Wh-reduplication in Korean and Khalkha Mongolian

This paper analyzes wh-reduplication patterns in Korean and Khalkha Mongolian. To account for restrictions on wh-reduplication under different contexts (Table 1) in Yaeyaman (Japonic), Davis 2015 proposes the reduplicative morpheme RED, which adds a presupposition that the denotation of its complement contains at least one non-atomic alternative, and which triggers reduplication on the wh-item it Agrees with. RED may attach locally (e.g. to NP, requiring non-atomic entities) or high (e.g. to CP, requiring non-atomic propositions).

Proposal. We propose that RED can attach medially (e.g. to VP), and that variation across all three languages depends on i) the attachment site of RED, and ii) whether RED agrees with the highest or all wh-items. We assume that the single-pair/pair-list distinction is not due to RED but differences in the derivation of single-pair/pair-list questions (cf. Chierchia 1993, Dayal 1996, a.o.).

Single-wh contexts A-D. Khalkha and Korean pattern like Yaeyaman in disallowing wh-reduplication when singular argument answers are expected (context A). Following Davis, we propose that local RED derives these patterns. In context D, we propose that non-reduplicated wh-items generate an implicature of atomic alternatives that is incompatible with collective predicates in Yaeyaman and Khalkha (hence wh-reduplication is obligatory (15)-(16)), but not in Korean (hence wh-reduplication is optional (5)-(6)).

Single-pair contexts E-H. Korean patterns like Yaeyaman: arguments that contain non-atoms license wh-reduplication. Notably, Khalkha differs in disallowing wh-reduplication in all single-pair contexts. Following Davis, we propose that local RED derives the patterns in Korean and Yaeyaman. We further suggest that only clausal/medial RED is available in Khalkha multiple wh-questions; since these require non-atomic propositions, they are incompatible in single-pair contexts.

Pair-list contexts I-M. Korean and Khalkha display different patterns than Yaeyaman. Korean allows reduplication of neither (7), either (8)-(9) or both (10) wh-items in pair-list contexts. We propose that these patterns are derived by local RED; plurality may be calculated within or across pairs in Korean.

In Yaeyaman, reduplicated wh-subjects but not wh-objects are compatible with plurality of the reduplicated argument across pairs. Davis argues that this is because clausal RED Agrees only with the highest wh-item. In Khalkha, non-reduplication (17), or reduplication of both wh-arguments (20) is compatible with pair-list contexts. Reduplication of only the wh-object (19) is compatible in context K.

We argue that RED attaches to CP or VP in Khalkha pair-list multiple wh-questions, generating a presupposition that the set of propositions contain some non-atomic alternatives. Further, unlike Yaeyaman, Khalkha RED agrees with all wh-items – it bears a probe specified with Interaction and Satisfaction conditions (Deal 2022), e.g. [Int:WH, Sat:–]. When RED attaches to CP, it obligatorily Agrees with all wh-items, ruling out (18); if it attaches to VP, it only Agrees with the wh-object, deriving (19). We suggest that (19) generates an implicature that is congruous with context K (atomic subject, non-atomic object), but incongruous in other pair-list contexts, e.g. L (non-atomic subject and object).

Conclusion. We broaden the typology of wh-reduplication by discussing novel patterns in Korean and Khalkha. We also capture the variation in wh-reduplication patterns across three languages by modifying and extending Davis' original account for Yaeyaman.

[500 words]

References.

Chierchia, G. 1993. Questions with quantifiers. *Natural Language Semantics 1, no. 2*. 181–234.
Davis, C. 2015. Plurality and distributivity in Yaeyaman wh-questions. *Proceedings of SALT 25.* 636–655.
Dayal, V. 1996. *Locality in Wh Quantification: Questions and Relative Clauses in Hindi*. Dordrecht: Springer.
Deal, A. R. 2022. Interaction, Satisfaction, and the PCC. *Linguistic Inquiry*. 1–56.

Korean data*

(1) nwuka sakwa-lul kacyeowa-ss-ni?
who.NOM apples-ACC bring-PST-Q
'Who brought apples?'

(2) nwuka-nwuka sakwa-lul kacyeowa-ss-ni?
who.NOM-who.NOM apples-ACC bring-PST-Q
'Who (pl.) brought apples?'

(3) Jisoo-ka mwue-lul kacyeowa-ss-ni?
Jisoo-NOM what-ACC bring-PST-Q
'What did Jisoo bring?'

(4) Jisoo-ka mwue-mwue-lul kacyeowa-ss-ni?
Jisoo-NOM what-what-ACC bring-PST-Q
'What (pl.) did Jisoo bring?'

(5) nwuka(-nwuka) moi-ss-ni?
who.NOM(-who.NOM) gather-PST-Q
'Who gathered?'

(6) Jisoo-ka mwue(-mwue)-lul sekk-ess-ni?
Jisoo-NOM what(-what)-ACC mix-PST-Q
'What did Jisoo mix?'

(7) nwuka mwue-lul kacyeowa-ss-ni?
who.NOM what-ACC bring-PST-Q
'Who brought what?'

(8) nwuka-nwuka mwue-lul kacyeowa-ss-ni?
who.NOM-who.NOM what-ACC bring-PST-Q
'Who (pl.) brought what?'

(9) nwuka mwue-mwue-lul kacyeowa-ss-ni?
who.NOM what-what-ACC bring-PST-Q
'Who brought what (pl.)?'

(10) nwuka-nwuka mwue-mwue-lul kacyeowa-ss-ni?
who.NOM-who.NOM what-what-ACC bring-PST-Q
'Who (pl.) brought what (pl.)?'

Khalkha data*

(11) Hen tsuivan id-sen be?
Who fried.noodle eat-PST WHQ
'Who ate fried noodles?'

(12) Hen-hen tsuivan id-sen be?
Who-who fried.noodle eat-PST WHQ
'Who (pl.) ate fried noodles?'

(13) Galaa yuu id-sen be?
Galaa what eat-PST WHQ
'What did Galaa eat?'

(14) Galaa yuu-yuu id-sen be?
Galaa what-what eat-PST WHQ
'What (pl.) did Galaa eat?'

(15) Hen*(-hen) tsugla-san be?
Who-who gather-PST WHQ
'Who (pl.) gathered?'

(16) Bilgüün yuu*(-yuu) hoil-son be?
Bilguun what-what mix-PST WHQ
'What (pl.) did Bilguun mix (together)?'

(17) Hen yuu avchir-san be?
Who what bring-PST WHQ
'Who brought what?'

(18) * Hen-hen yuu avchir-san be?
Who-who what bring-PST WHQ
Int.: 'Who (pl.) brought what?'

(19) Hen yuu-yuu avchir-san be?
Who what-what bring-PST WHQ
'Who brought what (pl.)?'

(20) Hen-hen yuu-yuu avchir-san be?
Who-who what-what bring-PST WHQ
'Who (pl.) brought what (pl.)?'

*All data from original fieldwork by authors.

Table 1. Acceptable wh-questions in Korean and Khalkha

	Context	Korean	Khalkha
Single-wh	A. Singular ans. assumption	(1), (3)	(11), (13)
	B. Plural ans. assumption	(1), (2), (3), (4)	(11), (12), (13), (14)
	C. No assumption	(1), (2), (3), (4)	(11), (12), (13), (14)
	D. Collective predicate	(5), (6)	(15), (16)
Single-pair	E. (x, a)	(7)	(17)
	F. (x+y, a)	(7), (8)	(17)
	G. (x, a+b)	(7), (9)	(17)
	H. (x+y, a+b)	(7), (8), (9), (10)	(17)
Pair-list	I. (x, a), (y, b)	(7), (8), (9), (10)	(17), (20)
	J. (x+y, a), (w+z, b)	(7), (8), (9), (10)	(17), (20)
	K. (x, a+b), (y, a+b)	(7), (8), (9), (10)	(17), (19), (20)
	L. (x+y, a+b), (w+z, c+d)	(7), (8), (9), (10)	(17), (20)
	M. (x, a+b), (w+y, c), (z, d)	(7), (8), (9), (10)	(17), (20)