

Stay Inside: The Interpretation of Internally-Headed Relative Clauses in Navajo

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This paper presents fieldwork evidence about the interpretation of quantifiers and internally headed relative clauses (IHRCs; bracketed) like (1) in Navajo (*Diné Bizaad*; Dene). In IHRCs, a single expression (e.g. *chidí* ‘car’) appears to be an argument in both the RC and main clause.

- (1) [_{RC} John Bill *chidí t’áá ’altso* yaa nayiisnii’]=éę nizhónigo nidaajeesh.
J. B. car all 3O.3S.buy.PERF=REL well DIST.3S.run.IMPF
‘All the cars that John bought from Bill run well.’ (adapt. Faltz 1995, Grosu 2012)

Previous work: Classic analyses of IHRCs argue that internal heads raise at LF to RC-external position (Platero 1974, Williamson 1987, a.o.); i.e. despite differences in surface form, (1) has the same LF as the English externally-headed RC *all the cars* [_{RC} *that J. bought from B.*]. An alternative view (Hoshi 1995, Shimoyama 1999) leaves heads RC-internal. IHRCs are closed sentences: context determines the role of the head in the main clause; (1) might be paraphrased ‘John bought all the cars from Bill; they run well.’ Grosu (2012) argues that Navajo IHRCs are of the first sort: the head and any of its modifiers are interpreted RC-externally. For Grosu, the RC head in (1) is *chidí t’áá ’altso* – comprised of noun *chidí* and post-nominal expression *t’áá ’altso*. The quantified head raises and is interpreted RC-externally. Grosu argues that *chidí t’áá ’altso* must have raised out of the RC since (1) does not mean that John bought all cars from Bill. Grosu argues that this interpretation is incorrectly predicted to arise if IHRCs are instead treated as closed sentences, viz. e.g. Shimoyama 1999.

Our contributions: We make two contributions that challenge the conclusions that Grosu draws for Navajo. Doing so, we enrich documentation of Navajo RCs and quantificational expressions.

First, we tested examples like (2a) and (2b), which we argue show that other post-nominal expressions (*’alníí’ dóó* ‘half’) pronounced RC-internally are interpreted RC-internally. The target sentence shown was only accepted in context (2a), which targeted an internal interpretation of *half*; it was infelicitous in context (2b), which targeted an external interpretation of *half*. Grosu’s account – where the expression *’aghaa’ ’alníí’ dóó* would raise to RC-external position – would incorrectly predict the target sentence to be felicitous in context (2b). By contrast, a Shimoyama-style picture in which IHRCs behave semantically like closed sentences correctly predicts that material pronounced clause-internally will be interpreted clause-internally.

- (2) a. We had 10lb. of wool. Mary spun 5lb. (half of it). Alice dyed all of the spun wool red.

[_{RC} Mary ’aghaa’ ’alníí’ dóó yidiz]=éę Alice yiyiilchii’.
M. wool half 3O.3S.spin=REL A. 3O.3S.dye.PERF

- b. We had 10lb. of wool. Mary spun all 10lb. Alice dyed 5lb. (half) of the spun wool red.

[_{RC} Mary ’aghaa’ ’alníí’ dóó yidiz]=éę Alice yiyiilchii’.
M. wool half 3O.3S.spin=REL A. 3O.3S.dye.PERF

Second, we argue that the truth conditions reported for sentences with IHRCs with *t’áá ’altso* (1) can still be captured by an account where *t’áá ’altso* is interpreted in RC-internal position. We show that the interpretation desired for (1) arises if the quantificational domain of *t’áá ’altso* can be particularly contextually constrained. E.g., if its domain can be restricted to the set of objects made salient by the main clause (i.e. cars that run well), it is unsurprising that (1) need not mean that ‘John bought *absolutely* all cars from Bill.’ We consider additional data that suggests such restricted interpretations are possible for quantifiers in Navajo more generally.

References:

- Faltz, L. 1995. Towards a typology of natural logic. In *Quantification in Natural Languages*, ed. E. Bach, E. Jelinek, A. Kratzer, and B.H. Partee, 271-319. Dordrecht: Kluwer.
- Grosu, A. 2012. Towards a more articulated typology of internally headed relative constructions: the semantics connection. *Language and Linguistics Compass* 2012, 1-30.
- Hoshi, K. 1995. *Structural and Interpretive Aspects of Head-Internal and Head-External Relative Clauses*. PhD dissertation, University of Rochester.
- Platero, P. 1974. The Navajo Relative Clause. *International Journal of American Linguistics* 40, 202-246.
- Shimoyama, J. 1999. Internally headed relative clauses in Japanese and E-type anaphora. *Journal of East Asian Linguistics* 8, 147-182.
- Williamson, J. 1987. An indefiniteness restriction on relative clauses in Lakota. In *The Representation of Indefinites*, ed. E. Reuland and A.G.B. ter Meulen. Cambridge, MA: MIT Press.