

CLASSIFICATION OF VERBS IN AUSTRALIAN LANGUAGES

A. Capell

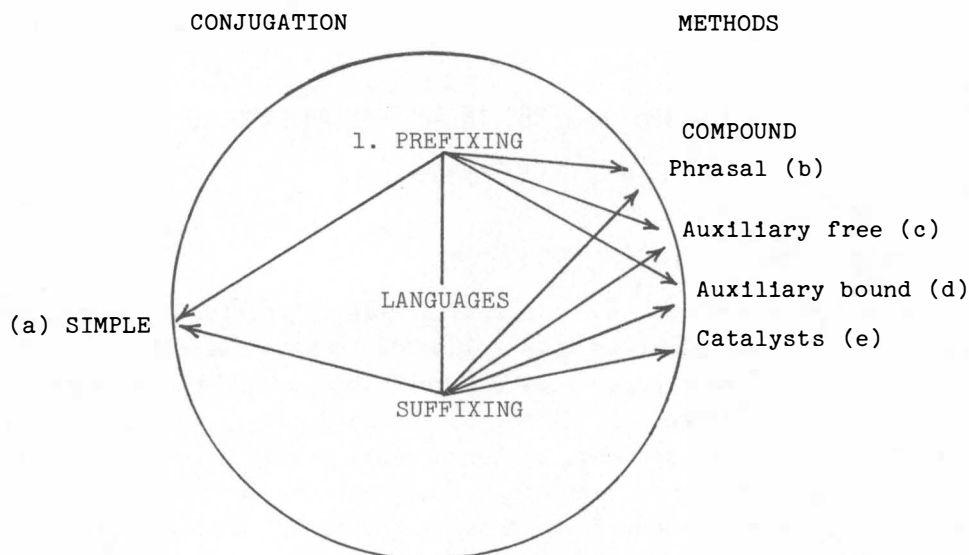
0. INTRODUCTION

Noun and verb are the two principal formal categories in Australian languages. Another paper in this volume deals with the classification of nouns. The present paper sets out the various manners in which verbs may be classified. It is not concerned directly in the expression of person, tense or mood, although mention will be made of these factors in describing the verb classes and how they are reflected in the classificatory systems. The general introduction to the paper on the classification of nouns makes mention of verbal classifications in the most general terms. Details are given in the present paper.

From the viewpoint of classification there are three types of verbal system in Australia: 1. Language in which the verbal stem is invariable for person, tense, mood and voice, the markers of these being indicated by affixes to the root itself. The affixes may be suffixes or prefixes; the majority of languages use suffixation as a conjugational process. 2. Languages in which the markers are added, not to the base, but to an auxiliary which may vary according to the semantic class of the verb - and in the northern Kimberley according to whether the verb base begins with a vowel or a consonant. 3. Languages in which only tense, mood and voice indicators are added to the stem, while person - and occasionally tense - is marked by the affixation of the relevant markers to an invariable particle which does nothing more than act as a carrier. This has been called by the chemical term 'catalyst' because of itself it adds nothing to the reaction.

Other divisions of the matter are possible, but these have their place in the general chapter on the nature and development of the Australian languages elsewhere in this volume.

The systems of classification of verbal stems may be diagrammed as follows:

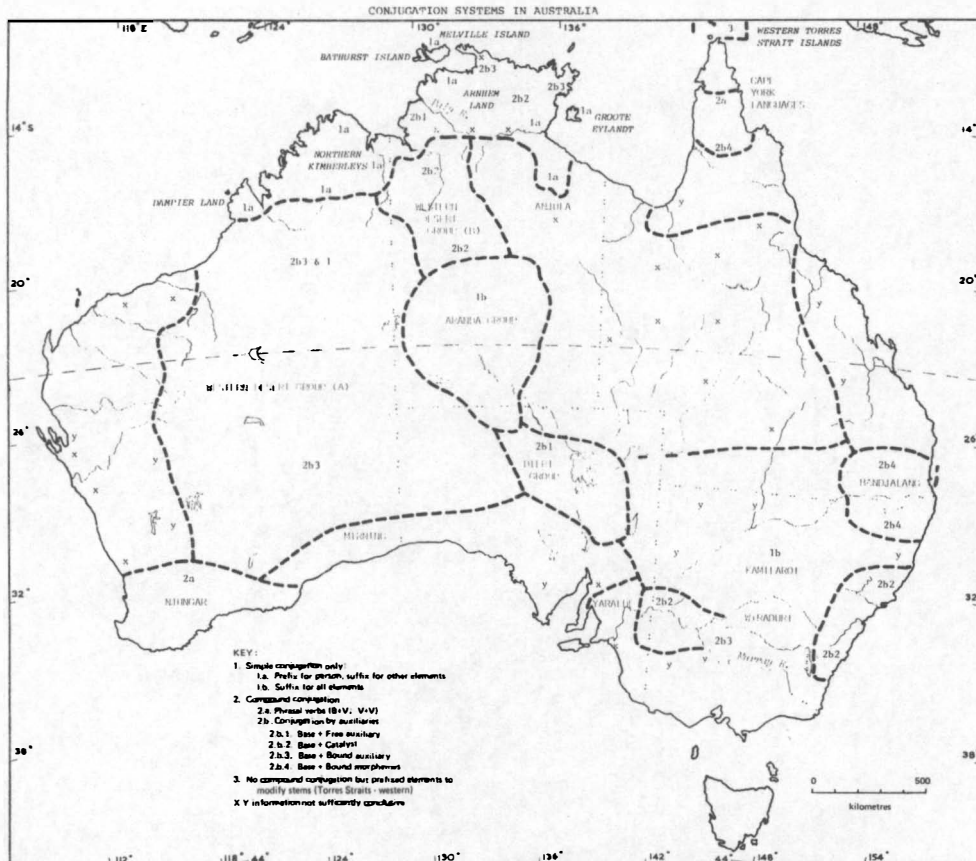


The types are equally divided between prefixing and suffixing languages, except that no prefixing language uses catalysts.

In the western Torres Straits there is no compound conjugation. These languages have the simple type, but there are prefixed elements which modify the meanings of stems in a way best described as adverbial. The Map indicates the regions in which the various sub-groups occur, and the methods of indicating person and number. In some areas insufficient is known about the conjugation systems to enable classification to be made: these are extinct languages that were not recorded while they still existed.

It is not necessary to treat prefixing and suffixing languages separately. The probable origin of prefixation is discussed in the general study elsewhere in this book. The system of person marking has no relevance for this chapter. It is possible that it did have an influence in determining what type of verb classing a language would develop, but that is a minor point at the descriptive level. In this chapter the only indication whether a language is prefixing or suffixing will come to light in the numbering (1 or 2) of the actual examples, and if the language does not mark person at all, the matter will not arise.

In European languages the verbal stem is usually conjugated by a suffix which indicates person and number of the actor. The Latin



type is represented by such roots as *am-o I love*, *habe-o I have*, etc. But there is also a Latin type such as *gratias ag-o I give thanks*. Here is a noun root supported by a verbal stem without which it cannot be conjugated. In Australia many languages have such double verbs. In Ngarinjin of the Northern Kimberley, for instance, one says *a-ŋ-uŋulu-n him-I-give-PRES., I give it to him*; but one also says *wulan ŋ-ama-nanga speech I-do-to-him, I speak to him*. It is impossible to say simple **a-ŋ-wula-n*. Here and in some areas of Arnhem Land, it seems that the decision regarding the type of conjugation depends on whether the verb stem (for a prefixing language at least) begins with a vowel or a consonant: in the latter case it is treated as a compound verb with some kind of auxiliary. The matter is not really as simple as this, but detail will be given in due place (2. below).

1. SIMPLE CONJUGATION

The term 'simple' here means that person and other endings are added directly to the verbal stem, without any use of auxiliaries of any type. These are of the Latin type *am-o*, and just as in Latin there are different classes of 'conjugations' (*am-o*, *hab-e-o*, *fac-i-o*, *aud-i-o*, etc.) so there may be different 'conjugations' or classes in Australian languages of the 'simple conjugation' type. This is not what is meant here by verb classification, as will become clearer in the following pages. The 'classification' referred to in Australia means the use of different groupings which are basically semantic.

In Australian languages of type 1 there is usually only one 'conjugation', i.e. one set of markers applicable to all verbs. In probably the majority of cases these markers are added to all verb stems, not to classes in the Latin sense. Such simple conjugation is presumably the original system in Australia, and its occurrence is marked on the Map. But compound conjugation in its various forms is widespread also. It seems to be concentrated in the north-west and to decrease in frequency from west to east. At least the available examples are less common in the latter area.

This type of conjugation need be hardly more than mentioned and illustrated in this paper. An example of simple conjugation without person markers is found in Gadhang of the Hunter River region, New South Wales:

ŋanda miRi nja:-njala
I dog see -PAST

miRi-gu baRanaŋ nja:-njala
dog-ERG me see-PAST

I saw the dog and the dog saw me

No matter what the actor, the verb ending will not change; this must be indicated in the actor - as the language is ergative, this is easily done. While the pronouns do not have an ergative, they have oblique cases built on different stems in a way that is not relevant here.

A second example is taken from Djabugay, in the Rain Forest region of North Queensland:

nawungu numa gali-na
I tomorrow go-FUT

bama-lu minja бага-na
man-ERG meat eat-FUT

I will go tomorrow and the man will eat meat

Beyond this point a number of complications may be found, but the system is still 'simple' even though person, number, etc. may be indicated in the verbal affixes. There seems to have been a series of developmental stages: see Capell (1962; 1972) and particularly Wurm (1969).

Information supplied by J.G. Breen (Capell 1976:624) indicates, in his own words that 'Western Queensland languages in general have no compound conjugation'. One exception is Midhaga (see 2.2.1.7.4).

Most languages however seem to have very few compound verbs, e.g. Bularnu has a few of the form V + бага meaning *to do V while going* (бага *to go*); Bidjara has a couple of what may be compounds with бura *to go away*, e.g. wagani-bura *to run fast* (wagani *to run*); Wagaya (Eastern Northern Territory, not West Queensland) has a few such as budjaganund *to run away with* (budjaga *to run*, gund *to give*); Wangga-Yudjuru has тарилпиррака *to (run and) spear*, (тари *to spear*, пиррака *to run*). None of the processes involved seem to be productive. There are a few productive formative stems clearly derived from verbs, e.g. Bidabida-yaṇṭa *to do while going along*, cf. kaṇṭa *to go*. Andegerbina has compound verbs in -alba- *action while going towards the speaker* (?), cf. alba *to go*, e.g. bidjalba- *to return* (bidja *to come*). Gṇadjalba *to bring* (gṇa- *to carry*, and also verbs that seem to be compounded with la *to go*, function not clear to me yet. I would not call any of these things compound conjugations. Other languages similar to one or other of the above, or with less semblance of compound conjugation are Marganj, Gunja, Gunggari, Wanggumara, Ngawun/Mayagulan, Warluwara.

Such compound conjugation is not treated in the present statement it is really a matter of stem compounding, which does not belong to the classification types under discussion.

The largest area of Australia completely without compound conjugation appears to be Victoria, and if the thesis that Victoria represents the most archaic area of the country is upheld, then it would seem that the Early Australian level of language had only simple conjugation - and other facts support the idea that this stratum had only verbs invariable for person and number. It is possible that the paucity of information on Victoria is leading to a wrong conclusion in this matter. Study of Hercus' *The Languages of Victoria* (Hercus 1969) serves only to point up this scarcity. Capell (1956 (1962)) showed that the Wudjwuru language of western Victoria has the affix-transferring system of the WD languages well developed, although R.H. Mathews' brief paper (1902) does not give the least suggestion that this is so. Even if, as Capell now holds (see the general paper on Australian languages in this volume) affix transference is only a special syntactic event, its occurrence in western Victoria shows influence from the WD languages on a considerable scale. It is possible, therefore, that auxiliaries in some form or other occurred in Victoria more widely than they are documented, but nothing can be built on this to invalidate the statements made above.

Apart from these two fairly continuous areas from which compounding is absent there are others more fragmented. One of these is Tiwi (Bathurst and Melville Islands), others are Gunavidji and Nagara on the north coast of Arnhem Land, Nunggubuyu at Rose River on the east coast, and Groote Eylandt. As well, there are some - but not all - languages in Cape York Peninsula which do not compound verbs in the way here discussed. In the north-west of Western Australia also there is a fair sprinkling of such languages, along the margins of the WD languages. The areas can be found on the Map.

2. COMPOUND CONJUGATION

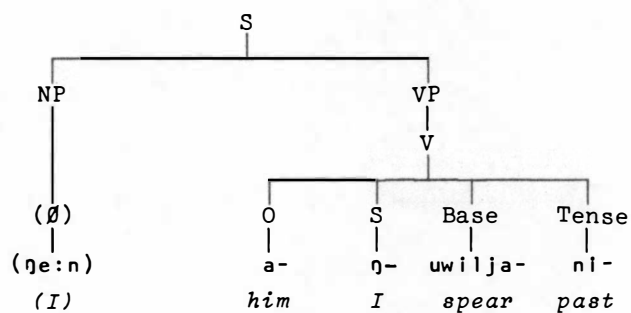
Processes similar to those outlined in the Introduction as 'compound conjugation' are found in parts of Australia other than those mentioned and mapped in the preceding section. It is the business of this part of the paper to review these processes. As a general definition, that offered by D.T. Tryon is useful: 'Two verbs to translate one action, the first indicating the type of action being performed, and the second specific, indicating exactly which action is being performed within the field delimited by the particular verb class. As with the Daly Family, the general verb delimiting the field is bound, while the particularising verb is a free form. Again, as with the Daly languages, only the bound form is required to denote

certain actions.' (Tryon 1971:10). One example in Wageman is *wuri ma ŋa-ma-yi hunt I-go-past, I hunted*. In Ngarinjin and other languages however, there is the complication that the generic part of the verbal compound is often a noun, or perhaps a gerund. In the example below *maRa* is a Cl. V noun, *light* (Worora *maRa-ma*, with Cl. V suffix when used as a noun, but *maRa* alone when used as the first element of a compound verb). In Worora *maRa ga-ŋ-o:-na I see him* is literally *I hit him (with) light*. There is actually structural difference between this type and the Daly type as defined by Tryon, and this needs to be kept in mind in the study of the verbal systems involved. Unfortunately, it is not always possible to isolate and classify the first element of the compound. In Mawng, although the majority of the verbs are simple, some are compounded on a still different system: the conjugated verb comes first, not second, and the second element is usually a type of stative noun or gerund, as in *yuRaŋ ab he went sit = he sat down; yuRaŋ alja he went forget(ful), he forgot*. In other Mawng examples, the verbs to *do, take, eat, hit* and others are used (Capell and Hinch 1970:69-83). Exchange of auxiliaries is not unusual. In Ngarinjin it is possible to start from *mindjal mouth* and form *mindjal ŋe: I eat* (as an action, usually in the continued tense form), *mindjal ŋ-ama I do eat (a certain kind of food)* and *mindjal wu-ŋ-o:n I am eating (a certain food now)* using three different auxiliaries in varying circumstances, each defining the manner of eating.

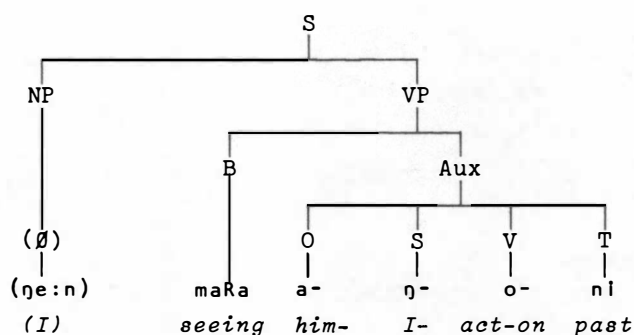
The analysis of such compound conjugations, in the case of the NK languages, and those of East Kimberley and Arnhem Land can be best illustrated from Ngarinjin of NK, which is entirely typical. The form remains similar throughout, the semantics of the auxiliaries influence the combinations but not the forms. In Ngarinjin, *maRa light*, takes on the form *maRa a-ŋ-o:-ni seeing I did to him, I saw him*. This implies a simple act of vision, willed or otherwise, but *maRa a-ŋ-ela-ni seeing I held him* is rather *I stared at him, kept him in view*. In Ngarinjin there are eleven such auxiliaries, all of which have specified uses, and the student must learn which one (or ones) are usable with a given verb.

The phrase structure patterns of the two types are as follows:

1. anuwiljani I speared him

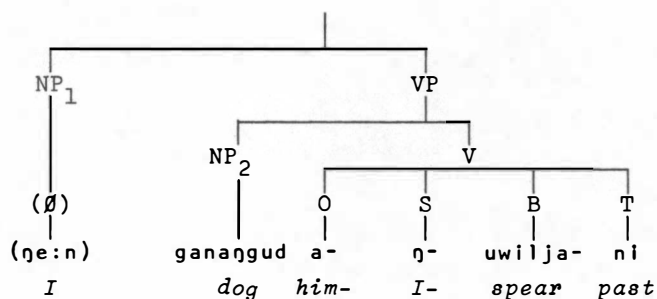


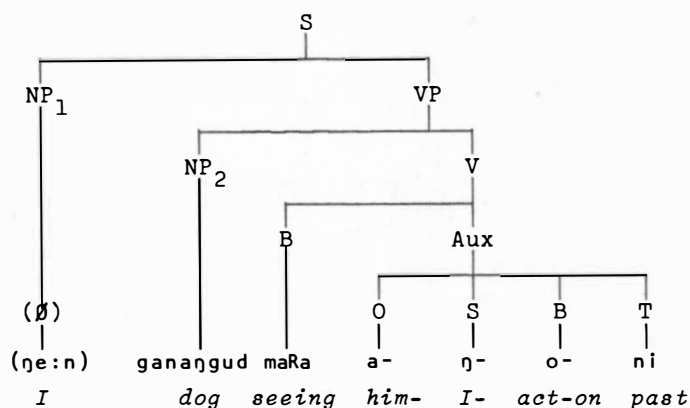
2. maRa anoni I saw him



Where a noun-object is involved the pattern is extended:

3. ganangud anuwiljani I speared the dog



4. ganangud maRa aŋonl *I saw the dog*

This formal patterning is modified by the auxiliaries in use in a given language, and these are best illustrated under the various subsection headings which now follow:

	TYPE	BASE MEANING	NGARINJIN STEM
1.	stative	<i>be</i>	-e-
2.	action	<i>do</i>	-ama-
3.	motion	<i>go</i>	-a-
4.	reflexive	<i>fall</i>	-awa-
5.	effective	<i>strike</i>	-bu- -o:-
6.	continuous effect	<i>hold</i>	-eia-
7.	ejective	<i>throw</i>	-ebi-
8.	taking	<i>take</i>	-uma-
9.	junctional	<i>give</i>	-uŋulu-
10.	locating	<i>put</i>	-iniŋa-
11.	causative	<i>make</i>	-andju-

As stated, the verb base remains unchanged, and the auxiliary takes markers of person, number, tense, etc.

In these languages, noun class is marked in verbs of the third person. In the southern subgroup, to which Ngarinjin belongs, subject marking by class concord is required only in intransitive verbs: *maɟa a he is walking*, *maɟe nja: she is walking*. With transitive verbs,

Ngarinjin does not mark class of subject (though the northern languages, Gambera etc., and in Arnhem Land Laragiya, Mawng and Anindiljawgwa do), the eastern dialect of Ngarinjin does have a common Cl. IV and Cl. V marker; otherwise, only object class is marked. Thus:

Cl. I	<i>I bring the kangaroo</i>	lali anuman
Cl. II	<i>I bring the phalanger</i>	langari njanuman
Cl. III	<i>I bring the children</i>	jile:la buñuman
Cl. IV	<i>I bring the stone</i>	mandja wuñuman
Cl. V	<i>I bring the sandstone</i>	banaru muñuman

In the compound verb a corresponding procedure takes place. A transitive auxiliary carries both subject and object of the action, object preceding subject: jile:la guḍu bu-ŋ-oni *children striking them-I-do-past, struck the children*. If the auxiliary is intransitive, an object required in the compound is shown by suffixing the direct object marker: with the root bu *blow with the mouth* (homonym of the auxiliary bu *striking*); o:ndan bu ŋa-ma-nannga *paint blowing I-do-it, I blow the paint on to it*. Dual or trial objects are shown by suffixes, as in buruRu maRa bu-ŋ-o:n-ŋjiri *men seeing them-I-do-two, I see both the men*.

Interchange of auxiliaries is frequent but not at will. An example with *ada sitting*: ada ŋama *rest, I do a resting, I stay or sit*; ada a-ŋ-inina-Ra *sitting him-I-put-past, I made him sit down*. An intransitive auxiliary may receive transitive powers not only by the addition of an oblique pronoun, as in ŋara ŋ-awa-n *falling I-fall-pres. (Aux. 5)* > ŋara ŋ-awa-n-nannga *I fall on him* but also by conjugation with transitive prefixes: ŋ-a *I go* > dambun mu-ŋ-a-n-balu *camp it-I-go-pres.-directive, I am coming this way to the place*. This manner of transitivity an intransitive verb seems to be peculiar to the south-western section of the NK languages.

With this general introduction it is now possible to pass on to the various subgroups of different kinds of compound conjugation found in various parts of Australia. They are set out in terms of the small letters placed beside each in the preceding diagram.

2.1. Phrasal Verbs

2.1.1. Phrasal verb compounding

This type of compounding is chosen as a beginning because in it the individual verbs of a compound retain most freedom, both of

transference to other settings and in regard to their own semantics. In languages of this kind, each verb is still able to be used as a full verb apart from its occurrence as an auxiliary. The languages concerned are found mainly in Cape York Peninsula, and the examples here are drawn from Thayorre of Edward River district. The information used is based on the work of A.H. Hall (Hall 1972).

Hall (1972:82ff.) states that 'normally the verb may have one or more auxiliaries before or one after or both these alternatives occur simultaneously.... In order to understand the nature of the verb phrase, it will be necessary to decide which are nuclear tagmemes, what fillers can occupy available slots, and then to illustrate these showing how many auxiliaries tend to occur before the verb and how many after and whether any preferences occur for some and not for others'. He then illustrates, first, the nuclear tagmemes, of which he says two are necessary, the head tagmeme plus one tagmeme in either position:

(Auxiliary)	Head	Auxiliary
... aŋt	yu:mp	okun....
try	do (it)	maybe

He then proceeds to exemplify eleven different combinations of word classes such as directive + verb or verb + directive, two verbs together, noun + verb or noun + verb, verb + auxiliary, which cannot be illustrated in full here. A few examples must suffice:

kana ya: - n pal have go-do come = have come here

yup ʔe:rk i:-wal soon return this way = come back soon

kana ka:l-ku:k ɲi:-n (n)anɲn We've sat waiting for your answer.

In the third example, ka:l-ku:k *take-word* is one type of compound, kana is an auxiliary of completion (not in terms of 'auxiliary' as here considered), ɲi:-n is *sit-imperfective*, *sitting*, so that ka:l-ku:k-ɲi:n is a double compounding of verb + noun + verb. The whole pattern allows of a good deal of movement and interchange of parts. The system is not rigid, and it will appear in the following sections of this study that a pattern of increasing rigidity is being developed, rather than one of increasing complexity. In Australian linguistic development such has been the case throughout: increasing rigidity of construction has been combined with increasing complexity, the one leading on to the other. If the tendency is for languages to decrease in complexity, as W. Tauli (1958) has tried to show in his

book on the subject, then the Australian languages have not yet reached the stage of breakdown. It seems fairly clear that Indo-European languages with the exception of the Slavonic languages (within limits, as shown by Bulgarian) and the Baltic languages (again with limits shown by Latvian) have withstood the tendency and have retained their morphological complexity. The Australian languages do not seem to have done this, and as they seem to be surrendering, with varying speeds, to the pressure of English since colonisation, it is unlikely that they will survive long enough to do it.

There is considerable variety possible in the Thayorre recombinations of free forms into 'bundles' which as a total act as another free form. At the same time there are elements which are bound forms that can be added to make the 'bundles' into usable verbs, as in *ninjiR-p-un ready + verbaliser + causative* to which again tense indicators etc. may be added, as in Hall's example (p. 138):
ḡul ku:lan ḡaḡkn kana niniRpun-ḡam he track your now ready-verbaliser-causative-future, He is now going to prepare your path. The basic element of the compound is here an attribute (*ready*) made into a verb by a bound suffix (-p-) to which a causative (-un-) is linked before the tense marker is added. But, as Hall says later (p. 155), 'auxiliaries may fill an obvious gap in the inflectional pattern, syntactically rather than morphologically,' either before or after the verb base. These modifiers intersect with a perfective-imperfective system.

Verbs may combine, as in *law ḡik snap break*, i.e. break with a snap or break by snapping; *tup ke'er swish spear-did*. In particular there is one noun stem which combines with (in Hall's list) twenty-three verb bases. This is *ḡa:(w) mouth*, and all the actions listed involve the mouth. This process reminds one of formations that will be seen in other parts of this survey, such as Arnhem Land compounds. A very few compounds are built on *ko:(w) nose*, as *ko:mat croak*: but Hall's other two examples do not seem to belong to the set except in form. They are *ko:piḡ rescue* and *ko:-ḡunp show off*. The root *ne:r eye* gives *ne:r-mu:ḡ blink*, *ne:r-ru:k sharpen* and *ne:r-ḡi:k copy*. At this stage, as Hall points out, it becomes a matter of 'compound' words. In his later chapter on compounding he quotes among other types which are non-verbal, *ka:l-u-ḡe:n remember*, *me:R-t-pa:r weep*; *wark-(y)an-t wander round*, *wut-wun sleep lie*, *pot-pa:t shiver*, *ḡarn-(R)e:k strengthen*; *maḡiR-wunp measure*, *ḡapaR-(p)iRk rip off*. The bracketed elements mark phonetic changes that take place in the process of combination.

2.2. Auxiliaries

When one element of the phrasal verb has reached a subordinate position in the phrase, it is easy for it to lose its individual force and be debased into an auxiliary place in which its general or basic meaning remains only as an indicator of the way in which the action of the dominating verb has been carried out. This appears in the Daly River languages as marking action by sitting, standing, etc.; elsewhere in other ways. At this stage the tendency is for only a few verbs to be used in the subordinate position, and these can then be regarded as auxiliaries. They may develop as in English into 'modal' verbs - *can*, *may*, *should*, etc. In the Australian languages they have not in general done this (in a few cases in the NK, for instance, they may have done so: at this length of time it cannot be proved). In Australia there are ways of expressing all these ideas, and a certain amount of agreement in the forms of the indicators suggests common origins, but there is no evidence that the modal verbs are such debased auxiliaries. At a later stage auxiliaries may lose their semantic identity and become simply means by which person, tense, etc. may be indicated in forms whose roots were perhaps not originally verbs at all. The former usage is here treated as 2.2.1, and the latter as 2.2.2. These two sub-groups are now treated in sequence.

2.2.1. Free auxiliaries

2.2.1.1. Cape York languages

The Thayorre system which has just been considered approaches fairly closely to the one now to be considered, but a type language for this subsection is better supplied by Gog-Nar, a language of the south-western edge of Cape York, treated by Breen (1976a and b).

In this language verbs can be compounded, usually of N V bases, as in *yel yem eye throw*, i.e. *look*. Subject still has to be indicated and so do tense and mood: these are not in question here. This does in a way compare with Ngarinjin *burgadj a-n-e:bu-n question him-I-throw-pres.*, *I ask him*. In English also one can speak of 'casting a glance'. There are also what Breen has called 'formatives', and these are auxiliaries much as in Bidjandjadjara (2.2.2). Their exact status is equally uncertain in both, and something will need to be said about them because they occur widely in New South Wales as well, and apparently represent a fairly old and widespread development, including Cape York, New South Wales, Western Desert and South-west

Australia. Breen uses *mba* as a 'formative', which he defines as a stative; it might possibly be better defined as inchoative. An example is *man Ray-mba-n throat got dry < Ray dry*. There is an allomorph, *ba*, and another *baḡa*, and the latter may still retain word status - showing that this type is a debasement of the Thayorre type. Breen gives seven such auxiliaries (1976b:252). An important subdivision is supplied by 'certain verb stems, all with initial /ŋ/ and all very common, have a bound form from which an initial consonant has been deleted and which is used much more frequently than the free form. These include /ŋi/ *go, walk*, and homonym /ŋi/ *to spear, kick...*' (Breen 1976b:252). His examples show something actually more complicated, in that the dependent phrase is amalgamated with the verb almost in a polysynthetic manner: *ḡand gaḡḡing let's go now*, glossed as *we (pl.) now-go-PURP*, *ḡu minyaḡ I will eat some meat* which is *I meat-eat-PURP*: the base for *eat* is /ḡa/. There is also an independent *niḡḡo become*, seen in *bunḡu niḡḡer got to his knees (bunḡu knee)*. The stages involved here are obvious: an independent word, an auxiliary and finally a polysynthetic unit. Breen quotes as examples of the independent stage a phonologically free stem, *ḡandəbaḡim is itchy*, *binwar baḡim is thinking* (person is not marked). He also shows how a causative *bi* added to the imperfective future tense of an intransitive verb derives from it a causative transitive as in *yegi climb > yegi-n-bin lifted or woke (trans.)*. A similar result may be obtained by using *bala leave*: added to an N stem, *ḡugumb deep > ḡugumba-bala-ḡḡa deepen it*. Here it is possible to see the development of a compound conjugation, illustrating with some probability a process through which such systems could have arisen elsewhere in Australia - and it must be remembered that absence of documentation diachronically makes it necessary never to say more than 'could have' in any of the present studies.

2.2.1.2. South-western languages

Very similar processes have been at work also in South-west Australia, in the Wadjug languages about Perth. Here the modern authority is W.H. Douglas (1968). Douglas presents many examples of N + V, V + V and other compounds which are similar in principle to those of North Queensland. Douglas states: 'compound stems of two types: free plus bound root; free root plus free root' show the patterns and exemplifies them by *muḡidj strong, + -b become + aspect > muḡidjabinj becoming strong*; *wanḡ talk + njin sit > wanḡ njin converse*; *woḡ throat > woḡ baRaḡ throat grasp, choke a person*, and many other examples scattered through the work.

2.2.1.3. The Dampier Land languages

The outstanding difference between these languages and those treated earlier is that the Dampier Land languages are prefixal, like those of the Kimberley to the north and Bunaba-Guniyan to the east of them. They comprise the following languages (see Wurm 1972:124, where they are classed as 'Njul-njulan' from the name of one of them). In construction and vocabulary alike they stand largely apart from others, and although there is CA material in them, they provide one of the distinctive 'regional' vocabularies in Australia (Wurm 1972:93-4; Capell 1956/62:103-6). The materials used here are partly from published sources (Capell 1953:450ff.; Worms 1942:125ff.; Nekes 1938:139-63), and partly from unpublished fieldwork of Capell. The only published references to Bunaba and Guniyan are in Capell 1940:416ff., where also some Dampier Land material is given in 411-15.

The Dampier Land languages are listed by Wurm (1972:124) as follows:

1. Njulnjul, with an associated group of dialects: Bard, Djabirdjabir, Nimanbur, Djawi, Ngo:mbal, Djugan. These are all located on the Dampier Land Peninsula.
2. Yawur, also spelled Yauor, Djauor, about Broome.
3. Njigina, about Derby, and 4. Warwa, between that region on the area of the Northern Kimberley languages.

In the present setting, the description will be limited to the Njulnjul and Njigina groups: the characteristic features are all included within these.

In all the languages, person marking is by prefix and tense and mood by suffix: this is in keeping with the general patterning of Prefixing Languages in Australia. In both groups there are simple verbs and compound verbs. Worms (1942) using as examples the verb *to smell*, gives Njulnjul *nan-morean* (transitive) *I smell it*, and *na-bonyen* (= *na-bunjin*) (intransitive). Forms of the same root appear in the other languages, except that in Njigina there is only one root involved: *nan-bandjun*, with a slight variant *nam-bandjun* as intransitive.

The pattern in general for compound conjugation is a number of auxiliaries which in their Njulnjul form are: (1) *nandin I say*, (2) *nanin I am*, (3) *nanam I put*, (4) *nanag I bring, I carry*, (5) *nandjid I go*, (6) *nanar I bite*. These seem to be very similar to

those found in the WD languages and some of them may be CA roots, e.g. -am put (*(a)ma); -ag bring (*-ga); ɲandin *I say* seems to agree with Gunwinjgu -di (see earlier, but there is change of meaning if this is so). It is difficult to link -ar bite with *bad(j)a, but it may be possible.

Warwa deviates considerably and seems to have been influenced rather deeply by the Northern Kimberley languages (Capell 1953:458ff.). Capell has stated that there has been NK influence in Warwa not only in forms but such that it 'has thrown it out of order in two ways:

(1) the wrong meanings have become attached to person prefixes, e.g. ɲ- is used in the 3rd sing. and plur. as well as in 1st sing. and (2) a totally new type of transitive conjugation has been developed, though the general outline of tenses and moods remains as in Njigina'. The auxiliaries used in Warwa are: 1) ɲanganj *I am*, 2) ɲaRan *I say*, 3) ɲanman *take or put*, 4) ɲanagan *I hit*, ɲanan *I stay, put*, 5) ɲaɲaɲgaweran *I follow*, 6) ɲaɲaɲgama *I give*. One example of each will show: woɖidjɲanganj *I dig ground*, bindaɲuna ɲaRan *I am sick*, liyan ɲanman *I like*, lit. *put to stomach, or inside*, giɖar ɲanagan *I pull* (gulin ɲaɲajalu *I sleep* is a Warwa variation for the Njigina given below), nila ɲaɲaɲgaman *I show him*.

The Njigina auxiliaries with corresponding examples are very like these but rather different from Njulinjul:

Auxiliary	Example	English
ɲan <i>do, say</i>	woɖidj ɲan	<i>I dig ground</i>
ɲiyan <i>be</i>	i:ga ɲiyan	<i>I am sick</i>
ɲanman <i>take, put</i>	liyan ɲanman	<i>I like</i>
ɲanagan <i>hit</i>	giɖar ɲanagan	<i>I pull</i>
ɲanan <i>stay, put</i>	gulin ɲanan	<i>I sleep</i>
ɲanilgan <i>follow</i>	garba ɲanilgan	<i>I help one to look for</i>
ɲamin <i>change of state</i>	pila ɲamin	<i>I show him</i>

2.2.1.4. Daly River languages

The Daly River languages have a type of verb compounding that is peculiar to them. This is described by Tryon (1974:304) in the following terms: 'In all of the languages there are, in general terms, two verbs contained in every verb phrase, one a bound form, used to indicate the verb class and general type of action; such verbs may be called secondary verbs, for they indicate either the general action

type or the physical position in which the action denoted by the primary verb, normally a free form, is performed; the other, the free form verb stem, indicates generally the particular action which is performed within the range delimited by the secondary or bound stem'. A few examples from various languages of the group will make the meaning of this rather complicated explanation plain to those who have had no experience of the particular set of languages. Reference is made here to Tryon (1970:51ff.), examples being taken from Maranunggu. Firstly, there are twenty-two verb classes in this language - and it is typical. The auxiliary verbs consist of three parts, tense + person + aspect, the name used by Tryon for the particularising verb stem. So *wad gaṇani I went*, which consists of a base verb *wad*, of going, and a compound auxiliary *ga-ṇa-ni* past-*I*-movement. Actually the form here is simple non-future, a definite past involves adding a past auxiliary *yi* at the end of the phrase (Tryon 1970:18). Another auxiliary, *-ma-*, of standing, yields forms such as *djinda nala ga-ṇa-ma gay ayi spear for past-I-stand call past*, i.e. *I called out for a spear*.

A paper by D. Birk on Mulluk-Mulluk (Birk 1976) deals with what is really the same system. He brings out the fact that 'in the great majority of cases the verb root has the choice of up to six conjugations, of which five have the semantic role of variously defining the manner' of the action. Thus 'it is not the case that each verb root always co-occurs with a particular auxiliary; the choice is, in principle, multiple, all conjugations being productive'. This is the state of affairs also in Ngarinjin, whose eleven possibilities have been listed earlier, but there is in the NK languages less variety allowable in practice, whatever the theory may have been. In all the languages, the semantic aspect is primary, and indeed suggests that there has been a coalescence of more than one system.

Some of the languages are more elaborate than Maranunggu: Ngangigurunggur has twenty-nine auxiliaries among which a choice can be made. There are also other elements which are invariable and indicate the manner of an action, such as *du touching*, which occurs with four auxiliaries, e.g. *ṇarin du I feel for turtles*; *ṇudubun du I taste, try the point of a spear*; *ṇebem du I grind up* and *ṇerim du I awaken somebody*. These uses are slightly different from the others. The classification of the auxiliaries given by Hoddinott and Kofod (1976:695-6) is a double one: (a) semantic particles which express the verbal meaning, as in *yenim fa he screams*; *wudem fel he dives*. These come from a variety of word classes, mostly adverbs, some

gerunds; (b) particles largely adverbial and retaining the function. They indicate how the action was done: *da-ba arm*, *menjin ba wa he* *picks up by the arm*. Markers of tense detail are also free forms such as *tye* past and *ɲini* future. The Maranunggu (a)yi of past time is similar.

The exceptional language of the Daly River group is Wadjiginj, where the verbs are still certainly double, as in the rest of the areas, but the verbs of manner and position are not present. Instead, there is a compound verb which is very like those of the Northern Kimberley languages, in which a noun or gerund form is completed by a verb in which subject and object are amalgamated, just as in the NK group.

The main feature of Wadjiginj to be noted here is the transitive verb, in which the object is represented by a marker used with that of the subject prefix. For details reference should be made to Tryon (1974:214-5), who says: 'The subject and pronoun object are fused into a combined or portmanteau morpheme, a feature not found elsewhere here in the Daly Family. With noun objects, then, there are four possible forms for each actor'. The transitive verb phrase is pictured as

VP (Trans) = + subject/object + predicate (+vb stem + tense).

This is again precisely the picture found in the NK and AL languages, and repeated in Lamalama in N.E. Queensland. In Wadjiginj, however, there are future and non-future forms as a general rule, not past forms. As in the NK also, object precedes subject in the combination: *ya-ŋ him-I*; *yi-n him-you*, but there are irregularities and Tryon (1974:216) was not quite happy about all details of the analysis. This, however, is beyond the immediate subject. What is important here is the system of conjugation, which shows that this language stands apart from the rest of the Daly Family and seems to have connections with the type that blossomed out chiefly in the languages to the north of it.

2.2.1.5. Languages along Southern Arnhem Land

There are some languages spoken along the southern edges of Arnhem Land that have connection with the present section. These are chiefly those of the Roper River area - Wandarang, Mara and Alawa, Mangaray and Yangman. Some of them were noted by Capell (1942) and brief notes given on them. The first three were outlined by M. Sharpe (1976); the last two were noted by Capell but no material on them has yet been

published. The bulk of the Arnhem Land languages, although they have noun classes, do not compound verb stems; those in N.E. Arnhem Land (the Murngin and Yulngu group) do compound verb stems but have no noun classes, while in the north-west the Gunwinjgu group have both noun classes and verb classes of the kind here considered.

The following notes rest largely on the as yet unpublished paper of Sharpe, and the field notes of Capell for the south-western languages.

Wandarang, Mara and Alawa form a subgroup in a number of respects, including the classification of verbs. The systems of classification, however, seem to be rather irregular, and give the feeling - for what it is worth - that they are not basically part of the languages. According to Sharpe, Alawa exhibits ± thirty auxiliaries, Mara and Wandarang ± fifteen, whose conjugational forms (person, tense, etc.) are often irregular and even suppletive. She deals chiefly with Alawa, where she finds different auxiliaries used with roots marking qualities of a thing, transitive sensations, instrumental transitives, change of state, motion, and such ditransitive verbs as *give*. Present space allows only brief illustrations of the verbs so classed. Firstly, the statement about the irregular and suppletive nature of the forms may be illustrated by a few examples from her lists: *na sit*, gives punctiliar past *nagaŋan I sat*, future *neyi I shall sit*, present *neni* - there are also irrealis forms; *ma do*, has in the same order *ma*, *mi* and *manjdji*, and *yura go* has *aŋa* or *iŋa*, *djura*, *lindu* or *lindiŋi*. These irregularities in themselves suggest a complicated history that probably cannot be worked out in the absence of diachronic information.

Some of the classifications can be similarly illustrated in outline:

1. Qualitative verbs: *gulg ri to be heavy*; *ruwu gulg neni the tree is heavy*; *ruwu gulg manjdjawa nda the tree is not heavy*.
2. Instrumental qualitative verbs: *galur ri be round for a purpose*, as in *ludjuludju galur neni* (or *galur mayin*) *the coolamin is round for water*.
3. Transitive sensation verbs: *gaya na to hear*; *njiŋaya ri to like* (with a different auxiliary), shown in *dul ŋulaŋanna nda yargala we found the kangaroo*; *gaya ŋeŋeni nda garuReru njuR nembeli hear the dingo howling*.
4. Transitive action state: *lilmiri gunn ganna nda girimbu man watch he-did-it kangaroo*, i.e. *the man watched the kangaroo*.
5. Change of state verbs: *buŋ njidi be born*; *budid winja get up and go*, as in *lilmi budid naŋa the man sets out*.

In Mara, Capell's examples show the following situations: gal inguduliya *I bite you*, gal nadjuliya *I bite him*; nan nalindu *I run*; mal nana *I climbed* (aux. *go, past*); walanjan nowi? walindu *the fish is swimming* (here the Murngin dialect Maragulu can reverse the order though using the same construction: gwi:ya mardji gabagar *fish goes swimming*); dar nalinma *I hid (myself)*; nal namanjdji *I speak (doing talk)*; others appear on the lists but have not been worked out as yet.

There are exactly similar structures in Wandarang, Ngalagan and Ngandi that do not call for detailed illustration in the present survey context. They are not present in Garawa and Yanjuwa to the east. The chain of this language type stretches westward. It is found in Mangaray, on the immediate west of Alawa, but has not yet been analysed. Like Alawa, Mangaray has simple verbs such as nayag *I go*, nama *I hold*, and compounds as shown in gabudji duRur bundi nandju *blind man I lead*; ba:ndi boRan nawu yinji *the snake is crawling*. Exchange of auxiliaries with consequent semantic change is possible here also: compare the above *blind man I am leading* with duRur bu drag *it!* and the simple nayag *go* with minaba liwu yag *I dive into the water*.

Farther west, towards Katherine, the Yangman language shows a similar phenomenon, but this again has not been analysed. A few scattered examples from Capell's field notes, however, show the presence of such compound verbs as wogba nanimen *follow me*; if -me(n) represents the common Australian *ma take, do* root, then the analysis is *a following do-to-me*. Yangman is one of the few Australian languages that show a strong tonal patterning: here it is wógbà nānīmēn.¹ A further example, from a story text, shows ingenba njelma buriya nolgin translated by the informant as *another man mustered the people*; njelma buriy-a *gather he-them-went* shows a transitive use of -a or -ya *go*, as can be found in the Ngarinjin and other NK languages. Some further examples may be quoted, although they cannot be analysed in detail as yet: yingengaR narlo:yi *we meet*; wiriyi wungumbuRuRi *he turned and hit (-bu-) them*; la:l yirgugari *we were tired* (la:l *tired*, yirgu- *we*, -ga verb root (*be?*), -ri *past*). The neighbouring language, Wageman, has already been listed with the Daly River languages, to which it is akin, and shows verbal phenomena similar to theirs.

A little to the north, however, Waḍaman (Wardaman) does show the compounding phenomena. Among the auxiliaries listed there are

¹ In this example, an acute accent indicates high tone, grave the low tone, and macron the mid or level tone.

ḡadjinjin *I stay, I am*, ḡamin *I do* (the common -ma- root), ḡawin *I fall* (the common -wa- root); ḡanḡun *I hit him* (the common -bu- root), ḡa-gi-n *take, place* (common -ga-), ḡawan *I give*, ḡanjḡja *I do*. These compare with some of the NK roots, and through them with some form of early Australian, and similar comparison may be made with the suffix -ba, a frequentative in both NK and Wardaman - in the latter, for instance, bagba ḡamin *I break it with frequent blows* (also good Ngarinjin!). In point of fact, comparison can often be made between this language and Ngarinjin, e.g. Wardaman ḡawa-dari *I left them*, cf. Ngarinjin ḡjari buḡuni, also *I left them*, Wardaman jamin ḡjerin *he dug (a hole)* compares also with Ngarinjin ḡjari *dig* though the latter uses a different auxiliary.

2.2.1.6. The Northern Arnhem Land languages

The comparisons made above between Wardaman, near Katherine, and the Northern Kimberley languages allows a turn northwards in the investigation towards the languages of northern Arnhem Land, especially those in the north-west.

2.2.1.6.1. Laragiya

The Laragia (Laragiya) language formerly spoken about Darwin patterns in practically the same way as the NK languages. There are simple verbs, and there are also compound verbs. In the compound verbs the first element is gerundial in nature, the second - the auxiliary - carries person, tense and other necessary markers. One of the commonest auxiliaries in the compound verbs is -la- *hit* which corresponds to the NK (and CA) root -bu-, but differs from it formally. It is therefore possible either that the formation by means of *hit* in the extended sense of 'acting upon', is older than the use of *bu-, but it could be that Laragiya has imitated the common usage with its own equivalent, i.e. that -la- is a calque or loan translation. This cannot be historically determined. As in Ngarinjin, the basic meaning of *hit* is lost: it is only in Worora of NK that the basic as well as the extended meaning of the root is retained. Examples in Laragiya are: ḡuidui bilan *I knocked*, ḡiridj bilan *I pinched him*. Another frequent auxiliary is -ga- *do, say* which answers to the NK and elsewhere -ma-. The fact that in CA *ga = *take, hold* may or may not be important. In Laragiya the root sometimes indicates becoming (*take on*) or being in a state, as in ḡirḡir ḡagam *I am hot*, but note bidbid ḡagin *I waved it*, bididjbaw ḡagin *I rolled it along*, ḡirḡir ḡagin *I scratched it* (*ḡidi(ḡidi) *tickle, scratch*, probably EA), maḡamaḡa wiwi maḡin *the wind blew*. A third is -ag *to go*,

as in way *ṇaylga I swim*, bawRull *ṇagag I shall lead him*, bawudjin *ṇaledji I passed by* (a suppletive form, cf. Mara etc. in 2.2.1.4), njul *ṇaledji I dived*. This auxiliary may be used transitively or intransitively, e.g. luglug *wagag I shall steal it*. A further example is -r *hold*, gugar *I will hold it*, as in mingil *muwar I hop*, presumably *I hold a hopping position*, the m- class prefix probably referring, as it would in Ngarinjin, to the ground; murg gugar *I'll grab it*. Still another is -(w)al *make*, as in gulwa *guguwal I'll make a song, I'll sing*.

In all these forms the strong typological resemblance of Laragiya to the NK languages is maintained, even when the vocabulary is quite different. Seeing that CA vocabulary is at a lower percentage in Laragiya than in NK, it is open to suggestion that the system in Laragiya is basically common to this and all the NK languages, but that the latter have incorporated CA material at a later date. When this material is examined from an LS point of view (which cannot be done here) the conclusion is greatly strengthened. It has already been suggested, in another paper in this volume, that noun-classing in the NK is a relatively late formation, the structures of Laragiya and NK remain as early types, on to which classification patterns have been added later.

2.2.1.6.2. Other Western Arnhem Land languages

The lesser known languages - Gagadju, Mangeri, Urninggang - do not use compounding. Their verbs are all simple bases to which person and other markers are added as affixes either before or after the base. The first group that shows compounding, eastward of Laragiya, is the Gunwinjgu group. It must be recalled, however, that some languages such as Warrai, are not known structurally at all.

2.2.1.6.3. Gunwinjgu Group of Languages

Under this heading are subsumed Gunwinjgu itself, along with Mawng, Gunbalang, Gundangbon, Mayali (a dialect of Gunwinjgu not of free standing). The Jiwadja language is the nearest relative to Mawng, but has no noun classes (Capell 1962:127-170). In Mawng there is very little compounding of verbs, and in Jiwadja apparently none at all. The Mawng situation has been mentioned already in (2) above. It is not enlarged here; the main stress is on the phenomena in Gunwinjgu.

In Gunwinjgu, noun object incorporation into the verb complex is allowable: *I am making a spear* may be either *man-gole ṇa-ṇanbu-n* or *ṇa-gole-ṇanbu-n* *I am washing my head* is normally *ṇa-go:dj-djiridjbu-re-n* *I head wash*. The peculiarities of verb classification in

Gunwinjgu seem to rest on this capacity; the gerund is incorporated between subject ($\pm$ object) marker and tense etc. ending. This formation does not seem to have been noticed before, certainly not by the present author in earlier publications, but if it is assumed to be acting, the analysis of the verbal systems becomes much easier. The pattern in the Gunwinjgu compound conjugation then becomes uniformly

+ subject $\pm$ object + gerund + tense etc. markers

and in 'tense etc. markers' the reflexive suffixes are contained. The papers put out in the Australian Institute of Aboriginal Studies Seminar in 1974 (see Dixon, ed. 1976) did not notice this fact, and therefore both Carroll's paper (Carroll 1976) and Capell's comments on it need to be revised from this new angle. The earlier Gunwinjgu grammar (Oates 1964) also needs to be revised from this point of view.

In all these earlier analyses the compounding of verbs in Gunwinjgu has stood apart from that in other languages as being suffixal, e.g. *na-wog-di I spoke* as compared with *gun-wog a word, speech*. A simple verb such as *na-bu-n I hit him* does not really contrast with the compound in the same way as in the other languages. There are no verbs in Gunwinjgu of the gerund + auxiliary type. But if *na-wog-di* could be broken up into **wog na-di*, the normal pattern would be attained. Owing to the fact that noun incorporation is the rule in Gunwinjgu (though not now compulsory), **wog na-di* becomes impossible, and the incorporative type becomes standard. The various 'suffixes' listed by Oates and Carroll then become the stems of verbs preceded by a 'noun' of some type, which often does not exist as a free form. This is true of many of the 'bases' in the NK and other languages; in these the 'bases' are functionally gerunds, followed immediately by the verb; in Gunwinjgu they are still nouns incorporated into the verb - but the principle of compounding remains the same.

The interpretations of these forms are not at all clear in many instances. J.T. Platt remarks in another context: 'semantic analyses based on morphology run into all sorts of difficulties... the semantic analyses may, at first, look to be very language specific, but if we look further we may see that there are interesting parallels between the morphological analysis and possible underlying structures for related lexical items in English and other languages' (Platt:1974:119). The same remarks may be made for Gunwinjgu as for Bidjandjadjara, to which Platt's remarks refer. Some of the suffixed auxiliaries in Gunwinjgu are recognisable as either free forms within the present-day language or related to other forms, either **CA* or **EA*. The

present summary statement will therefore be divided into two sections, one referring to roots which can be recognised with fair confidence, and the other roots not so recognisable at least nowadays.

What are the bases in Gunwinjgu? In some cases, such as *gun-wog*, they can appear with a noun-class prefix and function as nouns. In others, they do not function independently, but there are signs that once they did: there is the infix *-bɔ:-* of *reference to water*, combining with *-nu-* *eat or drink*, to make *ŋa-bɔ:-ŋu-n* lit. *I-water-eat*, i.e. *I drink*. This does not stand alone, but the writer well remembers it as the first call in the Marayin ritual, a prolonged *gunbɔ:*, *gunbɔ:*, *gunbɔ:* by the song leader and master of the rite, and clearly a call to *water* which is central to the mythology. Another, *-bɔlg-* *reference to ground* does occur alone as *gun-bɔlg* *ground, earth, camp*, and in verbs such as *-bɔlg-ge* *drop to the ground* and in other nominals such as *gunRed ga-bɔlg-ŋeyo* *earth its ground name, the name of the place*. If a man in a temper calms down, he *ga-ŋuɖ-me*; if a stormy sea calms down it *ga-bɔ:-ŋuɖ-me*. These prefixed elements are noun classifiers extended to verb classification, not auxiliaries: the suffixed *-me* is the auxiliary, usually intransitive, with *-ge* as the corresponding transitive.

The result turns out to be a picture not unlike the Daly River Family languages already dealt with. Moreover, some of the markers listed by Oates (Oates 1964:37ff.) do not seem to be justified, e.g. *ginje* *cook* looks to be a simple root and not *-gin-je*: no suffix *-je* appears. This applies to quite a number of other allomorphs. The final analysis at present will then be:

1. Recognisable roots:

<i>-bu</i> <i>hit</i>	<i>-ni</i> <i>sit</i>
<i>-di</i> <i>stand</i>	<i>-Re</i> <i>go (-m-Re come)</i>
<i>-ga</i> <i>take (hither)</i>	<i>-we</i> <i>throw</i>
<i>-ma</i> <i>take (away)</i>	<i>-wo</i> <i>give</i>
<i>-na</i> <i>see</i>	<i>-yo</i> <i>lie</i>

2. Not now recognisable roots:

<i>-do</i>	<i>-me</i> (< <i>-ma?</i>)
<i>-ge</i> (< <i>-ga?</i>)	<i>-ri</i>
<i>-wa</i> (?)	

The two sets are now briefly exemplified:

- (1) -bu *hit* CA *bu: most of the examples are in NK languages reduced to 'action on an object': -dulu-bu *pierce*, -djiridj-bu *wash* (-djiridj-bu-Ren *wash oneself*), -manbu- *make, heal*. This is almost as common a formative as in NK languages.
- (2) -di *stand*, na-di *I stand*, -wog-di *talk* (standing as a rule) - there does not seem to be a corresponding *-wog-ni *talk while sitting*, -miri?-di *be sharp, like a point, standing out*.
- (3) -ga- *take*, with basic idea of motion towards speaker, *bring*, -manga- *fall down, take a fall (to oneself)*, -walga *hide*.
- (4) -ma *take*, motion away from speaker, as in bunja-ma *kiss*, which must be away from actor towards recipient, -la|ma *separate*, again in the same manner. The root is used by itself as na-ma-n *I do, I say*, a double meaning which is very commonly found with this CA root, e.g. in the NK languages and in Alawa, etc. There seems to be a phonetically variant form in the third root of group 2, -me, as also there is a -ge from -ga; these are discussed below. As an auxiliary the root -ma is Australia wide, being found as far from NK as northern New South Wales.
- (5) -na *see*, also a CA root, but not commonly found as an auxiliary in other languages. It is involved with activities which involve the eyes: -wo?na *watch, keep watch on, be alive*. An interesting case is found in the modern verb *to read*, -bim-burg-na: -bim is *carve, write*, -burg is *body*, and -na: one who sees the form which has been carved or written.
- (6) -ni *sit*, na-ni *I sit, dwell, remain*. This is the simplest form of an EA root *ni which appears in CA as *nin(i). An example is wayi-ni *sing*, which is really *sit and sing*, as is usually done.
- (7) -Re *go*, and with prefix of reversed motion, -m-Re *come*. This is auxiliary for verbs of movement as a whole, whether by the actor or not, e.g. -bo:Re *to flow out, issue* is built from the *water* indicator -bo previously mentioned, and -Re, -djargRe *assemble* uses the plural action prefix -djarg-; -djalg-mi-Re- *to tear* as cloth, uses the *tear* -djalg-, and can also be -djalgme- without the direction suffix; some other cases are not so clear, e.g. -bugiru-Re *to dream* and wuyug-mi-Re *to be tired* - again a form of -me, plus the

directional -Re.

- (8) -we to *throw*, related to the NK root wadj: Gunwinjgu *na-we- I throw it away*. In Ngarinjin, however, this would be a compound word: wadj anebun *throwing I-do-to-it*, whereas here it is a main verb: what is the history of the formation of these compounds? Examples: munge-we to *send*, mari-we to *be in a hurry* (sc. to get away), -go-we to *tell a lie* (it is thrown at the recipient!), -bugburi-we to *knock over*.
- (9) -wo *give*, one of the forms of a CA root that appears as *wu, *yu or *nu. As a full verb it is *na-wo:n I give it to him*. Oates remarks that it acts on various speech categories, e.g. -ba-wo to *go away*, -bele-wo *make clean* (clear -bele), -woybug-wo *make true*, i.e. believe a thing, -ware-wo *make a mistake* (CA root *wari *bad*), -yag-wo to *finish* (yag *done*). The Gunwinjgu word -nu however, is the verb *eat*, and comes from a different root.
- (10) -yo to *lie down*: *na-yo*. This does not seem to be a general Australian root of either stratum. It appears in -ge-yo to *sleep*, -yiri-yo *stretch oneself*, -boyboyo *lie prone*, -lumbari-yo *lie supine*, -go:dj-bugiri-yo to *dream*, where -go:dj is *head*.

The second set of formatives is shorter, but not too easy to deal with, particularly in the cases of -ge and -me, which are clearly derived from -ga and -ma respectively. The former is a common transitiviser, the latter an intransitiviser, and the two will often interchange with the one verbal (or gerundive) prefix; Oates' illustration is *nuri-boled-ge-men you turn it over* and *ga-boled-me he turns (himself) over*. She adds, however, 'but there are many intransitive verbs ending in -me, and transitive verbs ending in -ge which have no corresponding transitive or intransitive counterpart' (Oates 1964:37). There is no solution offered in the present short space to the matter; it would seem that a further suffix -i has been added (ma + i = me; ga + i = ge), but what this would be cannot be said.

The remaining roots are -do, -ri and -wa, the last being doubtful, since none of the examples in Oates seems to appear also without the -wa, i.e. it would be part of a stem, not a suffix at all.

For -do the evidence is unsatisfactory. It could be that it represents a phonemic variation of -ro, a verb to *throw* *na-ro*, and that -dagendo *put or place in a container* refers to throwing an

article into the container. According to Capell's vocabulary there is also -daʔgen-di *to embark on a canoe*, i.e. to stand in a canoe as a container, thus isolating the root -dagen- or daʔgen- (dialect variation). Whether -Ro-me *to dodge* belongs here depends on checking as to ro/Ro. A verb -do-we *die* could belong to the -do root as well, but the whole matter of these non-separable suffixes is unsatisfactory and is best left so for the moment.

This demonstration of the nature of the Gunwinjgu verb has been given probably an over-great proportion of a work of the present nature, but as it represents a type not previously reported for Australia this seemed advisable. As remarked, it does look rather like the Daly River type previously treated more briefly.

The remaining uncertain formative is -ri, and here Oates' examples are ambiguous. It is true that -durgmi-ri *to work* may represent -*durg-me + *di-, as work is mostly done standing, and the -di form is used with some laxity about position, but -diri *play* looks like a simple verb, and -benyi-ri *listen* needs more analysis, since it evidently has connections with -bega- *hear* and -ben-ga *know*. The last appears as -bengu in Gundangbon.

For Gunbalang, J. Kinslow Harris states in regard to compound stems, that 'in some of the compound and reduplicative stems each morpheme is semantically identifiable, i.e. ngayn- has the meaning "actions towards the speaker" and -ka has the meaning *go*, so that in combination -ngaynka (read -nanjga in present orthography) means *to come*. However, the majority of these stems are a combination of a non-productive morpheme in unique occurrence with a morpheme which may occur elsewhere as a simple root, i.e. -puyn (= -bu-nj *CA bu *hit*) is a simple root which occurs with the non-productive morpheme -mij giving the combined meaning -mijpuyn *to meet*.' (Harris 1969:6).

In the south-central area the group of dialects known as Buwan, Ngalgbon or Dalabon has a system very much like that of the Gunwinjgu. Reference may be made to Capell (1962:112), where six suffixal classifiers, all cognate to Gunwinjgu forms, are set out as follows:

- (1) -bu-, action upon an object: gulaʔ *skin* > -gulaʔbu- *to skin*, an animal; danj- *spear* > danjbu *to spear*; bi:m *clay* > -bi:mbu- *to mark with clay, to write, draw*.
- (2) -ga-, transitiviser, with some exceptions: cf. Gunwinjgu -ge, -ga:-boled-ga *upset, overturn*; -raʔga- *to drop*; and among intransitives: -doʔga- *be awake*. The distinction between -ga and -ge found in Gunwinjgu does not appear here.

- (3) -ma-, intransitiviser: -wulub *dive* > -wulub-ma *bathe*; -wo?ma- *be drowned*; -dadadj-ma- *grow weary*, seemingly connected with -dadj-ga *cut*. There is apparently no connection between -wo?ga- *sing* and -wo?ma- *be drowned*.
- (4) -mɪ-, equivalent to Gunwinjgu -me, described by Capell (op. cit.) as neutral in regard to goal, marking a derived verb, used when other, more specific markers are not called for: -wiyal-mɪ *hiccough*; -gunon-mɪ *tell, narrate*.
- (5) -na-, the root meaning *see* is largely lost in compounding: -jidj-na *hold*; -wad-na *throw*, wo-na *hear*; -gunwo-na *think*. There is a compound with -ri- (not otherwise used in Dalabon): non *spittle* > non wad-na-ri *to spit*, which Capell there interpreted as a -ri- reflexive, *throw for oneself spittle*; similarly nunj wadnari *to sneeze*.
- (6) -wo-, root of the verb *give*: -djanwo- *ask, give a question*; maŋ-wo *make, heal*, constructed in Gunwinjgu with -bu- as -maŋ-bu-; -doge?wo- *find*; -we? *bad* > -we?wo- *to swear*.

All these forms in Gunbalang and Dalabon are capable of interpretation as compounds of noun root plus verb auxiliary, preceded by person marking, treating the noun as an incorporated form.

2.2.1.6.4. Other Arnhem Land languages

Compounding of verbal stems seems to be absent among the other languages of northern Arnhem Land. It does not appear in Gunavidjɪ, Nagara or Burera – and those to the east belong to another group of non-classifying languages, which will be mentioned in their place (see 2.2.2.7.5 below). In the south-east, Nunggubuyu and Anindiljawgwa also lack the system. It is found in the Roper River area, where it has already been mentioned. The Dalabon type, which belongs to the Gunwinjgu model, has been mentioned in 2.2.1.6.3.

2.2.1.7. South Australian languages

This subgroup comprises the South Australian languages in which compound conjugation occurs. It consists of six interrelated languages:

Diyari	Midhaga
Dhirari	Yandruwanda
Ngamini	Yarluyandi

occupying an area east of the Lakes district and stretching towards the north-west corner of New South Wales and the south-west corner of Queensland. They are characterised generally by certain common features, apart from vocabulary. They do not mark person in the verb, but require a noun or pronoun subject and object to be expressed. They are ergative languages. They use a small number of auxiliaries (eight at the most) which mark tense and mood, while the main verb remains unaltered to a very large degree. The auxiliary verb itself can also function as a main verb.

Diyari (Dieri) is the best known of the languages. There is a New Testament translation by Reuther dating from 1896, as well as some published grammatical studies of varying degrees of unsatisfactoriness. The remaining languages have received less attention. The information used in the present notes is derived from work by sundry students - published materials on Diyari, and papers by Breen (1976c,d) and Austin (1976), with reference to a little material made available by L. Hercus in which Yarluyandi is mentioned.

2.2.1.7.1. Diyari

Diyari has no genders or classes in nouns but does mark masculine and feminine in pronouns on a basis of 'natural' gender. The normal sentence type is SOV, and in the verb the pattern is base + auxiliary. The simple base is used alone only in dependent clauses, and the suffix then has a special use. There is a verb *to be* - *wandi* - which is one of the auxiliaries but appears in equational and descriptive sentences. In one of Berndt's texts there occurs the sentence *nanija nanay widla gurunuru she is woman strong*, where the syntax can be justified in a way not relevant here. Apart from the present (or aorist), verb bases can be used only with auxiliaries: *jada nanay is speaking*.

There are six auxiliaries, each having its own basic meaning, and usable under certain conditions as a main verb. They are:

Auxiliary	Meaning	Use
<i>bara</i>	<i>lie</i>	state just attained
<i>qana</i>	<i>be</i>	permanent state
<i>waba</i>	<i>go</i>	entry upon a state
<i>wandi</i>	<i>seek</i>	state attained or action done
<i>wara</i>	<i>throw</i>	action already done
<i>wiri</i>	<i>enter</i>	state recently attained

There are aspect endings used with the auxiliaries, as in *nawu worga-la wandi*, *buṇani wiri-la* *he came to enter the house* and the imperfective *-la* also indicates purpose. The details of tense and aspect are expressed in various combinations of roots and auxiliaries:

1. With *-na* perfective: *ṇani jada-na wandi* *I spoke*, *ṇani jada-na waray* *I have spoken*, *ṇani jada-na bara-ya* *I spoke some time ago*; *bara* suggests *I have thrown in my word*, and *it's all done*.
2. With *-la* imperfective: *ṇani jada-la najay* *I am about to speak*, *I shall speak*, *ṇani jada-la waba-ya* *I am in the process of speaking*, *going to speak*, *ṇani jada-la wiri* *I have entered upon speaking*, *begun to speak*.

It is possible for auxiliaries to qualify themselves in a repetitive manner, as in *wandina wandi*, which occurs twice in Reuther's New Testament translation: Matthew 2:20 *were seeking* - also John 11:56. On the other hand he uses in Luke 4:33 *warana wandi* *he threw*, where Austin quotes *warana waray*. This may be a stylistic use of Reuther's: it is difficult now to say.

The entire system of auxiliaries here is different from those used in the other languages studied here. It seems to be a matter of expressing first of all by means of an aspect marker whether the act is complete or not, then by an auxiliary when it was or will be completed, and what sort of activity is involved in the completion.

In terms of phrase analysis the various situations might be set out in something like the following ways:

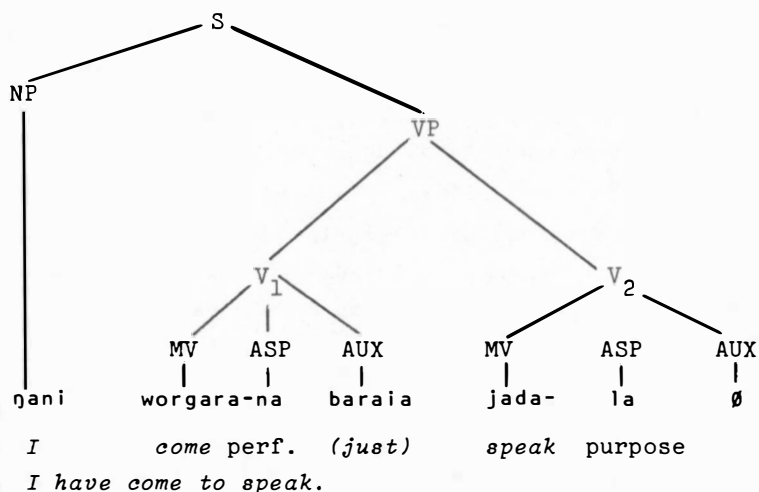
1.


```

graph TD
    S --> NP
    S --> VP
    NP --> Pron
    Pron --> nani[ṇani]
    nani --> I[I]
    VP --> V
    V --> MV
    V --> ASP
    V --> AUX
    MV --> jada[jada-]
    jada --> speak[speak]
    ASP --> na[na]
    na --> perf["perf. (attained)"]
    AUX --> wandi[wandi]
      
```

I have just spoken.

2.



An example of the ergative construction, the locative ending and the sentence medial use of -na aspect is seen in the following:

nū-lu bradjana madjadinda-na nuga-ŋu-bini mida-ni,
 he-erg. everything now having-lost that-in-emph. land-in,

mawa biŋa bandji-na wandi
 hunger great make-perf. past.

When he had lost everything, a great famine happened in that country.

2.2.1.7.2. Dhirari

The Dhirari language is a dialect of Diyari, and the notes used in this section rest on a paper by Peter Austin given at the 1974 May meeting of the Australian Institute of Aboriginal Studies, Canberra (Austin 1976).

The general pattern is similar to that of Diyari 'with the added complications of an additional auxiliary verb' (Austin). Austin also finds that some of the Diyari auxiliaries are not functioning in Dhirari, but (using his spellings) *wandiy* and *waray* are regularly found, marking 'distant past' and 'less distant past' respectively. They occur after *buri* which is not an element of Diyari. This *buri* is *fall* and as such appears in Diyari also: Austin gives *nani ŋaba-ni buri-yaḡi* *she fell into the water*. This becomes in Dhirari

nani ɣaba-ni buri-ŋɔa buri-yadl
she water-DAT/LOC fall-PART buri-PROB

according to Austin's analysis.

The buri verb, then, is characteristic of Dhirari; and with the absence of most of the auxiliaries used in Diyari, gives its special character to the dialect. Aspect and tense and other endings are added to buri, and the dialect presents a totally different aspect from that of Diyari however close the two may be in vocabulary. Further reference needs to be made to Austin (1976).

2.2.1.7.3. Ngamini

The information on this language is drawn from a paper presented by J.G. Breen at the above-mentioned meeting (Breen 1976c). He links Ngamini, Midhaga and Yarluyandi in a dialect chain stretching north-east from Dhirari-Diyari.

Ngamini shows eight auxiliaries, which are:

1. *barga run*, momentary action while the actor is moving.
2. *ɔiga return*, action directed back to where the original action took place.
3. *guru motion away* - not used as main verb.
4. *marga crawl*, continuing action while the actor is moving.
5. *ɣana do* - but Breen is uncertain - denotes intention; rare as main verb.
6. *waba go, walk*, habitual action in past time.
7. *wara throw*, marks past time.
8. *wiri enter*, seems to denote arrival, but some uncertainty.

There are, however, extra suffixes which Breen calls 'verb stem formatives'; these have suspicious resemblance to some of the WD auxiliaries:

(1) -ba added to intransitive verb stem, makes a 'causative: from 8. above, *wiri-ba to insert*.

(2) -ga may be added to an intransitive stem such as *waba go* to form *wabaga take*: this certainly looks like the CA root *ga- take, carry, hold*.

(3) -naga is added to a non-verbal stem to indicate causation: *naRi dead, naRinaga kill*. This looks like a form of -ga, but if the

stem is non-verbal it is hardly likely to be the imperfective marker (which is -*ṇa*).

(4) -*ni* turns a noun stem into a verb stem: *biṇa* *big*, *biṇaṇi* *grow*. This looks like a form of CA *nin(i)* *sit*. If these identifications can be accepted, then we have double composition in this language.

Concerning these auxiliaries Breen (1976c:747) writes: 'by far the most frequently used is *wara*, used in its present tense form *warayi* to mark the past tense'. He illustrates:

gubanu maḍa ṇaganamu waraṇa warayi
child-ERG stone me-IO throw- past
The child threw a stone at me.

He proceeds to illustrate the other auxiliaries with examples that are precluded here by considerations of space.

2.2.1.7.4. Midhaga

Breen (1976c:749) found data on this language very uncertain, and notes that 'it did have at least two auxiliary verbs' - *guli* *sit*, *wait*, and *wiri* *enter*. His examples are:

1. wani ṇadu yadabanda guli
song I sing-pres. sit
I am singing a song.

2. waḍaṇanduwa yini ḍaRinda wirindari
where-from you come - arrive - past
Where did you come from?

It is also possible to use at least the first one independently and with itself as in *gulinda* *guli* *sitting*.

These few examples show a system that is essentially the same as that of *Diyari* itself, with again some variations from pattern.

2.2.1.7.5. Yandruwanda

Here again the information is chiefly from Breen (1976d), but Hercus and Wurm have also gathered material in the language. Here such compounding as is found seems to be borrowed, for Breen remarks (1976d:750) that only in the Strzelecki Creek dialect is anything such found, and then only with *ṇana* *do* as an auxiliary. He exemplifies with

ḡanyl ḡawana ḡana!a
 I go-FUT do-PRES
I am going to do.

However, he adds: 'It does, however, have a system in which verbs (or certain other words) are compounded with a main verb to perform a wide range of functions, including some similar to those performed by auxiliaries in Ngamiñi. Thus it forms a link between the auxiliary verb system and the more common system in which verb modification is by affixation or morphemes which exist only in bound forms.' In this it seems to be closer to other systems studied in his chapter than to the present subsection as a whole. It also, noticeably, has subdivisions of morning-noon-night tenses, such as appear in Tiwi of Bathurst-Melville Islands and parts of New South Wales.

2.2.1.7.6. Yarluḡandi

No information is to hand regarding this language; only a mention that it belongs to the present grouping.

Introductory Note on 2.2.2. and 2.2.3.

Preliminary Note on the Western Desert (WD) Languages

The group of languages which has become known in Australian linguistics as 'Western Desert' (WD) is very clearly marked off from all the other languages by certain characteristics. These are a subject for another paper by the same author in the present work as far as more detailed description is concerned, but something needs to be said about them here to make clear the designations 2.2.2. and 2.2.3. in the present section. They form a whole in that they alone employ as person endings in the singular number sing. 1 -ḡa, sing. 2 -n and sing. 3 Ø. All other languages either use none at all or have a set of markers of quite different origin. Their vocabulary is that originally designated 'Common Australian' (CA), in the sense that the highest percentage of CA words is found in these languages - up to almost 90% in some of them. It is claimed it was from this region that CA vocabulary moved out south-east, east and south-west - a comparatively small proportion only to the north and north-east, and also to the south-west. Historically these seem to have been the latest developments of language in Australia before European immigration. Western Desert languages share certain grammatical features which need to be mentioned here: they are

explained more fully in the other paper. They are divisible into two subgroups on the basis of the behaviour of the verb, and for that reason they are examined in the present setting. The two subdivisions are (1) those that do not mark person in the verb itself, but use a 'catalyst' on which the person markers are congregated, and (2) those which add the person markers to the verb stem itself. Both, however, have the phenomenon known as 'Affix Transferring' (AT) though each employs it according to its own genius. The nature of this phenomenon and its historical explanation are also included in another paper in this volume, and seeing that it occurs in both, in spite of their structural difference, it would have to be either prior to the division of the WD languages into the two subgroups, or borrowed from one into the other. This question does not concern the present purely descriptive paper, for both subdivisions have the system of auxiliary verbs in common.

It is simpler to take the Catalyst languages first, so that they become 2.2.2, and the other WD type follows as 2.2.3.

2.2.2. The 'Catalyst' Languages

These languages are predominantly WD, but are found in parts of eastern Australia - Victoria and New South Wales - as well, to which they seem to have been imported from the WD area. The historical discussion of this claim is featured in the historical paper to which reference has already been made. On the map they appear as 2.2.2. and have been described in outline by Capell (1956/62 and earlier, 1940). The present description will be divided into three area sections: Western Desert and Northern Territory, Victoria and New South Wales.

As described in the earlier account by Capell they were labelled 'Mudbura' type languages because the complication is greatest in this language. They include

1. Ngardi, about Lewis' Creek, Northern Territory.
11. Wanayaga, about Tanami, Northern Territory.
111. Djaru and Njinin (dialects of one language) with possible addition of Wandjira, to the south of Hall's Creek, Western Australia.
- iv. Malngin, Upper Ord River, Western Australia.
- v. Ngarinman (ḡaRinman), from about Rosewood Station towards Victoria River, Northern Territory.
- vi. Mudbura, Wave Hill region, Northern Territory.
- vii. Gurindji may now be added, east of Mudbura.

The name 'catalyst' applies to a particle to which markers of person, both subject and - for transitive verbs - objects are added. The particle is monosyllabic, being either *ba*, *ŋa* or in its Djaru form *ŋu*. It is as a rule meaningless - though there are complications in Mudbura, where a number of particles are used, determined by the tense or mood of the verb. To say *ba-ŋa* simply means that 'I' am or do something. It says nothing about time or manner of the action. This is made clear in the ending of the verb. A Mudbura example is:

ba-n ŋa-nanari maŋari ma
C-you eat-past food ?

i.e. *have you eaten food?* A meaningless, purely functional particle of this kind has therefore been given the name 'catalyst' from its use in chemistry for a substance which enters into a total reaction and makes it possible, without being affected itself.

The 2.2.2. languages are mostly - but not necessarily - ergative, and the noun phrase does not enter into the present subject matter; it is enough to say that if a cardinal pronoun is used (for emphasis) as well, then it precedes the whole phrase and if the phrase is transitive the ergative form will appear, as in Waljbiri:

ŋadjulu-!u ga-ŋa-ŋgu wari-ŋi
I-ERG C-I-you seek-PRES.

Here the ergative subject phrase stands outside the construction entirely; it is not necessary except to provide emphasis - unless, of course, it is a noun subject, when it will appear, but then the C carries no person marker:

ŋarga-!u ga-Ø-ŋgu wari-ŋi
man-ERG C-he-you seek-PRES.

a man is looking for you.

The reason for classing these languages as examples of compound conjugation is that in other parts of Australia the particles - *ba* especially - occur as bearers of meaning in their own right. This original meaning is in abeyance if not entirely lost in the C languages but it may still influence the particle chosen.

In these languages the principle of Affix Transference is found in certain cases: negatives and interrogatives tend to remove the person markers from the C, eliminate the C and carry the markers as suffixes to the head word of the phrase, e.g. Waljbiri:

gula-ŋa-ŋgu ju-ŋgu
not-I-you give-FUT.

I shall not give it to you, or with an interrogative:

njaRba-la-nggu balga manu
where-he-you find-PAST?

where did he find you? - balga ma- being a compound verb of the type to be discussed later. AT processes can occur even when the head word carries a case marker of its own. Yulbaridja:

buli-ngga-na dadi-n-ba
rock-on-I climb-PAST

I climbed on to a rock. Yulbaridja is a 2.2.3. language (not using C constructions) but otherwise works in the same way as 2.2.2.

In most of the C languages, word order is fairly free, and C is not bound immediately to its verb. It may precede or follow it or be disjoined in some other way. Djaru:

ga-na-la nja-nani wuna djadjadji na-Ø
C-I-him see-PAST walk about C-he

I saw him walking about. Again: baɖai ja-ni na *climb go-PAST he, he climbed up*, or with extension: na-nalu burungu baɖai ja-nangu naliwa: *C-we early climb go-FUT. we; we shall climb early.*

In Mudbura there are complications in the systems, in that while ba is still the basic or indicative particle, there is a form bi for a hypothesis or contingency and nja- for an emphatic future, and a conditional ba---nja-- with infixed pronouns (Capell 1940:427). Examples of these are: ba-na na-nani manari *C-I eat-PAST food, I have eaten food*; nja-na juguru *C-(fut)-I give-FUT, I shall give*; nja-na-ba ginanguya yali gaRu, *ba-na baru-ru If I catch that boy I'll beat him*; ba-na-ba wandula, *nja-na-ba nja-ngala I would catch him if I saw him*. No examples of this complication have been adduced in the other languages.

The mere possession of C would not qualify these languages to be classed as 'compound conjugation' languages, but the examples have been necessary for two reasons (1) because the phenomenon is itself different from the situation in other Australian languages, and (2) because they actually do possess compound verbs. The compounding is practically the same as in the languages of 2.2.3. except that in the latter there are no catalysts and the person markers are added directly to the second element of the compound. In 2.2.3. also there are simple verbs as well as compound verbs, and while this is the case also in 2.2.2. languages, in these neither basic nor auxiliary verb carries the person markers.

The languages of 2.2.2. and the forms of the catalysts are as follows:

Language	Catalyst(s)
Ngardi	ŋu-
Wanayaga	ŋa-, ŋu-
Djaru	ŋa-
Malngin	ŋu-
Ngarinman	ŋa-
Mudbura	ba-, nja-, ba...nja...
Gurindji	ŋu-

The Waljbiri group of dialects (including Walmanba) differ from the others in that they have an alternative 2.2.3. type in which the person markers are added directly to the auxiliary verb, *ga-* to the non-past and *ba-* to the past, but alternating freely with affixation to the verb stem itself, without particle. Walmanba uses *ba-* but replaces *ga-* by *a-*. In Waljbiri, *I look for it* may be either *wayunu ba-ŋa-la* or *wayunu-ŋa-la*, while Walmanba can say either *wayunu ba-ŋa-la* or *wayunu a-ŋa-la* for the same phrase. *I will look for it to-morrow* is in Waljbiri *djugura ga-ŋa-la wayini*, in Walmanba *djawadi a-ŋa-la wayini* (or in the other word order, of course; note also vowel harmony here in the tense changes).

Something must now be said about the auxiliary verbs that justify the classing of these two subdivisions of WD as 2.2.2. and 2.2.3. respectively. The auxiliaries form a small closed group, and they are historically extremely important for the tracing of linguistic history in Australia, as appeared in the paper referred to several times already. Here 2.2.3. may be introduced first and the two groups treated together subsequently.

2.2.3. Languages Using Free Auxiliaries

In a typical language of this group such a structure may be found as *see-do-I-shall-I-him* = *I shall see him*; *spear throw-FUT-you-us* = *you will spear us* and similar periphrastic arrangements. They differ from those of 2.2.2. in not using a catalyst of the type of *C-I-him spear throw-FUT* = *I shall spear him*.

Contrary to the type of the Daly River Family, where all verbs are double, in 2.2.2. some verbs are simple, others double. In all of them simple verbs exist in considerable numbers and in most they are in a great majority. The 2.2.2. languages in general mark tense by suffix, and add a final person suffix, including a second object suffix if the object is a pronoun, giving the pattern $V = R + t + p$, 'root followed by tense marker, followed by person marker of both subject and object -

even in some cases an anticipatory object'. It is, however, possible - and this demarcates 2.2.3. as a class - to express by means of an auxiliary a particular shade of meaning or emphasis, e.g. -bu- *hit* found as free verb, may assume the role of an auxiliary as in Bidjandjadjara gurani *do wrong* > gura-Ra-bu-ŋanji *do great wrong to*. Actually it is not right to conjoin the two roots in spelling, as has been done in Bidjandjandjara writing. The -Ra- of guraRa- is the suffix of the sentence medial I form (a type of participle implying that the same actor performs both actions (Trudinger 1943:219).

A transition language appears between 2.2.2. and 2.2.3. in Ngardi of the Northern Territory, which combines all three conjugation types. There is the possibility in this language to use

1. direct suffixing of pronouns to a simple verb stem:
AT processes with a negative will then produce, e.g.
wagura-lu la-ni *not-they-two spear-PAST*, i.e. *they did not spear*;
2. suffixing of pronouns to an auxiliary, e.g. dalj
ma-ngu-ŋa *breaking do-shall-I*, i.e. *I shall break*;
3. just a catalyst, e.g. ŋa-lili djura ja-nani C-*they*
down PAST, i.e. *they descended*.

These languages cover the bulk of the Western Desert area, and can be regarded as forming a definite subdivision of Australian languages by themselves. They are not the only languages in which this process occurs, however; there are isolated groups elsewhere. The Dampier Land languages are contiguous, it is true, but their methods and actual morphemes are quite different, so that they call for separate statement.

Most of the Western Desert 2.2.3. languages are also AT languages. The utterance (or sentence, in this case) consists of a head word to which suffixes are added. There are two types, according to whether the head word is the verb stem or not. Two patterns result:

- (1) Head word (H) is the verbal stem:

$$U = H + t + p_s \pm p_o$$

where t = tense marker, p = person marker, either as subject (s) or object (o).

- (2) If H is a nominal (including free pronouns, which may be used in such a situation, but the suffixed pronouns must still be added to the verb):

$$U = [H + p_s \pm p_o] + [V + t]$$

Variations of detail take place according to the exact nature of H:

(1) H is a noun or free pronoun:

Bidjandjadjara ɲana-lu-ɲi bambu-nu?
 who-ERG-me touch-PAST
 Who touched me?

(2) H is a negative:

Waljbiri gula-ɲa-ɲgu yu-ɲgu
 not- I-you give-will

(3) H is adverbial:

Bidjandjadjara nja:gu-ɲgu-n bu-ɲanji?
 why-self-you hit-PRES
 Why are you hitting yourself?

These examples are adapted from Capell (1972:5-36) where more detail on the whole subject may be found.

2.2.3.1. Western Desert Languages

Wurm (1972:127) lists forty names under 'Western Desert Languages', and these are practically all dialects of one language - differing considerably in vocabulary from area to area but very similar to each other in structure. Also structurally not unlike them is a group of three languages grouped as 'Marngu' - the basic word for *man* being used as is often done by Australian students to name either a language or a group. These three are Njangumarda, Garadjari and Mangala. They are sufficiently close to each other to be subsumed under the heading 'Western Desert' for the present purpose. The main features of these WD languages as far as verbal systems are concerned are:

1. A majority of simple verbs to which tense endings are added, followed by subject pronouns and in some also object pronouns, which are not abbreviations of free pronouns. In the paper dealing with the history of Australian languages in this volume, it is suggested that these suffixed pronouns are not related to the free pronouns, but that the latter have been developed from an original suffixed set that provided only for the singular number. In the present paper, however, the synchronic situation is considered: all numbers are provided for, but the non-singular suffixes are built up in various ways (Capell 1955:283ff.). In general, dual and plural are present, but some

languages, such as Bidjandjadjara, do not make full provision for a distinction of inclusive and exclusive in the dual and plural.

2. In a minority of cases, whose number varies from language to language, the verb root remains unchangeable, and conjugation is carried out by means of a set of auxiliary verbs, whose number also varies, to which subject and usually object markers are added. Certain elasticity of arrangement is allowed, especially where AT processes occur. In some languages, such verbs are used mainly to provide nuances of meaning (as has been shown already for Bidjandjadjara); in others, the simple stem is either conjugated by itself or is not changed at all and auxiliaries are used instead. This would rather suggest that the historical development of these systems has been gradual and without uniformity (not from a single centre), but this again is a diachronic matter for which only indirect evidence is available.

The normal patterning in this subgroup is

$$Vph = R + t + p,$$

i.e. the verb phrase consists of a root to which tense and person markers are added. In the case of a compound verb, the pattern is

$$Vph = R + [A + t + p]$$

where A = auxiliary; and again, the order of R and A may change, but that of t and p is fixed.

Example:

Bidjandjadjara baluRu nji-nanji
 child sit-PRES

The child is sitting.

nana-lu djiduja baladja wadabara-l-gu?
 who-ERG dog that chase-LINK-FUT

Who will chase that dog?

This is the general usage of all the WD languages, including some of the Waljbiri forms (present tense, optionally). But in Bidjandjadjara and the related dialects it is possible to use auxiliary verbs, of which there are five: bu- *hit*, marking intensity of action; gadi- continuity of action; ma- *do* (also *say, take*); wan- *throw*, and njin- stative. These roots can all be used as simple verbs as well as serving as auxiliaries. In this latter use, it is unfortunate that the habit of writing them as part of the verbal stem was early adopted; if they are separated out their function becomes clearer:

<i>guraŋl</i>	<i>do wrong</i>	<i>guraRa bu-</i>	<i>do great wrong</i>
<i>baldjuŋi</i>	<i>walk</i>	<i>baldju! gadi-</i>	<i>continue to walk</i>
<i>gulinl</i>	<i>listen</i>	<i>guliRa njl-</i>	<i>be obedient</i>

There is one feature here that is not shared by most languages: the base verb is participialised, the ending *-Ra* being the SM I form - the participle which indicates that the same actor acts in both verbs. These SM forms are themselves rare in Australia, and the Bidjandjadjara usage, more complicated than most, would seem to be a relatively late development. This must not, however, be taken to imply that the whole system is 'late', but only that its use in Bidjandjadjara probably is.

A few fixed auxiliaries in Bidjandjadjara are omitted, such as *-(a)ri* inchoative, *-gara* *having*, *-ŋaRa* *standing*. These are not separable and present a different type that is not germane to the present study.

The only other WD language of this type that can be illustrated here is Yulbaridja, which has been studied by O'Grady as well as Capell: see O'Grady et al. (1966:150ff.). This language has both simple and compound verbs, and the person endings are typical of the languages throughout WD. O'Grady's list of compounding elements (O'Grady et al. 1966:156) contains:

- ŋaRa* *stand* as component of stative verbs: it can also be a free verb *to stand*;
- bu* *hit*, which marks transitivity: *wiri-bu-wa* *throw it!*;
- ya* *go*, verbs of movement: *galgi yagaya-* *skulk about*;
- nya* *see*, of mental action (cf. English *I see!*): *djala-nja-* *forget*.

Yulbaridja is an AT language, as the following examples show:

may-dja ju-wa
food-me give-IMP
Give me some food

bu-ŋa-nja-ŋa-nda
hit-will -I- you

bull-ŋga-ŋa dadinba
stone-on-I climb-will

waRu-ŋa njana-njin
fire-I see-PRES

On the northern boundaries of the WD area certain other languages call for mention; these are Njangumarda, Garadjari, Mangala and Walmadjari.

Njangumarda shows precisely the same type of structure as those of the WD area as a whole. Concerning the verbal system of this language, O'Grady (1964:66) says: 'verb compounds involve a relatively large number of morphemes as first member, and relatively few as second member.' The morphemes that occur as second member are the following:

1. -ya- *go*, as a free verb and as the auxiliary for motion:
waḍa yaṇara *he went off the road*. In this example the verb as spelled in a free form is spelled by O'Grady as a suffix to the main verb; but he says that it can be separated from its referent: yangulumuṇu yuḍagaḍi wiyara *I am going to go fishing*.
2. -ga- *carry*: waḍa ganyara *he took it off the road*; gaRir ga-nja-ṇa *I slipped*.
3. -yi- *give* (CA *yu-): mura yinjanja *he cheated me*.
4. -yaga- *leave, quit*: midu yaga-ṇa-ṇa *I didn't believe him, lit. I left faith in him*.
5. -baḍi-, meaning not recognised in a free form, only known in a compound: djunara baḍi-ṇi-yalu *they encircled him*.
6. -gama- *call, shout*: djuRi gama-la *taste it!*
7. -badji- *bite*: djuRi badji-ṇa *he tasted it*.
8. -Ruwi- *hit with a missile*: ḍiḍiḍi Ruwi-yiṇi *I twisted it*.
9. -buri- *pull*: ḍaṇḍaṇ buri-li *stretch it!*

There are further details in the grammar that are not relevant here. What does appear is a large use of auxiliaries to which person markers are added. Unfortunately there is no statement about the category to which the root belongs - it apparently is not always a verb. There are no catalysts in the language and no AT process.

Immediately to the east of Njangumada comes Garadjari. A grammatical sketch of this language has been given by the present author (Capell 1962:51ff.), from which the following remarks are adapted to clarify the situation. It should be stated, however, that another analysis suggests an appearance of the catalyst *ba*: reference will be made at the end of the paragraph concerning this matter, which is not certain but a possible interpretation.

There are three dialects: coastal (Ngadja or Murgud), Ngangu (inland to S.E. of La Grange), and Ngawudu or Baldu, to N.E. near Mangala. These differ considerably, as shown in the 1st sg pres of *bite*: Ngadja *badja-na*; Ngangu *badja-n ba-na*; Ngawudu *badja-n ba-naŋ*. The point of interest is that two dialects use the catalyst *ba-* while the third - the farthest west - does not. Examples here are usually eastern, as Capell's work was done mostly with speakers found at Beagle Bay. More recent work done by Fr McKelson is mostly Ngadja, from La Grange Mission. The latter has unfortunately not been published except in xerox form within the Mission itself.

Fr McKelson's work treats all verbs as either single roots or compounds, writing *-ba-* as part of a single root. He divides verbs into five 'conjugations' but does not distinguish the catalyst of the two dialects as a separate element. Nekes and Worms treated *ba* as *come*, but this does not seem to be correct; the auxiliary *djay- come* is the only form with this meaning (Nekes and Worms 1938). Capell's arrangement of auxiliaries treated *ba-* as *come* (and this, as stated, is wrong), plus eight others. With adjustment by the omission of *ba*, the list would now be:

1. *-bu- fall*: *maRu -bu- to dance*, as against *maRu jin-ba-*.
2. *-dja- put*: *galay dja- to finish*; *jarga dja- conceal*.
3. *-djay- come*: *gurga djay- arise*; *jay djay hunt*.
4. *-ga-*, *bina ga- hear*; *miRa ga- look at*.
5. *ma- do, say*: *wiḍiri ma- lead*; *baṇḍi ma- smell*.
6. *nja- see*, but the meaning implies a homonymous form of which no interpretation is to hand: *guṇḍi nja- climb*; *njaruga nja- laugh* (Capell 1962:72).
7. *wandi- be*; *jagar wandi float*.

The root given as *jinba- say* has been omitted here; it would break into *jin ba-* with catalyst. The form in McKelson is regularly *indanba-* and it forms many compounds, such as *garg indanbana I clear my throat*, *dinjirb indanbana I sneeze*. These in Capell's analysis would be *gard jindan ba-na*, *dinjirb jindan ba-na*. Dialect difference appears to lie at the base of this discrepancy, rather than difference of analysis.

Mangala has had effect in the Garadjari area border on the S.E. and something must be said about this language, which lies between Garadjari and Walmadjari (or Wolmeri as it was earlier called). Some material was collected by Capell but remains unpublished; a few notes

were included in Nekes and Worms (1938), but the language still awaits study in any detail. The language is subject to AT processes: *guli-ṇa-ṇgu djari angry-I-you become, I'm angry with you*; also catalysts are present, as in *Rai ṇaṇa djari I'm afraid*; *jin ba-nja he speared*.

There are both simple and compound verbs; in each case person markers are the same, as also in the neighbouring languages, e.g. simple: *gaḍidju-ṇgu-ṇu I shall pinch*; *jinba-ṇgu-n you will spear him*; *wiridjangu-ṇa I shall throw it away*. Some of the verbs are used both as simple verbs (*jinba* is one of them) and as compounds (*djudu jinba-ṇgu-lu he will sing*; *djari-nja I become*; *bulga djari-nja I grow big, mature*).

The auxiliary verbs evidenced in the material collected include:

1. *djari- become* (as illustrated above); *ray ṇana djari-nja I turn about*.
2. *bu- strike, hit*; *djudjud bu-ṇaṇa I spread it out*.
3. *ga- get, take*; *garowanj gaṇana I gather, collect*.
4. *ma(n)- take*; *gaḍi man-ṇa-ṇa I hold*; *gidar manṇana I lead*; *gawu man-gu-ṇa bani-wura I will call to him*.¹

A few others are less certain until further analysis is done:

5. *yu- give*; *bo: yu-wa blow it!*; *muj jin-ṇa-ṇa I move it*; *ṇuj ji-ṇgu-ṇu I shall return*.²
6. *ṇa-*, meaning undetermined; *wandjan ṇaṇana I leave (trs.)*; *ṇaji-ṇgu-na buḍana I will meet (someone)*.
7. *wandu- be*; *djidanj wandu-lu he is seated*; *lambu wandu-lu he is asleep*.

There are also some doubly compounded verbs: *wona-ṇa jan-ṇa I am walking*; *wona-ṇa janna jab I pass him by*. Here also there seems to be an AT effect that is unusual in a compound verb.

One example in the material is intriguing, as it seems to be a Walmadjari formation - which is likely seeing the conditions under which the material was gathered. In the sentence

¹It would seem that the root *ma- do, say, act on*, needs to be distinguished from *man- take*, and there may be confusion in the analysis elsewhere; but in Mangala the distinction seems to be quite clear.

²The exchange between *-ṇa* and *-ṇu* as 1st person ending seems to be an optional vowel harmony in Mangala.

badja-ni ba-dja gambuRa-lu
bite-PAST *it-me* *a flea*-ERG

a flea bit me; the *ba* is a Walmadjari 3rd sg. subject marker, and *-dja* or *-dju* is a not uncommon WD 1st sg. object marker.

Walmadjari, spoken about Fitzroy Crossing, has been studied of recent years chiefly by Joyce Hudson of the Summer Institute of Linguistics, who read a paper on the verbal auxiliaries at the May meeting of the Australian Institute of Aboriginal Studies in Canberra in 1974. Some notes from her as yet unpublished paper make the structure of the language plain. There are some differences in the principles involved. The author states (1976:653) that 'one of the functions of the verbal auxiliary in Walmadjari is to indicate the mood of the sentence... Mood is shown in the verbal auxiliary but morphemes in the verb also play a part... Stems may be simple or compound and are divided into five conjugation classes. There are many compound verb stems and in present data less than 10% are simple stems (monomorphic).' Again, some auxiliaries can also serve as simple stems, such as *bu-ŋgu maŋa I shall hit it*.

The elements listed by Hudson for Walmadjari are nine in number, mostly those found elsewhere, a few rather unusual. They are:

(1) *badjar- bite, chopping*, which seems to link somehow with the Australian root *bad(j)a bite*; (2) *bu- strike, hit*; (3) *djar- become*; (4) *gar-*, undefined; (5) *gudji cause*; (6) *jan- motion*; (7) *man- do* distinguishable from (8) *manj- say*; (9) *wandi- be*. Only the less usual will be illustrated here.

Number 1, *badjar- biting, chopping*, is a simple verb, but compounds as in *djuŋ-badjar- to chop: djuŋbadjar-gu maŋa mana I will chop the tree*; *gar-* does not seem to occur alone, and Hudson says of it 'meaning undefined'; *Rugu-gar-gu maŋa giŋiŋiri I will block the hole*; the rest are fairly parallel to those of other languages.

The person marker *maŋa* is of interest - and difficulty. The suffix *-ŋa* is the 1st sg. sign; the root is then *ma-*. This would look like the auxiliary *ma do, cause*, but Hudson says that the root is *ba-* of which the initial becomes *m-* when the marker following begins with a nasal. The paradigm in the singular would then be: *ma-ŋa, ma-n baØ*. Her examples seem to bear this out. The root is then *ba-*, which is an early Australian pronoun for 3rd sg. *he, she, it*. At the same time there is the catalyst *ba* already noticed in 2.2.2. Can it be that this catalyst is *ba-*, a pronoun, later degraded? Again, there is a Walmadjari catalyst *ŋa-* which occurs 'in interrogative and implied admonitive mood' (Hudson 1976:9). In cases where *ba-* would occur alone

it is usually in conversation omitted altogether, but this cannot be done when *na-* would be used: *he...him...* becomes *naða*; contrast *nanbayi-lu bari-Ø binja the man hit the boy* and *nanbayi naða giraṇana nura-na is the man sitting in the camp?* To the present writer it seems better to suggest that *ma-* is primary and that *ma-na* is therefore basic, *ba-* being a substitute 3rd person pronoun within a suppletive system. This, of course, cannot be proved but, as requiring less morphological adaptation or morphological change, is simpler.

2.2.3.2. North-east Arnhem Land

In deciding whether auxiliaries are free or bound it is desirable to use the stress pattern of a language as a criterion. Platt (1974) has so used the initial stress of Bidjandjadjara: 'It seems appropriate to consider such compound verbs as single lexical items, unless the stress occurs on two or more lexical items as it does with some compound verbal groups.' This is what has actually been done in the preceding pages. The WD languages therefore have a majority of compound verbs.

In the so-called Yulngu or Murngin languages of north-east Arnhem Land (NEAL) it is not possible to separate compounding elements out in the way it has been in some of the WD languages. In the course of the preceding study it has been possible to suggest that certain of the languages combine either catalyst systems or free auxiliary systems. Waljbiri and some of its neighbours belong to this set. The same thing will appear below in some of the New South Wales languages, where a verb obviously is compounded, but the second element of the compound cannot be isolated within the language, and frequently the base or stem cannot be used alone. This is the basis on which 2.2.3.2. languages are isolated.

The Yulngu or Murngin languages form one such set. These languages number about forty, and no full study of them has yet appeared. Introductory notes were given by Capell (1940:40ff.), but Schebeck has lengthened the list in papers not fully published since then. These languages contrast with those of the rest of Arnhem Land in that they are suffixing, not prefixing, and have no noun classes. In vocabulary they seem to be offshoots of WD or CA languages, rather than members of the largely unclassified AL languages as a whole. Between these and the Yulngu languages lie Djinang and Djinba, which are catalyst languages of a somewhat peculiar type, not here treated.

In most of the Yulngu languages, it is difficult to regard the compounding elements as auxiliaries in the sense used above, because

they do not occur independently as morphemes. When New South Wales is reached it is simply a matter of base + bound morphemes: the morphemes do not occur apart from the base and it is only by comparison with other languages that the original semantic independence of the morpheme can be recognised - in fact some cannot be recognised at all.

While there is a general pattern in the Yulngu languages, there is much difference in detail between them. Gubabwiyngu is used as the model because there is most material available in that form of the NEAL languages. The others seem to follow precisely similar patterns.

In Gubabwiyngu it is not easy to decide whether a system of compound conjugation is coexistent with one in which bound morphemes occur. It is possible to use certain roots as elements in compounding: CA *bu *hit* is found in *gar bu-ma stab, pierce*, where the initial element is apparently to be linked with *garba wood, tree*. There seems to be no regular system of compounding in the sense with which this paper is concerned, so that it has seemed better to include these languages amongst those having only bound morphemes as the basis of conjugation systems. There are certain cases here where some disagreement is possible: the problem might be solved by comparison with other Yulngu dialects, for which the present materials are inadequate. One of these is -maRa-ma, a transitive suffix. The final -ma appears to be the root *ma, leaving -maRa-, and it is tempting to identify this with CA *maRa(ŋ) *hand*. The Gubabwiyngu verb *take*, however, is *mara-ma*, with a flapped -r-. It may still be the same root, with a locally developed distinction of the rhotic consonant, and the addition of the verb class marker -ma, one of nine such markers. The transitive value of the suffix appears in such contrasts as:

	Intransitive	Transitive
<i>turn over</i>	<i>bil-yu-n</i>	<i>bil-maRa-ma</i>
<i>wake up</i>	<i>binga?yu-n</i>	<i>binga?-maRa-ma</i>

Some longer series can be found, such as:

<i>slow</i>	<i>bulna</i>
<i>slow down</i>	<i>bulna?yu-n</i>
<i>make slow</i>	<i>bulna-gu-ma</i>
<i>slacken</i>	<i>bulna-maRa-ma</i>

In some cases the transitive suffix is added not directly to the stem but to what Miss B. Lowe has called the 'short quaternary form' of the

verb: *ḡiṅga-ma die* > *ḡiṅga-ṅa-maRa-ma kill*. The quaternary forms, amongst other values, have that of indicating a purpose, so that the suffix *-ṅaRa-*, *-ṅa-* indicates purpose and is strengthened by the genitive ending *-wa*, producing a long form *-ṅaRa-wa* and a short form *-ṅa*, to which *-maRa-ma* is superadded, *make to....* There is also another causative, added to the dative ending *-gu* to form *-gu-ma*. This form is usually applied to adjectival stems: *Ragunj dead* > *Ragunj-gu-ma kill*, lit. *die-for-make (cause)*. There are also numbers of morphophonemic changes which act within the groups listed, and the groups themselves are not here listed in full. The total result is a grammatically complicated language, and the chief impression is that of a language conjugating by one system which is not compounding, but based on the use of bound morphemes of various kinds.

If it is possible to regard the *-ga-* as the auxiliary **ga take*, with the *-ma* of the 'primary grade' added, then we are left with a transitiviser *-ḡu-/yu* whose forms are morphophonemically determined: *d* after stop or nasal, *y* after liquid *w* or another *y*, in each case plus the vowel *u*: *-yu-*, *-ḡu-* etc. according to grade. Semantically, however, the problem is not solved, as verbs with one of these forms may be either transitive or intransitive: *-maRa-ma* is always transitive. It may be that *-ma* is simply a marker of type of conjugation, in which situation *-maRa-* must be regarded as the basic transitiviser, and *-ḡ-/y-* as only a verbaliser. This raises a further theoretical question as to why adjectives should have a special verbaliser based on **gu-ma in order to*, as already indicated.

In spite of these uncertainties, the Murngin or Yulngu languages seem as a whole to bridge the gap between languages that definitely use bound auxiliaries (as has already appeared in the WD languages) and those in which the original auxiliaries have lost all independence and been reduced to conjugation mechanisms, as appears in the following section of the paper, 2.2.4., to which a transition may now be made. At the same time, however, we shall meet at least one language in the extreme south of the continent that uses *{-yu-}* as a verbaliser: Murundi, for which see 3.2.1. below.

2.2.4. Bases with Bound Morphemes

The languages to be dealt with here use some of the same auxiliaries as are found in the other groups, but they are no longer recognised auxiliaries occurring in their own rights as lexical elements. It has already appeared in 2.2.3. that the recognition of auxiliaries as

free elements was diminishing as one came eastwards and southwards. In New South Wales and the south-east of Queensland, so far as compounding occurs at all, there is a use rather of 'formatives' than 'auxiliaries'. It is recognised that 'formatives' is an ambiguous and unsatisfactory word: any element that goes to form a word is a 'formative' in a general sense. What is meant here is that an element which can be analysed in another language and assigned a basic meaning as a morpheme, now occurs without such status simply as a means of forming a verb from a noun, or some other similar process. This is particularly the case of *ga* and *ma*, which hitherto have definitely been indicators of causality, and still farther west, directionals as well as means of expressing transitivity. In New South Wales, however, they are generalised and help to form verbs from other parts of speech without any very clear indication of a basic direction of the action, or anything that would give them clear lexical value.

The languages concerned are found along the east coast of New South Wales in the main: from roughly the region of present-day Brisbane southwards, and nearly all on the coastal side of the Dividing Range. The large group of Bandjalang dialects will be treated first, then a gradual move southward will bring in a review of Gumbainggar, Dhanggadi, Gadhang, Awaba, Guringgay, Iyora, Dharawal, Dhurga, and so towards eastern Victoria. In the inland languages there is less certainty about identification of the type. In Gamilaray, for instance, *ga-* *take* is a lexical item in its own right; the past tense is *ga-ne* and the 'today' past is *ka-ne* but the vocabularies do not seem to suggest that it helps to form compound verbs of any kind. Some attention will be given to the interior languages of New South Wales and Queensland at the end of this section, but in any case there is insufficient information in many of the languages that might be concerned.

One of the main points of interest is a possible answer to the question: seeing that these formatives do occur in the east of Australia in this way, but, so to speak, not in their prime form, how far can such generalised uses of originally free 'words' as 'formatives' be diagnostic of the historical position of the languages in which they occur? The elements used seem to be all WD morphemes, and in the WD languages they lead an independent existence which is at least much curtailed in the far east of the continent.

Various uses of *ga-* and *ma-* in the reduced forms of suffixes to a root, not necessarily verbal, are found right from the Brisbane area southwards, until Sydney is reached, when *ma-* changes its character and becomes a conjugational element with the verb stem, marking a

tense. No exhaustive exploration of these changes can be undertaken here, but examples will be given from the various languages in which the particles or suffixes are found. In Durubul (Ridley 1875:77-98) no explicit statements are made regarding *ma-*, but a number of examples are given both in the vocabulary and in translated Biblical texts (which are not well done, but clear enough to show the structures implied in most cases). A common past tense ending in the language seems to be *-ri*, as *yuga:ri made*: it would seem, then, that the translator whose work Ridley reproduced meant by the ending *-murri*, a past tense *-mari* < *-ma*, the *-ur* indicating a short *a* followed by a flapped *r*, as often in the earlier writings in Australian languages. Examples then are given in Ridley's spelling and an attempted phonemicisation, as follows:

2.2.4.1. Durubul (Djandawal, Yagarabal, etc.)

1. *ba-* *become*: this is an extra morpheme not found in all the New South Wales languages but common in Ridley's material for this language:

bayim ba- to be sick; *murumba bayi* he will be(come) good; *mil bulbu alive* > *mil bulbu ba-* become alive, arise from the dead; *nayi name* > *nayi ba-* to name; *num-ba-yi shining*; *guruga ba-* to throng a person; *dul ba-* to sit up, come to a sitting position.

2. *ga-* seems to be a transitiviser, not so definite as *ma-* in its uses, in fact the difference between the two is not always clear:

yu ga- make (if this is a true compound; the material is insufficient in that **yu* does not occur, but mostly *yugari made*; *bul ga-* bring (but *bul-ga-yi* is often *come*); *gun ga-* cry out (fetch a cry?); *gal ga-* cut.

3. *ma-*, transitiviser, also independent verb *ma-ni seized*; cf. also *maRa hand*:

gali ma- punish; *bugan sleep* > *bugan ma-* put to sleep; *bulgan ma-* raise up (cf. *bul* above; the compound *bul ga* with a final *-n* is not clear); *gungi:r ma* kill; *wu:n ma-* lay (in a position); *bun ma-* separate, pluck up (as flower), draw out; *duluṇundu ma-* to close up; *ṇuru ma-* hide oneself (make shade for oneself? < *ṇuru shade*).

This is a language in which *yan go* is conjugated with *ma* so that *yan ma- walk, go*. The same is true of Gabigabi and other neighbouring languages. It will appear that in Iyora (Sydney) *ma-* becomes a simple tense marker, and *ba-* becomes another tense marker). There are unclear cases in the texts, e.g. *yungar murumba yuggali* is translated *they cannot make well*; this should apparently be *yungar marumba yu-ga-li not well make-ga-they*. Another series is : *dayi-na he lay (sick)*; *dayi ma-ri lay (something on the ground)*; *dayi duṅa he lay*, in *gungir dayiduṅa he lay dead*); the root *duṅa* as a single word means *weep*, EA **duṅga*. The above notes, however, make the salient features of this part of Australia clear; some comparisons might also be made with Gabigabi and Waga.

2.2.4.2. Bandjalong Dialects

Of these dialects, bridging the New South Wales-Queensland border, there are nine, listed in another paper in this volume. The chief dialect used here is Gidabal, after Geytenbeek and Geytenbeek (1971), with references to Yugumbir (Cunningham 1969).

According to the former authors some auxiliaries still exist in the various forms, but there is evidence that they are not securely established in the language. Thus, 'most nouns that refer to noises may be verbalised with the verb root *ba- say*; *ṅur ba- growl*; *yare:ṅ ba- scream*; *buru:ṅ ba- snore*, etc.' The authors add: 'a few other combinations have been recorded involving nouns and verbs, e.g. *bu:n gawa-roll up (as blanket)*, lit. *coil-break*; *girur gaware- slip*, lit. *smooth-run*. With adjectival phrases *ma-* is the verbaliser: *bugal ma- to do something well*; *daram ma- to dry something*; *yingam ma- to make angry*' (Geytenbeek and Geytenbeek 1971:40). Further about *ma-* (p. 23) we read: 'It also conveys a causative meaning when verbalising the nominalised forms of the irregular verbs of Groups A and B. A verb root *ma-* following a locational phrase means *put*.' The mention of 'nominalised form' will prove important when Dharawal is discussed, because all roots there involving *ma-* are nominalised (by means of *-l*) and it will appear that this *-l* is a EA nominaliser frequently combined with the purposive **-gu* to form *-l-gu* 'future action'. Dharawal *bul ma-i-a he hit him* (from **bu*, *hit* is exactly of this pattern). In Gidabal, *ga:ṅa* is *bring*, from the **ga* root, but with a compounding element. On the other hand, such verbs as *galga- cut* look like *gal ga-* and do fit the pattern found in Durubul (above), though not recognised as compounds by the Geytenbeeks.

For the Yugumbe: or Yugumbir dialect, Cunningham (1969:88) says: 'Some of the adjectives in the data took various verbalising affixes converting them to verb roots, which could then take normal verbal affixation.... Suffix *ma-* could be assigned the meaning causative, and may be suffixed to nouns also.' Amongst her second order suffixes are *-ba*, *-ga*, *-ma*, *-gira* and *-i*.

2.2.4.3. Gumbainggar

This language impinges on Bandjalong to the south and continues as far south as Nambucca Heads and inland to the Dividing Range. The information is drawn from W.E. Smythe (1948). Unfortunately, Smythe's methods of spelling introduce some complications, especially his use of the diphthongs *-ai-*, *-ei* and his habit of working with an 'infinitive' *-eigu* as a base form of the verb, under the influence of English grammar. The form seems to be *-ay-gu* with phonetic fluctuation to *-ey-gu*, and quite a number of adjustments of his spelling are needed here, so that the relationships may be plainer. A form such as *bindaimeigu throw* is much plainer if taken as *binday may+gu*: from which it would appear that **ma-* in this language becomes *-maʷ*. These forms are therefore used in what follows, but it must be borne in mind that they are interpretations of Smythe's actual spellings.

After dealing with simple forms of the verb, Smythe has a section (pp. 45-6) on 'modified forms', and these seem to be the compounds that Gumbainggar has to offer in comparison with the more northerly - and for that matter, more southerly - languages, taking as his base (*-ei*, *-i:*, *ai*, *i*)*gu* (*i*, *e*, in the present spelling *-eʷ*, *-iʷ*, *-aʷ*, *-i + gu*), he gives:

-(eʷ, -iʷ)gureʷgu causative or permissive

and with 'a few verbs' variants replacing *-gureʷ* by *-mbeʷ-* or *-ndeʷ-*, *-(i):baiji:gu desire to*, *-(e)reʷ-* 'reciprocal'; *-(i)leʷ-* 'action by carrying'; and *-(a, a:)reʷ-* 'action in a direction away from some point' (Smythe 1948:45-6). On page 45 also he says: 'In this way the verb behaves very much as though it were composed of two parts - an invariable, or more or less invariable stem, and a series of attached terminal elements which undergo the various modifications...' This, of course, is what he should have done, and it would then seem that the elements concerned are: *aʷ- be become*; *-gura-* *cause or permission* (rather like Yugumbir-*gira*), causatives also *mba-*, *nda-*, *bayi want to*, *laʷ-* *carrying*; *raʷ-* 'action away from speaker', which would then be treated in writing as separate words. Actually there are other forms

not listed in the grammar but found in the vocabulary, e.g. the series:

ju:ŋgu *bad* > ju:ŋgu mbaʸ- *make bad*
> ju:ŋgu waʸ- *become bad*

The last may well be equivalent to Durubul ba- mentioned above. He does exemplify modern verbs adopted from English (p. 57), such as lo:nimbeigu *to learn*; njoinjimbeigu *to know*; gi:bimbeigu *to keep*; bailimbeigu *to boil*. There is also here wara:li *sorry* > wara:li waY- *become sorry*; and daruwi *good* > daruwi aY- *become good* seems to be a variant of this same marker. The ma- form appears in jul maY- *tell a lie*, with what seems to be a phonetic variant in jurun daY- *lengthen*. This language also has a long series of prefixes which indicate direction of action, but these are outside the present essay. The English loans referred to above include lo:ni mbaY- *learn*; njoinji mbaY- *know*; gi:bi mbaY- *keep* and baili mbaY- *boil*.

Although the formations are far from clear and really need re-examination (largely thanks to the author's unsatisfactory spellings), it is quite clear that much the same set of compounding elements is found in Gumbainggar as in the more northerly languages.

2.2.4.4. Dhanqqadi and Gadhang

These two languages cover the area from Nambucca Heads to Newcastle and its neighbourhood. The information here rests on the work of Holmer (1966, 1967). In these two languages the whole structure seems to be simpler than in the northern languages, and contrasts with the far more complicated structures of Awaba and Guringgay to the south of Newcastle.

These languages have the ga- and ma- auxiliaries in common, although of course the shapes assumed in the conjugation of them vary. The presence of more than these two auxiliaries seems doubtful and Holmer had difficulty with further analysis. While Holmer's account is not entirely clear, it will supply enough information for the present need. In Holmer (1966:43-4) he writes: 'The verbal derivatives (-ba, -ma or -mba-, -nda, -nja-, -ra-, -baja-, -buja-, -windi- or -windji-) have a more vague function than the above nominal suffixes, but usually they form causative verbs. This, at least, is true of the Dhanggadi -nja- (also -njara-, that is -nja- plus -ra-), as in: mananja- *make go* (from T mana- *go*), T bajanja- *let go out* (from T baja(ja)- *go out*), T balajanja- (bala·nja-) *make jump* (from T balaja- *jump*)... Some of these formatives are originally independent verb stems; especially the suffix -windi- (as in T bukawindi- *kill*, from buka *dead*) is no doubt

the same as the verb T *winda-* (*windja-*), *windjiṭa-* *do, make, go (about)*, etc.; *-ma-* may be connected with the verb stem *ma-* *get, take*, etc. (usually expressing action by *hand*... As for *-baja-*, it is formally identical with the Dhanggadi verb stem *baja(ja)-* *get out*, etc.; cf. T *wutubaja-* *grow up* (from T *wutu-* *big*).¹ He goes on to mention *-buja*, as in *maRuṅbuja* *feel good* < *maRuṅ* *good* and *mundurbuja* *to smell* < *mundur* *a smell*. He also mentions, what has appeared in other languages, that the formatives may be combined, and instances for Dhanggadi *-nja-ra* and *ba-ra* *to extinguish a fire* is either *badi-ba*, *badi-ba-ja* or *badi-ba-ra*. He finds one instance of the *-nda* (listed for Gumbainggar) in *juwanda-* *put, leave*, but is unable to analyse it.

The formative *ga-* is shared by both languages, and may combine with noun stems or follow verb stems. The general meaning, Holmer says, is *be or become*, and this is somewhat different from its uses in other areas - a loss of force, actually. *Gadhang garwaṅga gagii* *it is becoming fine*; *baga ga-nji* *will become mad*. With nouns he gives *Dhanggadi dimbunj g-in* *became a ghost*; *ṅunmar g-in* *it became night*. *Gadhang dalga ga-njila* *it became hot*; *banma gaga* *keep quiet*.

2.2.4.5. Awaba and Guringgay

These two languages were probably dialects of each other, Awaba had its centre about Lake Macquarie and probably extended as far as present-day Newcastle. It is the theme of L.E. Threlkeld's writings now best known through Fraser's edition of the major part of them (Threlkeld, ed. Fraser 1892, but see also Gunson 1974). The Guringgay dialect was also investigated by Threlkeld, but all that remains is a lengthy manuscript in the Mitchell Library, Sydney, which has never been published, but has been noticed by Capell (Capell 1972). The exact relationship between this and Awaba has yet to be made out; there is considerable difference in vocabulary, as is usual in Australia even when geographical distance is small. The grammatical structure in each case is practically the same. The real gulf is between this northern language and the Iyora and Dharug of Sydney district, where similar linguistic elements are used in a rather different way. At the present moment, of course, only the verbal structure is under discussion.

Some study in this was made by Capell (1956-62; especially pp. 69-70 of the latter edition), but one correction has to be made to a statement on p. 70 of the earlier work, and this will be included below. The Awaba verb is extraordinarily complicated as compared with that of the languages to the north which have just been discussed, and

Threlkeld's explanations are not always easy to follow: his analysis seems to be too thorough, in fact, and to be reduced to meanings of individual phonemes in a way that even Fraser rejected - and rightly so (Threlkeld, ed. Fraser 1892:94).

None of the analyses so far published of Awaba formatives is really clear - whether Threlkeld's or Müller's (Müller 1876), based on these. Neither, for that matter, was Capell's (1956-62). The root trouble seems to be the involved nature of Threlkeld's explanations, based on a theory of phono-semantics (Threlkeld 1850). Capell stated that there are four indicators which serve to show types of verbal action, viz. *ba*, *ga*, *ma* and *ŋa*. The first three are right and will be explored here; the fourth seems to be ruled out by closer study: it does do so, but only with certain interrogatives. It is itself the stem of *ŋan-who* and is used in only a few situations which Threlkeld illustrates. In other words, *ŋa-* is a pronominal base rather than a verbal marker. This perhaps does not invalidate the connection suggested by Capell between this *ŋa* and the homonymic catalyst of the WD languages.

The remaining three hold good, however, and they are used very much as in the other New South Wales languages dealt with already. It seems safe to retain the analyses given by Capell in the earlier work:

<i>ba</i>	action as such
<i>ga</i>	being as such
<i>ma</i>	transitivity

the last including causativity, i.e. transitivity of an intransitive base. These formatives occur in sundry forms, and *ma* is the formative mostly found in the formation of transitives. Thus, starting from the base *bidal glad*, it is possible to form:

bidal ga- be glad: bidal ba-ŋ ga-dan I am glad

bidal ma- make glad: bidal ma-n bon ba-ŋ I make him glad

The *ba-* formative is the basis of personal action, and the person markers in the singular number are added to it, as in *ba-ŋ I (do)*.¹

The system, however, is not nearly so simple as these examples suggest. Some verbs use almost entirely a given formative as, so to speak, part of themselves: *be:l ma- to mock* is not found without the *ma-*. It would moreover seem that in this language the basic forms

¹The limitation of these markers to a singular pronoun is one of the facts that suggests that Australian pronouns provided originally only for singular pronouns - dual, trial and plural are all later, composite formations. This is treated in the longer paper already referred to.

carry a final -n in many instances where this is not part of the original root: *bu *hit* becomes in the present tense bu-n-dan; ma- becomes ma-n in, e.g. ga-ma-n-bin bon ba-ŋ *I allow (ma-n) him to be (ga-)*.

Moreover, the nominalising or gerundial -l (which is really *l in EA) plays an important part in Gadhang, Awaba and Dharawal, as well as in other parts of Australia. This, again, is not a subject for discussion here. It sometimes appears with ma-, e.g. ŋagoya *deception* > ŋagoy ma-li-gu *in order to deceive*, which the writer is inclined to analyse as ŋagoy + ma(l) + gu *deception making-for*.

At the same time, not all Awaba verbs are compounded; there are also simple verbs: wiya *say* > wiya-n ba-ŋ *say-PRES ba-I*, where ba- simply serves to show personal action of the type indicated by the root wiya *saying*. The root *bu gives bu-n-da-n bon ba-ŋ *strike-PRES him actor-I*. The auxiliaries can be used also by themselves, often in composition with each other: ga-dan ba-ŋ *I am*, lit. *be-PRES actor-I*.

There are also other 'side' developments of some auxiliaries in Awaba, especially in the uses of ma-. This becomes a 'permissive' in many instances, e.g.

bu- ma-n- bila bi dia bon
hit-allow IMPERT. you me him

allow me to hit him!

The intransitive marker ga- *be* can also be used in compounds, e.g. bolo:ŋ ga- *set of the sun*: bunul bolo:ŋ ga-dan *the sun is setting*. This also appears to be part of the noun formant seen in wiya *speak* > wiya-li-gani *word, that which is spoken*.

The Guringgay forms have not yet been analysed. The sole source of this dialect of Awaba is a manuscript by Threlkeld held in the Mitchell Library and not yet published (see Threlkeld, ed. Fraser 1892). Most of the grammatical forms are identical with those of Awaba, except that ba-nuŋ *I do it to you* always appears as ba-nu - and it does not look like a mistake on the part of the recorder. As in Awaba, the structure of the VP is

VP = V + tense etc. + pronoun(s), e.g. ŋuruŋ-ala bi?
here-did you? As in Awaba ba + yi > bi.¹

¹As the pronoun *you* in Awaba is ŋin-du-wa, and the possessive ŋi-ro-wumba, it would not be logical to posit ba + yi, as here is done, but for the fact that the same recorder (Threlkeld) in his Guringgay manuscript writes *your* as yiroumba, i.e. yi-ro-wumba < ylro+wuŋ+ba. So it seems that the northern Awaba may have changed an initial ŋ into y in this instance.

The first person form is *guruŋ-ala ba-ŋ* as in Awaba. Note that as in the Catalyst languages, tense is marked in the verb, not in the person signs in both Awaba and Guringgay. There is a difference also in the desiderative form: *wiya-d-ul ba-nu* *I want to talk to you* (Guringgay) as against Awaba *wiya-n-uwil ba-nuwuŋ*.

2.2.4.6. The Sydney Area

The area covered by the Awaba dialect group finishes at the northern shore of Sydney Harbour. The language of the Sydney area has no known native name, but has been called Iyora (Iora) after the local word for *people*, and this is serviceable as a designation. To the immediate west of this, and reaching to the Blue Mountains - definite boundaries again are unknown - was the language recorded by R.H. Mathews (Mathews 1901) as 'Dharruk' (Dharug in the present spelling). This apparently reached to the southern bank of the Hawkesbury River; on the other side, stretching north-westwards, came the related Darginjung language. These seem all to have formed one subgroup by themselves, and are quite distinct from the Awaba group to the north and Dharawal south of Botany Bay. Gandangara, according to Mathews, was hardly more than dialectally different from Dharug.

Information on all these languages is insufficient for any real analysis of them, and the grammar reputedly written by Lieut. W. Dawes of the Sydney speech has come to light only since about 1970, and no analysis of it has been published yet.¹ Even Dawes did not give a name for the language, so that Iyora is retained here.

In these languages there are traces of the auxiliaries found in Awaba and northwards, but their uses are quite different. They now function not as auxiliaries at all, but simply as tense markers, and Capell finds that it is easiest and clearest to treat the Iyora verb as a simple root, conjugated by a separate particle variable for tense, as in English *I do come, I did come - I shall come* then using a different particle. In Iyora, three separate particles are used for the three simple tenses: one of these is *dja-* (which has not appeared in the other languages), and the other two *ba* and *ma*. The two latter are future markers, *dja-* marks a past, while the present (probably an aorist) is marked by change of person endings.

Dawes' manuscript is not perfectly clear as to distinction between *ba* and *ma*, so that it seems best at this stage of the study to give simply a few examples of verbs as set out by him. It is worth noting

¹The present writer has the matter in hand.

that he is the only writer to supply non-singular verbs, and his account of dual and apparently trial number, is not entirely clear.

However, with Dawes' material, our knowledge of Iyora is now greater than our knowledge of Dharug, especially in regard to the verbal system, for of that Mathews only says that it is similar to Dharawal (which is not true) and that lack of space prevents him from giving examples. His manuscript notes in an exercise book give a better reason than that for omitting it. His word list in Dharug is much better than his grammar. In Dharug, and apparently in Iyora as well, the formatives discussed for the more northerly languages do appear and do function, but as consistently as in the north. It may be that the formatives used for tense formations in Iyora and that auxiliaries are accidentally homonyms, but that is inherently unlikely. Before the matter is examined it is best to give some conjugation forms from Iyora according to Dawes' manuscript. It should be remarked first that he does not allow for the distinction of inclusive-exclusive and gives simply '1st person plural', the ending for which is -*ṇun*, but occasional examples of a final -*na* which looks to be exclusive are found by another writer whose work Dawes included with his own - the two handwritings are quite different. Thus, for Dawes' *na: djaṇun we saw*, the second writer has *na: djanna*: one must suppose therefore that the language - which is an ergative language with AT processes - does make provision for both forms: only the one will be given here because it is Dawes' own writing that is being used.

In Dawes' exposition, the present tense seems to be really an aorist, and is rarely given. For the verb *see* he has *ṇaya na*: only.¹ The other two tenses given by Dawes are:

Past	Future
<i>na: djaṅw</i>	<i>na: baṅw</i>
<i>na: djami</i>	<i>na: bami</i>
<i>na: djaṇa</i>	<i>na: baban</i> or <i>na: ba</i>
<i>na: djaṇun</i>	<i>na: baṇun</i>
<i>(na: djanna)</i>	
<i>na: djanye</i>	<i>na: banye</i>
<i>na: djawi</i>	<i>na: bawi</i>

In these examples, it is easy to see that *ba* has been reduced to a formative, as stated above; after a nasal ending *ma-* is apparently a

¹Some other writers use *ṇa*: instead of *na:-* for *see*, and it is of course impossible now to decide; either could be right. The velar nasal form occurs in the second writer in Dawes' manuscript.

morphophonemic change for it: *yan ma I shall go*, etc.

However, the form *ba* is also used as a copula in some sentences given by the second writer in the manuscript: *mi bɔ djara? What is its name?*, answer: *Djegomarani djara ban Its name is Djegomorani*. The ending *-djana* often given with verbs in 3rd sg. past, looks like an error: *bay djana he beat* should undoubtedly be *he beat me*.

For Dharug the documentation is unsatisfactory. In some of Mathews' examples the verb is not marked for person at all, but does carry the *-ma* suffix, as in

<i>naja badi ma</i>	<i>I eat</i>
<i>njindi badi ma</i>	<i>you eat</i>
<i>nanu badi ma</i>	<i>he eats</i>
<i>nali badi ma</i>	<i>you and I eat</i>

In others, there is change of final vowel for the persons at least of the singular:

<i>naja naliwa-du</i>	<i>I am sitting</i>
<i>njindi nalawa-di</i>	<i>you are sitting</i>
<i>nanu naliwa-d</i>	<i>he is sitting</i> ¹

In the future tense, *-ba* becomes the suffix in the following examples: *maraga nalaway-bi nali perhaps we two eat*, i.e. *let us two eat*.

This is also rendered *nali-dja nalaway bi*, the pronoun being in the ergative case for no obvious reason. The 3rd person singular remains constant, as in *nalawad nunbi she, its*. On the amount of information in Mathews' notebooks (material which he never published), it seems impossible to go further.

To pass now to the occurrence of compound verbs in both Dharug and Iyora, many examples occur in both the languages and the two do not always agree in the formation. There are instances in which the Dharug vocabulary of Mathews (1901:157-60) shows a verb ending in *ma* where the Iyora lists give it without *ma* and Dawes' conjugations show *ba* (or morphophonemically *ma*) or *dja* as tense markers. Thus: Iyora *wida*, Dharug *wadama drink*; Iyora *wad ma swim*, Dharug *wari-na*, which seems to have a different ending, reminiscent of Awaba *-na*; Iyora *bada*, Dharug *bada ma-eat*. The *-ga* ending seems rarer, and in the present state of knowledge it cannot be defined as holding the same position as in Awaba, the words ending in *-ga*, in the vocabulary do, however, seem to be all intransitive, as Iyora *yil-ga leap*, Dharug *gari-ga*; but for *laugh* the

¹As there is evidence of Aux. process in Iyora, there may have been more than one way to say these things in Dharug.

languages disagree slightly: Iyora *djanl-bl*, Dharug *djan-di-ga*; Dharug *stand* (Iyora not given); *dunga weep* in both languages, is mono-morphemic, but there is *woin-ga whistle* (Dharug) *wogawina* (Iyora). Tense formation here seems to be involved in Dharug *wangi-d*, (Dharug) *pretend* as 3rd sg. of the *-ga* verb, cf. *ma:ni-d takes*.

The few examples in Ridley (1875:101) of sentences in the Gwiyaagal (George's River) dialect of Iyora (see Capell 1972:25-7) do show a similar structure but they are too sparse for it to be clear. They include: *bun-ma kill*, *man-ma take*! This dialect however seems to have a different method of person marking if the analysis of *bindwagun I'll give you* as *bln-dwa-gun give-I-you* is right and *wuni-djeru-n-bi want-you-PRES*, *you want* bears it out.

2.2.4.7. South Coast of New South Wales

Most of these languages are no longer in use and it is difficult to distinguish boundaries. Examples will be taken here only from Dharawal and Dhurga, which are fairly closely related. They have been studied by Diana Eades (1976). These languages are rather more difficult to analyse than those north of Botany Bay, largely because the material is inadequate and inconsistent. This fact is well brought out by Eades. She, however, has denied entirely that these languages use auxiliaries at all. It is true that so far as the material goes they do not use them as free formatives, such that different auxiliaries can be used with one root, and she denies the present writer's claims that they can be found at all in the languages. The author, nevertheless still feels that this is wrong, and based perhaps in too great a caution in analysing what must be admitted to be faulty material. In both the languages she takes the verbal stem as ending in a consonant and the person markers as beginning with a vowel (Eades 1976:54ff.). Hence Dharawal *bulm-aya he struck* as against Capell's *bu-l ma-y-a*. She states that the appended *-l* on the root **bu strike* is unexplained. She speaks of 'the unexplained link *-l*'. However, the link can be explained; it is the gerund-forming *-l* that can be assigned to EA as **-l*. It is frequent especially in WD languages in a future formed as *-l-gu*. She is equally sceptical of R.H. Mathews' *-gay*, as a formant for intransitive verbs derived from adjectives, which the present writer takes as the auxiliary *ga* already found in the more northerly languages, and as EA **ga* of *carrying*. There is a difficulty in explaining the final consonant, but the usage is so similar to that of other languages that the two can almost certainly be identified. Thus *nagun good*, *nagun-gay-nay I am good*, past tense *nagun-ga-ya-nay*, future

nagun-gay-naya-nay. It should also be noted that the negative in Dhurga comes between the auxiliary stem and the tense or person signs: Dhurga dja ma-namba-ga *I do not speak*.

To take ma- *do, make, cause* first: it seems arbitrary to deny the form as an auxiliary once the nature of -l is realised. It is true that in Wiradjuri and other languages across the Dividing Range -l is not involved: Wiradjuri bu ma-ra *I hit (now)* as against Dharawal bu-l ma-y-nay. This may be compared with mi ma-ra *detains*, and Awaba mi ma-li *remain cause-to, detain*. Wiradjuri does use ma as a normal auxiliary with transitive verbs, without -l, but nearly all the Wiradjuri tenses except the present include an -l with the auxiliary, not with the root: ma-l-narin (this morning past), ma-l-nurani (near past), ma-l-guwan (completive morning tense), while with verbs of the yan- *go* type this does not occur, while with those of the bada *bite* type (simple stems) the gerundial is added directly to the root: bada-l-giri *ate*.

There are other Dharawal verbs in which Eades makes the root or stem end in -Cm in what seems to be an unjustified way, e.g. danm- *eat* rather than accept dan ma- as a compound verb. Again, some verbs end in -Cg where Capell would interpret -C + ga, as in nan ga- *sleep*, yila ga- *rejoice* (Eades 1976:54). Most of these are intransitive verbs, as they should be according to the other languages, except babu-g *bite* (which may be either transitive or intransitive in English).

Other examples occur which could be reinterpreted, such as mimb- *kiss*, with what would be the ba auxiliary treated in Awaba *supra*: in that language actually the verb to *kiss* or *salute* takes ga- according to Threlkeld: bunbun ga-. The Dharawal example pattern is mim ba-. There is also an apparent form *da which has no relations in other languages; taking Eades' forms, nand- *see*, yand- *go*, bind-/bindg- *give*, nandi- *hear*. These are quite normal Australian forms without the final -d, and in some languages without the -n either. With the last mentioned, N.E. Arnhem Land na-ma seems a reasonable cognate: -ma is here the 'infinitive' ending, not the auxiliary. The root for *give* in Australia varies between nu-, wu- and yu-; bind- could possibly belong here but is outside the present research. Presuming -n to be a final of root at some stage at least of Proto-Australian language, it still remains to identify the -d, this could represent -l/-r for -la/-ra after a nasal, but there is no means of identification at the moment and the form is best left marked as an auxiliary but uninterpreted.

In Dhurgathere are also numerous examples which come to light in a critical examination of R.H. Mathews' vocabulary. There are simple verb forms to which person and tense endings are added directly, as *na:ra-ga I bind*; *nambadja-ga I catch*; *ya:wa-ga I talk*; *waḍaluwal-ga I search for* - and *nja-ga I see*, which lacks the final consonant of the corresponding Dharawal verb listed above.

There are examples where a *ma* auxiliary can be safely identified: *dja ma-ga I talk*; *ṇu ma-la-ga give did-PAST-I* - quite different from Dharawal - *gana ma-ga I eat*; *guwinj ma-r twist it*; *bulu ma-ga I wash*; *djinja ma-ga I build it*; and quite a number of other examples. A smaller number evidence *ba*, as in *djindju ba-ga I spit*; *djarum ba-r be quiet!* (interpreting Mathews' spelling *djarumbur*). There are also a few of the doubtful *d-* forms as in *ṇunda-ga I drink*, and *ṇara-ga I hear* seems to be a simple verb here. Although Eades does not accept such analyses - and indeed holds that the available materials are inadequate, there is nothing inherently unlikely in what is said here, and both form and sense support the suggestions made here. It may be added in passing to the next section, that Wiradjuri *binan ga-ra hear* seems to be quite the right interpretation of *binanggara*, in view of the CA **binan ear* compounded in Ngarinman *binan + auxiliary to hear*, especially as in that language the noun *ear* has been replaced by *laṇa*.

2.2.4.8. Languages Inland from the Dividing Range

A note needs to be added concerning these, because mention has been made of Wiradjuri, where certainly *ma* and *ga* are present as bound auxiliaries - and the point is exactly that in all this area the auxiliaries are not only morphologically bound forms (even if it is convenient to write them separately) but bound to certain verbs also.

There is no satisfactory grammar of Wiradjuri, but the notes by Günther in Threlkeld, ed. Fraser 1892:Appendix, 56-120, enable certain things to be said on the formatives in this language. *Ba*, *ga*, *ma* are among others.

1. *ba be*, also in form *bala* is used with pronoun suffixes:
bala-du I am.
2. *ga be*, used only with present tenses, but may also be interrogative, example: *wadaṇ-ga- to be angry*.
3. *ma-* is causative: *giway sharp > giway-ma sharpen*. It is also used with English loanwords: *ring ma- to ring a bell*.

There are also certain others which are not fully explained, e.g. *gana burn (intr.) > gana bi- set on fire*; *balu die + bu strike >*

balubu-l *kill*; baŋa *break* (intr.) > baŋa-naŋl- *break by falling*. In point of fact Wiradjuri word formation (not only verbs) in general is rather complicated.

For the Ngunawal language (about Goulburn, New South Wales) most of the information rests on R.H. Mathews (1904:297ff.) and his notebooks (unpublished). His model verb *beat* is in present tense ŋubu-ma-ŋga - in his spelling ngubumangga, in which ma- is clearly involved as a formative. This, however, becomes -ri- in past tense and -ni- in future, recalling the abovementioned Wiradjuri markers which are limited to a single tense. However, he notes that 'a predicative adjective will become an intransitive verb' and this then involves ma, ri and ni - showing that the basic meanings have been lost: munun ma-ŋga *I am large*. A substantive verb 'to be' does not occur in this language: yedaŋ madi ŋunu *good very this, this is very good*.

There is thus at least a suggestion that Ngunawal was not entirely without a system of formatives similar to those of Wiradjuri.

To the north of the Wiradjuri there are a number of languages, of which Gamilroy (Kamil(a)roy) is the best recorded (Ridley 1875:3-43). The same auxiliaries are found in these languages also, but again reduced to the status of formatives and in some cases changed considerably in form. Communications from Peter Austin (Canberra, Australian National University) have helped considerably in clearing up the situation in Gamilroy and the neighbouring languages and have been embodied in the present note. Austin in a private letter states that he cannot identify the ga auxiliary in this language, but it seems to the present writer that it is to be recognised in the forms of gi-, given by Ridley (1875:13) as *be, become*. In regard to the other auxiliaries, it seems best to embody the information supplied by Austin, who writes: 'The morpheme -ma-l turns up in Gamilaraay [Austin's spelling], Yuwaaliyaay and Yuwaa:araay as an affix on y and ŋ conjugation intransitive verbs, which converts them into l conjugation transitive verbs...all these languages have four verb conjugations, y, l, ŋ and n.'¹ It is also found on English loanwords which are borrowed as verbs, for example gigima-l *kick* which is borrowed from English. Examples of the ma transitiviser include the following taken from the honours thesis of Mrs Corinne Williams (Williams 1976), a grammar of Yuwalaray:

¹The treatment of l as a conjugation marker differs from mine; I discuss it lower down in section 3.0 of this paper.

gi:ru nama dayindu:l nana bunda:ma:y
 (statement) *that man-dim. lsg.O fall-me-nonfuture*
That man made me fall over

and

gi:ru nya giya:na ninuga danduwimali
 (statement) *I be-continuous you sleep-ma-future*
I'm going to make you go to sleep

'The same affix is found in Wiradjuri, Wayilwan and Wangaybuwan to the south and west to which the three northerly languages are closely related...As for the intransitivising marker *ga* I can find no trace of it in any of these languages;¹ the only affixes affecting the change from transitive to intransitive stems are the reflexive and reciprocal which are not at all connected with *ga*.'

Austin also remarks that he would expect to find these formatives also in Queensland and quotes their occurrence in Diyari, as has been already mentioned here. Professor Wurm (Wurm 1972), however, does not recognise them in the New South Wales languages between the Darling River and the South Australian border.

3. THE NATURE AND HISTORY OF THE SYSTEMS

3.1. Introduction

The time has now come to undertake a discussion of the history of the various systems of compound conjugation which have been outlined in the preceding sections. It is obvious that EA verbs did not have this dual system of conjugation. It would in fact seem that the earliest verbal system was hardly a system at all: this seems - from the few remains that can be interpreted - to have remained the form in Tasmania (Capell 1968). Compound conjugation in Australia developed first of all as a syntactic matter, a device probably for vividness and clarity of expression, certainly not for any grammatical reason.

The stages that will be suggested are as follows:

1. Uses of $V + V > V + \text{auxiliary } V > V + \text{morphemic } V$.
2. Gradual subdivision of this scheme in different areas in different ways, with involvement of *N* as well as *V*.

It even seems possible that the more elaborate scheme belongs to the relatively modern CA period, which must be dated as later than 10,000 B.P. The frequent use of the gerundial marker *-l* is the ground for

¹See previous footnote.

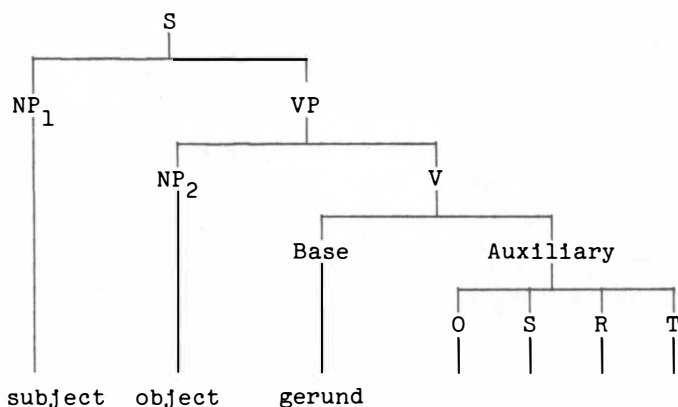
making this statement, for -l certainly appears to belong to the CA stratum, and is most marked in regions where such influence can be suggested on other grounds also. This is, in fact, the main reason for treating the Dharawal verb, e.g. bu-l-ma-y-a *he hit him* as bu-l-maya, and this seems to have been a borrowing from the Wiradjuri subgroup where the system was developed more highly. In fact, the tendency for the construction to occur with the CA *bu hit root makes it tempting to suggest that something like a 'sprachbund' was operating in the south-east of New South Wales, and perhaps elsewhere.

By way of preliminary, attention may be suggested to rather similar phenomena, of course with different morphemes, found at least in parts of the Indo-European languages. In modern English it is possible to say not only *I came* but *I did come*. Such a construction is at first emphatic, then becomes functional on its own merits which, especially for non-English speakers learning the language, are considerable. There is a tendency to simplification visible in language as a whole: the loss of the Latin future-by-inflection and its replacement by a future-by-auxiliary in the Romance languages, is not isolated, and would probably be found more frequently if the early history of non-literary languages were known.

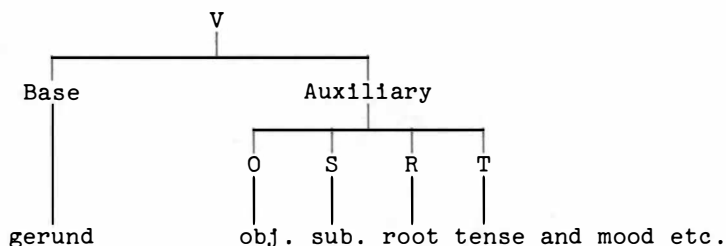
The various systems of auxiliaries that have been noticed lend themselves to classification, as in the following diagram:

Independent	(a) Syntactic combination, derived from an original phrasal verb combination. (b) Syntactic combination derived from an original N + V phrase, N being object, or gerund derived from a verb stem by the addition of -l, the CA gerundial marker.
Catalyst	The catalysts were originally independent verbs, whose independence was lost and their meaning reduced to verb in general terms.
Dependent	Originally fully meaningful, but the meaning has been largely lost and has assumed a semantic change in the resulting compounds.
Bound	A final stage, in which very little of the original is retained, and it is used only to make the compound phrase possible.

In the diagram on page 237 some Ngarinjin sentences were transformationally analysed under the general form of



This same general pattern suggests a combination diagram in which the various types of Base and Auxiliary can be arranged in forms which allow of typological classification of the phenomenon. This diagram follows as Diagram II. Both NP and NP₂ being optional, the VP phrase only is taken as base. The next diagram therefore takes the form:



The classification types rest on the morphemic and semantic contents of 'base'; the order of subject and object markers may also be SO or OS in different types of languages. This last point is diagnostic for the present purposes and needs to be regarded especially in the analysis of the Gunwinjgu type verbs (2.2.1.6.3.). A re-study of this section will show that it is just the order of O and S that has decided this particular type of compounding. As a matter of fact, of course, it is not essentially different from that of Ngarinjin and the Kimberley languages in general, but does lead to different emphases and therefore different orders, as will appear below.

Regarding the WD languages, K. Hale (1972) writes as follows: 'The process of de-stressing and cliticizing pronouns eventually became an obligatory rule and subsequently independent pronouns were recreated from other sources available to the language (sc. Waljbiri), such as oblique forms of pronouns like those found in possessives or in other functions not normally subject to cliticization.' In this essay, Hale regards the Warnman pronouns as re-creations. Wider comparison with languages of Victoria (for instance) leads the author to disagree with Hale in this matter, and to believe that the WD languages (brought to birth from *CA) originally had only suffixes for person - number developed later, as did the distinction between inclusive and exclusive. He has tried to show this in an earlier writing (Capell 1955). In some the inclusive-exclusive distinction has never developed (e.g. Bidjandjadjara) and in others it is limited to certain situations: in Yulbaridja it is found only in suffixed and not in cardinal pronouns. Eastern Australia (representing *EA type languages) quite frequently shows pronouns that are built on a nominal root (Capell 1956-62:21ff.) just as apparently Warnman originally had. Moreover, only singular forms are sometimes present, as seems to be the case in Tasmanian. In the WD languages the suffixes are as a rule only those for 1st and 2nd persons singular; 3rd singular is zero, and other numbers are all composite. This is a matter belonging to the historical section in this volume and cannot be enlarged on here, but its conclusions are accepted for the present discussion also.

3.2. The Phrasal Verb

The simplest form of phrasal verb is the combination of two bases both verbal by nature; slightly less simple is the phrase in which one element is nominal by nature. Both occur in the Cape York area of Australia. Not only is this the simplest type of compounding, but in fact it is not grammatical compounding at all, nor is it limited to Australian languages. Such compounding as *look see* is used in Chinese, and *snap break* is a similar example in Australia (2.1.1.). This process is entirely syntactical, and reappears often as a stage in thought development. For the purposes of this paper it had, of course, to be mentioned and illustrated, but it need not be treated as a stage in the historical part of the compounding process, but only as a phenomenon in its own right. As a matter of fact, such compounding is found outside the Cape York area as well. Idiomatic uses of such double verbs is found for instance in the Bandjalong and other regions.

There are areas of the continent where phrasal verbs are not in use. These are areas in which there is complication in the morphology of the verbal system demanding that each verb be marked for person, tense, etc. Nor is there any historical development from area to area, for phrasal verbs are found both in Cape York in the extreme north-east and Njungar in the extreme south-west.

There is, in fact, a tendency to PV organisation in many languages in Australia in which verb compounding is not developed; examples from Bularnu and other south-west Queensland languages have already appeared in the Introduction to this section. The same process is appearing in English in phrases such as *to baby sit*.

Where phrasal verbs exist, they may be either V + V or N + V; on account of the basic SOV typology of Australian languages, there is a bias against V + N. In a language such as Gog-Nar, such a compound as *yel + yem eye throw = look* is natural; so also is the Njungar *wang + njin talk-sit = sit talking*. A language such as Thayorre, however, allowing a series of verbs together, becomes more complicated. The following examples are culled from Hall (1972); they also show examples of the rarer V + N combination

pa:l pir- nan okun
come snatch-will perhaps
will probably snatch

petn pirk
skin rip
husk, skin

djat ke'e-r
swish spear-did
the spear went swish

pal kal
come carry
bring

Longer combinations of various degrees of intimacy are possible here: *kana ya:-n pal have go-do come = have come here*; *ant te:Rŋ-ŋa ka:r-p try kill-can not-too = won't threaten to kill*. Examples of this type show a maximum of separability within a total limit of order, as appears in:

kana ka:l-k-ku:k ŋi:n-n (ŋ)andjn
have back-speech sit-ting we
We've sat waiting for your answer.

At this stage all that is involved is a sequence of words (plus inflections) each of which can occur separately. In other languages this will harden into a fixed set of elements which can occur only when they do, as in the Gunwinjgu:

gari-	ben-	mane-	djal-	djarg-	gole-	manbo-yi
<i>we</i>	<i>them</i>	IO continuity	group	<i>spear</i>		<i>make</i> IMPF.

we used always to gather together and make spears for them

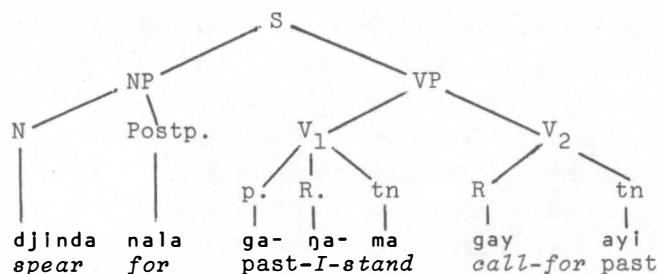
Here no element is free; even *spear*, to appear in the free state, must take the class prefix and become *mangole*. The various types of verbal compounding seen in the preceding pages are therefore to be regarded as the growth of a complex system in different parts of Australia differently, and influenced no doubt by many different facts, in each of them. But it seems impossible to doubt that these various systems originated in a simple Phrasal Verb system to which other elements were added under other conditions.

3.3. Compounding by Auxiliary

The various systems of compounding by auxiliaries which have been illustrated here represent complex developments, not all resting on the same foundation, but all agreeing in at least one point; a certain number of basic verbs were chosen out of the whole vocabulary of the language as 'builders' for verbal expressions. The free choice of combination existing in the PV languages became limited when certain basic ideas were accepted as foundations for compounding. Auxiliary verbs as they appear in the different languages grow fewer and fewer in different regions, until finally it seems to be forgotten that the auxiliaries were ever free forms with full semantic force, and they become simply instruments for expressing verbal categories, even a simple difference between transitive and intransitive - and in so far as roots *ma* and *ga* come to do this in some languages, they themselves had so far lost their meaning that it was apparently forgotten that both of them are originally transitive! An auxiliary is a full verb that has been downgraded in certain circumstances. It would also seem that there are occasional homonyms to be reckoned with: the transitiviser *ma* was originally *do*, and so *cause*, *bring about an action* in most areas, but where it is, as in the Daly River area, the coefficient of 'standing action', as in *ganama gay I (stand and) call*, *I call from a standing position*, this clearly is a different root.

The appearance of *ma* in a language does not allow it to be taken for granted that it is always the same *ma*, although generally it is.

In terms of TG set-out, sentences of the type of the Daly example *djinda nala ga-na-ma gay ayi spear for past-I-stand call-past*, i.e. *I (stood and)¹ called for a spear* (2.2.1.4.) a tree of the following shape seems to be acceptable:



There are stages between the PV verbs and the compounding processes that have been studied in the preceding pages. What is being exhibited first of all is a logical division into types, not a historical account of origins and stages. So far as it is possible, hints concerning this latter will be given in a final section of this paper.

3.3.1. Free Auxiliaries

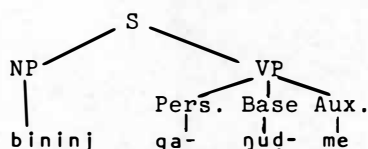
The first stage of development of auxiliaries is probably represented by those languages in which the auxiliary is free, i.e. leads a semantic as well as a grammatical life of its own. In Ngarinjin, for instance, *ne* is *I am* – but it can also help to make a verbal phrase. In some of the languages there is a considerable number of such free verbs used as auxiliaries as well as standing in their own right. They combine with bases that are, so far as distinguishable in grammatical terms, nouns rather than verbs, or sometimes even adverbs. In 2.2.1. comparison was made between Gog-Nar *yel gem eye throw, look at* and Ngarinjin *burgadj anebun question I-throw-him, I ask him*. These two are parallel except for the added grammatical features in the Ngarinjin verb. They are both N + V structures. In Ngarinjin *burgadj* does not seem to be used as a noun as it would be in English *what is your question?*, but that is not important; an Aboriginal speaker would

¹*Stood* has no logical part in the sentence as a kind of action; it is simply that *calling* is done in a standing position, as this language structures the activity.

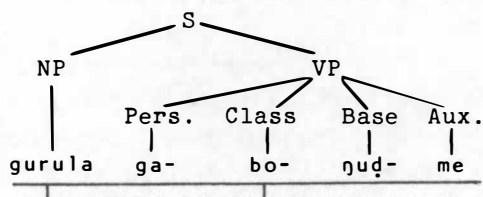
certainly prefer the more concrete expression *what are you asking me?*. The point is that structurally both phrases are the same. In Gog-Nar the combinations of N + V are very numerous - and so in other CY languages as well; in Ngarinjin there are only eleven such combinations, and in other NK languages usually less. The 'phrasal verb' is beginning to be an auxiliary, one of a certain - small - number of helpers which retain their own functions as well as 'helping out'. As other areas of Australia are reached, these 'helpers' are fewer and their work greater, except in so far as more actual verb roots are developed. Free auxiliaries certainly seem to be the earliest stages historically as well as logically, but there is no need to lay that principle down at this stage.

In the process of development it is noticeable that V + V tends to disappear and N + V remain a lot longer on the historical scene. The Ngarinjin tree patterns have already been set out (section 2.) and need not be repeated. The difference between these and the Gunwinjgu type has also been mentioned, and it was there suggested (2.2.1.6.3.) that a theoretical difference exists between them and the NK shapes, due to object incorporation as part of the agglutinative picture in Gunwinjgu and its relatives. Some tree diagrams showing the Gunwinjgu analysis may be of help to reinforce this difference. A series of sentences showing the different types produced by the occurrence of inset nouns in these languages is therefore given here.

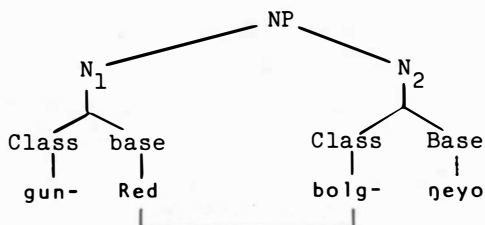
(1) bininj ga-ɲuɖ-me *the man calms down*:



(2) gurula ga-bo-ɲuɖ-me *the sea calms down*:

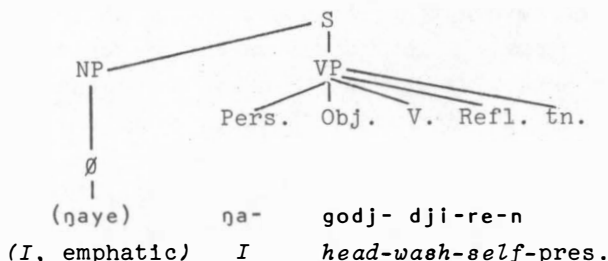


(3) gunRed bolg-neyo *camp its name, name of the camp:*

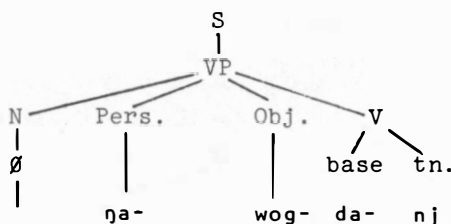


To which is added an example not used above:

ŋa-godj-dji-re-n *I wash my head*



which is exactly parallel to



ŋawogdanj *I spoke, I said a word*

on which the assertion was based that the Gunwinjgu subclass rests on its power to inset noun objects before the verb, retaining in the VP the syntactic structure of S.

Very similar patterns can be worked out for the Dampier Land languages. The historical problem in this case is more difficult, in that Dampier Land shows one of the Regional vocabularies which suggest an origin apart from those of the chief body of Australian languages. That question cannot be gone into in this paper. It is worth recalling that here also not all verbs are compounded; as in most of the languages (except Daly River) there are simple verbs also.

Mention of the fact that all verbs are compounded in Daly River languages brings out the fact that a different principle is at work in these, and this needs to be demonstrated in some detail. The fact itself has been stated by Tryon, but he has not compared Daly River compound verbs with those of the NK and AL languages.

First of all, although the compounding is still normally in the same order - Base + Aux., this does not need to be so, and Aux. + Base is allowable. The difference lies in the fact that Daly River auxiliaries classify actions in a way similar to noun prefixes classifying nouns. It is a classification by kind of action, so that the same base can sometimes take different auxiliaries in a somewhat different sense. This is true also of the NK languages, as has already been shown in the relevant section of this paper, but the true nature of the auxiliaries is not quite so clear in NK as in Daly River. Moreover, the order of elements in the auxiliary itself is different:

NK: O + S + B + T

(where T covers mood and voice as well as tense)

Daly: T + S + B + O

The originally free position (it would seem) of the pronoun object has caused it to be left outside the Daly River compound. In the NK the basic order SOV has led to its being included in the verb phrase, and not only so, but to its having priority over the subject marker. This latter peculiarity might be accounted for by supposing that the system points back to a preceding free subject, so that VP represents $(O + S_2)$, the second S being incorporated in the VP. The earlier sentence type in NK would then have been

$$S + O + VP = S_1 + O + (O + S_2 V).$$

In the Daly River languages the auxiliaries are concerned with manner of action. Tryon's summary (1974:298ff.) speaks of five verb classes in the Mulluk group, but adds 'within the Brinken-Wogadj and Djemerri groups, however, in addition to the five verb classes just listed, there are up to twenty further classes,' and they are all concerned with the manner in which an action is done. There is a world of difference, therefore, between the NK type and the more general Australian type to be reviewed below, and those of the Daly River. The latter seem to have developed quite independently of the rest of Australia - and indeed the cognate count between Daly River and the rest of the continent is also often very small.

3.3.2. The Degradation of Auxiliaries

The subsequent sections of this paper have shown the auxiliaries gradually losing their independence. First they are reduced to indicators of various kinds of action, while still retaining an identity, e.g. as in south-eastern New South Wales, where the negative follows the auxiliary and not the main verb (see the Gandangara and Dhurga examples). Later they become simply grammatical formatives, which are very well treated in writing as part of an entire verbal stem to which tense and other suffixes are added. At this stage there is loss of identity to the extent that it becomes impossible to prophesy which auxiliary will appear in a given case and whether it will retain any clear sign of its original meaning. Last of all, a set auxiliary is used with a given verb, with little regard for meaning.

In all this there is no precise geographical link; Djirbal *-ba* and *-ma* (as will be shown below) no longer function as anything but markers of intransitive and transitive verbs respectively, and both add an *-l* which is in that language a conjugation sign and not a gerund (probably not even historically derived from the gerund *-l-*), and moreover *-ba* is reduced to *-bi-l*, functioning as such a compound.

Parallel to all these developments, there are languages in which the same functions are carried out by totally different sets of markers, and to these attention must now be turned.

3.4. Other Systems of Verb Derivation

It would seem that in the extreme south-west of Australia the various derivational systems here studied, did not hold good. In most cases there is insufficient material for analysis of the verbs in Njungar and the related dialects. The same facts hold good in the extreme south-east - Victoria and even the south of South Australia. This would fit in with the 'areal' linguistics theory. There is no intention of embarking on this type of argument here, but some notes will be given on the south-eastern groups of languages in order to make it clear that the various methods of conjugation and derivation that have been studied above are to be connected with the CA languages, and result from the movements of speakers of such languages from their original homes towards the east and south of the continent.

Notes will be given on the verbal systems of Banggala (Parnkalla), Gaurna (Kaurna), Narrinjeri or Yaralde, and Murundi from the South Australian languages to bear out what has just been said. Study of

Hercus (1969 Part I) will show that Victoria is equally innocent of the systems of auxiliaries and formatives that have been studied.

A beginning is made with Banggala.

The fact that, although the phenomena just considered belong for the most part to the CA stratum, they are based on analogues in EA will become clearer if a look is taken at the latter types of language. Few, if any, Australian languages are entirely free from CA intrusion, though some are much less influenced than others. This is particularly true of the south-eastern languages (and for that matter the grammar of the south-western languages is largely EA), more markedly perhaps than some of the AL languages not dealt with in detail here.

A preliminary glance at the structures of Banggala and Gaurna (Kaurna), Yarlalde and Murundi among the South Australian languages, and those of Victoria still farther east, will be taken first. The citations of words in this section will be largely those of the original grammar writers, except for Yarlalde, where later work (Yallop 1975; Grimwade 1975) allows of greater phonological approximation.

In Banggala - see Schürmann (1844) - quite a number of auxiliary verbs are found, but these are actually of the PV type, seen in the CY languages. Schürmann says, 'When the sense admits it, the following words are frequently used, where we would employ the auxiliary *to be*, viz. *yuwa-ta to stand*; *ikka-ta to sit*; *padna-ta to go*; *kari-ti to continue*; *wawi-ti to lie down*; as: *kutyō yurari yarlanga padna tanna the other men are hunting...*' His sentences are best analysed to show what is really happening: *pallari kangaranga kari tanna the women among the grass tree roots continue*, i.e. *are*; *kutyu yurari yarlanga padna tanna the other men hunting go they*, and so forth. The first of these auxiliaries recalls the Daly River system, but unfortunately it is not illustrated by a sentence - nor, of course, can it be said in the absence of text matter, that these were all the auxiliaries in use. There are interesting uses of *padna-ta go*, as in *ninna yureyappu padnata? are you aware?*, lit. *you ear-attending go?*; *ngai kubmanna padnata I am alone*, lit. *I one go*; *karakurtu karkurar-kuru ngukatao kauungu the boat goes whizzing through the water (very rapidly)*, seemingly

<u>gaRaqudu</u>	<u>gaRguRaRguRu</u>	<u>nuga-da-wu</u>	<u>gawu-ngu</u>
boat	whizzing	go-PRES-3rd sg.	water-in

Other examples culled from the vocabulary include *parungu kari tanna*¹ *yuRari game-for continue men*, i.e. *the men are still hunting*; *kaya ilka padna (tanna) they go spear-having*, i.e. *they have spears*.

The causative, expressed by the *ma* auxiliary in the CA languages, is here expressed by *+ngutu*, e.g. *birkibirki-ngutu to break into many pieces*, from *birkibirki-rri-ti to crumble (intr.)*; *ngalaniti grow large* > *ngalaningutu enlarge*; *marniti good, be good* > *marni-ngutu make good*. And Schürmann adds that *ngutu* can be appended only to intransitive verbs, including such as *yuwa-ta stand* > *yuwa-ngutu raise up*; *worniti fall* > *worningutu drop something*.

This system providing means for deriving one type of verb from another or verbalising another part of speech, obviously works quite differently from those studied above.

In the Gaurna (Kaurna) language of the Adelaide district (Teichelmann and Schürmann 1840) there are differences again, and apparently compounding was not greatly in evidence. For *make wapp-e-ndi* is given, and it is abbreviated slightly to *-app-e-ndi* (*-e-* is a conjugation class marker, and *-ndi* 'infinitive') as a causative suffix, e.g. *wakkina bad*, *wakkinarndiappendi cause or allow a person to become bad* - apparently both halves of such a compound could be conjugated - the lack of text material is here a problem. This suffix seems to have been fully productive; the root would be **(w)app-*. On the other hand, *-r-e-ndi* marks the intransitive or even benefactive; *pingya-r-e-ndi to turn, to lighten, to flash*, with causative *pingya-ri-app-e-ndi turn something round*. There is, however, a suspicion that *ma* has come into the language also as formative, for the authors give *bakka dry bark* > *bakka-ndi dig out roots*, but *bakka-ma-ndi to peel something*. However, *ma-ndi* is glossed as *draw, pull*, and may be compounded with *karra up, high*, as *karramandi to hand, take, pick up*, and this is apparently the root **ma* with a local suffix.

In these final examples it is possible - though the possibility is hardly justified - to see a southern extension of CA influence. Further south, in Yaralde, Murundi and some Victorian languages - there does not seem to be any such influence discernible. According to a personal communication from S.A. Wurm, the CA formation does not occur in New South Wales west of the Darling River. The system of auxiliaries, therefore, must be taken as derived ultimately from the CA stratum. Phrasal verbs occur in Cape York and in Banggala, but these

¹I take it that *tanna* represents the 3rd person plural pronoun so common in Australia, and write it separately, though Schürmann makes it part of the verb.

are not historically diagnostic in any case, as has been already stated. The question of how CA auxiliary formations got into eastern New South Wales has still to be faced.

First, however, the Yaralde and Murundi evidence, negative but no less important, must be assessed.

The Narrinjeri group of dialects of which Yaralde is one (Taplin 1878, 1880; and Yallop 1975) occupied the lower Murray region between that river and the southern ocean, and Murundi (Moorhouse 1846) was spoken on the Murray near the southward bend. These are the only two forms of speech from this region at all well recorded.

In Yaralde according to Taplin there are three auxiliaries: -war (which Yallop takes as -uwal/-uwar) and -min- both causative, along with -en- of being or doing, and -el- *be, do, intend* (Yallop) - the last a most unsatisfactory designation, although certainly it does serve as a copula verb. Among Yallop's examples (orthography here modified):

na:bi(n) el-un na:dji
I be-PRES friend

I am a friend shows *el* taking the tense markers, but just as often - or more often? - these were added to the main verb:

ya:n-un el ab
speak-PRES do I

I am speaking, or

yu:n el idj brag-ani nani
soon do it rise-FUT sun

the sun will soon rise.

Transitivity is marked by -uwal/-uwar, but also derived from other parts of speech are similarly marked: *wireŋi bad* > *wireŋ-uwar-un act bad-PRES*; -min- or -mind- does just the same task: *buldamul-min-un tired-make-PRES*. There is just the possibility that this may represent *ma, especially in view of the occasional final *n* in some languages, but it is not convincing. It does not seem possible to fit these suffixal morphemes into any of the patterns hitherto examined, they represent a system *sui generis*.

Murundi as set out by Moorhouse seems even less clear. The -un present tense marker of Yaralde is shared, but the other tense endings differ between the two languages - and for that matter there is in Murngin in N.E. Arnhem Land a class of verbs ending in -un in the present tense, which need to be examined before this section is closed. The Murundi formatives have to be dug out from the vocabulary, and the

surprising result is that Murundi in its system does seem to show a surprising resemblance to Murngin. Moorhouse's material is not good enough to enable a system to be properly worked out. Examples of verb derivation occur in the vocabulary, but though a number of verb classes can be found, they do not seem to be clearly analysable - nor do those of Murngin, to the degree that any reason for a given verb being in a given class can be suggested. The following are just some of the discernible subgroups in Murundi. Even the basic EA roots of words are largely missing from Murundi.

Moorhouse's spellings are largely retained because it is often uncertain what they stand for. For *hit* the root *bu may be hidden in bund- (present tense bund-un) but this is not certain. It would point to an original EA *bund- which nearly everywhere has lost its final consonant, and in any case this chapter is not concerned with reconstruction of EA or CA vocabulary. A number of consonant additions to the stem are found: not to the intransitive, as in tap- *bury* > tap-t- *be in the grave*; djerub- *chase* > djerub-ul- *run away*; woarn- (= wuwaŋ-?) *come* > wuwaŋ-uw- *carry, cause to come*; kailk- *ask* > kailk-uwa- *ask for, order a thing*; and a common intransitive ending -ang- is added to a number of roots, e.g. wir-ang- *tremble*; bokk-ang *burn, blaze* > bokaikn- *order or arrange the fire*; gidl-ang- *be angry* > gidl-ar- *become angry*; gir-edl-an- *be in love* > gir-b- *make love to a woman*; parldk- *hit* > pardlk-udli-ma- *beat-cause-make* - the sole or nearly sole suggestion of the *ma root.

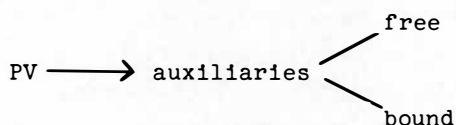
In some cases, as noted, there is a suspicious resemblance to the Murngin or Yulngu languages (chiefly Gubabwiylngu will be cited) of N.E. Arnhem Land, where a present tense marker -un may be preceded by a consonant that does seem to be diagnostic. For the previous reference to these languages see 2.2.3.2. above. In the Murundi examples in Moorhouse, the chief linking consonant seems to be t (= d), which is the consonant in Murngin that serves to verbalise a stem ending in a stop, as y verbalises one that ends in a non-stop. In Murundi, the distinctive function of the added consonant is not clear (at least in the available material): gab-un and gab-d-un both mean *speak, say*, but there is also an example or two in which -an is written by Moorhouse, with a difference in meaning: yurrun *be afraid*, but yurran *frighten*. In Gubabwiylngu also there is an -an conjugation to which attention has been called earlier.

There are unexplained cases such as kudl-un *to warm* > ku-edl-un *to shine* > ku-e-dl-emat-un *be shining*; djab-d-un *accompany each other*

(*go in a group?*) > djab-b-un *accompany*¹; de-rri-n *stand* > de-dd-in *cause to stand, raise*. While it is not the purpose of this section to suggest analyses for these forms, they do emphasise the great difference between the languages of the area and those of the CA groups, and suggest possible links with north Australia - links which are clearly established by comparisons between the Northern Kimberley, Arnhem Land and Western Victoria, as discussed in the general section on the Australian languages.

3.5. Summary and Probable History

The establishment of the series



brings the historical element into focus. It does not follow, however, that the development has been in terms of present day distribution of these features, from one point of the compass to some other. Moreover, the system of catalysts does not seem to fit directly into the series at all. There will have been many local developments, especially if the Sprachbund association earlier suggested is at all real. Classification of nouns in the northern parts of the continent has also caused complication. The Daly River 'coefficient of kind of action' system also does not belong in the series. These languages with such a small percentage of CA are so different in structure from most other Australian languages that they seem to represent a separate movement into the continent, affected by such later movements as EA and CA - probably both.

The possibility of the following stages is therefore suggested - with the proviso that it may not be right, certainly not in all details!

1. Systems of 'phrasal verbs' would be quite early. Whether the still extant systems of the CY area represent the early stage of this is open to doubt until the historical position of these languages can be more definitely established in terms of lexical investigation. There

¹My personal inclination is to spell djab-un for *accompany* so that djab-d-un may be regularly derived from it. Double consonants do not seem to have phonemic value in Moorhouse's spelling. There is also marked vowel harmony in the tense endings in Murundi, which Moorhouse does not mention. But cf. -in and -un endings in his vocabulary.

is certainly much in common between them and the New South Wales coastal languages that lies outside the present paper. While some vocabulary (such as **dunga weep*) is common to these and New South Wales (including Sydney area), some of it (including this same root) is also found in the north-west of Western Australia, as O'Grady's study (1967) shows. These types do represent an early stage of syntactic expression in Australia, but are so widely shared - outside the continent as well as in it - that it can hardly have the historically diagnostic value one might be inclined to assign to it.

2. A small set of auxiliaries - *ma-*, *ga-*, *ba-* and with greater limit *na-*, seems to hang together all over the continent, from WD to New South Wales. The connection between the presence of these as a series is so constant that they do seem to be established as a related set. The first two have definite semantic content that also seems to be constant. Its activity varies; in some areas these roots can still function as independent verbs, in others rather less so. Another stage can possibly be recognised in the contrast between languages in which conjugation is based on an auxiliary *ma* as one or sole auxiliary, and languages in which *ma* is a formative, not in any sense a free form with a definite lexical meaning, but without semantic content other than 'transitivity' of which it serves as a marker. This group seems to comprise the languages between the Dividing Range and the Darling River in New South Wales (where even some intransitive verbs can have *ma*). Other auxiliaries, especially *ga*, may be present here, and it seems likely that this represents the breakdown of a system still holding fairly well together on the coast (Dhurga northward to Bandjalong), and that this is itself the remains of a fuller system from WD and Central Australia. If these hypotheses are reasonable, something more may be built upon them. At the same time, *ma* is still felt to be an auxiliary rather than part of a verb stem in the coastal languages themselves, in that another suffix - such as the negative - is interpolated between the root and the *ma* to which personal endings are added, e.g. Gandangara:

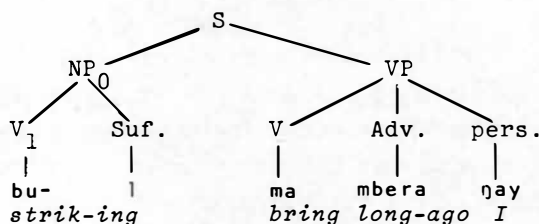
gala muga ma-nja
sit not AUX-I

as against Dharawal

bu-l ma-mbera-ŋay
strik-ing AUX-long-ago-I

which seems to represent an even earlier pattern in which the verbal noun *bu-l strik-ing* occupies the 0 position in SOV sentence type

patterning as



This is an even earlier pattern, for *ηay* is practically the free pronoun *ηayu* *I*. The implications of this occurrence in this area where noun roots + suffix so often = pronoun cannot be brought out here.

From the historical point of view a suggested summary of the foregoing study would be as follows:

1. The *ma-*, *ba-* and *ga* series of auxiliaries is CA. This statement rests on the wide occurrence of these in the acknowledged CA regions of the continent, and their overwhelming influence where these CA languages have spread. In the WD area in particular they are of great importance. The *ba* and *ga* series are chiefly manifested as independent elements in the catalyst area, but occur in a somewhat degraded form in the eastern languages also. Their use as formatives will be the latest development, and in many of the eastern languages their original meanings are not always clear, in that *ma* is liable to occur with intransitive roots, and not only with transitives, as it originally did. In the eastern languages they have come rather as formatives than as free auxiliaries because they were not native to languages which took them over, and so had not discrete conceptual meaning to the speakers, only a general indication of type of action. The *ηa* forms remain somewhat obscure: it would seem that these did not spread very widely. Threlkeld in his 'Key' (Threlkeld 1850) in his continual effort to analyse the Awaba formatives psychologically or conceptually, speaks of *η-* as a personal marker; *ηa-* as 'actuality of personality', 'person as actual', and *ηi-* 'indication of person', a peculiar phrase used when one leaves another to be in place: *ηi-noa-ki* *you remain, I go*. Under the first heading he refers to *ηa-n* *who?*, *ηatoa* (*ηaduwa*) *it is I who...*, and *ηe:l* *place of action* as in *ta-kili-ηel* (*dagiline:l*) *eating place*. This suggested to the writer (Capell 1956/62:70) 'personal action', and the catalyst *ηu* as a local phonetic variation of it. However, if there is any truth in this, *ηa-* became a pronominal root rather than a marker of verbal activity. In fact it is the marker of first person pronouns in the bulk of Australian languages, and the situation is still obscure. The possible history of *ηa-* is best left

unsettled, and the general discussion limited to the other three auxiliaries.

There has been higher development of the auxiliaries in the western desert area, where the original CA group of languages would appear to have taken on its special character. The movement eastward remains to be traced, but this is a matter for the general paper on the languages and not for this special line of study.

2. The PV systems are to be set apart from this development altogether. They would seem to be indigenous to the CY languages and traces of them are still found in areas in which dependence on the CY stratum are located - along the east coast at least as far south as Bandjalong.

3. There are non-CA systems visible also in a number of languages such as those of the far South Australian languages (Yaralde, Murundi, etc.) and other southern areas where CA had less influence.

If it is true that the basic auxiliaries do not occur in New South Wales west of the Darling River, and are absent from the greater part of Queensland, but do occur in eastern New South Wales and southern Queensland, further investigation is required as to how they reached these latter areas. Vocabulary comparisons (which belong to the general paper) indicate that CA influences cross through northern Victoria into coastal New South Wales, and as suggested here, spread by Sprachbund methods to the interior regions of the Wiradjuri-Gamilaray. It is to be presumed that the use of the auxiliaries *ma*, *ga*, and in some cases *ba* reached New South Wales as part of the 'packet'. What is needed is further information on east coastal Queensland, and this is lacking for the regions south of Djirbal.

In Djirbal, Dixon (1972:86) shows a formative *-bil* which forms intransitive verbs from other parts of speech, and *-mal* which forms transitive verbs from roots of two syllables (if there are more than two syllables the suffix is *-mbal*). Amongst his examples are

bayi yaRa bulgan the man is big
bayi yaRa bulganbil the man has become big

In these cases the final *-l* is a conjugation marker, not the gerund marker; the suffixes are *-ma* and *-bi* (*-ba?*). If the last identification is right then two of the auxiliaries are present here, *ma* and *ba*, transitive and intransitive respectively. They would seem to be late formations in that they do not strictly follow the original uses and meanings of the suffixes. In Awaba (New South Wales) for instance, they do have much greater sense of function or original meaning, so

that the southern forms would seem to be earlier and possibly brought in with the CA stratum of language directly.

At the absence of information from Djirbal south to Waga-Gabigabi-Bandjalong is a handicap. There is very little such to hand at present and it will be of interest, if further material can still be gathered, to find out what it has to tell about the movements of the CA auxiliaries.

At present the survey seems to end at this point, with the list of suggestions made at the beginning of this section. The commonly shared auxiliaries are of CA origin, but have been modified in both usage and meaning in different ways in various regions. How this has historically come about is part of the questions that belong to a general history of language in Australia.

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