

Raising and Major Arguments

James Hye Suk Yoon

Department of Linguistics, University of Illinois, Urbana-Champaign

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Major Foci of the Talk:

- Properties of SOR in Korean (Japanese) – Raising or not?
- The Major Subject raises in the Subject-to-Object Raising construction
- Movement vs. Base-generation analysis

1. The Role of the Major Subject in SOR in Korean (and Japanese):

1.1. Does Korean/Japanese Have Subject-to-Object Raising?

1a Cheli-nun Yenghi-**lul**/Yenghi-**ka** yengliha-ta-ko sayngkakha-n-ta
 C-top Y-acc/Y-nom smart-decl-comp think-prs-decl
 ‘Cheli considers Yenghi to be smart.’

1b John believes (that) **he**/***him** is innocent
 vs.
 John believes ***he**/**him** to be innocent

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Question: Is the alternation shown in (1a) analogous to that in (1b)? In other words, is there SOR (or ECM) in Korean (and Japanese)?

Davies and Dubinsky (2004, chapter 10):

A number of constructions in different languages previously analyzed as involving SOR do not seem to be raising/ECM constructions, but something else. The Japanese SOR construction might not be a raising/ECM construction either.

Properties that suggest that the construction in (1) may be SOR:

- The raised nominal is Acc-marked.
- The Acc-marked nominal is not an argument of the raising verb.
- SOR is governed.
- The SOR nominal undergoes A-movement in the upstairs clause.
- Non-nominative embedded subjects can undergo raising.

Properties that suggest that the construction in (1) may not be SOR:

- Raising takes place from finite complement clauses.
- Accusative alternates with Nominative on the raised nominal.
- The raised nominal is not restricted to the subject of the embedded clause.
- The raised nominal can be coindexed with a resumptive element and the raised nominal can be associated with a gap inside an island.
- Idiom chunks lose idiomatic interpretation when raised. Raised and non-raised nominals differ interpretively.
- There are apparent cases of multiple raising (in Korean).

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The above properties will be exemplified primarily on the basis of Korean. As is clear, they go significantly beyond those that have been identified in the extant literature.

1.2. Properties Suggesting That (1) Involves SOR:

A. The raised nominal is Acc-marked.

Cf. (1) above

B. The Acc-marked nominal is not an argument of the raising verb. That is the construction is distinct from the Object Control construction.

(i) The first argument showing that SOR is distinct from Object Control is based on the classical test of active-passive synonymy in clauses embedded under raising verbs. Actives and passives appear to be synonymous, though they clearly differ in focus/information structure.

Active-Passive pairs under SOR:

2. Na-nun i cakka-**lul** kwukpokwup cakphwum-ul manhi mantunta-ko
 I-top this artist-acc national.treasure artwork-acc a.lot make-comp
 sayngkakhanta
 think
 =

?Na-nun kwukpokwup cakphwum-**ul** i cakka-eyuyhay manhi mantul-eci-nta-ko
 I-top national.treasure artwork-acc this artist-by a.lot make-pass-decl-comp
 sayngkakhanta
 think

Active-Passive pairs under Object Control:

3. Na-nun...
 I-top
 Yenghi-eykey/lul Cheli-lul pwutcap-ula-ko myenglyeng-ss-ta
 Y-dat/acc C-acc catch-imp-comp order-pst-decl
 =/=
 Cheli-eykey/lul Yenghi-eykey pwutcap-hi-la-ko myenglyenghay-ss-ta
 C-dat/acc Y-dat catch-pass-imp-comp order-pst-decl

(ii) The second argument is based on Tanaka (2002), who in turn follows Kuno (1976): while the clausal complement in Object Control can be clefted and preposed, that in SOR cannot.

- 4 a. *Cheli-ka i chayk-**ul** sayngkakha-nun kes-un...
 C-nom this book-acc think-adnom thing-top
 [e acwu pissata]-nun kes-i-ta
 very expensive-adnom thing-cop-decl
- b. Cheli-ka Yenghi-**eykey/lul** myenglyengha-n kes-un...
 C-nom Y-dat/acc order-adnom thing-top
 [e cip-ey ka-la]-nun kes-i-ess-ta
 home-loc go-imp-adnom thing-cop-pst-decl

- 5 a. *?[e acwu pissata]-ko na-nun i chayk-**ul** sayngkakhanta
 very expensive-comp I-top this book-acc think
- b. [e cip-ey kala]-ko na-nun Cheli-**eykey/lul** myenglyenghayssta
 home-loc go-comp I-top C-dat/acc ordered

Tanaka invokes the **Proper Binding Condition** (PBC). If we assume that the empty category coindexed with a raised subject is a trace, PBC will correctly rule out (4a) and (4b). In contrast, since the empty category is a PRO/pro in Control complements, (5a) and (5b) are well-formed.

(iii) Raising verbs impose no syntactic or semantic selectional restrictions on the raised nominal, unlike Object Control verbs:

- 6 a. Na-nun { **Cheli-lul** papola-ko
 I-top { C-acc fool-comp
 { **Yeki-pwuthe-lul** nay ttang-ila-ko
 { Here-from-acc my territory-cop-comp
 { **LA-lul** pemcoy-ka mahnta-ko
 { LA-acc crime-nom a.lot-comp } } } } mitnunta
 think
- b. Na-nun { **Cheli-eykey/lul** cip-ey ka-tolok } seltukhayssta
 I-top { C-dat/acc home-loc go-comp } persuaded
 { **#chayk-eykey/ul** cal phalli-tolok }
 { book-dat/acc well be.sold-comp }

(iv) Raised NPs cannot occur as the sole complement of raising verbs when the clausal complement is omitted. This contrasts with Object Control verbs which do allow the omission of the clausal complement:

- 7 a. *Na-nun yeki-pwuthe-lul/LA-lul Δ mwulessta/mitnunta
 I-top here-from-acc/LA-acc asked/believe
- b. Na-nun Cheli-eykey/lul Δ seltukhayss-ta/myenglyenghayssta
 I-top C-dat/acc persuaded/ordered

C. SOR is 'governed'.

English SOR/ECM is 'governed' in the following ways:

- Not all clause-embedding verbs allow SOR/ECM.
- Not all complement clauses allow SOR/ECM.

These two properties are cashed out in standard GB theory by assuming that only verbs that c-select **infinitival TP complements** (or **Small Clauses**) can participate in SOR/ECM. And since Heads c-select Complements, SOR/ECM from adjunct or subject clauses is naturally ruled out. Other assumptions conspire to prevent raising out of/ECM into full CP complements.

SOR in Korean/Japanese is governed, but **the nature of 'governedness'** plays itself out differently than in English:

#1. SOR is possible out of finite complement CPs:

Cf. (1) above and data below

Reduced (Small) Clauses also allow SOR in Korean, but we will not be concerned with them.

#2. However, not all verbs which c-select clausal complements allow SOR:

8. Cheli-nun i chayk-**ul** pissa-**ta-ko** (*V-ta/la-ko* complement)
C-top this book-acc expensive-decl-comp

sayngkakha-n-ta/mit-nun-ta
think-prs-decl/believe-prs-decl

? malhay-ss-ta/?tancenghay-ss-ta
say-pst-decl/determine-pst-decl

??solichi-ess-ta/??cwucang-ess-ta
shout-pst-decl/argued-pst-decl

9. Cheli-nun i chayk-**ul**..... (*V-nya-ko* complement)
C-top this book-acc

??kaps-i pissa-**nya-ko** mwul-ess-ta
price-nom expensive-inter-comp ask-pst-decl

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*?micey-i-**nci** kwungkumhayhay-ss-ta/uysimhay-ss-ta
US-made-cop-int wonder-pst-decl/suspect-pst-decl

10. Cheli-nun i chayk-**ul** (*V-nominalized* complement)
C-top this book-acc

*kaps-i pissa-**n** **kes-ul** molu-n-ta
price-nom expensive-adnom fact-acc not.know-prs-decl

*kaps-i pissa-**m-ul** a-n-ta
price-nom expensive-nml-acc know-prs-decl

*?kaps-i ssa-**ki-lul** pala-n-ta
price-nom cheap-nml-acc wish/hope-prs-decl

11. Cheli-nun Yenghi-eykey Tongswu-***lul** sakikkwun-i-**m-ul** allie-cwu-ess-ta
C-top Y-dat T-acc cheater-cop-nml-acc inform-pst-decl

Cheli-nun Yenghi-eykey Tongswu-***lul** sakikkwun-i-**nya-ko** mwul-ess-ta
C-top Y-dat T-acc cheater-cop-Q-comp ask-pst-decl

#3. The embedded predicate is restricted:

SOR is optimal with embedded predicates that are **Individual-level** (vs. **Stage-level**, J-S Lee 1992 claims it is Stativity that is relevant). However, Stage-level intransitives and transitive predicates are

allowed so long as entire embedded clause can be considered ‘**semantically stative**’ or ‘**characterizing**’ with respect to the raised nominal (J-M Yoon 1989; K-S Hong 1997).

Embedded Individual-level intransitives:

12. Cheli-nun tolkolay-**lul** { phoyutongmwul-ila-ko } sayngkakha-n-ta
 C-top dolphin-acc { mammal-cop-decl-comp } think-prs-decl
 { yengliha-ta-ko }
 { smart-prs-decl }

Embedded Stage-level intransitives:

13. Cheli-nun *?tolkolay-**lul** { poin-ta-ko } sayngkakha-n-ta
 { visible-decl-comp } think-prs-decl
 { mwul-eyse ttwie olu-ss-ta-ko }
 { water-from jump come-pst-decl-comp }
- vs.
- Cheli-nun tolkolay-**lul** { cal caphi-n-ta-ko } saynghakha-n-ta
 C-top dolphins-acc { easily be.caught-prs-decl-comp } think-prs-decl
 { salam-kwa cal chinhayci-n-ta-ko }
 { people-with well befriend-prs-decl-comp }

Embedded transitives:

14. Cheli-nun { *?Yenghi-**lul** pap-ul cikum ha-n-ta-ko } sayngkakha-n-ta
 { Y-acc meal-acc now do-prs-decl-comp } think-prs-decl
 { *?Yenghi-**lul** achim-ey hwacang-ul hayssta-ko }
 { Y-acc morning-loc makeup-acc put.on-comp }
- vs.

- Cheli-nun { Yenghi-**lul** pap-ul nul ha-n-ta-ko } sayngkakha-n-ta
 C-top { Y-acc meal-acc always do-pr-decl-comp } think-prs-decl
 { Yenghi-**lul** hangsang hwacang-ul cinhakey }
 { Y-acc always make.up-acc extremely }
 { ha-ko taninta-ko }
 { put.on-comp go.around-comp }

D. The SOR-ed nominal can undergo A-movement in the matrix clause.

Passive:

- 15a. Salamtul-un **Yengswu-lul** han-ttay chencay-la-ko sayngkakhay-ss-ta
 People-top Y-acc once genius-decl-comp think-pst-decl
- b. ?**Yengswu-ka_i** han-ttay (caki chinkwutul-eykey-nun) e_i chencay-la-ko
 Y-nom once self friends-by-top genius-cop-comp
 sayngkak-toy-ess-ess-ta
 think-pass-prf-pst-decl (based on J-M Yoon 1991)
- 16a. Cenmwunkatul-un **i cakphwum-ul** han-ttay mocophwum-ila-ko sayngkakhayss-ess-ta
 experts-top this work-acc once fake-cop-comp think-pst-decl
- b. ?**I cakphwum-un_i** han-ttay (cenmwunkatul-eykey) e_i mocophwum-ila-ko
 this work-top once (experts-dat) fake-cop-comp
 sayngkak-toy-ess-ess-ta
 think-pass-perf-pst-decl

Note:

(15b) cannot be accounted for by assuming that *Yenghi-ka* has scrambled out of the (passivized) embedded clause. The first consideration against this analysis is that subjects don't scramble.

Three other facts support our assumption that the raised nominal has undergone Passive. One, *Yenghi-ka* binds an anaphor in the Agent phrase, indicating that it is in an A (hence, Subject) position. Two, if the entire clause underwent passive, the clause should be nominalized, since sentential subjects are uniformly nominal in Korean. Unless we assume that passive is impersonal (that is, without movement), we cannot explain why the clause is not nominalized. Three, the embedded subject position can be filled by a resumptive element. This should not be possible if *Yenghi-ka* has scrambled out of the clause, since scrambling does not allow resumptive pronouns (Saito 1985).

An adversity passive analysis, such as that proposed for Japanese (Kuno 1976. See Davies and Dubinsky 2004:260ff for discussion), is not viable either, since Korean does not possess adversity passives.

A-scrambling (Tanaka 2002; Bruening 2000, 2001)

- 17a. *?caki sensayngnim-i ku haksayng-ul papo-la-ko sayngkakhanta
 self teacher-nom that student-acc fool-cop-comp thinks
- b. ku haksayng-ul caki sensayngnim-i papo-la-ko sayngkakhanta
 that student-acc self teacher-nom fool-cop-comp thinks

E. Non-nominative embedded Subjects can undergo SOR (yielding Case Stacking).

- 18a. Na-nun Cheli-hanthey-man-**ul** ton-i manhta-ko sayngkakhanta (SOR)
 I-top C-dat-only-acc money-nom a.lot-comp think
 vs.
- b. Na-nun Cheli-hanthey-man-(**i**) ton-i manhta-ko sayngkakhanta (no SOR)
 I-top C-dat-only-(nom) money-nom a.lot-comp think

While the evidence seen thus far is suggestive of the existence of SOR, additional properties of SOR in Korean (and Japanese) seem to suggest otherwise.

1.3. Properties Suggesting That (1) May Not Be SOR:

F. Raising takes place from unreduced, finite, clauses.

Numerous examples

G. Accusative alternates with Nominative on the raised nominal. That is, SOR seems to be optional.

(1) and numerous examples

H. Embedded non-subjects can raise (Yoon 1987; K-S Hong 1991, 1997; J-M Yoon 1991, *inter alia*).

Most commonly raised non-subjects are the initial, Nom-marked NP in different types of **Multiple Nominative Constructions** (MNCs), including ‘scene-setting’ adverbial NPs.

19. First Nom-NP in Inalienable Possession-type MNC:

Na-nun **Cheli-lul** meli-ka coh-ta-ko mit-nun-ta
 N-top C-acc head-nom good-decl-comp believe-prs-decl
 cf.
Cheli-ka meli-ka coh-ta
 C-nom head-nom good-decl

20. First Nom-NP in Focus-type MNC:

Na-nun
 I-top
Cheli-lul kos (ku-ka) tani-nun hoysa-ka mangha-lkes-ila-ko
 C-acc soon (he-nom) work-adnom company-nom go.under-fut-decl-comp
 mit-nun-ta
 believe-prs-decl
 cf.
Cheli-ka kos (ku-ka) tani-nun hoysa-ka mangha-lkes-ita
 C-nom soon he-nom work-adnom company-nom go.under-fut-decl

21. Scene-setting adverbial NPs in MNC:

Na-nun **LA-lul** (mikwuk-eyse) hankwuksalam-i kacang manhi sa-n-ta-ko
 I-top LA-acc US-loc Koreans-nom most many live-prs-decl-comp
 mit-nun-ta
 believe-prs-decl
 cf.
LA-ka mikwuk-eyse hankwuksalam-i kacang manhi sa-n-ta
 LA-nom US-loc Koreans-nom most many live-prs-decl

22. Initial temporal adverbial NP in MNC:

Na-nun **ecy-lul** ol-kyewul tulse kacang nalssi-ka chwuw-ess-ta-ko
 I-top yesterday-acc this-winter among most weather-nom cold-pst-decl-comp
 sayngkakhanta
 think-prs-decl
 cf.
Ecy-ka ol-kyewul tulse nalssi-ka kacang chwuw-ess-ta
 Yesterday-nom this-winter among weather-nom most cold-pst-decl

J-M Yoon (1991) and K-S Hong (1997) claim that even **embedded objects** can be raised. Since Acc-marked objects can be scrambled out of the embedded clause, we need to find embedded dyadic predicates that do not assign Acc-case. If Acc-case is licensed on a fronted object in such clauses, we assume that it was due to SOR.

23. Raised objects

Na-nun **kochungkenmwul-ul** New York-ey ceyil mahnta-ko sayngkakhanta
 I-top skyscraper-acc NY-loc most numerous-comp think

- cf.
 Na-nun New York-ey **kochungkenmwul-i/*ul** ceyil manhta-ko sayngkakhanta
 I-top NY-loc skyscraper-nom/*acc most numerous-comp think

In evaluating these examples, we need to make sure that the **stativity/characteristic property restriction** is maintained. The sentence is acceptable since ‘NY having the largest number of (them)’ could be a characteristic property felicitously predicated of the raised object ‘skyscrapers’.

Additional examples of Object/Complement raising are given below:

- 24a. Na-nun **i sey-kwen-uy chayk-ul** Kim-sensayngnim-kkey-man
 I-top this 3-cl-gen book-acc K-professor-hon.dat-only
 philyoha-(si)-ta-ko sayngkakhanta
 necessary-(sbj.hon)-decl-comp think
- a'. Na-nun K-sensayngnim-kkey-man **i sey-kwen-uy chayk-i/*ul**
 I-top K-teacher-hon.dat-only this 3-cl-gen book-nom/*acc
 philyoha-(si)-ta-ko sayngkakhanta
 necessary-(hon)-decl-comp think
- b. Na-nun **ilen conglyu-uy chayk-ul** kyoswutul-eykey-man
 I-top this kind-gen book-acc professors-dat-only
 philyohata-ko sayngkakhanta
 necessary-comp think

- b'. Na-nun kyoswutul-eykey-man **ilen conglyu-uy chayk-i/*ul**
 I-top professor-dat-only this kind-gen book-nom/*acc
 philoha-(si)-ta-ko sayngkakhanta
 necessary-(hon)-decl-comp think
- c. Na-nun **Swuni-lul** ilen os-i cal ewullinta-ko sayngkakhanta
 I-top S-acc this.kind dress-nom well go.with-comp think
- c'. Ilen os-i **Swuni-eykey/*lul** cal ewullinta
 this.kind dress-nom S-dat/*acc well go.with
 ‘This kind of dress goes well with Swuni.’
- d. Na-nun **Pwukhansan-ul** mwul-i manhi nanta-ko sayngkakhanta
 I-top Mt. Pwukhan-acc water-nom a.lot flow-comp think
- d'. Mwul-i **Pwukhansan-eyse/*ul** manhi nanta
 Water-nom Mt. Pwukhan-loc/*acc a.lot flows

Takano (2003) gives the following example from Japanese showing the raising of an embedded object:

- 25a. John-wa **Mary-o** Bill-ga horeteiru-to omotteiru
 J-top M-acc B-nom is.in.love.with-comp thinks
- b. John-wa Bill-ga **Mary-ni/*o** horeteiru-to omotteiru
 J-top B-nom M-dat/*acc is.in.love.with-comp thinks

I. Raising can relate the raised nominal to a constituent within an island. Raised nominals can bind resumptive pronouns.

- 26a. Na-nun **Yenghi-lul**_i [[e/**kunye-ka** e ha-nun] il]-i
 I-top Y-acc she-nom do-adnom work-nom
 mopemcek-ila-ko sayngkakhanta
 exemplary-cop-comp think
- b. Na-nun **Cheli-lul** hangsang **kunyesek-i** taytanhan malssengkkwuleki-la-ko
 I-top C-acc always the.guy-nom extreme troublemaker-cop-comp
 sayngkakhayssta
 thought

J. Idiom chunks lose idiomatic interpretation under SOR. More generally, raised and non-raised nominals differ in their interpretive properties.

Raised subject idiom chunks strongly tend to lose the idiomatic reading (J-S Lee 1992):

26. Hankwuksalamtul-un
 Koreans-top
 cakun kochwu-**ka** mayp-ta-ko sayngkakha-n-ta → idiomatic, literal
 small pepper-nom hot-decl-comp think-prs-decl
 vs.

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cakun kochwu-**lul** mayp-ta-ko sayngkakha-n-ta → *?idiomatic, literal
 small pepper-acc hot-decl-comp think-prs-decl

Idiomatic reading: ‘short/little men, despite their height, are strong/tough’

27. Na-nun ...
 I-top
 pin swuley-**ka** ceyil yolanha-ta-ko sayngkakha-n-ta → literal, idiomatic
 empty cart-nom most noisy-decl-comp think-prs-decl
 vs.
 pin swuley-**lul** ceyil yolanha-ta-ko ... → literal, *?idiomatic
 empty cart-acc most noisy-decl-comp

Bruening (2000, 2001) reports that his Japanese informants allow idiomatic readings under raising, but my consultants (T. Nakamura, Y. Horikawa, K. Fujioka) gave conflicting judgments on the availability of the idiomatic reading in (28) below:

28. Taroo-wa ...
 T-top
 sono seezika-no kao-**ga** hiroi-to omotta → literal, idiomatic
 that politician-gen face-nom wide-comp thought
 vs.
 sono seezika-no kao-**o** (orokanimo) hiroi-to omotta → literal, ?idiomatic
 that politician-gen face-acc (foolishly) wide-comp thought

Idiomatic sense of X-no kao-ga hiroi = X is well-known

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T. Nakamura and K. Fujioka (p.c.) also report that the idiomatic reading is hard to obtain in the following examples:

29. Hanako-wa ...
 H-top
 Taroo-no atama-**o** kata-sugiru-to omotta → literal, *?idiomatic
 T-gen head-acc hard-exceed-comp thought
 vs.
 Taroo-no atama-**ga** kata-sugiru-to omotta → literal, idiomatic
 T-gen head-nom hard-exceed-comp thought

Idiomatic sense of *X-no atama-ga kata-sugiru* = X is stubborn

30. Hanako-wa ...
 H-top
 Taroo-no kuti-**o** katai-to omotta → literal, *?idiomatic
 T-gen lips-acc hard-comp thought
 vs.
 Taroo-no kuti-**ga** katai-to omotta → literal, idiomatic
 T-gen lips-nom hard-comp thought

Idiomatic sense of *X-no kuti-ga katai* = X can be trusted with words

A possible explanation of the differences in judgments among speakers between (25, 26) and (28-30) may be that the latter are not completely frozen sentential idioms.

In addition to the lack/difficulty of idiomatic readings, raised and non-raised nominals **differ interpretively** in many other ways.

#1. A raised indefinite strongly prefers a specific interpretation, unlike a non-raised one (J-M Yoon 1989):

- 31a. John-un icwung etten salam-**ul** ttoktokhata-ko sayngkakhanta
 J-top among.these some person-acc clever-decl-comp thinks
 # Kulena silcey ku salam-i nwukwuninci moluko iss-ta
 But in.fact that person-nom who.cop.int not.know be-decl
- b. John-un icwung etten salam-**i** ttoktokhata-ko sayngkakhanta
 J-top among.these some person-nom clever-comp thinks
 Kulena silcey ku salam-i nwukwuinci moluko iss-ta
 But in.fact that person-nom who.cop.inter not.know be-decl

#2. The raised nominal can be used in contexts that demand a *de re* reading (O'Grady 1991; J-G Song 1994). A non-raised nominal is not felicitous in the same context.

In (32), the raised nominal can take scope over the matrix predicate yielding a *de re* reading (so that the existence of his wife is true only in the mind of the speaker), while in (33), it takes scope under the matrix predicate (and thus, the existence of his wife is true in the mind of John, yielding a *de se* reading).

32. John-un caki anay-**lul** totwuk-i-la-ko sayngkakhay-ss-ta
 J-top self wife-acc thief-cop-decl-comp think-pst-decl
 Context: John hearing a sound outside his room, not knowing it is his wife
33. John-un caki anay-**ka** totwuk-ila-ko sayngkakhay-ss-ta
 J-top self wife-nom thief-cop-comp think-pst-decl
 → Not felicitous in the same context

#3. Kuno (1976) argues that a raised QP may (marginally) take scope over a matrix QP subject, but an unraised QP cannot:

- 34a. Dareka-ga minna-o bakada-to omotteiru
 someone-nom everyone-acc fool-comp thinks
?everyone > someone, someone > everyone
- b. Dareka-ga minna-ga bakada-to omotteiru
 someone-nom everyone-nom fool-comp thinks
***everyone > someone, someone > everyone**

#4. Raised QPs do not take scope below QPs in the embedded clause (Oka 1988, via Takano 2003):

- 35a. Mary-wa sannin-no gakusei-**ga** subete-no sensei-ni syookais-are-ru
 M-top three-gen student-nom all-gen teacher-to introduce-pass
 bekida-to omotteiru
 should-comp thinks
three > every, every > three

- b. Mary-wa sannin-no gakusei-**o** subete-no sensei-ni syookais-are-ru
 M-top three-gen student-acc all-gen teacher-dat introduce-pass
 bekida-to omotteiru
 should-comp thinks
three > every, *every > three

#5. Reconstruction for variable binding is unavailable for raised subjects.

- 36a. Na-nun caki sensayng-uy chwuchense-**ka** citohaksayngtul-eykey
 I-top self teacher-gen letter-nom advisees-dat
 kakkak kongkay-toy-eyahanta-ko sayngkakhanta
 each release-pass-must-comp thinks
- b. *Na-nun caki sensayng-uy chwuchense-**lul** citohaksayngtul-eykey
 I-top self teacher-gen letter-acc advisees-dat
 kakkak kongkay-toy-eyahanta-ko sayngkakhanta
 each release-pass-must-comp thinks

What #1 - #5 demonstrate is that the raised nominal fails to take scope below embedded clause constituents and can take scope over matrix constituents, unlike non-raised subjects. However, as the availability of *de dicto* reading (contra Takano) in (32a) and (33b) shows, it is not the case that the raised nominal must take the widest possible scope in the matrix clause (that is, scope over the matrix clause predicate).

K. More than one embedded constituent can be marked Acc (in Korean).

When there is multiple raising, all of the Acc-marked constituents are outside the embedded clause. There are conflicting claims about multiple SOR, with some rejecting it (J-M Yoon 1989). However, I think there are acceptable examples:

- 37a. ?Na-nun Cheli-**lul** apeci-**lul** pwuca-la-ko mit-nun-ta
 I-top C-acc father-acc rich-decl-comp believe-prs-decl
- b. ?Na-nun haksayngtul-**ul** seys-**ul** ttoktokha-ta-ko sayngkakha-n-ta
 I-top students-acc three-acc smart-pst-decl think-prs-decl
- c. ?Na-nun ku kwasuwon-**ul** kwail-**ul** phwumcil-i wuswuhata-ko
 I-top that orchard-acc fruit-acc quality-nom excellent-comp
 sayngkakha-n-ta (K-S Hong 1997:426)
 think-prs-decl

Other examples don't sound too good, however:

- 38a. *?Na-nun LA-**lul** mikwuk-eyse hankwuksalam-**ul** ceyil manh-ta-ko
 I-top LA-acc US-loc Koreans-acc most a.lot-decl-comp
 sayngkakha-n-ta
 think-prs-decl
- b. *?Na-nun New York-**ul** kochungkenmwul-**ul** manh-ta-ko sayngkakha-n-ta
 I-top NY-acc skyscraper-acc a.lot-decl-comp think-prs-decl

- c. *?Na-nun Cheli-hanthey-**lul** ton-**ul** manh-ta-ko sayngkakha-n-ta
 I-top C-dat-acc money-acc a.lot-decl-comp think-prs-decl

Taking Stock:

The properties of Korean (and Japanese) SOR discussed in this section (**section 1.3**) appear problematic for the assumption that SOR is involved in (1). Indeed, Davies and Dubinsky (2004, chapter 10) argue against the existence of SOR in **Austronesian** and **Philippine languages** because the putative SOR constructions in these languages exhibit a number of properties discussed in this section.

Before launching the argument that the proper analysis of (1) is still Raising, I will shut down one possible alternative path – that of treating **Subject raising** vs. **Non-subject raising as two distinct constructions**, with only the former being SOR and the latter being something else. This path leads nowhere because with regard to applicable properties, sentences with raised non-subjects behave no differently from those with raised subjects, making this alternative difficult to maintain.

Thus, either both are Raising constructions or neither of them is. Properties of raised non-subjects are illustrated below.

Properties of the raised non-subject:

#1. The raised non-subject may be associated with a gap within an island, or bind a resumptive pronoun.

39. Na-nun **Yenghi-lul**; salamtul-i [[e;**kunye-ka** e ha-nun] il]-ul silhehanta-ko
 I-top Y-acc people-nom she-nom do-adnom work-nom hate-comp
 sayngkakhanta
 think

#2. Idiomatic readings are lost with raised non-subjects:

40. (Na-nun yeca-ka han-ul phwum-umyen)
 I-top woman-nom vengeance-acc harbor-if
 onyuwel-**ul/ey-l** seli-ka nayli-n-ta-ko sayngkakha-n-ta
 May.June-acc/loc-acc frost-nom come-prs-decl-comp think-prs-decl
 cf.
 onyuwel-ey/-?i seli-ka nayli-n-ta-ko sayngkakha-n-ta
 May.June-loc frost-nom come-prs-decl-comp think

#3. A-movement into the matrix clause is possible for raised non-subjects: (J-M Yoon 1991)

49. ?I chayk-i_i olaytongan (salamtul-eykey) t_i [Hemingway-ka e_i ssu-ess-ta-ko]
 This book-nom long.time people-dat H-nom write-pst-decl-comp
 sayngkak-toy-ess-ess-ta
 think-pass-pst-perf-decl

#4. Non-nominative non-subjects can raise:

- 50a. ?Na-nun LA-**ey-(lu)l** hankwuksalam-i manh-ta-ko sayngkakhanta
 I-top LA-loc-acc Koreans-nom a.lot-decl-comp think
- b. ?Na-nun New York-**ey-(lu)l** kochungkenmwul-i manh-ta-ko sayngkakhanta
 I-top NY-loc-acc skyscrapers-nom a.lot-decl-comp think
- c. ?Na-nun Kim-taythonglyeng-**eykey-man-ul** atultul-i mwuncey-ka manh-ta-ko
 I-top K-present-dat-only-acc sons-nom problem-nom a.lot-comp
 sayngkakhay-ss-ess-ta
 think-perf-pst-decl

#5. Scope and other interpretive properties of raised non-subjects are similar to raised subjects:

- 51a. Na-nun sey-kwen-uy chayk-**ul** enu haksayngtul-eykey-na
 I-top 3-cl-gen book-acc which students-dat-ever
 philyoha-ta-ko sayngkakhanta
 necessary-decl-comp think
three > every, *?every > three
- b. Na-nun enu haksayngtul-eykey-na sey-kwen-uy chayk-**i**
 I-top which students-dat-ever 3-cl-gen book-nom
 philyoha-ta-ko sayngkakhanta
 necessary-decl-comp think
?three > every, every > three

- c. Na-nun sey-kwen-uy chayk-i enu haksayngtul-eykey-na
 I-top 3-cl-gen book-nom which students-dat-ever
 philyoha-ta-ko sayngkakhanta
 necessary-decl-comp think
three > every, ?every > three

2. The Proposal

Because of their inherent theoretical interest, numerous researchers have investigated the SOR construction in Korean/Japanese within the generative tradition.

Representative proposals for Korean:

J-M Yoon (1989, 1991); K-S Hong (1990, 1997); J-S Lee (1992); K-H Lee (1997)

Representative recent works on Japanese:

Bruening (2001a,b), Hiraiwa (2002) and Tanaka (2002), and Takano (2003)

However, despite offering valuable insights, many of these proposals fall short of providing a satisfactory account of the properties of SOR we observed in section 1. Often, problematic generalizations are ignored in order to streamline the analysis.

Of the many interesting proposals about Korean SOR to date, I think that the insights offered by J-M Yoon (1989) and K-S Hong (1990, 1997) constitute a significant advance over other proposals. The central observation that they make is the following:

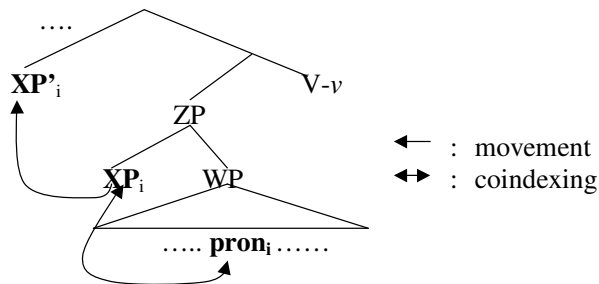
There is a non-accidental correlation between the ability of a nominal to appear as the initial, ‘Major Subject’ of a Multiple Nominative Construction (MNC) and its ability to show up as the raised nominal in SOR.

A benefit of pursuing this line of analysis is that many of the properties that seem to suggest that Korean/Japanese SOR may not be a Raising construction (properties discussed in 1.3) can be naturally accounted for.

The analysis of SOR I propose can be summarized as follows:

- (i) Verbs that govern SOR in Korean select complement clauses with **Major Subject-Sentential Predicate structure** when raising takes place (they need not without SOR).
- (ii) The **Major Subject** of the embedded clause, and **not the Grammatical Subject, undergoes SOR**, an instance of NP/A-movement (J-M Yoon 1989, Yoon 2004a, b).
- (iii) The Major Subject of the embedded clause is (or, can be) coindexed with a **null or overt pronoun** in Sentential Predicate.
- (iv) The GR of the gap/pronoun coindexed with the Major Subject is **not restricted to that of Grammatical Subject**.
- (v) The Major Subject, as well as the Sentential Predicate that is in construction with it, must satisfy **certain semantic conditions** in order to be felicitous (Kuno 1973, J-M Yoon 1989, K-S Hong 1997, Yoon 2004a, b)
- (vi) Major Subject-Sentential Predicate structures are **not possible in certain embedded domains**.
- (vii) The position occupied by the raised Major Subject is a **derived/non-thematic Major Object** position in the matrix clause.

The analysis is illustrated schematically below:



- XP':** The derived Object position of moved Major Subject
- XP:** The base position of Major Subject
- WP:** Sentential Predicate
- ZP:** Sentence containing a Major Subject
- Pron:** Constituent within Sentential Predicate coindexed with Major Subject (it can be the Grammatical Subject)

(Details about the structure of ZP, the position of two subjects, and the derived object position will be discussed subsequently.)

2.1. Properties of SOR Deriving From Major Subject Raising:

Many of the observed properties of SOR in Korean (and Japanese) are attributable to the fact that the raised nominal is the Major Subject of the embedded clause. These include the following:

(i) Raising takes from **finite complement clauses**.

This is because a **Major Subject (MS)** requires a full clause (containing a **Grammatical Subject, GS**) as its **Sentential Predicate** (Yoon 2004a, b).

52 John-i(**MS**) [SP apeci-ka(**GS**) pwuca-si-ta] **GS** = Grammatical Subject
 J-nom father-nom rich-hon-decl **SP** = Sentential Predicate

53 Yelum-i(**MS**) [SP maykcwu-ka(**GS**) mas-iss-ta]
 summer-nom beer-nom tasty-decl

Thus, the peculiarity of raising from finite embedded clauses owes in part to the fact that the raised embedded Major Subject is in construction with a full clause that functions as a predicate.

This is not unique to Korean/Japanese. There are additional examples of such ‘Sentential Predicates’ that serve as complement clauses in SOR constructions in other languages.

(ii) Raising appears to be a **governed** process.

There are several factors involved in ‘governedness’, as we saw earlier.

Now, if SOR verbs select Major Subject-Sentential Predicate structures when raising takes place and if this is a lexically determined property, we can understand why SOR is not possible from certain types of embedded clauses – the matrix verbs **do not select the right type of complement clause**.

For example, we saw that verbs that select nominalized or interrogative complements do not allow SOR easily. The relevant examples are repeated below:

9. Cheli-nun i chayk-**ul**..... (*V-nya-ko* complement)
 C-top this book-acc

??kaps-i pissa-**nya-ko** mwul-ess-ta
 price-nom expensive-inter-comp ask-pst-decl

*?micey-i-**nci** kwungkumhayhay-ss-ta/uysimhay-ss-ta
 US-made-cop-int wonder-pst-decl/suspect-pst-decl

10. Cheli-nun i chayk-**ul** (*V-nominalized* complement)
 C-top this book-acc

*kaps-i pissa-**n** **kes-ul** molu-n-ta
 price-nom expensive-adnom fact-acc not.know-prs-decl

*kaps-i pissa-**m-ul** a-n-ta
 price-nom expensive-nml-acc know-prs-decl

*?kaps-i ssa-**ki-lul** pala-n-ta
 price-nom cheap-nml-acc wish/hope-prs-decl

This aspect of ‘governedness’ can be attributed to the fact that **Major Subjects are marginal** in nominalized or interrogative complement clauses. Cf.

- 54a. ??Na-nun [Yenghi-ka(MS) apeci-ka pwuca-in kes]-ul moluko issessta
 I-top Y-nom father-nom rich-comp fact]-acc not.know aux
 cf.
 a'. Na-nun [Yenghi-uy apeci-ka pwuca-in kes]-ul moluko issessta
 I-top Y-gen father-nom rich-comp fact-acc not.know aux
- b. ??Na-nun [Yenghi-ka(MS) apeci-ka kasin kes]-ul palkyenhayssta
 I-top Y-nom father-nom gone fact-acc discovered
 cf.
 b'. Na-nun [Yenghi-uy apeci-ka kasin kes]-ul palkyenhayssta
 I-top Y-nom father-nom gone fact-acc discovered
- 55a. ??Na-nun [Yenghi-ka(MS) apeci-ka pwuca-i-nka-ko] mwul-ess-ta
 I-top Y-nom father-nom rich-cop-inter-comp ask-pst-decl
 cf.
 b. Na-nun [Yenghi-uy apeci-ka pwuca-i-nka-ko] mwul-ess-ta
 I-top Y-gen father-nom rich-cop-inter-comp ask-pst-decl

We see that the difficulty of SOR correlates with the difficulty of having embedded Major Subjects, a correlation which can be accounted for if SOR targets embedded Major Subjects.

This cannot be the entire story, however. The **'governed' nature of SOR extends** beyond distinctions in clause type marking (*nominalized* vs. *non-nominalized*; *declarative* vs. *interrogative*, etc.) **to the predicate** of the embedded clauses, as the following (repeated from earlier) illustrates:

Embedded Individual-level intransitives:

12. Cheli-nun tolkolay-**lul** { phoyutongmwul-ila-ko } sayngkakha-n-ta
 C-top dolphin-acc { mammal-cop-decl-comp } think-prs-decl
 { yengliha-ta-ko }
 { smart-prs-decl }

Embedded Stage-level intransitives:

13. Cheli-nun *?tolkolay-**lul** { poin-ta-ko } sayngkakha-n-ta
 { visible-decl-comp } think-prs-decl
 { mwul-eyse ttwie ollu-ess-ta-ko }
 { water-from jump come-pst-decl-comp }
- vs.
 Cheli-nun tolkolay-**lul** { cal caphi-n-ta-ko } saynghakha-n-ta
 C-top dolphins-acc { easily be.caught-prs-decl-comp } think-prs-decl
 { salam-kwa cal chinhayci-n-ta-ko }
 { people-with well befriend-prs-decl-comp }

Embedded transitives:

14. Cheli-nun { *?Yenghi-**lul** pap-ul cikum ha-n-ta-ko } sayngkakha-n-ta
 { Y-acc meal-acc now do-prs-decl-comp } think-prs-decl
 { *?Yenghi-**lul** achim-ey hwacang-ul hayssta-ko }
 { Y-acc morning-loc makeup-acc put.on-comp }
- vs.

Cheli-nun	{	Yenghi- lul	pap-ul	nul	ha-n-ta-ko	sayngkakhanta	
C-top		Y-acc	meal-acc	always	do-pr-decl-comp		think-prs-decl
		Yenghi- lul	hangsang	hwacang-ul	cinhakey		
		Y-acc	always	make.up-acc	extremely		
		ha-ko	taninta-ko				
		put.on-comp	go.around-comp				

We argue that the sensitivity of SOR to embedded lexical predicates seen above is also attributable to the fact that embedded Major Subjects undergo SOR. The reasons are as follows:

The lexical property of embedded clause predicates is not at issue. Rather, SOR is optimal if the entire embedded clause can be construed as ‘characterizing’ with respect to the raised nominal.

This property can be easily understood if what undergoes raising is an embedded Major Subject that is in construction with a Sentential Predicate, **for the ‘characterizing’ property is nothing other than a property that Sentential Predicates in non-SOR contexts must satisfy.**

Major Subject as Categorical Subject:

The Major Subject is a subject of sentences expressing a **categorical judgment** (Kuroda 1992, Ladusaw 1994, Heycock and Doron 2003, Yoon 2004a, b). That the subject positions of sentences expressing categorical judgment are different (and higher than) those of sentences expressingthetic judgment is by now well-established (Diesing 1992, Kratzer 1995, Basilico 2003, *inter alia*).

It is also well known that while lexically Individual-level predicates are associated with categorical judgments, **sentences containing lexically Stage-level predicates can express categorical judgments under certain circumstances** (Ladusaw 1994, Lambrecht 1994, Heycock and Doron 2003, Yoon 2004b).

The lexical predicate of the embedded clause (56a, b) is a Stage-level predicate. However, while the embedded clause of (56a) **expresses athetic judgment** (with the plural subject interpreted **existentially**), that in (56b) **expresses a categorical judgment** (the subject interpreted **generically**).

We propose, following earlier researchers, that the difference is reflected in **the different syntactic positions of the subjects**, as schematically shown below:

- 56a. John-un [tolkolay-**ka**(GS) yeki-se cikum pointa-ko] sayngkakhanta
 J-top dolphins-nom here-loc now visible-comp think
- b. John-un [tolkolay-**ka_i**(MS) [e_i yeki-se cal pointa-ko]] sayngkakhanta
 J-top dolphins-nom here-loc often visible-comp think
- c. ??John-un tolkolay-**lul_i** [t_i(GS) yeki-se cikum pointa-ko] sayngkakhanta
 J-top dolphins-acc outside-loc now visible-comp think
- d. John-un tolkolay-**lul_i** [t_i(MS) [e_i yeki-se cal pointa-ko]] sayngkakhanta
 J-top dolphins-acc outside-loc often visible-comp think

(56c) shows that the embedded Grammatical Subject of athetic sentence does not undergo SOR, while (56d) shows that the embedded Major Subject of a categorical sentence does.

In sum, ‘governedness’ of SOR – as manifested (i) in the selection of complement clause types and, (ii) in the restriction on embedded predicates/clauses – is attributable to the fact that what undergoes SOR is the embedded Major Subject (of a categorical judgment sentence).

We have chosen to express the difference between subjects ofthetic and categorical sentences as a **difference in position**. While this interpretation of thethetic-categorical (stage-individual) distinction is by no means the only possible one, there is ample evidence that in Korean (and Japanese), the differences do correlate with position.

Straightforward evidence comes from sentences with two subject positions, which we turn to now. Further evidence comes from movement restrictions (to be discussed later).

(iii) **Non-subject raising** is possible (but more restricted than Subject raising).

We propose that there is **no raising of non-subjects in SOR**, despite appearance, and that the raising of apparent non-subjects is in fact the raising of the **Major Subject**. Since the Major Subject occupies the highest A-Specifier position of the embedded clause (J-M Yoon 1989; K-S Hong 1997), it can raise to the upstairs clause.

There is ample evidence that this is the right way to view non-subject raising.

(i) As shown earlier, many raised **non-subjects must be felicitous as the first constituent in a MNC** – namely, as a Major Subject.

(ii) We propose that this is true even in sentences where Objects/Complements seem to have raised. That is, only those Object/Complements that are coindexed with Major Subjects appear to undergo raising. Those that are not cannot.

This proposal explains the following fact about non-subject raising.

Speakers in general are more reluctant to accept sentences involving Object/Complement raising than Subject raising. This fact can be attributed to the fact that **Major Subjects that bind an Object/non-Subject gap** (or a gap within a non-subject constituent, more generally) **are rare and licensed under more stringent conditions** than Major Subjects that bind (or bind into) the Grammatical Subject. This is shown below:

- 57a ??(Yenghi-ka aniko) Mary-ka_i(**MS**) [_{SP} namhaksayngtul-i(**GS**) e_i yocum
 Y-nom not M-nom male.students-nom these.days
 salang-ey ppacie-iss-ta]
 love-loc fall-prog-decl
 ‘It is Mary, and not Yenghi that the male students are deeply in love with these days.’
- b. ??Pata-ka_i(**MS**) [_{SP} nointul-i(**GS**) e_i nul kuliwehanta] (B-K Kim 1996)
 sea-nom elderly-nom always miss
 ‘It is the sea that the elderly people always miss.’
- c. Ilen chayk-i_i(**MS**) [_{SP} salamtul-i(**GS**) e culkye ilknunta]
 this.kind book-nom people-nom enjoying read
 ‘This kind of book, people enjoy reading.’

- d. Mikwuk-yenghwa-ka₁(MS) [SP salamtul-i(GS)) enu kukcang-eyse-na
 American-movie-nom people-nom which theater-loc-ever
 yocum swipkey e₁ po-l swu iss-ta/po-n-ta]
 these.days easily see-comp can be-decl/see-prs-decl
 ‘American movies can be seen by people in any movie theater.’
- e. * Mikwuk-yenghwa-ka₁(MS) [SP John-i(GS) cikum ce kukcang-eyse
 American-movie-nom John-nom now that theater-loc
 e₁ po-ko iss-ta]
 see-comp be-decl
 ‘It is an American movie that John is watching in that movie theater now.’

Yoon (2004b) details a number of factors that contribute to making such structures felicitous. Among such factors are:

- (a) Preference for **generic/habitual** versus episodic interpretation of Sentential Predicate
 (b) Preference for the **lexical predicate** within the Sentential Predicate **to be Individual-level** predicate
 (c) Preference for the Major Subject to be **more salient** than Grammatical Subject

These factors are shown most clearly by the contrast between (57d), containing an Individual-level Sentential Predicate interpreted generically and where the Grammatical Subject is low in salience, and (57e), containing an episodically interpreted Sentential Predicate whose lexical predicate is Stage-level where the Grammatical Subject is higher in salience than the Major Subject.

Acceptable examples of non-subject raising satisfy these conditions stated above (examples repeated from earlier). In particular, the non-subject can always be expressed as a Major Subject (note: 24b,b’ cannot be used to demonstrate this because the Object is Nom-marked without raising):

- 24b. Na-nun **ilen conglyu-uy chayk-ul** kyoswutul-eykey-man
 I-top this kind-gen book-acc professors-dat-only
 philyohata-ko sayngkakhanta
 necessary-comp think
- c. Na-nun **Swuni-lul** ilen os-i cal ewullinta-ko sayngkakhanta
 I-top S-acc this.kind dress-nom well go.with-comp think
- c’. Ilen os-i **Swuni-eykey/*lul** cal ewullinta
 this.kind dress-nom S-dat/*acc well go.with

→ Swuni-ka(MS) ilen os-i cal ewullinta S-nom this.kind clothes-nom well go.with

- d. Na-nun **Pwukhansan-ul** mwul-i manhi nanta-ko sayngkakhanta
 I-top Mt. Pwukhan-acc water-nom a.lot flow-comp think

- d’. Mwul-i **Pwukhansan-eyse/*ul** manhi nanta
 Water-nom Mt. Pwukhan-loc/*acc a.lot flows

→ Pwukhansan-i(MS) mwul-i manhi nanta Mt. Pwukhan-nom water-nom a.lot flows

(iv) The raised nominal can be related to a gap or a resumptive pronoun/epithet, even **within an island**.

This is a consequence of the fact that the relationship between a Major Subject and a clause-internal gap/pronoun is not one of movement, but coindexation (Heycock & Doron 1999, Yoon 1987, 2004a,b, among many others)

(v) Unlike English SOR, **idioms** fail to raise.

This can also be attributed to the fact that what raises is a Major Subject.

A Major Subject is the notional subject of a Sentential Predicate. As such, it doesn't make sense to say something about (attribute some property to) a Major Subject that fails to denote or otherwise sets conditions on reference.

For this reason, Yoon (2004a, b) suggest that Major Subjects must denote 'news-worthy' entities. An idiomatic Major Subject stands in flagrant violation of this interpretive condition. Grammatical Subjects, by contrast, need not be 'news-worthy', as is well-known.

Therefore, while sentential idioms can be used as Sentential Predicates in MNCs, there are **no attested examples of MNCs where the Major Subject position is idiomatic**. This is shown below.

- 58a. Seoul-ey nwun-i mahni naylinta
S-loc snow-nom a.lot falls
- b. Seoul-i(MS) nwun-i mahni naylinta
S-nom snow-nom a.lot falls
- 59a. (yeca-ka han-ul phwum-umyen)
woman-nom vengeance-acc harbor-if
- onyuwel-ey seli-ka naylinta
May.June-loc frost-nom falls
- ?onyuwel-i(MS) seli-ka naylinta → *idiomatic, literal
May.June-nom frost-nom falls
- 60 Yengswu-ka(MS) [elkwul-i twukkepta] → idiomatic, literal
Y-nom face-nom thick
- 61a. Cakun kochwu-ka maypta
small pepper-nom hot → idiomatic, literal
- b. Cakun kochwu-ka(MS) kkut-pwupwun-i mayp-ta
small pepper-nom end-part-nom hot-decl → *idiomatic, literal

It is not Topic Raising:

Now, while recognizing the similarity of Major Subjects and raised nominals, K-S Hong (1990, 1997) suggested that what raises in SOR is the **Topic** of the embedded clause, not the Major Subject. However, it can be shown that the Topic raising analysis is not tenable. This is because constituents that don't make good Major Subjects can be Topics:

- 62a. ecey-**ka**(MS)/ecey-**nun**(TOP) nalssi-ka cohassta
yesterday-nom/yesterday-top weather-nom was.good
- b. Na-nun ecey-**lul** nalssi-ka cohassta-ko sayngkakhanta
I-top yesterday-acc weather-nom was.good-comp think
- c. ??ecey-**ka**(MS)/ecey-**nun**(TOP) nay-ka hakkyo-ey kassta
yesterday-nom/yesterday-top I-nom school-loc went
- d. ??Cheli-nun ecey-**lul** nay-ka hakkyo-ey kassta-ko sayngkakhanta
C-top yesterday-acc I-top school-loc went-comp thinks

And elements that cannot be marked as Topics can nevertheless raise:

- 63a. John-un nwukwu-**lul**/***nun** papola-ko sayngkaka-ni?
J-top who-acc/-top fool-comp think-inter
- b. Nwukwu-**ka**/***nun** papo-ni?
Who-nom/top fool-int

(vii) The **interpretive differences** between raised and unraised nominals are due to the fact that what raises is the Major Subject.

In addition to the lack of idiomatic readings, other interpretive properties of the raised nominal may be blamed on its Major Subject status.

- (i) An indefinite prefers to be **interpreted specifically** in SOR contexts – (31).
- (ii) Bare plurals tend to be **interpreted generically** under SOR – (56).
- (iii) Raised nominals can be/are **interpreted *de re*** – (32, 33)
- (iv) Raised nominals **do not reconstruct** into the Sentential Predicate for scope – (35).
- (v) Raised nominals **do not reconstruct** into the Sentential Predicate for variable binding – (36).

Now, these properties can also be attributed to the fact that the raised nominal is a Major Subject.

First, Major Subjects always take wider scope than constituents internal to the Sentential Predicate. This is so because the Major Subject is directly merged into its position rather than derived by movement from within the Sentential Predicate (and reconstruction is contingent on Chains).

The wide scope of the Major Subject over constituents within the Sentential Predicate is illustrated below:

64. sey-myeng-uy haksayng-i(MS) pwumo-ka(GS) enu kyoswutul-eykey-na
three-cl-gen student-nom parents-nom which professor-dat-ever
sokay-toy-ess-ta
introduce-pass-pst-decl
→ **three > every, *every > three**

- 65a. Motun haksayngtul-i(MS) khemphyute-ka kocangna-ss-ta
 Every student-nom computer-nom break-pst-decl
 → every > one, *one > every
- b. Motun haksayngtul-uy khemphyute-ka kocangna-ss-ta
 Every students-gen computer-nom break-pst-decl
 → every > one, one > every

Second, indefinite and bare plural Major Subjects tend respectively to be interpreted as specific and generic, as shown below:

- 66a. Etten haksayng-i(MS) apeci-ka acwu pwuca-ta
 certain student-nom father-nom very rich-decl
- b. Etten haksayng-uy apeci-ka acwu pwuca-ta
 certain student-nom father-nom veryrich-decl
- 67a. ??Tolkolay-ka(MS) kkoli-ka ceki pointa!!
 Dolphins-nom tail-nom there visible
- b. Tolkolay-uy kkoli-ka(GS) ceki pointa
 Dolphins-gen tail-nom there visible
- c. Tolkolay-ka(MS) meli-ka yenglihata
 Dolphins-nom head-nom smart

2.2. Remaining Properties:

We have seen that a number of properties of Korean/Japanese SOR that suggest that it may not involve SOR can be blamed on the fact that verbs which govern SOR select embedded clauses that have a Major Subject-Sentential Predicate structure where SOR targets the Major Subject.

Differences between K/J and English SOR not due to Major Subjects:

K/J SOR differ from English SOR in other ways. However, these differences may not be directly related to the fact that SOR targets embedded Major Subjects. They are:

- (i) Optionality of SOR
- (ii) TSC Violation
- (iii) Multiple Case-marking of raised nominal
- (iv) Non-string-vacuous raising
- (v) Multiple SOR

Optionality of SOR seems tied to the fact that the raised nominal in the embedded clause has Case. That is, movement is not triggered by lack of Case.

Optionality of movement ties in with **multiple case-marking**. As is well-known (Yoon 1996), A-Chains with Cases on more than one position exist robustly in languages like Korean. I will not have a lot to say about multiple case-marking here, but assume that it is possible in certain languages. Bejar and Massam (1999) develop a Minimalistic-sounding theory of multiple case assignment.

TSC violations will be dealt with in the context of locality issues in raising in section 3.

Non-string vacuousness of raising is simply due to the fact that SOR in Korean, like that in many other languages, does not work simply by (Long-Distance) Agree, but involves overt raising into the matrix clause.

Multiple SOR will be dealt with in the appendix (time permitting).

Shared properties of K/J and English SOR:

- (vi) Raised nominal undergoes A-movement in the upstairs clause
- (vii) Verbs that govern SOR are distinct from Object Control verbs

Since SOR in Korean is A-movement, it is expected to ‘feed’ other instances of A-movement (Passive and A-Scrambling). And, while verbs governing SOR in Korean have a different selection than corresponding verbs in English, they are still not the same as Object Control verbs.

We now turn to a comparison of our analysis with **some alternatives**.

3. The Raised Object Is Not Moved:

Or if it is, it is not derived by A-movement. If the construction in (1) is not SOR/ECM, what else could it be? The following possibilities have been suggested:

Object Control: **A-STR**(sayngkakha-): <**x**, **y**, **z**>

John-un Cheli-lul_i [pro_i papo-la-ko] sayngkakha-n-ta
 J-top C-acc fool-cop-comp think-prs-decl

Copy Raising (Prolepsis): **A-STR**(sayngkakha-): <**x**, **z**>??

John-un Cheli-eytayhay/lul_i [**kunyesek-i**_i papo-la-ko] sayngkakha-n-ta
 J-top C-regarding/acc that.guy-nom fool-decl-comp think-prs-decl

A-bar movement (Scrambling): **A-STR**(sayngkakha-): <**x**, **z**>

John-un Cheli-lul_i [_{t_i} papo-la-ko] sayngkakha-n-ta
 J-top C-acc fool-cop-comp think-prs-decl

We have already shown that SOR verbs are **distinct from Object Control** verbs (section 1.2. B).

The **A-bar movement** (Scrambling, since Topicalization was ruled out) analysis cannot account for the fact that SOR feeds A-movement in the upstairs clause. Neither can it account for interpretive differences between raised and unraised nominals. The restriction on embedded clause types and predicates cannot be accounted for either.

What remains is/are (variations on) the **second alternative – Copy Raising**.

3.1. The Copy Raising/Major Object Analysis:

Many of the properties of K/J SOR are compatible with an alternative analysis where **the raised nominal is base-generated** in the upstairs VP/clause **as a Major Object and directly binds** the gap/pronoun in the embedded clause -- **without the mediation of the Major Subject** position.

- (i) The lack of Subjacency (because the relation is not movement)
- (ii) The possibility of resumptive pronouns (same reason)
- (iii) Wide scope of the raised object (it is base-generated in the upstairs clause)
- (iv) Non-subject raising (control/coindexation is not restricted subjects)
- (v) Failure of idiom interpretation and interpretive differences between raised and unraised subjects (base-generated SOR nominal is an argument of the raising verb).

Nevertheless, such an approach is not without problems. There is **one** salient difficulty with this type of **Copy Raising/Major Object/Prolepsis** analysis (Takano 2003). The problem is this – **how does the base-generated Object get its theta-role?**

Perhaps it doesn't, because it is an Adjunct. However, the raised nominal does not behave as an Adjunct, because it undergoes A-movement in the upstairs clause.

Therefore, it must be **argument-like** in some way. But how? Given standard assumptions (at least in P&P traditions) about semantic role assignment, it is not straightforward. The options are:

- (i) Theta-role transmission in a base-generated Chain (cf. Moore 1998; Rezac 2004)
- (ii) Theta-role from the Sentential Predicate
- (iii) Theta-role from the Sentential Predicate and matrix predicate

Problems with (i):

Supposing that theta-role transmission in base-generated Chain exists, the conditions for such transmission are local (cf. Moore 1998; Rezac 2004). The gap/pronoun in the embedded clause is not local to the SOR nominal, however.

Problems with (ii) and (iii):

The SOR nominal is base-generated with matrix VP. So it should receive a role from the V as well as the Sentential Predicate. But the lack of selection between V and the SOR nominal shows this is not the case.

Another shortcoming of this kind of analysis (e.g., Hoji 1991, Takano 2003, K-S Hong 1990, though not K-S Hong 1997) is the following:

The conditions on Major Subject-Sentential Predicate structures must be **redundantly stated** as conditions on the base-generated Major Object in SOR constructions.

A third shortcoming of this approach is this:

It becomes **difficult to distinguish Object Control verbs and SOR verbs** (Hiraiwa 2002, Tanaka 2002, etc), though we have seen that they differ in terms of whether they assign a semantic role to the Object.

The problems so far are in part **theory-dependent**. We now turn to evidence that could be construed as empirical support for the hypothesis that the raised object is related to the embedded Major Subject by A-movement, rather than being base-generated and coindexed directly with an embedded clause constituent.

3.2 Evidence for Movement from Major Subject to Raised Object:

Proper Binding Condition Again:

The **first** argument is based on Tanaka (2002). Tanaka argues that preposing the complement clause in an SOR construction yields marginality because the empty category within it is a trace (of the raised subject) violating the **Proper Binding Condition (PBC)**. In contrast, in control complements, the EC is a PRO/pro, which does not violate the PBC. This accounts for the contrast between (68a) and (68b) shown below.

68a. ??[t_i acwu ikicek-ila]-ko na-nun Cheli-lul sayngkakhanta
 very selfish-cop-comp I-top C-acc think

b. [pro cip-ey kala]-ko na-nun Cheli-eykey/lul seltukhayssta
 home-loc go-comp I-top C-dat/acc persuaded

Now, since Tanaka was assuming that the raised Object moves directly from within the embedded clause, if the gap position is filled by a pronoun, his analysis predicts that the PBC violation should disappear and the result of preposing the embedded clause should be grammatical. His analysis makes a similar prediction about the preposing of complement clauses that do not seem to contain a gap.

However, these predictions are not borne out. Preposing the complement clause still results in ungrammaticality even when the complement clause contains a resumptive pronoun or appears to lack a gap altogether.

69a ??[t_i [ku-ka acwu ikicekila-ko]] na-nun **Cheli-lul_i** sayngkakhanta
 he-nom very selfish-com I-top C-acc think

b *?[t_i [kakyek-i acwu pissata-ko]] na-nun **i chayk-ul_i** sayngkakhanta
 price-nom very expensive-comp I-top this book-acc think

c *?[t_i [hankwuksalam-i kacang mahnta-ko]] na-nun **LA-lul_i** sayngkakhanta
 Koreans-nom most numerous-comp I-top LA-acc think

Since we are assuming that a raised Object is always derived by movement, though the movement is from the embedded Major Subject position (indicated as ‘t’ in the above examples), PBC will still rule out (69). This is then evidence that movement relates the SOR nominal to the Major Subject position.

Case Connectivity:

A **second** argument for supposing that the raised Object is related to the Major Subject by movement is that the raised Major Subject retains the case assigned in the embedded clause, as we saw earlier. Such **case connectivity** can be seen in case-stacked Major Subjects that undergo SOR in Korean (see Yoon 2004a for arguments that Nom-stacked constituents are Major Subjects):

- 70a. na-nun Cheli-**hanthey-man-ul** [t(MS) [e mwuncey-ka issta-ko]] mitnunta
 I-top C-dat-only-acc problem-nom exist-comp think
- a'. na-nun [Cheli-**hanthey-man-i**(MS) [e mwuncey-ka issta-ko]] mitnunta
 I-top C-dat-only-nom problem-nom exist-comp think
- b. na-nun yeki-**pwuthe-lul** [t(MS) [e nay ttang-ila-ko]] sayngkakhanta
 I-top here-from-acc my land-cop-comp think
- b'. na-nun [yeki-**pwuthe-ka**(MS) [e nay ttang-ila-ko]] sayngkakhanta
 I-top here-from-nom my land-cop-comp think

Locality:

A **third** argument for the raising analysis comes from considerations of **Locality**. At first glance, SOR in Korean (and Japanese) appears to flout all known constraints on A-movement – the Specified Subject Condition (Relativized Minimality) as well as the Tensed-S Condition.

However, under the Major Subject raising analysis, neither of these conditions is violated:

SSC is satisfied – because only the highest Subject, the Major Subject, moves

TSC is satisfied – because the Major Subject does not move out of a finite clause

Proponents of the Major Object analysis might be unconvinced, since they do not assume the mediation of the Major Subject and so locality is violated by the direct coindexation between the Major Object and the embedded clause constituent.

A **better argument** for raising can be formulated on the basis of the fact that embeddedthetic subjects do not undergo SOR, as we have seen:

Embedded categorical/individual-level subjects:

12. Cheli-nun tolkolay-**lul** { phoyutongmwul-ila-ko } sayngkakha-n-ta
 C-top dolphin-acc { mammal-cop-decl-comp } think-prs-decl
 { yengliha-ta-ko }
 { smart-prs-decl }

Embeddedthetic/stage-level subjects:

13. Cheli-nun *?tolkolay-**lul** { poin-ta-ko } sayngkakha-n-ta
 { visible-decl-comp } think-prs-decl
 { mwul-eyse ttwie olu-ss-ta-ko }
 { water-from jump come-pst-decl-comp }
- vs.
 Cheli-nun tolkolay-**lul** { cal caphi-n-ta-ko } saynghakha-n-ta
 C-top dolphins-acc { easily be.caught-prs-decl-comp } think-prs-decl
 { salam-kwa cal chinhayci-n-ta-ko }
 { people-with well befriend-prs-decl-comp }

At first sight, this generalization actually **appears to undermine the raising analysis** of SOR, for the following reasons:

Since SOR verbs can also select embeddedthetic clauses, and the subject (=Grammatical Subject) is the highest A-specifier in the embedded domain, why can'tthetic subjects undergo SOR?

The selection of embeddedthetic clauses by SOR verbs is shown below. The clause is interpreted episodically, and the bare plural subject can be interpreted existentially, all suggesting that the clause expresses athetic judgment:

71. Cheli-nun [aitul-i pahk-eyse cikum nonta-ko] sayngkakhanta
 C-top children-nom outside-loc now play-comp thinks

Since non-thematic object positions exist, the lack of one cannot be the answer. Neither can we invoke case, since multiple case assignment is attested in the language. Short of a construction-specific stipulation, it is hard to prevent the embedded subject in (71) from undergoing SOR.

The problem here is similar to the problem of movement out of Small Clauses in English (Basilico 2003). As is well known, there are two types of SC's in English – **verbal** and **adjectival SC's**.

One difference between the two types is that only the subject of adjectival SCs can undergo A-movement.

72a. John was considered [_{SC} t intelligent]
 a'. We considered [_{SC} John intelligent]

b. *John was seen [_{SC} t leave the room]
 b'. We saw [_{SC} John leave the room]

Another difference between the two is that **adjectival SCs** express a **categorical judgment**, while **verbal SCs** express a **thetic judgment**.

What seems to be going on is that an embedded subject of categorical sentences can be A-moved while a subject of athetic sentence cannot. The parallels between raising out of SCs and SOR in Korean should be obvious. The reason that the embedded subject cannot raise in (71) in Korean must be because it is athetic subject.

The restriction is quite general. That is, even when a matrix predicate selects both types of SCs (as our SOR predicates allow both types of sentences), A-movement is possible only for the embedded subject of categorical SC:

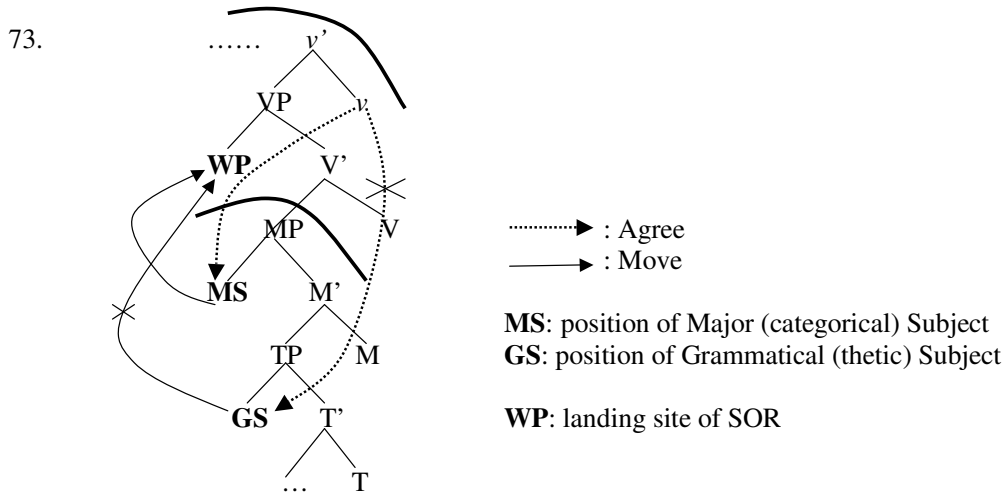
73a. We made [John unhappy]
 b. We made [John sweep the floor]
 c. John was made [t unhappy] (by his friends)
 d. *John was made [t sweep the floor] (by his mother)

Basilico's (2003) analysis recruits the different positions of two subjects and the assumption that eventhetic sentences have a higher subject (a Stage Topic). For him, the reason for the failure of movement

of thetic subjects reduces to the SSC/RM. The Stage Topic in the higher subject position blocks the movement of the lower subject.

This account fails to generalize to ECM into TPs, for which he incorporates additional assumptions. Rather than dwelling on the details, we turn to Korean/Japanese SOR. The inability of thetic subjects to undergo SOR is a straightforward consequence of movement locality – in particular, the locality of **Phases** and the **Phase Impenetrability Condition (PIC, Chomsky 2001)**.

Let us consider the following structure:



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We are making the following assumptions:

- (i) The Major Subject (categorical subject) is in the A-specifier of the highest f-projection. We call it MoodP for convenience. J-M Yoon (1991) suggests it is the A-specifier of CP; Tanaka (2002) makes a similar proposal. The highest f-head is a Strong Phase head (natural if it is CP).
- (ii) The Grammatical Subject (thetic subject) is in a lower position, perhaps SpTP (if there is raising), or even lower (SpvP).
- (iii) Raised nominals occupy SpVP (Johnson 1991) or some derived Object position
- (iv) PIC – Phase heads can access the Edge of a lower Phase but not the c-domain of a lower phase head.

As you can tell, these assumptions suffice to rule out raising of the lower subject. The only way a lower, thetic, subject can undergo SOR is if it is in a higher subject position. Since by assumption the higher subject position is a categorical subject position, the Sentential Predicate (=TP) must have compatible properties.

The Major Object analysis does not have a natural way of accounting for these facts, other than to stipulate that the embedded clause must be construable as making a categorical predication on the base-generated Major Object.

In contrast, the Major Subject raising analysis reduces the difference to an independent locality constraint on Move/Agree.

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Undaunted, the Major Object proponent might respond:

Locality is not just found in movement (Raising). (Obligatory) control is also subject to locality. Thus, locality by itself is no argument for a movement analysis.

However, to **maintain a non-movement Major Object analysis of SOR that is local, the Major Subject position must be implicated.** That is, coindexing (Control) must hold between the base-generated Major Object in the upstairs clause and the embedded Major Subject position. E.g., (74a) and not (74b):

74a. Na-nun **kochungkenmwul-ul**_i [**pro**_i(MS) [NY-ey **pro**_i kacang manhta-ko]
 I-top skyscrapers-acc NY-loc most numerous-comp
 sayngkakhanta
 think
Control!!

74b. Na-nun **kochungkenmwul-ul**_i [NY-ey **pro**_i kacang manhta-ko] sayngkakhanta
 I-top skyscraper-acc NY-loc most numerous-comp think

This version of the Major Object analysis is almost indistinguishable from our Major Subject raising analysis. It does, however, acknowledge the crucial mediating role of the Major Subject, which is one of the main points of this paper.

De dicto vs. de re ambiguity:

A well-known difference between Raising and Control is the following :

- 75a. **A griffin** seems to be lurking on the top floor
 → *de re, de dicto*
 b. **A griffin** tried to get to the top floor
 → *de re, *de dicto*

Since May (1985), this has been tied to the difference between movement and non-movement (in part). Now, if the raised Object is base-generated in the matrix clause, we do not expect the raised (base-generated) Object to scope below the intentional verb. While the **de re** reading is possible, **de dicto** readings are not ruled out with SOR structures, as we saw earlier (cf. 32, 33).

This is possibly another indication that movement relates the raised Object position to a position lower than the verb – that is, the embedded Major Subject position.

A similar conclusion can be drawn from the interpretation of indefinites, discussed earlier:

- 76a. Na-nun etten salam-**ul** totwuk-ila-ko sayngkakhanta
 I-top some person-acc thief-cop-comp think
 b. Na-nun etten salam-**i** totwuk-ila-ko sayngkakhanta
 I-top some person-nom thief-cop-comp think

- 77a. kyengchal-i myes-myeng-uy namca-**lul** peminila-ko tancenghayssni? (cf. Takano 2003)
 police-nom how.many-cl-gen man-acc culprit-comp conclude.int

- b. kyengchal-i myes-myeng-uy namca-**ka** peminila-ko tancenghayssni?
 police-nom how.many-cl-gen man-nom culprit-comp conclude.int?

While the **specific**, or **presuppositional**, reading of the indefinite is preferred in (76a), it is not the only reading. Likewise, the **presuppositional** reading of ‘how many’ is preferred in (77a) but the **cardinal** reading is not altogether out. These suggest reconstruction of the raised Object to a position lower than the matrix verb, which is a possibility that the Major Object analysis denies.

Summary:

Overall, the **PBC facts**, **Scope Reconstruction**, and **Case Connectivity** tip the balance in favor of the raising analysis, in my opinion – because these two are standard, theory-neutral, diagnostics of Raising vs. Control.

It is also unclear to me how a theory of Control could prevent the embedded Grammatical Subject (thetic subject) from being controlled by the base-generated Major Object.

These considerations, together with the difficulties of finding an appropriate way to assign a semantic/thematic role to the base-generated Major Object, argue in favor the Major Subject raising.

4. Conclusion

In this presentation, we have argued for the following:

- SOR exists in Korean (and Japanese).
- What raises in SOR is the embedded Major (categorical) Subject.
- SOR is distinct from Object Control, Scrambling, Topicalization, or Major Object/Copy Raising.

The unusual properties of Korean/Japanese SOR are not that unusual once we adopt this analysis. In other work, I showed that K/J aren’t the only languages where a constituent in construction with an embedded Sentential Predicate participates in SOR.

Some corollaries of the analysis are the following:

- A-movement is constrained by SSC/RM (and TSC), despite appearances to the contrary.
- Locality of Agree/Move is constrained by the PIC.
- The positions of subjects of categorical and thetic sentences are different.
- The Major Subject-Sentential Predicate structure (categorical sentences) plays a pervasive role in the syntax of Korean/Japanese.

Appendix: Multiple SOR

As we have seen, Korean allows multiple SOR. Japanese does not, given the famous ‘Double-O Constraint’ that prohibits more than one Accusative-marked nominal in a single clause. The Korean data are repeated below.

- (i)a. ?Na-nun Cheli-**lul** apeci-**lul** (ku-pwun-i) pwuca-si-la-ko mitnun-ta
 I-top C-acc father-acc that-person-nom rich-hon-decl-comp believe
- b. ?Na-nun John-**ul** haksayngtul-**ul** (seys-i) ttokttokhata-ko
 I-top John-acc students-acc three-nom smart-pst-decl
 sayngkakhanta
 think
- c. ?Na-nun ku kwaswuwon-**ul** kwail-**ul** phwumcil-i wuswuhata-ko
 I-top that orchard-acc fruit-acc quality-nom excellent-comp
 sayngkakha-n-ta (K-S Hong 1997:426)
 think-prs-decl

Adverb insertion shows that all the Acc-marked constituents in the matrix clause. It also shows that the two Acc-marked DPs do not form a constituent:

- (ii) ...Cheli-**lul** (papokathi) apeci-**lul** (papokathi) pwuca-si-la-ko...
 C-acc foolishly father-acc foolishly

Other examples of multiple SOR don't sound too good, however:

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- (iii)
- a. *?Na-nun LA-**lul** (mikwuk-eyse) hankwuksalam-**ul** ceyil manh-ta-ko
 I-top LA-acc US-loc Koreans-acc most a.lot-decl-comp
 sayngkakha-n-ta
 think-prs-decl
- b. *?Na-nun New York-**ul** kochungkenmwul-**ul** manh-ta-ko sayngkakha-n-ta
 I-top NY-acc skyscraper-acc a.lot-decl-comp think-prs-decl
- c. *?Na-nun Cheli-(hanthey)-**lul** ton-**ul** manh-ta-ko sayngkakha-n-ta
 I-top C-(dat)-acc money-acc a.lot-decl-comp think-prs-decl

The generalization that sets apart (i)-(ii) from (iii) seems to be that in the latter, the second/last Acc-marked DP is **not readily construable as a Major Subject of the embedded clause** (being an internal argument of the embedded unaccusative predicate, such as a Nominative Object).

This seems to imply that in the sequence of multiply raised DPs, the final DP must be able to function as the Major Subject of the embedded clause (Sentential Predicate) in order for multiple SOR to take place.

I assume that the preceding generalization indicates that only the last of the multiply Acc-marked DPs is raised from the embedded Major Subject position. Making this assumption will explain why, when the last DP cannot be construed as a Major Subject, multiple SOR is degraded.

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With regard to the non-final Acc-marked DPs, I propose that they are base-generated as **Major Objects** in the matrix VP. Schematically:

- (iv) [_{VP} DP1[acc] [_{V'} DP2[acc]_i [_{V'} [_{MP} t_i [_{TP} ... e_i ...]] V]]]...
-

Non-thematic Major Objects independently exist without raising in Korean, as the following examples show (see various references arguing that the multiple Accusative DPs are not derived by movement but base-generated):

- (v)a. John-un cemsim-**ul** spaghetti-**lul** twu-kulus-**ul** mek-ess-ta
 J-top lunch-acc spaghetti-acc two-bowls-acc eat-pst-decl
 'For lunch, John had two bowls of spaghetti.'
- b. John-un Yenghi-**lul** phal-**ul** pwuthcap-ass-ta
 J-top Y-acc arm-acc catch-pst-decl
 'John grabbed Yenghi by the arm.'

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