Topic E:
Simple and compound verbs:
conjugation by auxiliaries in Australian verbal systems
### 89. North-east Arnhem Land

Jeffrey Heath

At first sight, there appears to be a sharp break between the structure of verb complexes from the Mara-Alawic family (Mara, Alawa, Warndarang, Yugul) in the Roper River area (Northern Territory) and those of the languages just north of them (Nunggubuyu, Ngandi, and the Yuungu group, exemplified here by Ritharrngu). In this paper I will argue that the discontinuity is less severe than it seems.

In Mara-Alawic the verb-complex type is usually this:

(1) **Verb + Pronominals-Aux-Suffixes**

Here — is the usual word-internal morpheme boundary, and + a special boundary intermediate between — and a true word boundary.

Example: **war+ga-windjma-ni** 'I see him' ('see+I/him-Aux-Continuous-Present').

The complex is usually tightly fused phonologically, with several morphophonemic rules applying over the + boundary which do not apply over word boundaries. The order of elements is rigidly fixed.

A few verbs do not require the auxiliary and are instead directly inflected, the result being Pronominals-Verb-Suffixes. Most of these inflectible verbs can also function as auxiliaries.

To the north, we find that main verbs are directly inflected for tense-aspect (Ritharrngu), or for both tense-aspect and pronominal subject and object (Nunggubuyu, Ngandi). Thus Nunggubuyu **gama-na-yi**: 'I see him' ('I/him-see-Present'). In Ritharrngu, subject and object-marking pronominals are enclitics added to the first constituent of the clause:

(2) **daramu-ga ha ra ya:-ma** 'I see the man.'

Accus him I see Present

This could also be **yu:-ma ha ra daramu-ga** with reordering, showing that the pronominal enclitics are not prefixes or proclitics to the verb.

Ritharrngu pronominal enclitics appear to historically represent reductions of independent pronouns found in other Yuungu languages; in others the pronominals can occur in any position in the clause.

Despite these substantial differences between Mara-Alawic and the northern languages, the latter (especially Ritharrngu) have constructions which could be regarded as parallels to or precursors of the Mara-Alawic auxiliary constructions.

Ritharrngu has a large verb-class, which I call class 5, whose roots are normally of the form CVC or CVCC, where noninitial C may be a cluster or a single consonant. To be inflected verbally, these roots must add a thematicising suffix -Cui (-die-, -yu-, etc.). The consonant is predictable from the final segment(s) of the root. For example, **bangul** 'return' is thematicised as **bangul-yu-** 'to return'; as in potential **bangul-yu-ru**. Sometimes, but not often, the root can be identified historically with a nonverbal stem surviving elsewhere in the language: **haimu** (particle) 'alone, abandoned', class 5 root **bairu/-mu**(-yu-) 'to abandon, reject'.

Another thematicising suffix, -wu-, is added to a different set of stems when inflected verbally. Most of these are clearly adjectival or nominal in nature, and some can occur with nominal inflection: **mukuy** 'dead body, devil',

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### Table 6: Inflection patterns in Alawa and Mara

<table>
<thead>
<tr>
<th>LANGUAGE</th>
<th>Alawa</th>
<th>Mara</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASS CTS</td>
<td>PAST CTS</td>
<td>PR PUNCT SUBI</td>
</tr>
<tr>
<td>PAST PUNCT</td>
<td>-a</td>
<td>-a</td>
</tr>
<tr>
<td>SUBI</td>
<td>-a</td>
<td>-a</td>
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<tr>
<td>FUT CTS</td>
<td>-a</td>
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<td>FUT CTS</td>
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<td>-a</td>
</tr>
<tr>
<td>FUT CTS</td>
<td>-a</td>
<td>-a</td>
</tr>
</tbody>
</table>

a. C stands for any consonant.

b. Plus marks do not correspond across the table, except for pres ets and past ets forms in Alawa, and possibly

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Thus Ritharrngu, like Mara-Alawic, has mechanisms for converting uninflected roots into main verbs. In one language the root is verbally thematised and then the affixes are added to it directly; in the others, the root remains uninflected and a special auxiliary verb takes the affixes. We have a functional, but not formal, parallel here. However, going further into Ritharrngu we find constructions which have both formal and functional similarities to Mara-Alawic auxiliary constructions.

Ritharrngu verbs in -Cy, and -gi are normally capable of dropping all affixes (including thematising -Cu or -fi) and thereby showing a special 'root form'. Since root forms of -fi verbs are often identical to, or at least confusable with, unverbalised nominal and adjectival stems, we will focus on class 5 roots with -Cu.

The normal past tense form of bangul? 'return' is bangul?-yu-na. However, in narratives where all verbs are in the past tense, the truncated root form bangul? can occasionally be used instead:

(3) warni-ka yuy bangul? 'He went and returned.'

(4) bangul? 'Come back!'

The root form is usually pronounced emphatically, like an interjection, and is definitely expressive. Therefore with activity verbs it often refers to sudden or surprising events, as in (3). Similarly, the imperative type (4) is a curt or rude type which might be used when shouting at children. However, for the most part the root form is best described simply as a contraction of longer and more complex forms, and thus as essentially temporal and non-aspectual. Furthermore, it can be seen from (3) and (4) that the root form can function as the contracted form of an entire clause, not merely of a complex verb form. In (3), bangul? is not simply the simplified form of bangul?-yu-na, but of the clause bangul?-yu-na pay with third person enclitic pronoun pay, and in (4) it is the contraction of bangul?-yu-ra gi, with second singular gi added to a potential verb. While it is true that the root form sometimes takes pronoun enclitics and so can be said to be the nucleus of a clause, more often it patterns itself as a single, isolated particle.

Since the root form is not inflected verbally, it is not always easy to determine what its surface class is (verb, noun, adjective, adverb, etc.). In fact, there is no reason to draw a sharp line between root forms and other types of particle, including some which may well historically be nominal or adverbial. For example, there is a particle marambada referring to the act of stealing or running off with a woman. The full expression usually contains a verb like mara- 'to grab, get', as in this example:

(5) mara-ga ha pay marambada? 'He ran off with her.'

Although marambada may well be a noun historically ('elopement' or the like), it is not unlike the root form in sentences like (3).

Furthermore, there are certain particles which appear to function as suppletive root forms for verbs which cannot form regular root forms. For example, gi appears to correspond to the inflected verb lu- 'to strike with a spear', but to the verb gi-ya- 'to sit', and bat to mara- 'to grab'. These suppletive root forms are often used as adjuncts to the inflected verbs, and serve mainly to add an expressive flavour:

(6) mara-ga ya yu bat 'He grabbed it.'

The nuance of elements like bat and gi can sometimes be expressed in translation by an expression such as all of a sudden or even an interjection like Pow! or Bang!. However, the Ritharrngu elements are more clearly related to verbal notions.

So we have a wide range of verb-plus-particle constructions, including such diverse types as (3), (5), and (6). I would suggest that the Mara-Alawic auxiliary system can be plausibly explained as reflecting crystallisation of certain of these verb-plus-particle constructions. The following developments could convert Ritharrngu into a language similar to Mara-Alawic: (a) increase in the number of verbs which can produce root forms (in Ritharrngu, many verbs cannot); (b) loss of the inflected roots of many of these stems, so that to indicate tense and aspect it is necessary to juxtapose them to one of a dwindling number of inflectable verbs; (c) consequent semantic dilution of inflectable verbs, at least when juxtaposed to root forms; (d) fixation of ordering of verb-plus-particle constructions, including those where the particle is a root form of a verb but also those with other types of particle.

The constructions of types (3), (5), and (6) which we have been looking at are more productive in Ritharrngu than in Nunggubuyu, but this language does have some examples of them; the Ngandi types will probably turn out to be similar after more research is done on the language.

There are not many root forms related to inflectable verb stems in Nunggubuyu. One example is jelg, which is associated with the stem -ylja- 'take'. This example is instructive, since the root form is phonologically archaic, and could not possibly be a recent creation. The full stem can be reconstructed as *-yjda-*, with a thematic suffix parallel to (and perhaps historically related to) Ritharrngu -Cy. This becomes -ylda- by elision and loss of *-g- between consonants; the -yda- is no longer clearly segmentable. The root form jelg must be a survival of a period when the full stem was still in the form *-yjda-*. There are only a few other root forms, and in general they are similarly indicative of or compatible with sporadic survival of a formation no longer productive. The use of the surviving root forms is similar to that of similar Ritharrngu forms, and like them they are usually pronounced as interjections. An example:

(7) jelg ni-yjda-nil 'He went past (all of a sudden),' he go past Past

Nunggubuyu also has a few particles of basically nominal type as in the case of Ritharrngu marambad? in (5). In fact, this Ritharrngu element has an exact correspondent in Nunggubuyu wi-maymunay (with nominal derivational prefix wi-). Another example is wi-ya-rt 'lighting'.
structure of verb complexes than they are now. Starting from a relatively undifferentiated common base, each language or family has gone its own way by developing and suppressing different combinations of construction-types, so that of the four languages treated here only Nunggubuyu and Ngandi show substantial structural similarities to each other today.

Our job is not yet completed, however, since we have yet to tackle the question of what the relationship is between auxiliary and proto-auxiliary constructions on the one hand and compounds on the other. I will now argue that there is a close historical connection between them, and specifically that compounds in the northern languages in many cases reflect the same historical processes which have led to auxiliary constructions in Mara-Alawic.

We are not interested in just any compounds here. For example, Nunggubuyu compounds with incorporated noun stem are only marginally relevant to us. The compounds which are relevant are chiefly those where the initial element is either definitely verbal or at least semi-verbal in force, and the second (main) element is one of the language’s high frequency verb stems.

In Ritharngu, we find a fair number of compounds of this sort with final elements *gara-(cf. *gara- ‘to stand’), *mara- (cf. *mara- ‘to grab, get’), and a few others. Examples are *dumudum-*gara- ‘to bend over’ and *wuwu-*mara- ‘to use magic against’. In the latter example *wuwu- may be a noun historically, but its force in the compound is semi-verbal since it modifies the sense of the verb. We note at once the similarity between such compounds and Mara-Alawic auxiliary constructions, where the initial stem is a verbal or semi-verbal particle and the auxiliary is one of a small set of high-frequency verbs which have lost most of their semantic force.

The reason why Mara-Alawic has auxiliary constructions while Ritharngu has such compounds is not hard to discover. It is an automatic consequence of the fact that Mara-Alawic had subject- and object-marking pronominal prefixes on main verbs at the time auxiliary constructions were formed, while Ritharngu had independent pronouns not bound to the verb. Therefore, when a sequence of uninflected particle plus inflected verb became a single fused unit in Mara-Alawic, we wound up with Particle-Pronominals-Verb-Suffixes, reinterpreted as Verb-Pronominals-Aux-Suffixes when the particle came to acquire the major responsibility for specifying the activity or state involved. On the other hand, in Ritharngu the fusion of the particle to an inflected verb did not trap pronominal elements in between, since these were not fixed in pre-verbal position, so we get Particle-Verb-Suffixes, as in *dumudum-*gara- (really *dumudum-*gara- with zero present-tense suffix) and *wuwu-*mara- (for example present *wuwu-*mara-). Thus the position of the pronominal elements is decisive in determining the shape of verb complexes with fused particles.

Unfortunately for this theory, it turns out that Nunggubuyu and Ngandi have Ritharngu-type compounds rather than Mara-Alawic-type auxiliary constructions. For example, Warnadarak main verb *mal- ‘to go up’ (with ‘to go’ as auxiliary, so that *mal- may once have merely referred to upward direction) shows up in Nunggubuyu in one example as the first part of a compound. In Warnarang we get *mal- + *gatu- ‘I went up’ (‘go up + I-Aux’) with *mal- preceding the pronominal, but in Nunggubuyu we get *gatu-*mal-nayi: ‘I look up at him’ (‘him-up-see’ where *mal- follows the pronominals.

We might expect *mal-*yama-nayi: with the fusion of particle *mal- to an inflected verb *yama-nayi: ‘I see him’.

There are a number of ways to account for the difference between Nunggubuyu and Mara-Alawic in this regard. We would like to close by suggesting one interesting possibility which deserves consideration although it is too early to assert that it is the best theory. This is the possibility that the difference between Mara-Alawic and Nunggubuyu (as well as Ngandi) in the relative ordering of fused particles and pronominal affixes is due to different timing of the fusion of the pronominals themselves as prefixes to inflected verbs. That is, at the period when particles like *mal- were being fused to inflected verbs in Mara-Alawic, the pronominals had already become bound prefixes, so that *mal- was added to a combination of the type Pronominals-Verb-Suffixes. At the period when corresponding particles were being fused to inflected verbs in Nunggubuyu and Ngandi, so this theory goes, the pronominals were still free or semi-free words or affixes. In this case, particles like *mal- would have been fused directly to the verb stem, and at a later period the pronominals became fused prefixes, yielding a combination Pronominals-Particle-Verb-Suffixes. That is, Mara-Alawic and the other two languages differ in the relative ordering of the two fusion processes, one affecting particles and the other applying to pronominals.

There is little or no direct evidence in Nunggubuyu for a relatively late fusion of pronominal prefixes, and since most languages in the area (except for Yuungu languages like Ritharngu) have bound pronominal prefixes one would normally assume that the pronominal prefixes were an early development. Against this view, however, we may adduce evidence from Ngandi, where the pronominal prefixes are in reality independent from the phonological point of view, though they must immediately precede the verb. Thus, *mal-*yama-nayi: ‘I see him’ is Ngundi *gatu-*yama-*mal-nayi: with a word boundary at *gatu-*yama-, that is at a weak boundary. The element *gatu- is best described as proclitic rather than prefixal, and has its own stress pattern and may be set off by a short pause from the verb. The fact that na- ‘to see’ begins with a reflexed nasal is also instructive, since in Nunggubuyu we get *na- (cf. Rith. *ga- , etc.). There is evidence that Ngandi, like Ritharngu and some other languages in the area, neutralises apico-alveolars and apico-domals (retroflexes) word-initially (N.B.), and the neutralised consonants are phonetically apico-domal. Thus a shift from *na- to *na- is reasonable in Ngandi provided the preceding boundary is a word-boundary, or at least no more than the weak elicit-boundary +, and in any event not a normal word-internal morpheme-boundary.

Since Nunggubuyu and Ngandi are fairly close genetically, it now seems likely that Nunggubuyu also had Ngandi-type proclitic pronominals not long ago. It is hardly likely that Nunggubuyu-type fused prefixes could have somehow become detached from verb stems in the recent history of Ngandi, since such fusions are generally irreversible. If we can recover a prototype for Nunggubuyu and Ngandi with semi-independent pronominals, is it not possible that going back one stage further we can envisage a situation where pronominals were a bit more independent, so that particles like *mal- could fairly freely intervene between them and the verb?

The point is merely that the development of auxiliary systems and certain
types of compounds can only be accounted for in detail by simultaneously examining the history of other grammatical phenomena; conversely, an understanding of the history of auxiliary and compound constructions may provide precious clues for the reconstruction of the history of these other phenomena.

Notes
1. I have done fieldwork on Nunggubuyu and Ritharngu, and to a lesser extent on Warndarang and Ngandi. For a discussion of Mara-Alawic auxiliaries see Paper 88 by Margaret Sharpe.
2. These root-shapes are essentially identical to those of 'main verbs' in Mara-Alawic auxiliary constructions. I am unable to cite many actual cognates at this stage of research. Nevertheless, note Warndarang lar 'to cut up', Ritharngu class 5 root lar? lar 'to cut up' (a frozen reduplication).
3. I gloss inflectable stems, including thematised class 5 stems, as English infinitives ("to return"), and uninflectable roots as simple verbs ("return").
4. The final glottal stop is historically secondary in the class 5 root, as in many others. My suspicion is that it originated in reduplications: *ba:nu(-yu)-* reduplicated as *ba:nu*-ba:nu(-yu), with later analogical reshaping to *ba:nu*-ba:nu(-yu) and simplex ba:nu(-yu). Cf ga:ra-gara, the reduplication of class 1 ga:ra 'to stand', and many other reduplications with 'inorganic' glottal stop.
5. To wul-mara- someone you take a piece of his clothing and seal it in a hole in a tree, preferably ironwood. As a noun, wul appears to denote the article used in this fashion.

90. Arabana-Wangganguru

L. A. Hercus

Wangganguru [Wanganganur] and Arabana are dialects of a single language, originally spoken to the west of Lake Eyre, in the Simpson Desert and on the Lower Diamantina.

1.0. The conjugation system
The Arabana-Wangganguru verb is invariable for person and number, but the verbal system is complex on account of the large number of affixes that can be used. These indicate:

Voice
Mood
Aspect
Tense

In addition, there are certain other semantic modifications or 'action-types' ('Aktionarten', as they have been called in Hindi grammar since S. Lienhard's *Tempusgebräuch und Aktionartenbildung in der modernen Hindi*, 1961). Some of these action types can be expressed by stem-forming affixes, for example Arabana -mindi- 'action or state lasting only a little while or slight

in extent', -nda- 'while travelling', -ba- 'action carried out in all directions', -ndu- continually';

(1) unyu -dina purgu-di- ndu-mindi-da
your-POS foot-good-become-SP -little -PRES
'Your (sore) foot is suddenly getting a little bit better.'

(SP = speed form, use of the affix -nda to denote hastily finished action or development, also action taken before leaving.)

Stem-forming affixes like -mindi- may have originated as auxiliaries, but now they exist only as bound forms and are very limited in their use.

2.0. The main auxiliaries
A number of these 'action-types' can be expressed by auxiliaries. When auxiliaries are used the main verb can be followed by the voice marker and by certain aspectual stem-forming affixes, particularly the speed-marking affix, but tense and mood are always expressed by the auxiliary.

Two of the common auxiliaries generally retain their basic meaning:

*duga* 'to return' *yaridi- 'to descend'
but considerable variation of meaning can be achieved by the use of the speed form in the main verb:

(2) mami-diga-nda 'He is going back to get it.'

(3) manda-diga-nda 'He's picking it up and bringing it back.'

The other three most common auxiliaries modify the semantic value of the verb in the following manner:

<table>
<thead>
<tr>
<th>Semantic Value Added</th>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>to crawl</td>
<td>marga-nda</td>
<td>to crawl</td>
</tr>
<tr>
<td>slow movement, steady action</td>
<td>wanga-nda</td>
<td>to rise</td>
</tr>
<tr>
<td>inspective</td>
<td>daw-nda</td>
<td>to throw</td>
</tr>
<tr>
<td>rapid action</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(4) uga darga-marga-nda (W) he stand-crawl AUX PRES 'He is getting up gradually.'

Again the use of the 'speed' form in the main verb makes for a considerable difference in meaning:

(5) uga darga-nda-marga-nda he stand SP- crawl AUX PRES 'He is getting up gradually, prior to leaving.'

The following sentences illustrate the use of the other auxiliaries:

(6) aqqa gadjiwiri-widji- na ilapa bidru nawi-wanga fugi(W) I big-become PRES thus name INSTR hear-rose AUX HIST 'As I grew up I began to hear it called by that name.'

(7) uga jangi- wanga- da angida he speak-arise AUX PRES me DAT 'He is starting up a conversation with me.'

(8) gadi mani-na-daw! meat get SP-throw AUX IMPV 'Get some meat quickly!'