CORNELL UNIVERSITY

9th Workshop on Altaic Formal Linguistics (WAFL9)

August 23-25, 2013
Ithaca, NY

Invited Speakers:

Guglielmo Cinque, Università Ca'Foscari Venezia
Bruce Hayes, UCLA
Susumu Kuno, Harvard University

Sponsors:

The Mellon Upstate Humanities Corridor
The Department of Linguistics, Cornell University
The East Asia Program, Cornell University
The Program in Linguistics, Syracuse University
The National Institute of Japanese Language and Linguistics (NINJAL)

Organizing Committee:

John Whitman, Jaklin Kornfilt,
Andrew Joseph, Esra Predolac

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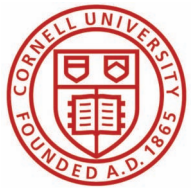
Website: http://conf.ling.cornell.edu/WAFL9/HOME.html

9th Workshop on Altaic Formal Linguistics (WAFL9)
Cornell University



NINJAL 大学共同利用機関法人人間文化研究機構 国立国語研究所
NATIONAL INSTITUTE FOR JAPANESE LANGUAGE AND LINGUISTICS

~ Program ~

All talks will be in Clark Hall, room 700
The poster session will be in Clark Hall, room 701

Day 1- Friday, August 23

8:30am-9:15am
~ Registration & Breakfast ~

9:15am-9:30am
Opening Remarks: John Whitman

Session: 1, Chair: Mats Rooth

9:30am-10:30am	**Invited Speaker:** Susumu Kuno (Harvard University) & Soo-Yeon Kim (Sejong University) *How Much Do Islands Matter in Sluicing?*
10:30am-11:00am	Jiwon Yun (Stony Brook University) *The influence of sentence-final intonation and phonological phrasing on the interpretation of wh*

11:00am-11:30am
~ Coffee Break ~

Session: 2, Chair: John Bowers

11:30am-12:00pm	Changguk Yim (Chung-Ang University) & Yoshi Dobashi (Niigata University) *Recursive ɪ-phrasing and Yo-particle in Korean: A Derivational Approach*
12:00am-12:30pm	Bonnie Krejci (Stanford University) & Lelia Glass (Stanford University) *The Noun/Adjective Distinction in Kazakh*
12:30pm-1:00pm	Toru Ishii (Meiji University) *Evidential Markers in the Nominal Right Periphery: The Japanese Hearsay Marker "Tte"*

1:00pm-2:30pm
~ Lunch ~

Session: 3, Chair: Wayne Harbert

2:30pm-3:00pm	Yinji Jin (Yokohama National University) *Nominative-Genitive Conversion in Late Middle Korean*
3:00pm-3:30pm	Lina Bao (Osaka University), Megumi Hasebe (Yokohama National University), Wurigumula Bao (Gifu University) & Hideki Maki (Gifu University) *Accusative Subject Licensing in Modern Inner Mongolian*
3:30pm-4:00pm	Yoshiyuki Shibata (University of Connecticut) *Object movement and its implication for A-scrambling in Japanese*

4:00pm-4:30pm
~ Coffee Break ~

Session: 4, Chair: Miloje Despic

4:30pm-5:00pm	Jaklin Kornfilt (Syracuse University) & Omer Preminger (Syracuse University) *Nominative as no case at all: An argument from raising-to-accusative*
5:00pm-5:30pm	Hanzhi Zhu (Stanford University) *Raising in Kazakh: Case, Agreement, and the EPP*
5:30pm-6:00pm	Faruk Akkuş (Boğaziçi University) *Light Verb Constructions in Turkish: A Case for DP Predication and Blocking*
6:00pm-6:30pm	Mikhail Knyazev (St. Petersburg State University) *Verbal complementizers in Kalmyk*

6:30pm-8:00pm
~ Wine & Cheese Reception, Morrill Hall 106 ~

~ End of Day 1 ~

Day 2- Saturday, August 24

9:00am-9:30am
~ Breakfast ~

Session: 1, Chair: John Whitman

9:30am-10:00am	Hideki Kishimoto (Kobe University) *Exclamatives and Nominalization in Japanese*
10:00am-10:30am	Asya Pereltsvaig (Stanford) & Ekaterina Lyutikova (Moscow State University) *Functional Structure in the Nominal Domain: A View from Tatar*
10:30am-11:00am	Noriko Yoshimura (University of Shizuoka) & Shoichi Iwasaki (UCLA) *Cross-dialectal patterns of focus marking in Japanese cleft constructions*

11:00am-11:30am
~ Coffee Break ~

Session: 2, Chair: Jaklin Kornfilt

11:30am-12:00pm	Nil Tonyalı (Boğaziçi University) *Should Turkish be categorized as a high or low applicative language?*
12:00pm-12:30pm	Kyumin Kim (University of Calgary) *Phases and idioms*

12:30pm-1:30pm
~ Lunch ~

1:30pm-3:00pm
Poster Session (Clark Hall, room 701)

Session: 3, Chair: Abby Cohn

3:00pm-4:00pm	**Invited Speaker:** Bruce Hayes (UCLA) *How do constraint families interact? A study of variation in Tagalog, French, and Hungarian*
4:00pm-4:30pm	Yusuke Imanishi (MIT) *Minimal vs. maximal truncation in the Kansai Japanese hypocoristics*

4:30pm-5:00pm
~ Coffee Break ~

Session: 4, Chair: Draga Zec

5:00pm-5:30pm	Seongyeon Ko (Queens College) *Towards a contrast-driven typology of the ALtaic vowel systems*
5:30pm-6:00pm	Samuel R. Bowman (Stanford University) & Benjamin Lokshin (Stanford University) *Idiosyncratic transparency in Kazakh vowel harmony*
6:00pm-6:30pm	Yusuke Yoda (Kinki University) *Phrasal or Phasal Coordination?-From the Evidence of Suspended Affixation*

7:00-9:00pm
~ Banquet dinner at the Statler Hotel ~

~ End of Day 2 ~

Day 3- Sunday, August 25

8:30am-9:00am
~ Breakfast ~

Session: 1, Chair: Jeff Runner

9:00am-10:00am	**Invited Speaker:** Guglielmo Cinque (Università Ca'Foscari Venezia) *Word Order Typology: a change of perspective*
10:00am-10:30am	Tomoko Ishizuka (Tama University) *Steps towards a minimalist analysis of Japanese no*
10:30am-11:00am	Kunio Nishiyama (Ibaraki University) *The development of Japanese no: Grammaticalization, degrammaticalization, or neither?*

11:00am-11:30am
~ Coffee Break ~

Session: 2, Chair: John Whitman

11:30am-12:00pm	Yasuhiro Iida (Osaka University) *On the "What as Why" Phenomenon in Japanese and Turkish*
12:00pm-12:30pm	Jaehoon Choi (University of Arizona) *On Jussive Clauses in Korean*
12:30pm-1:00pm	Hsu-Te Cheng (University of Connecticut) *Ellipsis in Disguise*

1:00pm-1:15pm
~ Closing Remarks ~

~ Conclusion of Conference ~

~ List of Posters ~

1:30pm and 3:00pm, Saturday, August 24 2013
The Clark Hall, room 701

Bilge Palaz (Boğaziçi University, Yıldız Technical University) *(Alternate)*
On the Structure of Postpositional Phrases in Turkish

Hyun Kyoung Jung (University of Arizona) *(Alternate)*
The Double Functions of Korean Benefactive Suffix

Feyza Balakbabalar (Boğaziçi University) *(Alternate)*
Can non-active morphology be a reliable indicator of external causation in anti-causative structures? Evidence from Turkish

Takashi Nakajima (Toyama Prefectural University) *(Alternate)*
"Weak" Projection, Conflation and the Lexical Transitivity Alternations

Lan Kim (University of Delaware) & Satoshi Tomioka (University of Delaware) *(Alternate)*
Decomposing the Give-type Benefactives in Korean and Japanese

Sergei Tatevosov (Moscow State University) *(Alternate)*
Manner-result dichotomy and light verb constructions in Karachay-Balkar

Sungsoo Ok (Sejong University)
A Predicate Approach to Korean Sluicing-like Constructions

Naoyuki Akaso (Nagoya Gakuin University)
On the Subject Position of Unaccusatives in Japanese: the Kageyama-Kishimoto Puzzle

Takeru Suzuki (Tokyo Gakugei University)
Not so Simple as Ik-Sounds: Verbs of Motion and Purpose Ni in Japanese

Theodore Levin (MIT)
Successive-Cyclic Case Assignment: Korean Case Alternation and Stacking

Kenshi Funakoshi (University of Maryland)
Silent Possessors in Korean

Yuta Sakamoto (University of Connecticut / Tohoku University)
Absence of Case-matching Effects in Mongolian Sluicing

Ayşe Büşra Yakut (Boğaziçi University)
The Logophoric Nature of the Bound Anaphor "kendi" in Turkish

Hiroshi Aoyagi (Nanzan University)
On Serialized Verbs in Japanese and Korean

Invited Speaker: Susumu Kuno (Harvard University) **Friday, 9:30am-10:30am**
& Soo-Yeon Kim (Sejong University)

How much Do Islands Matter in Sluicing?

Since Ross (1969) introduced the notions of 'islands' and 'sluicing' in the study of syntax, an extensive body of literature has been produced on the visibility or invisibility of islands in sluicing constructions. These studies, despite their divergence in resolution of sluicing constructions with respect to their interpretations and internal structures (if there is any), agree on the fact that the presence of 'islands' somehow affects the acceptability status of sluicing constructions, leaving debatable questions on why, how, and how much it does. This paper focuses on data that have been claimed to be island-sensitive in the literature to show that many of the critical island-related data in sluicing are graded in nature and that this gradient nature of the acceptability status makes it necessary to incorporate in the analysis of sluicing non-structural factors that control their acceptability status. One such factor relates to whether the hearer is aware of the correlate (or antecedent) of the *wh*-expression in a sluicing sentence. There are various ways for the antecedent to be in the awareness of the hearer: by being explicit (as in canonical examples of island repair in sluicing with overt antecedents); by being in the dominant part of the sentence (in the sense of Erteschik-Shir 2007 for implicit antecedents in non-islands); by co-occurring with lexical items that are closely associated with it, or by having a leading statement in the discourse that activates the hearer's awareness of the antecedent. We show that the claimed structural constraint (e.g., an island constraint) can easily be proven to be moot by manipulating the crucial sentences in such a way as to satisfy "awareness" and some other nonstructural constraints that are discussed in the paper. The data of this paper include (i) English sluicing with an implicit correlate (Chung, Ladusaw, and McClosky 1995, 2010, 2011); (ii) Japanese sluicing with an overtly Case-marked remnant (Hiraiwa and Ishihara 2010, Fukaya 2012); (iii) Contrast sluicing in English and Japanese (Merchant 2008, Fukaya 2012, Barros 2013); and (iv) Korean pseudo-sluicing with an implicit correlate (Ok and Kim 2012).

The influence of sentence-final intonation and phonological phrasing on the interpretation of *wh*-indeterminates

Introduction: Is has long been noticed that in many languages *wh*-words are ambiguous between interrogatives 'who/what/...' and indefinites 'someone/something/...' (cf. Kuroda 1965). In recent years, there has been a surge of interest in the role of prosody in disambiguating those indeterminate *wh*-words (e.g. Fu 2002; Dong 2009 for Chinese, Ishihara 2002; Sugahara 2003 for Japanese, Jun & Oh 1996; Yun 2012 for Korean, among others). While the majority of the studies confirm the importance of phonological phrasing, i.e. *wh*-questions create a single prosodic domain which starts with the *wh*-phrase and ends with the complementizer (cf. Richards 2010), it has received relatively less attention whether the sentence-final tone has influence on the interpretation of the sentences containing *wh*-indeterminates. In Korean, sentence-final intonation has been known to signal different types of sentences: declarative sentences and *wh*-questions show final falling intonation, while yes/no-questions have rising intonation (Martin 1951, K.-M. Lee et al. 1984, C.-S. Suh 1989, Heo 1991, I.-S. Lee & Ramsey 2000, Kwon 2002). Although the sentence-final tone does not distinguish different readings of *wh*-words, one might expect that it can provide at least a partial clue. Moreover, Hwang (2007) argues that when a declarative reading is excluded by context, the sentence-final tone plays a decisive role in disambiguating the meaning of *wh*-words. In this paper, however, I present a perception experiment suggesting that the interference of the sentence-final tone is overridden by a phrasing effect in Korean, thus not as strong as argued in Hwang (2007).

Procedure: A perception experiment was conducted to compare the effect of the sentence-final tone and phonological phrasing. As a theoretical assumption for phonological phrasing, this paper adopts the argument by Jun (1993) that in *wh*-questions, a *wh*-word and the following word must be in the same AP (Accentual Phrase) in Korean. According to Jun (1993), certain phonological processes such as inter-sonorant *h*-deletion can only occur within an AP. Thus the target sentences were designed to contain a *wh*-phrase ending with a vowel, followed by a word starting with /*h*/ to test different phrasing effects. All sentences ended with a neutral intimate ending that can be used for either assertion or question. As a result, three different readings were available for each sentence: i) declarative, ii) yes/no-question, iii) *wh*-question.

(1) Example of Stimuli

nœil	*mwə*	*halkəja*
tomorrow	what	do

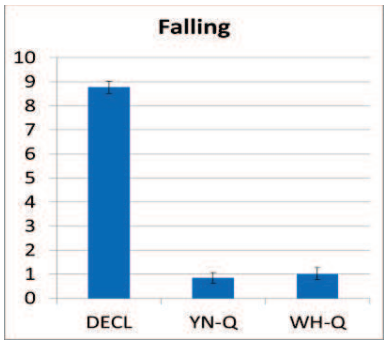
i) 'I'm going to do something tomorrow.' (DECL)
ii) 'Are you going to do something tomorrow? (YN-Q)
iii) 'What are you going to do tomorrow?' (WH-Q)

Each sentence was read by a Seoul Korean speaker with four different types of prosody, as two factors varied in each repetition: i.e. whether the sentence-final tone was falling or rising, and whether the post-*wh* *h*-sound was maintained or deleted. In total, 24 stimuli (2 sentences × 4 prosody types × 3 context types) mixed with fillers were presented to 24 Seoul Korean speakers. For each sentence, the participants read a written scenario that facilitated one of the three different readings as illustrated in (1), listened to the target sentence recorded in one of the four prosody types, and rated the acceptability of the sentence in the given context.

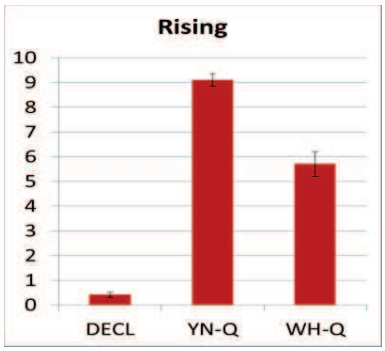
Results: There was a sharp contrast between the results with and without *h*-deletion. When *h*-deletion did not occur, there was a clear association of the sentence-final tones with sentence types: a falling tone created a strong bias toward a declarative reading, while a rising tone did toward a yes/no-question reading as in (2). On the other hand, if *h*-deletion occurred, the sentence-final tone did not help

distinguish the meaning of the sentence: a *wh*-question reading was strongly preferred regardless of the sentence-final tone as in (3).

(2) Acceptance rates without *h*-deletion

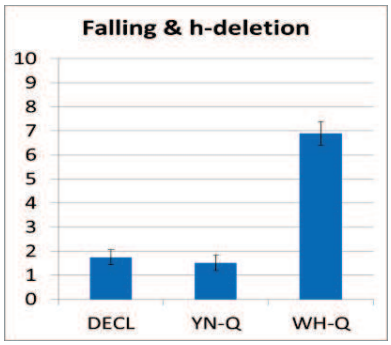


DECL>YN-Q=WH-Q (**)

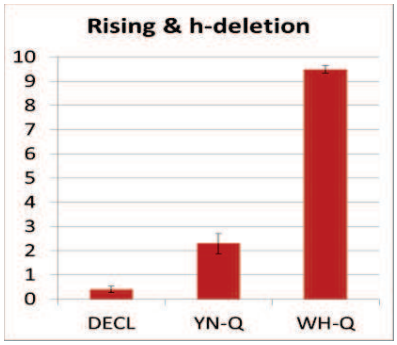


YN-Q>WH-Q>DECL (**)

(3) Acceptance rates with *h*-deletion



WH-Q>DECL=YN-Q (**)



WH-Q>YN-Q>DECL (**)

Conclusion: The results of the experiment in this study demonstrate that the effect of phonological phrasing overrides the influence of the sentence-final tone in deciding the meaning of the sentence containing *wh*-words. Thus this study reinforces the findings in the previous studies (Jun & Oh 1996 and Yun 2012) that phonological phrasing is a primary prosodic factor to decide the meaning of *wh*-words in Korean. It further supports the argument that creating a single prosodic domain is cross-linguistically a crucial factor in forming *wh*-questions (Richards 2010).

Selected References

Hwang, Heeju. 2007. *Wh*-Phrase Questions and Prosody in Korean. Paper presented to the 17th Japanese/Korean Linguistics Conference.

Jun, Sun-Ah. 1993. *The phonetics and phonology of Korean prosody*: PhD Dissertation, University of California, Los Angeles.

Jun, Sun-Ah & Mira Oh. 1996. A prosodic analysis of three types of *wh*-phrases in Korean. *Language and Speech* 39.37-61.

Kuroda, Sige-Yuki. 1965. Generative grammatical studies in the Japanese language: MIT.

Richards, Norvin. 2010. *Uttering trees*: The MIT Press.

Yun, Jiwon. 2012. The Deterministic Prosody of Indeterminates. Proceedings of the 29th West Coast Conference on Formal Linguistics.285-93.

Changguk Yim (Chung-Ang University) &
Yoshi Dobashi (Niigata University)

Friday, 11:30am-12:00pm

Recursive ι-phrasing and *Yo*-particle in Korean: A Derivational Approach

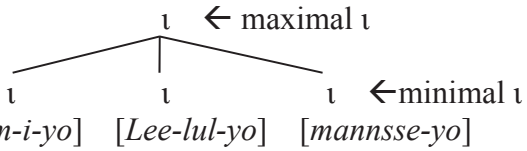
CLAIM The distribution of *yo*-particle in Korean has resisted a principled account in the study of generative grammar. We argue that it can be best accounted for in terms of prosody. The **distributional** facts indicate that ***yo*-attachment** targets the right edge of **phonological phrase** (φ) while its **prosodic** facts indicate that a *yo*-phrase corresponds to **intonational phrase** (ι) given its boundary tone. This puzzle is resolved in a **derivational approach** to prosodic category formation (Pak 2008), and the apparent exceptions in the previous studies receive a straightforward account. Furthermore, given its ι status, *yo*-attachment constitutes evidence for **prosodic phrase recursion** (Ito and Mester 2012).

DATA & EXPLANATION The *yo*-particle usually follows the verb at the end of a sentence, conveying politeness toward the addressee. However, it may optionally spread over the sentence-medial non-verbal elements (Lee and Park 1999):

(1) *Kim-i(-**yo**)* *ecey(-**yo**)* *kkaphey-eyse(-**yo**)* *Lee-lul(-**yo**)* *mannasse-**yo***.
Kim-Nom(-yo) yesterday(-yo) café-at(-yo) Lee-Acc(-yo) met-yo
'Kim saw Lee at the café yesterday.'

Only on the presence of the sentence-final *yo* may optional sentence-medial *yo*'s occur. The **phrases containing medial *yo* are ι's** given the boundary tone (HL%), being a distinctive property of ι (Jun 1998). As in (2), ι (the whole sentence) contains another layer of ι'**s** (*yo*-phrases). That is, *yo*-attachment is involved with **recursive prosodic phrasing** (Ito and Mester 2012).

(2)



We further argue that while *yo*-phrases carry the ι boundary tone, *yo*-attachment applies to φ rather than ι. Consider (3a) where there is no medial -*yo*:

(3) a. ι[φ{*Kim-i*} φ{*Lee-lul*} φ{*mannasse-yo*}] b. *Kim-i*(-*yo*) *Lee-lul*(-*yo*) *mannasse-yo.*

A structural Case-marked NP forms φ, and the entire sentence forms an ι. At first sight the possible *yo*-attachment site, shown in (3b), corresponds to the right edge of a φ, but the actual *yo*-phrase constitutes an ι. That is, we have a 'prosodic size' discrepancy.

The discrepancy can be resolved if we assume that the **prosodic categories are created in a derivational manner** (Pak 2008): **ι is formed by combining φ's**. On this assumption we propose that *yo*-attachment takes place after φ-phrasing and before ι-phrasing.

(4) a. **φ{***Kim-i***} φ{***Lee-lul***} φ{***mannasse-yo***}** ← φ-phrasing
b. φ{*Kim-i-**yo***} φ{*Lee-lul-**yo***} φ{*mannasse-yo*} ← *yo*-insertion
c. **ι[**φ{*Kim-i-yo*}**]** **ι[**φ{*Lee-lul-yo*}**]** **ι[**φ{*mannasse-yo*}**]** ←(minimal) ι-phrasing
d. **ι[**ι[φ{*Kim-i-yo*}] ι[φ{*Lee-lul-yo*}] ι[φ{*mannasse-yo*}]**]** ← (maximal) ι-phrasing

Once φ-phrasing ends (4a), *yo*-insertion applies (4b). Subsequently, ι-phrasing takes place for the *yo*-phrases (4c) and in turn for the entire sentence (4d). Note that **φ containing *yo* turns into ι under this derivational approach to prosodic phrasing**.

The proposed analysis accounts for apparent "exceptions" observed in the previous studies (Lee and Park 1991). Thus, adverbs such as 'immediately' usually resist *yo*-attachment whereas they allow it in an elliptical context like fragment answers (Yim 2012).

(5) a. Ikes-ul tangcang(*-**yo**) chelihase-yo.
this-Acc immediately(*-yo) handle-yo 'Have this done immediately.'
b. $_{\varphi}${Ikes-ul} $_{\varphi}${tangcang(*-**yo**) chelihase-yo}
c. Tangcang-**yo**! (as a response to a question like 'By when must I have this done?')
d. $_{\varphi}${Tangcang} → $_{\varphi}${Tangcang-yo} → $_{\iota}$[$_{\varphi}${Tangcang-yo}]

The ill-formedness of (5a) with the particle on the adverb follows from the fact that there is no φ boundary between 'immediately' and 'handle', as given in (5b). However, sentences like (5c) are acceptable since the adverb alone forms a φ, so that *yo*-attachment gets applicable. Moreover, *yo*-attachment is allowed in the context where a φ-boundary is forced:

(6) a. **kapcaki-(yo) pwuthakhaysse-yo*
suddenly-(yo) requested-yo '(someone) asked (something) all at once.'
b. *kapcaki-(yo) kosonhi pwuthakhaysse-yo*
suddenly-(yo) politely requested-yo '(someone) asked (something) politely all at once.'

Although *kapcaki* 'suddenly' resists *-yo* when it immediately precedes the verb as in (6a), it allows *-yo* when another adverb intervenes and a prosodic boundary is forced to be created between the two adverbs. The contrast in (6) clearly shows that *yo*-attachment is not specific to a certain syntactic category but it is a prosodic phenomenon.

A similar account carries over to various *yo*-resistant categories that have been considered exceptional in the previous studies; e.g. relative clauses, preverbal classifiers, degree phrases modifying adjectives, NPs without a Case particle, the first verbs in the serial verb constructions, and so forth (Lee and Park 1991, Yim 2012).

We also argue that the same line of analysis applies to the Japanese particle *ne*:

(7) Taro-ga(-**ne**) Hanako-ni(-**ne**) atta-**yo**.
Taro-Nom(ne) Hanako-Dat(-ne) met-yo 'Taro met Hanako.'

Like Korean *yo*, *ne* is optional, and when it shows up, the use of the sentence final *yo* is strongly preferred. The partcle *ne*, once attached, requires a pause after it, indicating the presence of an ι-phrase boundary, while it apparently attaches to the right edge of the so-called *bunsetsu* (which roughly corresponds to accentual phrase/minor phrase). We show that the distribution of *ne* is also accounted for straightforwardly in terms of the proposed derivational prosodic analysis.

References

Ito, Junko and Armin Mester. 2012. Recursive prosodic phrasing in Japanese. In *Prosody Matters*, eds. By T. Borowsky, S. Kawahara, T. Shinya and M. Sugahara, 280-303. Sheffield: Equinox Publishing.

Jun, Sun-Ah. 1998. The Accentual Phrase in the Korean prosodic hierarchy. *Phonology* 15:189-226.

Lee, Chungmin and Sunghyun Park. 1991. '-Yo' ssuimuy kwucowa kinung (The structure and function of the mid-sentential *-yo* construction). *Linguistic Journal of Korea* 16:361-389.

Pak, Marjorie. 2008. *The postsyntactic derivation and its phonological reflexes*. Doctoral dissertation, University of Pennsylvania.

Yim, Changguk. 2012. Fragment answers containing *-yo* in Korean: New evidence for the PF deletion theory of ellipsis. *Linguistic Inquiry* 43:514-518.

Bonnie Krejci (Stanford University) &
Lelia Glass (Stanford University)

Friday, 12:00pm-12:30pm

The Noun/Adjective Distinction in Kazakh

This paper bears on the long-debated question of whether every language has the familiar major word classes *noun, verb,* and *adjective*, focusing on the noun/adjective distinction in Kazakh (Turkic). Braun and Haig (2000), henceforth B&H, working in Turkish, argue against a noun/adjective distinction, proposing that adjectives and nouns are two ends along a smooth continuum of nominals. They argue that words that denote properties of humans, such as *genç* "young (person)", sit in the middle of the continuum. Similarly, Kazakh words that denote properties of humans are at first difficult to classify as nouns or adjectives; however, we establish a number of morphosyntactic diagnostics that consistently distinguish nouns and adjectives. We argue that the prototype analysis that B&H suggest for Turkish is inappropriate for Kazakh, and that instead Kazakh adjectives can be categorically distinguished from nouns. Instances where the diagnostics provide ambiguous results can be explained by noun-noun compounding and nominal subdeletion. Therefore, this paper provides an explanation for the intuition behind classifying adjectives as a type of nominal, while ultimately rejecting that view in favor of dividing the non-verbal lexicon of Kazakh into the two familiar word classes, *noun* and *adjective*.

B&H show that a number of Turkish words that are intuitively adjectival, denoting property concepts that do not necessarily hold of humans, tend to pass morphosyntactic diagnostics for adjectivity, such as gradability and the ability to bear intensive reduplication of the first syllable. Words that are intuitively noun-like tend to fail those diagnostics, instead being able to appear with the suffix *-sIz* "without" and the possessive suffix *-lI*. "Neutral" words, on the other hand, denoting properties held by humans, display variable behavior. Crucially, the diagnostics provide gradient results, showing that there is no ideal place at which to divide nouns from adjectives. B&H therefore argue for a continuum from prototypical noun to prototypical adjective, allowing for a large and indeterminate intermediate section. That section contains the "neutral" words that denote properties that hold of humans.

A basic problem for such an analysis concerns the "neutral" words; crosslinguistically, words denoting properties that hold of humans are often able to substantivize, appearing in nominal syntactic contexts (e.g., English *the poor, the bold*) (Borer & Roy, 2010). Another possibility is that nominal subdeletion allows a noun to be elided out of an NP, resulting in what appears to be an adjective in a nominal context (Giannakidou & Stavrou, 1999; Giannakidou & Merchant, 1997). Additionally, B&H argue that the ability of a word to modify a clear noun provides evidence that that word is more adjectival; however, Turkish noun-noun compounding is productive (Yükseker, 1987), suggesting that this diagnostic is problematic. These issues suggest that it may still be possible to separate nouns from adjectives.

Kazakh similarly has a number of words that at first seem difficult to classify as nouns or adjectives. Among them, again, are words that denote properties of humans. For example, *yerkek* "man" and *ayel* "woman" both readily modify clear nouns, as in (1), but they are also readily modifiable by clear adjectives, as in (2).

(1) a. *yerkek adam* "male person; man"
b. *ayel adam* "female person; woman"

(2) a. *ädemi yerkek* "beautiful man"
b. *ädemi ayel* "beautiful woman"

To determine whether Kazakh nouns and adjectives should also be analyzed along a continuum, we identified ten words denoting property concepts, six words denoting concrete, time-stable objects, and nine words denoting properties that hold of humans, and subjected them to seven morphosyntactic diagnostics designed to distinguish nouns from adjectives. Tests for adjectivehood include intensive reduplication of the first syllable, gradability with *wöte* "very", suffixation with the deintensifiers *-şE* and *-law* "somewhat", and the ability to appear between the indefinite article *bir* and a canonical noun. Tests for nounhood include suffixation with *-sIz* "without", the appearance with the possessive suffix *-lI* when preceding a clear noun, and the appearance with the plural suffix *-lEr*. We found that these tests distinguish canonical nouns from canonical adjectives, as in (3) and (5), and that words that denote human properties can similarly be split categorically into two classes, as in (4) and (6).

(3) Canonical Noun: *ağaş* "tree"
a. **ap-ağaş* "very tree-like"
b. **wöte ağaş* "very tree-like"
c. **ağaş-şa/-taw* "like a tree"
d. *bir ağaş orman* "a woody forest"
e. *ağaş-sız* "without a tree"
f. *yeki ağaş-tı üy* "a house with two trees"
g. *ağaş-tar* "trees"

(4) Human Property Noun: *yerkek* "man"
a. **yep-yerkek* "very male"
b. **wöte yerkek* "very male"
c. *yerkek-şe* "like a man"
d. *bir yerkek adam* "a man"
e. *yerkek-siz* "without a man"
f. *yerkek-ti adam* "a person with a man"
g. *yerkek-ter* "men"

(5) Canonical Adjective: *qızıl* "red"
   a. *qıp-qızıl* "very red"
   b. *wöte qızıl* "very red"
   c. *qızıl-şa* "somewhat red"
   d. *bir qızıl kitap* "a red book"
   e. **qızıl-sız* "without a red one"
   f. **qızıl-dı üy* "a house with redness/a red one"
   g. **qızıl-dar* "red ones"

(6) Human Property Adjective: *jas* "young"
   a. *jap-jas* "very young"
   b. *wöte jas* "very young"
   c. *jas-taw* "somewhat young"
   d. *bir jas adam* "a young person"
   e. **jas-sız* "without a young person"
   f. **jas-tı adam* "a person with youth/a young person"
   g. *jas-tar* "young people"

Interestingly, despite the fact that five out of the seven diagnostics reliably split all of the words tested into two distinct classes, two diagnostics produced ambiguous results. First, almost all words were able to appear between an indefinite determiner and a canonical noun head, as in the (d) examples. On this basis, we conclude that this construction cannot be considered a good diagnostic for adjectivehood. Instead, the fact that even canonical nouns appear in this construction suggests that noun-noun compounding is productive in Kazakh. Additional evidence from stress patterns suggests that when a human property noun like *yerkek* "man" or *ayel* "woman" modifies a clear noun, as in (1), the result is a noun-noun compound.

Second, all nouns and almost all human property adjectives were able to take the plural suffix *-lEr*, as in the (g) examples. We suggest that the appearance of *-lEr* on adjectives is due to nominal subdeletion, or ellipsis of an N out of an NP (Giannakidou & Stavrou, 1999; Giannakidou & Merchant, 1997). In Kazakh, nominal subdeletion of adjectives is possible when an adjective appears with overt case morphology, as in (7) and (8). It does not appear to be possible when there is no overt nominal morphology on the adjective, as in (9).

(7) ***qızıl***-*dı* *qızıl de-me*
red-ACC red call.IMP-NEG
"Do not call a red thing red."

(8) *men* ***jaman***-*dı* ***jaqsı***-*ğa* *ïter-di-m*
I **bad**-ACC **good**-DAT push-PST-1SG
"I pushed the bad one to the good one."

(9) *jas* *adam-men* *qart adam* *birge* *tur-dı.* ***jas*** **(adam) söïle-di.*
young person-with old person together stand-PST **young** (person) speak-PST
"An old person and a young person were standing together. The young *(person) spoke."

Like case morphology, plural morphology on adjectives also enables nominal subdeletion. Both compounding and nominal subdeletion make it somewhat difficult to distinguish nouns and adjectives; however, we argue that the division is a meaningful one.

Unlike B&H, we do not find that words denoting properties of humans were somewhat adjectival and somewhat nominal, sitting in the middle of a smooth continuum from canonical nouns to canonical adjectives. Instead, we find that it is possible to divide the words denoting properties of humans categorically into nouns and adjectives. Based on this study, then, we conclude that a prototype analysis of nouns and adjectives is inappropriate for Kazakh. Instead, we argue that the Kazakh non-verbal lexicon is divided into the familiar categories *adjective* and *noun*.

References

Borer, H., & Roy, I. (2010). The name of the adjective. In P. Cabredo Hoffher & O. Matushansky (Eds.), *Formal Approaches to Adjectives.* John Benjamins.

Braun, F., & Haig, G. (2000). The noun/adjective distinction in Turkish: An empirical approach. In A. Göksel & C. Kerslake (Eds.), *Studies in Turkish and Turkic Languages: Proceedings of the ninth international conference on Turkish linguistics, Lincoln College, Oxford, August 12-14, 1998* (pp. 85–92). Wiesbaden: Harrassowitz Verlag.

Giannakidou, A., & Merchant, J. (1997). On the interpretation of null indefinite objects in Greek. *Studies in Greek Linguistics*, *17*, 141–155.

Giannakidou, A., & Stavrou, M. (1999). Nominalization and ellipsis in the Greek DP. *The Linguistic Review*, *16*, 295–331.

Yükseker, H. (1987). Turkish nominal compounds. *Toronto Working Papers in Linguistics*, *7*, 83–102.

Toru Ishii (Meiji University) Friday, 12:30pm-1:00pm

EVIDENTIAL MARKERS IN THE NOMINAL RIGHT PERIPHERY: THE JAPANESE HEARSAY MARKER *TTE*

Introduction: Evidential markers express the means by which the speaker acquired the information s/he is conveying (like personal experience, direct evidence, indirect evidence, and hearsay). They represent 'source of information' relevant to evaluating an utterance, which is pragmatic in nature (Rooryck 2001; Speas 2003). It has been claimed that Japanese has evidential markers like hearsay-*sooda* 'I'm told' and indirect evidence-*yooda* 'seem' which are overt instantiations of a functional head for evidentiality (evidential head, Evid) in the clause right periphery (*i.e.* clausal Evid) (Tenny 2006). This paper proposes that Japanese also has an overt evidential marker within a nominal projection. It is shown that its distribution is constrained by syntactic principles, which constitutes further evidence for the view that there are pragmatically relevant features that are subject to the syntactic computation (Cinque 1999; Speas 2003). The existence of an evidential head in the nominal right periphery reinforces the parallel between a clause and a nominal.

Evidential Marker *tte*: Among various uses of *tte* in Japanese, this paper deals with the so called "topic marker" *tte* (1B) (Niwa 1994; Akaso 2007). Since the "topic marker" *tte* is very often interchangeable with *to(yuu-no/*Noun*)-wa* 'C(-N)-Topic' as in (1B), *tte* has been analyzed as a colloquial variant of the latter:

(1) A: Enniti-e ikuto, okane-o tukaun desu
temple-fair-to when-go money-Acc use Cop(ula)
'When I go to the temple fair, I spend my money.'
B: Enniti-**tte/to-wa/toyuu-no-wa** doko desu ka?
temple-fair-**tte/C-Top/C-N-Top** where Cop Q
Lit. 'The temple fair, where is *it*?' (Martin 1975: 940)

There are, however, differences between *tte* and *to(yuu-no)-wa* 'C(-N)-Topic'. Just like the thematic topic marker *wa*, (i) *to(yuu-no)-wa* 'C(-N)-Topic' cannot be attached to indeterminate pronouns like *dare* 'who' (2), and (ii) its multiple occurrences within a clause are not allowed (3b). Note that the *to(yuu-no)-wa* phrases in (2) and (3b) are deviant under the intended interpretation that they receive the thematic topic (not contrastive) interpretations. On the other hand, *tte* can be attached to an indeterminate pronoun (2) and its multiple occurrences within a clause are possible (3a). These facts indicate that *tte* is not a topic marker:

(2) A: John-ga kooen-de atteita onnano hito-wa dare na no ka sitteru?
John-Nom park-at met woman-Top who Cop N Q know
'Do you know who the woman John met at the park is?'
B: **Dare-tte/*wa/*to-wa/*toyuu-no-wa** Mary-no hanasidato dare-mo siranai rasii yo
who-tte/*Top/*C-Top/C-N-Top Mary-Gen speech anyone not-know Evid (hearsay) Part
Lit. 'Who, according to Mary, nobody knows *who* she is.'

(3) a. **Kodomo-tte omaturi-tte** suki da yone
children-tte festival-tte love Cop Part(icle)
Lit. 'Children, festivals, it seems that *they* love *them*.'
b. * **Kodomo-wa/to-wa/toyuu-no-wa omaturi-wa/to-wa/toyuu-no-wa** suki da yone
children-Top/C-Topic/C-N-Top festival-Top/C-Top/C-N-Top love Cop Part

I argue that *tte* in (1-3) is a hearsay evidential marker which is an overt realization of the evidential head in the nominal right periphery (nominal Evid). This is based on the insight that *tte* in (1-3) should be connected to the use of *tte* as a hearsay evidential sentence-final particle (an overt realization of clausal Evid) (4):

(4) John-ga Suzy-to kekkon suru **tte**
John-Nom Suzy-with marry **Evid (hearsay)**
'John is going to marry Suzy (I'm told).'

Proposal: Our hearsay evidential marker analysis explains a hitherto unexplained puzzling restriction on the *tte*-phrase (nominal EvidP); sentences with the *tte*-phrase must be interrogatives (5a) or generics (5b), or they must contain an individual-level predicate (5c). When the *-tte* phrase appears in a declarative non-generic sentence with a stage-level predicate, the result is deviant (5d). Note that (5d) becomes acceptable when it is interpreted as an interrogative (a yes/no question) with rising intonation:

(5) a. **Ringo-tte** moo tabeta no?
apple-tte already have-eaten Q
Lit. 'Apples, have you already eaten *them*?'
b. **John-tte** kaigi-no maeni itumo tabako-o suu
John-tte meeting-Gen before always smoke
Lit. 'John, *he* always smokes before a meeting'
c. **John-tte** atama-ga ii
John-tte brain-Nom good
Lit. 'John, *he* is clever.'
d.?* **John-tte** kinoo ringo-o tabeta
John-tte yesterday apples-to ate
Lit. 'John, *he* ate apples yesterday.'

As argued by Rooryck (2001) and Speas (2003), although there are many possible pragmatic categories of 'sources of information', only its restricted class is syntactically represented in the evidential system of a language, and languages vary as to which 'source of information' is syntactically represented. I claim that the Japanese evidential system syntactically marks whether 'source of information' involves the speaker (1st person) or not. Given the binary decomposition of person into [+/- author] and [+/- participant] (Noyer 1992; Halle 1997) (*i.e.* 1st person=[+author, +participant], 2nd person=[-author, +participant], 3rd person=[-author, -participant]), I claim that the Japanese Evid is syntactically specified as either [+author] (1st person) or

[-author] (non-1st-person). Since the evidential marker *tte* is of the hearsay evidential type, its 'source of information' does not involve the speaker; the nominal Evid *tte* is syntactically specified as [-author]. Under our analysis, the derivation of generic sentence (5b), for example, proceeds as in (6):

(6) a. [EvidP [TP **[EvidP John-tte[*i*Evid, -author]]** kaigi-no maeni itumo tabako-o suu] Evid **[*i*Evid, [ ]]**]]
John-tte meeting-Gen before always smoke

b. [EvidP **[EvidP John-tte [*i*Evid, -author]]** [TP ***t*** itumo kaigi-no maeni tabako-o suu] Evid**[*i*Evid, -author]**]

I adopt Pesetsky & Torrego's (2007) system of features: (i) Both interpretable and uninterpretable features may come as valued or unvalued; (ii) AGREE involves valuation and feature sharing. In (6), given that an unvalued feature functions as a probe, the unvalued interpretable evidential feature ([*i*Evid, []]) of the clausal Evid functions as a probe. It undergoes Agree with the valued interpretable evidential feature ([*i*Evid, -author]) of the nominal Evid *tte*, and attracts the *tte* phrase (nominal EvidP) to the Spec of the clausal Evid. The clausal Evid shares the [-author] value with *tte* as in (6b). Generic sentences like (5b) provide generally shared cultural knowledge. In other words, a speaker conveys common knowledge; the 'source of information' does not involve the speaker. The pragmatic evidential category of a generic sentence is thus compatible with the syntactic [-author] evidential feature of the clausal Evid; (5b) is acceptable. If we take Chierchia's (1995) view that individual-level predicates are inherently generics in the sense that they express properties of individuals that are permanent, it also follows that (5c) is acceptable. In interrogatives like (5a), it is the hearer (2nd person) who is the 'source of information' relevant to evaluating an utterance (Speas and Tenny 2003); the 'source of information' does not involve the speaker, and thus (5a) is acceptable. In declarative non-generic sentences with stage-level predicates like (5d), the 'source of information' is the speaker; its pragmatic evidential category is not compatible with the syntactic [-author] feature of the clausal Evid. Hence, (5d) is anomalous. If we add hearsay evidential markers like *sooda/rasii/tte* to (5d), and make its evidential category compatible with the syntactic [-author] feature, (5d) becomes acceptable (7):

(7) **John-tte** (Mary-no hanasidato) kinoo ringo-o {tabeta{**rasii/sooda**} / tabetanda **tte** }
John-tte (Mary-Gen speech) yesterday apple-Acc {ate **hearsay** / ate **hearsay**}
'Lit. John, (according to Mary,) *he* ate apples yesterday (I'm told).'

Further Evidence: First, there is evidence to show that the *tte*-phrase undergoes successive cyclic movement through intermediate Spec-(clausal) Evid; all the clauses that the *tte*-phrase has passed must have a 'source of information' compatible with the syntactic [-author] feature of their clausal Evid. As a response to (8), (9) is acceptable whereas (10, 11) are not. Rooryck (2001) argues that the person feature in the embedded Evid, being anaphoric, takes the matrix subject as its 'source of information'. In (9), the matrix clause is of the hearsay evidential type and the 'source of information' of the embedded clause is the matrix subject *hahaoya* 'mother'; their 'sources of information' do not involve the speaker; (9) is acceptable. In (10), however, the matrix clause is a declarative with a stage-level predicate; its 'source of information' involves the speaker. In (11), the 'source of information' of the embedded clause is the matrix subject *watasi* 'I', who is the speaker:

(8) Yamada-san-ni kinoo atta yo
Mr. Yamada-Dat yesterday met Part 'I have met Mr. Yamada yesterday.'

(9) [EvidP **Yamada-san-tte** [hahaoya-ga [EvidP ***t'*** [***t*** syoorai oomono-ni naru to]] omotteiru] rasii ne]
Mr. Yamada-tte mother-Nom future big-figure-Dat become C think hearsay Part
Lit. 'Mr. Yamada, (someone said) his mother thinks that *he* will become a big figure in the future.'

(10)?*[EvidP **Yamada-san-tte** [hahaoya-ga [EvidP ***t'*** [***t*** Suzy-to kekkon sita to] kinoo minna-ni hanasita
Mr. Yamada-tte mother-Nom Suzy-with married C yesterday everyone told
Lit. 'Mr. Yamada, his mother told everyone yesterday that *he* married Suzy.'

(11)?*[EvidP **Yamada-san-tte** [watasi-ga [EvidP ***t'*** [***t*** syoorai oomono-ni naru to]] wakatteiru]]
Mr. Yamada-tte I-Nom future big-figure-Dat become C know
Lit. 'That actor, I know that *he* will become a big figure in the future.'

Second, the *tte*-phrase exhibits island effects, which shows that it undergoes movement:

(11)?***John-tte** (Mary-no hanasidato) Suzy-ga [Complex NP ***t*** sitteiru hito]-o sagasiteiru rasii
John-tte (Mary-Gen speech) Suzy-Nom know person-Acc look-for hearsay
Lit. 'John, (according to Mary) Suzy is looking for the person who knows *him*.'

(12)?***John-tte** (Mary-no hanasidato) Suzy-ga [Adjunct ***t*** se-ga hikui node] tigau hito-to kekkonsita rasii
John-tte (Mary-Gen speech) Suzy-Nom height-Nom short because different person-with married Evi
Lit. 'John, (according to Mary) Suzy married a different person because *he* is short.'

Third, Miyagawa (2011) argues that the Japanese politeness verbal affix *-masu* only occurs when there is a speech act phrase (saP), showing that its limited distribution in an embedded context can be explained by his claim that *to* nonfactive C occurs with saP whereas *koto*/*no* factive C does not. The distribution of *tte*-phrase in an embedded context (13) can be explained if we assume that both saP and EvidP, being 'periphery pragmatic projections', occur in nonfactive complements but not in factive complements:

(13) Mary-wa [**John-tte** atama-ga ii {**to**] itta / **?*koto**]-o hookokusita}
Mary-Top **John-tte** brain-Nom good {**C** said / **fact**-Acc reported }
Lit. 'Mary said that John, *he* is clever./Mary reported the fact that John, *he* is clever.'

Nominative-Genitive Conversion in Late Middle Korean

Synopsis: While genitive subjects are the norm in nominalized clauses in Altaic languages, Nominative-Genitive Conversion (NGC) is best known from Modern Japanese. This paper deals with two issues concerning NGC in Late Middle Korean (LMK; 15th century): (i) whether NGC occurs in this stage of the language; and (ii) how LMK NGC differs from both the modern Japanese and Modern Korean cases. Based on an extensive examination of LMK electronic corpora, I show that LMK, like Japanese but unlike Modern Korean (Sohn 2004), allows NGC, and that LMK differs from that in Japanese in that it does not obey Transitivity Restriction (Harada 1971).

Background: Pseudo-NGC in Modern Korean: Sohn (2004) argues that Modern Korean does not allow NGC. Apparent genitive subjects are in fact in Spec, DP in adnominal clause, and function as possessors, not subject of the adnominal clause predicate, as in (1a). IP-level adverb may not appear to the left of the apparent genitive subject (1b), in contrast to Japanese (See Miyagawa 1993).

(1) a. [$_{DP}$ John$_i$-uy [$_{IP}$ pro$_i$ ka-n] iyu] b. [$_{DP}$ [$_{IP}$ **Adverb** NP-GEN Predicate] N]
John-GEN buy-Adnm.Pst reason
'the reason why John went'

Contrasting with the Modern Korean case, Jang (1995) assumed there is a NGC in adnominal clauses and *-m* clauses in LMK (see also Suh 1971). However, Jang did not find the crucial data involving an adverb preceding Gen-NP in LMK. I use data **from** bound noun modifying clauses to confirm that NGC occurs in LMK. (2) shows a genitive subject in adnominal clause with a lexical head noun. (3, 4a-b) show the alternation between genitive and nominative in an adnominal clauses, while (5) shows the alteration in an *–m* nominalized clause. While the genitive subject might be analyzed as a possessor in (2) and (3a) with the lexical noun heads *ca* 'seat' and *sicel* 'time', the Gen-NP cannot function as a possessor of the bound noun *-Kes* in (4a) (Ko 2002: 69); needless to say, the Gen-NP cannot function as a possessor of the nominalinz suffix *-m* in (5) either.

(2) [*SWUTAL*-**oy** mongkoro-n *CWA*]
Swutal-GEN make-Adnm.Pst position
'the pisition Swutal made' (*Sŏk sang* 6:30a)

(3) a. [i *CWUNGSAYNG*-**oy** na-l sicel]
this people-GEN born-Adnm.Fut time
'the time when people will born' (*Sŏk sang* 19:22)
b. [i *PIKWU*-**i** cwuk-ulh SICEL]-ey
this Pikwu-NOM die-Adn.Fut time-at
'At the time while this Bigwu will die' (*Sŏk sang* 19:31b) (Suh 1977, (126))

(4) a. [*CHWUKSAYNG*-**uy** **nah**o-n kesi]-l-ssol...
animals-GEN give birth to-Adn.Pst thing-And if…
'If something to whom animals gave birth…' (*Sŏk* sang 11:31a)
b. [*PWUMO*-∅ **nah**o-n kes]-wun...
parents-NOM give birth to-Adn.Pst thing-Top
'someone to whom parents gave birth…' (*Wer Sŏk* 17:58a)

(5) a. ...*WI SINLYEK*-**oy** WOYWOY ho-m-i i re ho-nira.
…Buddha's powers-GEN higt do-Nml-Nom like this do-End
'...Buddha's powers being higt is like this' (*Sŏk Sang* 21:6b)
b. ...*WI SINLYEK*-**i** WOYWOY ho-m-i i kot ho-nira.
…Buddha's powers -NOM higt do-Nml-Nom like this do-End
'...Buddha's powers being higt is like this' (*Beb Hua* 7:59b)

An account of LMK genitive subject case licensing: It is well known that the adnominal form is distinct from the conclusive form in Korean; this is the case in LMK as in ModK. I propose that genitive subjects in both adnominal (2-4) and nominalized clauses (5) is licensed by a [nominal] feature in C, as proposed by Hiraiwa (2001)) for ModJ. Evidence for this proposal comes from the non-existence of a transitivity condition in LMK adnominal clauses.

Non-existence of Transitivity Restriction: Sugai (2004) gives a detailed study of object marking in two representative LMK texts, the *Sŏkpo sangjŏl* (1447) and the *Samgang haengsil to* (1481). Sugai finds a low proportion of bare objects (11.6% of 276 tokens) in main clauses, but a high proportion in

relative and nominalized clauses (82.5% of 160 and 62.6% of 123 tokens respectively). In fact, both nominalized clauses and relative clause show large numbers of bare objects in transitive clauses with genitive subjects (6-7) is a nominative clause contain bare object, And data of (7) is a nominal clause containe the element of PP.

(6) [Ahoy-tolh-**oy** CAHYWOhonon kamagoy-∅ thywu-m]-ul tut-ti ani ho−nwora.
Child-Pl-GEN tender crow bit-Nml-Acc believe-Susp not do-End
'(He) does not believe that children bit tendresse Crow' (*Tusi* 15:22) (Suh 1977 (159))

(7) [*WANG*-oy mwolay-lwo PWUSA ho-sya-m]-i koti anihwoita.
[King-GEN sand-with offering do-Hon-Nml]-Nom same-Neg-be-End
'The King making a (religious) offering with sand is not the same as (my making an offering with money).' (*Sŏk sang* 24:35a)

These examples show that, in contrast to ModJ, objects may co-occur with genitive marked subjects in LMK adnominal clauses. However such apparent violations of the Transitivity Restriction seem to be limited to cases where morphological accusative is not spelled out. This restriction does not hold in *–m* nominalizations, as shown by (8), which contains a morphological accusative object.

(8) [*CENGHAKWONG*-**oy** culumskilh-ulwo *WOKCHAYK*-ol CEN hwo-m-ol] mastola.
Cenghakwong GEN shortcut-with Wochayk-ACC give-do-NML-Acc encounter.Past
'(Someone) saw [*Cenghakong* give (someone) *Okchayk* by taking a shortcut].' (Tusi 24:13b)

Comparative issues: It is well known that Japanese allowed NGC in adnominal clauses (9a), and *no* complement clauses (9b). As shown in (10), Japanese has the Transitivity Restriction: if there is a morphological accusative object in subordinate clause NGC is disallowed (10a), but NGC is possible when the subordinate clause contains another element like a PP, (10b). (See, Harada 1971, Watanabe 1996 a, b)

(9) Modern Japanese
a. [[kinoo John-ga/no katta] hon]
yesterday John-NOM/GEN buy-Pst book
'the book John bought yesterday'
b. John-wa [kinoo Mary-ga/no kita no]-wo sira-nak-atta.
John-Top yesterday Mary-NOM/GEN come-Pst NML-Acc know-Neg-Pst
'John didn't know that Mary caome yesterday.' (Hiraiwa 2001, (86))

(10) Modern Japanese
a. [[John-ga/*no hon-wo kasita] hito]
John-NOM/GEN book-Acc lent-Pst person
'the person John lent a book'
b. [[John-ga/no nihon-ni itta] hi]
John-NOM/GEN Japan-to go-Pst day
'the day John go to Japan'

We observed above that bare objects are allowed in LMK adnominal clauses. We also find examples of bare nominative objects, as in (11) in LMK. This phonemenon does not contrast with Japanese phenomena that there is no Transitivity Restriction when clause contain morphorocal nominave object in adnominal clauses (See Hiraiwa 2011, (119)).

(11) [*SWUTL*-**oy** pelwus-∅ epsu-**n**] **cwu**l-ul pwoko...
Sudal-GEN manner-nominative object did not have.Adnm.Pat fact (Light N)-Acc see.Pst
'He saw the fact taht Swudal did not have manner…' (*Sŏk Sang* 6:21)

Analysis: The data involving *–m* nominalizations in (8) is parallels with languages like Turkish, which have no Transitivity Restriction in clauses with genitive subjects. Miyagawa (2011) suggests that the difference between Turkish and Japanese is dues to the existence of [nominal] C in Turkish adnominal (and more generally, nominalized) clauses. If so, LMK *–m* nominalizations may be analyzed in the same way as Turkish. LMK adnominal clauses represent a situation intermediate between Turkish and Modern Japanese: they allow overt direct objects, but do not allow them to be marked with overt accusative case. I suggest that this is because LMK adnominal clauses no longer license genitive subjects with [nominal] C (like Modern Japanese), but have strategy for licensing bare objects distinct from Modern Japanese accusative case licensing.

Selected References: Hiraiwa, K. 2001. On nominative-genitive conversion. MITWPL 39, 66-125. Sohn 2004. Nom-Gen Conversion as a Spurious Phenomenon. Yengemunhak yenku (The English Linguistics) 2004, 183-202. Sugai, Yoshinori. 2004. Taykyek cosa uy yumu wa muncang uy kyeychung kwuco – *Sekpo Sangcel, Samgang hayngsilto* lul cwungsim ulo. *Kwukehak*43.

Lina Bao (Osaka University), Megumi Hasebe (Yokohama National University), Wurigumula Bao (Gifu University) & Hideki Maki (Gifu University)

Accusative Subject Licensing in Modern Inner Mongolian

1. Introduction: In the generative literature, abstract Case assigners/licensors are considered to be D, *v*, and I. These are functional categories. The question then arises as to whether C, another instance of functional categories, can be an abstract Case assigner/licensor in human language. To address this research question, this paper investigates the environments in which accusative Case is assigned/licensed in modern Inner Mongolian (Mongolian, hereafter), and argues, based on the newly found data, that C is actually an abstract accusative Case assigner/licensor in this language. This paper thus contributes to elaborating Case Theory in the framework of generative grammar.

2. Background: We will first see the distribution of genitive subject in Mongolian as a background to the subsequent sections. First, (1)-(2) show that genitive subject needs to co-occur with an outer nominal element. In the following examples, AND = adnominal and CON = conclusive.

(1) Nidunun Ulagan-ø/*-nu nom-ø biči-jei.
last year Ulagan-Nom/-Gen book-Acc write-past.CON ‘Ulagan wrote a book last year.’

(2) nidunun Ulagan-ø/-nu *pro*$_1$ biči-gsen/*-jei nom$_1$
last year Ulagan-Nom/-Gen write-past.ADN/-past.CON book
‘the book which Ulagan wrote last year’

Second, (3)-(6) show that long distance genitive subject licensing by an outer nominal element is possible when the nominal originates from the same clause as the genitive subject.

(3) Baɣatur-ø [nidunun Ulaɣan-ø/*-nu nom-ø biči-gsen/-jei gejü] kele-jei.
Bagatur-Nom last year Ulagan-Nom/-Gen book write-past.ADN/-past.CON that say-past
‘Bagatur said that Ulagan wrote a book last year.’

(4) Baɣatur-ø [nidunun Ulaɣan-ø/-nu *pro*$_1$ biči-gsen/*-jei gejü]
Bagatur-Nom last year Ulagan-Nom/-Gen write-past.ADN/-past.CON that
kele-gsen nom$_1$
say-past.ADN book ‘the book which Bagatur said that Ulagan wrote last year’

(5) nidunun Ulagan-ø/-nu nom-ø biči-gsen/*-jei šiltaɣan/učir
last year Ulagan-Nom/-Gen book-Acc write-past.ADN/-past.CON reason/fact
‘the reason/fact that Ulagan wrote a book last year’

(6) Baɣatur-ø [nidunun Ulaɣan ø/-*nu nom-ø biči-gsen gejü]
Bagatur-Nom last year Ulagan-Nom/-Gen book-Acc write-past.ADN that
kele-gsen šiltaɣan/učir
say-past.ADN reason/fact
‘the reason/fact that Bagatur said that Ulagan wrote a book last year’

Based on these data, Maki *et al*. (2011) claim that percolation of a [+N] feature takes place from *pro* to the corresponding outer nominal, and the heads on the path have the [+N] feature. Then, the COMP *gejü* ‘that’ with the [+N] feature can license the genitive subject in (4), but not in (6).

3. Data: Let us now consider the distribution of accusative subject in Mongolian. Maki *et al*. (2010) show that accusative subject is possible in adjunct clauses, and the generalization on the distribution of accusative subject is (7).

(7) *Generalization about the Distribution of Accusative Subject in Mongolian*
Accusative subject may appear in adjunct clauses whose heads are not nominal.

(8)-(10) show that accusative subject is allowed in a temporal, conditional, and reason clause.

(8) a. Yaɣaru-ber Ulaɣan-ø/*-i almurad-ø ide-jei.
hastily Ulagan-Nom/-Acc apple-Acc eat-past.CON ‘Ulagan ate an apple hastily.’

b. Yaɣaru-ber Ulaɣan-ø/-i almurad-ø ide-gsen-nü daraɣa, Baɣatur-ø
hastily Ulagan-Nom/-Acc apple-Acc eat-past.ADN-Gen after Bagatur-Nom
jurji-ø ide-jei.
orange-Acc eat-past.CON ‘After Ulagan had eaten an apple hastily, Bagatur ate an orange’

(9) a. Quyar čaɣ-un daraɣa Ulaɣan-ø/*-i ende ire-jei.
two hour-Gen after Ulagan-Nom/-Acc here come-past.CON
‘Ulagan came here in two hours.’

b. Quyar čaɣ-un daraɣa Ulaɣan-ø/-i ende ire-bel, bögüdeger-ø ɣaciɣdana.

two hour-Gen after Ulagan-Nom/-Acc here come-if everyone-Nom trouble
'If Ulagan comes here in two hours, everybody will be in trouble.

(10) a. Öčügedür Ulaɣan-ø/*-i suryaɣuli-du ire-gsen ügüi.
yesterday Ulagan-Nom/-Acc school-to come-past.ADN not
'Ulagan did not come to school yesterday.'

b. Öčügedür Ulaɣan-ø/-i suryaɣuli-du ire-gsen ügüi učir-eče, bögüdeger-ø sedkil joba-jai.
yesterday Ulagan-Nom/-Acc school-to come-past.ADN not because everyone-Nom heart worry-past.CON
'Because Ulagan did not come to school yesterday, everybody was worried.'

However, it is not allowed in relative clauses, as shown in (11).

(11) nidunun Ulagan-ø/-nu/*-i biči-gsen nom
last year Ulagan-Nom/-Gen/-Acc write-past.ADN book
'the book which Ulagan wrote last year'

Accusative subject is also allowed in complement clauses, as shown in (12).

(12) Baɣatur-ø [nidunun Ulaɣan-ø/-i nom-ø biči-gsen/-jei gejü] kele-jei.
Bagatur-Nom last year Ulagan-Nom/-Acc book write-past.ADN/-past.CON that say-past
'Bagatur said that Ulagan wrote a book last year.'

However, it is not allowed in a relative clause in which the nominal element originates from the same clause as it, as shown in (13-14).

(13) a. Baɣatur-ø [nidunun Ulaɣan-ø/-nu/*-i pro_1 biči-gsen gejü] kele-gsen nom_1
Bagatur-Nom last year Ulagan-Nom/-Gen/-Acc write-past.ADN that say-past book
'the book which Bagatur said that Ulagan wrote last year'

b. Baɣatur-ø [nidunun Ulaɣan-ø/*-nu/*-i pro_1 biči-jei gejü] kele-gsen nom_1
Bagatur-Nom last year Ulagan-Nom/-Gen/-Acc write-past.CON that say-past book

(14) a. Baɣatur-ø [nidunun Ulaɣan-ø/-*nu/-i nom-ø biči-gsen gejü] kele-gsen
Bagatur-Nom last year Ulagan-Nom/-Gen/-Acc book-Acc write-past.ADN that say-past
šiltaɣan/učir
reason/fact 'the reason/fact that Bagatur said that Ulagan wrote a book last year'

b. Baɣatur-ø [nidunun Ulaɣan-ø/-*nu/-i nom-ø biči-jei gejü] kele-gsen
Bagatur-Nom last year Ulagan-Nom/-Gen/-Acc book-Acc write-past.CON that say-past
šiltaɣan/učir
reason/fact

4. Discussion: Let us consider what the above data suggest. We claim that they suggest that what licenses accusative subject/what assigns accusative Case to accusative subject is COMP without a [+N] feature. (8b)-(10b) with accusative subject are allowed, because the head of the adjunct clauses is COMP without a [+N] feature. (8a)-(10a) and (11) with accusative subject are ungrammatical, because there is no such COMP in the structures. (12) with accusative subject is grammatical due to the COMP without a [+N] feature. (13a, b) with accusative subject are ungrammatical, because the COMP has a [+N] feature by percolation of the feature from *pro* to the head noun. Finally, (14a, b) with accusative subject are grammatical, because they involve gap-less prenominal modifiers, so that the relevant COMP does not have a [+N] feature.

One may argue against the above argument, however, because verbs such as *kele* 'say' take accusative object, as shown in (15), so that these verbs actually assign/license accusative subject in examples such as (12), as in the raising-to-object construction in English.

(15) Baɣatur-ø Ulaɣan-nu učir-i Batu-du kele-jei.
Bagatur-Nom Ulagan-Gen thing-Acc Batu-to say-past
'Bagatur told to Ulagan things about Batu.'

However, this argument does not hold for examples such as (8b), in which the matrix verb *ide* 'eat' does not have more than one accusative Case to assign/license. Therefore, in order to give a consistent account for the entire data shown above, we have to admit that C can assign/license accusative Case. If this argument is correct, Case assignment/licensing system looks like (16).

(16) Case Assignment/Licensing System: Functional Categories D, *v*, I, C assign/license Case.

Therefore, the present study contributes to elaborating Case Theory in generative grammar.

Object movement and its implication for A-scrambling in Japanese

Introduction: In Japanese, object quantifier phrases (QPs) can take scope either over or under negation **[1]**, which contrasts with English **[2]**, where the universal object QP is trapped inside the scope of the negation:

[1] Taroo-wa gakusee-zen'in-o/go-nin-o sikar-anakat-ta. (obj.>neg; neg>obj.)
Taro-TOP student-all-ACC /5-CL-ACC scold-NEG-PAST
'lit. Taro didn't scold all/five students.'

[2] John didn't scold every student. (*obj.>neg; neg>obj.)

As Japanese is assumed to lack optional quantifier raising, 'obj.>neg' reading has led to assuming Japanese negation is different from English one. Authors like Han et al. (2004), Kataoka (2006) assume there are several positions for negation; in one of them, negation is below objects. I claim the difference in **[1-2]** is not the position of negation but the existence of object movement in **[1]**, which provides a new account for Japanese A-scrambling.

Scope relation with negation: English QP subjects are scopally ambiguous with respect to negation **[3]**:

[3] All/A student(s) didn't come. (subj.>neg; neg>subj.)

When focused or disjunctive phrases appear in subject position, they must scope over negation **[4]**:

[4] Only John/John or Tom didn't come. (subj.>neg;*neg>subj.)

The same thing happens in Japanese; focused or disjunctive phrases in subject position allow only wide scope **[5]**:

[5] a. [Subete-no/Go-nin-izyoo-no gakusee-ga] ko-nakat-ta.
all-GEN/5-CL-or.more-GEN student-NOM come-NEG-PAST (subj.>neg; neg>subj.)
'lit. All/Five or more students didn't come.'

b. [Taroo-mo/dake] / [Taroo-ka Ziroo-ga] ko-nakat-ta.
Taro-also/only Taro-or Ziro-NOM come-NEG-PAST
'lit. [Also/Only Taro]/[Taro or Ziro] didn't come.' (subj.>neg;*neg>subj.)

Thus, I propose the generalization **[6]** regarding the scope of focused and disjunctive phrases:

[6] Focused and disjunctive phrases allow only surface scope.

Object position in Japanese: Significantly, when focused or disjunctive phrases are placed in object position in Japanese, the availability of 'neg>obj.' reading disappears **[7]**:

[7] Taroo-wa [yasai-mo/dake] / [yasai-ka kudamono]-o tabe-anakat-ta.
Taro-TOP vegetable-also/only / vegetable-or fruit -ACC tabe-NEG-PAST
'lit. Taro didn't eat [only/also vegetable] / [vegetable or fruit]. (obj.>neg;* neg>obj.)

Note that these phrases do not seem to be positive polarity items (PPIs) (contra Hasegawa 1991 and Goro 2007). PPIs can scope under local negation when another downward-entailing (DE) operator is added **[8]**, while Japanese focused and disjunctive phrases in object position still cannot scope under local negation in such contexts **[9]**:

[8] I don't think that John didn't call someone. (ok: neg>neg>some)

[9] John-wa [Taro-ga pan-mo/dake / [pan-ka-kome-o] tabe-nakat-ta to] omowa-nakat-ta
John-TOP Taro-NOM bread-also/only/[bread-or-rice-ACC] eat-NEG-PAST that think-NEG-PAST
'lit. John didn't think Taro didn't eat also/only bread/[bread or rice].' (*neg>neg>obj.; neg>obj.>neg)

Nor these phrases seem to undergo some focus movement to the higher domain (contra Aoyagi 1999, Miyagawa 2010), for adding a focus particle does not affect the scope relations among arguments **[10]**:

[10] a. Taroo-ga [san-nin-izyoo-no sensee-ni] [yo-nin-izyoo-no dansi gakusee-o] syookaisi-ta.
Taro-NOM 3-CL-or.more-GEN teacher-DAT 4-CL-or.more-GEN male student-ACC introduce-PAST
'lit. Taro introduces four or more male students to three or more teachers.' (dat.>acc.;??acc.>dat.)

b. Taroo-ga [san-nin-izyoo-no sensee-ni] [yo-nin-izyoo-no dansi gakusee-**mo**] syookaisi-ta.
Taro-NOM 3-CL-or.more-GEN teacher-DAT 4-CL-or.more-GEN male student-**also** introduce-PAST
'lit. Taro introduced also four or more male students to three or more students.' (dat.>acc.;??acc.>dat)

If the generalization **[6]** is correct, these phrases reflect their surface scope, and it follows that the objects are in fact above negation in the syntax in **[7]**. Thus, I argue that Japanese objects must move above NegP.

Why objects move? I argue that objects move for formal licensing reasons. Assume that NegP is above *v*P, which means objects move into the TP-domain. I assume that this is related to case particles. In Japanese, case particles affect the distribution of objects; without a case particle, objects must be adjacent to the verb (i.e. Case-drop), while with it, they can appear even above subjects (i.e. scrambling). Thus, I claim that objects with a case particle have an uninterpretable 'particle' feature besides abstract Case feature, and that although abstract Case is checked within *v*P, objects with a particle still need to move into the TP-domain for licensing case particle. (This means case particles are not a mere morphological realization of abstract Case.) I assume the particle licensing head X is above NegP:

[11] $[_{IP} \ldots [_{XP}\ X_{[Case.prt]}\ ([_{NegP}\ Neg)\ [_{vP}\ v\ [_{VP}\ V\ Obj.\text{-}o_{[-Case.prt]}\ ]](])]]$

This predicts that when a case particle is absent, objects stay inside the *v*P-domain, so the scope relation with

negation should be opposite of the cases of objects with a case particle. Surprisingly, this seems correct **[12]**:

[12] a. Taroo-wa [san-nin-izyoo-no gakusee]-o sir-anakat-ta.
Taro-TOP 3-CL-or.more-GEN student-ACC know-NEG-PAST (prominent reading: obj.>neg)
b. Taroo-wa [san-nin-izyoo-no gakusee] sir-anakat-ta.
Taro-TOP 3-CL-or.more-GEN student know-NEG-PAST (prominent reading: neg>obj.)
'lit. Taro didn't know three or more students.'

With an accusative case particle, the prominent reading is 'obj.>neg' (cf. Han et al. 2004), while without it, the prominent reading is reversed. The prominence of 'obj.>neg' in **[12a]** can be explained straightforwardly under the current analysis since these objects undergo movement above NegP, hence 'obj.>neg' reading is a surface scope reading (note that surface scope readings are often stronger than inverse scope ones). By contrast, since objects without a case particle do not have the motivation for movement into the TP-domain, they stay low, so the 'neg>obj.' becomes strong. (Why 'obj.>neg' reading is still weakly possible in **[12b]** seems related to the fact that Case-drop is marginally possible in non-adjacent-to-verb contexts, that is, there seems to be a distinction between cases where case particles are absent from the beginning of the derivation and cases where case particles are present in the syntax but deleted at PF.) Thus, I argue that objects with a case particle move for particle licensing.

A-scrambling: This provides a new account for why object scrambling over subjects can be A-movement in Japanese. In Japanese, objects can be scrambled over subjects without Weak Crossover (WCO) violations **[13]**:

[13] [mi-tu-izyoo-no kaisya-o]$_i$ [soko$_i$-no ookuno zyuugyooin-ga] t_i hihansi-ta.
3-CL-or.more-GEN company-ACC it-GEN many employee-NOM criticize-PAST
'lit. Three or more companies, many of its employees criticized.' (bound variable reading of *soko* is ok)

The status of Japanese A-scrambling is unclear; it is scrambling, so it seems optional, but in general, A-movement is obligatory. Also, if all A-related features of objects are checked within *v*P, why can object movement above subjects be A-movement? This can be explained under the current analysis. I adopt Bošković (2007, 2008), where elements requiring checking must function as a probe, which deduces generalized EPP effects. He claims that XP with an uninterpretable feature (uF) moves, to probe down a head with the relevant interpretable feature (iF) **[14]**:

[14] [$_{YP}$ Y [$_{ZP}$ … XP …]] (XP with uF moves, to probe down Y with iF)
iF uF

Then, a hint to solve Japanese A-scrambling puzzle is obtained from West Ulster English (WUE):

[15] a. Who$_i$ was arrested all t_i in Duke Street? b. *They$_i$ were arrested all t_i last night. (McCloskey 2000)

In WUE, *wh*-movement allows Q-float but movement to [Spec,TP] does not. Bošković (2008) argues that in **[15a]**, *who* directly moves to [Spec,CP] and probes both C and I, checking both its Case and Op-features; otherwise, **[15a]** should be ill-formed on a par with **[15b]**. I claim that Japanese A-scrambling over subjects is basically the same as **[15a]**. Objects move to a position above subjects, and from there, probe heads with the relevant features. Since this involves case particle licensing, which I assume is A-related, the movement can be A-movement. Note that this differs from Miyagawa (1997), where A-scrambling involves IP-adjunction for accusative Case checking with I. The current approach claims that A-scrambling involves multiple-feature-checking. Then, as for another head above subjects, I argue that it is related to topicality/definiteness. As evidence, I provide **[16]**, which has been unnoticed in the literature. In Japanese, NPs are basically ambiguous regarding specificity/definiteness, but in the form '[NP-Case-Numeral-CL]', only non-specific/indefinite reading is possible. Surprisingly, when scrambled objects occur in this form, scrambling cannot be A-movement, hence the WCO effect is observed:

[16] *?[Kaisya-o mit-tu-izyoo]$_i$ [soko$_i$-no ookuno zyuugyooin-ga] t_i hihansi-ta.
company-ACC 3-CL-or.more it-GEN many employee-NOM criticize-PAST
'lit. Three or more companies, many of its employees criticized.'(bound variable reading of *soko* is bad)

Thus, I propose **[17]** for the mechanism enabling object scrambling over subjects to be A-movement:

Movement
[17] [$_{YP}$ Obj.-*o* Y$_{[topic/definite]}$ … [$_{TP}$ Subj. ... [$_{XP}$ X$_{[Case-prt]}$ …
probe both features

This means that A-scrambling is not optional; rather, A-scrambling is a feature-driven movement. It moves above subjects to check its [topic/definite] feature (say, in TopP) and from there, it also checks its case particle feature. In **[16]**, as the object is indefinite, i.e., lacks a [topic/definite] feature, the movement in **[17]** cannot be applied. Thus, the current study not only resolves the scope issue of objects but eliminates optionality in Japanese A-scrambling.

Selected References: Bošković, Ž. 2007. On the locality and motivation of Move and Agree: An even more minimal theory, *LI* 38. Han, C.-H, D. R. Storoshenko, and Y. Sakurai. 2004. Scope of negation, and clause structure in Japanese. *Berkeley Linguistics Society 30*. Miyagawa, S. 1997. Against optional scrambling. *LI* 28.

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Friday, 4:30pm-5:00pm

Nominative as *no case at all*: An argument from raising-to-accusative in Sakha

Preminger (2011) argues for a reimplementation of Marantz's (1991) configurational approach to case assignment entirely within syntax. He argues that the "disjunctive case hierarchy" given in (1), which must be stipulated in Marantz's account, can be *derived* from this syntax-internal reimplementation.

(1) LEXICALLY-GOVERNED CASE > DEPENDENT CASE > UNMARKED CASE

On Preminger's account, LEXICALLY-GOVERNED CASE is the first case that a DP can receive because it is case assigned upon first merge (by the head that c-selects the DP); DEPENDENT CASE requires a c-command relation between two DPs, and so more structure must first be built; and finally, UNMARKED CASE is simply the morphological spellout of a DP whose case features *were never valued* in the course of the derivation (recall that Marantz's 1991 approach to case eschews the Case Filter entirely). The ordering in (1) therefore follows from the bottom-up manner in which syntactic structure is built.

Preminger (2011) and Levin & Preminger (2012) argue that case in Sakha (Turkic) can be explained entirely within such an approach, building on Baker & Vinokurova (2010) (henceforth BV), but extending their configurational account to also include NOM and GEN (rather than ACC and DAT alone). We argue here that a certain kind of raising in Sakha discussed by BV provides a novel argument for the treatment of nominative as the wholesale absence of case—in accordance with Preminger's proposal.

The construction in question involves raising of the subject of an embedded clause to a position where it receives accusative case. Raising-to-accusative is not unique to Sakha, of course, and close analogues are found in other Turkic languages. But BV provide a variety of arguments showing that accusative in Sakha is DEPENDENT CASE, rather than case assigned by a functional head (e.g. v^0). Thus, for example, the matrix verb in (2a) is unaccusative (and therefore its v^0 is presumably accusative-less), yet accusative is still assignable, provided that *ehigi* ('you') and *bihigi* ('we') enter into a sufficiently local relation. This differs from the state of affairs in, e.g., Turkish (Kornfilt 1977, Moore 1998).

(2) a. Ehigi bihigi-ni kyajtar-dy-byt dien xomoj-du-gut [V:369]
you we-ACC lose-PAST-1pS that become.sad-PAST-2pS
'You (pl.) were disappointed that we lost.'

b. Masha ejiigin yaldj-ya-ŋ dien tönün-ne
Masha you.ACC fall.sick-FUT-2sS that return-PAST.3sS
'Masha returned for fear that you (sg.) would fall sick.'

Note the presence of agreement on the embedded verbs in (2a-b); it is crucial to what follows that verbal agreement in Sakha cannot generally target accusative nominals, except in these raising environments.

The question we would like to pose is: what is the representation of nominative in Sakha, such that —

(3) a. agreement on the embedded verb, which in Sakha normally targets *only nominative arguments*, is able to target, e.g., *bihigi(-ni)* ('we(-ACC)') in a construction like (2a)
b. DEPENDENT CASE, which Marantz (1991) argued can only arise through case-competition by two *still caseless* nominals, can nonetheless arise on this raised subject

The provision of 'still caseless' in Marantz's formulation of the conditions for DEPENDENT CASE was needed because otherwise, the objects of quirky-subject verbs in Icelandic would be assigned accusative, whereas they actually surface as nominative; but one could imagine that this is not so in Sakha, and that due to the lack of true quirky-subject verbs in Sakha, one could not rule out this possibility.

We argue that this is not so, and that the juxtaposition of (3a) with (3b) requires an account where:

(4) a. agreement in Sakha can only target caseless nominals
b. agreement does not give rise to case (Bobaljik 2008, Preminger 2011; cf. BV, Chomsky 2000, 2001)
c. "nominative"(/"genitive") in Sakha is simply a descriptive label for *caselessness* (within the clausal and nominal domains, respectively)

BV(:603) assume that Sakha allows *case stacking*, whereby a DP can receive case more than once. On this view, it is possible for the embedded subjects in (2a-b) to receive true, non-vacuous nominative within the

embedded clause, and subsequently raise to a position where they receive accusative, which is "stacked" atop (or outside of) the previously assigned nominative. Since Sakha never actually exhibits multiple overt case endings on a single DP (e.g. [[NP-DAT]-ACC]), the morphological component must then reduce each such "stack" of cases on a given DP to a single morphological marking.

Setting aside, for the moment, the question of why accusative 'wins' over nominative (in terms of overt expression), this assumption creates a problem elsewhere. If DPs that are already case-marked can enter into subsequent DEPENDENT CASE relations, then the prediction is that any nominative DP c-commanded by another DP can be assigned accusative—which will simply be "stacked" atop the nominative. The case in point concerns scrambling of an accusative-marked object across a nominative subject:

(5) Deriebine-ni orospuonnjuk-tar xalaa-byt-tar [BV:604]
village-ACC robber-PL raid-PTPL-3pS
'Some robbers raided the village.'

BV argue that accusative on the scrambled object in (5) is assigned as the object passes through the edge of the VP phase; at that point, the subject locally c-commands the object, giving it DEPENDENT CASE:

(6) Deriebine-ni$_1$ orospuonnjuk-tar [$_{VP}$ $\underline{t_1}$ [t_1 xalaa-byt-tar]]
village-ACC robber-PL raid-PTPL-3pS
'Some robbers raided the village.'

But now consider the surface configuration. Here, the subject is locally c-commanded by the object (note that even if object scrambling of this sort is A-bar movement, it still must be able to feed DEPENDENT CASE in Sakha, to account for case in raising-to-accusative constructions; see BV sec. 3.5). If DPs that are already case-marked can enter into subsequent DEPENDENT CASE relations, then by virtue of being c-commanded by the object, the subject in (5) should receive accusative, "stacked" atop its existing nominative (cf. the earlier discussion of (2a-b)). And since the morphological resolution for such a case-stack must favor realization of accusative over nominative, in order to account for (2a-b), the result is the false prediction of accusative morphology on the subject in (5).

Instead, we argue, Marantz's provision that only caseless arguments can enter into DEPENDENT CASE relations must hold of Sakha, as well. This accounts for data like (5), because accusative having already been assigned to the object will prevent a subsequent DEPENDENT CASE relation being established when the object is scrambled across the subject. But it also accounts for data like (2a-b), if we crucially assume (with Preminger) that 'nominative' is none other than the *absence of case*. The restriction of verbal agreement in Sakha to nominative targets can be reconstrued as a restriction to only target caseless DPs; importantly, this retains BV's insight that the embedded verb was able to agree with the raised subjects in (2), which ultimately come to bear accusative, because at that point, they were not accusative yet. Note that (4b) (i.e., that agreement does not give rise to case) is now crucial: the embedded subjects in (2) are first agreed with, and subsequently enter into a DEPENDENT CASE relation; that would not be possible if agreement had given rise to a representation of 'nominative' that was anything but caselessness.

Conclusion: If we accept BV's arguments that accusative in Sakha is a DEPENDENT CASE, we must disallow already case-marked nominals from entering into new DEPENDENT CASE relations, otherwise the wrong prediction is made for structures like (5). Because only nominatives can be targeted for verbal agreement in Sakha, it follows that the embedded subjects in (2a-b) were 'nominative' at the point at which agreement took place; and because these raised subjects do subsequently enter into a DEPENDENT CASE relation (and consequently, receive accusative case), it follows that 'nominative' is simply caselessness.

SELECTED REFERENCES: **Baker, M. & N. Vinokurova. 2010.** Two modalities of Case assignment: Case in Sakha. *NLLT* 28:593-642. **Bobaljik, J. D. 2008.** Where's phi? Agreement as a post-syntactic operation. In *Phi Theory*, eds. Harbour et al., 295-328. Oxford: OUP. **Kornfilt, J. 1977.** A note on subject raising in Turkish. *LI* 8:736-742. **Levin, T. & O. Preminger. 2012.** *Case in Sakha: Are Two Modalities Really Necessary?* Ms. **Marantz, A. 1991.** Case and Licensing. In *Proceedings of ESCOL 8*, eds. Westphal et al., Ithaca, NY: CLC Publications, 234-253. **Moore, J. 1998.** Turkish copy-raising and A-chain locality. *NLLT* 16:149-189. **Preminger, O. 2011.** *Agreement as a fallible operation*. PhD diss., MIT.

Raising in Kazakh: Case, Agreement, and the EPP

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Kazakh (Turkic) exhibits two raising constructions (1), which differ in their case and agreement properties. I demonstrate that these differences follow directly from structural differences in the embedded clause. In one case (1b/3b), the raising predicate selects for a more functional structure (a DP layer), yielding case and agreement possibilities in the embedded clause; in the other case (1a/3a), no such structure is available, limiting subject case possibilities and triggering agreement with the matrix, rather than the embedded, predicate. I further demonstrate that subject case and subject-verb agreement in nominalized clauses may be dissociated, contradicting prominent theories of case and agreement in which both are valued by AGREE with the same structural head (Chomsky 2001, i.a.). I claim that Kazakh raising does not target nominal phrases with unvalued case features and is therefore not subject to the A(ctivity) C(ondition), supporting Asarina's (2011) claims for Uyghur (Turkic). Evidence for this claim comes from two observations: case-marked (genitive) subjects from the lower clause may raise, and other arguments may raise if they have undergone short scrambling to the left periphery of the embedded clause. To account for Kazakh raising, I propose a locality-based raising mechanism driven purely by the EPP feature, independent of any AGREE operation.

Two semantically equivalent expressions (1) have visible differences in case and agreement (in bold):

(1) a. **men(*-iñ)** (şınımen) kïim sat-w kerek-**pin**
1SG(*-GEN) (very much) clothing sell-INF necessary-1SG
'I (very much) need to sell clothing.'

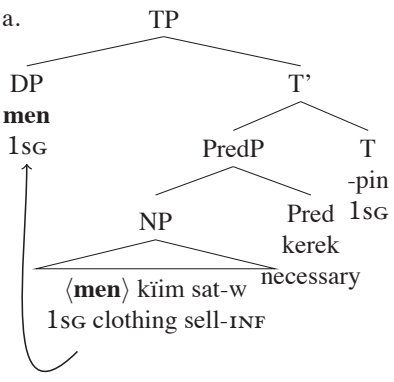
b. **men(-iñ)** (şınımen) kïim sat-w-**ım** kerek
1SG(-GEN) (very much) clothing sell-INF-1SG.POSS necessary
'I (very much) need to sell clothing.'

(1a) appears similar to English raising: the subject *men* has unmarked (nominative) case and agrees with the matrix predicate *kerek* 'necessary'. (1b) however exhibits possessor agreement with the optionally genitive subject *men(-iñ)*. Both examples exhibit raising of the subject *men* from the embedded clause to the spec(ifier) of matrix TP. Crucially, the modifier *şınımen* 'very much' must be interpreted as modifying the matrix predicate *kerek*; it cannot be interpreted as modifying *sat-* 'sell' (*#şınımen sat-*). If subject raising had not occurred in (1), *şınımen* would have been generated within the embedded clause, where matrix interpretation (as modifying *kerek*) is not possible. As expected, non-raising predicates (such as *qajet* 'required') do not allow matrix interpretation of *şınımen* when it is generated inside the embedded clause:

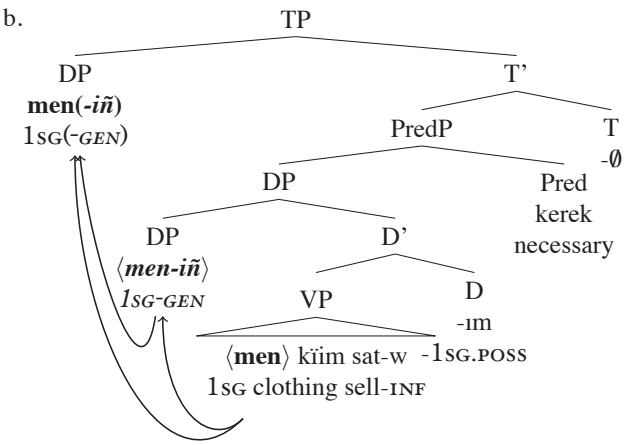
(2) men-iñ (**#şınımen**) kïim sat-w-ım qajet
me-GEN (#very much) clothing buy-INF-POSS.1SG required
'I am required to (#very much) sell clothing.'

I claim that the structural differences between (1a) and (1b) lie in the complement of *kerek*:

(3) a.



b.



In (1a/3a), possessor agreement with the subject is forbidden on the clausal complement to *kerek*, whereas in (1b/3b) it is required. Following from Kornfilt's (2008) analysis in which possessor agreement is hosted on the D head in some Turkic languages (including Kazakh), I take the complement to *kerek* in (1b/3b) to be a DP, whereas in (1a/3a) the complement is missing a DP layer, and therefore lacks possessor agreement. I take this complement to be an NP, since it can be assigned case by other raising predicates, such as by *mindetti* 'obligatory':

(4) biz mektep-ke bar-w-**ğa** mindetti-miz
1PL school-DAT go-INF-DAT obligatory-1PL
'We are obliged to go to school.'

In both constructions in (1/3), *men* moves to [spec, TP]. In (1a/3a), there is no D head targeting the subject's ϕ-features, which remain unvalued until agreement with the matrix T head. In (1b/3b) however, *men*'s ϕ-features are inactive after agreement with D, rendering it inactive as a goal for T.

Following Gribanova (2013) for Uzbek, I assume [spec, DP] in Kazakh is the structural position for genitive case assignment. Since *men* can optionally receive genitive case in (1b/3b), it may either move through [spec, DP] where it gains genitive case before raising to [spec, TP], or it may raise directly from within the VP. In both cases, agreement on D targets 1SG, showing that the agreement and case-assigning operations are separable; nominal agreement may target either an unmarked subject inside the embedded VP or a genitive subject after movement to [spec, DP]. I take this to be evidence that agreement and case-assignment are separate operations.

The raising construction does not exclusively target embedded subjects. If an object is first scrambled to a high position inside the embedded clause, it can also be raised:

(5) a. **kïïm-di** (şınımen) men(*-iñ) sat-w kerek-pin
clothing-ACC (very much) 1SG(*-GEN) sell-INF necessary-1SG
'I (very much) need to buy clothing.'

b. **kïïm-di** (şınımen) men(*-iñ) sat-w-ım kerek
clothing-ACC (very much) 1SG(*-GEN) sell-INF-1SG.POSS necessary
'I (very much) need to buy clothing.'

Just as in (1), the fact that *şınımen* is interpreted as modifying the matrix predicate *kerek* can only follow if the preceding phrase raises to [spec, TP]. In (5), the goal *men* stays low within the embedded clause, yet remains a goal for both matrix agreement (5a) and nominal agreement (5b). Thus, neither agreement operation is tied to case-assignment, let alone to a single structural position.

Finally, (5) is evidence against the AC. *kïïm-di* bear morphological (accusative) case and therefore has no unvalued case features, yet it still raises. As with the subject raising in (1), the interpretation of *şınımen* as modifying matrix *kerek* follows only if *kïïm-di* raises; otherwise *şınımen* would be generated within the embedded clause and interpreted only as modifying the embedded verb. Thus, contrary to the AC, movement to [spec, TP] is not driven by unvalued features on the DP targeted for movement. Instead, raising is blind to features of the moved DP and will attract a phrase purely based on locality, whether the closest phrase in the embedded clause is a subject or a non-subject argument resulting from scrambling.

References

Asarina, Alya. 2011. Case in Uyghur and Beyond. PhD thesis, MIT. **Chomsky, Noam**. 2001. *Derivation by phase*. MITWPL. **Gribanova, Vera**. 2013. Case and agreement in Uzbek nominalized clauses. University of Chicago Linguistics Department colloquium. **Kornfilt, Jaklin**. 2008. Subject case and Agr in two types of Turkic RCs. In *Proceedings of Workshop on Altaic Formal Linguistics (WAFL4)*, *MITWPL* 56:145–168.

Faruk Akkuş (Boğaziçi University) Friday, 5:30pm-6:00pm

Light Verb Constructions in Turkish: A Case for DP Predication and Blocking

In this paper we investigate the internal structure of bare nominals, mostly of Romance origin, e.g. *rapor* 'report', *analiz* 'analysis', *restore* 'restore', found in complex predicates (CPr) formed with the light verb (LV) *et-* 'do' in Turkish (1). In (1a) and (1b) in which the bare nominal occurs respectively with the LV *et-* 'do' and in its absence, the same arguments with the same theta roles and case properties are available. The literature dealing with bare nominals (BNs) under various names (e.g. Kornfilt 1997, Göksel and Kerslake 2005, Öztürk 2005) has generally given a unitary account of BNs and made no distinction among them. For instance, Öztürk (2005) assumes all BNs to be of predicative nature based on the systematic parallelisms between CPs and DPs (Abney, 1987). Following the account of predication, Keskin (2009: 127) offers a DP structure for BNs. Key and Tat (K&T, 2012), on the other hand, categorize preverbal transitive BNs according to the complements they take: if a CPr can be intransitivized by changing the LV from *et-* to *ol-* 'become', it is of Type I and if not, it is of Type II. This paper will investigate the nature of BNs and show that not all BNs are of the predicative nature unlike what is claimed in the literature. It will also present a categorization based on the predicative feature of BNs, contra K&T (2012). Our classification will reveal a blocking effect, where the existence of a lexical item blocks a periphrastic construct (**Type B**). It will also offer a DP structure different from the one proposed by Keskin (2009) arguing that our structure can account for the range of data Keskin (2009) fails to accommodate. (see Appendix for a sample list of types of BNs)

The evidence that not all BNs are of the predicative type comes from examples like (2). As seen in example (2), not all CP structures with CPrs can be projected into a DP, unlike (1). This implies that these BNs differ from one another in terms of their predicative feature, which is crucial for a DP to be grammatical. We will call BNs which project a DP **Type A** and those which don't **Type B.** We extend Bowers' (2001) idea of Predicate Phrase (PrP) and assume a PrP within DP to explain the difference between Type A and Type B. We propose the structure in (4a) for (3a). This structure differs from Keskin (2009) in which BNs are generated sisters of Pr° and projected as N°. In our structure, Pr° can select the maximal projection XP of a different lexical category X, e.g. NP or AdjP. This is evinced by the possibility of inserting certain particles like *bile* 'even' and coordination, which target only XPs (Taylan, 1984; Öztürk, 2005) as illustrated in (3c). This shows that BNs in both Type A and Type B constructions have full NP status syntactically, not N as suggested by Keskin, despite their difference in projecting a DP structure. PrP must contain a feature complex: [+nominal, +predicative], which must be satisfied.

Grimshaw and Mester (1988) take the BN itself to be the θ-role assigner, which lends its arguments and θ-marking ability to the LV via 'Argument Transfer' in a clause. We argue that in DP, a BN projects its a-structure without an abstract LV that inherits a-structure from it, contra Sezer (1991) and Keskin. Our structure can account for the cases in which NPs generated as the immediate sister of Pr° form a complex predicate, parallel to the case of pseudo-incorporation (cf. Massam, 2001; Öztürk, 2005), such as (3b) represented in (4b). Besides, the fact that they allow adjectival modifiers like *beklenmeyen* 'unexpected' supports the nominal nature of such BNs. An abstract LV would allow adverbial modification as in gerunds. BNs, like gerunds, take arguments but allow adjectival modification. We assume that certain adjectives mark the edge (existential closure) into which specific NPs cannot occur in DP, similar to the case of manner adverbs marking left-edge boundary of VP in CP. This analysis furthers the justification for assimilating DP and clauses. BN constructions differ from standard compounds (Özsoy, 2004) in involving predication although adjectives mark an edge in both constructions. To be interpreted as syntactic arguments, object NPs have to occur in Spec of PrP. BNs of Type A are both [+nominal, +predicative], and therefore they qualify to occupy the Pr° (cf. (4)). BNs of Type B are [+nominal, -predicative], so they cannot occur in Pr°, which leads to ungrammaticality in their DP as in (5a) represented in (4c).

We argue that there are two reasons BNs of the Type B exhibit [-predicative] feature: In the case of some BNs under this type, Turkish not only borrowed BNs, but also their 'true' nominal counterparts, e.g. *restore* 'restore' vs. *restorasyon* 'restoration'. That's why it is possible to talk of a "lexical blocking" effect for these BNs, in that BNs like *restore* are blocked from bearing [+nominal, +predicative] features if there is a 'true' nominal like *restorasyon* to begin with, which is already [+predicative]. In other words, the existence of a lexical item blocks a periphrastic construct. This explains the grammaticality of (5b), as opposed to (5a). A schematic representation is given in (6). The only way a 'defective' nominal/bound stem like *restore* to be used in a DP structure is with the LV *et-*. Other BNs of Type B don't have their 'true' nominal counterparts, i.e. they exhibit some adjectival flavor, e.g. *irite* 'irritate(d)', *onore* 'honor(ed)'. Hence, they are not qualified to occupy the Pr position. K&T's method of classification would predict that a BN like *monte* 'montage' should be taken to be under Type A (when translated into our categorization). The reason is that the intransitive version of such a CPr cannot be formed by changing the LV from (transitive) *et-* to (intransitive) *ol-*. However, we argue that CPrs like *monte, sabote* belong to Type B because their true nominal counterparts also exist in Turkish. The existence of *montaj,* for instance, precludes *monte* from

having the [+predicative] feature. It is for this reason that a DP structure with *monte* cannot be the counterpart of a CP as illustrated in (7). Based on the argument we put forward, we hold that alternation with *ol-* for intransitivization cannot be taken as a reliable criterion.

(1) a. [$_{CP}$ Öğrenci-ler yasa-yı protesto etti.]
student-pl. law-acc protest did
"The students protested the law."

b. [$_{DP}$ Öğrenci-ler-in yasa-yı protesto-su]
student-pl.-gen law-acc protest-3poss.
"The students' protest against the law"

(2) a. [$_{CP}$ Kurul yazar-ı onore etti.]
board author-acc honor did
"The board honored the author."

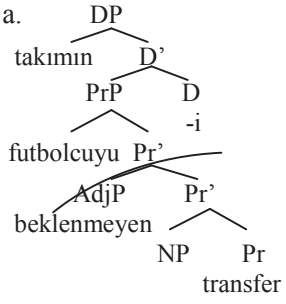
b. *[$_{DP}$ Kurul-un yazar-ı onore-si]
board-gen author-acc honor-3poss
Intended: "The board's honoring of the author"

(3) a. [$_{DP}$ takım-ın futbolcu-yu transfer-i]
team-gen football player-acc transfer-3poss
"the team's transfer of the football player"

b. [$_{DP}$ takım-ın (beklenmeyen) futbolcu transfer-i]
team-gen (unexpected) f. player transfer-3poss
"the team's (unexpected) football-player transfer"

c. [$_{DP}$ takım-ın futbolcu ve basketbolcu transfer-i]
team-gen football player and basketball player transfer-3poss
"the team's football-player and basketball-player transfer"

(4) a.



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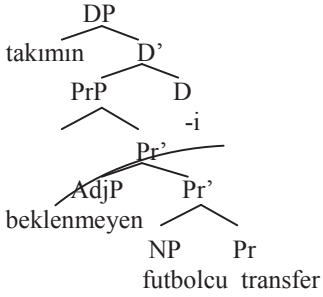
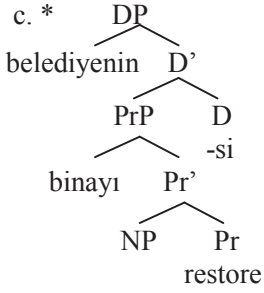


c. *



(5) a. *[$_{DP}$ Belediyenin binayı restoresi…] *Intended*: "the municipality's restoration of the building"
b. [$_{DP}$ Belediyenin binayı restorasyonu…] "the municipality's restoration of the building"

(6)

	BN element	**True nominal**	**BN Blocked**
Type A	dizayn 'design'	dizayn 'design'	No
Type B	sabote 'sabotage'	sabotaj 'sabotage'	Yes

(7) [$_{CP}$ Tamirci dolabı (duvara) monte etti.] "The repairman fixed the cupboard to the wall."
a. *[$_{DP}$ Tamircinin dolabı (duvara) montesi…] *Intended:* "the repairman's fixing of the cupboard to the wall"
b. [$_{DP}$ Tamircinin dolabı (duvara) montajı…] "the repairman's fixing of the cupboard to the wall"

Appendix

Type A **:** protesto etmek, analiz etmek, dizayn etmek, kontrol etmek, rapor etmek…
Type B **:** restore (etmek) vs. restorasyon; motive (etmek) vs. motivasyon; finanse (etmek) vs. finansman; monte (etmek) vs. montaj; sabote (etmek) vs. sabotaj; onore etmek, irrite etmek…

References

Abney, S. (1987). 'The English noun phrase in its sentential aspect'. PhD thesis, MIT.

Bowers, J. (2001). 'Predication'. *The Handbook of Contemporary Syntactic Theory.* In Baltin, M. and Collins C. (eds) Blackwell.

Göksel A., Kerslake C. (2005). *Turkish: A Comprehensive Grammar.* Oxford: Routledge.

Grimshaw, J., Mester, A., (1988). 'Light Verbs and θ-Marking', *Linguistic Inquiry*. 19, 205–232.

Keskin, C. (2009). *Subject Agreement-Dependency of Accusative Case in Turkish or Jump-starting Grammatical Machinery,* Utrecht: LOT.

Key, G., Tat D. (2012). 'Structural Variation in Turkish complex predicates'. Paper presented at 16th ICTL, Sept 18 - 20, 2012, METU, Ankara.

Kornfilt, J. (1997). *Turkish*. London: Routledge.

Massam, D. (2001). 'Pseudo Noun Incorporation in Niuean'. *Natural Language and Linguistic Theory,* 19: 153-197.

Özsoy, S. (2004). 'Dışişleri Eski Bakanı ve Türkçe'nin Yeni Yapısı, *Journal of Turkish Studies,* 28:1, 247-256.

Öztürk, B. (2005). *Case, Referentiality and Phrase Structure*. John Benjamins.

Sezer, E. (1991). 'Issues in Turkish syntax'. Doctoral Dissertation, Harvard University.

Taylan, E. E. (1984). *The Function of Word Order in Turkish Grammar*. University of California Press, Berkeley.

Verbal complementizers in Kalmyk

This paper deals with the complementizer(s) in Kalmyk (a Mongolic language spoken in the Republic of Kalmykia in Russia). According to the descriptive grammars (e.g., Sanžeev 1983) in Kalmyk the complementizer function is performed by one of the (participial) forms of the verb *gi-* 'say', a typologically common situation (see Dixon and Aikhenvald 2006). Those forms are mainly *giž*, illustrated in (1), but also *gihäd* and *gisn*.

(1) Eck-n' Badm nand möng ög-txä **gi-ž** kel-v.
father-P.3 B. I.DAT money give-JUSS say-CV.IPFV tell-PST
'His father said that Badma should give me the money.'

Two questions that arise is (a) whether the complementizers *giž*, *gihäd*, and *gisn* are (fully grammaticalized) instances of the category C, like complementizers in the better-known European languages, and (b) whether the verb *gi-* 'say' in its 'verbal' (unembedded) uses, such as (2), is an instance of the category V, just like other matrix verbs.

(2) Eck-n' Badm nand möng ög-txä **gi-v**.
father-P.3 B. I.DAT money give-JUSS say-PST
'His father said Badma should give me the money.'

The data obtained through field work suggest that answers to both questions should be negative. To anticipate the conclusion, I will show that the complementizers derived from *gi-* behave much like verbs while the verb *gi-* behaves much like a complementizer. That is, the verb-like and complementizer-like uses of *gi-* are very similar and, in fact, as I will propose, should receive a unified analysis.

As to the question (a), it can be shown that the complementizers have internal (morpho)syntactic structure. This is because the participial markers present on the complementizers appear to show the same syntactic properties that they display otherwise. Thus, *giž*, morphologically the adverbial participle (converb) of the verb *gi-* 'say', at least for some speakers, may not be embedded in a noun phrase, like adverbial modifiers in general (see Grimshaw 1990); instead the adjectival participial form *gisn* is used, as shown in (3). The simplest way to accomodate those data is to say that the complementizers should be synchronically analyzed as participles, comprising (at least) of V and a participial morpheme (Ptcp).

(3) [Cergč-nr xol tal jov-tn **gi-sn**/***gi-ž** zakvr] av-v.
soldier-PL river towards go-IMP.PL say-PC.PST/*say-CV.IPFV order receive-PST
'Soldiers received the order to go towards the river.'

As to the question (b), it can be shown that the verb *gi-* 'say' in its verbal uses is a (semi)functional element, showing affinity to the traditional elements of the category C. Firstly, *gi-* 'say' is a unique verb that is able to embed a finite clause directly. All other matrix verbs require the support of the complementizer *giž* (*gihäd*), as shown in (4); cf. (2).

(4) * Eck-n' Badm nand möng ög-txä kel-v.
father-P.3 B. I.DAT money give-JUSS tell-PST
'His father said that Badma should give me the money.'

Secondly, it resists nominal complements, as shown in (5). Thirdly, it requires the embedded clause to immediately precede it, which is not the case for, e.g., the verb *kel-* 'tell'. This is shown by the (dis)allowed positions of the subject in (6a)–(6b).

(5) Ajsa ju kel-v/$^{???}$gi-v?
A. what tell-PST/$^{???}$say-PST
'What did Ajsa say?'

(6) a. (**Eck-n'**) kövüd-t-än [mod xamxl-txa gi-ž] (**eck-n'**) kel-v.
(father-P.3) sons-DAT-P.REFL wood cut-JUSS say-CV.IPFV (father-P.3) tell-PST
'Father said that his sons should cut some wood.'

b. (**Eck-n'**) kövüd-t-än [mod xamxl-txa] (* **eck-n'**) gi-v.
(father-P.3) sons-DAT-P.REFL wood cut-JUSS (* father-P.3) say-PST
'Father said that his sons should cut some wood.'

The conclusion that we can draw from these data is that *gi-* in both its complementizer-like and verb-like uses is a verb and a complementizer at the same time. The analysis that I would like to propose for that peculiar situation is that *gi-* spans across two adjacent heads (V and C) in a nanosyntactic fashion (see Starke 2009). That is, *gi-* is associated in the lexicon with a two-head C-V structure. This explains why *gi-* bears syntactically active verbal morphology while otherwise behaving like a complementizer in (obligatorily and uniquely) selecting a finite clause immediately adjacent to it.

There is one important question that this unified analysis of *gi-* raises. Namely, why *gi-* is apparently interpreted as 'say' in examples like (2), while lacking any lexical content when embedded (note that *gi-* also introduces complements of verbs like *san-* 'think', which don't refer to a speech act).

What I would like to suggest is that *gi-* lacks any encyclopedic content, like a functional element. The verbal meaning that we perceive in (2) arises as the result of a postsyntactic (presumably, pragmatic) rule of default semantic interpretation, assigning the meaning 'say' to the V whose complement is a CP (along the lines of Pustejovsky 1995). Perhaps, this is also what we find in a zero-verb construction in Russian shown in (7), which is interpreted as a speech act. This analysis might be supported by the fact that some speakers in certain contexts translate the unembedded *gi-* as 'want', which shows that its meaning is not fixed in the lexicon.

(7) Ja ej: 'Id-i sjuda!'
I.NOM her.DAT go-IMP here
'I tell her "Come here!"'

To conclude, the complementizers in Kalmyk have a double categorial nature, being both C and V elements. Viewed diachronically, they have lost the semantics but retained the morphology of their verbal source and acquired a new C syntax. These data can shed some light on the emergence of functional elements from lexical sources.

References

Dixon, Robert M.W., and Alexandra Y. Aikhenvald. 2006. *Complementation: a cross-linguistic typology*. Oxford: Oxford University Press.

Grimshaw, Jane. 1990. *Argument structure*. Cambridge, MA: MIT Press.

Pustejovsky, James. 1995. *The generative lexicon*. Cambridge, MA: MIT Press.

Sanžeev, G.D., ed. 1983. *Grammatika kalmyckogo jazyka. Fonetika i morfologija [The grammar of Kalmyk language. Phonetics and morphology]*. Èlista: Kalmyckoe knižnoe izdatel'stvo.

Starke, Michal. 2009. Nanosyntax: A short primer to a new approach to language. In *Tromsø working papers on language and linguistics: Nordlyd 36.1, Special issue on Nanosyntax*, ed. Peter Svenonius, Gillian Ramchand, Michal Starke, and Knut Tarald Taraldsen, 1–6. Tromsø: University of Tromsø. Available at http://www.ub.uit.no/baser/nordlyd/.

Exclamatives and Nominalization in Japanese

In many of the languages grouped together as Altaic, when predicates are inflected for their attributive form, they can be used as nominals as well as noun modifiers, suggesting that the attributive form has a nominalizing function. In earlier stages of the language, Japanese made use of attributed forms for nominalization, as (1) illustrates.

(1) *[Kano siroku sakeru] wo namu yufugafo to mawosi faberu.*
that white bloom ACC FOC bottle.gourd COMP say be.HUMBL.PRES
'What blooms in a white color is called 'bottle gourd'.' (Yūgao, Tale of Genji)

In modern Japanese, the nominalization pattern (except in archaic usage) is no longer available. This is generally considered to result from the attributive form having merged with the conclusive form. Shida (2006) claims that the attrition of the nominalizing pattern has began around the end of Middle Japanese or the beginning of Early Modern Japanese (c.a.1600). It is claimed by many (Aoki 2005, inter alia) that the loss of the inflectional distinction correlates with the emergence of the nominalizing particle *no*.

In modern Japanese, verbs and adjectives have lost a distinct 'attributive-conclusive' inflection, so the loss of the nominalizing function is naturally expected, as described by many previous studies. On the other hand, nominal adjectives still retain a distinct attributive morphological form, as shown in (2).

(2) a. *{yake-ta/aka-i/kirei-na}* *kami*
burn-PAST/red-PRES/pretty-ATTR.PRES paper
'{burnt/red/pretty} paper'

b. *Kami-ga yake-ta/aka-i/kirei-da.*
paper-NOM burn-PRES/red-PRES/pretty-CONCL.PRES
'The paper is {burnt/red/pretty}.

The non-past inflectional form of a nominal adjective differs depending on whether it modifies a noun or is used as a main predicate. This inflectional difference leads to the expectation that nominal adjectives would retain a nominalizing function.

The main objective of the present paper is to show that this expectation is borne out. In this paper, this is shown by data from fragmentary exclamatives like (3).

(3) *Nan-toyuu {orokamono/*utukusi-i/*hasir-u}!*
what stupid.man/beautiful-PRES/run-PRES
'What {a stupid man/beautiful/run}!'

The type of exclamative illustrated in (3) has a syntactic restriction that what occurs after the exclamatizer *nan-toyuu* 'what' is limited to a noun or a noun phrase. Thus, categories such as verbs and adjectives are not allowed to occur after the exclamativizer *nan-toyuu*. Nevertheless, nominal adjectives are licensed in the post-exclamativizer position when they appear in the attributive form.

(4) *Nan-toyuu {oroka-na/*oroka-da}!*
what stupid-ATTR.PRES/stupid-CONCL.PRES
'How stupid!'

Nominal adjectives occur in this environment only when they take the attributive form (and the conclusive form is unacceptable). Since the post-exclamatizer position is restricted to nominal expressions, it can be concluded that the attributive form of a nominal adjective is nominalized.

Importantly, nominalized nominal adjectives behave differently from regular noun phrases; nominal adjectives following the exclamatizer *nan-toyuu* do not serve as

nominal predicates nor can they be placed in argument position.

(5) *Kare-wa {nan-toyuu orokamono/*nan-toyuu oroka-na (no)} da!*
he-TOP what stupid.man/what stupid-ATTR.PRES NOMLZ COP
'What {a stupid man/stupid} he is!'

I propose that the nominalization of nominal adjectives in the attributive form is accomplished by merging the nominalizing little *n* with the nominal-adjective head NomA to create the structure [$_{n}$ [$_{\text{NomA}}$ NomA]] (instead of merging the adjectival little *a* with NomAP). I suggest that the little *n* does not project to a maximal projection, as a result of diachronic attrition—a plausible historical change, given the general loss of distinct attributive inflection. If nominalized adjectives are not turned into phrases, it follows that they can appear only in stand-alone fragmentary exclamatives, which accommodate non-maximal nominal expressions. This analysis also accounts for the fact that genitive phrases do not occur with the attributive form of nominal adjectives.

(6) **Nan-toyuu kare-no oroka-na!*
what he-GEN stupid-ATTR.PRES
(lit.) 'What his stupid!'

Note that (6) is acceptable if *oroka-na*, which is in the attributive form, is replaced by the noun *orokasa* 'stupidity'. If the little *n*, which nominalizes nominal adjectives, has a nominal feature, *oroka-na* should have the potential to license genitive case. But genitive phrases cannot be merged with the nominalized *oroka-na*, since *n*P, to which a phrasal element (i.e. a maximal projection) is added, is not projected from the little *n*.

In the literature on Japanese, there is an issue over how nominative-genitive conversion is licensed. Under the most prominent view (e.g. Miyagawa 1993), genitive case is licensed by N (or D), which appears outside a relative or a noun-complement clause, but Hiraiwa (2001) argues that the genitive case is licensed by C (which Agrees with T and v to derive the attributive form). If the little *n* remains non-phrasal, and if only a phrasal element can occur in the specifier or the complement position of a category, a nominalized predicate in the attributive form will not appear in a clause, and hence cannot be associated with TP/CP. This fact leads to the conclusion that C (i.e. the attributive form of the predicate) should not license nominative-genitive conversion.

Overall, the new exclamative data reveal that the nominalization patterns attained by attributive inflection are quite restricted. Verbs and adjectives are not nominalized by their inflection. Nominal adjectives, which retain a distinct attributive inflection, can be nominalized by merging the nominalizing little *n*, but this element no longer projects to *n*P. The data show that in modern Japanese, noun-modifying verbal/adjectival clauses—the type of clauses where the predicates appeared in the attributive form in earlier pre-modern stages—are no longer nominalized; nominal adjectives can still be nominalized, but clauses are not built from nominalized nominal adjectives.

References

Aoki, H. 2004. "History of the noun clause in a complex sentence." *Studies in the Japanese Language* 1, 47-60.

Hirawiwa, K. 2001. "On nominative-genitive conversion." *MITWPL* 39, 65-123.

Miyagawa, S. 1993. "LF case-checking and minimal link condition." *MITWPL* 19, 213-254.

Shida, T. 2006. "Suitaiki-no rentaikei-juntaihoo-to juntaijoshi *no*." *Kobe Joshidaigaku Kokubun.* 29-45.

Asya Pereltsvaig (Stanford) &
Ekaterina Lyutikova (Moscow State University)

Saturday, 10:00am-10:30am

Functional Structure in the Nominal Domain: A View from Tatar

Do languages that lack articles have an extended functional structure in the nominal domain, including a DP projection? This question has been a topic of a long-lasting debate in the linguistic literature. Previous studies focused on Slavic languages (but see Bošković and Şener 2012 on Turkish); some scholars (cf. Progovac 1998, Rutkowski 2002, *inter alia*) argued in favor of the DP projection, while Bošković (2005 and later work; Bošković and Şener 2012) argued against it. Pereltsvaig (2006, 2007) proposed that while some nominals in Russian are DPs, others are Small Nominals (SNs) of different sizes. In this paper, we provide novel evidence for the latter position based on another Turkic language, Tatar (spoken by over 5 million in Tatarstan, Russia). Drawing on our fieldwork on one subdialect of Tatar (spoken in the village of Kutlushkino), we show that different syntactic constructions call for nominals of different sizes. Moreover, we argue that Differential Object Marking (DOM) in Tatar—unlike in other Turkic languages such as Turkish or Sakha—can only be explained in terms of the amount of functional architecture in the object: DP objects receive structural (accusative) Case, as in (1a), while SNs (i.e. NPs or NumPs) remain Caseless, as in (1b). Thus, we rule out alternative analyses based on distinct positions of accusative and unmarked objects or on the semantic interpretation of the object. More generally, we propose that only DPs must receive structural case while SNs are not subject to such Case licensing requirements and may remain morphologically caseless. We further buttress this analysis by showing that DPs and SNs differ in their Case marking not only in the object position but inside nominals as well.

(1) a. Marat [$_{DP}$ mašina-**nı**] sat-ıp al-dı.
Marat car-**ACC** buy-CONV take-PST
'Marat bought a/the car.'

b. Marat [$_{NP/NumP}$ mašina] sat-ıp al-dı.
Marat car buy-CONV take-PST
'Marat bought a car/cars.'

Our first argument in favor of the structural analysis of DOM in Tatar comes from the fact that ACC-marked and unmarked objects cannot be coordinated. Second, we show that objects which contain DP-level elements (demonstratives, strong quantifiers, pronouns, proper names, etc.) must be ACC-marked, regardless of interpretation. Third, unmarked objects fit the profile of a SN, described by Pereltsvaig (2006): not only are they unable to have an individuated, specific, partitive, or anaphoric interpretation or wide scope with respect to negation or other quantifiers, but they also cannot serve as controllers or antecedents of reflexives/reciprocals.

We buttress our argument that DOM correlates with the DP/SN distinction by showing that the full range of Tatar data cannot be explained by the semantic features of the nominal (e.g. specificity), as has been proposed for Turkish (Enç 1991) and Hebrew (Danon 2006). In particular, nominals involving the so-called ezafe-3 construction, which we independently show to be DPs, must be ACC-marked but may simultaneously have a non-specific interpretation and take narrow scope in relation to other quantifiers/negation.

(2) Marat [$_{DP}$ Alsu-nıŋ fotografia-se-*(n)] kür-me-de.
Marat Alsu-GEN photo-3-ACC see-NEG-PST
'Marat didn't see a photo of Alsu.'
☞ **Neg > ∃** (= it is not the case that Marat saw a photo of Alsu)
∃ > Neg (= there is a photo of Alsu that Marat didn't see)

Furthermore, we argue against the positional analysis which treats unmarked objects as pseudo-incorporated into the verb and ACC-marked objects as appearing outside the *v*P, as has been proposed for Sakha by Baker & Vinokurova (2010). We show that in Tatar accusative objects can appear inside VP boundary marked by VP-level adverbs (e.g. *tiz* 'quickly'), unlike in Sakha.

(3) a. Marat **tiz** *botka-**nı*** aša-dı. [Tatar]
Marat quickly porridge-ACC eat-PST
'Marat ate porridge quickly.'

b. Masha **türgennik** *salamaat-**(#y)*** sie-te. [Sakha]
Masha quickly porridge-ACC eat-PAST.3sS
'Masha ate porridge quickly.' (ACC on 'porridge' only if it has contrastive focus)

Moreover, we propose that in Tatar pseudo-incorporation is the correct analysis for the nominal component in complex predicate constructions (CPCs) (e.g. *büläk it-* 'gift do'). The nominal component in CPCs must be bare, cannot be focused, and cannot serve as an antecedent for discourse anaphora; in contrast, unmarked objects may contain certain modifiers and complements, may be focused, and support discourse anaphora. Also, in causative structures based on CPCs, the causee is marked accusative, whereas with caseless objects (as with accusative ones), the causee is ablative.

We conclude that the lack of the DP in SN in Tatar makes them invisible to Probes searching for [+D] feature, immune to Case licensing violations, and "semantically deficient" in certain ways. However, we argue that although DPs and SNs differ in their mobility in a clause, case marking (or lack thereof), and semantics, the functional architecture is the key component that explains the others and cannot be dispensed with, as was done by the advocates of the parameterized DP view.

References:

Baker, M. and N. Vinokurova (2010) Two Modalities of Case Assignment: Case in Sakha. *NLLT* 28: 593-642.

Bošković, Ž. (2005) On the locality of left branch extraction and the Structure of NP. *Studia Linguistica* 59(1): 1–45.

Bošković, Ž. and S. Şener (2012) *Turkish NP*. Ms., University of Connecticut. http://web2.uconn.edu/boskovic/papers/Boskovic&SenerTurkishNPSubmissionFinal.pdf

Danon, G. (2006) Caseless Nominals and the Projection of DP. *NLLT* 24: 977-1008.

Enç, M. (1991) The Semantics of Specificity. *Linguistic Inquiry* 22: 1-26.

Pereltsvaig, A. (2001) *On the Nature of Intra-Clausal Relations: A Study of Copular Sentences in Russian and Italian*. Ph.D. dissertation, McGill University.

Pereltsvaig, A. (2006) Small nominals. *NLLT*. 24(2): 433-500.

Pereltsvaig, A. (2007) On the Universality of DP: A View from Russian. *Studia Linguistica* 61(1): 59-94.

Progovac, L. (1998) Determiner phrase in a language without determiners. *Journal of Linguistics* 34: 165-179.

Rutkowski, P. (2002) Noun/pronoun asymmetries: evidence in support of the DP hypothesis in Polish. *Jezikoslovlje* 3(1-2): 159-170.

Noriko Yoshimura (University of Shizuoka) &
Shoichi Iwasaki (UCLA)

Saturday, 10:30am-11:00am

Cross-dialectal patterns of focus marking in Japanese cleft constructions

Our understanding of synchronic patterns of morphosyntax can be advanced significantly if we incorporate cross-dialectal perspectives, as well as diachronic insight, when available. In this paper, we examine structural patterns of focus function for two particles, WA and GA, in the cleft construction in three different varieties of the Japonic language family; Standard Japanese (SJ), Kumamoto-Yatsushiro Japanese (KYJ), and Ikema Ryukyuan (IR). We raise two issues concerning the interpretation of focus in SJ and provide morphosemantic evidence that is available in KYJ and IR, but not in SJ.

It has been observed in the literature that there are two types of the cleft construction in SJ.

(1) a. John-ga kinoo eki de atta no-**wa** [$_{\text{Focus}}$ Mary] da
John-NOM yesterday station at met person-TOP Mary Copula
b. [$_{\text{Focus}}$ John-ga kinoo eki de atta no]-**ga** Mary da
John-NOM yesterday station at met person-NOM Mary Copula
'It was Mary who John met at the station yesterday.'
'The person whom John met at the station yesterday was Mary.

As shown in (1), the clause headed by the pronominal form *no* can be marked with either the topic particle WA or the nominative particle GA (Kuno, 1973; Noda, 1996). Interestingly, this WA-GA case particle alternation induces a crucial difference in the focus interpretation between the two clefts: In the WA-cleft the focus is on the noun phrase *Mary* in the predicate, a "postposed" focus structure, whereas in the GA-cleft the focus is on the clause *John ga kinoo eki de atta no* seemingly in the subject position, a "preposed" focus structure (Amano, 1996; Sunakawa, 1995). We understand that WA's role of providing a postposed focus function is not anything new in the history of Japanese if we look at the WA-ZO construction in classical Japanese, like *umashi kuni zo akizushima Yamato no kuni wa* 'A splendid land, this land of Yamato is' (Man'yo) (Kasuga, 1968). Given the diachronically delayed development of the nominative particle, however, why GA in (1b) performs the role of focus function rather than that of nominative marking needs to be further explored with respect to the issue of syntactic-pragmatic distinction between the postposed and the preposed focus structures in SJ.

Particularly relevant to this question is the pattern found in Kumamoto-Yatsushiro Japanese (KYJ), a southern Kyushu dialect. In this dialect, GA must be deployed for a focused subject, with the role of nominative marking being left to NO (*Kachan *ga/n korashita*. '(My) mother came.') (Yoshimura, 1994; Iwasaki & Yoshimura, to appear).

(2) [$_{\text{Focus}}$Yacchiro de toreta suika]-wa sore-n/***ga** umaka yo.
Yatsushiro in was taken watermelon-TOP it-NOM/*FOCUS delicious SFP
'As for watermelons produced in Yatsushiro, they are delicious!' (SFP=sentence final particle)

(3) a. [$_{\text{Focus}}$ Gonen mae-ni hitto sita tu]-**ga**/*n kou bai
five years before hit thing-FOCU/*NOM this SFP
'The song that was a big hit five years ago is this.'
b. Yappa, [$_{\text{Focus}}$ kachan-no tukkuta mon]-**ga**/*no itiban umaka
after all mother-NOM made thing-FOCUS/*NOM first delicious
'After all, the foods (my) mother makes are most delicious.'

In (2), because WA is attached to the relative head *suika*, *umaka* 'delicious' in the predicate receives a topic/focus interpretation, like *Mary* in (1a) in SJ. Consequently, the resumptive pronoun *sore* 'it' for the head noun is not a focus constituent and cannot be marked by GA, a focus particle in KYJ; it must be marked by the nominative NO. Similarly in (3), given the pragmatic relation between the noun clause headed by *tu* or *mon* 'thing' and the stative-predicate, the GA marked subject in question must not be a regular subject, but a focused subject like (1b), hence the impossibility of NO. The data from KYJ confirm that the case particle GA involved in the cleft construction like (1b) maps its focus function onto the clause at hand; it is not a nominative particle. [It should be noted that GA can mark a regular nominative subject in SJ sentences such as *yuki ga furi-hajimeta* 'it began snowing,' but in KYJ, being a focus particle, it must be translated as 'it was snow that started falling.']

A subsequent question concerns the preposed vs. postposed focus function. This distinctive view does not seem to have been well established among Japanese linguists yet (Kumamoto, 2000;

Sunakawa, 2002) partially because an interpretation relies, to a large extent, on the context or situation in which a cleft sentence is uttered in communication. We found, however, Ikema Ryukyuan (IR), a dialect of Miyako spoken in the Ryukyu Islands, has a dedicated focus particle (DU) which indicate the location of focus explicitly. Observe first that DU, which maps the function of focus onto the constituent preceding it, as shown in (4).

(4) a. Taru-ga **du** zzu-u fautai ga
Who-NOM FOCUS fish-ACC ate Q
'Who ate the fish?
b. Mayu-nu **du** fautai doo
cat-NOM FOCUS ate SFP
'The cat ate it.'

Being followed by DU, *taru* 'who' and *mayu* 'cat' can receive a focus interpretation, respectively (Karimata, 2011). More crucially, the following contrast emerges between the two clefts in IR. Notice that the location of focus is clear in IR in contrast to that in SJ.

(5) a. hnu hiima fautai munu-u timpura **du** atai doo
Yesterday day.time ate thing-TOP tempura FOCUS copula SFP
[Kinoo-no hiruma tabeta mono-**wa** tempura da] 'It was tempura that I ate yesterday'
b. hnu hiima faitai munu (nu) **du** tempura atai doo
yesterday day.time ate thing-(NOM) FOCUS tempura copula SFP
[Kinoo-no hiruma tabeta mono-**ga** tempura da] 'The thing that I ate yesterday is tempura'

As shown in the translation, in (5a), a WA-cleft like (1a), the focus particle DU appears in the predicate, rendering a focus reading to the preceding noun, whereas in (5b), a GA-cleft like (1b), DU appears after the nominative subject clause, giving a focus reading to it. While examining the data on focus construction from SJ alone remains speculative, the data from KYJ and IR provide morphological evidence for the hypothesized focus constructions.

We extend our discussion to the question of how plausible the following proposal would be for the distinct assignment of focus function in the two clefts: In the case of WA-cleft focus meaning can be transferred from WA to the relevant constituent by virtue of a concordance relation between the topic WA and the predicate; on the other hand, in the case of GA-cleft it is GA that can map a focus/ exhaustive listing onto the constituent in the subject position. We assume that GA marks both a regular and focus subject in SJ, but only a focus subject in KYJ. [GA acquired this focus function as the focus particle ZO disappeared in the history of Japanese] (Yamada, 2001). This research thus goes beyond simple dialectal comparisons of lexical semantics of the morphemes, suggesting that our linguistic knowledge can be significantly advanced by looking at the interface between syntax and semantics/pragmatics synchronically and diachronically across the language varieties.

References

Amano, M. 1996. An analysis of functions of the particles Wa and Ga using the concept of "presupposition/focus". *Japanese Linguistics 3*: 67-85.

Iwasaki, S. & Yoshimura, N. to appear. Distributional Patterns of *GA* and *NO* in Four Varieties of the Japonic Languages. *Japanese/Korean Linguistics 21*. Stanford, California: CSLI.

Karimata, S. 2011. Ryukyu hogen no shotenka jyoji to bun no tutatutekina taipu [Focus particles in Ryukyuan dialects and sentence notification types]. *Studies in the Japanese language 7*: 69-81.

Kuno, S. 1973. *The structure of Japanese language*. Cambridge, Massachusetts: The MIT Press.

Noda, H. 1985. *Wa to Ga*. [Wa and Ga]. Tokyo: Kuroshio

Sukawa, Y. 1995. Nihongo ni okeru bunnretsu bun no kino to gojyun no genre [Functions and principles of clefts in Japanese]. In Nitta, Y. (ed.) Fukubun no kenkyuu [A study of complex sentences[. Tokyo: Kuroshio.

Sukawa, Y. 2002. Nihongo kopurabun no kouzo to dannwa kino [Structures and discourse functions of Japanese copula sentences]. In Ueda, H. (ed.) *Nihongogaku to gengo kyoiku* [Japanese linguistics and language eduation]. 39-70.Tokyo: University of Tokyo Press.

Kasuga, H. 1968. Sonzaishi ni kansuru kenkyuu [A study on copula verb structures]. Tokyo: Kazama.

Yamada, M. 2001. *Shugo hyoji 'ga' no kyoochoo hyoogen ni okeru seeryoku kakudai no yoosoo: 'zo' to no kanrensee ni oite*. [Aspects of the expansion of subject marking 'ga' into the domain of emphatic expression with respect to 'zo'] *Kokugo Kokubun*. 32-48.

Yoshimura, N. 1994. 'GA' no mondai [A problem with GA]. *Hen'yoosuru gengo bunka kenkyu*. 13-28. University of Shizuoka.

Should Turkish be categorized as a high or low applicative language?

Pylkkänen (2002) has proposed that cross-linguistically languages exhibit two types of applicative constructions: i. *Low* applicatives which denote a relation between two individuals necessarily implying a transfer of *to* or *from the possession of* and ii. *High* applicatives which denote a relation between an individual and an event, being introduced above VP. However, the low applicative account has been challenged in the literature (Lee-Schoenfeld, 2005, Folli, R & H. Harely, 2006, Georgala, E. et al. 2008, Grashchenkov, P& V. G. Markman, 2008, Boneh & Nash, 2011). The aim of this paper is to investigate the potential applicative constructions in Turkish by looking at non-core datives comprehensively for the very first time in the literature, and to argue that a low applicative analysis is problematic for Turkish where non-core datives can only be accounted for via high applicative constructions.

Pylkkänen presents certain diagnostics for distinguishing between high and low applicatives: a. In low applicatives transfer of possession is an entailment b. Only high applicatives can combine with unergatives c. Only high applicatives can combine with stative verbs. Georgala (2012), on the other hand, proposes a uniform account of low and high applicatives with two subtypes, *Thematic* and *Raising* applicatives, whereby a single applicative construction positioned above the lexical VP fulfils a dual function.

In Turkish, at first look, double object constructions (DOC) which denote *a transfer of possession* between a dative goal/recipient and an accusative theme appear as good candidates for low applicatives as in (1a) and (1b). However, the *recipient/goal* originates lower than the direct object, *theme* and clearly, the indirect object does not c-command the direct object unlike predicted by the low applicative hypothesis. In (1a) the direct object (DO) (theme) binds the indirect object (IO) (goal/recipient). In (1b) we can maintain the same binding relationship although the *goal* has scrambled over the *theme*. This implies that the goal can reconstruct and be bound by the theme which c-commands it. With regards to scope facts, both IO and DO can take inverse scope as in (2).While in an English DOC, where the indirect object asymmetrically c-commands the direct object, scope is frozen, in Turkish we get scope ambiguity. This implies that in Turkish the DO and IO must be part of the same minimal domain as opposed to an English DOC (Bruening, 2001). In a frozen scope environment, the hierarchal order of the raised object quantifiers cannot change, which are introduced in different verbal projections. In contrast, in a ditransitive construction, where two quantified arguments are equidistant to a head, scope is not frozen but free. Therefore, given the scope and binding facts, Turkish DOCs, where the theme c-commands the goal, can only be analyzed as prototypical ditransitive constructions, hence would be miscategorized by receiving a low applicative analysis.

When we turn to non-core dative arguments in Turkish, we see that they can be added to transitive verbs as well as stative verbs and unergatives. (3a-b) show that a non-core dative can be added to the stative verb *hold.* In (3b) there is an obvious interpretation of *transfer of possession*, because the child's holding the sweets is to result in a possessive relationship between the *recipients* and the *theme*, which undermines the core diagnostics of the high/low distinction. Non-core dative arguments also can combine with unergatives as shown in (4), where the applied argument is introduced as a beneficiary to the event VP. While in (4b-c) a benefactive argument has been added to a reflexive verb, in (5a) the reflexive combines with a malefactive non-core argument. Thus, I propose that non-core datives in Turkish should semantically be analyzed mainly as benefactives or malefactives (affectee), where a recipient or possessor meaning is only secondary. These constructions are compatible with Georgala's *Thematic* applicative hypothesis, where the extra argument is base generated in [Spec, ApplP] above VP. In high applicatives, both the IO and DO can undergo passive movement. The DO is attracted by the EPP feature on Appl to its specifier position and thus can move over the IO via the availability of an 'escape hatch' (McGinnis, 2001). However, in Turkish only asymmetric theme passivization is attested as in (6a-b), therefore Georgala's approach, where the asymmetries or symmetries regarding passivization stem from the free ordering of Merge and Move, contingent on parametrization, can account for Turkish. As seen in (6c), when Move precedes Merge, the DO (theme) is attracted by the EPP feature on Appl to its specifier position and then the dative argument is merged by tucking in below the DO and is licensed by Appl. Consequently, since DO with an unckecked Case feature is closer to v, it enters into Agree with v. When undergoing passivization, the theme being the nearest goal to T, can Agree with T and move up to its specifier position to check its EPP feature (Georgala, 2012:71). Thus, I show how in terms of syntactic licensing a *Thematic* applicative hypothesis can be adopted for a scrambling language such as Turkish, whereby Turkish could parametrize Move before Merge and thereby account for the DO moving over the dative argument as well as asymmetric theme passivization.

To conclude, Turkish appears to challenge the low applicative structure proposed by Pylkkänen in that the diagnostics for identifying a low vs. high applicative construction cannot provide a clear distinction for Turkish, therefore a hypothesis that unifies applicative structures under a high applicative construction should be adopted for Turkish.

Examples:

(1) a. Hükümet kaçak çalış-an-lar-ı $_i$ ülke-ler-in-e $_i$ yolla-dı DO>IO
goverm.NOM illegal work.NOML.PL.ACC country.PL.3PS.DAT send- PAST.3PS
'The government sent the people who work illegally to their countries'

b. Ülke-ler-in-e $_i$ kaçak çalış-an-lar-ı $_i$ **hükümet** yolla-dı. IO>DO
country.PL.3PS.DAT illegal work.NOML.PL.ACC send-PAST.3PS
'The government sent the people who work illegally to their countries.'

(2) Her çocuğ-a bir oyun-u göster-di-m. $\forall > \exists$,$\exists > \forall$
each child.DAT a game.ACC show-PAST.1PS
'I showed each/every child a game' (different or a specific game)

(3) a. Ahmet kadın-a $_i$ palto-sun-u $_i$ tut-tu.
Ahmet.NOM woman.DAT coat.3PS.ACC hold-PAST.3PS
'Ahmet held the woman's coat for her so that she could put it on.'

b. Çocuk misafir-ler-e şeker-ler-i/çikolata-lar-ı tut-tu.
child.NOM guest.PL.DAT sweet.PL/chocolate.PL.ACC hold.PAST.3PS
'The child held (meaning offer) the sweets/chocolates for the guests.'

(4) a. On-a çalış-ıyor-um.
I.DAT work-PROG.1PS
'I work for him/for his benefit.'

b. Betül sevgili-sin-e süsle-n-iyor.
Betül lover.3PS.DAT makeup.REFL.PROG.3PS
'Betül is dressing/making up for her boyfriend.'

c. Kim-e giy-in-di-n böyle?
who.DAT dress.REFL.PAST.2PS so/such a way
'Who did you dress up for or who are you trying to affect by dressing up like this?'

(5) a. Hep biz-e (parası yok diye) ağla-n-ıyor.
always we.DAT cry.REFL.PROG.3PS
'He/she is always whining at us (that he/she doesn't have any money).'

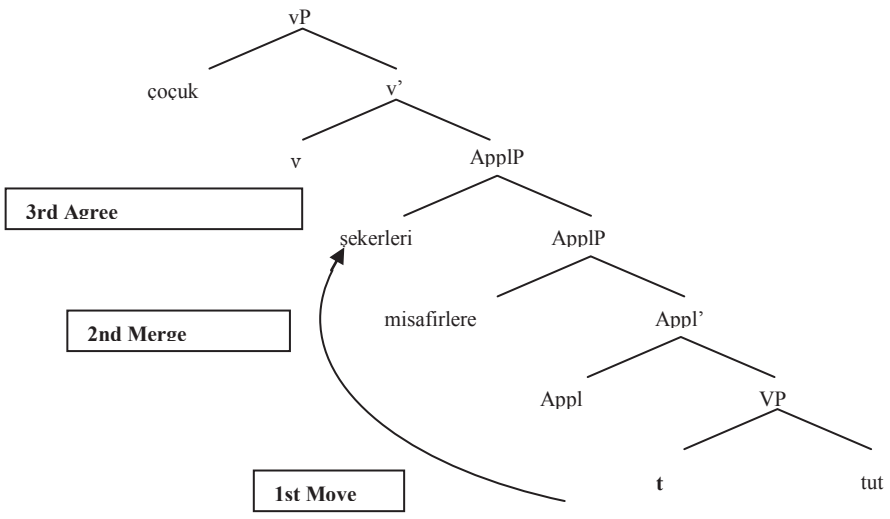
b. Ban-a hayat-ı zindan et-ti-n.
I.DAT. life.ACC dungeon do/make.PAST.2PS.
Literally: 'You have caused life to become a dungeon (affecting me)'
'You have destroyed my life or made life very unpleasant for me'

c. Sen-i ban-a düşman et-ti-ler.
you.ACC I.DAT enemy do/make.PAST.3PL.
'They/people antagonised you against *me*.'
(the affected argument is the non-core dative because the enmity is one sided, not mutual)

(6) a. Şeker-ler misafir-ler-e tut-ul-du.
sweet.PL.NOM guest.PL.DAT hold.PASS.PAST.3PS
'The sweets were held for the guests.'

b. *Misafir-ler şeker-ler-(i) tut-ul-du.
guest.PL.NOM sweet.PL.(ACC) hold.PASS.PAST.3PS
'The guests were held the sweets'

(6c)



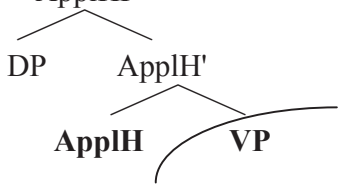
Kyumin Kim (University of Calgary) Saturday, 12:00pm-12:30pm

Phases and idioms

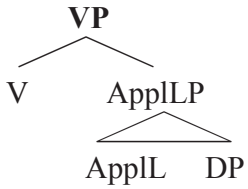
Within the Minimalist framework (e.g., Chomsky 2000), where the syntactic computation is interpreted cyclically in phases as the derivation is built up, it is predicted that there should be a strict structural boundary restricting idiomatic interpretations. Voice, which merges external to VP and introduces an agent, is argued to be one such boundary (Harley and Stone, in press). This paper argues that another VP-external head, high applicative head (ApplH) (1) can also restrict the domain of idiomatic interpretation, but a VP-internal head, such as low applicative head (ApplL) (2) cannot, by providing evidence from Korean and Japanese. Theoretically, this paper lends novel empirical support to a cyclic domain of semantic interpretation, i.e., phases, as ApplH, like Voice, constitutes a phasal head (McGinnis 2003).

McGinnis (2003) argues that ApplH and ApplL (Pylkkänen 2008) can be distinguished in terms of phases: ApplH is a phasal head but ApplL is not. I show that this phasal difference between ApplH and ApplL has consequences for idiomatic interpretations. In particular, I argue that (i) the phasal head ApplH, which merges external to VP, can restrict the domain of idiomatic interpretation (1), but (ii) the non-phasal low applicative head (ApplL), which takes a DP complement and merges below VP (2), cannot. Thus, the specifier of ApplH is excluded from idiomatic interpretations, but the specifier of ApplL is not. An additional prediction made by (1) and (2) is that anything below VP, but not above, can belong to an idiomatic expression.

(1)



(2)



Compelling evidence for ApplH being a structural boundary for idiomatic interpretation (1) comes from the contrast between the Double Object Construction (DOC) and clauses with postpositional datives in Korean. As shown in (3), in the DOC, the verb and the direct object form an idiomatic expression, as in 'give false hope', but the indirect object does not belong to the idiomatic interpretation. Unlike DOCs, postpositional datives (PPs) can belong to the idiomatic interpretation, as in (4). In fact, in contrast to these PPs, in Korean an indirect object in the DOC never belongs to an idiomatic expression (Kim, L. 2012).

(3) Swuni-ka [$_{\text{ApplHP}}$ ku ai-lul [$_{\text{VP}}$ palam-ul neh]]-ess-ta
Suni-NOM that child-ACC wind-ACC put-PAST-DEC
'Suni gave the child false hope.'

(4) Swuni-ka [$_{\text{VP}}$ [$_{\text{PP}}$ ip-ey] [mothe-lul tal]]-ass-ta.
Suni-NOM mouth-P electric.motor-ACC put.on-PAST-DEC
'Suni spoke very fast and quickly.'

As the indirect object in DOC merges in the specifier of ApplHP (3) (Kim, L. 2012), the exclusion of the indirect object from the idiomatic expression is precisely what is predicted by (1). By contrast, postpositional datives merge below VP (4) (Park and Whitman 2003), like the specifier of ApplL (2); consequently, the postpositional datives can belong to the idiomatic interpretation, as we would predict from (1) and (2). Other constructions in Korean that involve ApplH further provide support for (1). For example, in adversity passives, the dative DP occurs in the specifier of ApplHP (Kim, K. 2012). As predicted by (1), the dative DP in an adversity clause does not belong to the idiomatic interpretation, as in (5).

(5) Swuni-ka (caki-uy silswuhan-kes-lul)
Suni-NOM (self-GEN mistake-do-NL-ACC)
[$_{ApplHP}$ Inho-eykey [$_{VP}$ telmi-lul cap]-hi]-ess-ta
Inho-DAT neck-ACC catch-PASS-PAST-DEC
'Suni was caught by Inho (regarding the mistake that she had made).'

Evidence for ApplL not being a boundary for idiomatic interpretation (2) comes from Japanese ditransitives. In recent studies (Miyagawa and Tsujioka 2004, Kishimoto 2008), indirect dative (*ni*)-marked DPs in the Japanese DOC have been shown to merge as the specifier of ApplHP, whereas locative postpositional datives merge in the VP, below ApplHP, as in (6). This is similar to Korean ((3) and (4)).

(6) [$_{\mathbf{ApplHP}}$ **DP-*ni*** [$_{ApplH'}$ [ApplH [$_{VP}$ **PP** [$_{V'}$ [DP-*o* [V [$_{\mathbf{ApplLP}}$ **idiomatic DP-*ni***]]]]]

Unlike Korean, however, the dative-marked DP in the DOC can form an idiomatic expression with the verb. Importantly, only idiomatic dative DPs merge below VP, in ApplLP (6) (Kishimoto 2008). When a dative DP is not idiomatic, on the other hand, it merges in the specifier of ApplH (6). Evidence for this comes from nominalization: in (7), the idiomatic DP, *kuti,* has a verbal marking, *-ni*, which is assigned by a c-commanding V. The idiomatic DP disallows the nominal marking *-e no*, as it is not in a local relation with the nominalizer. On the other hand, a non-idiomatic DP, such as *himawari* in (8), has a nominal marking assigned by the nominalizer. That is, this DP merges above VP, in the specifier of ApplHP (6); thus, it is not within the c-command domain of V and is unable to have the verbal marking *-ni* (8). Importantly, *-ni* marking on the idiomatic DP in (7) is not a postposition, as it cannot be replaced with the P *-e* (**kunit-e* 'mouth-P'), in contrast to PPs in ditransitives (9).

(7) omotta koto-no [$_{VP}$ [$_{ApplLP}$ **kuti-ni/*-e no**] dasi]-niku-sa
thought thing-GEN mouth-DAT/-to-GEN let.out-difficult-NL
'The difficulty of saying what is on one's mind.'

(8) [$_{ApplHP}$ **himawari-e no/*-ni** [$_{ApplH'}$ [ApplH [$_{VP}$ mizu-no [V atae]]-niku-sa
sunflower-to-GEN/-DAT water-GEN give-difficult-NL
'The difficulty of giving water to the sunflowers.'

The contrast between (7) and (8) in markings in nominalization indicates that an idiomatic dative DP must appear below VP, while non-idiomatic one must appear above VP: namely in ApplL and in ApplH respectively (6). Interestingly, this result is precisely the prediction made by the phasal difference between (1) and (2). Moreover, similarly to PPs in postpositional datives in Korean (4), locative PPs in Japanese ditransitives can belong to an idiomatic interpretation (9) as they are below VP, which also supports the additional prediction of (1) and (2).

(9) [$_{VP}$ [$_{PP}$ kayui tokoro-ni/-e] te-ga toduk]-u
itchy place-DAT /-to hand-NOM reach-PRES
'give a timely service.'

The current account is favored over idiom formation in Bruening (2010) in which one constituent has to select the other in order for the two constituents to form an idiom. Under this view, the specifier of a functional head, e.g., ApplH, can belong to the idiomatic interpretation, contrary to fact in Korean (3) and Japanese (8), as the specifier is selected by the head.

The proposed analysis provides a unified account of the structural restrictions on idiomatic interpretation in both Korean and Japanese. Moreover, it provides novel support for cyclic domains of semantic interpretation, i.e., phases. Lastly, the proposed analysis lends interesting support to the view that a phrase other than vP can be a phase (e.g., Bobaljik and Wurmbrand 2003, Legate 2003, McGinnis 2003).

Invited Speaker: Bruce Hayes (UCLA) **Saturday, 3:00pm-4:00pm**

How do constraint families interact? A study of variation in Tagalog, French, and Hungarian

In the analysis of free variation in phonology, we often encounter the effects of **intersecting constraint families**: there are two independent families of constraints, each of which has a quantifiable effect on the outcome. A challenge to theory is to account for the patterns that emerge from such intersection. We address three cases: Tagalog Nasal Substitution, French Liaison, and Hungarian Vowel Harmony, using corpus data. We analyze the data patterns created by intersecting families using several different formal frameworks, and find that an accurate account is best based on one of two quantitative implementations of Harmonic Grammar. Our work also suggests that that certain lexical distinctions treated as discrete by classical phonological theory (e.g., "*h* aspire" vs. ordinary vowel-initial words of French) are in fact gradient and require quantitative treatment.

Yusuke Imanishi (MIT) Saturday, 4:00pm-4:30pm

Minimal vs. maximal truncation in the Kansai Japanese hypocoristics

Keywords*: hypocoristics, truncation, coalescence, gemination*

1. Introduction: This paper analyzes the hypocoristics of surnames involving truncation and gemination in a subset of Kansai Japanese (KJ) in (1).

(1) a. Kubo**t**a + san → [Ku. bo. **s.] s**an. b. Haya**sh**i + san → [Ha. ya. **s.] s**an.

I claim that the relevant hypocoristics can be in principle derived via coalescence of adjacent consonants. I propose an optimality theoretic analysis of the geminated hypocoristics in which it is argued that coalescence conforms to an identity condition on strings undergoing it, building on de Lacy (1999).

2. Issues: When the polite marker suffix *-san* follows a surname, the surname is truncated, and the first consonant of *-san* is geminated in (1). The contrast between (1) and (2) shows that a target of truncation in the name base must be a *voiceless coronal obstruent* (i.e., a truncatable consonant).

(2) a. Yama**d**a + san → *[Ya. ma. s.] san. b. Muraka**m**i + san → *[Mu. ra. ka. s.] san.

However, a truncatable consonant need not be the right edge of a name base. KJ allows cases in which the otherwise non-truncatable consonants in a right-edge or/and medial position of the base can be truncated so long as a truncatable consonant is followed by those consonants as in (3). I call this *maximal truncation*.

(3) a. Ho**sh**ida + san → [Ho. s.] san. b. Ki**t**ahara + san → [Ki. s.] san.

The KJ hypocoristics also display the property of *minimal truncation*. When there are two truncatable consonants in the name base, the rightmost one must be truncated in (4).

(4) I**sh**iba**sh**i + san → [I. shi. ba. s.] san. (*I. s. san.)

The hypocoristics above cannot be captured by the previous templatic (i.e., bimoraic/disyllabic) analyses of crosslinguistic hypocoristics (Itô 1990, Poser 1990, Benua 1997, Itô and Mester 1997, Bat-El 2005). As shown above, the name base of the KJ hypocoristics can be three moras in (1), bimoraic in (3) or four moras in (4). The KJ hypocoristics must be thus explained by a non-templatic account.

3. Analysis: (5) is a configuration in which hypocoristic formation in KJ takes place. I argue that gemination of the initial consonant *-s* of the suffix is a result of coalescing C with *s*, after vowel deletion.

(5) [$_{base}$…C~~V~~ . . .] *san*, where C is a voiceless coronal obstruent

I propose an identity condition on strings undergoing coalescence in (6), following de Lacy (1999).

(6) ID(ENT)-F: If an input segment is αF, then its output correspond is αF. (i) F is a feature (ii) α is a featural specification (+ or -).

Given that the manner and place features of *t* and *sh* need not be preserved in (1a) and (1b), I further propose to rank ID-F above ID-[-continuant] and ID-[-anterior]. The geminate *-ss(an)* created by

coalescence can preserve the features of C and *s* in the input iff C is a voiceless coronal obstruent: C and *s* match in phonological features. Such an instance of coalescence then satisfies ID-F. I also assume a markedness constraint triggering gemination of the initial consonant of *-san* stated in (7).

(7) **Gem(ination)**: **The initial consonant of the suffix *-san* is geminated.**

Moreover, I adopt MAX C and MAX V as low-ranked faithfulness constraints. The proposed global ranking is given in (8).

(8) **ID-F >> Gem >> ID-[-ant(erior)], ID-[-cont(inuant)], MAX C, MAX V**

(9) illustrates how well-formed hypocoristics in (1) are derived. (9a) satisfies the high-ranked ID-F because *t* in the name base and *s* in the suffix can coalesce due to feature matching.

(9)

/Kub$_1$ot$_2$a + s$_3$an/	ID-F	Gem	ID-[-ant]	MAX V
a. ☞ Kub$_1$oss$_{2,3}$an			*	*
b. Kub$_1$ot$_2$as$_3$an		*!		

The ill-formed hypocoristic forms in (2) such as *Yamassan* are ruled out by ID-F in (10a): the voiced consonant *d* and *s* do not satisfy the featural identity in (6), and hence coalescence cannot occur. (10b) is instead selected.

(10)

/Yam$_1$ad$_2$a + s$_3$an/	ID-F	Gem	ID-[-cont]	MAX V
a. Yam$_1$ass$_{2,3}$an	*!		*	*
b. ☞ Yam$_1$ad$_2$as$_3$an		*		

I argue that the maximal truncation like *Kissan* in (3) involves deletion of non-truncatable consonants, which feeds coalescence of t_1 and s_4 in (11a): the deletion creates the situation where two truncatable consonants are adjacent and can undergo coalescence. The low ranked faithfulness constraints (MAX C and MAX V) then allow this derivation.

(11)

/Kit$_1$ah$_2$ar$_3$a + s$_4$an/	ID-F	Gem	MAX C	ID[- cont]	MAX V
a. ☞ Kiss$_{1,4}$an			**	*	**
b. Kit$_1$ah$_2$ass$_{3,4}$an	*!				*
c. Kit$_1$ass$_{2,3,4}$an	*!				**
d. Kit$_1$ah$_2$ar$_3$as$_4$an		*!			

Concerning the minimal truncation *Ishibassan* in (4), on the other hand, MAX C and MAX V play a decisive role. (12b) incurs more violations of MAAX C and MAX V than (12a) although both satisfy ID-F. (12a), which only coalesces the right-most truncatable consonant sh_3 with s_4, is chosen as a winning candidate. MAX C and MAX V thus ban more deletion of C and V than necessary.

(12)

/Ish$_1$ib$_2$ash$_3$i + s$_4$an/	ID-F	Gem	MAX C	IDENT[-ant]	MAX V
a. ☞ Ish$_1$ib$_2$ass$_{3,4}$an				*	*
b. Iss$_{1,3,4}$an			*!	*	***

Seongyeon Ko (Queens College)

Towards a contrast-driven typology of the Altaic vowel systems

This paper argues for what I will term a *contrast-driven typology* with an empirical focus on the Altaic vowel systems including Mongolic, Tungusic, Korean, and Turkic languages (Poppe 1960). Following Dresher's (2009) assumption that phonological contrast is governed by language-specific feature hierarchies, I establish the *contrastive hierarchies* for the vowels in individual languages based on their patterns as well as their surface phonetic realizations. The result is summarized in (1) through (4).

This approach differs from the conventional *inventory-driven typology* in (5) (Crothers 1978, Maddieson 1984) that has focused more on analyzing the structure of phoneme inventory rather than the structure of phonological contrast. For example, apparently dissimilar inventories (e.g., Khalkha 7-vowel system and Chakhar 14-vowel system) can receive the same contrastive hierarchy analysis. There are also cases where similar inventories (e.g., Monguor and Dagur 5-vowel systems) are treated as distinct types with different contrastive hierarchies.

The *contrast-driven typology* presented in this paper correctly reflects the genetic/geographical affinity among the languages, leading to several significant consequences as follows. First, it gives us a better understanding of the synchrony and diachrony of each group. Of particular interest is the Kalmyk/Oirat language (1d) in the Mongolic group, which has a vowel inventory and a palatal harmony seemingly almost identical to Uyghur in (4b) and thus is predicted to have a similar contrastive hierarchy. However, evidence shows that a proper treatment of vowel system in Kalmyk/Oirat requires two distinct features for the front-back dimension, [coronal] for palatalization/umlaut vs. [dorsal] for palatal harmony. The overall Kalmyk/Oirat contrastive hierarchy looks more similar to the Khalkha hierarchy in (1a) than the Uyghur hierarchy in (4b) in terms of the number and the partial rankings of the proposed four contrastive features. I argue that the Kalmyk/Oirat system is an innovation, possibly due to Turkic influence, rather than the retention of the archaic system (contra Svantesson 1985), which can be formalized as [αRTR] → [αdorsal] (Vaux 2009), a phonetically grounded development (A&P 1994). Second, we also notice that there is a systematic difference between the Mongolic and Tungusic groups: [coronal]>[low] in (1) vs. [low]>[coronal] in (3). This minimal difference captures the contrast between the transparency of Mongolic /i/ vs. the opacity of Tungusic /i/ to labial harmony (van der Hulst and Smith 1988). Under the proposed hierarchy, Mongolic /i/ is specified only with [+coronal] and requires no further specification. Lacking [±low] value (unlike Tungusic /i/ and other high vowels), it does not block the labial spreading. Third, notice that Middle Korean (2a) shares exactly the same contrastive hierarchy with the main varieties of Mongolic (1a) and the same four contrastive features with the majority of Tungusic (3a). The difference, however, is found in that Middle Korean exploits the high back region for the labial contrast (/ɨ, ʌ/ vs. /u, o/) while Mongolic and Tungusic languages use the low back region (/ə, a/ vs. /o, ɔ/) instead. Fourth, the current contrast-driven typology provides a plausible account for the inventorial difference between Turkic (4) vs. non-Turkic vowel systems (1), (2), (3). Unlike symmetrical Turkic vowel systems, Mongolic, Tungusic, and Korean have an asymmetrical vowel system that lacks the non-high front vowels. I argue that this difference can be ascribed to the absence vs. presence of the contrastive [coronal] feature in Turkic vs. in non-Turkic vowel systems, respectively. In non-Turkic systems, non-high front vowels are disfavored because their existence requires the antagonistic articulatory correlation between [coronal] and [low] (cf. A&P 1994).

Selected References **ARCHANGELI, D. & D. PULLEYBLANK**. 1994. *Grounded Phonology*. **CROTHERS, J.** 1978. Typology and universals of vowel systems. *Universals of Human Language 2, Phonology*. **DRESHER, B. E.** 2009. *The contrastive hierarchy in phonology*. **DRESHER, B. E. & X. ZHANG.** 2005. Contrast and Phonological Activity in Manchu Vowel Systems. *CJL*50. **HULST, H. G. van der & N. SMITH.** 1988. Tungusic and Mongolian vowel harmony: a minimal pair. *Linguistics in the Netherlands 1988*. **MADDIESON, I.** 1984. *Patterns of Sounds*. **POPPE, N. N.** 1960. *Vergleichende Grammatik der Altaischen Sprachen. Teil I. Vergleichende Lautlehre*. **SVANTESSON, Jan-Olaf.** 1985. Vowel Harmony Shift in Mongolian. *Lingua 67*. **VAUX, B.** 2009. [atr] and [back] harmony in the Altaic languages. *Proceedings of WAFL3*. **WALKER, R.** 1993. A feature hierarchy for contrastive specification. *TWPL 12.2*. **ZHANG, X.** 1996. *Vowel systems of the Manchu-Tungus languages of China*. PhD dissertation, U. of Toronto.

(1) Mongolic vowel systems

Language	*Contrastive hierarchy*
a. Mongolian proper (e.g., Khalkha, Chakhar)	[coronal]>[low]>[labial]>[RTR]
b. Monguor, Santa, Bonan, Moghol	[coronal]>[low]>[labial](>[RTR])
c. OM, Dagur, Buriat, Khamnigan	[coronal]>[labial]>[RTR](>[low])
d. Kalmyk, Oirat	[coronal]>[low]>[labial]>[dorsal]

(2) Korean vowel systems

Language	*Contrastive hierarchy*
a. Middle Korean	[coronal]>[low]>[labial]>[RTR]
b. Early Modern Korean; NW Korean	[coronal]>[high]>[low](>[labial])
c. Central Korean; SE Korean	[coronal]>[low]>[labial](>[high])
d. Jeju Korean	[coronal]>[high]>[labial]>[low]

(3) Tungusic vowel systems (cf. Zhang 1996; Dresher and Zhang 2005)

Language	*Contrastive hierarchy*
a. W. Manchu, Oroch, Udihe, Ulchi, Uilta Oroqen, Ewenki, Solon, Ewen	[low]>[coronal]>[RTR]>[labial]
b. Nanai	[low]>[coronal]>[RTR]
c. Spoken Manchu, Xibe	[low]>[coronal]>[labial]

(4) Turkic vowel systems

Language	*Contrastive hierarchy*
a. Most Turkic languages (e.g., Turkish)	[low]≈[labial]≈[dorsal] (cf. Walker 1993)
b. Uyghur	[low]≈[labial]>[dorsal]

('≈' indicates that there is no positive evidence in favor of one hierarchy over the other.)

(5) An inventory-driven typology based on the number of vowel qualities

No. of vowel qualities	No. of langs (M/Tg/Tk/K)	Percent of langs	Language (^{M}: Mongolic, ^{Tg}: Tungusic, ^{Tk}: Turkic, ^{K}: Korean)
5	7 (5/2/0/0)	10.1 %	Monguor^{M}, Santa^{M}, Bonan^{M}, Moghol^{M}, Dagur^{M}, Udihe^{Tg}, Literary Ewenki^{Tg}
6	7 (1/2/2/2)	10.1 %	Khamnigan^{M}, NW Korean^{K}, SE Korean^{K}, Written Manchu^{Tg}, Najkhin Nanai^{Tg}, Uzbek^{Tk}, Halič Karaim^{Tk}
7	9 (3/3/2/1)	13.0 %	Khalkha^{M}, Buriat^{M}, Old Mongolian^{M}, Middle Korean^{K}, Spoken Manchu^{Tg}, Oroch^{Tg}, Xunke Oroqen^{Tg}, Khalaj^{Tk}, (Fuyu Kirghiz^{Tk})
8	27 (2/6/19/1)	39.1 %	Kalmyk^{M}, Oirat^{M}, Early Middle Korean^{K}, Sibe^{Tg}, Ulchi^{Tg}, (Baiyinna) Oroqen^{Tg}, Ewen^{Tg}, Solon^{Tg}, Negidal^{Tg}, Chuvash^{Tk}, Turkish^{Tk}, Gagauz^{Tk}, Turkmen^{Tk}, Salar^{Tk}, Crimean Tatar^{Tk}, (Caucasian) Urum^{Tk}, Karaim^{Tk}, Karachai-Balkar^{Tk}, Kumyk^{Tk}, Kirghiz^{Tk}, Altai^{Tk}, Shor^{Tk}, (Middle) Chulym^{Tk}, Tuvan^{Tk}, Tofa^{Tk}, Yakut^{Tk}, Dolgan^{Tk}, Yellow Uyghur^{Tk}
9	11 (1/0/10/0)	15.9 %	Kanjia^{M}, Old Turkic^{Tk}, Azerbaijani^{Tk}, Azari^{Tk}, Uyghur^{Tk}, Tatar^{Tk}, Bashkir^{Tk}, Kazakh^{Tk}, Karakalpak^{Tk}, Noghay^{Tk}, Khakas^{Tk}
10	5 (1/1/0/3)	7.2 %	Shira Yugur^{M}, Uilta^{Tg}, NE Korean^{K}, SW Korean^{K}, Central Korean^{K}
11	1 (1/0/0/0)	1.4 %	Baarin^{M}
12	1 (0/0/0/1)	1.4 %	Jeju Korean^{K}
13	0 (0/0/0/0)	0.0 %	
14	1 (1/0/0/0)	1.4 %	Chakhar^{M}
Total	69 (15/14/33/8)	100.0 %	

Samuel R. Bowman (Stanford University) &
Benjamin Lokshin (Stanford University)

Saturday, 5:30pm-6:00pm

Idiosyncratic transparency in Kazakh vowel harmony

We present a phonetic and phonological study of the Kazakh backness harmony system, and argue that it presents two clear cases of affixes which are idiosyncratically transparent to harmony—a phenomenon not documented in the formal linguistic literature. We show that the dismissive prior treatment of one such affix, /+uw/ (Vajda, 1994, Tamir, 2007), relies on a transcription that does not reflect the speech of our speakers, and introduce another such affix whose behavior has not been documented previously. We show that both Agreement by Correspondence (ABC, Rhodes, 2010) and Trigger Competition (TC, Kimper, 2011) can be straightforwardly modified to account for these facts, and that TC makes the strongest predictions about the rarity of the phenomenon.

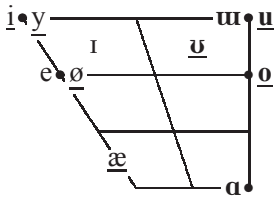


Figure 1: The proposed Kazakh vowel inventory.

We hypothesize eleven phonological vowels, which can be divided into front and back vowels by their harmonic behavior. The chart in Figure 1 indicates the approximate targets of these vowels, with back vowels indicated in bold type, and vowels restricted to initial syllables underlined. Harmony requires that native word stems contain either only front vowels or only back vowels, and limits the inventories of consonants that can appear with each:

(1) FRONT ROOT: ʃømʲelʲe ‘haystack’ bʲerɪk ‘mighty’ myjɪz ‘horn’
BACK ROOT: qɯrbɑqɑ ‘frog’ bɑwɯr ‘liver’ qʊjrɯq ‘tail’

Though Vajda (1994) argues that the primary alternating feature is [RTR] rather than [BACK] (we ignore the limited rounding harmony), we use the areally typical terminology of backness, and do not commit ourselves to either analysis.

Nearly all suffixes that contain vowels participate in harmony categorically:

(2) FRONT ROOT: søjlʲe-gʲen *søjlʲe-ɣɑn ‘speak-PST.PTCP’
BACK ROOT: *ɑjuw-lʲer ɑjuw-lar ‘bear-PL’

Two suffixes break that generalization by showing harmonically neutral behavior: the comitative case marker /+mʲen/ and the infinitive marker /+uw/. Both occur after both front and back vowels, and both are transparent to harmony, requiring that following suffixes ignore them and harmonize with the root:

(3) FRONT ROOT: syt-pʲen-bʲe *syt-pʲen-bɑ ‘milk-COM-Q’
BACK ROOT: *nɑn-mʲen-bʲe nɑn-mʲen-bɑ ‘bread-COM-Q’

(4) FRONT ROOT: ʒyz-uw-dɪ *ʒyz-uw-dɯ ‘swim-INF-ACC’
BACK ROOT: *ɑl-uw-dɪ ɑl-uw-dɯ ‘take-INF-ACC’

Vajda and Tamir attempt to account for INF (/+uw/ above) by describing it as a normal harmonizing suffix with two phonological variants: /ʊw/ is used in back contexts and /yw/ in front contexts. This allows this common suffix to be accounted for under most standard theories of harmony, but it runs counter to both the standard Kazakh orthographies—which treat the suffix as surfacing with a single vowel—and to our own casual observations. To test this claim, we conducted a systematic acoustic analysis of two native speakers’ vowel systems. We recorded speakers from two regions of Kazakhstan reading a wordlist, and focused our analysis on six minimal or near-minimal pairs of front and back words containing INF. These pairs did not differ in preceding consonant nor in the height and roundedness of the surrounding vowels. To test the effects of harmonic environment, we measured F1 and F2 at a point 25% of the way through the vowel in INF (taken as the nucleus of the diphthong) and converted frequencies to Bark values (to facilitate distance calculations).

We found that harmonic context had a significant effect on the realization of the INF affix (especially in Z2), but that the initial target of the vowel did not come particularly close to any other vowel, including [ʊ] and [y]. The differences in Z2 between front-context INF and /y/ and between back-context INF and /ʊ/ were significant ($p < 0.01$ for both speakers and for both contexts), and the Euclidean distance between

the front-context INF and /y/ was relatively large (in Bark: 2.7 for speaker 1, 1.1 for speaker 2). Given the minimal spectral overlap between INF and either /y/ or /ʊ/, we conclude that the fronting effect can be ascribed to phonetic coarticulation rather than phonological harmony. Thus, we include /u/ as a vowel phoneme alongside the other ten, and we treat its behavior in INF as a case of idiosyncratic transparency.

INF and COM both show behavior that cannot be predicted on the basis of the general phonology of the language: except in COM, /e/ participates in harmony, and except in INF, /u/ is neither transparent nor even licit in non-initial syllables. As such, both must be lexically marked in some way, but this alone is not sufficient: both interact with stems and following suffixes in predictable ways, and the grammar must be able to explicitly account for those interactions.

Many current approaches to harmony offer accounts for lexically idiosyncratic opaque affixes (e.g. Baković, 2000, Nevins, 2010) by introducing lexically-indexed protection constraints, but there is only one clear case of an idiosyncratically transparent affix in the literature (Lesley-Neuman, 2007), and that case can be explained on the basis of morphosyntactic facts that do not hold in Kazakh. We claim that the Kazakh facts can be most readily accounted for in a harmony system that allows for non-local agreement.

Harmony in ABC presents the simplest account. Since it can selectively establish long-distance links between segments, it is possible to build a grammar in which all alternating segments are compelled to enter into a relationship that the idiosyncratic segments avoid. We follow Rhodes's terminology in claiming that these two affixes are idiosyncratically stored with weak backness specifications, allowing a strength-sensitive correspondence constraint to skip them. For COM, this is all that is necessary, and for INF (as in 4), we need only add an indexed constraint to protect the /u/ from neutralizing to a less marked back vowel:

/ʒyz+uw+dɯ/	IO-IDENT-σ_1	IO-ID-INDEXED	*{iuyʊoøæ}	CORRV$_{Str}$V$_{Str}$	IDENTVV[BK]
a. [ʒy$_i$z+u$_j$w+dɯ$_k$]			**	*	
b. [ʒy$_i$z+u$_j$w+dɯ$_i$]			**		*
c. ☞ [ʒy$_i$z+u$_j$w+dɪ$_i$]			**		
d. [ʒy$_i$z+ɯ$_j$w+dɪ$_i$]		*	*		

The newer and less widely adopted TC framework claims to offer a more typologically sound approach to non-local harmony, and also accounts for Kazakh. Normal transparent vowels are modeled as vowel *types* which are too well cued for backness to trigger harmony, but which are blocked by another constraint from alternating. To account for idiosyncratic COM, we allow that lexical items can be specified to have this weak trigger property, inducing transparency. In addition to this, it is necessary to use a lexically indexed constraint to protect both vowels from *undergoing* harmony triggered by a preceding vowel.

It may seem undesirable to require, as we do for both frameworks, that idiosyncratically transparent morphemes be lexically specified both as protected and as weak, but there are typological benefits to this approach. Idiosyncratic transparent vowels are clearly rare, and requiring them to be doubly specified encodes this rarity. Proposing a grammar that allows for both kinds of specification does not yield any other novel behavior: if a vowel is protected but not weak, then it is an idiosyncratic opaque affix of the observed sort. If a vowel is weak but not protected, TC ensures that it will participate in harmony normally, and ABC still allows the rare but observed idiosyncratic transparency behavior to surface for some vowels.

References

Eric Baković. *Harmony, Dominance and Control*. PhD thesis, Rutgers University, 2000.

Wendell A. Kimper. *Competing triggers: Transparency and opacity in vowel harmony*. PhD thesis, University of Massachusetts Amherst, 2011.

Diane Lesley-Neuman. *ATR harmony in Karimojong verbs: Justification for a stratal optimality theory*. PhD thesis, University of Colorado at Boulder, 2007.

Andrew Nevins. *Locality in vowel harmony*, volume 55. The MIT Press, 2010.

Russel Rhodes. Vowel harmony as agreement by correspondence. Unpublished ms., UC Berkeley, 2010.

Ferhat Tamir. Kazak Türkçesi. In *Türk Lehçeleri Grameri*, pages 430–480. Ankara, 2007.

Edward Vajda. Kazakh phonology. *Opuscula Altaica: Essays Presented in Honor of Henry Schwarz*, pages 603–650, 1994.

Yusuke Yoda (Kinki University) Saturday, 6:00pm-6:30pm

Phrasal or Phasal Coordination?
-From the Evidence of Suspended Affixation-

Synopsis: In this paper, introducing novel facts in Japanese that different categories can be coordinated, I will argue that the relevant factor is not the categorial isomorphism but whether the elements that are coordinated constitute a phase (Chomsky 2000, Embick 2010).

Facts: Japanese has three ways to connect two sentences as in (1).

(1) Taroo-ga betsubetsu-no ronbun-o {kopii-si/kopi-si-te/kopii-shita sosite} fairu-si-ta.
Taro-$_{NOM}$ different-$_{GEN}$ paper-$_{ACC}$ copy-do/copy-do-and/copy-do and.then file-do-PAST.
'Taro copied a paper and filed another different paper. / Taro copied and filed a paper.'

Among the three, the sentence with a bare-verbal element in the first conjunct is regarded as coordination (Takano 2004, Hirata 2006), since it can co-occur with *betsubetsu* 'different', which induces a sentence-internal reading, according to which the paper that is copied and the paper that is filed can be different as the translation in (1) indicates. Although the traditional analysis of Japanese sentential coordination (SC) is TP-coordination (Tomioka 1994, Nishiyama 2012 a.o.), the existence of T in the sentential coordination is not well-established. If the sentence in (1) involves TP-coordination, the shared part (i.e. *-ta*) must be moved to C via Across-the-board (ATB) movement. That is, (1) has the following structure:

(2) [$_{CP}$ [$_{TP1}$ SUBJ OBJ V] [$_{TP2}$ SUBJ OBJ V] C(=*-ta*)]

However, if (2) is on the right track, we expect that negation, which amalgamates with *-ta*, always takes scope over SUBJ in (3), which is not the case.

(3) [$_{TP}$ Zen'in-ga ronbun-o kopii-si] [$_{TP2}$ *pro*(SUBJ) *pro*(OBJ) fairu-si]-nak-at-ta.
Everyone-$_{NOM}$ paper-$_{ACC}$ copy-do file-do-NEG-COP-PAST.
'Everyone didn't copy and file a paper.' (everyone > not / not > everyone)

In (3), the subject universal quantifier can be outside the scope of the negation. I thus assume in line with Takano (2004) and Hirata (2006) that what is coordinated in (1) and (3) is *v*P as in (4).

(4) [$_{TP}$ Zen'in-ga [$_{vP1}$ t_1 robun-o kopii-si] [$_{vP1}$ t_1 *pro*(OBJ) fairu-si]-nak-at-ta.
Everyone-$_{NOM}$ paper-$_{ACC}$ copy-do file-do-neg-cop-past
'Everyone didn't copy and file a paper.' (everyone > not / not > everyone)

Issues: Crucial here is the scope interpretation observed in (5) and (7), where Suspended Affixation (SA) is invoked due to the presence of *-(s)ase* (causative) and *-nai* (negation). Given the above argument that what is coordinated is *caus*P, the scope facts regarding (5a) are not surprising; the causative morpheme takes scope over both *caus*P1 and *caus*P2. Moreover, the existence of CAUS in both clauses is evident by the realization of additional arguments. Observe:

(5) a. [$_{TP}$ Hanako-ga [$_{XP}$ Masao-ni$_1$ [$_{caus}$P1 $t_1$piano-o narai t_{sase}] [$_{caus}$P2 t_1 syuuji-o naraw t_{sase}]-**ase**]-ta].
Hanako-$_{NOM}$ Masao-$_{DAT}$ piano-$_{ACC}$ learn Taro-$_{DAT}$ calligraphy-$_{ACC}$ learn-CAUS-PAST
b.[$_{TP}$ Hanako-ga [$_{XP}$ Masao-ni [$_{caus}$P1 t_1 piano-o naraw-**ase**] [$_{caus}$P2 t_1 syuuji-o naraw-**ase**]-ta].
Hanako-$_{NOM}$ Masao-$_{DAT}$ piano-$_{ACC}$ learn –CAUS calligraphy-$_{ACC}$ learn-CAUS-PAST
'Hanko made Masao learn piano and Hanako made Masao learn calligraphy.'
(V1<V2<CAUS /*V1< CAUS <V2/*V2< CAUS<V1)

Here, (5a) only has a V1<V2<CAUS reading just like (5b), which indicates that (5a) has the following structure:

(6) [$_{CAUS}$P [$_{caus}$P1 … t_{caus}] [$_{caus}$P2 … t_{caus}] CAUS]

However, if (6) is the right structure for the bare-verbal coordination, (7) will be problematic.

(7) *Because he has to drive …*
Kare-wa [$_{vP1}$ sushi-o tabe] [$_{vP2}$ sake-o noma]-nak-at-ta.
he-TOP sushi-ACC eat sake-ACC drink-NEG-COP-PAST
'He neither ate sushi nor drunk sake. / He ate sushi but he didn't drink sake.'
(V1<V2<NEG / ✓V2<NEG<V1)

(7) allows a V2< NEG <V1 reading, which is unexpected if the relevant structure is (8).

(8) [$_{NEG}$P [$_{vP1}$ … t_{neg}] [$_{vP2}$ …t_{neg}] NEG]

The existence of a V2<NEG<V1 reading in (7) indicates that there is a case where only the second conjunct (i.e. *v*P2) is negated, which is normally ruled out due to the heterogeneous categories being coordinated (i.e. *v*P1 and NEGP). This is surprising since both CAUSE and NEG are suffixes to the verb, and the former is verbal and the latter is adjectival by nature. Note that logical combinations of negation and coordination do not work. Consider:

(9)

P (*v*P1)	Q (*v*P2)	P∧Q	~(P∧Q)
1	1	1	0
0	1	0	1
1	0	0	1
0	0	0	1

As shown in (9), the negation of both *v*P1 and *v*P2 does entail NEG(*v*P1) or NEG(*v*P2), so that a V1>NEG>V2 reading should also be possible. However, such an interpretation is not an option in (7).

Analysis: To account for the contrast between CAUS and NEG, I propose that only phases can be coordinated, and that NEG constitutes a category-changing node and hence a phase in the sense of Bobaljik and Wurmbrand (2013). NEGP should be regarded as a category-changing node since its conjugation is adjectival. Bobaljik and Wurmbrand (2013) argue that phases can be extended only when a given phase head is morphologically interpreted relative to a next phase. Given this, the phasal status of *v*P therefore extends to NEGP (cf. Embick 2010). The impossibility of a V2<CAUS<V1 reading in (5a) is not surprising since CAUS is a category-determining node (= an exponent of *v*) and hence it forms a phase, so that both *caus*P1 and *caus*P2 undergoes Spell-Out independently. Thus, (5a) is represented as:

(10) [$_{v\text{P}}$ Taro-$_{\text{TOP}}$ [$_{\text{XP}}$ Masao-$_{\text{DAT}}$ [$_{caus\text{P1}}$ piano-$_{\text{ACC}}$ learn t_{caus}]&[$_{caus\text{P2}}$ calligraphy-$_{\text{ACC}}$ learn t_{caus}]-CAUS]-*v*]

Phase 1 Phase 2

Note also that (11) is impossible since *narai* (=learn) is categorially neutral (an exponent of √) due to the absence of a categorial-determining head 'CAUS', and it is not phasal. Hence, the *V2< CAUS<V1 reading is excluded.

(11) [$_{v\text{P}}$ Taro-$_{\text{TOP}}$ [$_{\text{XP}}$ Masao-$_{\text{DAT}}$ [$_{\surd\text{P1}}$ piano-$_{\text{ACC}}$ learn]&[$_{\text{CAUSP}}$ calligraphy-$_{\text{ACC}}$ teach-CAUS]-X]-*v*]

Not a Phase!! Phase

This explains that the scope facts in (5a). Turning to (7), since NEG is a phase, it is possible to have (12).

(12) [Kare-$_{\text{TOP}}$]$_1$ [$_{v\text{P}}$ t_1 susi-$_{\text{ACC}}$ eat]&[$_{\text{NEGP}}$ [$_{v\text{P2}}$ t_1 sake-$_{\text{ACC}}$ t_2] drink$_2$-NEG]-COP-PAST

⇐⇐⇐⇐⇐⇐*v*P2⇒⇒⇒⇒⇒⇒⇒⇒ (*v*P2 phase extends to NEGP)

Consequences 1: This analysis predicts that since CAUS is morphologically inside NEG, movement of CAUS precedes the introduction of NEGP, hence NEG cannot take scope over only V2 and excluding a V2< NEG<V1 reading. This prediction is borne out:

(13) Hanako-ga [Masao-ni[$_{caus\text{P}}$ piano-o narai t_{caus}] [$_{caus\text{P}}$ syuuji-o naraw-t_{caus}] ase]-nak-at-ta

Hanako-NOM Masao-$_{\text{DAT}}$ piano-$_{\text{ACC}}$ learn calligraphy-$_{\text{ACC}}$ learn-CAUS-NEG-COP-PAST

'Hanko didn't Masao take piano lessons and Hanako didn't Masao take calligraphy lessons.'

(V1<V2< NEG / *V2< NEG<V1)

Consequences 2: The proposed analysis also accommodates the following contrast in Turkish SA. According to Konfilt (2012), the affix *-ma* can form either a gerund (GER) or a result (RES) nominal. In this language, result nominal affix *-ma* cannot be suspended as follows:

(14) a. dun-dur-ma b. kizar-t-ma c. dun-dur-up kizar-t-ma

freeze-CAUS-GER/RES roast-CAUS-GER/RES freeze- CAUS-& roast-CAUS-GER/RES

freezing/ice cream roasting/roasted food ✓freezing and roasting/*ice cream and roast food

In the result interpretations, the event interpretation of a verb disappears and no internal argument can be selected by a verb (Grimshaw 1990). This is elucidated in terms of the lack of *v*P and [$_{n\text{P}}$ [root-caus] *n*] structure, which is proposed by Volpe (2005). As a result, the coordination of result nominals in (15b) is excluded since both conjuncts are not categorory-changing nodes and therefore, they are not phasal.

(15) a. [$_{n\text{P}}$ [$_{v\text{P}}$[$_{v\text{P}}$ freeze- CAUS]-*v*] & [$_{v\text{P}}$[$_{v\text{P}}$ roast- CAUS]-*v*]-GER] b. *[$_{n\text{P}}$ [freeze-CAUS] & [roast-CAUS]-RES]

Phase Phase Not a Phase! Not a Phase!

Invited Speaker: **Sunday, 9:00am-10:00am**

Guglielmo Cinque (Università Ca'Foscari Venezia)

Word Order Typology: a change of perspective

In this talk I will suggest the opportunity of reversing the perspective of current word order typology, not by asking what the *predominant* correlates of OV and VO orders in actual languages are, but by asking what precisely the head-initial and head-final harmonic word order types are that we can theoretically reconstruct, and to what extent each language (or subset of languages) departs from them (with the "rigid" types, Altaic SOV and Austronesian VOS, approximating most closely the ideal harmonic orders). This change of perspective entails viewing the "harmonic" orders as abstract and exceptionless, and independent of actual languages, though no less real. I will also suggest that these harmonic orders should not be regarded as primitives, but rather as derived from a universal structure of Merge that reflects the relative scope of the elements involved via two distinct movement options, with actual languages departing to varying degrees from the "ideal" derivations (where more deviations should imply fewer languages instantiating that type).

Steps towards a minimalist analysis of Japanese *-no*

It is well-known that the Japanese grammatical particle *no* (e.g., *Naomi-no bag* 'Naomi's bag') occurs in a much wider variety of contexts than the traditional gloss of 'genitive case' suggests. Some of the contexts *-no* appears are shared with English *of* or French *de*. Descriptively the Japanese generative literature distinguishes between various *no* particles: a genitive case marker, an attributive copula, a pronoun, a complementizer, a nominalizer, a sentence extender and a modification marker (Kuno 1973, Murasugi 1991, Kitagawa and Ross 1982 among others). This raises the analytical question of how many different 'no's Japanese has. From a theoretical and acquisitional point of view, an optimal answer would be that there is only a single 'no', i.e. all contexts in which 'no' occurs project the same substructure, which follows from the properties of *no*. Comparing Tokyo and Toyama dialects, I show that many uses of *no* are in fact instantiation of only one *no*: a reduced relativizer D—a counterpart of English 'of'.

Tokyo and Toyama Dialects Table 1 shows that in both Toyama and Tokyo dialects, *-no* appears following a reduced clause in the frame of [DP/PP/SC-no NP] frame, with a possessor preceding a possessed NP. This *no* clearly has the same function across the two dialects, similar to English *of* (eg. *a picture of John, the way of solving the problem*, cf. Kayne 2002). i.e. they are the same morpheme, which I will analyze as reduced relative D, attracting XP with [+nominal] feature to its specifier. When the head noun is suppressed, however, *ga* appears in place of the head noun only in Toyama dialect. Then what is the Tokyo counterpart of Toyama *ga*? (Note that for ease of comparison, Toyama dialect is rendered into Tokyo dialect except the particles.)

Table 1	Tokyo	Toyama
1.[DP/PP-no NP]	{*Ken/Losu-kara*}*-no tegami-ga hosi-i.* {Ken/LA-from}-NO letter-NOM want-PRS '(I) want {Ken's letter/a letter from LA}.'	
2.[SC-no NP]	*Hahaoya-ga zyoyuu*-no -syoonen o sit-tei-ru [mother-ga actress]-NO boy-acc know-asp-pres Lit. 'I know a boy of his mom being an actress.'	
2.[DP/PP-no]	{*Ken/Losu-kara*}*-no ~~no~~-ga hosii.* {Ken/LA-from}-NO ~~no~~-NOM want '(I) want {Ken's /the one from LA}.'	{*Ken/Losu-kara*}*-no **ga**-ga hosii.* {Ken/LA-from}-NO ga-NOM want

Two possibilities: one is that Tokyo dialect has a pronoun *no*, and successive uses of *no* undergo simplification, and are realized as only one *no* (i.e. DP-no-*no*). The other is that Tokyo dialect has a silent pronoun. I pursue the first option here, along with Kuno (1973) and Murasugi (1991). Support for this claim comes from the distribution of headless RC. In Tokyo headless RC (3), *no* appears in place of the pronoun *ga* in Toyama headless RC.

Table 2	Tokyo	Toyama
4. Headless RC	*kino katta **no**-o yon-da.* yesterday bought no-acc read-pst '(I) read the book that (I) bought.'	*kino katta **ga**-o yon-da.* yesterday bought ga-acc read-pst
5. Nominalizer	*Ken-ga hikkosi-ta **no**-o sit-ta.* K-nom move-pst no-acc know-pst '(I) got to know that Ken moved.'	*Ken-ga hikkosi-ta **ga**-o sit-ta.* K-nom move-pst ga-acc know-pst
6. Pseudo-Cleft	*kino kat-ta **no**-wa hon-da.* yesterday buy-pst no-top book-cop 'What I bought yesterday is a book.'	*kino kat-ta **ga**-wa hon-da.* yesterday buy-pst ga-top book-cop
7. Sentence Extender	*kino hon-o katta **no**-da.* yesterday book-acc bought no-cop 'It is that (I) bought the book yesterday.'	*kino hon-o kat-ta **ga**-da.* yesterday book-acc bought ga-cop

What is interesting is the consistent appearance of *ga* in Toyama dialect in contexts given in Table 2. Generally, these uses of *no* in Tokyo dialect are distinguished from possessive *no* and are known as nominalizer (4-6), and sentence-extender (7). Contrary to the standard classification, Toyama's pattern naturally leads to a hypothesis that all of these instances in fact involve a single *no*—a pronoun 'no,' which is the same as the one that appears in (2) or (3). This proposal is not surprising given that 'no' in these positions can be replaced with an overt DP.

8. a. *Ken-ga hikkosi-ta (to iwu) {no/koto/zizitu}-o sit-ta.*
   Ken-NOM move-PST C say {no/matter/fact}-ACC know-PST
   '(I) knew the fact (which says) that Ken moved.'
   b. *kino kat-ta {no/mono}-wa hon-da.* 'The thing I bought yesterday is a book.'
   yesterday buy-PST{no/thing}-TOP book-COP

Sentence extender *no* given in (6) is used to provide an explanation (often a reason) for what has been said (Kuno 1973:227). The appropriate head noun that can replace this *no* depends on the type of explanation. Kuno (1973) translates it as 'It is (the case) that . . . ,' and I found the following example with the noun *tame* 'cause' very natural:

9. a. *Doo sita? Kao.iro-ga warui-yo.* 'What happened? You look pale.'
   b. *kino nomi-sugi-ta {no/tame}-da.*
   yesterday drink-exceed-PST {no/cause}-COP
   Int. 'It is {because/the case that} I drank too much yesterday.'

If *no* in table 2 is indeed a pronoun, this opens a possibility of analyzing these instances as relative clauses, similar to Kayne's (2008) proposal that English *that* is a relative D. In Japanese, however, this D, which attracts XP [+XP] feature to its specifier, is silent unlike English *that*.

***no* in [DP/PP-no NP]** Let us now return to cases in which *no* appears after a reduced XP. Recent analyses, such as Saito et al. 2008, assume that there are two *no* particles in the [DP-no NP] context—one introducing arguments and one introducing adjuncts—based on the distributional differences with respect to nominal ellipsis (e.g. *Ken-no (hon)* 'Ken's (book) vs. *ame-no *(hi)* 'rainy day'). If this is indeed the case, it is conceivable that the two *'no'*s are realized as different morphemes in Toyama dialect. However, this is not the case (e.g., 'rain-no day' is realized with *no* in Toyama dialect). Note that Saito's analysis crucially depends on the mechanism of nominal ellipsis (see Watanabe (2010) for a different proposal of licensing ellipsis). Further, 'DP-no' subject behaves differently from 'DP-no' object in terms of possessor-raising: only the former can undergo possessor-raising and move to a DP-external nominative position. Thus the dichotomy is not necessarily arguments vs. adjuncts (or predicate NP). Based on the data in Toyama dialect and the distribution in terms of possessor-raising, I argue that it is too hasty to abandon the uniform account of *no* in the [DP/PP-no (NP)] context.

Proposal Contrary to Saito et al. (2008), I motivate a (reduced) relative D analysis of *no* given in (10) (cf. Kayne 1994, Koike 1999): *no* is a type of "D", which merges with a CP complement (i.e., a relative clause), and which has an EPP-feature requiring a [+nominal] (with PP being nominal) specifier.

10. $[_{DP}\ [_{XP}$ +nominal$]\ [_{D}$ no $[_{CP}\ [_{C}\ [_{XP}$ ~~.. NP Pred. . . ..]~~ $\underline{]}]]]\ ]$

The CP contains an XP of different sizes, and provides an A-landing site to the relativized NP (if raising fails, the construction would not be headed). The remnant XP raises to the Spec, *no*, satisfying the EPP property of *no*. For example, the string *ame-no hi* 'rain-no day' is built from an elementary silent predicate BE (day BE rainy). First, 'day' raises to Spec,CP, then the remnant XP containing 'rain' raises to Spec,DP. The requirement of XP being [+nominal] comes from the fact that once an AP (in general, 'AP(*-no) NP') is embedded under a nominal element, *no* appears (e.g., *atui-dake-*(no) piza* 'hot-only-no pizza' the pizza that is only hot').

Selected Reference Kayne 2008 "Why Isn't *This* a Complementizer." Ms.

The development of Japanese *no*: Grammaticalization, degrammaticalization, or neither?

This paper discusses the development of the multi-functional particle *no* from premodern Japanese (PMJ) to modern Japanese (ModJ). After reviewing two previous proposals, which can be characterized as grammaticalization and degrammatialization, I argue that the alleged grammaticalization did not happen, and that alleged degrammaticalization is better characterized as renewal.

No in ModJ has three functions:

(1) a. Taro-no hon (Genitive) b. akai no (Pronoun)
T.-NO book red NO
'Taro's book' 'red one'

c. Taro-ga kooto-o kita no-wa samui kara da (Complementizer)
T.-ga coat-Acc put.on NO-Top cold because Copula
'It is because it is cold that Taro put on a coat.'

(1a-c) illustrate the usage of *no* as genitive, pronoun, and complelentizer, respectively. Genitive *no* existed in PMJ, while complementizer *no* emerged in ModJ, and the existence of pronominal *no* in PMJ is controversial, as I show below.

So far there has been two major proposals concerning the development of *no*:

(2) Pronoun > Complementizer (Yanagida 1993, grammaticalization)

(3) *Ø* > *no* (Horie 1993, degrammatialization)

I argue that the (2) did not happen, and that (3) is better characterized as renewal, where a morpheme undergoes phonological reduction to zero and is then replaced by another morpheme.

Pronoun > Complementizer ? (4) is the oft-cited alleged evidence for the pronominal *no* in PMJ:

(4) ima-no nusi-mo saki-no-mo te torikahasite
now-Gen master-also previous.time-NO-also hand holding
'the current master and the previous one are holding hands together,' (*Tosanikki*, 10C)

Yanagida (1993) assumes that the second *no* (after *saki*) is a pronoun and is the source of complementizer *no*, basing his proposal in (2). However, it is better analyzed as involving N' deletion (cf. Saito, Murasugi, and Lin 2008), illustrated below for ModJ:

(5) Taro-no kuruma-wa takai-ga Jiro-no Ø-wa yasui
T.-Gen car-Yop expensive-but J.-Gen Ø-Top cheap
'Taro's car is expensive, but Jiro's Ø is cheap.'

Thus, (4) does not constitute evidence for (2). I concur with Nishi (2006) that the complementizer *no* developed independently of the genitive *no*.

In more theoretically oriented research, Pronoun > Complementizer is formalized as D > C (Simpson 2003), but this is also dubious. The categorically ambiguous status of ModJ *no* is illustrated by (1c) above and (6) below:

(6) Taroo-wa [*ringo*-ga sara-no ue-ni at-ta **no**]-wo tot-te
T.-TOP apple-NOM plate-GEN surface-on be-PAST **NO**-ACC take-and
'Taro picked up an apple which was on a plate and…' (Kuroda 1992)

(1c) is a cleft, and *no* corresponds to the rationale clause in the focus, and therefore it cannot

be D (with a nominal feature) but C. (6) is an example of a head-internal relative clause, and since *no* is the complement of 'take', it is D.

Now, exactly the same categorial ambiguity of *no* (between D and C) in ModJ is observed in its PMJ equivalents. PMJ has designated inflection forms (the so-called *rentai* forms) used in particular embedded contexts:

(7) a. musaboru-koto-no **yama-zar-u**-ha inoti-o ohu-ru daizi
devour-thing-NOM stop-not-RU-TOP life-ACC finish-RU importance
ima koko-ni kitare-ri to tasikani **sira-zar-eba** nari
now here-at come-PERF C certainly know-not-because COP
'It is because he certainly does not know that it is time to finish his life that he does not stop being greedy.' (*Turezuregusa* 134, 14C)

b. [awoki *kame*-no ohoki-nar-**u**]-wo suwe-te
blue vase-GEN large-be-**RU**-ACC set.up-and (Kuroda 1992)
'(They) set up a celadon vase which was large and…' (*Makura-no Sōsi*, 10C)

(7a) and (7b) are a cleft and a head-internal relative clause, respectively, in PMJ, and like their ModJ equivalents in (1c) and (6), the conjugated (*rentai*) forms (headed by RU) are either D (7a) or C (7c). Thus, the categorial ambiguity of *no* simply reflects the categorial ambiguity of its ancestor *rentai* forms, and thus it in itself cannot have undergone the change of D > C.

***Ø > no* ?** Comparing the ModJ cleft and head-internal relative clause in (1c) and (6) and their PNJ equivalents in (7a, b), one can see that *no* is missing in (7). This led Horie (1993) (among others) to assume that PMJ has a zero noun Ø, which is replaced by *no* in ModJ. This proposal itself is degrammaticalization and requires strong motivations, but the proposal stems from the failure to recognize the proper morphological structure of *rentai* forms. As in (7a, b), once RU is identified as the head of rentai forms, we can connect RU and *no*. But there is a time gap between the loss of RU and the emergence of *no*. So the real change is ru > Ø > no. The zero morpheme appeared only in a transitional stage. Crucially, to the extent that the ultimate source of *no* is not zero, the whole change *ru* > *Ø* > *no* is not a case of degrammaticalization. More specifically, it is a case of renewal (cf. Gelderen 2011), a kind of cycle, where a morpheme undergoes phonological reduction to zero and is then replaced by another morpheme.

Gelderen, Elly van. 2011. *The linguistic cycle*. OUP. **Horie**, Kaoru. 1993. From zero to overt nominalizer *no*: a syntactic change in Japanese. *Japanese/Korean Linguistics* 3: 305-321. **Kuroda**, Shige-Yuki. 1992. *Japanese syntax and semantics*. Dordrecht: Kluwer. **Nishi**, Yumiko. 2006. The emergence of the complementizer *no* in Japanese revisited. *Japanese/Korean Linguistics 14*. pp.127-137. **Saito**, Mamoru, T.-H. Jonah Lin, and Keiko Murasugi. 2008. N' ellipsis and the structure of noun phrases in Chinese and Japanese. *Journal of East Asian Linguistics 17*. pp.247-271. **Simpson**, Andrew. 2003. On the re-analysis of nominalizers in Chinese, Japanese and Korean. In *Functional structure(s), from and interpretation*, ed. Yen-hui Audrey Li and Andrew Simpson, 131-160. London: RoutlegeCurzon. **Yanagida**, Seiji. 1993. *No* no tenkai, kodago kara kindaigo e no [The development of *no*, from premodern Japanese to contemporary Japanese]. *Nihongogaku* 12 (10): 15-22.

On the "What as Why" Phenomenon in Japanese and Turkish

In quite a few languages, the *wh*-phrase corresponding to English 'what' can be used to ask for a reason, in addition to a canonical reason *wh*-phrase corresponding to English 'why': Japanese and Turkish are, among other languages, mainly considered in this paper. It has been reported that reason WHAT-words have more restrictions than WHY-words (e.g., Kurafuji 1996). Thus, the goal of this paper is, arguing (1a-b), to provide a unified analysis for the reason WHAT-words in the two languages. Also, it is shown that (1c) is obtained as a consequence of our analysis.

(1) a. The reason WHAT-words have ordering restriction that is related to their Foc(us)-F(eature).
b. The reason WHAT-words should be treated as non-D-linked *wh*-phrases.
c. The reason WHAT-words are base-generated lower than the NegP; the WHY-words are higher than the NegP.

The relevant examples are in (2). There, Japanese *nani-o* 'what-Acc' and Turkish *ne* 'what' function as a reason *wh*-phrase, just like the canonical reason *wh*-phrase in these language *naze* 'why' and *neden* 'why', respectively.

(2) a. *Japanese* karera-wa nani-o/naze sawaide-i-ru no.
they-Top what-Acc/why are making noise Q
'Why are they making a noise?'

b. *Turkish* Ne/Neden ağlıyorsun?
what/why you are crying
'Why are you crying?'

However, there exist crucial differences between the WHAT-words and the WHY-words in both these languages.

Firstly, unlike WHY-words in these languages, WHAT-words indicate a high degree of emotion, such as surprise, annoyance, or anger (e.g., Ochi 2004). Therefore, in (2), WHAT-questions are best uttered in a situation where the speaker is annoyed or upset.

Secondly, it has been pointed out that Japanese *nani-o* must linearly precede the objet in a transitive sentence as in (3) (e.g., Konno 2004). In this paper, I further report that Turkish reason WHAT-word *ne* also has an order restriction; and *ne* must appear right before the verb as in (4). On the other hand, WHY-words in these languages are not subject to the order restriction. To account for these properties of the reason WHAT-words in Japanese and Turkish, I propose (5).

(3) a. **naze/nani-o** henna uta bakari utatte-i-ru no.
why/what-Acc funny song only are singing Q
'Why are you singing only funny songs?'

b. henna uta bakari **naze/*nani-o** utatte-i-ru no.
funny song only why/ what-Acc are singing Q

(4) a. Kapıyı **neden/ne** çalıyorsun?
the door why/what you are knocking
'Why are you knocking on the door?'

b. **Neden/*Ne** kapıyı çalıyorsun?
why/what the door you are knocking

(5) The WHAT-words in Japanese and Turkish obligatorily bear a [Foc]-F when they are used as reason *wh*-phrases.

Recall that the reason WHAT-words generally imply speaker's emotion such as anger or surprise. Thus, we assume the [Foc]-F in (5) to be a realization of this additional information, which is relevant to expressive contents in the sense of Potts (2003). Let us first consider Turkish *ne*, keeping in mind that languages use different means to encode focus including word order or morphology. Turkish has a specific focus position: the position immediately preceding the verb (Erguvanlı 1979). Given (5), it then naturally follows that Turkish reason WHAT-word *ne* always appears in the focus position as in (4). At this point, it is important to note that the WHY-word *neden* can also appear in that position as in (4a), because *wh*-phrases typically signal information that is unknown and thus it is natural for them to occur in the focus position. However, the significant difference between *neden* and *ne* is that other elements can appear in the focus position in a *neden* sentence as in (4b) because *neden* does not always have to bear the obligatory [Foc]-F. Accordingly, given that the [Foc]-F of *ne* is always realized by the particular focus position in Turkish, the strict order restriction of *ne* in (4) naturally follows.

As for Japanese *nani-o*, following Iida (2011), I assume here that a *nani-o* question always contains another phrase that bears a [Foc]-F, in addition to *nani-o*. This is because a *nani-o* question becomes more acceptable when it contains an intensifier like *sonnani* 'such a', or when the object has a focus particle like *bakari* 'only' as in (3). Eventually, a *nani-o* sentence contains two phrases with a [Foc]-Fs: in (3a), *nani-o* and the object *henna uta bakari*. However, this configuration faces the intervention effect (IE), as depicted in (3a)'s base structure (6). There, the [Foc]-F of the object cannot establish the legitimate Agree relation with the Foc, due to the closer [Foc]-F. (Here, we assume that *nani-o* is base-generated in the VP-adjoined position (Ochi 1999) and that *nani-o* is accompanied by an empty *wh* Op(erator), which moves up to the CP (Watanabe 1992).)

(6) $[_{CP}\ [_{FocP}\ \text{Foc}\ [_{vP}\ pro\ [_{VP}\ \underset{\textbf{[Foc]}}{\textbf{[}_{DP}\ \textbf{Op nani]-o}}\ [_{VP}\ \underset{\textbf{[Foc]}}{\textbf{[}_{DP}\ \textbf{hen na uta bakari]}}\ \text{utatte-i}]]]\text{-ru}]\text{-no}]$

To avoid this undesirable configuration (6), I adopt Iida's (2011) derivations, in which *nani-o* is left-adjoined to the raised object with a [Foc]-F. This *nani-o*'s adjunction operation creates a focus cluster, and the Foc checks two [Foc]-Fs simultaneously as a whole cluster (e.g., Sabel and Wolfgang 2001). The derivations are illustrated in (7), and notice that the focus cluster has the desirable word order: *nani-o* precedes the object.

(7) a. $[_{CP}\ [_{FocP}\ \text{Foc}\ [_{vP}\ \textbf{Op}_1\ [_{vP}\ \textbf{[}_{DP}\ \textbf{henna uta bakari]}_2\ [_{vP}\ pro\ [_{VP}\ \textbf{[}_{DP}\ \boldsymbol{t}_1\ \textbf{nani]-o}\ \ \boldsymbol{t}_2\ \text{utatte-i}]]]]\text{-ru}]\text{-no}]$

Left-Adjunction

b. $[_{CP}\ \textbf{Op}_1\ [_{FocP}\ \text{Foc}\ [_{vP}\ t_1\ [_{vP}\ \textbf{[}_{DP}\ \textbf{[}_{DP}\ \boldsymbol{t}_1\ \textbf{nani]-o}_3\ \textbf{[}_{DP}\ \textbf{henna uta bakari]}_2\textbf{]}\ [_{vP}\ pro\ [_{VP}\ t_3\ \ t_2\ \text{utatte-i}]]]]\text{-ru}]\text{-no}]$

Focus-Cluster

A third similarity between *nani-o* and *ne* is that these reason WHAT-words cannot be used with the negation, unlike the WHY-word *naze* and *neden*. As Kurafuji (1996) points out with (8), Japanese *nani-o* induces ungrammaticality when the negation appears. In this paper, I report that, with the negation, Turkish *ne* only allows a rhetorical question reading, which, for example, suggests the hearer should beat the donkey in (9).

(8) a. * karera-wa nani-o sawaide-i-**nai** no.
they-Top what-Acc are clamoring-**Neg** Q
'Why aren't they clamoring?'

b. karera-wa naze sawaide-i-**nai** no.
they-Top why are clamoring-**Neg** Q
'Why aren't they clamoring?' (Kurafuji 1996: 87)

(9) **Ne** dövmüyorsun eşeğ-i?
what you are not beating donkey-Acc
* 'Why aren't you beating the donkey?' [canonical question]
'Why don't you beat the donkey?' [rhetorical question]

As Kurafuji claims, the grammatical difference in (8) can be accounted for via the Inner Island Effect, with the assumption that *naze* is base-generated higher than the NegP, while *nani-o* is lower than the NegP. Our analysis, in fact, can correctly rule out (8a) because, as shown in (7), we assume *nani-o* to be base-generated in the VP-adjoining position and thus the Op-movement of *nani-o* eventually induces the Inner Island Effect, jumping over the NegP located under the TP. As for *naze*, we assume that it first appears in the [Spec, CP] (e.g., Ko 2005). It is worth noting here that this type of reasoning cannot be held by Nakao's (2009: 244) structure in (10), where *nani-o* is base-generated in the F(unctional)P(rojection) in the CP area. Unlike our analysis, much more needs to be said to explain the fact in (8) to maintain this structure.

(10) [$_{CP}$ **[**$_{FP}$ nani-o [$_{IP}$ kare-wa [$_{VP}$ sawai] dei-ru] **F]** no]
what-Acc he-Top make noise Prog-Pres Q

Returning to Turkish examples in (9), the forced rhetorical reading of a *ne* sentence reminds us of the asymmetry between D(iscourse)-linked and non-D-linked *wh*-phrases, since only the latter are forced to have a rhetorical reading once the negation appears. To see this point, consider Endo's (2007: 32) English examples below.

(11) a. Which professor didn't you invite for the party?
b. ?? Who {the hell/in the world} didn't you invite for the party?

Although the D-linked *wh*-phrase *which professor* can jump over the negation to obtain a canonical *wh*-question reading in (11a), the aggressively non-D-linked *wh*-phrase *who the hell/in the world* cannot go over the negation in (11b). Thus, (11b) only gets rhetorical reading: i.e., only possible meaning is, for example, *You invited everybody!* (Endo 2007). Then, a natural conclusion here is that Turkish reason WHAT-word *ne* in (9) shows a property of non-D-linked *wh*-phrases. Furthermore, this conclusion amounts to saying that Turkish reason WHAT-word *ne* is base-generated in the lower position than the NegP, whereas the WHY-word *neden* is higher than the NegP. Therefore, we consequently obtained a similar hierarchical difference between the reason WHAT-words and the WHY-words in both Turkish and Japanese. This is desirable consequence to provide a unified analysis for reason *wh*-phrases in the two languages.

In fact, our unified analysis of reason *wh*-phrases can be supported further since Japanese *nani-o* shows non-D-linked properties just like Turkish *ne*. Nakao (2009) provides several similarities between a *nani-o* sentence and the English sentence that involves aggressively non-D-linked phrases such as *wh-the-hell*. For instance, as her examples below indicate, (i) neither of the sentences can be embedded in a veridical predicate as in (12); and (ii) in a multiple *wh*-question, no pair-list reading can be obtained as in (13).

(12) a. watasi-wa [kare-ga ??nani-o/naze sawagu ka] wakaru.
I-Top he-Nom what-Acc/why make noise Q know
'I know why he makes a noise.'

b. *I know who the hell would buy that book.

(13) a. dare-ga nani-o naite-i-ru no. [Single Pair/*Pair List]
who-Nom what-Acc is crying Q
'Who is crying why?'

b. ? Who the hell is in love with who? [Single Pair/*Pair List]

Therefore, it can be concluded that *ne* and *nani-o* are similar in that they both have non-D-linked properties.

In sum, I report that the Turkish reason *wh*-phrase *ne* necessarily appears in the immediately preverbal position, which is the focus position in this language. Then, I propose that the Japanese *nani-o* and Turkish *ne* obligatorily bear the [Foc]-F, which correlates to additional information: i.e., speaker's emotion. It is this [Foc]-F that makes (i) *ne* sit in the focus position and (ii) *nani-o* precede the object to avoid IE. Also I argue that both *ne* and *nani-o* have properties of non-D-linked phrases, since the former allows only a rhetorical reading if the negation appears, and the latter shows various similarities to the aggressively non-D-linked phrases in English. Furthermore, as a consequence, this paper argues that both Japanese and Turkish have a similar hierarchical difference between the reason WHAT-words and the WHY-words: the former is base-generated lower than the NegP; the latter higher than the NegP.

Selected References: **Iida, Y.** 2011. On the Adjunction-based Licensing of the Accusative *Wh*-adjunct *Nani-o*. *Proceedings of 12th TCP*: 93-112. **Kurafuji, T.** (1996) Unambiguous Checking. *MIT Working Papers in Linguistics* 29: 81-95. **Nakao, C.** (2009) On Accusative *Wh*-adjuncts in Japanese. *Proceedings of WAFL 5*: 241-255.

On Jussive Clauses in Korean

This paper investigates clause-typing jussive particles in Korean (Pak2006). I propose that jussive clauses involve allocutive agreement (AA), and thus should be embedded under SpeechActPhrase (Miyagawa2012).

AA in Basque arises as a result of agreement with the non-argument addressee (Oyharcabal1993;Miyagawa2012). Also, AA encodes the speaker-hearer relationship: (1a) and (1b) are respectively used to talk to a male and female friend, while (1c) is used when the hearer is someone higher in status. Moreover, AA inflection is related to C^0, and thus is disallowed to occur in interrogatives (2).

(1) a. Pettek lan egin di**k**.
Peter.ERG work.ABS do.PRF AUX-3S.ABS-**2S.C.MSC.ALLO**-3.S.ERG
'Peter worked.' [hearer: *a male friend*]

b. Pettek lan egin di**n**.
Peter.ERG work.ABS do.PRF AUX-3S.ABS-**2S.C.F.ALLO**-3.S.ERG
'Peter worked.' [hearer: *a female friend*]

c. Pettek lan egin diz**ü**.
Peter.ERG work.ABS do.PRF AUX-3S.ABS-**2S.F.ALLO**-3.S.ERG
'Peter worked.' [hearer: *someone higher in status*]

(2) Lan egiten **duia**/***dina** hire lagunak?
work **AUX.3E.Q**/**ALLOfem.Q** your friend.ERG
'Does your friend work?'

Interestingly, jussive particles—PROM(issives)/IMP(eratives)/EXH(ortatives)—behave in a parallel way to AA. First, jussive particles provide information about the discourse participants: PROM/IMP/EXH are respectively associated with speaker/addressee/speaker+addressee (Zanuttini et al.2012). I also observe that jussive particles encode information about the speaker-hearer relationship: the speaker must be at the same level as (not for PROM), and/or higher level than the hearer. For instance, (3) are infelicitous if uttered by a student to a teacher when the subject is a pronoun or unexpressed. Also, humble/honorific pronoun subjects are disallowed with jussive particles (4). Lastly, jussive particles are related to C^0 and thus cannot co-occur with a DECL/INT particle (3).

(3) a. (Nay/Emma) cemsim-ul sa-**ma**/*-ss-**ta**/*-ss-**ni**.
I/mother-NOM lunch-ACC buy-PROM/PST-DECL/PST-INT
'I/Mother will buy lunch.'

b. (Ney/Inho-ka) cemsim-ul sa-**la**/*-ss-**ta**/*-ss-**ni**.
you/Inho-NOM lunch-ACC buy-IMP/PST-DECL/PST-INT
'(You/Inho) Buy lunch.'

c. (Wuri/Emma-hako Inho-ka) cemsim-ul sa-**ca**/*-ss-**ta**/*-ss-**ni**.
we/mother-and Inho-NOM lunch-ACC buy-EXH/PST-DECL/PST-INT
'Let's buy lunch./Mother and Inho will buy lunch.'

(4) a. ***Cey**-ka cemsim-ul sa-**ma**.
I.HUMBLE-NOM lunch-ACC buy-PROM
'I(HUMBLE) will buy lunch.'

b. ***Tangsin**-i cemsim-ul sa-**la**.
you.HONORIFIC-NOM lunch-ACC buy-IMP
'You(HONORIFIC) buy lunch.'

c. ***Cehuy**-ka cemsim-ul sa-**ca**.
we.HUMBLE-NOM lunch-ACC buy-EXH
'Let's (HUMBLE) buy lunch.'

Given the above similarities between AA and jussive particles, and the syntactic properties of jussive particles (Zanuttini et al.2012), I adopt the syntax of discourse (5) (Haegeman&Hill2010); CP is embedded under the SpeechActPhrase (saP/SAP), which provides discourse-related information about speaker/hearer. This approach is in line with Miyagawa2012, who adopts (5) in order to account for the Japanese politeness marking *-des-*/*-mas-* whose person feature is valued to be second via agreement with HEARER in SpecSAP.

(5) $[_{saP}$ SPEAKER sa^0 $[_{SAP}$ HEARER SA^0 $[_{CP}$ C^0 $[_{TP}$ ...]]]]

Applying (5) to jussive clauses would result in (6). Following Miyagawa2012, I assume that C^0 head-moves upto SA^0 via sa^0. However, unlike Miyagawa, I assume that C^0 obtains its person feature in Spec-Head configuration: C^0_{PROM} agrees with SPEAKER, C^0_{IMP} with HEARER, C^0_{EXH} with both SPEAKER and HEARER (cf. Zanuttini et al.2012).

(6) $[_{saP}$ SPEAKER $\mathbf{C^0+SA^0+sa^0}$ $[_{SAP}$ HEARER $\mathbf{C^0+SA^0}$ $[_{CP}$ $\mathbf{C^0_{PROM/IMP/EXH/DECL/INT}}$ $[_{TP}$ ...]]]]

The present analysis treats jussive clauses on a par with DECL/INT clauses (contra, Pak2006;Zanuttini et al.2012). Pak2006 argues that jussive clauses should be distinguished from DECL/INT clauses. Some plausible differences are: (i) tense marking can co-occur with DECL/INT particles (7a), but not with jussive particles (7b); (ii) mood particles (retrospective *-te*, apperceptive *-kwun*, suppositive *-ci*, apprehensive *-ney*) can co-occur with DECL/INT particles (8a), but not with jussive particles (8b).

In fact, these arguments are far from convincing. First, the complementarity between tense marking and jussive particles is due to the future-oriented temporal property of jussive clauses. This property blocks other tense markings/interpretations. Second, the complementarity between mood particles and jussive particles is attributed to the semantic incompatibility. Such mood particles are used for politeness, so only polite form of DECL/INT particle *-yo* can be used with the mood particles (8a), but not the politeness-neutral *-ta*/*-ni* (7c). As discussed above, jussive particles are not used for politeness.

(7) a. Cemsim-ul mek-**ess-ta**./**ni**?
lunch-ACC eat-PST-DECL/INT
'John ate lunch/Did John eat lunch?'

b. *Cemsim-ul mek-**ess-ma**/**la/ca.**
lunch-ACC eat-PST-PROM/IMP/EXH

(8) a. Cemsim-ul mekess-**tey**/**kwun**/**ci**/**ney**-**yo**.
lunch-ACC ate-RETRO/APPER/SUPP/APPR-DECL.POL

b. *Cemsim-ul mek-**tey**/**kwun**/**ci**/**ney-ma/la/ca**.
lunch-ACC eat-RETRO/APPER/SUPP/APPR-PROM/IMP/EXH

c. *Cemsim-ul mekess-**ta/ni**.
lunch-ACC ate-RETRO/APPER/SUPP/APPR-DECL/INT

The current analysis incorporates the speaker-hearer relationship, which has not been taken up in the literature, and provides a unified analysis of the clause-typing particles.

References **Haegeman**, L., **Hill**, V. 2010. The Syntacticization of discourse, Ms, Ghent University and University of New Brunswick-Sj. **Miyagawa**, S. 2012. Agreements that occur mainly in main clauses. *Main Clause Phenomena. New Horizons*, Lobke, A., Haegeman, L, Nye, R., (eds), 79-112. Amsterdam, John Benjamins. **Oyharcabal**, B. 1993. Verb agreement with non-arguments: On allocutive agreement. In *Generative Studies in Basque Linguistics*. Jose Ignacio Huaide & Jon Ortiz de Urbina (eds), 89-114. John Benjamins. **Pak**, M. 2006. Jussive Clauses and Agreement of Sentence Final Particles in Korean. In T. Vance and K. Jones, eds., Japanese/Korean Linguistics 14, 295-306. Stanford, CA: CSLI Publications. **Zanuttini**, R., **Pak**, M., **Portner**, P. 2012. A syntactic analysis of interpretive restrictions on imperative, promissive, and exhortative subjects. *Natural Language and Linguistic Theory* 30(4): 1231-1274.

Hsu-Te Cheng (University of Connecticut) Sunday, 12:30pm-1:00pm

Ellipsis in Disguise

Synopsis In this paper, I examine the paradigm of Argument Ellipsis (AE) in Japanese and argue that movement out of CP followed by CP AE is not allowed. I argue that there is no CP ellipsis. The seemingly CP ellipsis is an illusion created by a null topic, a case of deep anaphora.

Introduction AE refers to cases where an argument may be elliptic (rather than pronominal), as evidenced by the contrast in the availability of quantificational reading in (1b,c). There are two other properties of AE. First, it is limited to arguments and does not include adjuncts, as in (2). This thus differentiates it from canonical VP ellipsis. Second, it applies to elements of different categories, including PP and CP, as long as they are arguments, as shown in (3) and (4).

(1) a. Hanako-ga taitei-no sensei-o sonkeisiteiru
Hanako-nom most-gen teacher-acc respect 'Hanako respects most teachers.'
b. sosite Taroo-mo [*e*] sonkeisiteiru
and Taroo-also respect 'lit. And Taroo also respects.' (^{OK}*quant. reading*)
c. sosite Taroo-mo karera-o sonkeisiteiru
and Taroo-mo them-acc respect 'And Taroo also respects them.' (^{X}*quant. reading*)

(2) a. Taroo-wa kono riyuu de sinda b. Hanako-mo e sinda.
Taroo-top this reason for died Hanako-also died
'Taroo died for this reason.' 'Hanako also died.'≠ Hanako died for this reason, too.
(cf. John died for this reason. Mary did [$_{VP}$ *e*], too. = Mary died for this reason, too.)

(3) a. Taroo to Hanako-ga otagai-kara meeru-o uketotta
Taroo and Hanako-nom each.other-from e-mail-acc received
b. Ken to Yumiko-wa [$_{PP}$ *e*] tegami-o uketotta (^{OK}*sloppy reading*)
Ken and Yumiko-top letter-acc received
'lit. Taroo and Hanako received e-mail from each other. Ken and Yumiko received letters.'

(4) a. Taroo-wa zibun-no teian-ga Hanako-o odorokasu to omotteiru
Taroo-top self-gen proposa-nom Hanako-acc surprise that think
b. Ken-mo [$_{CP}$ *e*] omotteiru (^{OK}*sloppy reading*)
Ken-also think 'lit. Taroo thinks his proposal will surprise Hanako. Ken also thinks e .'

Extraction Shinohara (2006) observes one interesting fact about AE that scrambling out of CP followed by CP AE is not allowed, as shown in (5). Shinohara (2006) argues that this is due to the radical/obligatory reconstruction effect of scrambling. After reconstruction of the scrambled element, (5a) will have the representation in (6a) with a full CP. After copying of this full CP, (5b) will have the structure in (6b), with the sentence-initial object left having no case and theta-roles, hence the ungrammaticality. (5c) is ungrammatical for the same reason.

(5) a. Hon-o$_1$ Taroo-wa [$_{CP}$ Hanako-ga t_1 katta to] itta ga
book-acc Taroo-top Hanako-nom bought that said though
'Taroo said that Hanako bought a book, but…'
b. *Zassi-o$_2$ Ziroo-wa [$_{CP}$ e_2] itta c. *Sono hon-o$_2$ Ziroo-wa [$_{CP}$ e_2] itta
magazine-acc Ziroo-top said that book-acc Ziroo-top said
'Ziroo said (that Hanako bought a) magazine' 'Ziroo said (that Hanako bought) that book'

(6) a. Taroo-wa [$_{CP}$ Hanako-ga hon-o katta to] itta ga
b. **Zassi-o** Ziroo-wa [$_{CP}$ Hanako-ga **hon-o** katta to] itta

Problem Under the analysis above, it is thus predicted that if the scrambled element does not reconstruct (for independent reasons), there will be no Case/theta-role violation and CP AE will be possible. This prediction, however, is not borne out, as shown in (7-8). Nishigauchi (2002)

observes that there is no Condition C violation in (7a) and co-reference between *he* and *John* is allowed. He thus argues that the scrambled element does not reconstruct to the base position. (7b) shows that, even in this case, CP AE is still ungrammatical. Moreover, Miyagawa (2006), building on Abe (2005), shows that the obligatory reconstruction effect of scrambling is not always attested when there is another scope element in the embedded clause, as in (8a), and the ∀>∃ reading is possible. (8b) shows CP AE is still bad, even when there is no reconstruction.

(7) a. [John$_1$-ni-tuite-no dono hon]$_2$-o kare$_1$-ga [Hanako-ga t_2 ki-ni-itteiru ka] sitte-iru
John-about-gen which book-acc he-nom Hanako-nom like Q knows
'lit. Which book about John$_1$, he$_1$ knows Hanako likes '

b. *[Bill$_1$-ni-tuite-no dono hon]-o kare$_1$-mo [$_{CP}$ *e*] sitte-iru
Bill-about-gen which book-acc he-also knows
'He also knows which book about Bill, (Hanako likes).'

(8) a. Daremo$_1$-ni dareka-ga [futari-no kodomo-ga t_1 kisusita to] omotteiru
everyone-dat someone-nom 2-gen kids-nom kissed C thinks
'Everyone, someone thinks that two kids kissed.' ($^{OK/??}$∀>∃, ∃>∀)

b. *dono kangofu-ni-mo aru isha-mo [$_{CP}$ *e*] omotteiru
every nurse-dat-also some doctor-also thinks
'Every nurse, some doctor also thinks that (two kids kissed).'

Proposal The paradigm above may be summarized as in (9). I claim that the whole paradigm receives a straightforward account under the proposal that there is no CP ellipsis. Specifically, I propose that the seemingly CP ellipsis in (4b) is just an illusion created by a null topic binding a variable (cf. Huang (1984)), as shown in the structure in (10). There is independent evidence that a null argument can be bound by a discourse/null topic in Japanese (11a) and that CP can be fronted (11b). (4b) will thus have the structure in (11c), with the null CP bound by a null topic. This discourse topic is a case of deep anaphora (cf. Hankamer and Sag (1976)). This explains why movement out of an elided CP is bad, whether the moved element reconstructs or not. Being a deep anaphora, the CP AE behaves like a null pronoun and has no internal structure. Movement out of it is thus banned. In this respect, it patterns alike with Null Complement Anaphora (NCA), another case of deep anaphora that resists extraction, as in (12), selected by verbs like *agree*.

(9)	Movement?	Reconstruct?	Grammatical?	Predicted?
Scrambling	√	√	X	√
Binding Condition	√	X	X	X
Quantifier Scope	√	X	X	X

(10) [$_{CP}$ (null) topic]$_1$ subject … e$_1$ … V

(11) a. [*e*] kita [upon hearing the footsteps of **the teacher** in the hall, the student said…]
came '(The teacher) is coming.'

b. [$_{CP}$ Hanako-ga hon-o katta to]$_1$ Taroo-wa [$_{CP}$ t_1] itta
Hanako-nom book-acc bought that Taroo-top said
'Taroo said that Hanako bought a book'

c. [$_{null\ topic}$ his proposal will surprise Hanako]$_1$ Ken also thinks [$_{CP}$ e_1]

(12) a. When Mary said she was going to change careers, Anne agreed _____. (Depiante 2000)

b. *Tim asked which book Anne agreed to donate and Jim asked which car Jane agreed _____.

Selected References **Depiante, A. (2000)**. *The syntax of deep and surface anaphora*. UConn dissertation. **Hankamer, J. and I. Sag (1976).** Deep and surface anaphora. *LI*, 391-428. **Huang, J. (1984).** On the distribution and reference of empty pronoun. *LI*: 531-574. **Miyagawa, S. (2006).** On the undoing nature of scrambling. *LI*: 607-624. **Nishigauchi, T. (2002).** Scrambling and reconstruction at LF. *Gengo Kenkyu* 121: 49-105. **Shinohara, M. (2006).** On some differences between the major deletion phenomena and Japanese argument ellipsis. Ms. Nanzan University.

On the Structure of Postpositional Phrases in Turkish

This paper proposes an analysis of postpositional phrases (PPs) in Turkish based on their semantic and morphological properties, supported by the empirical evidence which comes from both the case marking properties of the NP complements of PPs and the licensing of the anaphor *kendi* 'self' as the complement of PPs. That PPs are categorized into two classes in Turkish based on the morphological marking (or its absence) of the head is well-recorded in the literature (Kornfilt 1997, Göksel and Kerslake, 2005); (i) those headed by bare postpositions such as *için* 'for', *göre* 'according to' and *önce* 'before' and (ii) those headed by possessive-marked postpositions such as *yerine* 'instead' and *hakkında* 'about'. PPs headed by bare postpositions are further categorized into two based on the nature of the case marker on their complements as the following table presents:

	PP- I
NP abstract-case marked *o*-Genitive case marked **kendi*	için, ile, kadar, gibi
	PP- II
NP – Dative/ablative marked *o*-Dative/ablative marked *kendi*	göre, doğru önce, başka

As observed in the lack of contrast between the case marking of their complements, PP-II postpositions do not distinguish between the lexical category of their complements - the personal pronoun *o* bears the same case marker as its NP counterpart (1). Yet as the complement of PP-I postpositions, *o* is overtly marked Genitive whereas its NP counterpart is not (2). Since PPs are considered to be predicates (cf. Becker and Arms, 1969) similar to verbs and the lexical property of a verb can determine its syntactic structure (Levin & Rappaport Hovav, 1995), I suggest event structures are reflected in linguistic forms of postpositions. Following the spirit of Kornfilt (2001)'s claim for the genitive marked subjects of nominalized subordinate clauses in Turkish, I assume there is an Operator participating in the case marking potential of PP-I postpositions. Semantically, *için* 'for' gives a reason, *ile* 'with' denotes togetherness, *kadar* 'as much as' is a comparative, and *gibi* 'similar to' denotes similarity, hence *için* comes to the derivation with a reason Operator, *kadar* with a comparative Operator, and *ile* and *gibi* with event Operators.

Crucially, PP-I and PP-II categories also contrast with respect to licensing the anaphor *kendi* and its variant inflected with the agreement marker *kendi-si* "him/her-self + 3SGPOSS" as their complements. *Kendi* obeys Condition A of the Binding Theory as initially formulated by Chomsky (1986) whereas *kendisi* does not as in (3) and (4). Within the literature, there are several accounts which discuss the conditions that obtain in the case of *kendisi,* which does not conform to the predictions of local binding (Özsoy, 1983, 1990; Kornfilt, 2001; Safir, 2004; Meral, 2010). As a complement of a verb, both *kendi* and *kendisi* seem to be interchangeable for a number of speakers of Turkish when bound by a local antecedent yet the licensing environments of *kendi* and *kendisi* as a complement of PPs differ. *kendi* is licensed as the complement of PP-II postpositions (5) whereas it yields ungrammaticality as the complement of PP-I (6). I argue that this empirical evidence supports the claim that PP-I postpositions occur with an Operator, which defines a domain for their complement and renders the domain opaque for binding. Yet lacking an Operator, PP-II postpositions remain as transparent domains for *kendi* to be bound by the coreferential subject of the clause. As an extension of Kornfilt (2001)'s proposal for nominalized clauses, I propose either an Operator or an AgrP is sufficient to assign Genitive to the complement of PPs, and create an opaque domain for binding.

Within these lines, I also propose an Agr projection above PPs headed by possessive marked postpositions. Possessive marked postpositions are derived from nouns and their morphological structure is the same of a possessive NP construction. Thus, I assume an Agr head above the possessive marked PPs in Turkish in line with possessive NP constructions, which differs from Kornfilt (1984)'s assumption that genitive marking on the complement of PPs is an instance of case insertion. PPs headed by possessive marked postpositions create an opaque domain resulting from the presence of AgrP, thus *kendi* becomes illicit as a complement of these PPs as it lacks a c-commanding

antecedent within this domain. *kendisi* as in (7), however, occurs in this environment irrespective of Condition A since it is not a true anaphor.

Based on the theoretical considerations and empirical evidence, the proposal in this study suggests a three-way distinction among postpositional constructions in Turkish. The clausal nature of postpositions headed by PP-I differs from the ones headed by PP-II due to the presence of the Operator related to the event structures of PP-I postpositions; and the morphological properties of possessive marked PPs as well as the data based on the binding relations provides evidence for the Agr projection analysis of PPs headed by possessive marked postpositions.

(1) Ayşe [Ahmet-ten / on-dan önce] Ali'yi düşün-ür.
Ayşe Ahmet-Abl. / 3rd person sing.-Abl. before Ali-Acc think-Aorist
'Ayşe thinks of Ali before Ahmet/him.'

(2) Ayşe kimse-yi [Ali / o-nun kadar] sev-me-z.
Ayşe nobody-Acc. Ali / 3rd person sing.-Gen. as much as like-Neg.-Aorist
Intended meaning: '$Ayşe_i$ likes nobody as much as Ali.'

(3) [$Ayşe_i$ [Ahmet-in_j kendin-$e_{*i/j}$ haksızlık et-tiğ-in-i] düşün-üyor].
Ayşe Ahmet-Gen *kendi*-Dative unfair-Ger.-3sg.-Acc. think-Pres.Progr.
"Ayşe thinks that Ahmet is unfair to himself/*herself."

(4) [$Ayşe_i$ [Ahmet-in_j kendi-sin-$e_{i/j/k}$ haksızlık et-tiğ-in-i] düşün-üyor.]
Ayşe Ahmet-Gen *kendisi*-3sg.-Dative unfair-Ger.-3sg.-Acc. think-Pres.Progr.
"Ayşe thinks that Ahmet is unfair to himself/herself/someone else."

(5) $Ayşe_i$ [kendin-e_i göre] başarılı ol-du.
Ayşe kendi-Dat. according to successful become-Past
'$Ayşe_i$ became successful according to $herself_i$.'

(6) $Ayşe_i$ bütün yıl [* $kendi_i$ / $kendisi_{i/j}$ için] çalış-tı.
Ayşe whole year *kendi kendisi* for study-Past.
'$Ayşe_i$ studied for $herself_i$ the whole year.'

(7) $Ayşe_i$ ben-im-le [* $kendi_i$ / $kendisi_{i/j}$ hakkında] pek konuş-ma-z.
Ayşe I- Gen-with *kendi kendisi* about much talk-Neg.-Aorist
'$Ayşe_i$ does not talk about $herself_i$ much with me.'

Selected References

Becker, A.L. and Arms, D. 1969, *Prepositions as predicates*, in Papers of the Chicago Linguistic Society, vol. 5, pp. 1-11.

Chomsky, Noam. 1986. *Knowledge of language*. New York: Praeger.

Göksel, A. and C. Kerslake . 2005. Turkish, A Comprehensive Grammar. London: Routledge.

Kornfilt, Jaklin. 1984. Case Marking, Agreement and Empty Categories in Turkish, Harvard University, Ph.D. Dissertation.

Kornfilt, Jaklin. 1997 Turkish, Routledge, London.

Kornfilt, Jaklin. 2001. Functional Projections and their Subjects in Turkish Clauses. In Erguvanlı-Taylan, E. (ed.), The Verb in Turkish, 183-212. Amsterdam and Philadelphia: John Benjamins Publishing Company.

Kornfilt, Jaklin. Ed. Peter Cole, Gabriella Hermon, C.-T. James Huang. 2001. *Long-Distance Reflexives: Syntax and Semantics.* Vol.33, 197-224. San Diego: Academic Press.

Levin, B. & Rappaport Hovav, M. 1995. Unaccusativity: at the Syntax-Lexical Semantics Interface.
Cambridge: MIT Press.

Özsoy, A. Sumru. 1983. Kendi'-reflexivization in Turkish: a syntactic, semantic and discourse analysis. University of Michigan PhD dissertation.

Özsoy, A. Sumru. 1990. *Söylemiçi Dönüşlü Yapı*. Dilbilim Araştırmaları, 35-40. Ankara; Hitit Yayınevi.

Safir, Ken. 2004. The Syntax of Anaphora, Oxford University Press, Oxford.

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The Double Functions of Korean Benefactive Suffix

Introduction. This paper provides new evidence that the benefactive suffix *-(e)cwu* in Korean serves two different functions in syntax. Depending on whether it heads an applicative phrase or functions as a co-head of *v*, *-(e)cwu* exhibits distinct behaviors with respect to argument licensing, types of compatible roots, and the interaction with causative morphology.

Puzzle. Korean benefactive suffix *-(e)cwu* can appear either after the verb (1), or a causative suffix (2):

(1) Yenghi-ka tongsayng-ekey ppang-ul kwu-*(**ecwu**)-ess-ta.
Yenghi-Nom brother-Dat bread-Acc bake-*(**BEN**)-Past-Decl
'Yenghi baked bread for brother.'

(2) Yenghi-ka ai-ekey os-ul ip-**hi**-(**ecwu**)-ess-ta.
Yenghi-Nom child-Dat clothes-Acc wear-**LEX.CAUS**-(**BEN**)-Past-Decl
'Yenghi dressed the child (for the child's benefit).'

However, (1) and (2) behave differently in the omissibility of the benefactive suffix. (1) becomes ungrammatical without *-(e)cwu*. In contrast, leaving out *-(e)cwu* in (2) merely results in the modification of the semantics – that is, the benefactive interpretation disappears.

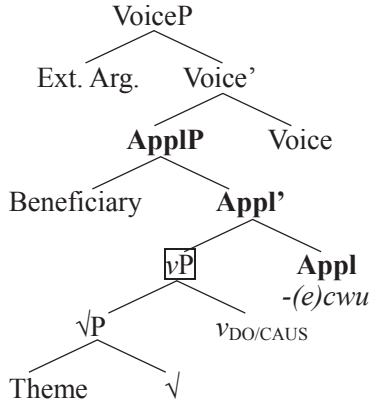
Note that the contrast in (1)-(2) is not due to the presence/absence of the causative suffix. (3), which involves a lexical causative suffix, patterns with (1), rather than (2):

(3) Yenghi-ka tongsayng-ekey lamyen-ul kkul-**i**-*(**ecwu**)-ess-ta.
Yenghi-Nom brother-Dat noodle-Acc boil-**LEX.CAUS**-*(**BEN**)-Past-Decl
'Yenghi cooked noodle for brother.'

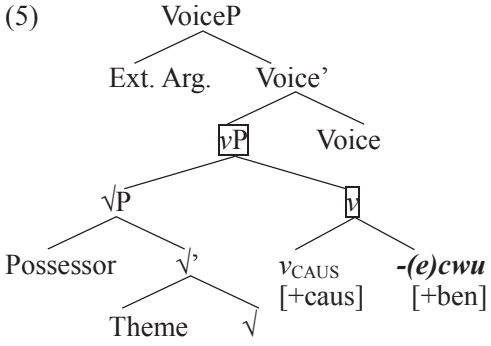
The question, then, is: what is the source of the disjunction between (1)/(3) and (2)?

Proposal. I argue that the contrast in the grammaticality between (1)/(3) and (2) is due to the distinct syntactic functions of the relevant benefactive suffix. Specifically, in (1) and (3) *-(e)cwu* projects its own maximal Appl projection, as in (4). The ApplP is in turn selected for by Voice, which hosts an external argument (Kratzer 1994). In contrast, in (2) the terminal node *v* is split into two pieces (i.e., the verbalizing *v* with the causative feature and -(*e*)*cwu* with the benefactive feature), as in (5) – a phenomenon known as "fission" (Noyer 1997, Halle 1997) within Distributed Morphology.

(4)



(5)



Evidence. The two roles of *-(e)cwu* depicted in (4)-(5) are evidenced by the ability to introduce its own argument. In (4) the relationship between Appl and the Beneficiary is obligatory, since Appl is a functional category introducing an applied argument (Pylkkänen 2002). The fact that the simple transitive counterpart of (1) in (6) is acceptable, whereas (1) is allowed only when the dative argument and *-(e)cwu* co-occur, shows that the dative argument in (1) is a Beneficary introduced by Appl as in (4).

(6) Yenghi-ka ppang-ul kwu-ess-ta.
Yenghi-Nom bread-Acc bake-Past-Decl
'Yenghi baked bread.'

On the other hand, in (5) *-(e)cwu* is not responsible for introducing the Possessor argument because it is

an internal argument of the root. This is why in (2), leaving out *-(e)cwu* does not incur ungrammaticality.

Consequences. The present proposal makes several predictions. **#1** First, according to (4), Korean Appl is a high applicative (Pylkkänen 2002), located higher than the verbalizing layer. High applicatives are cross-linguistically attested to be compatible with unergative roots (Pylkkänen 2002). This prediction is borne out in (7), where *-(e)cwu* is required in the presence of a dative Beneficiary argument:

(7) Yenghi-ka Chelswu-ekey wus/nolayha-*(**ecwu**)-ess-ta.
Yenghi-Nom Chelswu-Dat smile/sing-*(**APPL**)-Past-Decl
'Yenghi smiled/sang for Chelswu.'

#2 On the other hand, ditransitive roots, which require two internal arguments, are predicted to be associated with the structure in (5), not (4). In other words, when *-(e)cwu* occurs with a ditransitive root, it is expected to be optional like (2). This is confirmed in (8):

(8) Yenghi-ka Chelswu-ekey pyenci-lul ponay-(**ecwu**)-ess-ta.
Yenghi-Nom Chelswu-Dat letter-Acc send-(**BEN**)-Past-Decl
'Yenghi sent Chelswu a letter.'

Extension. This proposal can be extended to account for the interaction of *-(e)cwu* and Korean productive causative *-keyha.* It is known that *-keyha* is Voice-selecting (Jung 2013). That is, in a productive causative construction, the whole VoiceP structure in (4) is selected for by *-keyha* as a complement. This predicts that when *-(e)cwu* is followed, thus is scoped over, by *-keyha* like (9), *-(e)cwu* functions as the Appl head as in (4). In that case, *-(e)cwu* must be present with the Beneficiary argument, as is shown in (9):

(9) Emma-ka Yenghi-ekey tongsayng-ekey ppang-ul kwu-*(**ecwu**)-**keyha**-ess-ta.
mother-Nom Yenghi-Dat brother-Dat bread-Acc bake-*(**APPL**)-**SYN.CAUS**-Past-Decl
'Mother made Yenghi bake bread for brother.'

In contrast, when *-(e)cwu* follows *-keyha* like (10), it adds a permissive interpretation and is omissible.

(10) Emma-ka Yenghi-ekey ppang-ul kwup-**keyha**-(**ecwu**)-ess-ta.
mother-Nom Yenghi-Dat bread-Acc bake-**SYN.CAUS**-(**BEN**)-Past-Decl
'Mother let Yenghi bake bread.'

This is expected if *-(e)cwu* in (10) is the co-head of $v_{\text{SYN.CAUS}}$, similar to (5). This way *-(e)cwu*, together with *-keyha*, can select for the inner caused event (i.e., VoiceP) in (10). (11) is ungrammatical, where a separate Beneficiary is added to (10), hypothesizing that *-e(cwu)* is an Appl:

(11) *Emma-ka tongsayng-ekey Yenghi-ekey ppang-ul kwup-**keyha-ecwu-**ess-ta.
mother-Nom brother-Dat Yenghi-Dat bread-Acc bake-**SYN.CAUS-APPL**-Past-Decl
Intended: 'Mother, for brother, made Yenghi bake bread.'

The ungrammaticality confirms the fact that *-(e)cwu* in (10) is indeed the co-head of *v*, not an Appl head.

Typology. Interestingly, Turkish has a similar usage of co-heads. In Turkish, unlike Korean, reduplicating the causative suffix produces a permissive causative. Note that the reduplicated causative in (12) does not introduce a new argument, just like its Korean counterpart in (10):

(12) Can-ı çalış-**tır-(t)**-ma-dı-m. [*Turkish*]
Can-Acc work-**CAUS-(CAUS)**-Neg-Past-1sg
'I didn't let Can work.'

Turkish causative in (12) supports the present analysis of *-(e)cwu* in (5). Since reduplication targets the root level, it suggests that Korean *-(e)cwu* in (10)/(5) is a head, rather than is adjoined to v_{CAUS} as a phrase.

Conclusions. This paper has shown that Korean benefactive suffix *-(e)cwu* has a double life as an applicative head or as a co-head of *v*. The results of this study imply that the distributions of the benefactive *-(e)cwu* in Korean are determined by syntactic conditions.

References.[1] Halle, M. 1997. Distributed morphology: Impoverishment and fission. *MITWPL 30: Papers at the Interface*, 425–449. Cambridge, Mass. **[2]** Jung, H. 2013. Syntactic Constraints on Morpheme Ordering. *Paper presented at WCCFL 31.* **[3]** Kratzer, A. 1994. *On external arguments. In Functional Projection*s, 103-130. Amherst MA: GLSA. **[4]** Noyer, R. 1997. Features, positions and affixes in autonomous morphological structure. New York: Garland. **[5]** Pylkkänen, L. 2002. Introducing arguments. PhD dissertation, MIT.

Can non-active morphology be a reliable indicator of external causation in anti-causative structures? Evidence from Turkish

Taking non-active (NACT) morphology as a clear indication of external causation, Alexiadou (2010) defines two classes of languages exhibiting anti-causative alternation: (i) Languages which lack NACT and hence only allow cause unspecified roots to undergo alternation and (ii) Languages where all root types except agentive roots exhibit alternation with NACT marking solely external causation. In this study, we will show that Turkish constitutes a third class, where the very same root marked with NACT can also be interpreted as internally caused in addition to its external causation reading unexpectedly under Alexiadou (2010). Thus, we will show that (i) in Turkish lexical roots may have a complex event structure allowing for a double semantic categorization and hence a dual behavior in alternations and (ii) NACT morphology by itself is not a sufficient criterion to capture certain aspects of verbal meaning cross-linguistically.

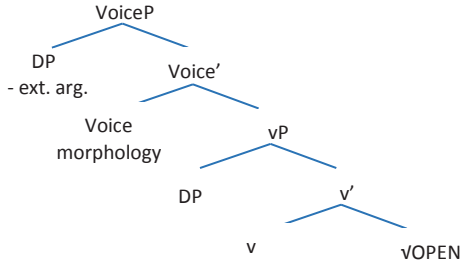
Alexiadou (2010) argues that the cross-linguistic distribution of alternating vs. non-alternating verbs depends on two building blocks of anti-causatives: Properties of voice projection and the semantic properties of the lexical root. With regards to the properties of the voice projection, morphologically marked anti-causatives are expected to surface with a voice head as shown in (1). On the other hand, morphologically unmarked anti-causatives surface with the structure in (2) without the voice projection. As for the semantic properties of the lexical roots, she proposes a 4-way classification: Agentive roots, roots of internal causation, roots of external causation and cause unspecified roots as illustrated for English in (3). The chart in (4) introduces the different types of PPs which are used to determine the semantic category of a given lexical root for Turkish. Taking these two building blocks of anti-causatives into consideration, Alexiadou proposes a cross-linguistic correlation between the semantic root classes and their behavior in the alternations: Agentive roots never alternate since they imply an agentive force bringing about the change of state as in (5). In contrast, roots of internal causation and cause unspecified roots are expected to alternate and surface with the structure in (2) and be morphologically unmarked as in (6). Externally caused verbs can also be expected to participate in the alternation but are expected to surface with NACT morphology as in (7). This leads to two classes of languages: Languages like English with no morphological means to differentiate between the sources of causation where only cause unspecified roots can undergo alternation and languages like Hindi, Greek or Korean where the availability of special morphological tools allows all root types (but agentive roots) to participate in the alternation.

The starting point of my analysis is Alexiadou's assumption that NACT morphology on anti-causative roots is a reliable criterion which indicates external causation. A logical implication of this observation would be to rule out the compatibility of such verbs with an internal cause interpretation. When we closely inspect the morphosyntactic behavior of Turkish verbal roots, we see that verbs of external causation also surface with NACT morphology, as predicted by Alexiadou's account. Unexpectedly, however, they can also be compatible with by-itself phrases, hence with an internally caused interpretation as can be seen in (8). This has implications both on the morphosyntax of Turkish anti-causatives and on the anti-causatives cross-linguistically. For Turkish, the implication is that a given anti-causative verb in Turkish may be compatible with more than one syntactic derivation. Consequently, in some externally caused Turkish verbs, the verbal root seems to be merged together with the Voice head at the root level as a lexical requirement which can be represented in (2). However, the very same verbs can also be represented with the structure in (1) when they show compatibility with Causer PPs in which case the NACT morphology will occupy the Voice head. Based on this observation, I argue that Turkish constitutes yet a third class of languages, where lexical roots may have a complex event structure allowing for a double semantic categorization and hence a dual behavior in alternations.

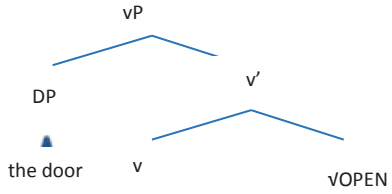
The cross-linguistic implication of this data is that NACT morphology by itself is not a sufficient criterion to capture certain aspects of verbal meaning in world's languages as what is assumed under Alexiadou (2010).

Examples:

(1)



(2)



(3)
a. √agentive (murder, assassinate)
b. √internally caused (blossom, wilt)
c. √externally caused (destroy, kill)
d. √cause unspecified (break, open) (Alexiadou 2010)

(4)

	Causer PP	by itself PP	Agentive PP
Externally caused roots	✓	-	-
Cause unspecified roots	✓	✓	-
Internally caused roots	✓	✓	-
Agentive roots	-	-	✓

(5)
a. O Janis dolofonise ti Maria
The John murdered-**Act** the Mary-Acc
John murdered Mary
b. I Maria dolofonithike apo to Jani/*apo to sismo
The Mary-nom murdered-**Nact** from the John/from the earthquake (Alexiadou 2010)

(6)
a. I porta anikse me ton aera
The door opened-**Act** with the wind
'*The door opened by the wind'
b. I porta anikse apo moni tis
The door opened-**Act** by alone-sg its
'The door opened by itself' (Alexiadou 2010)

(7)
a. Janis ekapse ti supa
the John-nom burnt-**Act** the soup
b. I supa kaike me ti dinati fotia/*apo to Jani
the soup burnt-**Nact** with the strong fire/from the John (Alexiadou 2010)

(8)
a. Düğmemi söktüm.
Button-poss1sg-acc remove-**Act**-past-1sg
'I removed my button'
b. Düğmeler terziler tarafından birer birer söküldü.
Button-pl-nom tailor-nom-pl by one by one remove-**Nact**-past-3sg
'The buttons were removed by the tailors one by one'
c. Düğmem kancaya takılınca söküldü.
Button-poss1sg-nom hook-dat get caught and remove-**Nact**-past-1sg
'My button got caught in the hook and came off'
d. Düğmem (kendi kendine) söküldü.
Button-poss1sg (by itself) remove-**Nact**-past-1sg
'My button came off by itself'

References:

Alexiadou, Artemis. 2010. On the morpho-syntax of (anti-)causative verbs. Syntax, Lexical Semantics and Event Structure, ed. By Malka Rappaport Hovav, Edit Doron and Ivy Sichel. New York: Oxford University Press.

Schäfer, Florian. 2009. The Causative Alternation. In Language and Linguistics Compass, Vol. 3.2, 641-681.

"Weak" Projection, Conflation and the Lexical Transitivity Alternations

This paper argues that the language faculty (FL) could reconfigure a structure that contains a "weak" projection, i.e., a projection that lacks a specifier and does not license an argument. A weak projection most typically appears with unergative and unaccusative roots, and the reconfiguration of their structures enables language to optimize derivations for semantically related event alternations like the ones between inchoative and causative.

1. Decomposition of *(s)ase* and Causative

In the recent literature, it has become increasing clear that the causative morpheme *(s)ase* in Japanese needs to be decomposed into atomic parts. For instance, Nishiyama (2000) argues that *(s)ase* should be analyzed as *s+ae*. Following his lead, Nakajima (2011) argues that *(s)ase* is composed of four independent heads; *a, ø, s* and *e* in which *a* is an allomorph of the copula that works as 'little' v (Marantz 2001), ø is the phonetically null 'small' *v* that transitivizes the root (Chomsky 2001), *s* is the root of the verb *s-uru* 'do' and *e* is the root of the verb *e-ru* 'get'. Thus, a simple transitive verb in (1a) is causativized as (1b).

(1) a. Hanako ga Taro ni tegami o kak- ase- ta.
NOM DAT letter ACC write-CAUS. PAST
(Hanako made Taro write a letter.)]

b. ^{GetP}\{ Hanako$_i$ ga ^{fP}\{ χ_i ^{vP}[Taro ni ^{vP}[tegami o √**kak- a**] **ø**] **s-**\} **e** \} ta
BENEFACTIVE INITIATOR AGENT THEME ROOT v *v* *f* GET PAST

In (1b), the AGENT *Taro* and the THEME *tegami* 'letter' are licensed in the specifier positions of v and *v*, respectively. They together constitute Inner Event [ ].

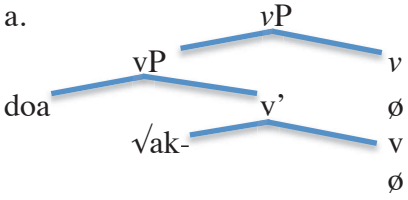
s 'do' and *e* 'get' constitute Outer Event { } that brings about the caused Inner Event. *s* is a functional head *f* that takes *v*P as a complement and licenses an implicit argument χ . Due to the semantics of *s* 'do', χ is sentient and functions as INITIATOR towards the Inner Event of *v*P. *e* 'get' introduces BENEFACTIVE argument *Hanako* which is coindexed with the implicit INITIATOR χ . The coindexization makes *Hanako* a benefactive initiator, the CAUSER. The subject *Taro* in *v*P remains as AGENT and is interpreted as the GOAL of initiation, i.e., CAUSEE. This explains the DAT *-ni* marking on *Taro*.

2. Two Puzzles in Lexical Transitivity Alternations

The analysis laid out above could shed new light on how the "lexical" transitivity alternations are done. I take up two puzzles: the unaccusative puzzle and the unergative puzzle.

The unaccusative puzzle is the following. The causativization of unaccusative roots such as √*ak-* 'open$^{intr.}$' requires AGENT who brings change of state on THEME in the Inner Event. This is, however, problematic since unaccusative roots only have weak *v* that lacks a specifier. In other words, they cannot license AGENT. Observe the unaccusative structure of the root √*ak-* 'open$^{intr.}$' with the THEME *doa* 'door' in *Doa ga aku* 'The door opens.' and the causativization of it below.

(2) a.

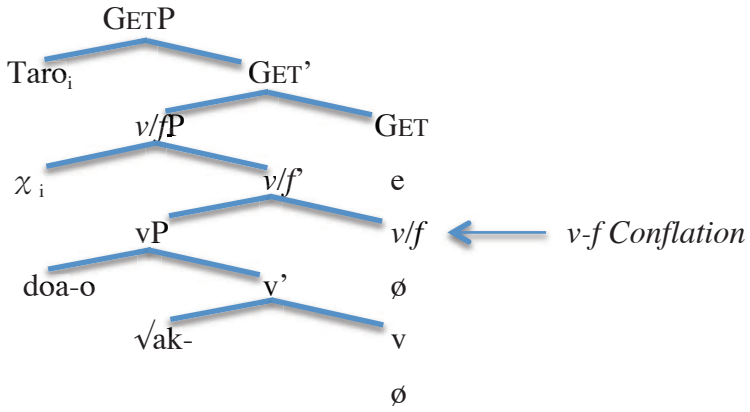


b. Taro ga doa o ak- e ta.
NOM door DAT open-GET PAST
(Taro opened the door.)

Thus, what we have here is a situation in which the causativization requires transitive *v*, but the root cannot supply it by definition, an apparent contradiction.

To solve this problem, I propose that *v* and *f* conflate, and the implicit INITIATOR argument of *f* becomes the argument of *v*.

(3)



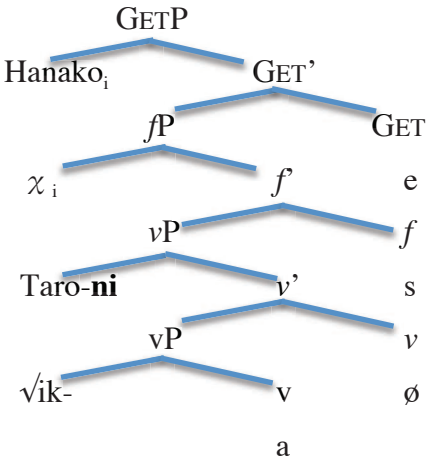
With the conflation, the implicit INITIATOR is the one who brings the change of state on the THEME and is also the BENEFACTIVE who has potency over *vf*P. This conflation effectively makes the *v/f*P and vP a functional equivalent of a transitive *v*P.

A similar puzzle exists with unergative roots as well. It has been pointed out that they allow AGENT to be case marked either with DAT *-ni* or ACC *-o*.

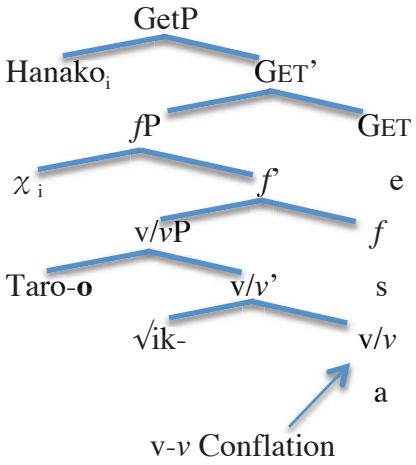
(4) Hanako ga Taro **ni/o** ik- ase ta
NOM DAT/ACC go-CAUS. PAST.
(Hanako let/made Taro go.)

When the CAUSEE *Taro* is *-ni* marked, it is assumed to be in spec, *v*P just like it is in (1b). When it is *-o* marked; however, a puzzle arises because unergative roots lack spec vP where THEME generally appears. The decompositional approach gives a straightforward answer to the puzzle. (5a) shows the *-ni* causative and (5b) the *-o* causative, respectively.

(5) a.



b.



In (5a), vP is weak and lacks a specifier. The basic unergative structure of the Inner Event is kept intact, and *Taro* is *-ni* maked. In (5b), the v and *v* heads conflate. Again, the conflation effectively makes v/*v*P and *f*P a functional equivalent of a transitive *v*P. As a consequence, *Taro* is interpreted as THEME while keeping its original agent role. Semantics reflects the differences: while (5a) generally has less coercive 'let' interpretation, (5b) has strong coercive 'make' interpretation.

3. Conclusion

A head is an atomic set of features that corresponds to an atomic subpart of the semantic representation of an event. FL could manipulate syntax to change event descriptions with alternating head-argument relations. If true, it could be argued that event cognition is an indispensible and fundamental reason for the emergence of language.

References

Chomsky, N. 2007. *Approaching UG from Below*., Marantz, A. (2007). *Phases and Words*., Nakajima, T. (2011). *On the Morphosyntactic Transparency of (S)ase and GETP*., Nishiyama, K. (2000). *Zita Kotai to Keitairon*.

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Decomposing the *Give*-type Benefactives in Korean and Japanese

Numerous languages have 'add-on' arguments that are not selected by the verb (Pylkkänen 2002, Bosse and Bruening 2011 inter alia). In this talk, we present a case study of 'add-on' arguments in the *give*-type benefactive construction in Korean and Japanese, as exemplified in (1) and (2).

(1) Yumi-ka	Hana-eykey	pap-ul	mantul-e	cwu-ess-ta.	KR
Yumi-Nom	Hana-Dat	meal-Acc	make-e	give-Pst-Dec	
(2) Yumi-ga	Hana-ni	gohan-o	tukutte	age-ta.	JP
Yumi-Nom	Hana-Dat	meal-Acc	make	give-Pst	

'Yumi made Hana the meal.'

Here, the dative NPs are considered as 'add-on' because, without the benefactive *-give*, the sentences are unacceptable (or awkward at best). Semantically, they seem to be both the recipient of the meal and the beneficiary of the meal-cooking event. (We limit true benefactive meanings to those in which the agent provides enjoyment (plain benefactive) or plays in a deputative role (deputative benefactive), following Van Valin & La Polla 1997). However, further consideration of the data reveals that the beneficiary meaning is not obligatory. For instance, Yumi could have made the meal for the benefit of a contextually salient individual: Yumi made the meal for Hana to eat so that Hana's mother could go out without worrying about making the meal to Hana. That the dative argument does not necessarily serve as the true beneficiary but as the possessor can also be supported by the following fact: (1) and (2) can be followed by a sentence such as 'But it was not for the benefit of Hana', which negates the true benefactive meaning on the dative argument. In addition, intransitive verbs can also appear in the benefactives (3) and (4).

(3) Hana-ka	(*Yumi-eykey)	tally-e	cwu-ess-ta.	(4) Hana-ga	(*Yumi-ni)	hasitte	age-ta.		
Hana-Nom	(Yumi-Dat)	run-e	give-Pst-Dec	Hana-Nom	Yumi-Dat	run	give-Dec		

'Hana gave-run (Hana ran for the benefit of someone)'.

Two important points here are (i) 'add-on' dative arguments are not supported, and (ii) without datives, the sentences are grammatical with implied (i.e., syntactically unrealized) beneficiaries. This fact once again supports the dissociation of the benefactive interpretation from the dative NP.

We propose that true benefactive meaning in Korean and Japanese is encoded as a definite implicit argument in the form of either a free or a bound variable. In (5), for example, a true beneficiary can be quantifier-bound: the one that benefits from Chelswu's action of dancing corresponds to every girl. (6) shows that, unlike the implicit external arguments in passives, the implicit beneficiary cannot be existentially bound; (6) is ruled out since the presence of *cwu-* implies that the speaker is aware that there is a definite beneficiary that benefits from the running event.

(5) Motun	sonye-ka	Chelswu-ka	chwum-ul	chwu-e	cwu-ki-lul	pala-n-ta.	
Every	girl-Nom	Chelswu-Nom	dance-Acc	dance-e	give-Nm-Acc	hope-Pres-Dec	

'Every girl hopes that Chelswu give-dance.'

(6) Hana-ka	tally-e	cwu-ess-nuntay,	#na-nun	nwukwu-lul	wi-han-kes-i-n-ci	molu-n-ta.		
Hana-Nom	run-e	give-Pst-but	I-Top	who-Acc	for-Do-Nml-Cop-Pres-CI	not.know-Pres-Dec		

'Hana gave-run (Hana ran for the benefit of someone), but I don't know for whom.'

Returning to the data in (1) through (4), the present view in which the dative argument is not necessarily a true beneficiary but a possessor gives a straightforward account for why the addition of the dative NP in (3) and (4) results in ungrammaticality: the running event does not create anything that can be possessed by the dative argument. In (1) and (2), by contrast, the making event contributes to the creation of the meal and so the dative argument 'Hana' is understood as the possessor of the theme 'meal'. However, establishing the required possession relation turns out to be far less straightforward. Complications arise because a number of non-creation verbs, in addition to creation verbs like 'make' in (1) and (2), can also be

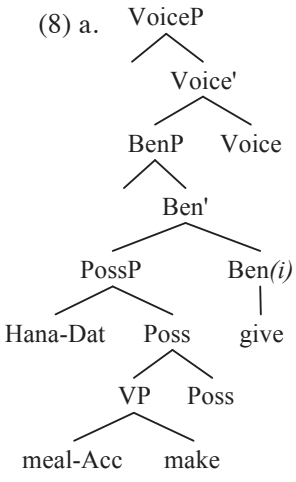
made use of in the benefactive constructions with overt dative arguments. In (7), for instance, it is clear that no direct possession relation holds between the dative argument (the possessor) and the accusative argument (the theme).

(7) Yumi-ka Hana-eykey chayksang-ul tak-a cwu-ess-ta.
Yumi-Nom Hana-Dat desk-Acc clean-a give-Pst-Dec
'Yumi gave-clean the desk to Hana.'

This sentence is felicitous when it is understood to mean that Hana now can have some clean space. In a similar vein, the Korean example *window-Acc open-give* can take the dative argument, but in a minimally different case where the verb 'open' is replaced with *tat-* 'close', the sentence becomes odd. This is because an opening-the-door event creates some space that one can make use, but it is hard to imagine the creation of a possessable entity in a closing-the-door event. It therefore follows that what is possessed is in fact a pragmatically implied entity that comes out of the eventuality, rather than the referent denoted by the accusative NP itself.

Thus, our proposal is doubly pragmatic/implicit. The beneficiary is not expressed by an overt dative argument but is encoded as a definite implicit argument. Dative NPs are possessors/recipients, but the possessed themes are also covert; pragmatically salient entities that have been created by the eventualities denoted by the main verbs. As for the syntax-semantics mapping of the construction, we situate our proposal within the event semantics of Kratzer (2003). In addition, the simplified version of Dowty (1981) is assumed in account for an implicit argument. In (8), a syntactic head Ben(efactive) introduces the true beneficiary in the form of a referential index attached to it and Poss(ession) introduces the dative argument; the event described by the PossP is the source of the beneficiary's benefitting event. The pragmatically implied possession meaning is existentially quantified as in (8c). (We further suggest that there is a presupposition in which the existentially quantified theme comes to an existence as a result of an event described by the VP, which is essentially identical to the presupposition associated with verbs of creation (cf. von Stechow 2001)).

(8) a.



b. $[[Ben_{(i)}]]^g = \lambda P_{<s,t>}. \lambda e. P(e) \& \exists e''(\text{benefit}(e'') \& \text{Ben}(g(i), e'') \& \forall e''(P(e'') \rightarrow \text{Source}(e'')(e+e')$

c. $[[\text{Poss}]] = \lambda P_{<s,t>}. \lambda x. \lambda e. P(e) \& \exists x. \lambda e'. \lambda y [\text{Result}(e)(e') \& \text{Possess}(e') \& \text{Possessor}(y,e') \& \text{Possessee}(x,e')]$

The realization of the benefactive verb *-give* is achieved in the Distributive Morphology fashion; the combination of Poss+ $Ben_{(i)}$ is realized as is *cwu-/ageru*. In other words, Poss cannot stand alone and does not have any morphological realization without $Ben_{(i)}$. On the other hand, $Ben_{(i)}$ alone can be realized as *cwu-/ageru* without Poss; that is the case with the intransitive benefactive (without dative arguments). Thus, our proposal explains the distribution patterns: (i) 'Benefactive' dative arguments can appear only with the benefactive marker. Without it, the Poss head is not morphologically licensed. (ii) The benefactive marker can appear without any sense of possession, but in that case, no dative arguments are permitted.

Selected references Dowty, D. 1981. Quantification and the lexicon: A Reply to Fodor and Fodor. In Michael Moortgat, Harry van der Hulst and Teun Hoekstra (eds.), The Scope of Lexical Rules, 79-106. Dordrecht: Foris. Pylkkänen, L. 2002. Introducing Arguments. Ph.D. thesis, MIT. Shibatani, M. 1996. Applicatives and benefactives. In Grammatical Constructions. Oxford: Clarendon Press.

Manner-result dichotomy and light verb constrictions in Karachay-Balkar

Problem. Turkic languages are famous for their light verb constructions (LVCs). In this paper, I address the puzzle exemplified in (1)-(2) from Karachay-Balkar:

(1) fatima qofta eš-ip tur-a-dɨ.
F. jacket knit-CONV LV-IPFV-3SG
'Fatima is knitting a jacket.'

(2) alim ešik-ni ac-ɨp tur-a-dɨ.
A. door-ACC open-CONV LV-IPFV-3SG
'The door is in a state of having been open by Alim.'

Both (1) and (2) show the LVC based on the LV *tur*- 'lit. stand' in combination with the deverbal adverb in *-Yp*. Most aspects of (1) and (2) are identical: both are transitive, both involve nominative-accusative case marking, both contain the LV in the present imperfective form. However, the interpretation is radically different: while (1) describes an ongoing process, (2) refers to a poststate of an event occurring prior to the reference time. (See Shluinsky 2006 for a list of diagnostics telling sentences like (1) and (2) apart.)

According to Shluinsky (2006), **manner verbs** in terms of Rapaport Hovav and Levin 1998 and elsewhere, RH&L henceforth, all pattern with (1), while **result verbs** behave like (2). (See Rappaport Hovav 2008, Levin & Rappaport Hovav 2010, and Koontz-Garboden & Beavers 2012 for a recent discussion of manner/result complementarity.) The questions I want to answer in this paper are: what makes the LVC in question sensitive to semantic class membership of the lexical verb and how does the mechanism assigning the stative interpretation to (2) but the process interpretation to (1) works?

Analysis of LVCs. In answering these questions I take the following steps. First, following RH&L and huge further literature, I assume that the semantic representation of result verbs consists of two subevents, causally related, where the causing activity is underspecified for descriptive content. Unlike in RH&L, I assume that manner verbs have complex event structure, too; for this class of verbs, underspecified for descriptive properties is a result subevent. Crucially, I propose that semantic representations of manner and result verbs contain a generalized quantifier of type <<v,t>,t>, which quantifies over an underspecified component of event structure. (3) and (4) are semantic representations for uninflected vPs based on manner and result verbs respectively.

(3) || fatima kofta eš- || = $\lambda \underline{P}_{<<v,t>,t>} \lambda e$ [knit(e) ∧ process(e) ∧ agent(Fatima)(e) ∧ theme(jacket)(e) ∧ $\underline{P}(\lambda e'$[state(e′) ∧ holer(jacket)(e′) ∧ cause(e′)(e)])] **type <<<v,t>,t>,<v,t>>**
where *v* is the logical type of eventualities comprising both events and states; $\underline{P}$ has the logical type <<v,t>,t>, the one of generalized quantifiers over events

(4) || alim ešik ac- || = $\lambda \underline{P}_{<<v,t>,t>} \lambda e$ [open(e) ∧ state(e) ∧ holder(door)(e) ∧ $\underline{P}(\lambda e'$[process(e′) ∧ agent(Alim)(e′) ∧ theme(door)(e′) ∧ cause(e)(e′)])] **type <<<v,t>,t>,<v,t>>**

As a descriptive generalization, I assume (5), remaining agnostic at the moment as to whether (5) is derivable from more basic principles of event composition:

(5) Descriptive properties of (sub)events in the event structure are either specified lexically or determined through quantification.

The rationale behind this proposal is this: when a subevent is underspecified for descriptive properties, this means that it can fall under an extension of different event predicates. Therefore, a set of event predicates is required to characterize this subevent. A set of event predicates has the logical type <<v,t>, t>, that of generalized quantifiers over events.

Secondly, I propose that *tur* is analyzed as an operator on event structure that binds existentially a generalized quantifier variable:

(6) || tur || = $\lambda S_{<<<v,t>,t>, <v,t>>} \lambda e \exists \underline{P}$[S($\underline{P}$)(e)] **type <<<<v,t>,t>,<v,t>>,<v,t>>**

Applying the denotation of *tur* in (6) to (3) and (4) yields (7) and (8) respectively:

(7) || [tur [fatima kofta eš-]] || = $\lambda e \exists \underline{P}$ [knit(e) ∧ process(e) ∧ agent(Fatima)(e) ∧ theme(jacket)(e) ∧ $\underline{P}(\lambda e'$[state(e′) ∧ holer(jacket)(e′) ∧ cause(e′)(e)])] **type <v,t>**

(8) || [tur [alim ešik ac-]] || = $\lambda e \exists \underline{P}$ [open(e) ∧ state(e) ∧ holder(door)(e) ∧ P(λe′[process(e′) ∧ agent(Alim)(e′) ∧ theme(door)(e′) ∧ cause(e)(e′)])] **type <v,t>**

(7) is a property of knitting processes that result in a state characterized by some set of eventuality descriptions $\underline{P}$. In contrast, (8) is a property of states of being open that are brought

about by processes whose content is similarly determined by some P. The process interpretation for (1) and stative interpretation of (2) now follow. To complete the derivation, one has to combine (7)-(8) with an aspectual operator; noting depends on the choice of analysis of aspectual operators.

Wider implications. The analysis has a number of further implications. For one, it offers a straightforward way of integrating manner/result modification into the picture. For instance, manner verbs normally license result state XPs that specify descriptive content of the result state, as in (9), where the PP *üjden* introduces the final location of the theme.

(9) marat kitap-ni üjden taš-ti.
M. book-ACC room-ABL carry-PST.3SG
'Marat carried the book out of the room.'

If result state descriptions are analyzed as existential quantifiers over eventualities, (11), the compositional interpretation of sentences like (9) obtains in one step, by applying (10) to (11), which yields (12).

(10) || Marat carry the book || = λPλe[carry(e) ∧ process(e) ∧ agent(e)=Marat ∧ theme(e)=book ∧ P(λe′. state(e′) ∧ holder(book)(e′) ∧ cause(e′)(e))] **type <<<v,t>,t>,<v,t>>**

(11) || out of the room || = $\lambda P_{<v,t>}\exists e[P(e) \wedge out.of.the.room(e)]$ **type <<v,t>,t>**

(12) || [out of the room [M. carry the book]] || = λe[carry(e) ∧ process(e) ∧ agent(e)=Marat ∧ theme(e)=book ∧ ∃e′[state(e′) ∧ holder(book)(e′) ∧ cause(e′)(e)) ∧ out.of.the.room(e′)]]

If no overt modifier is merged, I assume that a silent existential quantifier, (13), merges in the same position, yielding a property of events in (14):

(13) $\| \exists_v \| = \lambda P_{<v,t>}\exists e[P(e)]$ **type <<v,t>,t>**

(14) || [$\exists_v$ [Marat carry the book]] || = λe[carry(e) ∧ process(e) ∧ agent(e)=Marat ∧ theme(e)=book ∧ ∃e′[state(e′) ∧ holder(book)(e′) ∧ cause(e′)(e))]] **type <v,t>**

Result verbs require some further reflection. In a non-modified finite clause, their interpretation is eventive, not stative:

(15) alim ešik-ni ac-ti.
A. door-ACC open-PST.3SG
'Alim opened the door.'

I argue that the derivation of (15) proceeds in two steps. First, the Eventizer (independently motivated in, e.g. Paslawska, von Stechow 2003) in (16) existentially binds the state argument of (4) yielding a function from generalized quantifiers to truth values in (17).

(16) $\| Event \| = \lambda S_{<<<v,t>,t>, <v,t>>}\lambda P_{<<v,t>,t>}\exists e[S(P)(e)]$ **type <<<v,t>,t>, <v,t>>, <<<v,t>,t>,t>**

(17) λP ∃e[open(e) ∧ state(e) ∧ holder(door)(e) ∧ P(λe′[process(e′) ∧ agent(Alim)(e′) ∧ theme(door)(e′) ∧ cause(e)(e′)])] **type <<<v,t>,t>,t>**

Secondly, a type-shifting operator in (18) applies to (17) lowering the type of argument of the function in (17) and yielding a property of events. The driving force for this type-shift can be a the type mismatch between (17) and aspectual operators merged on top of (17): the latter require an event predicate, and not a set of generalized quantifiers.

(18) $\| Shift_{<<<v,t>,t>,t> \rightarrow <v,t>} \| = \lambda T_{<<<v,t>,t>,t>}\lambda e[T(\lambda P_{<v,t>}\exists e'[P(e') \wedge e' = e])]$ **type <<<<v,t>,t>,t>,t>, <v,t>>**

The type-shifting operator in (18) consists of two ingredients: the existential quantifier over events similar to $\exists_v$ in (13), and the type-shifting mechanism proper. The latter is comparable with the BE type-shifter of Partee 1987, whereby *x′* occurring in the "x′ = x" part of the translation is existentially bound, and *x* is abstracted over. Application of (18) to (17) results, after a series of λ-conversions, in an event predicated in (19), which correctly represents the meaning of (15).

(19) λe∃e′[open(e′) ∧ state(e′) ∧ holder(door)(e′) ∧ ∃e″[process(e″) ∧ agent(Alim)(e″) ∧ theme(door)(e″) ∧ cause(e)(e″) ∧ e″ = e]] **type <v,t>**

References. **Koontz-Garboden A. & J. Beavers.** 2012. Manner and Result in the roots of verbal meaning. *LI* 43. **Levin B. & M. Rappaport Hovav.** 2010. *Lexicalized meaning and Manner/Result complementarity*. Ms. **Shluinsky A.** 2006. Actional modification in Balkar. In *Struktura sobytija i semantika glagola v Karachajevo-Balkarskom jazyke*. **Partee B.** 1987. Noun phrase interpretation and type-shifting principles. In *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers.* **Paslawska A. & A. von Stechow.** 2003. Perfect Readings in Russian. In *Perfect Explorations*. **Rappaport Hovav M. & B. Levin.** 1998. Building verb meanings. In *The projection of arguments*

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A Predicate Approach to Korean Sluicing-like Constructions

1. Basic Facts

Sluicing, first investigated by Ross (1969) based on English data, is a linguistic phenomenon in a sentence where a single *wh*-phrase (remnant) in the second clause has a sentential interpretation as illustrated in (1a). In the same sense, sluicing-like constructions (hereafter SLCs)[1] exist in Korean as shown in (1b). Although Korean SLCs and English sluicing constructions share some properties in terms of the interpretation of remnants, their syntactic properties are not identical. One of the syntactic properties of Korean SLCs is that the possible categories of the remnants are not limited to *wh*-phrases as shown in (2). Another property is that case marking to remnants is not allowed in Korean SLCs when the case markers are functional as shown in (3). The most marked difference between English sluicing constructions and Korean SLCs is that the presence of a copula *-i* seems to be obligatory in Korean SLCs (as in (3) again) which has aroused a controversy over the derivation of Korean SLCs.

2. Previous Analyses

One approach to Korean SLCs is that these constructions are the result of focus movement of a *wh*-phrase followed by TP/VP deletion (Kim 2000). This approach claims that the copula *-i* insertion follows VP deletion to support the remaining Tense. However, the copula *-i* in Korean SLCs does not reflect the same tense information as the first conjunct (as in (4)) in spite of the fact that the copula *-i* in Korean does reflect tense information in fully-fledged declaratives or interrogatives. Moreover, under the movement analysis it is hard to explain why functional case markers must be deleted, which is contradictory to Merchant's (2001) Case-matching effects which is assumed to be evidence of syntactic movements. In opposition to the movement approach to Korean SLCs, other approaches include the cleft approach which claims that cleft structures are their underlying structures of Korean SLCs (Park 1998) and the copula approach which assumes a null pronoun of *kukes* in the subject position in the second conjunct (Sohn 2000). All of those previous approaches are based on the assumption that the presence of a copula in Korean SLCs is obligatory. However, an English sluicing example in (5a) and the parallel Korean example in (5b) show that it is not clear that the copula is an obligatory component in Korean. It is also noteworthy that the remnant can be of any category without restricting its property to interrogatives as shown in (6).

3. An Alternative View to the Derivation of Korean SLCs

With the empirical data, we argue that the presence of a copula is one way to establish a predicate relation to its implicit subject *pro* that is required to be activated by the first conjunct or by discourse. The suggested structure for Korean SLCs can be schematically illustrated as in (7). We also assume that there is a dependency link between the correlate and the remnant in Korean SLCs, and that its interpretation is affected by the amount of information given in the preceding discourse or in the first conjunct. This could provide a more convincing explanation on properties and types of remnants in Korean SLCs.

Data

(1) a. Sheldon ate something$_i$ at a Korean restaurant yesterday, but I don't know what$_i$.
b. Sheldon-i ecey hansiktang-eyse mwuenka$_i$-lul mekessnuntey,.
Sheldon-Nom yesterday Korean restaurant-at something-Acc ate but
mwues$_i$-i-nci molukeyssta.
what-Cop-Q not know
'Sheldon ate something at a Korean restaurant yesterday, but I don't know what.'

---

[1] We use a term 'sluicing-like constructions (SLCs)' for Korean examples in order to distinguish them from general sluicing constructions especially in English.

(2) John$_i$-i ecey halwucongil Syntax-lul kongpwuhaysstanuntey, John$_i$-i-nci hawksilchianhta.
John-Nom yesterday all day Syntax-Acc studied be told but John-Cop-Q sure not
'It is told that John studied Syntax all day yesterday, but I'm not sure whether it was John.'
(Q is a question Complementizer and is interpreted as 'whether')

(3) John-i Mary-eykey mwuenka-lul cwuessnuntey,
John-Nom Mary-Dat something-Acc gave but
mwues-i-nci/*mwues-ul-i-nci/*mwues-nci molukeyssta.
what-Cop-Q/ what-Acc-Cop-Q/what-Q not know
'John gave something to Mary, but I don't know what.'

(4) John-i mwuenka-lul mekessnuntey, mwues-i/iessnu-nci molukeyssta.
John-Nom something-Acc ate but what-Cop/Cop(past)-Q not know
'John ate something, but I don't know what.'

(5) a. She bought an {expensive/fast/big} car, but I don't know how {expensive/fast/big}.
(Merchant 2001:167)

b. kunye-ka {pissa/ppalu/ku}-n cha-lul sassnuntey,
she-Nom expensive/fast/big-Mod car-Acc bought but
elmana {pissa/ppalu/ku}-nci molukeysse.
how expensive/fast/big-Q not know
'She bought an {expensive/fast/big} car, but I don't know how {expensive/fast/big}.'
(OK and Kim 2012:164)

(6) a. John-i ecey Syntax-lul kongpwuhaysstanuntey, (cengmal) hayssnu-nci kwungkumhata.
John-Nom yesterday Syntax-Acc studied be told but really did-Q wonder
'It is told that John studied Syntax yesterday, but I wonder whether he really did.'

b. Salamtul-un Mary-ka yeypputanuntey, na-nun (cengmal) yeyppu-nci kwungkumhata.
People-Top Mary-Nom pretty say but I-Nom really pretty-Q wonder
'People say that Mary is pretty, but I wonder whether she is really pretty.'

(7) ……. , [$_{CP}$ [$_{TP}$ *pro* [$_{predicate}$ remnant-(Cop)]-Q]]

Selected References

Chung, S., W. Ladusaw, and J. McCloskey (1995) "Sluicing and Logical Form," *Natural Language Semantics* 3, 239-282.

Kim, J. (2000) "Sluicing in Japanese and Korean," *Korean Journal of Linguistics* 25, 271-290.

Merchant, J. (2001) *The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis*. Oxford: Oxford University Press.

OK, S. and S. Kim. (2012) "An Analysis of Sluicing-like Constructions in Korean: A Non-movement Approach (in Korean)," *Journal of Language Science* 19, 155-180.

Park, M. (1998) "Sluicing in English and Korean," Handout presented at the Linguistic Society of Korea Winter Workshop.

Ross, J. (1969) "Guess Who?" In *Papers from the Fifth Regional Meeting of the Chicago Linguistics Society*, (eds.) R. Binnick, A. Davidson, G. Green, and J. Morgan, 252-86.

Sohn, K. (2000) "A Non-sluicing, Non-clefting Approach to Copular Constructions (in Korean)," *Studies in Generative Grammar* 10, 267-294.

On the Subject Position of Unaccusatives in Japanese: the Kageyama-Kishimoto Puzzle

Synopsis: Kageyama (1993) and Kishimoto (2009) presented different views on the subject position of unaccusative verbs in Japanese: the former claimed that it should stay within VP/weak *v*P, while the latter held that it should be at Spec-TP. This issue, referred to here as the Kageyama-Kishimoto Puzzle (KKP), remains unsettled still now. The aim of this study is to solve the KKP, demonstrating that the disharmony arises from differences in the clausal structures they used as evidence.

Observations: The most convincing piece of evidence in Kageyama (1993) is arguably the case-dropping phenomenon seen in (1), where Nominative case-marker *-ga* drops.

(1) Kao-ni gohantsubu (*-ga*) tsuite-iru-no, sitteru?
face-on a grain of rice (-Nom) stick-BE-Fin, know
'Do you know that a gain of rice is on your face?'

This case-marker dropping cannot be observed when an unergative verb is used as shown in (2).

(2) Kodomo-tachi ?*(*-ga*) sawagu-no, mita-koto-nai.
kid-plurals (-Nom) make-fuss-Fin see-thing-Neg
'I have never seen the kids make fuss.'

Kageyama (1993) argued that this is because the subject position in (1), but not in (2), is the same as the object position in transitive clauses, in which the accusative case-marker *-o* may drop. For example, in (3) the DP *that woman* 'ano jyosei' may be case-marked, either Nominative or Accusative.

(3) Ano jyosei-ga/o sitte-iru-no-wa dare desu-ka?
That woman-Nom/Acc know-BE-Fin-Top who be-Q
'Who is the person that woman knows? / Who knows that woman?'

It is, however, impossible to interpret it as the subject when its case-marker drops, as illustrated below.

(4) Ano jyosei φ sitte-iru-no-wa dare desu-ka? 'Who knows that woman?'
That woman know-BE-Fin-Top who be-Q

This indicates that Nominative cannot drop in (3), and case-marker dropping is possible within VP.

Contra Kageyama (1993), Kishimoto (2009) claimed that the subject at issue should be at Spec-TP, showing the interpretation of the BAKARI ('only') construction as in (5).

(5) Kodomo-ga manga-o yon-de-BAKARI-iru. [transitive]
Kid-Nom cartoon-Acc read-ONLY-be
'Our kid is only reading a cartoon. / *Only our kid is reading a cartoon.'

As the translation shows, the scope of BAKARI "only" is limited within VP, excluding Spec-TP. The same is true of both cases of unergatives and unaccusatives, as shown in (6).

(6) a. John-ga itsumo ason-de-BAKARI-iru. [unergative]
John-Nom always play-ONLY-be 'John is always only playing./*Only John is always playing.'
b. John-ga kokode koron-de-BAKARI-iru. [unaccusative]
John-Nom here fall-ONLY-be 'John is only falling here./*Only John is falling here.'

Note that the subject in (6b) is also outside the scope of BAKARI. Therefore, Kishimoto (2009) claimed that the subject of unaccusatives is raised to Spec-TP, as are those of transitives and unergatives.

Analysis: What cannot be overlooked here is the fact that Kageyama (1993) used prenominal clauses as evidence. It is because a subject without a case-marker can be observed in root clauses even when an unergative verb is used as in (7a).

(7) a. Taro φ hasit-ta yo. (='Taro ran.')
Taro run-Past Particle

b. Taro φ koronda yo. ('Taro stumbled.')
Taro stumeled Particle

This is due to topic *-wa* deletion, and so we cannot distinguish Nominative-case dropping from the topic *-wa* deletion in (7). To avoid this confusion, Kageyama (1993) used prenominal clauses in which topic *-wa* cannot be observed, for it cannot appear in prenominal clauses. This is the very point where Kageyama (1993) and Kishimoto (2009) diverged from each other.

Along with Saito (2011), assuming that the φ-feature agreement does not work in Japanese, and that T is an independent licenser of Nominative case, I propose that only the EPP/edge feature is transmitted from C to T. Thus, CP always exists in root clauses and its C-head transmits the EPP to T, which results in raising a subject DP to Spec-TP. On the other hand, when C does not appear in a certain type of prenominal clauses, T fails to get the EPP and raise a subject DP to Spec-TP. This is the case when we observe the (im-) possibility of Possessor Raising (PR) exemplified below.

(8) a. Taro-no baiku-ga kowareta (koto/jiko) ➔ b. Taro-ga baiku-ga kowareta (*koto/*jiko)
Taro-Gen bike-Nom broke fact/accident Taro-Nom bike-Nom broke fact/accident
'(the fact that/the accident that) Taro's car broke'

(NB: The contrast becomes clearer in 'Hanako-wa *Taro*-ga/no baiku-ga kowareta koto/jiko*-ni odoroita.')

The genitive DP *Taro-no* in (8a) turns into an independent nominative DP *Taro-ga* only when it is within an independent/root clause, such as '*Taro-ga baiku-ga kowareta*.' PR is analyzed as a sort of focus-induced permutation and the focus feature on C is considered to be involved (cf. Hasegawa (2011)). PR, however, is not allowed when the clause is used as prenominal one. It can be explained straightforwardly if we assume that there is no C within a prenominal clause. That is, the syntactic category of the prenominal clause in question is TP, not CP. Keeping this in mind, let us pay attention to the difference between Kageyama and Kishimoto: the former's analysis was based on the data of prenominal clauses lacking C-head, while the latter's was based on that of main clauses, consisting of full-fledged CPs. This is the cause of the KKP. That is, the (un-)availability of C containing the focus-feature has brought about the different claims on the subject position at issue. It is noteworthy that the scope interpretation is not changed and nominative case-dropping becomes impossible when the BAKARI construction is used as a prenominal clause as illustrated in (9).

(9) John-ga/*φ kokode koron-de-BAKARI-iru koto
John-Nom here fall-ONLY-be fact
'the fact that John is only falling here. / *the fact that only John is falling here.'

It is known that Focus Particles (FPs) like *bakari* "only" must be licensed by the focus-feature on C (cf. Akaso & Haraguchi (2011)), and the prenominal clause must be a CP because of the existence of FP *bakari*. That is why the subject is excluded from the scope and the case marker *-ga* cannot drop.

Selected References: [1] Kageyama (1993) *Bumpoo to Gokeisei* (Grammar & Word-formation) [2] Kishimoto (2009) 'Subject Raising in Japanese.' [3] Saito (2011) 'Two Notes on Feature Inheritance.'

Not so Simple as *Ik-* Sounds: Verbs of Motion and Purpose *Ni* in Japanese

Questions: Japanese verbs of motion such as *ik-* 'go', *kur-* 'come', and verbs of location *ir/ar-* 'be, exist' take a goal/place complement marked with the same morpheme *ni* as in (1a) (cf. Sadakane and Koizumi 1995, Beavers 2008). As is well-known, no other verbs like verbs of manner select this type of *ni*, as in (1b).

(1) a. Taro-ga kooen-ni ik/kur/ir-ta.
T.-Nom park-NI go/come/is-Past
'Taro went/came to/was in the park.'
b. *Taro-ga kooen-ni hasir/aruk-ta.
run/walk-Past
'Taro ran/walked to the park.'

Ni has another use, among others, which marks purpose: attaching to either a noun (2a) or a verb (2b). Notice that purpose *ni* is only possible with the verbs of motion, as in (3). In particular, it is incompatible with the verbs of location, as in (3a).

(2) a. Taro-ga kunren/choosa-*ni* ik-ta.
training/research-NI
'Taro went for training/research.'
b. Taro-ga kunren/choosa-si-*ni* ik-ta.
training/research-do-NI
'Taro went to do training/research.'

(3) a. *Taro-ga kunren/choosa-(si)-*ni* ir-u.
training/research-(do)-NI
'Taro are (here) to do training/research.'
b. *Taro-ga kunren/choosa-(si)-*ni* hatarak/odor-ta.
training/research-(do)-NI work/dance-Past
'Taro worked/danced for training/research.'

How come the verbs of motion pattern with the verbs of location in (1) but not in (2, 3)? Why is the patterning related with the function of *ni*? Two more striking properties of purpose *ni* are to be noted: it is a V'-internal complement which can be replaced with *soo-sur* 'do so' (4a) (like V in a similar English construction *go/come*+V; Zubizarreta and Oh 2007) but it cooccurs with goal *ni* (4b) (unlike in *go/come*+V):

(4) a. Taro-ga kooen-*ni* kunren-ni ik-i
go-and
*Jiro-ga choosa-*ni* soo-sita//^{OK}Jiro-mo soo-sita.
so-did
'Taro went to the park for training and Jiro did so (for research).'
b. Taro-ga kooen-*ni* kunren/choosa-*ni* ik-ta.
'Taro went to the park for training/research.'

Proposals: Suzuki 2011 argues that the verbs of motion (*ik-* 'go', *kur-* 'come') and the verbs of location share an existential predicate BE_{LOC} (cf. Randall 2010) and that BE_{LOC} assigns the inherent locative case *ni* to its locative argument, as in (5):

(5) a. Taro-ga kooen-ni ik-ta.
T.-Nom park-NI go-Past 'Taro went to the station.'
$[_{VP}\ [_{VP}\ [_{SC}$ Taro $[_{DP}$ kooen$]]$ $BE_{LOC}]$ BECOME$]$
↑ inherent Loc case

b. Taro-ga kooen-ni ir.u.
exist.Pres ‘Taro is in the park.’
[$_{VP}$ [$_{SC}$ Taro [$_{DP}$ kooen]] BE_{LOC}]
↑_____| inherent Loc case

This analysis captures the fact that both types of verb take the *ni*-marked locative complement, attributing the semantic difference to BECOME. It, however, fails to account for the distribution of purpose *ni*. Partially maintaining the complex predicate analysis of *ik-* ‘go’ I propose an alternative. **First**, *ik-* is a simple unaccusative verb when no physical goal cooccurs. It is the verb of the initiation of directed-motion GO_{INIT} which selects an abstract target, namely, a purpose (or a destination), as in (5), to which it assigns *ni*. **Second**, *ik-* becomes a complex unaccusative through conflation with BE_{LOC}. Conflation can be considered the lexical-structural merge. I adopt Zubizarreta and Oh’s (2007) rule which merges a verbal l-structure with the head of another verbal l-structure. Thus, the phrase GO_{INIT} heads is merged with the second predicate BE_{LOC}. The *ni*-case assigned by GO_{INIT} roughly corresponds to English *for* and the other, *at* (coindexing indicates coreference just for convenience):

(5) a. Taro-ga choosa-ni ik-ta. ‘Taro left for research.’
b. [$_{VP}$ [Taro choosa] GO_{INIT}]

(6) a. Taro-ga kooen-*ni* kunren-*ni* ik-ta.
b. [$_{VP}$ [[[$Taro_i$ kunren] GO_{INIT}] [[$Taro_i$ kooen] BE_{LOC}]]]
↑_____| ↑_____|

(6b) implements an idea that *ik-* consists of a verb of the initiation of motion and a verb of location, each of which selects a ‘locative’ complement but only the former of which can select a purpose. From this follow all the properties of purpose *ni* discussed above: (a) its compatibility with the verbs of motion but not the others including verbs of location, (b) its being a complement, and (c) its cooccurrence with locative *ni*.

More Advantages: While English *go* is a simple activity/process verb, Japanese *ik-* in (5) encodes no process. This is supported, e.g., by the unacceptability of the progressive **Taro-ga kooen-ni ik-te-iru*. In addition, Suzuki 2011 claims that the ambiguity of (7) (the time of either departure or arrival) follows because *ik-* is the complex verb which has two predicates that can be modified by the time adverbial.

(7) Taro-ga 10 ji-ni gakkoo-ni ik-ta.
10 o’clock-at school-Loc go-Past
‘Taro left for school at 10.’ or ‘Taro went to school and was there at 10.’

However, modifying BECOME by the temporal adverb would yield the meaning of the arrival, not the departure, at that time. GO_{INIT} solves the problem. Furthermore, consider (8), with the meaning in which the time is that of departure:

(8) Taro-ga 10 ji-ni (eki/kunren-*ni*) ik-ta. ‘Taro left (for the station/training) at 10.’

With the departure meaning, the *ni*-phrase means the destination or the purpose, but not the place where Taro was. This follows from GO_{INIT}, which yields the destination/purpose/departure readings (while BE_{LOC} gives the locative/arrival readings).

Selected References: Beavers. 2008. On the nature of goal marking and delimitation. *JL* 44//Randall. 2010. *Linking.* Springer//Sadakane and Koizumi. 1995. On the nature of the “dative” particle *ni* in Japanese. *Linguistics* 33//Suzuki. 2011. No place/goal Ps in argument positions in Japanese. Presented at WAFL 8//Zubizarreta and Oh. 2007. *On the syntactic composition of manner and motion*. MIT Press.

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Successive-Cyclic Case Assignment: Korean Case Alternation and Stacking

In general, Case theory excludes the option of a DP receiving more than one Case (e.g. Chomsky 2000, 2001; Marantz 1991). However, certain constructions demonstrate that this is possible (e.g. McCreight 1988, Bejar & Massam 1999, Richards 2013). In this talk, I will examine two separate, but related, phenomena which are problematic for theories which do not permit multiple case assignment - case alternation and case stacking. *Case Alternation* occurs when a DP displays one of two (or more) case markers in the same structural position. *Case Stacking* occurs when those two case morphemes are realized simultaneously. Korean demonstrates both phenomena as seen in (1).

(1) a. Cheli-eykey/-ka/-eykey-ka ton-i iss-ta
C.-**DAT**/-**NOM/DAT-NOM** money-NOM exist-DEC
'Cheli has money.'

b. Swunhi-ka Yenghi-eykey/-lul/-eyekey-lul chayk-ul cwu-ess-ta
S.-NOM Y.-**DAT**/**ACC**/-**DAT-ACC** book-ACC give-PST-DEC.
'Swunhi gave Yenghi a book.'

In (1a), the subject *Cheli* displays dative-nominative alternation and stacking. Similarly, the indirect object *Yenghi* in (1b) displays dative-accusative alternation and stacking. Moreover, case-stacking is attested on adjuncts (2) and certain doubly nominative-marked subjects.

(2) ecey-pwuth-(ka) nalssi-ka cohaci-ess-ta
yesterday-**from**(-**NOM**) weather-NOM become.good-PST-DEC
'From yesterday, the weather became good.'

(3) sensayngnim-tul(-kkeyse)-man(-i) kulen il-ul ha-si-pnita
teacher-PL-(**HON.NOM**)-only(-**NOM**) that.kind work-ACC do-SH-DEC
'Only teachers do that kind of work.'

While the distribution of single-case-marked DPs is quite free, stacked case is restricted to focus contexts - including *wh*-questions and their answers, correction contexts, and co-occurrence with the overt focus marker *–man* 'only' (Yoon 1996, Schutze 2001). This observation has led some to conclude that stacked case is, in fact, a focus marker homophonous with and in the same distribution as strutural case (Schutze 2001). I posit that the examples in (1-3) and related constructions can be captured without appealing to a focus analysis, if we adopt a cyclic view of case assignment. Under this view, in Korean (and maybe all languages), DPs receive case in every case assignment domain (i.e. phase) they occupy. Case alternation is captured by restricting the pronunciation of stacked case morphemes via morphological rules.

Case alternation and stacking are known problems for both the agree model of case assignment (Chomsky 2000, 2001) and the configurational model (Marantz 1991, Bobaljik 2008) as both require case be assigned to a DP only once. In the proposed analysis, I present an emendation to the configurational model, which allows us to capture such case-marking phenomena. Specifically, I remove the stipulation that case may only be assigned to a DP once. Instead, the configurational algorithm can apply to a DP whenever it undergoes A-movement.

In (1a), the subject has undergone movement from Spec-vP to Spec-TP. In its base-position is assigned lexical dative by virtue of being the subject of a possession verb. In Spec-TP, the DP is evaluated for case again, and assigned unmarked nominative. Similarly in (1b), the indirect object can receive dative case from V^0 (or $Appl^0$), if the nominal undergoes movement it can also receive dependent accusative case by virtue of being c-commanded by the subject in Spec-TP. Support for this analysis comes from the

observation that accusative and dative-accusative indirect objects *must* receive a specific interpretation suggesting they have undergone object-shift to the edge of the vP (Diesing 1992). Examples like (3) can be accounted for if unmarked nominative is assigned twice – once to the subject in Spec-vP, and again in Spec-TP. Such assignment obeys the case disjunctive hierarchy proposed by Marantz if we take case assignment to be conducted phase-by-phase as suggested by Baker & Vinokurova (2010).

Examples like (2) require slightly more exposition. The adjunct DP receives lexical case within the vP, and unmarked nominative after the adjunct undergoes movement to some position above the subject in Spec-TP. Unlike subjects and indirect objects which permit case alternation and stacking, adjuncts only display case stacking. There are several ways to capture this behavior, one such way would be to posit that the lexical case of the adjunct is the P^0 itself which assigns null case to its DP complement. Under this view, the alternation can be maintained although because one of the two case morphemes is null it can never be realized.

Under the current proposal, all nominals which have undergone A-movement bear stacked case underlyingly. However, case-stacking is only possible in focus contexts. I posit that morphological rules restrict the over realization of such stacks. First, a PF deletion process akin to Pesetsky's One Suffix Rule (2010), originally proposed to explain case and number mismatches in Russian DPs modified by paucal numerals, intervenes forcing one of the two cases to go unpronounced. Whereas in Russian, the One Suffix Rule deletes all but the last case assigned. I propose to parameterize the One Suffix Rule to delete all but one of the cases assigned. Such a move may be necessitated independently of Korean due to the preservation of quirky case in Icelandic passives (Svenonius 2005). In instances of case-stacking, the One Suffix Rule must be overridden to realize multiple case morphemes on a single nominal. The preservation of case in focus contexts in not unusual. It has been observed in Korean and Japanese colloquial speech that structural case morphology can go unpronounced (Yatabe 1999, Kim 2008). However, when the nominal bears focus its case morphology must be realized. A similar process occurs in case stacking environments to overcome the One Suffix Rule permitting both assigned cases to be pronounced. Finally, it is important to note that many logically possible combinations of case markers in Korean are unavailable, because these particles are subject to morphological co-occurrence restrictions (Cho and Sells 1995).

The proposed analysis represents an improvement over previous case-based analyses (Gerdts & Youn 1988, 1999; Yoon 1996, 2004), because it captures all instances of case alternation and stacking in a unified manner. Furthermore, the analysis captures both phenomena without recourse to a focus analysis in which focus-markers are homophonous with and occur in identical environments as their structural case counterparts (Schutze 2001). The analysis also provides indirect arguments for the preferability of the configurational model of case assignment over the agree model. First, the agree model cannot capture (3), because it would require multiple phi-agreement with the same functional head (T^o). Similarly, the agree model cannot capture the obligatory specific reading of accusative and dative-accusative marked indirect objects in (1b). The modified agree model would capture dative-accusative assignment through phi-agreement between both V^0 (or $Appl^0$) and v^o with the indirect object. However, because accusative is realized on direct objects regardless of their specificity the agree model predicts no interpretive consequences for case alternation or stacking on indirect objects.

Selected Refernces

Bejar, S. & D. Massam. (2001) Multiple case checking. *Syntax* 2. **Marantz, A**. (1991). Case and licensing. *ESCOL 8*. **Pesetsky, D.** (2010). Russian Case Morphology and the Syntactic Categories. Available at LingBuzz. **Richards, N.** (2013) Lardil 'Case Stacking' and the timing of case assignment. *Syntax* 16. **Schütze, C.** (2001). On Korean "Case Stacking": The varied functions of the particles –ka and –lul. *The Linguistic Review* 18. **Yatabe, S.** (1999). Particle ellipsis and focus projection in Japanese. *Language, Information, Text* 6. **Yoon, J.** (1996). Ambiguity of government and the chain condition. *NLLT* 14.

Silent Possessors in Korean

Introduction: In this paper, I present a hitherto unnoticed three-way correlation in Korean possession constructions. I argue that this observation suggests that there is a silent accusative-marked possessor and the distribution of the silent accusative-marked possessor can be captured by the notion of *inherent participant* proposed by Funakoshi (2012). From this discussion, I conclude that Korean has backward control constructions in the nominal domain.

Observation: In Korean, a floating numeral quantifier (FNQ) must be c-commanded by its associate NP. Thus, possessor NPs (PNPs) cannot be associated with FNQs outside the possessed NPs since the PNPs do not c-command the FNQs. This is shown in (1).

(1) a.*Chelswu-ka [**haksayng-tul-uy** meli]-lul **sey-myeng** tta-ss-ta.
Chelswu-NOM student-PL-GEN hair-ACC 3-CL pick.up-PAST-DECL
'Chelswu picked up three students' hair.'

b.*Chelswu-ka [**haksayng-tul-uy** os]-ul **sey-myeng** kay-ess-ta.
Chelswu-NOM student-PL-GEN cloth-ACC 3-CL fold-PAST-DECL
'Chelswu folded three students' clothes.'

However, there are cases where PNPs license FNQs even if the former does not c-command the latter, as (2) shows.

(2) a. Chelswu-ka [**haksayng-tul-uy** meli]-lul **sey-myeng** jaru-ass-ta.
Chelswu-NOM student-PL-GEN hair-ACC 3-CL cut-PAST-DECL
'Chelswu cut three students' hair.'

b. Chelswu-ka [**haksayng-tul-uy** os]-ul **sey-myeng** botki-oss-ta.
Chelswu-NOM student-PL-GEN cloth-ACC 3-CL take.off-PAST-DECL
'Chelswu took off three students' clothes.'

The only difference between (1) and (2) is in the type of predicates. Interestingly, the same contrast can be observed in constructions involving Case-marked FNQs. Korean has Case-marked FNQs that are marked with the same Case as their associates, as illustrated by (3).

(3) **Haksayng-tul-i** ecey **sey-myeng-i** maykcwu-lul masi-ess-ta.
student-PL-NOM yesterday 3-CL-NOM beer-ACC drink-PAST-DECL
'Three students drank beer yesterday.'

As shown in (4), genitive-marked PNPs do not license accusative-marking on FNQs. This is not surprising because usually PNPs do not license FNQs in the first place, as we saw in (1).

(4) a.*Chelswu-ka [**haksayng-tul-uy** meli]-lul **sey-myeng-ul** tta-ss-ta.
Chelswu-NOM student-PL-GEN hair-ACC 3-CL-ACC pick.up-PAST-DECL
'Chelswu picked up three students' hair.'

b.*Chelswu-ka [**haksayng-tul-uy** os]-ul **sey-myeng-ul** kay-ess-ta.
Chelswu-NOM student-PL-GEN cloth-ACC 3-CL-ACC fold-PAST-DECL
'Chelswu folded three students' clothes.'

However, genitive-marked PNPs license accusative-marking on FNQs in the situation where they can license FNQs like in (2) even if the PNPs themselves are not marked with accusative, as shown in (5).

(5) a. Chelswu-ka [**haksayng-tul-uy** meli]-lul **sey-myeng-ul** jaru-ass-ta.
Chelswu-NOM student-PL-GEN hair-ACC 3-CL-ACC cut-PAST-DECL
'Chelswu cut three students' hair.'

b. Chelswu-ka [**haksayng-tul-uy** os]-ul **sey-myeng-ul** botki-oss-ta.
Chelswu-NOM student-PL-GEN cloth-ACC 3-CL-ACC take.off-PAST-DECL
'Chelswu took off three students' clothes.'

Furthermore, the same contrast can be observed in the so-called external possession construction, where PNPs are marked with accusative Case. PNPs can be marked with accusative in some cases but not in others:

(6) a.*Chelswu-ka **haksayng-tul-ul** meli-lu1 tta-ss-ta.
Chelswu-NOM student-PL-ACC hair-ACC pick.up-PAST-DECL
'Chelswu picked up students' hair.'

b.*Chelswu-ka **haksayng-tul-ul** os-ul kay-ess-ta.
Chelswu-NOM student-PL-ACC cloth-ACC fold-PAST-DECL
'Chelswu folded students' clothes.'

(7) a. Chelswu-ka **haksayng-tul-ul** meli-lul jaru-ass-ta.

Chelswu-NOM student-PL-ACC hair-ACC cut-PAST-DECL
'Chelswu cut students' hair.'

b. Chelswu-ka **haksayng-tul-ul** os-ul botki-oss-ta.
Chelswu-NOM student-PL-ACC cloth-ACC take.off-PAST-DECL
'Chelswu took off students' clothes.'

Notice that PNPs can be marked with accusative in the exactly same situation where PNPs can license FNQs outside the possessed NPs and they can license accusative-marking on FNQs.

Silent Accusative-Marked PNPs: In order to account for the three-way correlation, I propose that in sentences like (2) and (5), (i) there is a silent element outside the possessive phrase, (ii) the silent element is coreferantial with the PNPs, and (iii) the silent element is marked with accusative. Given that FNQs are adjoined to VP, then, (2) and (5) have the structure in (8) (the actual word order in these sentences is derived after the object NPs are moved to in front of the FNQs via scrambling).

(8) Subj $[\Delta_1$-ACC $[_{VP}$ FNQ(-ACC) $[_{VP}$ $[_{NP}$ PNP_1 NP] V]]]

In (8), the PNP can indirectly license the FNQ and accusative-marking on it since the coreferential element Δ c-commands the FNQ and is marked with accusative (I call Δ a silent possessor in what follows). In (7), the PNPs themselves, rather than silent possessors, occupy the position where Δ appears in (8), hence being accusative-marked.

Inherent Participant Generalization: Now notice that it is not always the case that PNPs or the silent possessor can occupy the position where Δ appears in (8). This is so because otherwise we cannot rule out (1), (4), and (6). Then, the question is when PNPs or silent possessors can appear outside the possessive phrase. I propose the following generalization: **PNPs or silent possessors can appear in the position where Δ appears in (8) only if PNPs are *inherent participants* in the event described by the predicate that takes the possessed NPs as its argument.** The notion of inherent participant is proposed by Funakoshi (2012) to capture the distribution of external possession constructions in Japanese. He defines this notion as follows: *x* is an inherent participant in an event *e* iff the participation of *x* in *e* is necessary for the realization of *e*. For example, in the event described by the sentence "Mary hit John's face", John as well as Mary and John's face is an inherent participant since it is impossible to hit John's face in the absence of John. On the other hand, in the sentence "Mary destroyed John's car", *John* is not an inherent participant since it is possible to destroy John's car in the absence of John. Given this notion of inherent participant, let us consider the possession constructions under discussion. In the event of cutting hair and the event of taking off clothes, the possessors of hair and clothes must participate in the event while in the event of picking up hair and the event of folding clothes, the possessors of hair and clothes do not have to. Thus, in the acceptable sentences (2), (5), and (7), the PNPs are inherent participants while in the unacceptable sentences (1), (4), and (6), they are not.

Backward Control: This generalization can be accounted for if we assume that the position where Δ occupies in (8) is theta-marked by V and the relevant theta-role is inherent participant. Only the elements that can be interpreted as inherent participants can occupy the Δ's position in (8). If a silent possessor occupies a theta position, this means that sentences like (2) and (5) are backward control constructions in Polinsky and Potsdam's (2002) sense. In backward control constructions, there is a dependency between an overt NP and a silent NP in reference, they are both in theta positions, and the silent NP is in a structurally higher position than the overt NP. The structure in (8) exactly matches this description. Thus, I conclude that sentences like (2) and (5) are instances of backward control constructions in the nominal domain.

Conclusion: The conclusion that Korean has backward control constructions in the nominal domain is both empirically and theoretically important. Empirically, this fills in the missing piece of the typology of raising and control in the nominal domain. As Funakoshi (2012) mentions, while in the nominal domain, forward raising (Hebrew: cf. Landau 1999), backward raising (Nez Perce: cf. Deal 2011), and forward control (German: Lee-Shoenfeld 2006) has been attested, backward control has not. Theoretically, this paper lends an empirical support to Movement Theory of Control (cf. Hornstein 1999) and Copy Theory of Movement (cf. Chomsky 1995) since this typology is expected in these theories.

Selected References: Deal 2011. Possessor raising. Ms. Harvard University; Funakoshi 2012. Backward control external possession constructions in Japanese. WAFL8.

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Absence of Case-matching Effects in Mongolian Sluicing

Synopsis: In this paper, we provide novel data on sluicing in the Khalkha dialect of Mongolian, and show that *wh*-remnants and their correlates do not have to match in case. We then argue that Mongolian sluicing is best analyzed by the LF-copy approach (Chung, Ladusaw & McCloskey 1995), where a sluiced clause consists of a *wh*-remnant base-generated in [Spec, CP] and an empty TP into which the antecedent TP is copied in LF.

PF-deletion and LF-copy: Sluicing is an ellipsis construction which involves a remnant *wh*-phrase.

(1) a. He is writing something, but you can't imagine what he is writing.
b. He is writing something, but you can't imagine what Δ. (Ross 1969:252)

Though the embedded clause of the second conjunct in (1b) is incomplete in that it only consists of a *wh*-phrase *what*, its interpretation is the same as (1a). There are two major analyses of this construction: PF-deletion ((2a), Ross 1969, Merchant 2001) and LF-copy ((2b), Chung, Ladusaw & McCloskey 1995).

(2) a. He is writing something, but you can't imagine [$_{CP}$ what$_i$ ~~[$_{TP}$ he is writing t$_i$]~~]. *Movement+PF-deletion*
b. [$_{TP}$ He is writing something], but you can't imagine [$_{CP}$ what [$_{TP}$ *e*]. *LF-copy*

In the former, the remnant *wh*-phrase is base-generated within TP and moves to [Spec, CP], which is followed by TP-deletion at PF; in the latter, a sluiced clause consists of a remnant *wh*-phrase base-generated in [Spec, CP] and an empty TP whose semantic content is obtained through LF-copy of the antecedent TP. Merchant (2001) argues for the PF-deletion analysis based on Ross's (1969) observation that a remnant *wh*-phrase must agree in case with its correlate as in German (3a).

(3) a. Er will **jemandem** schmeicheln, aber sie wissen nicht, **{*wen/wem}**.
he wants someone.DAT flatter but they know not who.ACC/who.DAT
'He wants to flatter someone, but they don't know who.' (Ross 1969: 253)
b. Sie wissen **{*der Antwort/ die Antwort}** nicht.
they know the answer.DAT/ the answer.ACC not
'They don't know the answer.' (Merchant 2001: 43)

Although, when it is transitive, the verb *wissen* 'know' assigns accusative case to its object as in (3b), the *wh*-remnant shares the case with its correlate in (3a), which illustrates that the case of the remnant *wh*-phrase is independent of the case which would be assigned to an object of the embedding predicate. Merchant (2001) then argues that the case-matching effect between *wh*-remnants and their correlates in sluicing is naturally explained by the PF-deletion analysis but not by the LF-copy analysis, since it seems difficult for the latter to explain how the case of a remnant *wh*-phrase base-generated in [Spec, CP] is checked (assigned) by a case-checker (-assigner) internal to an elliptical TP.

Mongolian Sluicing and Case-matching Effects: A similar phenomenon to English sluicing is also observed in Mongolian as in (4b).

(4) a. Oyuna-Ø yamar_negen_zuil-ig zeel-sen.
Oyuna-NOM something-ACC borrow-PERF
'Oyuna borrowed something.'
b. Gevch, bi [yu-g n'] med-eh-gui.
but I what-ACC N' know-INF-NEG
'But, I don't know what.'

The embedded clause in (4b) is incomplete in that it only consists of a remnant *wh*-phrase *yu* 'what' and an element *n'*, which is referred to as the 3rd person possessive suffix by Janhunen (2012), but we can interpret (4b) as if nothing were elided. A surprising fact about sluicing in Mongolian is that a *wh*-remnant must bear accusative case regardless of the case of its correlate as in (5).

(5) a. Bat-Ø **hen_negen-d** ene nom-ig ug-sun.
Bat-NOM someone-DAT this book-ACC give-PERF
'Bat gave this book to someone.'
b. Gevch, bi [***hen-d/hen-ig** n'] med-eh-gui.
but I who-DAT/who-ACC N' know-INF-NEG
'But, I don't know to whom.'

In (5a), the correlate of the *wh*-remnant in (5b) bears dative case. Then, it would be expected that the *wh*-remnant should also bear dative case. This, however, is not the case. Therefore, we conclude that Mongolian sluicing does not exhibit the case-matching effect between *wh*-remnants and their correlates.

Default Case and Matrix Sluicing: It could be possible that the default case in Mongolian is accusative and *wh*-remnants in Mongolian sluicing bear default case; however, it turns out that nominative case is the default case in Mongolian as illustrated in (6).

(6) a. **Bi** ukhaantai. b. ***Namaig** ukhaantai.
I.NOM intelligent I.ACC intelligent
'Me intelligent.' 'Me intelligent.'

The configuration in (6) is the standard test for determining the default case in a language. As the contrast in (6) shows, nominative pronouns but not accusative ones show up in this configuration, which means that the default case in Mongolian is nominative. We then have to investigate what the source of the obligatory accusative case assigned to *wh*-remnants in Mongolian sluicing is. A similar construction to English matrix sluicing (cf. Lasnik 1999) is also observed in Mongolian, which seems to hint the solution.

(7) a. Bat-Ø **hen_negen-d** ene nom-ig ug-sun.
Bat-NOM someone-DAT this book-ACC give-PERF
'Bat gave this book to someone.'
b. **Hen-d/*Hen-ig** n' be?
who-DAT/who-ACC N' Q
'To whom?'

What is interesting here is that the case-matching effect does appear when a sluiced clause is not embedded as in (7b), from which we conclude that some element in the matrix clause is the source of the obligatory accusative case assigned to *wh*-remnants in Mongolian embedded sluicing such as (5b).

Analysis: Regarding embedded sluicing in Mongolian, we argue that the absence of the case-matching effect between *wh*-remnants and their correlates favors the LF-copy over PF-deletion approach, since the latter predicts that effect. Under the Phase Impenetrability Condition (cf. Chomsky 2000), elements in the edge of CP, i.e. [Spec, CP], are accessible to the higher probe, head *v*, which means that a *wh*-phrase in [Spec, CP] can be case-checked by *v* (see also Şener to appear). This analysis is straightforwardly implemented under the LF-copy approach, where TP is missing at the relevant point: the only provided source of case-licensing for the *wh*-phrase is the higher *v*. We argue that this is what happens in Mongolian embedded sluicing as in (8).

(8) $[_{vP}\ [_{VP}\ [_{CP}\ wh\text{-remnant}\ \underbrace{[_{TP}\ e]}_{\text{LF-copy}}\ [_{C}\ n']]\ V]\ v]$
ACC-case ↑ ↑ *v*

The configuration in (8) correctly predicts the obligatory accusative case marking of the *wh*-remnant in (5b) since it ensures that the *wh*-remnant base-generated in [Spec, CP] always receives its case from the matrix *v*; it does not receive case within the elided TP. Furthermore, the fact that the *wh*-remnant in matrix sluicing such as (7b) does not have to bear accusative case is naturally captured since there is no "higher" source of accusative case, i.e. *v*.

Selected References: Chung, S., W. Ladusaw & J. McCloskey. (1995) "Sluicing and Logical Form." *Natural Language Semantics* 3: 239-282. Janhunen, J. (2012) *Mongolian*. Amsterdam: John Benjamins Publishing Company. Merchant, J. (2001) *The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis*. Oxford: Oxford University Press. Ross, J. R. (1969) "Guess who?" *Proceedings of the Chicago Linguistics Society* 5: 252-286. Şener, S. (to appear) "Non-canonical Case Marking is Canonical: Accusative Subjects in Turkish." *Natural Language and Linguistic Theory*.

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The Logophoric Nature of the Bound Anaphor "kendi" in Turkish

ABSTRACT

Turkish has two morphologically free reflexives; *kendi* 'self' and the inflected form, *kendi-si* 'self. 3_{SG}'. It has been previously claimed that *kendi* is a strict local anaphor which is subject to Condition A of the Binding Theory, as in the Example 1, while *kendisi* seems to have a dual nature, acting both as an anaphor and a pronominal, (Ex. 2a-b), (Kornfilt (2001)). In this paper, we mainly focus on Kornfilt (2001)'s analysis regarding the distribution of these reflexives. Kornfilt (2001) argues that *kendisi* is actually an Agreement 'phrase in disguise' with a little *pro* in Spec position (Ex. 3). AgrP is suggested to be the relevant binding domain for both the pronominal *pro* and the so-called strict local anaphor *kendi* (Ex. 4). In the light of the recently collected data, this paper clearly shows that *kendi* does not behave as a strict local anaphor, but a logophor in complex sentences under logophoric verbs, and the previously argued complementarity between *kendi* and *kendisi* is lost in such contexts. To account for this structurally, we argue that *kendisi* is a referential anaphor which only lacks a coreferential index, in comparison, *kendi* needs to define both its phi features and its D feature (Ex. 5). As Kornfilt (2001) has pointed out, DP (AgrP) seems to be the relevant binding domain for the little *pro* and for the reflexive in *kendisi,* however, *kendi* does not have a null pronominal in Spec position, rather an undefined empty category occupying Spec, NP. The little *pro* in *kendisi* just needs to be coindexed with an antecedent in the clausal domain (CP), however, *kendi* needs an antecedent to define its uninterpretable D and phi features. Therefore, it can only be read coindexed with an argument antecedent implying that the relevant binding domain for *kendi* is TP . Hence, *kendi* can be either bound by an antecedent in the minimal (embedded) TP, or it can be logophor-licensed being bound by the subject in the matrix TP if the matrix verb expresses the point of view or state of consciousness of the individual in the subject position. In the example 6 (a) where the subject of the verb 'şaşırmak' *to be surprised* is SELF, and in 7 (a) and 8 (a) where the subjects of the verb 'söylemek' *to tell* are SOURCE, *kendi* can take a non-local antecedent, namely the matrix logophoric subject although it still cannot refer to a discourse antecedent. In addition, the example 7 (a) indicates that *kendi* cannot be read coreferential with an indirect object, indicating the subject orientation of the bare reflexive when functioning as a logophor. When it is in a non-argument position in the deepest embedded clause, it still takes the subject of the matrix clause as its antecedent (Ex. 8 (a)). Comparing the examples 6, 7, and 8 (a) with 6, 7, and 8(b), we see that the referential properties of *kendi* and *kendisi* are identical implying that just as *kendi*, *kendisi* cannot refer to a discourse antecedent. Adopting Frascarelli (2007)'s analysis of Aboutness-shift Topic (A-Topic), we argue that although in simple sentences, *kendisi* is coreferential with a discourse-antecedent which is represented as a null topic in the C domain, the logophoric matrix subjects do not seem to allow a disjoint reading from A-Topic. Therefore, the highest available antecedent for *kendi* and *kendisi* in such contexts end up being the same even though their binding domains differ.

EXAMPLES

(1) Ali$_1$ Ayşe'nin$_2$ kendine$_2$ kızmasına şaşırdı.

Ali.$_{NOM}$ Ayşe.$_{GEN}$ self.$_{DAT}$ get.angry.$_{MSD.ACC}$ be.surprised.$_{AOR}$

'Ali$_1$ was surprised at Ayşe$_2$ getting angry at herself$_2$/*him$_{1=3}$'

(2) a. Ali$_1$ Ayşe'nin$_2$ kendisine$_{1/2/3}$ kızmasına şaşırdı.

Ali.$_{NOM}$ Ayşe.$_{GEN}$ self.$_{DAT}$ get.angry.$_{MSD.ACC}$ be.surprised.$_{AOR}$

'Ali$_1$ was surprised at Ayşe$_2$ getting angry at herself$_2$/him$_1$ /him=her$_3$'

b. Ahmet kendi-sin-i$_1$ çok beğen-iyor-muş

Ahmet self-$_{3.sg.}$-$_{ACC}$ very admire-$_{Progr.-Rep.Past.}$

'(They say that) Ahmet admires (i.e., Ali) very much.'

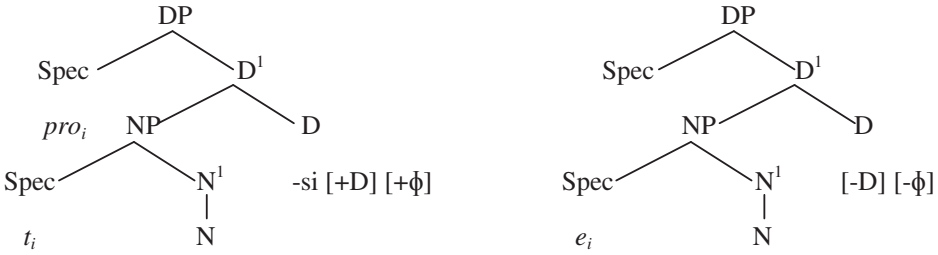
(3) $[_{AgrP}$ *pro* $[_{Agr}{}^{1}$ –si $[_{NP}$ kendi-]]]

(4) $[_{CP}$ Ali$_1$ $[_{AgrP}$ pro$_1$ kendisine$_1$]güveniyor.]

Ali self-$_{3\ SG.}$ -$_{DAT}$ trust-$_{PROG}$

'Ali trusts in himself/him-her

(5) A. *Kendisi* (N-to-D Movement) B. *Kendi* (No N-to-D Movement)



(6) a. Ali[SELF]$_1$ Ayşe'nin$_2$ kendine$_{1/2}$ kızmasına şaşırdı.

Ali Ayşe.$_{GEN}$ self.$_{DAT}$ get.angry.$_{MSD.ACC}$ be.surprised.$_{AOR}$

'Ali$_1$ was surprised at Ayşe$_2$ getting angry at herself$_2$/him$_1$/*him-her$_3$'

b. Ali[SELF]$_1$ Ayşe'nin$_2$ kendisine$_{1/2/*3}$ kızmasına şaşırdı.

Ali Ayşe.$_{GEN}$ self.$_{DAT}$ get.angry.$_{MSD.ACC}$ be.surprised.$_{AOR}$

'Ali$_1$ was surprised at Ayşe$_2$ getting angry at herself$_2$/him$_1$/?him =her$_3$'

(7) a. Ali[SOURCE]$_1$ Ahmet'e$_2$ [*pro$_1$* [Ayşe'nin$_3$ kendini$_{1/3}$ üzmesini] istemediğini] söyledi.

Ali Ahmet-$_{DAT}$ *pro* Ayşe-$_{GEN}$ self-$_{ACC}$ upset-$_{NOT\text{-}MSD\text{-}ACC}$ tell-$_{PST}$

'Ali$_1$ told Ahmet$_2$ that he$_1$ does not want Ayşe$_3$ to upset herself$_3$/ him$_1$/*him$_2$/*him=her$_4$'

b. Ali[SOURCE]$_1$ Ahmet'e$_2$ [*pro$_1$* [Ayşe'nin$_3$ kendisini $_{1/?2/3/*4}$ üzmesini] istemediğini] söyledi.

Ali Ahmet-$_{DAT}$ *pro* Ayşe-$_{GEN}$ self-$_{ACC}$ upset-$_{NOT\text{-}\ MSD\text{-}ACC}$ tell-$_{PST}$

'Ali[SOURCE]$_1$ told Ahmet$_2$ that he$_1$ does not want Ayşe$_3$ to upset herself$_3$/ him$_1$/?him$_2$ /*him=her$_4$'

(8) a. Ali [SOURCE]$_1$ [Ahmet'in[SELF]$_2$ [Ayşe'nin$_3$ kendi$_{1/2/3}$ için bir şeyler yapmasını] haklı bulduğunu] söyledi.

Ali Ahmet-$_{GEN}$ Ayşe-$_{GEN}$ self for something do-$_{MSD\text{-}ACC}$ recognize-$_{MSD\text{-}ACC}$ say-$_{PST}$

'Ali$_1$ said that Ahmet$_2$ recognizes Ayşe's$_3$ doing something for herself$_3$/him$_{1=2}$/*him=her$_4$'

b. Ali [SOURCE]$_1$ [Ahmet'in[SELF]$_2$ [Ayşe'nin$_3$ kendisi$_{1/2/3/*4}$ için bir şeyler yapmasını] haklı bulduğunu] söyledi.

Ali Ahmet-$_{GEN}$ Ayşe-$_{GEN}$ self for something do-$_{MSD\text{-}ACC}$ recognize-$_{MSD\text{-}ACC}$ say-$_{PST}$

'Ali$_1$ said that Ahmet$_2$ recognizes Ayşe's$_3$ doing something for herself$_3$/him$_{1=2}$/*__him=her$_4$__'

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On Serialized Verbs in Japanese and Korean

Synopsis: This paper discusses serialized verbs (SVs) in Japanese and Korean and argues that so-called "lexical" serialized verbs (LSVs) as well as syntactic serialized verbs (SSVs) are formed in the syntax under the view of Distributed Morphology ([4], [5], a.o.), and proposed arguments for the lexicalist approach to LSVs lose ground. I also claim that the effect of [1]'s Principle of Transitivity Harmony in LSVs (as well as that of [3]'s Matching Condition on Verb Serialization) can be deducible. Furthermore, I suggest that while J employs "internal" morphology productively, K employs "outer" morphology more frequently.

Data: Both Japanese and Korean are replete with SVs (i.e. V1+V2), and it has been widely held that J & K distinguish between LSVs and SSVs ([1], [2], a.o.).

(1) a. kiri-otos, naki-sakeb, kuzure-oti, ... (LSVs in J)
cut-fell cry-scream crumble-fall

b. kiri-owar, naki-tuzuke, kuzure-hazime, ... (SSVs in J)
cut-finish(intr) cry-continue(tr) crumble-begin(tr)

(2) a. palpa-cwuki, capa-mek, ttwie-nem, ... (LSVs in K)
stomp.on-kill catch-eat jump-go.over

b. palpa-peli, capa-cwu, ttwie-po, ... (SSVs in K)
stomp.on-finish catch-give jump-try

In J, one argument that the two types of SVs are distinct comes from the fact that only LSVs are subject to the Principle of Transitivity Harmony (PTH) in (3), proposed by [1].

(3) V1 and V2 must be in harmony with each other in terms of transitivity.

Obviously, while the LSVs in (1a) abide by the PTH, the SSVs in (1b) do not. In K, one argument that LSVs are distinct from SSVs comes from the "lexical integrity" of the former (cf. [2]), shown in (4).

(4) a. [SSV [SSV [LSV palpa-cwukye]-belye]-cwu](-ess-ta)
b. [SSV [SSV [LSV palpa-cwukye]-cwue] bely](-ess-ta)
c. *[SSV [LSV palpa-belye-cwukye]-cwu](-ess-ta)
d. *[SSV [LSV palpa-cwue-cwukye]-bely](-ess-ta)

Although the order of V2's of SSVs is relatively free (cf. 4a, b), V2 of SSVs may not intervene between V1 and V2 of LSVs (cf. 4c, d).

Assumptions: Following [4], [5] a.o., I will assume that (i) roots are acategorial before they are merged with the first category-determining functional head (e.g. n, v, a), and (ii) the structure of vP is layered as shown in (5), where v demarcates the border between "inner" and "outer" morphology.

(5) [vP(=VoiceP) ... [Voice [... [(Asp/Appl) [... [(Caus) [... **v** [(**X**) [√**P**]]]]]]]]]
"outer mophology" | "inner" morphology

Discussions: Under the current view, the effect of the PTH in (3) can be deduced from a natural hypothesis that two roots are merged in LSVs in J before they are merged with the first v.

(6) [vP [√2P √1 + √2] + v] (LSVs in Japanese)

(7) a. {(√KIR + √OT) + v.trans} <—> kiri(tr)-otos(tr) / *kiri(tr)-oti(intr)

b. {(√NAK + √SAKEB) +v.unerg} <—> naki(unerg)-sakeb(unerg)

c. {√KUZ + √OT) + v.unacc} <—> kuzure(unacc)-oti(unacc)

Since two roots are merged before they are merged with the first v in LSVs in J, the transitivity property of v spreads to √1 as well as √2. As a result, V1 and V2 harmonize with each other morphologically, as shown in (7). This is further evidenced by the attested transitive counterpart of (7c), i.e., kiri(tr)-otos(tr), where v is that of transitive, instead of unaccusative. Simultaneously, the fact in (4) ceases to be an argument for a lexicalist approach. This is because V2's of SSVs like beli 'finish' and cwu 'give' are Aspect and Applicative heads, respectively, within the layered vP system in (5), which take a verbal complement larger than the smallest vP while LSVs are formed by merger of two vP's as suggested by [3]. Thus, while LSVs in J are formed in "inner" morphology, those in K are created in "outer" morphology (compare (6) and (8)).

(8) [vP [vP2 [vP1 √1 + v1] + [vP2 √2 + v2]] + v] (LSVs in Korean)

Consequences: One immediate consequence of the current proposal is the fact that while LSVs in J do not allow particle insertion (note that even su-support 'do-support' does not help), LSVs in K do.

(9) a. *kiri-wa(-**si**)-otos, *naki-wa(-**si**)-sakeb, *kuzure-wa(-**si**)-oti, (LSVs in J)
cut-top-do-drop cry-top/also-do-shout crumble-top/also-do-fall

b. √palpa-nun-cwuki, √capa-nun-mek, √kkwulhe-nun-anchi, (LSVs in K)
stomp.on-top-kill catch-top-eat kneel-top-sit.caus

Furthermore, the absence of V1 as an independent lexical item in cases like (9) ceases to be an argument for a lexicalist approach to LSVs in K.

(10) a. thaye-na (be.born): V1=*thay, V2=na (get out)

b. tuna-tul (go in and out): V1=*tuna, V2=tul (go in)

(11) a. {√THAY + v} <—> no corresponding vocabulary item (VI)

b. {(√THAY + v) + (√NA + v) + v} <—> thaye-na

The V1's in (10) are not attested as independent VIs. This fact has often been taken for an argument that LSVs in K are created in the lexicon. However, under the current approach, it simply happens that the root of V1 in (10a) √THAY, if merged with v, does not have a corresponding VI; instead, the VI thaye-na can be inserted to the whole LSV as shown in (10b).

Selected References:

[1] Kageyama, T. (1993) Bunpoo to Gokeisei (Grammar and Word Formation). Hituzi. [2] Kim, B.K. (1993) The structure and the argument-linking convention of V-V compounds in Korean, HSIKL V. [3] Ko, H.J. & D.Y. Sohn (2011) Decomposing complex serialization: the role of v, ms., SNU. [4] Marantz, A. (1997) No escape from syntax, UPenn WPL. [5] Marantz, A. (2001) Words. ms., MIT.