

Clausal Recursion and Embedding in Warlpiri

Julie Anne Legate

University of Pennsylvania

jlegate@ling.upenn.edu

May 21, 2009

What follows is the core of an argument for clausal recursion and embedding in Warlpiri. In a slightly different form, it appears buried in section 3.2 of a paper accepted to appear in *Syntax* entitled “Warlpiri Wh-Scope Marking.”

In this note, I consider clausal recursion and clausal embedding in Warlpiri.¹ To begin, the issue of whether Warlpiri has embedded clauses is limited to finite clauses. Hale 1982 and Hale et al 1996 argue convincingly that Warlpiri does have embedded nonfinite clauses;² these exhibit obligatory control, where the controller of the embedded PRO is predictable – the matrix subject of an intransitive clause and the matrix object of transitive clause. Regarding the following examples, Hale states that the verbs “*select* jussive infinitival complements” (Hale 1982:282, emphasis original).

¹See Everett 2005, and Nevins, Pesetsky, & Rodrigues 2007 on recursion in Pirahã.

²Note that nonfinite clauses are nominalized in Warlpiri; see Nash 1986, Simpson 1991.

- (1) a. Ngarrka-ngku ka-palangu kurdu-jarra ngarri-rni [maliki
man-Erg PresImpf-3dualObj child-Dual tell-NPast dog
yampi-nja-ku]
leave-Infin-Purp
“The man is telling the two children to leave the dog alone.” (Hale 1982:282)
- b. Jakamarra-rlu-ju jinjinyi-ma-nu [warlu yarrpi-rninja-ku]
Jakamarra-Erg-1sgObj force-Cause-Past fire kindle-Infin-Purp
“Jakamarra ordered me to build a fire.” (Hale 1982:282)

These verbs of ‘linguistic communication’, Hale notes, also appear with a different type of nonfinite clause that show non-obligatory control, or even an overt subject:

- (2) a. Napurrula-rlu-jarrangu ngarru-rnu [pina-rni ya-ninja-ku], ngaka
Napurrula-Erg-1dualExclObj tell-Past back-hither go-Infin-Purp anon
nganta kapi ya-ni-rni
supposedly FutC go-NPast-hither
“Napurrula told us about coming back, i.e. (that) she will, according to her, come soon.” (Hale 1982:290)
- b. Yalumpu-rlu-ju ngarru-rnu pirrarni-rli, [ngapa wanti-nja-ku nganta].
that-Erg-1sgObj tell-Past yesterday-Erg water fall-Infin-Purp supposedly
“That person (nearby) told me yesterday that it was supposed to rain.” (Hale 1982:290)

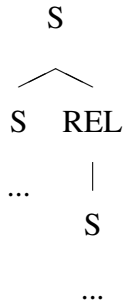
These he considers to be adjuncts rather than complements.

The origin of the claim that Warlpiri does not have finite embedded clauses is Hale’s influential 1976 article, which examined the “adjoined relative clause” construction. In this

construction, a finite clause on the right/left periphery of the main clause is interpreted as modifying either a DP or the temporal specification of the clause. This is illustrated in (3):

- (3) Ngajulu-rlu-rna yankiri pantu-rnu, [kuja-lpa ngapa nga-rnu].
 I-Erg-1sgSubj emu spear-Past DeclC-PastImpf water drink-Past
 “I speared the emu which was drinking water.” OR
 “I speared the emu while it was drinking water.” (Hale 1976:78)

Hale notes that such clauses are never found clause-internally and are typically intonationally dislocated. He proposes a structure whereby the relative is adjoined to the matrix clause at the level of the sentence:



This is already recursion of finite clauses in Warlpiri. However, there are more interesting cases, involving embedding.

Hale 1976 does not consider finite clauses associated with matrix verbs like *ngarrirni* “tell”,³ *wangkami* “say”, *japirni* “ask”, *payirni* “ask”, nor have I been able to find any treatment of such clauses in the literature. Hale 1994 briefly states that such clauses are adjoined and that this explains their status as syntactic islands, but that work provides no further evidence or discussion. So, let us focus on such intensional verbs and the associated dependent clauses.

³*ngarrirni* is also used to mean “call”, and has extended meanings similar, but not identical, to *say* and *tell* in English, including “indicate” and “swear at”.

Dependent finite clauses associated with verbs of linguistic communication can be a direct quote, (4):

- (4) Ngurra-ngka kaji-ka yitirli nyina.
 camp-Loc NFactC-PresImpf outside sit.NPast
 Kaji-ka-lu-rla yapa-kari wangka, “Nyiya-ku
 NFactC-PresImpf-3plSubj-3DatObj person-other say.NPast what-Dat
 ka-npa nyina yali-rla-ju, nganyngurlu?”
 PresImpf-2sgSubj sit.NPast there-Loc-Top apart
 “One might sit apart in the camp and others would say to that person, ‘Why are you
 sitting over there, apart?’.” (Warlpiri Dictionary Project 1993)

However, they may also be reported speech, (5a) and (5b). Notice that in (5a), a direct quote “I intend to come” would have required the first singular subject clitic *-rna* instead of the phonologically null third singular subject clitic. Similarly, in (5b), a direct quote “We two went a long way in another country where there were no people” would have required the first dual exclusive subject clitic *rlijarra*, rather than the second dual subject clitic *npala*.⁴

- (5) a. Ngaju-ku-pirdangka-rlu-ju ngarru-rnu [yungu-nganta ya-ntarla-rni];
 I-Dat-brother-Erg-Top tell-Past RelC-supposedly go-Irrealis-hither
 wali lawa-juku ka-rla karri.
 well nothing-still PresImpf-3DatObj stand.NPast
 “My brother said that he intended to come, but he is still not here.” (Warlpiri
 Dictionary Project 1993)

⁴A *Syntax* reviewer asks about changes in tense in reported speech in Warlpiri. I have not found any evidence for the sequence of tense phenomena in the language.

- b. Kala-ju yimi-ngarru-rnunjunu-rnu
 PastC-1sgObj speech-tell-Assoc.motion-Past-hither
 [yungu-lpa-npala wapa-ja wurnturu ngurrara-kari-rla
 RelC-PastImpf-2dualSubj walk-Past far country-other-Loc
 yapa-kurlu-kurlu-wangu-rla kulkurru-kulkurru].
 person-having-having-without-Loc country.without.people
 “Well he came and told me that you two went a long way in another country
 where there were no people – all by yourselves.” (Warlpiri Dictionary Project
 1993)

The complementizers that introduce dependent finite clauses in Warlpiri are of two types. First, we often find the relational complementizers *yi*, *yinga*, *yingi*, or *yungu*:

- (6) a. Ngarri-rni ka-pala-nyanu munga-ngka-kungarnti,
 tell-NPast PresImpf-3dualSubj-Anaph night-Loc-preparation
 [yinga-pala munga-ngka jintajarra].
 RelC-3dualSubj night-Loc one-Incho.NPast
 “They tell each other the plan for the night, that they will meet up.” (Warlpiri
 Dictionary Project 1993)
- b. Ngarri-rninja-ya-nta-jana ngangkayi-kirli [yungu-lu ya-ni-rni].
 tell-Infin-go-Imper-3plObj medicine.man RelC-3pl go-NPast-hither
 “Go and tell the medicine men to come.” (Warlpiri Dictionary Project 1993)

Dependent clauses introduced by these complementizers are not limited to appearing with speech verbs, and are associated with a range of interpretations, commonly “in order to” and “because”:

- (7) a. Kinki-ji yakarra-pardi-ja-lku [yungu-palangu kurlarda
monster-Top wake.up-Past-then RelC-3dualObj spear
jangkardu-ma-nu].
attack-Cause-Past
“The monster got up then to get his spear to attack those two.” (Warlpiri Dictionary Project 1993)
- b. Maliki, warna-jangka pali-ja, [yinga warna-ngku paju-rnu].
dog snake-from die-Past RelC snake-Erg bite-Past
“The dog died from a snake (bite), because a snake bit him.” (Warlpiri Dictionary Project 1993)
- c. Nyuntu pirntirri-kirra warrka-ka; [yinga-npa-rla pirntirri-ngirli
you tree.top-All climb-Imper RelC-2sgSubj-3DatObj tree.top-El
nya-nyi].
see-NPast
“You climb up the tree, so you can look out for him from the top” (Warlpiri Dictionary Project 1993)

Thus, these clauses can appear as unselected adjuncts in some of their uses. It is unclear whether they also appear as adjuncts with matrix intensional verbs.

Dependent clauses may also be introduced by the general declarative complementizer *kuja* “that”, as well as its variants based on tense and mood, including the future *kapu* found in (8).⁵ (These complementizers also introduce the adjoined relative clause.)

⁵A *Syntax* reviewer notes the interesting homophony between the manner pro-form *kuja* “thus”, which is often found with direct quotation, and the declarative complementizer *kuja* “that”. As noted in the main text, the latter, but not the former, alternates with other complementizers. Also, as the reviewer points out,

- (8) a. Jakamarra-rlu-ju yimi-ngarru-rnu [kuja Japanangka-rlu marlu
 Jakamarra-Erg-1sgObj speech-tell-Past DeclC Japanangka-Erg kangaroo
 pantu-rnu]
 spear-Past
 “Jakamarra told me that Japanangka speared a kangaroo.” (Granites et al 1976)
- b. Ngarrka-ngku-rla karnta-ku yimi-ngarru-rnu [kapu nganta ngapa
 man-Erg-3DatObj woman-Dat speech-tell-Past FutC supposedly water
 wanti-mi]
 fall-NPast
 “The man told the woman that it was going to rain” (Granites et al 1976)
- c. Ngaju-rna purda-nya-ngu [kuja Japanangka wanti-ja nantuwu-ngurlu]
 I-1sgSubj aural-see-Past DeclC Japanangka fall-Past horse-El
 “I heard that Japanangka fell off the horse” (Granites et al 1976)

Like relative clauses, the dependent clauses introduced by both of these types of complementizers are found only clause-peripherally, as may be verified with the examples throughout. This suggests that the clauses are adjoined, at least in their surface position. And indeed, Granites et al 1976 report that the dependent clause is presupposed true by the speaker, unless specifically marked otherwise, suggesting that the dependent clause is outside of the scope of the matrix intensional predicate:

- (9) a. Jakamarra-rlu-ju yimi-ngarru-rnu [kuja Japanangka-rlu marlu
 Jakamarra-Erg-1sgObj speech-tell-Past DeclC Japanangka-Erg kangaroo

the complementizer can host the second position clitic cluster in the dependent clause, whereas the manner pro-form cannot (since it belongs to the main clause). It would be interesting to investigate the historical relationship between these two synchronically distinct items.

pantu-rnu]

spear-Past

“Jakamarra told me that Japanangka speared a kangaroo.”

→ speaker presupposes that “Japanangka speared a kangaroo” is true (Granites et al 1976)

- b. Jakamarra-rlu-ju yimi-ngarru-rnu [kuja nganta Japanangka-rlu
Jakamarra-Erg-1sgObj speech-tell-Past DeclC supposedly Japanangka-Erg
marlu pantu-rnu]
kangaroo spear-Past
“Jakamarra told me that Japanangka supposedly speared a kangaroo.”
→ speaker does not presuppose that “Japanangka speared a kangaroo” is true
(Granites et al 1976)

- (10) a. Ngarrka-ngku-rla karnta-ku yimi-ngarru-rnu, [kuja-ka Japanangka
man-Erg-3DatObj woman-Dat speech-tell-Past DeclC-PresImpf Japanangka
ya-ni Yalijipiringi-kirra]
go-NPast Alice.Springs-All
“The man told the woman that Japanangka is going to Alice Springs.”
→ speaker presupposes that “Japanangka is going to Alice Springs” is true
(Granites et al 1976)
- b. Ngarrka-ngku-rla karnta-ku yimi-ngarru-rnu, [Japanangka nganta
man-Erg-3DatObj woman-Dat speech-tell-Past Japanangka supposedly
ka ya-ni Yalijipiringi-kirra]
PresImpf go-NPast Alice.Springs-All
“The man told the woman that Japanangka is supposedly going to Alice Springs.”

→ speaker does not presuppose that “Japanangka is going to Alice Springs” is true (Granites et al 1976)

However, there is phonological and semantic evidence that dependent clauses need not be adjoined. First, the dependent clause may provide a host for the second position clitic cluster. In (11), the dependent clause *wurdungu yungu nyinalku* “he must be silent” is peripheral, but fills the initial position providing a host for the second position clitic cluster *karlipa*:

- (11) [Wurdungu yungu nyina-lku] ka-rlipa pututu-ngarri-rni.
 silent RelC sit.NPast-now PresImpf-1plInclSubj warning-tell-NPast
 “We tell him that he must be silent.” (Warlpiri Dictionary Project 1993)

This contrasts with adjoined relative clauses, which do not provide a host for the clitic cluster, here *rna*:

- (12) [Yankiri-rli kuja-lpa ngapa nga-rnu], ngajulu-rlu-rna pantu-rnu
 emu-Erg DeclC-PastImpf water consume-Past I-Erg-1sgSubj spear-Past
 “The emu which was drinking water, I speared it.” (Hale 1976:78)

Second, the dependent clause can unambiguously take scope under the matrix intensional predicate. We must be careful, though, since in many examples, the dependent clause is marked as nonfactive through use of the irrealis verbal suffix, (5a), evidentials or adverbs. For example, although (13) appears in a context in which the dependent clause is explicitly denied (continuing with *Yampiyalu yiiki-nyinajawangurlu ngurrpa kuluwangu* “Don’t tell him such things as he’s got nothing to do with the fight”), we cannot conclude that the dependent clause *kapili pakarni nganta yapangku* “that the people will hit him” is

in the scope of the matrix verb, since the dependent clause is marked as nonfactual with the adverb *nganta* “supposedly”.

- (13) Yiiki-nyina-mi [kuja-ka-nkulu-rla ngaju-nyangu-ku
 predicting.worst-sit.NPast DeclC-PresImpf-2plSubj-3DatObj I-Poss-Dat
 kurdu-ku kapi-li paka-rni nganta yapa-ngku].
 child-Dat FutC-3plSubj hit-NPast supposedly person-Erg
 “There you are telling my child that the people will hit him.” (Warlpiri Dictionary
 Project 1993)

However, examples do exist in which the dependent clause appears in the scope of the matrix intensional predicate. Consider the following sentence in which the matrix predicate *kapuru-nyiyami* “disbelieve” takes scope over the dependent clause *kujaka yani wirlinyi* “that he is going hunting”.⁶

- (14) Kapuru-nyina-mi ka-lu-rla-jinta wati-ki yali-ki
 disbelieve-sit-NPast PresImpf-3plSubj-3DatObj-3DatObj man-Dat that-Dat
 [kuja-ka ya-ni wirlinyi].
 DeclC-PresImpf go-NPast hunting
 “They don’t believe that man is really going out hunting.” (Warlpiri Dictionary
 Project 1993)

⁶The translation given from the Warlpiri Dictionary Project is not exact, in that “that man” is translated as the subject of the embedded clause. An *Syntax* reviewer notes that in another version of the dictionary, the translation was “People don’t really believe it when that man says he is going out hunting”, which has both the problem of “that man” as the subject, and an additional clause with an added intensional predicate “that man says...”. The translation may be more appropriately “They don’t believe that man that he is going out hunting”.

Notice that the dependent clause is not marked in any way as nonfactive, so if it were outside the scope of the matrix intensional verb the dependent clause would be taken as true. However, in that case, the disbelief in the matrix clause should have been marked as mistaken (using the counterfactual evidential *kulanganta*), and indeed the continuation argues against such an interpretation: “*Yaliji wati ka yanirra malamarrri mayi?*” “*Lawa ngarra. Karntakupurda ka kutu ngayi warru-parnkami. Yuurrkupaturla ka karrimirni.*” “*Nganangku-wiyirla kuyu marlaja ngarnu ngulakuju purruparduku?*” “So that man’s a great game-hunter who is heading off there, is he? Not at all! He just runs around looking for women. He hangs around in the bushes. Whoever ate meat thanks to that lame duck?” Thus, we must conclude that the dependent clause originates as embedded under the matrix intensional verb.

Therefore, Warlpiri does have finite embedded clauses.

Determining the exact initial position of the dependent clause – for example as a complement to the matrix verb, or a modifier of a matrix nominal – is difficult, and undoubtedly varies with the matrix predicate. For example, the above verb *kapurunyinami* “disbelieve” occurs with double dative marking in the auxiliary, raising the possibility of a null matrix dative nominal (“about it”) that is modified by the dependent clause.⁷

For other predicates, there is no semantically appropriate matrix argument to be modified by the dependent clause, suggesting that the dependent clause may be merged as a complement of the verb before being extraposed. We cannot rule out the possibility of a null matrix absolutive modified by the dependent clause for the subset of verbs that allow absolutive “about” objects (e.g. *ngarrirni* “tell”), since such an object would not trigger

⁷Note, however, that double dative marking does not unambiguously indicate an additional dative argument; see Hale 1982.

agreement (third singular absolutive agreement is phonologically null). The following illustrates an overt absolutive “about” DP *ngamirliji* “curlew” with the predicate *ngarrirni* “tell”:

- (15) Pina-ngku-jala ka-rna ngarri-rni ngamirli-ji wita-juku
 knowledgable-Erg-actually PresImpf-1sgSubj tell-NPast curlew-Top small-still
 yi-ka nyina.
 RelC-PresImpf sit.NPast
 “The fact is that I know what I’m saying about the curlew which is the small one.”
 (Walpiri Dictionary Project 1993)

However, several other verbs do not occur with absolutive “about” objects (including, for example, *japirni* “ask”, *payirni* “ask”, *wangkami* “say”, *purda-nyanyi* “hear”), suggesting that the associated dependent clause may indeed originate as the complement of these matrix verbs. Such examples presented to this point include (5b) and (8c); an additional example follows:

- (16) ngula-jangka-ju, yurrkunu-rlu kuja-lu purda-nya-ngu [walypali Harry
 that-from-Top police-Erg DeclC-3plSubj aural-see-Past white.person Harry
 Henty nyurnu-lku], [kuja Harry Henty luwa-rnu yapa-ngku],
 Henty dead-now DeclC Harry Henty shoot-Past aboriginal.person-Erg
 ngula-jangka-lu-rla jangkardu-turnu-jarri-ja.
 that-after-3plSubj-3DatObj opposing-group-Incho-Past
 “After that, when the police heard that the white man Harry Henty was dead, that
 an aboriginal had shot him, then they came together to go after him.” (Walpiri
 Dictionary Project 1993)

As the resolution of this issue is not required for the current discussion, I leave it open.

References

- Everett, D. 2005. Cultural constraints on grammar and cognition in Pirahã: another look at the design features of human language. *Current Anthropology* 46:621-646.
- Granites, R.J., K.L. Hale, & D. Odling-Smee. 1976. Survey of Warlpiri Grammar. Ms., Massachusetts Institute of Technology.
- Hale, K.L. 1976. The adjoined relative clause in Australia. In *Grammatical Categories in Australian Languages*, ed. R.M.W. Dixon, 78-105. Canberra: Australian Institute of Aboriginal Studies.
- Hale, K.L. 1982. Some essential features of Warlpiri verbal clauses. In *Papers in Warlpiri grammar: in memory of Lothar Jagst*, ed. S. Swartz, 217-315. Berrimah, N.T.: SIL-AAB.
- Hale, K.L. 1994. Core structures and adjunctions in Warlpiri syntax. In *Studies in Scrambling. Movement and Non-Movement Approaches to Free Word-Order Phenomena*, ed. N. Corver & H. van Riemsdijk, 185-219. Hawthorne, NY: Walter de Gruyter.
- Hale K.L., M. Laughren & J. Simpson. 1995. Warlpiri Syntax. In *Syntax. Ein internationales Handbuch zeitgenössischer Forschung An International Handbook of Contemporary Research*, ed. J. Jacobs, A. von Stechow, W. Sternfeld & T. Vennemann, 1430-1451. New York, NY: Walter de Gruyter.
- Larson, R.K. 1982. A note on the interpretation of adjoined relative clauses. *Language and Philosophy* 5:473-82.

- Nash, D. 1986. *Topics in Warlpiri grammar*. New York: Garland.
- Nevins, A., D. Pesetsky, & C. Rodrigues. 2007. Pirahã Exceptionality: A Reassessment. Ms., Massachusetts Institute of Technology, Harvard, Universidade Estadual de Campinas.
- Simpson, J. 1991. *Warlpiri Morpho-Syntax. A Lexicalist Approach*. Dordrecht: Kluwer Academic Publishers.
- Warlpiri Dictionary Project. 1993. Warlpiri Dictionary. Ongoing work with numerous contributors. Machine-readable data files, deposited at ASEDA, AIATSIS.