# Polar alternative questions in Korean: A Construction-based Perspective

Jong-Bok Kim
jongbok@khu.ac.kr

Kyung Hee U., Seoul

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# Pol-Qs

- Typical examples: positive and negative

(1) a. Are you ready?
b. Will you be here tomorrow?
c. Do you want coffee?

(2) a. Aren't you ready?
b. Won't you be here tomorrow?
c. Don't you want coffee?

- Polar questions (positive or negative) are ones to which the expected answer is the equivalent of *yes* or *no*: they explicitly spell out only one alternative.

# Alt-Qs

- Alternative questions are non-wh questions standardly characterized by interrogative morpho-syntax, the presence of disjunction, and a characteristic intonation.

  (3) a. Did Alfonso or Joanna give you a ride↓??
  b. Do you want coffee or tea↓??
  c. Are you staying or leaving↓??

  (4) a. Did Alfonso give you a ride or not?
  b. Do you want coffee or not?
  c. Are you staying or not?

- Alternative questions, offering an unbiased choice, have as answers a set of alternatives given in the question itself (Huddleston and Pullum 2002: 868). When responding to an alternative question, the most compliant answer is to pick one of the offered alternatives.

# Pol-Qs vs. Alt-Qs

- According to the traditional semantic theories of questions (Hamblin 1973, Groenendijk & Stokhof 1984), the meaning of a question Q is a set of propositions that are 'good' answers to the question.
- Then the meaning of a positive or negative Pol-Q is logically equivalent.

(5) a. ⟦Is Mimi right?⟧
b. ⟦Is Mimi not right?⟧
c. { λw[Mimi is right in w], λw[Mimi is not right in w]}

- The meaning of an Alt-Q composed of two polar alternatives is thus also the same as the semantics of the related polar question:

(6) a. ⟦Is Mimi right or is Nana right?⟧=
b. { λw[Mimi is right in w], λw[Nana is right in w]}

(7) a. ⟦Is Mimi right or not?⟧=
{ λw[Mimi is right in w], λw[Mini is not right in w]}

# Differences between POL-QS vs. ALT-QS in response

- Polar and alternative questions seem to be similar, but have different responses.

(8) Q: Is the door open?
A: Yes, it is./No, It isn't.

(9) Q: Is the door open or is it closed↓?
A: *Yes, it is./*No, It isn't.
A: It is open./It is closed.

# More differences between POL-QS and ALT-QS (Bolinger 1978)

- Requests: While polar questions are common as pleas or requests, it seems strange to use an alternative question in the same context

(10) a. Will you marry me or not?
b. # May I see your ticket or not?

- Drawing Inferences: When drawing inferences, polar questions appear to be more appropriate than alternative questions

(11) A: I just saw David.
B: Is David back from Toronto?
B: # Is David back from Toronto or not?

# Differences between Pol-Qs and Alt-Qs (Bolinger 1978)

- Invitations: Invitations are often impolite if uttered as alternative questions.

  (12) a. Do you want something to drink?
  b. #Do you want something to drink or not?

- Conversation Starters: the use of the polar question is more likely than the alternative question.

  (13) a. Do you like to play golf?
  b. #Do you like to play golf or not?

- Rhetorical Questions: It seems impossible to realize rhetorical questions as alternative questions.

  (14) a. Are you crazy?
  b. #Are you crazy or not?

# ALT-QS in Korean

- POL-QS with a disjunctive marker: there is no alternative reading. They have only yes-no (yn) reading ( Beck & Kim 1997; Han & Romero 2004)

(15) a. khephi-na cha-lul masi-keyss-eyo?
coffee-or tea-ACC drink-FUT-QUE
'Will you drink coffee or tea?' (only yn reading)

b. mimi-lul cohaha-kena salangha-ni?
Mimi-ACC like-or love-QUE
'Do you like or love Mimi?' (only yn reading)

# ALT-QS in Korean

- POL-QS with an independent disjunctive adverbial *animyen* 'or not': these can induce alternative readings (Han and Romero 2004).

(16) a. khephi-lul animyen cha-lul masi-keyss-e?
coffee-ACC (if)-not tea-ACC drink-FUT-QUE
'Will you drink coffee or (if not) tea?' (alt-reading)

b. mimi-lul cohaha-kena animyen salangha-ni?
Mimi-ACC like-or (if)-not love-QUE
'Do you like Mimi or (if not) love Mimi?' (alt-reading)

# Alt-Qs in Japanese

- Similar to Korean, phrasal disjunction does not induce an AltQ reading: only a VP or bigger disjunction allows an alternative reading (Uegaki 2014)

(17) a. Toro-ga koohii ka ocha-o non-da ka (-ga
Taro-NOM coffee or tea-ACC drink-COP or (-NOM
mondai-da)
question-COP)
'It is a question if Taro drank coffee or tea.' (only yn-reading)

b. Toro-ga koohii-o non-da ka ocha-o non-da
Taro-NOM coffee-ACC drink-COP or tea-ACC drink-COP
ka
or
'whether Taro drank coffee or tea' (alt-reading)

# Pol-Alt-Qs: a special type of Alt-Qs

- A special type of alternative question has the alternatives consisting of a positive and its negative counterpart, where the second coordinate is a reduced form (Huddleston and Pullum 2002):

(18) a. Are you ready or are you not ready?
b. Are you ready or aren't you ready?
c. Are you ready or aren't you?
d. Are you ready or not?

- The Pol-Q (i.e., *Are you ready?*) expresses a single proposition and the answers are provided by this and its polar opposite. Meanwhile, the Pol-Alt-Qs here express two propositions, each of which provides an answer (the second one is taken to be a reduced clause). Pol-Alt-Qs are thus logically equivalent to Pol-Qs.

# Pol-Alt-Qs in the embedded

- Pol-Alt-Qs behave like Alt-Qs rather than Pol-Qs, as shown in the embedded: the verb *doubt* accepts only the polar type, excluding alternative and polar-alternative as its complement

(19) a. I wonder/doubt whether it is alive. (polar)
b. I wonder/!*doubt whether it is alive or dead. (alt)
c. I wonder/*doubt whether it is alive or not. (polar-alt)

(20) a. *I'm marrying her whether you like her. (polar)
b. I'm marrying her whether you like her or hate her. (alt)
c. I'm marrying her whether you like her or not. (polar-alt)

# Pol-Alt-Qs (A-not-A) in Chinese

- Mandarin A-not-A questions (Dai 1990; Huang 1991; Ernst 1994; Wu 1997; Law 2006; Hagstrom 2006):

(21) a. Ni xihuan bu xihuan Ditelü?
you like not like Detroit
'Do you like Detroit or not?'

b. ta xi-bu-xihuan zheben shu?
he li-not-like this book
'Does he like or not like this book?'

- The repeated A can be Vs, modals, P, and even the first syllable of the V.

# Korean POL-ALT-QS (or A-not-A): three types

- Type I (A-not-A): with a Neg-Predicate

  (22) Mimi-nun ca-ni an ca-ni?
  Mimi-TOP sleep-QUE not sleep-QUE
  'Is Mimi sleeping or not sleeping?'

- Type II: with an inherently negative verb

  (23) ton-i iss-ni eps-ni?
  money-NOM exist-QUE not.exist-QUE
  'Do you have money or not?'

- Type III: with a negative auxiliary

  (24) cip-ey kal-kka mal-kka?
  home-to go-QUE not-que
  'Should we go home or not?

# Questions in Pol-Alt-Qs

- Are Pol-Alt-Qs with no coordination marking at all subtypes of Alt-Qs? What are the shared as well as differing properties?
- Are these also clausal-disjunction or coordination (asyndeton coordination) inducing alernative readings?
- How to generate such constructions syntactically and how to compose the intended alternative meanings?

# Morphosyntactic identity in Type I

- Need to have identical lexeme, as well as tense, aspect, and mood (TAM) markings:

(25) a. *ca-ss-ni an ca-ni?
sleep-PST-QUE not sleep-QUE
'(Did you) sleep or not sleep?'

b. *ca-ss-ni an ca-ss-e?
sleep-PST-QUE not sleep-QUE
'(Did you) sleep or not sleep?'

- Semantic synonymous is not enough

(26) a. *alumptap-ni an yeppu-ni?
beautiful-QUE not pretty-QUE

b. *noh-ass-ni an twu-ess-ni?
put-PST-QUE not place-PST-QUE

# Morphosyntactic identity in Type II and III

- Type II and III also require the identity of TAM (tense, aspect, and mood) even though there is no lexeme identity.

(27)Type II

*ton-i iss-ess-ni eps-ni?
money-NOM exist-PST-QUE not.exist-QUE
'Do you have money or not?'

(28)Type III

*cip-ey ka-ess-lkka mal-kka?
home-to go-PST-QUE not-que
'Should we go home or not?

# Morphosyntactic identity in true ALT-QS

- Different from POL-ALT-QS, ALT-QS with a disjunctive marking or adverb require no lexeme and TAMS identity:

(29) a. alumptap-ni animyen yeppu-ni?
beautiful-QUE if-not pretty-QUE

b. noh-ass-ni animyen twu-ess-ni?
put-PST-QUE if-not place-PST-QUE

(30) ka-ss-ni animyen ka-ni?
go-PST-QUE if-not go-QUE
'(Did you) sleep or not sleep?'

# Type III

- The lexicalized negative expression *mal* 'not' in Types III of POL-ALT-QS.

(31) a. cip-ey *(kal-kka) mal-kka?
home-at go-QUE not-QUE
'Shall we go home or not?

b. cip-ey *(kal-lay) mal-lay
home-to go-SUG not-SUG
'Will we go home or not?'

- Note that the first verb in Type I and II is optional

(32) Mimi-nun (ca-ni) an ca-ni?
Mimi-TOP sleep-QUE not sleep-QUE
'Is Mimi (sleeping or) not sleeping?'

(33) ton-i (iss-ni) eps-ni?
money-NOM exist-QUE not.exist-QUE
'Do you (have money or) no money?'

# Morpho-syntactic constraints: complex predicate

- The repeated unit can be a complex predicate; Different from Chinese, Korean does not allow the auxiliary verb alone to be repeated

(34) a. ne-nun ka-ko siph-e an ka-ko
you-TOP go-CONN would.like-QUE not go-CONN
siph-e
would.like-QUE
'Do want to go or not go?'

b. *ne-nun ka-ko siph-e an o-ko
you-TOP go-CONN would.like-QUE not come-CONN
siph-e?
would.like-QUE
'Do want to go or not come?'

# Morpho-syntactic constraints: ordering

- In POL-ALT-Q, the ordering of the two disjunction is fixed: Positive V + Neg-V. Following Kim (2016), we take *an* as a prefix.

(35) a. ku chayk-ul [sa-ss-ni] [an sa-ss-ni]?
the book-ACC buy-PST-QUE not buy-PST-QUE
'Did you buy the book or not buy the book?'

b. *ku chayk-ul [an sa-ss-ni] [sa-ss-ni]?
the book-ACC not buy-PST-QUE buy-PST-QUE
'(int.) Didn't you buy the book or buy the book?'

- In true ALT-Q, the ordering is rather free

(36) ku chayk-ul an sa-ss-ni animyen sa-ss-ni ?
the book-ACC not buy-PST-QUE if-not buy-PST-QUE
'Didn't you buy the book or did you buy the book?'

# Indirect questions

- Typical embedded examples with *wonder* and *doubt*

(37) a. mimi-ka hankwuk-ulo ka-lci kwungkumha-ta
Mimi-NOM Korea-to go-whether wonder-DECL
'I wonder if Mimi will go to Korea.'

b. mimi-ka hankwuk-ulo ka-lci uysimsulep-ta
Mimi-NOM Korea-to go-whether doubt-DECL
'Mimi doubt if Mimi will go to Korea.'

# Indirect questions with POL-ALT-QS

- POL-ALT-QS can be embedded, but not as the complement of *doubt* which selects for a single proposition. This is what we can observe in English too. This again indicates that the mono-clausal properties of the construction.

(38) a. [mimi-ka hankwuk-ulo ka-lci an kal-ci]
Mimi-NOM Korea-to go-whether not go-whether
kwungkumha-ta
wonder-DECL
'I wonder whether Mimi will go to Korea or not.'

b. *[mimi-ka hankwuk-ulo ka-lci an kal-ci]
Mimi-NOM Korea-to go-whether not go-whether
uysimsulep-ta
doubt-DECL
'*Mimi doubt whether Mimi will go to Korea or not.'

# Wh-questions in general

- *wh*-expression in the matrix and embedded clause

(39) a. nwu-ka sewul-lo ka-ss-e?
who-NOM Seoul-to go-PST-QUE
'Who went to Seoul?'

b. nwu-ka o-nunci kwungkumha-ta.
who-NOM come-whether wonder-DECL
'I wonder who comes'

# Asymmetry of POL-ALT-QS in the matrix and embedded

- POL-ALT-QS are not possible to have a variable *wh*-expression, but it is fine to have a POL-ALT-Q in the indirect question (Ceong 2011)

(40) a. *nwu-ka sewul-lo ka-ss-e an ka-ss-e?
Mimi-NOM Seoul-to go-PST-QUE not go-PST-QUE
'Who went to Seoul or not?'

b. nwu-ka o-nunci an o-nunci
who-NOM come-whether not come-whether
kwungkumha-ta.
wonder-DECL
'I wonder who will come or who will not come.'

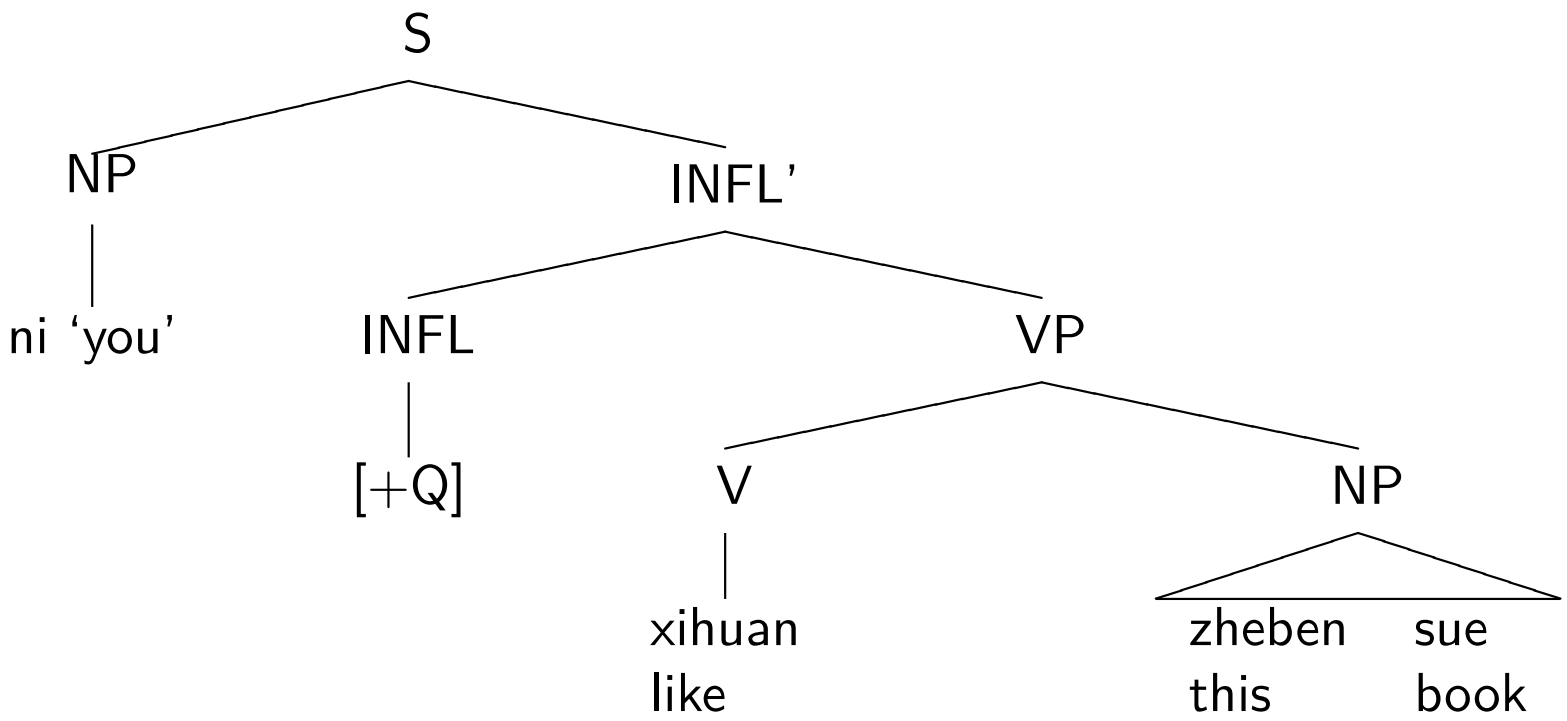
# Huang's (1990) analysis for Chinese A-or-A Qs

- regarded POL-ALT-QS as a type of yes-no questions since they are similar to yes-no questions to a large extent. (Cf. Huang 1982, Ernst 1994, McCawley 1994 and Matthews & Yip 1994)
- Huang (1990) departs from the traditional views and claims that A-not-A questions belong to the same question type as wh-questions based on the observation that A-not-A questions show similar syntactic behaviours to wh-questions rather than disjunctive questions.
- Aoun and Li (1993), Wu (1999): against the LF movement approach and allows base-generation

# Huang's for Chinese

Huang (1990/2010): Infl has an interrogative ([+Q]) INFL constituent that is phonetically realised by a reduplication rule which copies a sequence immediately following INFL and inserting the negative morpheme *bu* 'not' between the original and the copy. (You [+Q] like music)

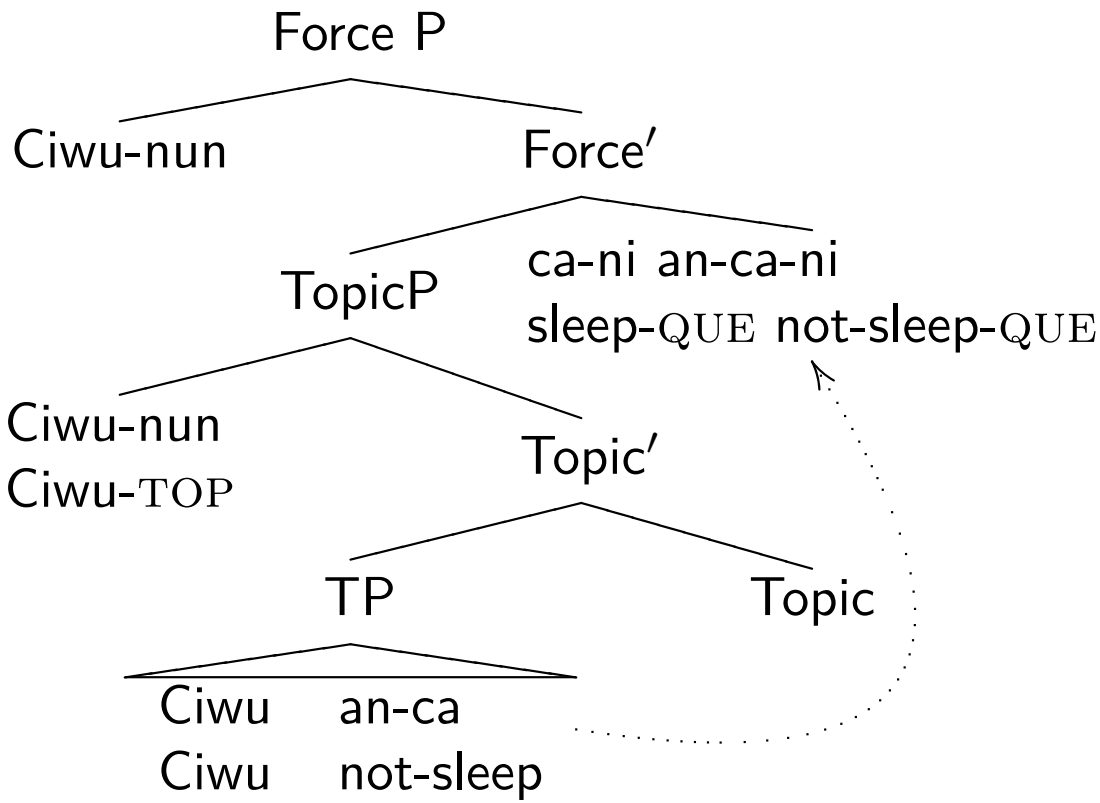
(41)



# Ceong's (2011) MP approach for Korean

- The verb *ca* 'sleep' Merges with *an* 'not', forming *an ca* 'not sleep'. The vP *an ca* 'not sleep' then moves into a local configuration with Force [POLARITY ALTERNATIVE], but the original and moved copies of the verb are both pronounced yielding the following:

(42)



# Larson's (1985) movement account

- *whether/Q..or* questions involves the same kind of ellipsis in *either...or*
- A non-wh-question has a question operator: *whether* or null *Q*. This operator originates from a disjunction phrase and moves to [Spec, CP], marking the scope of disjunction.

(43) a. (Q/whether)$_i$ Did John eat [$\varepsilon_i$ beans or rice]?
b. (Q/whether) [did John eat beans] or [did John eat rice]?

- supporting for movement: non-wh-questions that have a disjunction phrase inside an island do not have the alt-question reading available.

(44) Do you believe the claim that Bill resigned or retired? (only yn-reading)

# Han and Romero (2002, 2004): movement and ellipsis

- A non-wh-question containing a disjunctive phrase (NP) can have a yn-question reading only: there is no movement in the disjunction

(45) khephi-na cha-lul masi-keyss-eyo?
coffee-or tea-ACC drink-FUT-QUE
'Will you drink coffee or tea?' (only yes-no reading)

- an NP disjunction has no alt-reading: alt-questions must disjoin full clauses:

(46) mimi-lul cohaha-kena salangha-ni?
Mimi-ACC like-or love-QUE
'Do you like or love Mimi?' (only yes-no reading)

# Han and Romero (2002, 2004)

- Clausal disjunction: the accusative marking indicates clausal properties.

(47) khephi-lul ppali, animyeon cha-lul ppali
coffee-ACC quickly if-not tea-ACC quickly
masi-ess-ni?
drink-PST-QUE
'Did you drink coffee quickly or ~~d~~rink tea quickly?'

- There is an overt movement of *whehter/Q* and a deletion when the surface string of the disjunction is sub-clausal.

# Key issues in such derivational analyses

- As seen in Type II and III POL-ALT-QS, the morpho-syntactic identity for deletion (lexeme in Chinese and word in Korean) is overridden when the lexical verb A has its lexical negative verb or a lexicalized negative verb *mal-* 'not':

(48) a. *tap a-ni an a-ni?
answer know-QUE not know-QUE
'(Do you) know the answer or not?'

b. tap a-ni molu-ni?
answer know-QUE not.know-QUE

- The *malkka* in Type III does not have a corresponding clause source:

(49) a. wuli cip-ey kal-kka mal-kka?
we home-at go-QUE not-QUE
'Shall we go home or not?

b. *wuli cip-ey mal-kka?
we home-at not-QUE

# Key issues in such derivational analyses

- Type I is also different from true clausal disjunctions with *animyen*
- POL-ALT-QS cannot be used in inference context (e.g., #*Is it raining or not raining?*). Such a difference seems to have to do with the difference in presupposition.
- Ample evidence indicates that we cannot simply derive POL-ALT-QS by deletion operations or form identity conditions at syntax

# Constructionist Approaches

- 'Constructions' are the basic units of language and central to all linguistic descriptions and theories of languages.
- Definition of grammatical 'constructions' (Goldberg 2006: 5)

*Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency.*

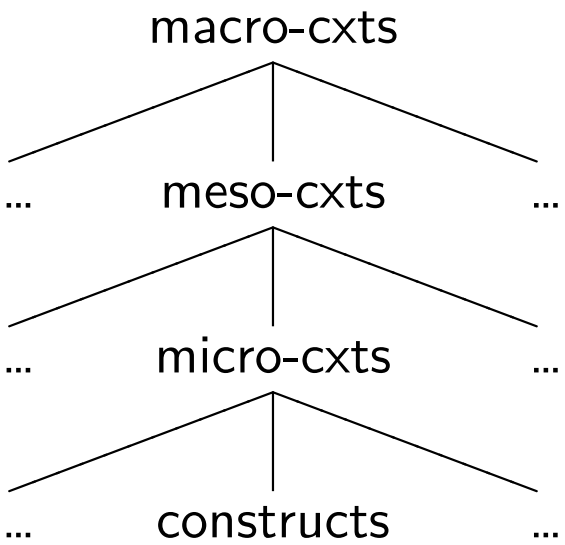
# Main features of Construction Grammar

- The main features of CxG can be summarized as follows (Goldberg 1995, 2003, 2006, Croft 2005, Fried 2009, Sag 2012, Michaelis 2013, Sag 2012, Hilpert 2014, and Kim 2016):
  - All levels of description (including morpheme, word, phrase, and clause) are understood to involve pairings of form with semantic or discourse functions.
  - Constructions vary in size and complexity, and form and function are specified if not readily transparent.
  - Language-specific generalizations across constructions are captured via inheritance networks, reflecting commonalities or differences among constructions.

# Inheritance network of constructions

- The constructions identified in each language are related to each other through inheritance hierarchies in which sub-constructions can inherit constructional properties from their super-constructions (see Goldberg 1995, 2005, Ginzburg and Sag 2000, Sag 2012, Traugott and Trousdale 2013, Hilpert 2013, Kim 2016, 2021).
- Hierarchical construction schema (Traugott 2007, Traugott and Trousdale 2013)

(50)



# Crosslinguistic Coordination Types

- Crosslinguistic classification of the coordination patterns by Drellishak and Bender (2005):

(51) a. Mono-conjunction (monosyndeton):
A B conj C

b. Zero-conjunction (asyndeton):
A B C

c. Poly-conjunction (polysyndeton: n-1 conjunctions):
A conj B conj C

d. Omni-conjunction (omnisyndeton: n conjunctions)
A conj B conj C conj

# Korean: employs all these four types

- Sejong Treebank Corpus consisting of 378,689 words (33,953 sentences). We identified total 6,345 instances of nominal coordination within which we identified all these four types.

| Patterns | Freq. | Patterns | Freq. |
|---|---|---|---|
| A(-)and B (mono) | 3,201 | A B(-)and, C (mono) | 167 |
| A(-)or B (mono) | 860 | A(-)and B(-)and C (poly) | 70 |
| A, B (asyndeton) | 508 | A-and B, C (mono) | 27 |
| A, B, C (asyndeton) | 534 | A(-)and B(-)and (omni) | 11 |

Table 1: Frequencies of Coordination Types in Sejong Corpus

# Asyndeton Coordinations

- Asyndeton is interpreted as conjunctive coordination:

(52) haksayng, hakpwumo, kyosa-tul-i chamsekhayessta
student parent teacher-PL-NOM attended
'Students, parents, and teachers attended.'

- True disjunctive ones are introduced with a disjunctive marker or adverbial:

(53) a. pelley-ey [mwulli-kena sso-yess-ta]
insect-DAT bite-or stung
'(He) was bitten and/or stung by an insect.'

b. hyencay-(wa) kuliko/ttonun/animyen milay-lul
present-and and/or/if-not future-ACC
sayngkakhay poca.
think let
'Let's think about the present and future!'

# Coordination construction

- Coordinations are independent constructions with either ternary or binary structures:

(54) Coordination Construction:

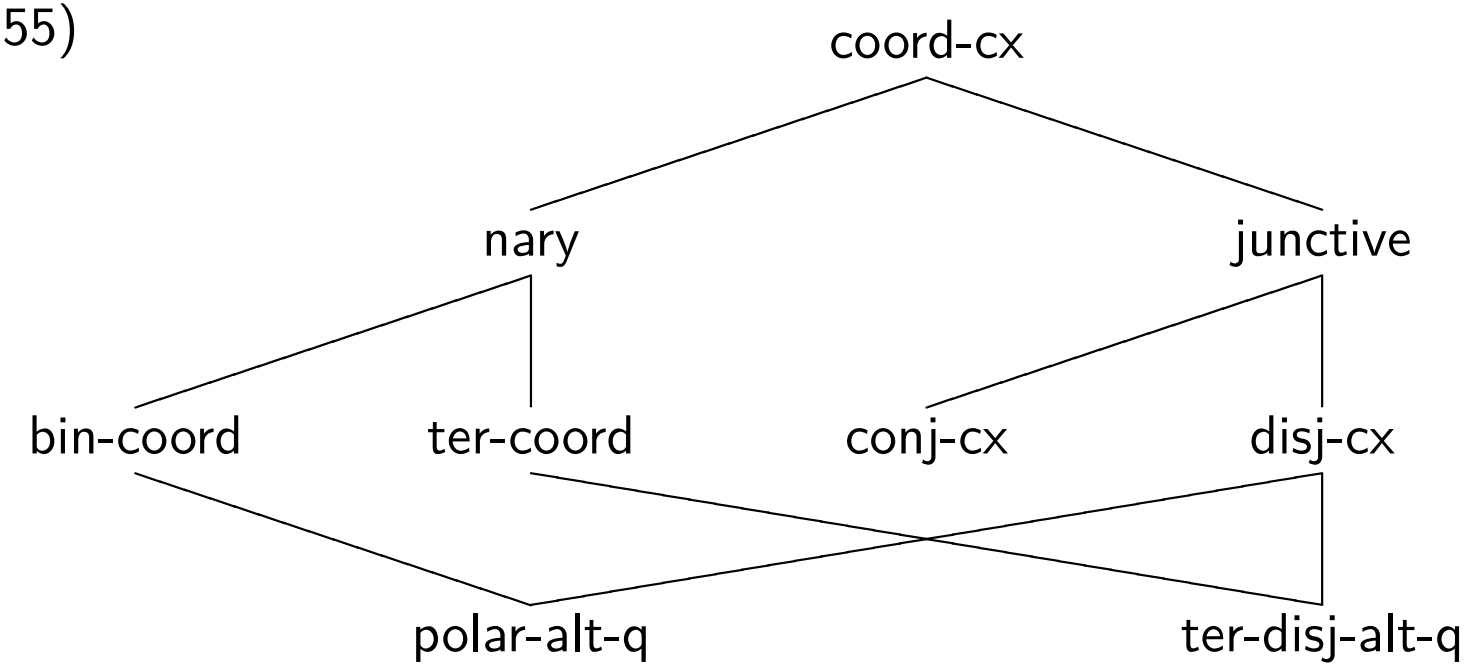
$$\text{XP}\left[\textit{coord-cxt}\right] \rightarrow \text{XP}\begin{bmatrix}\text{POS } \boxed{1}\\ \text{VAL } \boxed{2}\end{bmatrix}, \left(\left[\text{POS } \textit{conj}\right]\right), \textbf{(H)}\text{XP}\begin{bmatrix}\text{COORD } \textit{none}\\ \text{POS } \boxed{1}\\ \text{VAL } \boxed{2}\end{bmatrix}$$

- Two identical XPs can be conjoined when they share POS and VAL values, while the last conjunct serves as the syntactic head.

# Conjunctive and Disjunctive Coordination in the network

- Network for Coordination-cxts

(55)




- Note that the POL-ALT-Q is a subtype of the BINARY-COORDINATION (*bin-coord*) and DISJUNCTIVE COORINDATION (*dis-cx*).

# Constructional constraints

- Polar-Alt Question Construction (to be revised):

(56)

$$\text{XP}\begin{bmatrix}\textit{pol-aq-cxt}\\ \text{SEM } \textit{or\_rel}\end{bmatrix} \rightarrow \text{V}\begin{bmatrix}\text{SYN} \mid \text{HEAD} & \boxed{1}\begin{bmatrix}\text{TENSE } \ldots\\ \text{ASPECT } \ldots\\ \text{MOOD}\ldots\end{bmatrix}\\ \text{SEM } p\end{bmatrix}, \textbf{(H)}\text{V}\begin{bmatrix}\text{SYN} \mid \text{HEAD} & \boxed{1}\\ \text{SEM } \neg p\end{bmatrix}$$

- The constructional constraints indicate that the two Vs have the identical syntactic information including the TAM (tense, aspect, and mood) information. There is no lexeme identity to cover Type I as well as Type II and Type III, but the two V need to evoke the identiical semantic proposition *p*.

# Meaning composition in ALT-QS and POL-ALT-QS

- ALT-QS provide a list of alternatives currently in the QUD but presuppose that no other alternatives are salient, while polar questions presuppose other salient alternatives (Beizma and Rawlins 2012)
- POL-ALT-QS are syntactically asyndeton with no coordination marking at all, but offer a choice between an affirmative predicate and its negative counterpart (see the asyndeton example in (52) which induces only a coordination reading).

# Structured Discourse and QUD

- Discourse is structured around (potentially implicit) Questions Under Discussion (QUD) (Roberts 1996, Ginzburg 1994, 1996, Ginzburg and Sag 2000, among others)
- Key ideas of QUD:
  - Overt questions introduce a QUD.
  - Assertions are always addressing some QUD.
  - Hearers can infer covert QUD(s).
  - There can be multiple QUDs.

# Structured discourse: DGB and QUD

- Dialogue Game Board (DGB) where the contextual parameters are anchored and where there is a record of who said what to whom, and what/who they were referring to (see Ginzburg 1996, 2012, Ginzburg and Fernandex 2010).
- DGB monitors which questions are under discussion, what answers have been provided by whom, etc. The conversational events are tracked by various conversational 'moves' that have specific preconditions and effects.
- As part of contextual information, would have at least the two attributes, SAL-UTT (salient-utterance) and MAX-QUD (maximal-question-under-discussion)

# *wh*-question with DGB information

(57)

$$\begin{bmatrix} \textsc{form} & \langle \text{ Who did Mimi meet? } \rangle \\ \textsc{syn} & \text{S} \\ \textsc{sem} & \lambda\{\pi^i\}[\text{meet}(m,\ i)] \\ \textsc{dgb} & \begin{bmatrix} \textsc{max-qud} & \lambda\{\pi^i\}[\text{meet}(m,\ i)] \\ \textsc{sal-utt} & \left\{ \begin{bmatrix} \textsc{syn} & \text{NP} \\ \textsc{sem} & \pi^i \end{bmatrix} \right\} \end{bmatrix} \end{bmatrix}$$

# Polar-question with DGB information

(58)

$$\begin{bmatrix} \textsc{form} & \langle \text{ Did Mimi meet Nana? } \rangle \\ \textsc{syn} & \text{S} \\ \textsc{sem} & \lambda\{\quad\}[\text{meet}(m,\ n)] \\ \textsc{dgb} & \left[\textsc{max-qud}\left\{\lambda\{\quad\}[\text{meet}(m,\ n)]\right\}\right] \end{bmatrix}$$

# Discourse Constraint in the POL-ALT-Q Construction

- POL-ALT-QS (A-not-A) evoke the MAX-QUD with a positive proposition ($p$) and its negative one ($\neg p$).
- Polar-Alt Question Construction:

(59)

$$\text{XP}\left[\begin{array}{l}\textit{pol-aq-cxt}\\ \text{SEM } \textit{or\_rel}\\ \text{MAX-QUD } \{\text{p}, \neg p\}\end{array}\right] \rightarrow \text{V}\left[\begin{array}{l}\text{SYN} \mid \text{HEAD}\boxed{1}\left[\begin{array}{l}\text{TENSE...}\\ \text{ASPECT ...}\\ \text{MOOD...}\end{array}\right]\\ \text{SEM } p\end{array}\right], \textbf{(H)}\text{V}\left[\begin{array}{l}\text{SYN} \mid \text{HEAD}\boxed{1}\\ \text{SEM } \neg p\end{array}\right]$$

# DGB for a POL-ALT-Q example

- Repeated example

(60) Mimi-nun ca-ni an ca-ni?
Mimi-TOP sleep-QUE not sleep-QUE
'Is Mimi sleeping or not sleeping?'

- DGB information

(61)
$$\begin{bmatrix} \textsc{form} & \langle \text{Mimi-nun ca-ni an ca-ni} \rangle \\ \textsc{syn} & \text{S} \\ \textsc{sem} & p \text{ or } \neg p \\ \textsc{dgb} & \left[ \textsc{max-qud} \left\{ \lambda\{\quad\}[\text{sleep}(m)],\ \lambda\{\quad\}[\neg\text{sleep}(m)] \right\} \right] \end{bmatrix}$$

# Responses to POL-ALT-QS (A-not-A)

- The construction POL-ALT-Q introduces discourse constraints: the maximal question-under-discussion (QUD) information does not presuppose other alternative QUDs. The proper response needs to pick one of the these two propositions.

# Responses to ALT-QS and POL-ALT-QS

- Responses to the ALT-QS can be linked to one of the two propositions evoked by the MAX-QUD, corresponding to the disjuncts that make up the utterance.

(62) Q: khephi-lul animyen cha-lul masi-keyss-e?
coffee-ACC (if)-not tea-ACC drink-FUT-QUE
'Will you drink coffee or (if not) tea?'
A: khe-phi/cha. 'coffee/tea!'

- Note that a less compliant answer is also possible:

(63) A: amwukes-to an masil-la-y
anything-also not drink-FUT-DECL
'(I) will not drink anything.'
A: twul ta 'both all.'

# Responses to POL-ALT-QS(A-not-A)

- In many cases, responses to POL-ALT-QS do not involve the possibility of *both/neither* responses.

(64) Q: phathi-ey ka-a an ka-a?
party-to go-QUE not go-QUE?
'Are you going to the party or not?
A: ka/an ka. 'Go/Not go'
A: #ka-ki-to ha-ko an ka-ki-to ha-ko
go-NMLZ-also do-and not go-NMLZ-also do-and
'both go and not go'

- Note that POL-ALT-QS can even have *neither/both* responses too in some contexts:

(65) Q: i chayk ilk-ess-e an ilk-ess-e?
this book read-PST-QUE not read-PST-QUE
'Did you read this book or not?'
A: ilk-un kes-to ani-ko an ilk-un kes-to aniya.
read-PNE thing-also not-and not read-PNE thing-also not-DECL
'(lit.) neither read it nor not read it'

# Responses to POL-ALT-QS(A-not-A)

- ALT-QS including POL-ALT-QS appear to present a complete (exhaustive) list of alternatives for the answerer to choose from, responses that go outside of this alternative set pattern with presupposition denials, rather than answers per se. (Beizma and Kyle Rawlins 2012)
- The responses are heavily dependent on the context. (Polar) Alternative questions and polar questions have different uses in discourse; in particular, different from polar questions, alternative questions express exhaustivity.
- Considering the role of discourse, the MAX-QUD approach seems to be more viable one.

# Capturing the differences from true ALT-QS

- Binary ALT-QS: no alternative reading. This is because such a phrasal binary coordination with a disjunctive marking 'constructionally' does evoke only one proposotional MAX-QUD:

(66) mimi-lul cohaha-kena salangha-ni?
Mimi-ACC like-or love-QUE
'Do you like or love Mimi?' (only yes-no reading)

- Ternary ALT-QS: clausal disjunction and alternative readings. This is because each of the conjunct in the *ter-disj-alt-q* 'constructionally' DOES evoke its own proposotional MAX-QUD.

(67) Q: khephi-lul animyen cha-lul masi-keyss-e?
coffee-ACC (if)-not tea-ACC drink-FUT-QUE
'Will you drink coffee or (if not) tea?'
A: khe-phi/cha. 'coffee/tea!'

# Accounting for the asymmetry of POL-ALT-QS in main and embedded clause

- POL-ALT-QS are possible in the embedded clause

(68) a. *nwu-ka sewul-lo ka-ss-e an ka-ss-e?
Mimi-NOM Seoul-to go-PST-QUE not go-PST-QUE
'Who went to Seoul or not?'

b. nwu-ka o-nunci an o-nunci
who-NOM come-whether not come-whether
kwungkumha-ta.
wonder-DECL
'I wonder who will come or who will not come.'

- Polar-Qs and Wh-Qs have different illocutionary forces evoked by the sentential mood marking, not bu the complementizer like *nunci*. There can be only one illocutionary force in a given sentence (see Ceong 2011 too).

# Conclusion

- Discussed basic properties of ALT-QS and POL-ALT-QS, and seen that the latter has its own constructional constraints
- POL-ALT-QS share some properties with ALT-QS, while differing from them in several respects
- sketched a discourse-based and construction-based analysis for POL-ALT-QS, which seems to be a more viable direction than movement-deletion analyses

# Selected references


- Beizma, María, and Kyle Rawlins. 2012. Responding to alternative and polar questions. *Linguistics and Philosophy*, 35: 361-406.
- Ceong, Hailey Hyekyeong. 2011. *The Syntax of Korean Polar Alternative Questions: A-not-A*. Master's Thesis. University of Victoria.
- Hamblin, Charles. 1973. Questions in Montague English. *Foundations of Language* 10(1): 41-53.
- Han, Chung-hye, and Maribel Romero. 2004. The syntax of whether/q... or questions: Ellipsis combined with movement. *Natural Language & Linguistic Theory* 22:527–564.
- Hagstrom, P. (2006). A - not - A questions. In M. Everaet & H. Riemsdijk. (eds.), The Blackwell companion to syntax 1 (pp.173-214). Malden, MA: Blackwell.
- Huang, C. T. J (1991). Modularity and Chinese A-not-A questions. In C. Georgopolous & R. Ishihara (eds.), Interdisciplinary Approaches to Language (pp. 305-322). Dordrecht: Kluwer.
- Huang, C. T. J, Li, A., & Li, Y. (2009). The syntax of Chinese. Cambridge: Cambridge University Press.

# Selected references


- Huddleston, Rodney and Geoffrey K. Pullum. 2002. *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press.
- Kim, Jong-Bok. 2017. On the Anaphoric Nature of Particle Responses to the Polar Questions in English and Korean. *Korean Journal of Linguistics*, 42-2: 153-177.
- Kim, Jong-Bok. 2016. *The syntactic structure of Korean: A construction-based perspective*. Cambridge: Cambridge University Press.
- Kim, Jong-Bok, Jaehyung Yang. 2006. Coordination Structures in a Typed Featuer Structure Grammar: Formalization and Implementation. Lecture notes in computer science (2006): 194-205.
- Kim, Jong-Bok and JaeHyeong Yang. 2011. Symmetric and Asymmetric Properties in Korean Verbal Coordination: A Computational Implementation. *Language and Information* 15.2, 1-21.
- Uegaki,Wataru. 2014. Japanese alternative questions are disjunctions of polar questions. In Todd Snider (ed.), Proceedings of Semantics and Linguistic Theory (SALT) 24. Ithaca, NY: CLC Publications.