HEADLESS RELATIVES IN THE SOUTHWEST: ARE THEY RELATED?

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The Southwest has long been recognized as a linguistic as well as a culture area, at least so far as phonology and perhaps morphology are concerned. With increased attention in recent years to syntactic description, the extension of studies of language history in this area to include syntax seems feasible and desirable. Serious syntactic reconstruction has already begun for some Southwestern families, and inroads into areal syntactic analysis have been made. This paper considers one syntactic trait and its history in the Southwest.

1. The Headless Relative Clause. I call this surface construction the headless relative clause (HLRC). It is characterized by three properties:

   (1) a. it is a relative clause functionally and semantically;
       b. it lacks a syntactic head noun;
       c. a lexical instance of the semantic head appears as a noun (or more substantially expanded NP) in the subordinate clause.

(1b) means that all lexical nouns in the construction appear within the subordinate clause, while (1c) excludes free relative constructions, where there is no lexical instance of a noun head, as perhaps in the subject of the English sentence What you don't know won't hurt you. (2) below represents the HLRC schematically, in contrast with the English RC construction (3):

(2) $\text{HLRC:}$

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[ [. . . NP_i . . . ] ]
NP_i S / \ S NP_i
\ ...
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(3) $\text{English RC:}$

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[ NP_i[ NP_i . . . ] ]
NP_i S / \ S NP_i
\ ...
Pro
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An example will further clarify the definition:

(4) $\text{YUMAN (Diegueño)}$

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[tanay 'wa:+\Ø 'wu:w+pu+L'] 'čiyawx
yesterday house+OBJ I-see+DEF+IN I-sing-IRREAL
'I'll sing in the house I saw yesterday'
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(5) $\text{tanay 'wa:+\Ø 'wu:w I saw the house yesterday'}$

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yesterday house+OBJ I-see
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(6) $'wa: (+pu)+L' 'čiyawx 'I'll sing in the house'$

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house(+DEF)+IN I-sing-IRREAL
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Comparing (4) with (5) and (6), note that the semantic head 'wa: 'house' belongs only to the subordinate clause 'I saw the house yesterday', as indicated by both word order (surrounded by material unique to the lower clause) and case-marking (marked only for its role in the lower clause (object) -- not for its role (invasive) in the main clause). So while (4) includes a surface appearance of its semantic head 'house', it is not as a syntactic head of the RC construction.

2. Distribution. The Southwest includes languages from six families:

(7) a. Athapaskan (Navajo, Western Apache, Chiricahua, Mescalero, Lipan, Jicarilla)
    b. Keresan (Western Keres [Acoma, Laguna, Zia, San Felipe], Eastern Keres [Cochiti, Santo Domingo])
    c. Tanoan (Southern Tiwa [Isleta, Sandia], Northern Tiwa [Taos, Picuris], Towa [Jemez], Tewa [San Juan, Santa Clara, San Ildefonso, Tesuque, Nambe, Pojoaque, Arizona Tewa])
    d. Uto-Aztecan (Southern Paiute, Hopi, Chemehuevi, Pima, Papago, Luiseno, Cahuilla, Serrano)
    e. Yuman (Havasupai, Yavapai, Walapai, Mojave, Yuma, Maricopa, Diegueño, Paipai, Kiliwa)
    f. Zunian (Zuni)

For two of these, Keresan and Zunian, I lack the data to consider relative clauses seriously, so I do not treat them in this paper. The other families all include at least one Southwestern language which has HLRC's. This fact alone is striking, since HLRC's seem
to be an uncommon construction worldwide.⁶ Examples from the non-Yuman families include:

(9) **UTO-AZTECAN** (Hopi) [Jeanne 1974]

\[ná'[ˈɨna mit tįyó'ya+ wává'ta+qa+t] hó:na\]

'I my-father that boy+OBL hit+REL+OBL sent+home

'I sent home the boy that my father hit'

(10) **ATHAPASKAN** (Navajo) [Platero 1974]

\[[tl'ė́də́ɡa ashkii ahhą́'ę́'ąɡa] yádooltih\]

last-night boy IMP-3-snore+REL FUT-3-speak

(11) **TANOAN** (Arizona Tewa) [Kroskrity, in progress]

\[he'i sen c'a:ndi ų:bp'o mánsu'+n\]

that man yesterday wine 3/3-drink+SWITCH 3-SG 1/3-bought

'I bought the wine which that man drank yesterday'

On inspection of each example, word order shows that the lexical noun in surface structure corresponding to the semantic head is syntactically part of the lower clause.

What, then, is the genetic and geographical distribution of HLRC's in the Southwest? A satisfying answer must await further research, but a beginning can be made. Of the four families under consideration here, two (Tanoan and Yuman) are represented only in the Southwest, so for them it is impossible to compare Southwestern and non-Southwestern member languages.⁷ In both families, HLRC's occur in all member languages, can probably be reconstructed for the protolanguage, and are the dominant or only RC type in most languages.

Uto-Aztecan presents the opposite case. Hopi seems to be the only Uto-Aztecan language with HLRC's, and even there it alternates with other, more typically Uto-Aztecan constructions having syntactic head nouns.⁸ Notably lacking the construction are Uto-Aztecan languages rather close geographically to Hopi, including those of the Great Basin, the Colorado River and adjoining California desert, and southern Arizona. Thus HLRC's in Hopi are either an innovation or a borrowing. Given its location in recent times, surrounded by the Athapaskan-speaking Navajo and in prolonged close contact with the Tanoan-speaking Tewa of First Mesa (since ca. 1700), borrowing seems more likely.

The Athapaskan languages present more difficult problems. Within the Southwest, the HLRC is widespread if not universal.⁹ It coexists, however, with headed RC's, although the HLRC seems (in my gut-level only appraisal) somehow better integrated with Navajo grammar than its counterpart in Hopi is with Hopi grammar. Given the rather shallow time depth of Athapaskan presence in the Southwest -- probably only 400-500 years -- I would expect an internal Athapaskan source for the construction to show some trace in non-Southwestern Athapaskan languages. Unfortunately, syntactic description of the most relevant northern Athapaskan languages and of Kiowa-Apache is scarce. To this point, what information I have
is mostly negative (i.e. indicates an absence of HLRC's), but firm conclusions await much more descriptive evidence.

3. Diffusion. Given the scanty comparative evidence, what can be concluded? First, there is good prima facie evidence that the HLRC is an areal feature of the Southwest. For Uto-Aztecan and perhaps Athapaskan, it seems to have been borrowed. In each case, available knowledge of the nature of speech communities in historical times is compatible with, even encouraging to, this interpretation. I have already mentioned the situation of Hopi. The Athapaskan case needs some elaboration. Although Athapaskans probably arrived permanently in the Southwest only in historical times, and although the traditional assumption has been that they had little friendly contact with the Pueblo peoples, recent archaeological and ethnohistorical research suggests that, to the contrary, earliest contact was not hostile and was probably conducive to at least some multilingualism. Plains Athapaskans apparently began, not long before historical times, to trade and eventually winter with Pueblo groups of the Rio Grande and eastern New Mexico. Due to the concentration of Pueblo settlement, the presence of the various Athapaskans in the surrounding area was not the threat it might have been several hundred years earlier. The retention for a considerable time of band level organization by the Athapaskans lowered further their military profile and, perhaps crucially, insured that language contact would typically be between a small Athapaskan minority and a Pueblo majority.

4. Linguistic Factors. Crosslinguistic study of the HLRC and its relation to other constructions and to typological factors is in its infancy, but some typological correlations do exist. One is that languages with HLRC's seem always to be verb-final, often strictly so. This is not surprising, given the tendency for internal elements of subordinate clauses with clause-exterior relevance to remain in their "neutral" position within the clause in verb-final languages (e.g. WH-interrogatives and sometimes pronoun tokens of RC heads). Another tendency is for there to be powerful and productive patterns of nominalization which are at least superficially similar to RC's. These typological characteristics exist widely in Athapaskan generally. Furthermore, there is some evidence suggestive of the possibility that HLRC's may appear in some northern Athapaskan languages as a very marked (poetic?) variant (Scott Rushforth, personal communication). If the Athapaskan speakers arriving in the Southwest already used the HLRC as a very restricted variant or even were on the "typological brink" of allowing it, contact with Tanoan speakers and perhaps others using the construction may have sufficiently biased existing variation to produce the assumed change. The kind of mechanism I believe responsible is similar to that proposed by Silverstein (1972) for the genesis of Chinook jargon. Resources for existing internal variation (e.g. "optional transformations") tend to be used or not used in such a way that
surface structures result which are similar to surface structures of the "target" language with similar meaning. This shifting in the determinants of "optional" processes and forms produces a rotation of sociolinguistic axes -- dimensions of situation, status, personal style, etc. which once governed a given surface variation no longer do so to the same extent, at least in the limited confines of the contact situation. When the impact of contact is sufficient or internal linguistic or sociolinguistic factors are favorable, the borrowing becomes established in a wider range of contexts, much as an internal innovation might.

Though demonstration that this speculation is correct and the model appropriate (or their abandonment) lies in the future, there is a striking and ironic parallel in the apparent shift in Yuma from a headless to an English-like headed relative, as described recently by Sundheim (1976). Most Yuman languages, while preferring the HLRC, have available various raising, copying, and especially fronting processes which avoid ambiguities possible in the HLRC by producing RC's with syntactic heads (cf. Gorbet 1974: 42-71). Sundheim's data and analysis suggest that these very restricted constructions, previously bound to uncommon pragmatic conditions, have, presumably due to English influence, spread to situations where their original functional motivation is irrelevant, but where the new dimension of approximation to English surface structure has led to their preempting the previously satisfactory HLRC.

Thus far my discussion of possible diffusion of the HLRC has focussed on the facts of its distribution today and on non-linguistic evidence regarding the nature of earlier contacts in the Southwest. An important body of evidence that should be considered in addition is that of other linguistic influences among the languages in question. Though systematic study of areal phonological traits is not yet to the point where we can confidently assess the chance probability of a given correlation, there are still a couple of cases in the Southwest which are worthy of attention. One is the existence of voiceless laterals in Athapaskan, Tanoan, Yuman, and Zuni. They are an Athapaskan family trait, but inquiry into their development in Tanoan and Yuman especially may prove useful to broader problems. Another correlation is the glottalized nasal of Acoma (a Keresan language) and Navajo.

Perhaps of greater interest are a number of possible cases of syntactic influence. Paul Kroskrity (personal communication) has pointed out several possible interactions between Navajo and Tewa: similarities in constraints on the arguments of "passive" constructions; similarities of classificatory verbs; and parallels between Navajo /-yë/= and /-lgi/ and Tewa /-'i/. Pamela Munro (personal communication) has also noted the possibility that the Yavapai /-o/ 'benefactive' may be a development in response to the Navajo (or Western Apache) "passive" (marked in Navajo by the /bi-/-yi/- alternation). She points out that /-o/ constructions and perhaps others in Havasupai, Walapai, and Yavapai are somehow
very "un-Yuman". What they violate is an almost excessive syntactic transparency, one facet of which is a paucity of processes which change grammatical relations.12

5. Prospects and Problems. This paper has been a plausibility argument rather than a demonstration. Irregularly sampled facts about surface syntax show that the HLRC has a wide Southwestern distribution at least partially independent of family memberships, and our present understanding of language universals suggests that family-based typological characteristics alone do not lead us to expect this distribution. Evidence, also incomplete, about past contacts and their nature seems to make the hypothesis of diffusion plausible sociolinguistically.

Two principal gaps block discovery of the details of the history of the HLRC in this area. One, already mentioned, is the relative lack of syntactic description for many languages -- in particular, Zuni and the Keresan languages in the Southwest, Kiowa and Kiowa-Apache on the Plains, and Chipewyan, Carrier, and Sarsi in the North. For several of these, good descriptive work is in progress or well-begun, lacking mostly wider dissemination. The second gap is the lack of substantive information about relevant typological interdependencies. I have already mentioned that the worldwide distribution of HLRC's is in itself uncertain. Crucial to an attempt to interpret possible cases of diffusion is also a reliable background of conditional probabilities of occurrence. For example, if it were to turn out that verb-final languages almost always, or even very often, had HLRC's (perhaps along with other RC constructions), then the facts noted here about the distribution of HLRC's in the Southwest might have to be reinterpreted as actually about the distribution of verb-final word order. Needless to say, the problems posed here have wider applicability than the Southwest or North America. Hopefully I have conveyed why the problem of HLRC's in the Southwest is an attractive place to begin solving some of them.

**FOOTNOTES**

1. For helpful discussion and correspondence about the problems this paper addresses, I thank Paul Kroskrity, Margaret Langdon, Pam Munro, Stanley Newman, and Scott Rushforth. Only I bear responsibility for its shortcomings, of course.

2. Other terms for this construction include "internally-headed relative clause" (Gorbet 1974) and "pivot-independent relative clause" (Kuroda 1974).

3. I will not attempt a rigorous definition of "relative clause" here, except to note that I only consider restrictive relatives and that RC's are characterized by the discourse function of delimiting reference using a subordinate clause of which the referent is a topic. Cf. Gorbet (1974:34-41) for discussion of the problems of defining RC cross-linguistically.

4. This schema is for expository purposes and is not a general
representation of English RC's, since it ignores such complications as Pied Piping, the problematic status of that in RC's, and such that clauses.

5. Abbreviations used are: DEF 'definite', FUT 'future', HLRC 'headless relative', IMP 'imperfective', IN 'inessive/illative case', IRREAL 'irrealis', OBJ 'object case', OBL 'oblique case', RC 'relative clause', REL 'relativizer', SG 'singular', 1/3 'first person subject and third person object, 3 'third person subject'. The null "∅" indicates a morpheme without phonological realization whose presence is unambiguously inferable from constraints of the language. In transcriptions, † represents a glottal stop, + represents a morpheme boundary relevant to this paper; in glosses, - represents either irrelevant morpheme boundaries or material which is morpheme-internal in the language transcribed.

6. This assumption rests on shaky empirical ground. Though Schwartz (1971) seems to support it, the sudden increase in the last few years of the number of languages known to have HLRC's suggests that their rarity may be in part an artifact of lack of emphasis on careful and extensive syntactic field work and the prejudices of investigators. The fact that HLRC's were only noted as recently as 1974 (Kuroda 1974) in Japanese, a language given far more syntactic attention than most, much of it by linguistically sophisticated native speakers, should be a firm lesson in the nontrivial nature of description and the caution with which we must regard negative results.

7. For Yuman, of course, we could compare languages of other Hokan families, and for Tanoan, Kiowa. Though I intend to pursue such more distant comparisons, I feel they should await more thorough assessment of the distribution of HLRC's in the families proper of Southwestern languages.


9. It is definitely attested in Navajo (Platero 1974) and Western Apache (Keith Basso, personal communication), and I suspect on the basis of inconclusive but suggestive textual material that it will be found in Mescalero and Jicarilla. I am in the process of arranging first-hand tests of the latter suspicion.

10. Cf. Wilcox 1976 for an insightful integration of this material. Gunnerson and Gunnerson 1971 summarizes and discusses archaeological and other evidence, while Hammond and Rey 1966 provides abundant and fascinating ethnohistorical material.

11. The data in question is difficult to interpret. Sentence (i) is an example of a RC construction from Bearlake, a northern Athapaskan language:

(i) tâ [doo hîtâ'a ̄ iîlé] deyo
dog sheep it-bit-it it-was-so it-(was)-barking
'the dog that bit the sheep was barking'
When (ii) below was preferred as an alternative, the Bearlake speaker said that he would never say it but that he could understand it and it might be okay if you were talking fancy. Whether this response is to be interpreted as evidence for the actual existence of HLRC's in Bearlake or closely related languages, as evidence of the receptivity of the language to such a construction, or as polite acquiescence, I do not know, though I suspect I have listed the possibilities in order of increasing likelihood.

(ii) * [eyi doo tā́ yáré hɪtāˈa ɪlé] deyo
    that sheep dog through-it it-bit-it it-was-so it-(was)-barking

12. For a discussion of the specific manifestations of this pervasive characteristic in one Yuman language, see Gorbet (1974:210-224).

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