Between triviality and redundancy: evidence from Korean for the ban of CP conjunction
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OVERVIEW Conjunction of embedded CPs takes wide scope with respect to the embedding verb (Szabolcsi 1997, 2016, Bjorkman 2013, Bassi & Bondarenko 2021). This received two kinds of explanations: (i) complementizers have the meaning of the LIFT type-shifter (Szabolcsi 2016); (ii) true CP conjunction is impossible as it gives rise to deviant meanings, and strings *CP and CP* always involve conjunction reduction (CR), (Bassi & Bondarenko 2021). I provide an argument for the second approach. Korean morphologically distinguishes conjunctions that occur in CR structures, which allows us to observe the ungrammaticality of *CP and CP* strings outside of CR contexts. Thus, it supports the idea that structures that are either trivial or redundant become ungrammatical.

WIDE SCOPE OF CP CONJUNCTION In languages like English conjunction of embedded CPs, unlike TP conjunction, takes wide scope with respect to the embedding verb (Szabolcsi 1997, 2016, Bjorkman 2013, Bassi & Bondarenko 2021): in (1b) both John being drunk surprised Sue and Mary driving surprised Sue, whereas in (1a) Sue could have been surprised just by the combination of the two.

(1) a. It surprised Sue **that** [$_{TP}$ John was drunk] and [$_{TP}$ Mary was driving].   *surprise* > AND
   b. It surprised Sue [$_{CP}$ **that** John was drunk] and [$_{CP}$ **that** Mary was driving]. AND > *surprised*

Szabolcsi (1997, 2016) proposed that complementizers denote the type-shifter LIFT (**COMP-AS-LIFT theory**), (2a), and thus the CP conjunction takes the verbal meaning as its argument, leading to the wide scope of conjunction (2b). Bassi & Bondarenko (2021) proposed that the wide scope of conjunction is due to CR (**CR theory**), (3c), and true CP conjunction is banned due to being semantically deviant. If embedded CPs denote properties of particulars that have propositional content (Kratzer 2006), and their content *equals* the embedded proposition (Moulton 2009, Elliott 2017), (3a), then conjoining two CPs intersectively would give rise to a predicate that is never true of any entity: since CONT is a function, it cannot return two different propositions when applied to the same particular, (3b). Thus, the sentence will be L-analytic and ungrammatical (Gajewski 2002, a.o.).

(2) **COMP as LIFT (Szabolcsi 1997, 2016)**

   a. $[\![\text{that}]\!]^s = \lambda p_{st}.\lambda V_{st,t}.V(p)$
   b. $[\![[_{CP}\ \textbf{that}\ \text{John was drunk}]\text{ and }[_{CP}\ \textbf{that}\ \text{Mary was driving}]]\!]^s =$
       $\lambda V_{st,t}.\ V(\lambda s'.\ \text{John was drunk in s'}) \wedge V(\lambda s'.\ \text{Mary was driving in s'})$ AND > *verb*

(3) **CR theory: *[CP ∧ CP] is L-analytic — always false (Bassi & Bondarenko 2021)**

   a. $[\![\text{that}]\!]^s = \lambda p_{st}.\lambda e.\text{CONT}(e) = p$
   b. $[\![[_{CP}\ \textbf{that}\ \text{John was drunk}]\text{ and }[_{CP}\ \textbf{that}\ \text{Mary was driving}]]\!]^s =$
       $\lambda e.\ \text{CONT}(e) = \lambda s'.\ \text{John was drunk in s'} \wedge \text{CONT}(e) = \lambda s'.\ \text{Mary was driving in s'} = \varnothing$
   c. AND>*verb*: It [surprised Sue **that** John was drunk] and [~~surprised S.~~ **that** Mary was driving].

The two theories both successfully account for the wide scope of conjunction in English, but make different cross-linguistic predictions: the CR theory expects the grammaticality of *CP and CP* strings to depend on availability of CR, whereas the COMP-AS-LIFT theory expects no such dependency.

CONJUNCTION OF CPs THAT COMBINE WITH NOUNS: I test the predictions of the two theories by studying conjunction of Korean clauses with the adnominal marker *-nun/-(u)n* that combine with nouns. CPs that combine with nouns like *cwucang* 'claim' (content nouns, Cont-NPs) must have tense and declarative markers, which I assume to occupy T and Cont(ent) heads, where Cont is the head introducing the CONT function, (5). CPs that combine with nouns like *sanghwang* 'situation' (situation nouns, Sit-NPs), (6), lack T and Cont, and have only the C head, which hosts *-nun/-(u)n*

and introduces the exemplification relation (Kratzer 1989, see Bondarenko 2022 for arguments).

(4) Swunaka norayha-**yess-ta**-**nun** cwucangi
    Swuna   sing-**PST**-**DECL**-**ADN** claim
          V   -**T** -**CONT**-**C**
    'the claim that Swuna sang'

(6) [Swunaka norayha-**n**] sanghwangi
    Swuna   sing-**ADN** situation
         V   -**C**
    'the situation that Swuna sang'

(5) $[\![\text{CONT}]\!]^s = \lambda p_{st}.\lambda e.\ \text{CONT}(e) = p$

(7) $[\![\text{C}]\!]^s = \lambda p.\lambda x.\ x$ exemplifies p

Korean uses two different conjunctions depending on whether CR is present: *kuliko*, (8) and *ko*, (9).

(8) ***CR conjunction: kuliko***
    [Maryka sakwalul ~~mek~~] **kuliko**/*ko
    Mary   apple   AND
    [Swunaka pananalul mek]essta.
    Swuna   banana ate
    'Mary ~~ate~~ an apple and Swuna ate a banana.'

(9) ***Non-CR conjunction: ko***
    [Maryka sakwalul mek]-**ko**/*kuliko
    Mary   apple   eat- AND
    [Swunaka pananalul mek]essta.
    Swuna   banana ate
    'Mary ate an apple and Swuna ate a banana.'

RESULTS: The possibility of conjoining different constituents is summarized in (10). *Ko* can conjoin embedded VPs and TPs, but not ContPs or CPs. *Kuliko* can only occur in strings like *CP AND CP*.

(10)

	VP	TP	ContP	CP
ko	OK	OK	*	*
kuliko	*	*	*	OK

(data on TP and ContP are for Cont-CPs only)

> **Generalization:** conjunction that cannot occur in CR structures (*-ko*) cannot conjoin ContPs, (11), and CPs; conjunction that occurs only in CR structures (*kuliko*) can surface in *CP AND CP* strings.

These data favor the CR theory over the COMP-AS-LIFT theory, as only the former predicts that we should see ungrammaticality of *CP and CP strings* once the possibility of CR is removed. The inability of *kuliko* to occur between two ContPs, TPs or VPs can be attributed to the constraints on CR. The strings *CP kuliko CP* can only receive the wide scope reading, (12), as is expected for CR.

(11) *[S.-ka norayha-**yess-ta**]-**ko** /**kuliko** [H.-ka chwumchwu-**ess-ta**]-nun cwucang
    Swuna sing-**PST-DECL**   AND   Hani dance-**PST-DECL**-ADN   claim
    Intended: 'claim that Swuna sang and (that) Hani danced'

(12) Na-nun [wuli-uy hwupo-ka   ton.seythak-ul   ha-yess-ta-nun] **kuliko** [khun
    I-TOP   we-GEN candidate-NOM money.laundering-ACC do-PST-DECL-ADN **CONJ** big
    hoysa-lul   soyuha-yess-ta-nun] cwucang-i silh-ta.   ✓*and > dislike*, ✗*dislike > and*
    compamy-ACC own-PST-DECL-ADN claim-NOM dislike-DECL
    'I dislike the claim that our candidate did money laundering and that she owned a big company.'

The ban on CP conjunction with Sit-NPs is due to C contributing the exemplification relation: e.g., no entity can be both a minimal situation of Swuna singing and a minimal situation of Hani dancing.

(13) $[\![[_{CP}$ Swuna sang] and $[_{CP}$ Hani danced] situation$]\!]^s = \lambda x.$ situation$(x)_s \wedge x$ exemplifies
    {s': Swuna sang in s'} $\wedge$ x exemplifies {s': Hani danced in s'} $= \varnothing$

BAN ON REDUNDANCY: There is one case in which CP and ContP conjunctions are not trivially false: when the embedded propositions in the conjoined clauses are identical, (14). I propose that the CR theory needs to be supplemented with a principle that bans redundancy in *local contexts* (Schlenker 2009, 2010, Mandelkern & Romoli 2018) in order to account for the fact that such sentences are still ungrammatical (e.g. *[that Mary came] and [that Mary came]*). Thus, the ban on CP conjunction arises because the meanings of such structures are always deviant: either trivially false or redundant.

(14) ***Redundant (∀ p):*** $\lambda x.$ x exemplifies p $\wedge$ x exemplifies p; $\lambda x.$ CONT(x)=p $\wedge$ CONT(x)=p