Motivations for second position: Evidence from North-Central Australia

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Abstract

It has long been observed that many languages from all over the world require that certain grammatical categories (e.g., person, number, tense, modality) occur in the "second position" of a clause. Much of the research into second position has developed formal explanations for this recurring pattern, based on interactions between morphosyntax and phonology. In this article I explore how pragmatics of information packaging interacts with these other features in the development of such morphosyntactic architecture in three North-Central Australian languages: Warlpiri, Wambaya, and Garrwa.

Keywords: *Australian languages, auxiliary, clitic, clitic cluster, cliticisation, focus, Garrwa, grammaticalisation, information packaging, pronoun, second position, tense-aspect-modality, Wambaya, Warlpiri, word order*

1. Introduction

Second position, or "Wackernagel's position", is a crosslinguistically common grammatical slot in the position immediately following an initial word or constituent. Constituents may be phonologically, morphologically, and/or syntactically defined. Forms which occur in second position are typically prosodically dependent on (i.e., encliticised to) the initial word/constituent. These kinds form a subclass of clitics whose attachment can be defined in terms of syntactic position rather than word or phrase class – many belonging to the category of clitics that Zwicky (1977) called "special clitics". But forms in second position can also be free forms like inflected verbs (in V2 languages), particles, and auxiliaries. This article is about what occurs in second position, regardless of whether the forms which occur there are prosodically bound to the preceding initial word or constituent (even though they frequently are). Examples (1),

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from Serbo-Croat, and (2), from Homeric Greek, illustrate the occurrence of forms of the kind discussed here following the first word. In example (3), from the Australian language Yukulta, the clitic cluster occurs after a noun phrase constituent.

(1) *juče* sam=joj=ih *dao*
yesterday am=to.her=it given
'Yesterday I gave it to her.' (Camdzic & Hudson 2006: 1)

(2) *polees*=te=min *ērēsanto* *hippēes* *phoreein*
many=and=it prayed riders carry
'And many riders prayed to carry it.' (Iliad 4.143, cited in Anderson 1993: 70)

(3) *ngumpanta* *ngawu-Ø* *partangu-Ø*=thu=yingka *pa:ja*
your.ABS dog-ABS big-ABS=me=PAST bite.IND
'Your big dog bit me' (Keen 1983: 230; orthography modified towards the system used elsewhere in this article)

The Indo-Europeanist Jacob Wackernagel identified second position as the congregation point for enclitics in Ancient Greek and extended the generalisation to other Indo-European languages (Wackernagel 1892). However it has been shown that languages all over the world exhibit tendencies to place certain grammatical categories in second position. The second position slot identified by Wackernagel thus represents a widespread feature of grammatical architecture.

Forms attracted to second position cover an enormous range of grammatical categories, including argument categories like person and number (Anderson 1993, Cysouw 2003), clausal operators like tense and modality (Aikhenvald 2002), or "auxiliary" elements, which may include aspectual information (e.g., Anderson 1993, Camdzic & Hudson 2006). Inflected verbs are the only lexical category which seems to be associated with this position, perhaps because of the presence of inflectional material in the form. This indicates that second position is largely concerned with the attraction of GRAMMATICAL information to follow whatever occurs initially.

From his earliest work on the subject Anderson (1993: 95–96) noted the association between clitics and verbs in second position:

> the Verb Second regularity is [...] a language-particular choice in the rule that realizes the inflectional features of a clause – a rule that says 'put the clause's (verbal) inflectional material immediately after the first element of the clause'.

In his most recent work on clitics, Anderson (2005) refines this observation into a detailed analysis of second position clitics from a typological perspective. Using an Optimality Theoretic approach, Anderson proposes that the typology of second position clitics can be explained in terms of morphological

processes – the phrase level equivalent of certain rules of affixation at the word level. Variation in the attachment properties of second position clitics (e.g., whether they attach to the first word or the first constituent) across languages result primarily from the interaction and rankings of constraints. The most important of these interactions is the motivation for languages to place a form at the left edge of some domain (e.g., initially) being blocked by constraints which prevent such forms from occurring clause-initially. These constraints are mostly based on phonological and/or morphosyntactic properties of the language. This analysis follows from an earlier proposal that second position clitics were prevented from occurring initially by a rule of "prosodic inversion", where clitics are moved to second position because they must attach to a host and cannot occur at the leftmost edge (Halpern 1995).

The growing body of literature on the nature of second position demonstrates wide crosslinguistic variation in the degree to which forms which occur there are constrained by phonological and/or syntactic factors (e.g., Halpern & Zwicky (eds.) 1996, Gerlach & Grijzenhout (eds.) 2000, Anderson 2005, Legate forthcoming). Second position clitics may occur after the prosodic word in one language, but after a constituent in another. Clitics may be constrained to second position in all contexts exclusively, e.g., in Serbo-Croat (Camdzic & Hudson 2006), or may demonstrate positional flexibility in certain contexts, e.g., in Gurindji (McConvell 1996) and European Portuguese (Barbosa 1996).

The focus of linguistic research into clitics has thus been on their formal properties, using formal mechanisms for the development of a theory of clitics. However, despite the challenge indirectly raised by Anderson (1993) in the quote above, there has been little investigation from a functional perspective into why languages are motivated to systematise the relationship between first and second position, neither has there been much inquiry into the range of grammaticalisation paths that languages take to get there.

Some of this formalist literature does allude to or acknowledge a pragmatic dimension to the association between first and second position, recognising that what occurs in first position may have a particular pragmatic profile, usually called "focus" (see below for further discussion). However, there is very little analysis of how pressures of pragmatics and syntax interrelate in this relationship and how this may have led to the range of second position phenomena we see in languages synchronically (exceptions include McConvell 1996 and Cysouw 2003, discussed in Section 2). This is the underlying question to be explored in this article through a comparison of the properties of second position phenomena in three Australian languages, viz., Warlpiri, Wambaya, and Garrwa.

All three languages, spoken in the North-Central region of Australia, encode both pronominal and tense-aspect-modality information in second position clitic clusters. This pattern is somewhat unusual in the Australian context,

where pronominal and modal clitics are common but tense-aspect clitics sensitive to second position are less common.[1] It appears to be an areal feature of some non-prefixing languages, both Pama-Nyungan and Non-Pama-Nyungan, in North-Central Australia (Mushin 2005a). Other Australian languages which exhibit this property include the Pama-Nyungan language Warumungu (Simpson 2002) and non-Pama-Nyungan Yukulta (Keen 1983).

The Warlpiri and Wambaya clusters have more commonly been called "auxiliaries" (Hale 1973, Laughren 2002, Nordlinger 1998). The Warlpiri auxiliary has been the subject of extensive theoretical analysis (e.g., Hale 1973, 1983; Simpson 1991; Austin & Bresnan 1996; Laughren 2002; Legate 2002, forthcoming). The Wambaya auxiliary is described in Nordlinger (1998). Garrwa second position phenomena have not been formally defined in published descriptive literature (e.g., Furby's (1972) description of the pronominal system, does not mention their relationship to second position), but they have been referred to in recent typological work (Mushin 2005a).

I have restricted discussion in this article to these three languages because there are features of the Wambaya and Garrwa systems which bear superficial resemblance to the better described Warlpiri system. This is seen in the interaction between pronominal, aspectual, and modal forms within clitic clusters. Despite these similarities, and the general tendency for languages in this area to have grammaticalised second position clitic clusters, here it is shown that each language appears to have followed its own path in developing their second position phenomena. In each case, however, the development of a second position system can be analysed in terms of principles of information packaging (i.e., pragmatic functions) accommodating to existing syntactic structures.

The restriction of forms to a fixed sentential position is particularly interesting in the context of Australian languages, as word order in these languages is predominantly "unfixed" syntactically, and the ordering of elements is largely motivated by information packaging principles. Second position clitic clusters may therefore represent the most "syntacticised" feature of these languages (e.g., Laughren 2002). The Warlpiri auxiliary can occur in positions other than second position. The equivalent Wambaya and Garrwa forms are more conservatively restricted to second position, with Garrwa allowing some flexibility in tense-aspect attachment. The properties of second position phenomena in each of the languages is detailed in Section 3.

With respect to their history, McConvell (1996: 300) hypothesises that positional pronominal clitics originated as a category in a western subgroup of Pama-Nyungan, and is retained in some of the contemporary Ngumpin-Yapa

1. Grammatical clitics which are position-based may occur in other positions in Australian languages – preverbally, e.g., in Kuku Nganhcara (Smith & Johnson 2000), or post-verbally, e.g., in Nyangumarta (Sharp 2004).

languages of which Warlpiri (Yapa) is a member. It should be noted, however, that there are significant formal differences synchronically with the auxiliary system in the Ngumpin languages discussed in McConvell (1996) – Mudburra, Gurindji, and Birlinarra – and Warlpiri (see Section 2 for further discussion of the properties of Ngumpin languages). Wambaya and Garrwa are both non-Pama-Nyungan languages, but from a region with extensive contact with Pama-Nyungan, including Ngumpin-Yapa languages. Wambaya and Garrwa have clearly had much contact with each other and share other grammatical similarities, the congregation of clitics in second position being one of them, but at this stage they are analysed as belonging to two different non-Pama-Nyungan branches (Evans 2003: 12).[2]

So, although all three languages encode a combination of grammatical categories in second position, there is considerable variation in the grammatical properties of these clusters between the languages. This is reflected in differences in the ordering of elements, how tightly the elements in the clitic cluster are bound, and in their grammatical functions. These differences reflect the different histories of the development of second position clitics in these languages. Comparison of these languages thus allows us to tease out some of the pragmatic and morphosyntactic pressures that lead to the gravitation of categories of grammatical forms to second position, and to examine the range of variation that is exhibited.

2. Pragmatics and syntax in second position

Many languages which have clitics or free forms in second position have otherwise relatively "free" or "pragmatic" word order (Hale 1992). This is usually taken to mean that the ordering of core constituents is motivated by principles of information packaging rather than grammatical function. These are languages in which the permutation of constituents does not change the propositional content of the clause but rather reflects different contexts of utterance. The Warlpiri example in (4) illustrates the range of ordering possibilities, with the auxiliary following the first element in the clause.

(4) a. *yankirri-rli*=lpa *maju-manu* *yakajirri*
Emu-ERG=AUX bad-made berries.NOM

2. The three languages represent different stages of endangerment. Warlpiri is still acquired by children but is in some areas showing significant effects from extensive contact with English (e.g., O'Shannessy 2005). Wambaya and Garrwa are both moribund, as children are no longer acquiring the language. Wambaya is only used by a handful of very old people. There are more active speakers of Garrwa, but the language is in terminal decline as a medium of everyday communication.

b. *yakajirri*=lpa *maju-manu* *yankirri-rli*
berries.NOM=AUX bad-made Emu-ERG
c. *yankirri-rli*=lpa *yakajirri* *maju-manu*
Emu-ERG=AUX berries.NOM bad-made
d. *maju-manu*=lpa *yakajirri* *yankirri-rli*
bad-made=AUX berries.NOM Emu-ERG
e. *maju-manu*=lpa *yankirri-rli* *yakajirri*
bad-made=AUX Emu-ERG berries.NOM
f. *yakajirri*=lpa *yankirri-rli* *maju-manu*
berries.NOM=AUX Emu-ERG bad-made
'Emu was spoiling the berries' (lit., Emu was bad-making (the) berries) (Mary Laughren, personal communication)

The interaction of pragmatic word order with a fixed position means that while what occurs in second position is syntactically determined, what precedes and follows this position is likely to be pragmatically defined. As second position forms are usually prosodically dependent on the preceding constituent, the relevant literature has concentrated on the relationship between second position and "initial position". In most cases, the pragmatic status of the position preceding second postion has been described in terms of "focus" (e.g., McConvell 1996, Condoravdi & Kiparsky 2001, Laughren 2002, Cysouw 2003).[3]

"Focus" is a term used to cover a wide range of information types associated with information that is expected to update or add to the hearer's knowledge state. This information may be "new" to the hearer, and to the discourse (so-called "new" information), or it may simply be "prominent" (Choi 1999) – what Payne (1992) called "pragmatically marked".[4] In this article I use the term "focus" for information that is necessarily "prominent", but not necessarily "new". However I also recognise that there are difficulties in operationalising what constitutes "prominent" information, as there are a myriad of reasons why speakers are motivated to draw information to the particular attention of their interlocutors. Reasons for marking information as "prominent" in discourse include contrasts, answers to information seeking questions, topic switches, switches in perspective, or marking something as unexpected or emphatic. There is also an association between prominence and the narrowing of

3. In some of this literature, "focus" is pragmatically defined, while in other cases it is defined as a structural position in syntax.
4. The distinction between "new" and "prominent" is also very similar to that between informational and identificational focus (É. Kiss 1998) and rheme and contrast (Vallduví & Vilkuna 1998).

scope over some information by means of quantification, negation, and sometimes modal modification (e.g., É. Kiss 1998, Rooth 1996). Pragmatically, the narrowing of scope (e.g., through the use of "focus" quantifiers like *only* or *just*, or the contradiction of negation) serves to highlight such information. The result is a huge range of discourse functions (e.g., topic switch) and semantic functions (e.g., quantification) that share formal properties associated with "focus". There are various ways in which focus may be manifested in linguistic structure, including prosody, special morphology, marked syntactic structures (e.g., clefts), and word order.[5]

Mithun (1992) demonstrated a tendency in languages which exhibit free word order behaviour for pragmatically prominent information to occur at the beginning of utterances. She examined ordering preferences in three highly polysynthetic languages (two North American and one Australian), but this pattern of ordering has since been observed in numbers of languages, including the three languages surveyed here (McConvell 1996; Mushin 2005a, b; Simpson forthcoming; Simpson & Mushin forthcoming).[6] The kinds of information Mithun found in initial position in the languages of her survey included relatively new information, relatively "newsworthy" information, new topics (i.e., a reintroduction of a discourse entity already mentioned), and indefinites (which may be related to the newness of information).[7] This pattern of information packaging is illustrated with the following Garrwa data. The pronominal and tense-aspect clitics which follow this initial position are among the clitics more closely examined in Section 3.

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5. The crosslinguistic variation lies not only in how focus may be marked in different languages, but also in how the different types of focus might group in terms of their linguistic expression. As noted above, work by É. Kiss (1998) and Vallduví & Vilkuna (1998) on mappings between linguistic structure (including prosodic structure) and focus has established that "new" and "prominent" information can be formally distinguished. McConvell (forthcoming) similarly argues for a distinction between contrast and focus.

6. Other dependent-marking Australian languages with this pattern of ordering include Ngiyambaa (Donaldson 1980), Kalkatungu (Blake 1983), Yukulta (Keen 1983), Pitjantjatjara (Bowe 1990), and Jiwarli (Austin 2001).

7. One must be careful about what is counted as "initial". Preposed or left-dislocated constituents are "initial" in terms of information flow, but may not count as initial for the purposes of calculating second position (Anderson 2005). Preposed constituents tend to occur in an independent intonation unit from the rest of the clause and may be cross-referenced within the main clause. The notion of "initial" in this article is restricted to the first position under the main intonation contour.

(5) a. locative NP in contrast
nukami-na=*nurr=ili* *jilajba*
foot-LOC=1PL.EXCL=HAB walk
'BY FOOT, we would walk / It was BY FOOT, we would walk.' (25.8.03.1)

b. interrogative word
wanyimbala=*ja=ninji* *karri* *balba*
when=FUT=2SG east go
'When are you going east (to Robinson River)?' (25.8.03.1)

c. connector contrasting the activities of two discourse participants
yundijba=bul=i *mungana* / ngala=*nurru* *kululuka*
cook=3DU=PAST night CONN=1PL.EXCL sleep(REDUP)
'They two cooked (them) at night while we all were sleeping.' (15.5.01.1)

d. negative particle
miku=*nurr=ili* *jarr-kanyi* / *mukawu*
NEG=1PL.EXCL=HAB eat-NEG cow
'We didn't eat beef.' (2.5.01.1)

e. quantifier
ngawamba=*yili* *nurri* *jarrba* *munjimunji-nyi*
only=HAB 1PL.EXCL=PAST eat bush-DAT
wada
food
'We only would eat bush food.' (2.5.01.1)

Cysouw's (2003) typological study of pronominal clitics showed a systematic relationship between pronominal clitics which occur in second position and the status of initial position as a position of "focus". His "focus hierarchy of clitic attraction" demonstrates the real tendency for pronominal clitics to be attracted to the most focused element in the clause, regardless of where the focused element occurs. A simplified version of the hierarchy is represented in Figure 1.

Cysouw classifies "focus" into several types and ranks them according to the likelihood of forms expressing these types to attract pronominal clitics. At the top of his hierarchy are forms with "inherent focus", i.e., forms which bear a focus-related meaning as part of their semantics, such as interrogatives or negatives. Next in the hierarchy are forms with "intended focus". These are forms which are focused by virtue of the pragmatics of a particular utterance, such as NPs in contrastive or other emphatic contexts. Two other focused contexts identified by Cysouw include "stage setting", represented by clause linkers and adverbs, and certain kinds of modified NPs (indefinite and quantified). It should be noted that these last two contexts fall somewhat outside of

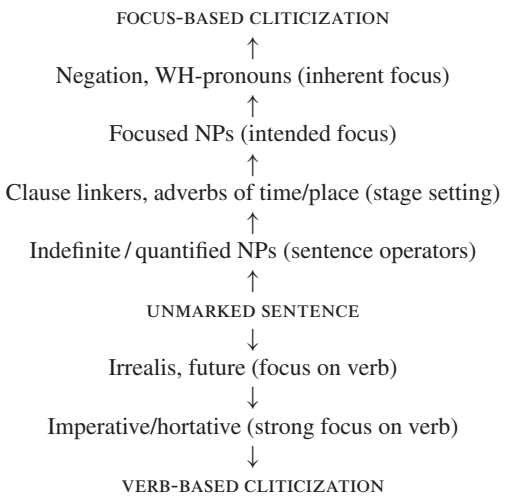

Figure 1. *Focus hierarchy of clitic attraction (adapted from Cysouw 2003)*

the scope of conventional senses of "focus" (and also outside of what I have been calling "focus" here). Cysouw found the greatest tendency for clitics to attach to "inherent focus" forms, if pragmatics was a motivating factor for clitic placement, followed by forms which expressed intended focus, stage setting, and then modified NPs.[8]

As utterances display less focus (inherent or intended), pronominal clitics tend to gravitate to the verb or predicate as the preferential "non-focused" element. When pronominal clitics are attracted to verbs only, Cysouw suggests that this is a step perhaps towards the development of inflectional agreement systems. However, even among these clitic types, in many cases the pronominal clitic still attaches to interrogative or negative markers in preference to verbs, when they occur.

As grammaticalised indices of referents, pronominal clitics encode only very basic information required to identify a referent and its role in the utterance (e.g., person, number, gender, case). Pragmatically, they always represent information that is well-established in the discourse, predictable, and topical – a very different profile from the information to which they are typically attracted. This grammatical pattern can be generalised as one where the least focused information in the clause is attracted to the most focused, the focused

8. This same range of forms also constitute what is most likely to occur initially in many Australian languages (McGregor 1990, Austin 2001, Simpson & Mushin forthcoming)

information providing a "beacon" for bare-bones grammatical information to be attracted to (Cysouw 2003, Mushin 2005a). This pattern of "beacon syntax" is consistent with Anderson's (1993, 2005) observation that verb-second phenomena represent an attraction for inflectional information to occur in second position.

The notion of "beacon syntax" seems at variance with the general view of second position syntax, which analyses such forms as being blocked or disallowed from occurring in initial position for some phonological or morphosyntactic reason. However, Cysouw's survey showed a real crosslinguistic tendency for certain kinds of grammatical information be attracted to focus, wherever it might be in the clause. The relationship between pragmatics and syntax in second position can thus be viewed as the interaction between two independent linguistic behaviours: the tendency for grammatical information to gravitate to positions of focus, and the tendency for focused elements to occur clause-initially.

Of course, pronominal clitics are not the only grammatical forms that gravitate to focused constituents. In some languages, modal and evidential categories are drawn to positions of focus. These include the so-called "floating clitics" (Facundes 2000, Aikhenvald 2002) found in some Amazonian languages. For example, in Apurinã, "floating clitics can attach to various grammatical categories, depending, apparently, on which of them is focused; these include a frustrative marker, a predicative marker, two perfectives and an emphatic marker" (Aikhenvald 2002: 47). Similarly, in Tariana, tense-evidentiality clitics "can go onto any constituent in the clause, if it is in contrastive focus and preposed to the predicate [. . .] If no constituent is contrastive, they go onto the predicate" (Aikhenvald 2002: 64). The contrastive use of the Tariana clitic is illustrated in (6).

(6) *machá-peri=siná* *du-kalité*
good-CL.COLL=REMPINFR 3SG.F-tell
'She (mother) says good things (contrary to what a misbehaving girl might think).'

The patterns of attachment described for these "floating clitics" are remarkably similar to how Cysouw (2003) described patterns of attachment for pronominal clitics in a large range of the world's languages (although in Tariana, the clitics appear to be attached to a type of "intended focus", but not necessarily an "inherent focus"). Like pronominal clitics, floating clitics are found attached either to a focused constituent or to the verb. Tense, aspect, and evidentiality are operators that modify temporal, epistemological, and subjective aspects of the proposition, and are inflectional categories in these languages. So, like pronominal clitics, they can be considered a part of the set of "bare

bones" grammatical information of the clause. In Tariana, it is this information, rather than the information encoded in pronouns, that is attracted to focus constituents.[9]

In summary, the following generalisations can be made concerning the relationship between initial focus and second position:[10] (i) inflectional information representing the "bare bones" grammatical information of a clause is often attracted to the most "focused" constituent; (ii) free word order languages tend to put the most focused information in clause-initial position; (iii) the intersection between these two tendencies results in a systematic placement of grammatical information in second position.

As a first pass at hypothesising the grammaticalisation of pronominal clitics, Cysouw (2003) proposes that clitics start with an attraction to a host with a particular pragmatic profile (e.g., focus), which gets associated with a position (e.g., initial position), and then (perhaps) to the morphological category found in that position (i.e., a word class).

McConvell (1996, forthcoming) outlines a different kind of path of development for pronominal clitics in Ngumpin languages, one which accounts for the considerable variation in clitic placement between the languages in this subgroup synchronically. More specifically, he recognises a split between the languages with "unmarked" second position placement (Ngarninyman and Birlinarra), and those with "marked" second position placement (Gurindji and Mudburra) (McConvell 1996: 302). Gurindji and Mudburra both have "auxiliary" structures in which pronominal clitics attach to a "base" or "catalyst" form which is relatively semantically empty (although it carries some associations with modality). The entire auxiliary structure frequently occurs in second position in discourse, although it is by no means restricted to this position (McConvell 1996: 301).

Unlike Cysouw, McConvell (1996) does not explicitly explore how forms came to be in second position originally, although there is an implication that categorical association with second position arose from associations with complementisers in initial position that reflected properties of Focus – a combina-

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9. Tagalog particles, which mostly represent these clausal operator meanings, are frequently found in second position. Anderson (2005) does not discuss their relationship with focus, but see Martin (2004) for a discussion of the pragmatics of particle placement that involves attraction to focus.

10. One of the reviewers has rightly pointed out that there are languages in the world with second position phenomena that do not have "initial focus". While examination of the relationship between pragmatics and syntax for these types of languages goes beyond the scope of this article, they should be examined in future work on the typology of second position. One needs to examine, for example, what kinds of pragmatic information are encoded in the preverbal slot, and what does occur initially in these languages. One should also determine the extent to which these languages are free word order languages, in Mithun's sense.

tion of both syntactic and pragmatic factors (McConvell 1996: 317).[11] In this article, he analyses pronominal clitics in Gurindji and Mudburra as no longer "positional", but rather as now associated with the syntactic category that frequently occupies initial position, a category of complementisers which have become the base component of the auxiliary. Gurindji and Mudburra pronominal clitics are therefore best analysed as attached to a head (COMP) than as second position clitics in most contexts (McConvell 1996: 300–302).

McConvell (1996: 316–317) also acknowledges a relationship between the positioning of this complementiser in initial position and the pragmatic category "Focus", seen in the attraction of pronominal clitics to interrogative words and negative particles (which must occur initially). These are still contexts in which pronominal clitics appear to occupy second position categorically. He (1996: 318–323, 2006, forthcoming) discusses another important construction that illustrates the pragmatic sensitivity of clitic placement. This is the "contrastive" construction, in which the pronominal clitics attach to an initial contrastive element (marked with a "topic" suffix *-ma*). An example of the contrastive construction in Gurindji is given in (7). The pronominal clitics (*=rna-yina* and *=lu*) are in roman.

(7) *yirrap-ma* *ngu*=rna-yina *parik* *wanyja-ni* *VRD-la.*
one.mob-TOP CAT=1SG.S-3PL.O leave leave-PAST VRD-LOC
yirrap-ma=rna-yina *wart* *ka-nya* *murla-ngkurra.*
one.mob-TOP=1SG.S-3PL.O back take-PAST here-ALL
murla-ngka-rni *ngu*=lu *karri-nyana.*
here-LOC-ONLY CAT-3PL.S be-PRES
'One lot I left at VRD. The other lot I brought back here. They are still here.' (McConvell 1996: 318–319)

McConvell (1996: 318–323, forthcoming) distinguishes the pragmatics of this contrastive construction from other information packaging functions like topic and focus. It "emphasizes the difference between the current proposition and a previous proposition or set of propositions in the discourse or 'in the air' " (McConvell forthcoming: 17). This pattern suggests that while pronominal clitic placement in these languages may now be mostly associated with a syntactic category, the second position slot still corresponds with a certain type of pragmatic markedness (also signalled by the use of the topic marker *-ma*).

The two studies described in this section are among the few attempts to seriously grapple with the associations between pragmatics and syntax that

11. Some "inherent focus" categories like initial wh-interrogatives (but not their answers) also attract pronominal clitics in these languages. This is given as further evidence that pragmatics also played a role in the story of pronominal clitic placement in Ngumpin languages (McConvell 1996: 317, personal communication).

Table 1. *Comparison of hypothesised grammaticalisation paths for second position clitics*

	Cysouw (2003) (generally)	McConvell (1996) (Ngumpin languages)
Stage I	Pragmatic host attachment (to focus)	Syntactic host attachment (to second position)
Stage II	Syntactic host attachment (to a position)	Pragmatic host attachment (to focus)
Stage III	Morphological host attachment (to a word class: Verb ∼ agreement)	Morphological host attachment (to focus operators like COMP, or Verb)

result in the grammaticalisation of second position as a site for grammatical markers. Table 1 provides a very rough summary of the paths of second position pronominal clitic grammaticalisation outlined in Cysouw (2003) and McConvell (1996).

Aside from the range of languages investigated, the main difference between these two studies lies in the fact that Cysouw was largely interested in what motivates the placement of pronominal clitics in second position categorically, while McConvell's work concentrates more on how syntactic and pragmatic pressures can lead to the development of more complex patterns of clitic clusters across different yet closely related languages. In order to further tease out the relationship between pragmatics and syntax in second position, it is important to extend the analysis to other languages with grammaticalised second position, and to forms other than pronominal clitics that cluster in second position. In the next section I describe the relevant features of Warlpiri (Section 3.2), Wambaya (Section 3.3), and Garrwa (Section 3.4). In Section 3.5 I show that differences in the grammatical structures of these clitic clusters derive from areal pressures, diverging grammatical development, and different origins.

3. Second position clitics in three Australian languages

3.1. *Introduction*

As stated in Section 1, pronominal clitics are the most common type of clitic to emerge in second position in Australian languages. They are very common generally among dependent-marking Australian languages (Dixon 2002). These bound pronouns are usually quite different in form and function from their free counterparts. They are typically obligatory, indexing the main grammatical features of the core arguments of predicates.[12] Free pronouns are not obligatory

12. These facts have contributed to the analysis of bound pronouns as the actual arguments of the predicate (e.g., Jelinek 1984, Baker 2001).

and in some languages they only occur in contexts of pragmatic prominence. Pronominal clitics in Australian languages display a wide range of patterns of attachment. Many of these patterns conform with Cysouw's observations that clitics are either drawn to positions of focus or to the predicate. Even in languages in which we find clitics attracted primarily to the verb, a clause with an interrogative or negative often attracts the clitic in preference to the verb, e.g., in Arabana (Hercus 1994). There are a number of languages in which pronominal clitics are only found attached to verbs in any context, such as Biri (Terrill 1998) and Nyangumarta (Sharp 2004). There are also pronominal clitic systems which are described as occurring rigidly in second position, e.g., in Ngiyambaa (Donaldson 1980) and Pitjantjatjara (Bowe 1990).

In a smaller group of Australian languages, other grammatical categories, usually in addition to pronouns, have grammaticalised in second position clitic clusters. These categories usually express tense, aspect, and modal meanings, either as the primary site for inflectional material, or in conjunction with verbal inflections. Such forms usually cluster with pronominal clitics to form some kind of "clitic cluster". This group of languages are found in a large area of the North-Central region of Australia, south of the prefixing non-Pama-Nyungan languages. There are both Pama-Nyungan and non-Pama-Nyungan languages that display this feature. Not all languages in this area, however, exhibit this phenomenon. Some only have second position pronouns, e.g., Wanyi (Laughren et al. 2004), and some clitic clusters show little sensitivity to second position, e.g., Jingulu (Pensalfini 2003). The languages examined here nevertheless represent a substantial subset of those which have grammaticalised both pronominal and tense-aspect-mood-modal information into second position.

3.2. *Warlpiri*

Warlpiri is a Ngumpin-Yapa language (Yapa subgroup) spoken across a relatively large area of the North-Central region of Australia. Unlike the other languages represented here, Warlpiri is still spoken as a first language by children and is used by all generations in everyday conversation.

The Warlpiri clitic cluster, commonly called the "auxiliary", is obligatory in main clauses only and minimally consists of a "base" which contributes to the overall aspectual meaning of the clause, followed by pronominal clitics which mark person and number of core arguments (subject, object, indirect object). The base form may be realised as zero, resulting in a surface auxiliary of only pronominal clitic forms. Examples (11) through (14) illustrate some of the combinations of base and pronoun expressing different combinations of tense-aspect and person-number. The base *ka* occurs in realis non-past clauses (8), while *lpa* occurs in irrealis or past forms (9). Note that tense-mood is also

marked as an inflectional category on the verb. Most of the description, data, and glossing conventions presented here come from Laughren (2002).

(8) a. *Wangka-mi* ka=rna *Yurntumu-wardingki*
speak-NPAST CENTR=1SG Yuendumu-habitant.NOM
'I, a Yuendumu person, am speaking.' (Laughren 2002: 87)
b. *Wangka-mi* ka=rna=ngku *Yurntumu-wardingki*
speak-NPAST CENTR=1SG=2NSG Yuendumu-habitant.NOM
'I, a Yuendumu person, am speaking to you.' (Laughren 2002: 87)

(9) a. *Wangka-ja*=lpa=lu
speak-PAST=CENTR=(3)PL.S
'They were speaking.' (Laughren 2002: 88)
b. *Wangka-yarla*=lpa=lu
speak-IRR=CENTR=(3)PL.S
'They should speak.' (Laughren 2002: 89)

As these examples illustrate, the Warlpiri auxiliary usually occurs after the first constituent. However, the association with second position is not absolute and auxiliaries may certainly occur in other positions in the clause under particular grammatical conditions. For example, there are phonotactic constraints on the occurrence of auxiliaries. Laughren (2002: 89) notes that as words must be at least disyllabic in Warlpiri, these monosyllabic base forms, *ka* and *lpa*, cannot constitute a phonological word. By combining with pronominal clitics, as in (9), they can potentially fulfil the phonological criteria for "wordhood" and may occur utterance-initially, as in (10).[13]

(10) ka-rna *ya-ni*
CENTR-1.S GO-NPAST
'I AM going' (Laughren 2002: 89)

It is unusual in actual discourse for these "minimal" auxiliaries to occur in initial position, however, and when the base is zero, they never occur initially. Example (10) reflects the particular context of contrastive focus, in response to an assertion that the speaker ought to be going. The placement of the clitic in initial position thus reflects the information structure of the clause, where it is the modality, i.e., the positive assertion of going, that is being made prominent. It is presented in contrast with an underlying assumption that the speaker is not going.

13. Strictly speaking, *lpa* should not be able to occur initially as it starts with a consonant cluster. However, Laughren (2002: Footnote 19) notes that there are examples of initial *lpa* in fluent speech in both her data and in data collected by Ken Hale.

Initial position in Warlpiri has been shown to be highly sensitive to focus, both inherent and intended (in Cysouw's sense), and is also consistent with Mithun's (1992) characterisation of the pragmatics of this position. Interrogatives must occur in this position, as in (11a), and answers to information questions also occur here, as in (11b). Other forms which must directly precede the auxiliary in initial position include the negative particle *kula*, as in (11c), and a set of particles expressing modal-evidential type meanings, called "propositional particles", as in (11d) (Laughren 1982). Simpson (forthcoming) has furthermore argued that verbs in initial position are also sensitive to focus. Examples like (10), where the auxiliary occurs in initial position and is focused, are further evidence that initial position is (mostly) reserved for pragmatic focus in this language.

(11) a. *ngana-patu* ka=lu *wangka-mi?*
who-PL.NOM *centr*=(3)PL.S speak-NPAST
'Which ones are speaking?' (Laughren 2002: 94)

b. *yurntumu-wardingki-patu* ka=lu *wangka-mi*
Yuendumu-habitant-PL.NOM CENTR-(3)PL.S speak-NPAST
'The Yuendumu people are speaking.' (= answer to question) (Laughren 2002: 94)

c. *kula*=ka=rna *ngaju* *ya-ni*
NEG-CENTR-1SG.S I.NOM go-NPAST
'I'm not going / I don't go' (Laughren 2002: 113)

d. *kari* ka=lu *wangka-mi*
perceptually.evident CENTR-(3)PL.S speak-NPAST
'(I) can see/hear (that) they are speaking' (Laughren 2002: 110)

In summary, the base+pronominal clitic auxiliary types can be described as preferentially occurring in second position, with the possibility of occurring in initial position if phonotactically permissible, and in contexts of focus. Note that it is only the aspectual component of the auxiliary in (10) that appears to be focused. The pronominal component is not focused and retains its referent-tracking function.

Warlpiri auxiliaries may also be augmented with a "complementiser", which precedes the base, when it occurs. Complementisers express modal and temporal information but do not overlap in meaning with the aspectual base component of the auxiliary. Unlike the base+pronominal clitic auxiliary type, auxiliaries which also incorporate a complementiser frequently occur clause-initially (12). They may also occur in second position, illustrated in (13).

(12) a. kaji=lpa=lu *wati* *ya-nu*
kaji=CENTR-PL.S man.NOM go-PAST
'When/as the men were going.' (Laughren 2002: 91)

b. kala=lu *wati* *ya-nu* *wirlinyi*
kala=PL.S man.NOM go-PAST hunting.NOM
kala=lu=nganpa *kuyu* *luwa-rnu*
kala=PL.S=1EXCL.PL.NS game.NOM shoot-PAST
'When the men used to go hunting, they used to shoot us game.'
(Laughren 2002: 91)

(13) *wati* kaji=li *ya-nu*
man.NOM *kaji*=PL.S go-PAST
'The men must have gone' (Laughren 2002: 91)

With or without a complementiser, the auxiliary has usually been treated as a single unit for the purposes of syntax (Nash 1986, Simpson 1991, Laughren 2002). The ordering behaviours of the individual elements, however, suggest asymmetries between auxiliaries when they occur with or without the complementiser element. Pronominal clitics must attach to a base, associated with aspectual categories. This makes them unlike other types of pronominal clitics used in Cysouw's sample as they are directly attached neither to the verb nor to the "focus" element in the clause. The base+pronominal clitics as a unit are attracted to focused elements in initial position, unless they themselves are focused. The convergence of initial focus and focus attraction results in a virtual categorical association between complementiser-less auxiliaries and second position in actual discourse.[14]

How then do we account for complementisers in initial position when they are incorporated into the auxiliary? In some cases there may be an association of complementiser with focus types. This is the case with the negative particle *kula*, which is restricted to initial position in most contexts. Modal-aspectual complementisers, such as *kala* and *kaji* in (12), are not obviously associated with focus. However, as complementisers usually express some connection between propositions, and function as clause-linking devices, they very frequently occur clause-initially across languages. The Warlpiri complementisers fall into this category. These features of Warlpiri syntax support the analysis of the complementiser as the initial element, with the base+pronominal clitic occupying second position.

Of particular interest then is the occurrence of such complementisers in second position. It appears that where there is a choice, Warlpiri speakers will put other focused information in initial position over the complementiser, as

14. In a corpus of Warlpiri narrative texts, used for the study in Simpson & Mushin (forthcoming), 191 out of 260 (i.e., 73 %) auxiliaries were found in second position. All of the initial auxiliaries were headed by a complementiser.

we see in (13) above, where the NP *wati* 'the men' is in focus.[15] When this is the case the complementiser is found in second position, followed by the rest of the auxiliary. This is further supported by McConvell's (2006: 129–131) analysis of the grammaticalisation of complementisers from demonstratives in Ngumpin-Yapa languages, where (put very simply) focal elements are bumped "up" to initial position when a demonstrative acquires complementiser functions to introduce certain types of subordinate clauses (see McConvell 2006 for details of the syntactic analysis).

The fusion of the base+pronominal clitic element of the auxiliary to the complementiser even when there is a focused constituent in initial position is evidence that their relationship has been reanalysed as a construction to some degree. The bond between the complementiser and the rest of the auxiliary can be compared with the behaviour of other initial forms, such as propositional particles, which must occur initially but do not always attract the auxiliary form. In (14), the propositional particle *kari* occurs initially, but it is followed by a focused NP, to which the auxiliary (including a complementiser) is attracted. This behaviour further supports the analysis of complementisers as preferring initial position (as clause linkers), but not "fixed" in that position in the way that propositional particles are.

(14) *kari* *wiyarrpa-rlu* kala=ka=npa=nyanu
perceptually.evident poor.thing-ERG *kala*=CENTR=2SG.S=ANAPH
ngarrpangarrpa-ma-ni
lie-CAUS-NPAST
'I can see that you are liable to be telling lies.' (Laughren 2002: 110)

The relationship of the different elements of the Warlpiri auxiliary can be summarised as follows:

(i) auxiliaries follow propositional particles and/or focused elements in initial position;
(ii) if there is a complementiser element preceding the base+pronominal part of the auxiliary, it will occur in initial position, unless there is a focused element or a propositional particle (e.g., example (14));
(iii) base (aspectual) forms do not occur initially unless their aspectual meaning is "focused" in some way (e.g., example (10));
(iv) pronominal clitics can never occur initially: if pronominal information is pragmatically prominent, a free pronominal form is used.

15. The preference for focused initial constituents over the functions served by complementisers is reflected in Cysouw's hierarchy of clitic placement, where "inherent" and "intended" focus types were more likely to attract pronominal clitics than other kinds of elements like scene-setting elements.

Both pronominal meanings and aspectual meanings are drawn to positions of focus, which is initial in Warlpiri – a grammaticalisation of the association between high pragmatic prominence and bare bones grammatical information.[16] The frequent association of base+pronominal clitic auxiliaries with complementisers appears to have resulted in the unification of these forms such that complementisers move out of their preferred initial position into second position when there is a focused form in initial position. The association of auxiliaries with complementisers with second position is thus qualitatively different from the association of auxiliaries without complementisers.

The relationship of grammatical information to second position in Warlpiri thus displays some fluidity, which may be related in part to a layered process of grammaticalisation of the auxiliary: the process by which the base and bound pronouns became fused as a syntactic unit, and the process by which the auxiliary became associated with complementisers. The interaction of these two processes results in the properties of Warlpiri syntax we see today.

The synchronic association of the auxiliary with complementisers is consistent with McConvell's proposal for the development of auxiliaries in the related Ngumpin languages – pronominal clitics attached to complementisers first, which occur in initial position by virtue of their clause linking properties. The strong association of initial position with focus has meant an association of auxiliaries with the pragmatics of this position, but the facts for Warlpiri suggest that while initial position is clearly used for focused information, this is not the driving force behind the association of auxiliaries with second position. This pattern of grammaticalisation thus presents a scenario quite different from that discussed in Cysouw (2003), in which an association with focus precedes any syntacticisation of the relationship to a position. I will return to this point in Section 4.

It is interesting that the complementisers which now show flexibility in movement out of initial position are those which also reflect modal-aspectual meanings, in addition to clause combining. Other related meanings such as the evidential meanings expressed by "propositional particles" have not been associated with the rest of the auxiliary in this way. Such forms occur initially even when there are elements of pragmatic prominence in the clause.[17]

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16. In the related Ngumpin languages, such as Gurindji and Mudburra, the auxiliary base does not encode aspectual meanings (McConvell 1996).

17. Evidentials and related modal categories are forms which frame the "stance" of the speaker (e.g., Mushin 2001, Kärkkäinen 2002). These may occur initially in some languages as a reflection of their scope over the whole proposition within the utterance.

3.3. *Wambaya*

Wambaya is a non-Pama-Nyungan language, currently classified in the geographically discontinuous Mirndi family (Green & Nordlinger 2004). Of the Mirndi family only Wambaya and the very closely related Gudanji exhibit the auxiliary type described in this section.[18] Data presented here are from Nordlinger (1998). Nordlinger (1998) notes that the name "auxiliary" was chosen for this category because of its resemblances to the Warlpiri auxiliary.

Like Warlpiri, the Wambaya auxiliary is a fused complex of clitics. If it is monosyllabic, it is prosodically bound to the initial constituent but may be prosodically "free" if it is polysyllabic. The order of elements in the Wambaya auxiliary is quite different from Warlpiri however: pronominal clitics form the initial element, and this is followed by tense-aspect and directional marking, as the template in (15) illustrates (Nordlinger 1998: 137).

(15) Subject + (Object) + tense-aspect-mood-directional

In Warlpiri, the base and complementisers of the auxiliary carry tense-aspect-modality meanings, but this complements a verbal inflectional system for tense. In Wambaya, verbs have minimal inflectional morphology – only the future tense is also marked on the verb. The auxiliary is thus the primary site for the expression of basic grammatical information about the identity and role of arguments and the temporal orientiation of the clause. These tense-aspect markers are most likely the vestiges of an earlier system of complex predication involving a (finite) set of inflecting verbs and an open class of "coverbs". These systems are still found in other contemporary Mirndi languages such as Jingulu (Pensalfini 2003) and Jaminjung (Schultze-Berndt 2000). In these complex predicate systems bound pronouns are prefixed onto an inflected verb, a position akin to the pronominal prefix systems found in most other non-Pama-Nyungan languages (Evans 2003). In Jaminjung, the coverb usually precedes the inflecting verb, but they are relatively free forms while in Jingulu, the coverb, pronominal prefixes, and the inflecting verb are mostly phonologically fused. In Wambaya, all traces of the inflecting verb root have been lost, leaving the inflections (i.e., the old pronominal prefixes and the tense-aspect-directional marking) behind as a clitic cluster. The old coverb has developed some inflectional morphology and functions as the only verb in the clause.

Wambaya pronominal clitics constitute a separate paradigm from their free form counterparts in the grammar, although there is some formal transparency between free and bound forms. Present tense is zero-marked, so auxiliaries in present tense are realised as pronominal clitics only. The examples in (16)

18. Gudanji and Wambaya are (virtually) mutually comprehensible. However as there is little description of Gudanji, it is unclear how similar it is to Wambaya with respect to its auxiliary.

illustrate the Wambaya auxiliary. The 2nd person singular future form in (16c) can be interpreted as a command.

(16) a. *jiyawu* ngirr-aji *marndanga*
give 1PL.EXCL.A-HAB.PAST white.woman.II(ACC)
nyanyalu
tea.IV(ACC)
'We'd give tea to the white lady.' (Nordlinger 1998: 147)

b. *didima* nyu-ng-uda
tell 2SG.A-1.O-NACT.PAST
'You should have told me.' (Nordlinger 1998: 149)

c. *jiya-j-ba* nyu-ng-u *manganyma*
give-TH-FUT 2SG.A-1.O-FUT tucker.III(ACC)
'You will give me some tucker; Give me some tucker.' (Nordlinger 1998: 162)

Wambaya auxiliaries strictly occur in second position, following the first constituent.[19] Initial position in Wambaya need not be pragmatically prominent. The examples in (16) do not reflect any marked pragmatic structure. In these cases the verb frequently occurs in initial position, followed by the auxiliary. The tendency for auxiliaries or pronominal clitics to follow verbs in discourse has been noted for other Australian languages (e.g., Bowe 1990 for Pitjantjatjara, Swartz 1988 for Warlpiri). Bowe (1990) attributes this to the large number of "verb-only" clauses in actual discourse, a result of rampant ellipsis of NP referents. These Wambaya examples demonstrate that verbs frequently precede the auxiliary even when there are NP referents present.

While verbs appear to occur initially when there is no pragmatic prominence, they occur elsewhere when there is something prominent in the clause. Like Warlpiri, Wambaya signals clausal negation with a negative particle (*guyala*) that must occur initially. The auxiliary always occurs after this particle, as in (17).

(17) *guyala* ng-udi *yarru*
NEG 1SG.S-NACT.PRES go
'I'm not going.' (Nordlinger 1998: 201)

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19. Nordlinger (1998: 54) does note that the auxiliary may occur in a clause-initial position only in a very restricted context where the "clause with the initial auxiliary is closely linked with the preceding clause in the discourse context" (e.g., coordination), as in the following example (which appears to involve switch reference):

(i) *ngawu* *ng-a* *gulugbi,* *ngiyi-ng-a* *dulanymi*
1SG.NOM 1SG.S-PST sleep 3SG.NM.A-IO-NF raise
'I was sleeping (and) she woke me up.'

Other forms which must occur initially, attracting the auxiliary, are interrogative forms and the conjoining particle *ngaba*, which connects two finite clauses with a consequential meaning (X-event so that Y-event). This is illustrated in (18).

(18) *yarru* g-a *ginmanji* *ngaba* murnd-u *ngarlwi*
go 3SG.S-PAST this.way then 1DU.INCL.S-FUT talk
'She came here so that we can talk.' (Nordlinger 1998: 208)

Nordlinger (1998: 154) notes that "topicalised" (i.e., left-dislocated) NPs do not count as "initial position" for the purposes of auxiliary placement.[20] While the precise pragmatics of "topicalisation" in Wambaya is unclear, it appears to include information which might count as "prominent" for other languages. For example, the initial NP *gujija-nka* 'my mother' in (19) could occur in a listing context (e.g., 'My mother I'm cooking tucker for, my father I'm cooking tucker for, etc.').

(19) *gujiga-nka* *manganyma* ngi-n *wugbardi*
mother.II-DAT tucker.III(ACC) 1SG.A(PRES)-PROG cook
'My mother I'm cooking tucker for.' (Nordlinger 1998: 154)

Certainly some types of pragmatic prominence result in initial NPs followed by the auxiliary. Example (20), from a narrative text, illustrates the occurrence of initial NPs in a contrastive context. Here a contrast is set up between the character of the sun (having a baby with no sores) and the character of the moon (having a baby with sores), signalled by the position of the character NPs in initial position, followed by the auxiliary (*ngiy-a*).

(20) *gambanga-ni* ngiy-a *yabu* *gurijbi* *alaji*
sun.II-LOC 3SG.NM.A-PAST have good.I(ACC) boy.I(ACC)
ilig-baji. *wardangarringa-ni* ngiy-a *yabu*
sore-PRIV.I(ACC) moon.II-LOC 3SG.NM.A-PAST have
iliga-nguji *bagijbi*
sore-PROP.I(ACC) bad.I(ACC)
'The sun had a nice baby, with no sores. The moon had a 'no good' (baby), with sores.' (Nordlinger 1998: 239)

There are also some "modal-evidential" clitics which precede the auxiliary, when they occur. Example (21) has *miji* 'inferential'. These appear to be the

20. Rachel Nordlinger (personal communication) also notes that there is typically an intonation break between the topicalised NP and the rest of the clause. Anderson (2005) accounts for these kinds of topicalisations not counting as "initial position" for the purposes of calculating second position on the basis of their being in a separate prosodic domain.

only forms which can intervene between the initial constituent and the auxiliary. Since the auxiliary would be prosodically dependent on the evidential form, it is possible to count such forms as part of the complex of forms found in second postion. It is interesting then that such forms precede the auxiliary, in a similar way that complementiser forms, expressing certain kinds of modality, do in Warlpiri.

(21) *mugunjana=miji* gi-n *mirra*
louse.II(NOM)=INFER 3SG.S(PRES)-PROG sit
'It must be a louse (because I keep scratching my head).' (Nordlinger 1998: 204)

In summary, second position in Wambaya is dominated by the pronominal clitic plus tense-aspect-directional auxiliary complex. As it is impossible to separate the two components of this complex in terms of their syntactic properties, they are best considered as a complex morphological unit bearing the main grammatical meanings of the clause, a consequence perhaps of their earlier life as an inflected verb. Some modal-evidential clitics are also associated with second position, but it is unclear whether this is because they form part of the clitic cluster, when they occur, or whether the form to which they attach happens to occur in initial position by virtue of its pragmatics. The similarity to the Warlpiri auxiliary system lies in the combination of pronominal and tense-aspect marking within a tightly bound clitic cluster. The positioning of the pronominal information first in this complex is, however, evidence of their independent origins. I will return to this point in more detail in Section 4.

3.4. *Garrwa*

Garrwa is spoken in the southwestern Gulf of Carpentaria region, northeast of traditional Wambaya country. Its traditional territories border onto Gudanji country, a close relative of Wambaya. The affiliation of Garrwa has been the subject of some debate, but most scholars now classify it as non-Pama-Nyungan (Blake 1990, Breen 2003). Evans (2003: 12) acknowledges the difficulties in the classification of Garrwa but in Evans (2005: 262) argues that, of the non-Pama-Nyungan languages, Proto-Garrwan was the closest relative of Proto-Pama-Nyungan. These arguments appear largely based on the similarities in pronoun forms between Garrwa/Wanyi and Pama-Nyungan languages, and the lack of prefixing morphology, in conjunction with a lack of Pama-Nyungan case reflexes.

O'Grady et al. (1966) classified Garrwa and its closely related neighbour Wanyi as "Karrwan" (here "Garrwan"). This is a different non-Pama-Nyungan family from Mirndi, the family to which Wambaya belongs. Breen (2003: 402) reports 17 % shared vocabulary between Garrwa and Wambaya (21 % between

Wanyi and Wambaya, 25 % between Garrwa and Gudanji), which confirms its independence. Nevertheless there are several aspects of Garrwa and Wambaya grammar that reflect at least the considerable contact between the two groups.[21] Both languages exhibit *-jb-* verb endings, although these are productive inflections in Wambaya and unproductive in Garrwa. The gravitation of pronominal and tense-aspect information to second position is another shared feature of these languages.

Like Wambaya, Garrwa has a clitic cluster consisting of a pronominal (usually subject pronominal) followed by tense-aspect-modality marking found in second position.[22] This is illustrated in (22a) (subject pronoun) and (22b) (object pronoun). In both examples the past tense marker *=(y)i* follows the pronoun. Example (22c) illustrates the complex with a present tense morpheme *=a*, following a subject pronoun.

(22) a. *kirrijba*=nurr=i *nanaba,* *dungala-na*
climb=1PL.EXCL-PAST over.there stone-LOC
'We climbed (up) the stone (hill) over there.' (1.5.01.2)

b. *kuyu*=nurri-ny=i *waydbala-wanyi*
take=1PL.EXCL-ACC=PAST European-ERG
'The whitefellow (station manager) took us.' (28.3.00.3)

c. *murdijba*=ngay=a
be.mad=1SG=PRES
'I'm crazy.' (spoken in jest) (25.8.03.1)

The similarities between the Garrwa and Wambaya systems are striking on the surface. However, the "bound" status of pronouns in Garrwa is less clear than for Wambaya. Garrwa has only one set of pronouns, rather than a set of free and bound forms (Furby 1972, Dixon 2002: 378).[23] However, pronouns are almost always found in second position in discourse (Mushin & Simpson 2005, Simpson & Mushin forthcoming), and they are almost always destressed, and sometimes phonologically reduced, in this position. These same pronouns may

21. Evans (2003: 12) mentions the similarities between the Mirndi and Garrwan groups but recommends further synchronic research into their properties. It is unclear where Proto-Mirndi sits according to his (2005: 277) "offshoot" model of the Australian language family. Proto-Garrwan is represented as a sister of Proto-Pama-Nyungan. The evidence for the shift from prefixing to suffixing in Mirndi languages proposed in Green & Nordlinger (2004) suggests that Proto-Mirndi should be analysed as a daughter of Proto-Macro-Pama-Nyungan, rather than of Proto-Garrwan.

22. Wanyi has pronouns in second position but does not have the tense-aspect-modal associations with this position that Garrwa does.

23. This single set includes a defective paradigm of "compound pronouns", object+subject. Like Dixon (2002: 378), I have not analysed these as a separate paradigm of bound pronouns as the compound pronouns behave syntactically as the "single" pronouns.

occur in initial position in certain contexts of prominence, such as contrast. In such contexts, these pronouns are also prosodically prominent. In (23), from a narrative text, the pronoun *bula* 'those two' occurs stressed in initial position and signals a "topic switch" in Mithun's (1992) terms. Here the reference to these two characters comes after a lengthy "aside" concerning a type of dance some other characters were performing. The initial *bula* here signals the restart of the main narrative line. In these contexts, the pronoun does not attract the tense-aspect clitic. Examples like this are rare in actual discourse however and pronouns almost always occur in second position.[24]

(23) bula *barri wanbiya nanaba*
3DU.NOM DM emerge over.there
'Those two joined up with them there.' (8.5.01.1)

Like both Warlpiri and Wambaya, focused information occurs in initial position. This includes interrogatives (24a), answers (24a), contrasts (including topic switch) (24c), and the negative particle *miku* (24b).[25] The example in (24a), from a narrative text, is represented dialogue between a grandmother and a grandson. The grandmother asks the grandson what he is looking at, and the grandson evasively answers that he is waiting for some food. The food, lilyseed, is found clause-initially followed by the pronoun.

(24) a. A: *wanya*=ninji *najba juka kukulinya*
what=2SG.NOM see boy grandson
'What do you see, Grandson?'
B: *nganbi-nyi*=ngayu *yadajba kukudi*
lilyseed-DAT=1SG.NOM wait granny
'I'm waiting for lilyseed, Granny.' (9.5.01.1)

b. *miku*=nurr=ili *jarr-kanyi, mukawu*
NEG=1PL.EXCL=HAB eat-NEG cow
'We didn't used to eat beef.' (2.5.01.1)

c. *yundijba*=bul=i *mungana, ngala=nurru kululuka*
cook=3DU=PAST night CONN=1PL.EXCL sleep(REDUP)
'They two cooked (them) at night while we all were sleeping.' (15.5.01.1)

If there is no particular focus expressed, then the verb is found in initial position, as in the first clause in (24c). The placement of the verb in initial

24. The discourse marker *barri*, which follows the initial stressed pronoun, signals some kind of discourse related boundary that is yet to be properly described; *barri* is not restricted to second position.

25. *Miku* appears to have very similar syntax to the Wambaya equivalent *guyala*, and also the Wanyi *budangku* (Mary Laughren, personal communication).

position in "pragmatically neutral" contexts has been used as evidence among other factors for classifying Garrwa (and Wanyi) as having a basic verb-initial order (Mushin 2005b, Laughren et al. 2004). Mushin (2005b) showed that in discourse it is preferential for the verb to occur initially, even when there are other constituents in the utterance. This suggests that like Wambaya, the Garrwa clitic cluster is associated with the position (i.e., second position) rather than the pragmatic prominence of the initial element.

Aside from only having one set of pronouns, Garrwa differs significantly from both Warlpiri and Wambaya in how tightly the elements within the clitic cluster are bound to each other. In both Warlpiri and Wambaya the pronominal clitics and tense-aspect categories may be analysed as a single unit consisting of two or more clitics fused in a particular order. In Garrwa, while the combination pronouns+tense-aspect is a frequent and usual way of realising these meanings, the tense-aspect clitics need not attach to the pronouns directly, and may indeed precede them. Speakers are consistent in claiming that this variation does not change the meaning of the utterance but there are differences between speakers in their preferred patterns of attachment, based on actual usage. This suggests varietal differences which may be enhanced by the decline of the language as a spoken medium.

The flexibility of tense-aspect clitic placement is illustrated in (25a) and (25b), which were uttered by the same speaker in the same narrative text. In (25a), the past tense clitic follows the pronoun while in (25b) it precedes the pronoun, prosodically bound to the verb.

(25) a. *jungku*=ngay=i *nana-nyina*
sit=1SG=PAST that-LOC
'I was living there.' (4.5.01.3)
b. *jungku*=yi=nurru *muningka*
sit=PAST=1PL.EXCL anyway
'We sat down anyway.' (4.5.01.3)

In (26), a question-answer sequence, the pronoun remains in second position while the past tense clitic *=yi* is attached to the verb. The result is a total separation between pronoun and tense-aspect marker.

(26) DG: *wanya*=ninji *wurdumba*=yi *bayungu*
what=2SG.NOM catch-PAST west
'What did you catch (in the) West?'
KS: *wurumul*=ngayu *wurdumba*=yi *bayangarri*
bait=1SG.NOM catch-PAST west
'I caught bait over in the west.' (27.3.00.1)

There is some variation in the patterns of tense-aspect distribution depending on the marker (reported in Mushin 2002, 2004). So for example, in actual dis-

course, when the tense-aspect clitics are not attached to pronouns in the clitic cluster, the past tense marker =*yi* and present progressive =*(ngk)a* show more attraction to verbs. As 3rd person singular reference is mostly unexpressed (zero) in Garrwa, tense-aspect clitics frequently find themselves directly attached to initial constituents anyway, as in (27).

(27) *kirrijba=yi kingkarri*
climb-PAST up
'he climbed up' (8.5.01.1)

In contrast with other tense-aspect forms, the habitual marker =*yili* shows a greater tendency to occur in second position, regardless of what it attaches to, and to be associated with verbs only when the verb is in initial position. This is illustrated in (28).

(28) a. *miku*=nurr=ili *jarr-kanyi* / *mukawu.*
NEG=1PL.EXCL=HAB eat-NEG cow
ngawamba=yili=nurri *jarrba* / *munjimunji-nyi wada*
only=HAB=1PL.EXCL eat bush-DAT food
'We didn't eat beef. We only would eat bush food.' (2.5.01.1)
b. *jilajba*=yili=nurru *juju*
walk=HAB=1PL.EXCL long.way
'We would walk a long way.' (1.5.01.2)

The difference in distributions between the tense-aspect clitics can be accounted for by their different origins. While the precise nature of their development is little understood, the most likely scenario is that =*yili*, a past habitual marker 'used to do X', evolved from a paradigm of modal clitics. Other modal clitics in Garrwa strictly occur in second position between initial position and the pronoun, illustrated in (29). The pattern looks like that seen for the inferential clitic =*miji* in Wambaya. In Garrwa, the epistemic modal =*wali* 'might' and the deontic modal (mostly used as an imperative) =*kiyi* have this property.

(29) a. *wurdumba=wali=ngayu ngalurr*
get=MIGHT=1SG cold
'I might be catching a cold.'
b. *kurdadi*[26]*=kiyi ngaraba nanda langkiyawa*
NEG-SHOULD drink that north.side
'Don't drink that (water) on the north side.' (11.5.01.1)

26. *Kurdadi* is the Yanyuwa negative particle, often used in everyday Garrwa speech instead of *miku*.

The flexibility of attachment of =*yili* suggests that it is no longer categorically a modal but has shifted towards the other tense markers, perhaps on account of its association with past tense. On the other hand, =*yi* and =*ngka* have become more associated with verbs, perhaps on the way to becoming verb inflections. Garrwa verbs are otherwise uninflected. What these patterns suggest is that both modal clitics and pronouns are positional. If they co-occur, then modals only precede pronouns.

Tense markers, including =*yili*, thus appear to be in a state of paradigmatic flux as they can occur as clitics in second position both preceding and following the pronoun. When they follow the pronoun, they reflect a structure like Wambaya auxiliaries.[27] There are a number of ways of accounting for the tense-aspect markers which occur in second position and PRECEDE the pronoun. The most likely analysis is that they are shifting from being position-based to being morphologically-based as a verb inflection, a path of grammaticalisation suggested by Cysouw for pronominal clitics (i.e., becoming agreement markers on verbs). As verbs very frequently occur in initial position in Garrwa, clitic forms find themselves frequently attached to verbs by virtue of their position. The current lack of verb inflections in Garrwa, coupled with pressure from contact languages which do have verb inflections, both indigenous languages and English, might lie behind such a change.

An alternative account of the reversal of pronoun+tense-aspect ordering to tense-aspect+pronoun in second position is that tense-aspect clitics are being reanalysed as modals, perhaps even moving towards a Warlpiri-type system involving a base+pronoun. Given that both =*yi* and =*ngka* can attach to verbs even when they are not in initial position, as (26) above demonstrates, suggests that this is a less likely analysis.

A final Garrwa form which deserves some mention here is the future marker *ja*. *Ja* frequently occurs prior to pronouns in both initial and second position, illustrated in (30a) from a narrative text.[28] If there is no pronoun, *ja* occurs encliticised to verbs, regardless of position, as in (30b) where it occurs utterance-finally.

(30)	a.	*kuyu*=ja=*nurru*	*narri-nya*	*bayangarri*	ja=*narri*
		bring=FUT=1PL.EXCL	2PL-ACC	west	FUT=2PL

27. The more reduced forms of the tense-aspect markers following pronouns suggest a tighter bond. Elicitations of Garrwa clauses by Ken Hale in the early 1960s, when the language was much stronger, suggest that this "auxiliary" unit was more robust a couple of generations ago. Alternations in tense-aspect placement were noted by the Furbys during their work in the late 1960s, early 1970s suggesting that the paradigm shift had begun while the language was still strong, possibly dating earlier than Hale's time in the field.
28. Hale's 1962 fieldnotes have examples of *ja* occurring as an enclitic on pronouns (e.g., *janyba=ngayi*=ja *jamba nganyindurri* 'I'll throw dirt at you'), but this never occurs in today's language use.

jungku / *jarribirri-na*
sit strong.building-LOC
'We're going to take you across the river. You're going to stay there, in a strong building.' (4.5.01.1)

b. *winyurru* *bardajba*=ja / *julaki*
directly come=FUT airplane
'(it) will be coming directly, (an) airplane.' (4.5.01.3)

So unlike other modal clitics, *ja* may occur in utterance-initial position, as interrogatives and the negative particle *miku* do. Its flexibility of placement in either initial position or second position, and its regular occurrence as the site for pronoun attachment (cf. *yili* which occurs either side of the pronoun), make it look superficially like a Warlpiri auxiliary base. The range of possibilities for where *ja* occurs suggests that although it has properties of a modal clitic it is not especially associated with second position.

In summary, the Garrwa system shows several significant features which suggest the grammaticalisation of an auxiliary complex which is much less developed than the auxiliaries found in Warlpiri and Wambaya. This can be seen both in the lack of a distinct paradigm of bound pronominals and in the paradigmatic flux of tense, aspect, and, to some degree, modal categories. Like Wambaya, modals and pronouns appear attracted to the position rather than to the pragmatic status of the pronouns. The tense-aspect morphemes have been described as in a state of "paradigmatic flux" with past and present morphemes perhaps on their way to becoming verb inflections, while habitual and future forms share more with other modals.

3.5. *Comparison of systems in the three languages*

In this section I summarise the properties of the three languages under discussion and present some hypotheses concerning their origins as clitic clusters. I return to their relationship to second position in Section 4.

Table 2 presents a summary of the grammatical and pragmatic properties of the placement of clitic clusters in the three languages.

What do these properties suggest about the relationships between these systems? Clearly the Wambaya and Garrwa systems look more similar to each other than either of them does to Warlpiri. In both Wambaya and Garrwa, tense-aspect marking follows the pronominal clitics, which categorically occur in second position. In Warlpiri, aspectual meanings in the base precede pronominal clitics. Modal clitics may precede pronouns in the clitic cluster, although a greater range of modal forms are found in Garrwa than in Wambaya. In Warlpiri, complementisers which may have modal meanings are found preceding the other clitics in the complex. There is no evidence that the Wambaya and Garrwa modal clitics have any association with clause linkage.

Table 2. *Summary of properties of clitic clusters in Warlpiri, Wambaya, and Garrwa*

	Warlpiri	Wambaya	Garrwa
Grammatical categories found in 2P	(Comp)+Aspect +Pronoun	(modal)+Pronoun +TAM+(Dir)	(Modal)+Pronoun +(TAM)
How many pronoun paradigms?	Two	Two (but relatively transparent relationship with free pronouns)	One
Status of initial position	Focused forms occur initially	Focus is initial, verb is commonly initial if no focus	Focus is initial, verb is initial if no focus
Position of pronominal clitics	Attach to auxiliary base	Attach to some modals, otherwise directly to initial position	Attach to modals, otherwise directly to initial position
Position of auxiliary as a whole	Variable, depending on presence or absence of COMP in addition to presence of focus in the clause	Strictly second position	Strictly second position

Nonetheless the clustering of a range of operator (e.g., tense-modality) and inflectional categories in second position makes Warlpiri, Wambaya, and Garrwa appear, on the surface, to have similar grammars. As the languages were traditionally spoken in close proximity, and other languages of this region show similar clusterings of grammatical information (e.g., Yukulta, Gurindji, Mudburra), the similarities may have arisen from contact-related pressures, but our understanding of the precise nature of these historical relationships is currently too sketchy to say more here.

The Warlpiri system belongs to the same family of language change patterns described by McConvell (1996, forthcoming) for Ngumpin languages.[29] In some senses this is unsurprising, given the established relationships between these languages: Warlpiri is a relatively close relative of Ngumpin languages while Wambaya and Garrwa are both suffixing non-Pama-Nyungan languages. This raises the question then of whether the Wambaya and Garrwa systems

29. Laughren (2002: 117–122) also presents a comparison between some synchronic properties of Gurindji (Ngumpin) and Warlpiri that show clear similarities.

can be accounted for by the same analysis. Despite the surface similarities, the evidence seems to suggest that they should be analysed independently.

Historically, the association of pronouns and tense-aspect information in a Wambaya auxiliary emerged from the loss of the inflected verb, still seen in other Mirndi languages (Green 1995, Green & Nordlinger 2004). The origins of the Garrwa system are less clear. Garrwa verbs are completely uninflected synchronically, which makes them look like coverbs. However, the lack of a separate paradigm of bound pronouns coupled with the flexibility of attachment between pronouns and tense-aspect marking makes it hard to argue that the existing pronoun+tense-aspect clitic structure is the remains of an earlier system of inflected verbs such as we see for Mirndi languages.[30]

Further evidence for the independent development of clitic clusters in these languages comes from the status of their pronominal systems. Warlpiri and Wambaya both have separate paradigms for bound and free pronouns while Garrwa has only one set of pronouns. Warlpiri pronominal clitics bear little resemblance to their free counterparts while Wambaya pronominal clitics are transparently related to free pronouns. Indeed all non-singular NOM/ERG free pronouns are identical to A and S clitic forms with the addition of *-wani/-yani* (e.g., 1DU.INCL: *mirndiyani* ∼ *mirndi*; 3DU: *wurluwani* ∼ *wurlu*, etc.). This suggests that Wambaya free pronouns are derived from the older bound set – the set of reanalysed pronominal prefixes, supported by Green & Nordlinger's (2004) demonstration that the Wambaya bound forms have a very old association with other Mirndi languages, going back to Proto-Mirndi.

In contrast, while Garrwa pronouns may be prosodically dependent on the preceding constituent, there is no evidence that they derive from pronominal prefixes. Furthermore, the similarities in the pronoun system between Garrwa and forms reconstructed for Proto-Pama-Nyungan, established by Blake (1990), suggest that, if anything, Garrwa pronouns were moving from a single free paradigm, as seen in many Pama-Nyungan languages, towards a bound system, as predicted by the grammaticalisation schema for Australian bound pronouns presented in Dixon (2002: 354). Unlike both Warlpiri and Wambaya, which allow "clitic doubling" for more than one core argument, Garrwa does neither allow systematic clitic doubling, nor uses its pronouns in contexts of agreement.[31] The differing statuses of the pronominal part of the clitic cluster in the three languages suggest three different origins for the clitic clusters we see today.

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30. It should be noted, however, that the precise origins of the Warlpiri system are also unclear. Although the base component of the auxiliary contributes to the aspectual meaning of the clause, there is no evidence that such forms originated as inflected verbs (cf. Wambaya).

31. I'm grateful to a reviewer for pointing this out.

The status of tense-aspect-modality categories in the three languages also supports the notion that the three systems should be considered independently. Warlpiri has retained verb inflections for tense so the aspectual and modal meanings of the auxiliary base contribute only one part of the temporal-realis meaning of the clause. As noted in Section 2, McConvell (1996: 300–302) accounts for the gravitation of pronominal clitics to such aspectual forms as part of the shift from second position encliticization to encliticization to a complementiser category, which just happens to carry temporal information.[32]

The story is quite different for Wambaya and Garrwa. In Wambaya, only future is marked as a verb category, other tense-aspect meanings being expressed in the auxiliary alone. In Garrwa all temporal-realis meanings are encoded in clitics and there are no inflectional categories for argument categories (like person, number, gender) or tense-aspect-modality categories expressed on the verb.[33] As mentioned earlier, the presence of tense-aspect-modality categories in Wambaya can of course be analysed as the remnant of the old inflected verb system. The fluid situation for tense-aspect clitics in Garrwa suggests that the language was undergoing a major reorientation with respect to its grammatical structure, one in which tense-aspect clitics were becoming verb inflections. While we might hypothesise that such tense-aspect markers originated as verbs, as they do in so many of the world's languages, we have no real evidence of their origin at present. Certainly the status of the Garrwa pronoun system, as presented above, is counter-evidence to the idea that the current second position complex is derived from the old non-Pama-Nyungan verb inflections (i.e., pronominal prefixes and tense-aspect-modality suffixes) as they are in Mirndi languages. If this is the case, it also suggests that the associations of pronouns, tense-aspect marking, and modals have more recently gravitated together as an accumulation of grammatical material in second position.

The positioning of modal clitics in Garrwa, and to some extent in Wambaya, between the initial constituent and the pronoun bears a superficial resemblance to the Warlpiri auxiliary, in which pronominal clitics are drawn to a (complementiser+)base. It is unclear however that this feature of the Wambaya and Garrwa systems is a sign of the development of a Warlpiri-type auxiliary construction. The placement of any clitics between the auxiliary and the initial constituent is fairly marginal in Wambaya (restricted to *=miji* 'might'), but more robust in Garrwa (e.g., there are a number of such clitics and some of them are fairly common in discourse). Further work needs to be done on the syntax of

32. Patrick McConvell (personal communication) points out that the origins of "base" forms in Ngumpin-Yapa auxiliaries paint a complex picture as they derive from different kinds of forms including old complementisers and epenthetic forms.
33. All verb morphology in Garrwa is associated with the formation of complex sentences.

modals in Garrwa; however, the strict positioning of deontic =*kiyi* and epistemic =*wali* directly after the initial constituent, and preceding the pronominal forms, might be analysed as the first clitic in the clitic cluster WHEN THEY OCCUR. Variation in the position of the Garrwa future marker *ja*=, which may occur both clause-initially and in second position preceding the pronoun, adds a further complexity to the analysis of the status of modal markers in Garrwa which goes beyond the scope of this article.

4. Second position: Grammatical and pragmatic motivations

Recall that Cysouw's (2003) typology of pronominal clitics demonstrated a very close association between pragmatic prominence and clitic attraction. This was attributed to the attraction of the least focused information to the most focused, where "focus" is defined as a prominent, but not necessarily new discourse entity. Based on this observation it was suggested that the prevalence of second position in Australian languages might arise from the intersection between attraction to the most focused constituent and the tendency for the most focused constituent to occur in clause-initial position. This analysis assumes that the pragmatics then drives the grammaticalisation of the most non-focused information in the clause, the "bare bones" grammatical information, to form a categorical association with second position. In this section I consider how this idea relates to the properties of the Warlpiri, Wambaya, and Garrwa clitic clusters.

According to McConvell (1996: 300), the development of the kinds of auxiliary systems we see in Ngumpin languages, and probably also Yapa languages like Warlpiri, began with second position cliticisation of pronouns. The development of a "base" component of auxiliary complexes of the kind seen in these languages arises when there is a categorical association to the form, or set of forms, to which the pronominal clitic attaches. In Warlpiri, while the origins of the base are obscure, synchronically the choice of base form interacts productively with the verbal tense-aspect-modality system, contributing to the overall tense-aspect meaning of the clause.

If second position cliticisation of pronouns occurred prior to the incorporation of the base, we should analyse the base forms as derived from older forms which occurred in initial position. In contemporary Warlpiri, the base+pronominal clitic construction operates as a single unit for the purposes of syntax, which itself predominantly occurs in second position. Initial position is reserved for propositional particles, focused constituents, and complementisers. As outlined in Section 3.2 above, there is evidence that while complementisers retain their syntactic preference for initialness, motivated by clause-linking functions, they move into second position in cases where there is a focused constituent (e.g., (13) above). In cases where there is both a propositional par-

ticle and a focused constituent (e.g., (14) above), the complementiser+rest of auxiliary may be found even further into the clause.

The fact that complementisers must give up their favoured initial position for focused information, is evidence of the ongoing relevance of pragmatics (i.e., principles of information packaging) to the development of clitic clusters in Warlpiri. In order to preserve initial position as the site for types of focus, other information must occur elsewhere in the clause. On the surface, this supports the model of clitics being attracted to focused information, which happens to occur initially in Warlpiri. However, the fact that complementisers do occur initially when there are no such focused elements indicates that their second position status (and therefore the second position status of the auxiliary as a whole) is related to their being "blocked" from occurring elsewhere. This makes the placement of the auxiliary a matter of syntax, and not just of pragmatics, consistent with Laughren's (2002) and Legate's (forthcoming) analyses of the Warlpiri auxiliary. It also supports McConvell's view of auxiliary placement in Ngumpin languages as driven by a combination of pragmatic and syntactic factors.

In the case of Warlpiri, we see a gradual addition of more grammatical information, including tense-aspect information, to a clitic cluster hypothesised to have started with pronominal clitics only (as we see in many other Pama-Nyungan languages).[34] The Wambaya auxiliary has an entirely different history. The association of tense-aspect information with pronominals arises from an earlier verb form, a form which need not have occurred in second position. Garrwa has not even developed an identifiable set of bound pronouns, and yet unless they are "prominent", they are always found in second position, regardless of the pragmatic status of what occurs initially. This suggests that, for Garrwa, the placement of pronouns in second position occurred prior to their cliticisation. This suggests very strongly that, for Garrwa at least, the motivation to put forms in second position is not driven by the need to have something to attach to. Rather, the loose cliticisation of these pronouns is a consequence of their fixed occurrence in second position.

In Garrwa modals, which occur prior to pronouns, and tense-aspect markers, which mostly occur following pronouns, can be described as gravitating to second position independently of pronominals. This is reflected in the range of ordering possibilities discussed in Section 3.4.[35] In Warlpiri, the aspectual and

34. The motivations for the original pronominal clitic attachment to second position in Warlpiri is unknown at this point. The main issue for this article is the continuing accumulation of other grammatical information in this position.

35. Since there is almost no Garrwa data earlier than the 1960s, it is very difficult to tell whether the past habitual clitic *=yili* was moving into the clitic cluster as a tense marker, or whether it was moving out of position in the complex to be a modal clitic preceding pronouns. There

modal meanings find themselves in second position by virtue of their grammaticalisation with pronominal clitics. In Garrwa, it seems that pronouns and tense-aspect and modal markers have independently found their way to second position as the clustering point for bare bones grammatical information.

The important question here is whether the categorical association with second position in Wambaya and Garrwa arose from pragmatic or other factors. In both languages this initial constituent is either a pragmatically prominent NP, a "focus operator" such as an interrogative or negative, or a verb (which need not be pragmatically prominent). The difference between these languages and Warlpiri in this regard is in the placement of verbs in initial position as a "default".

Given the overwhelming crosslinguistic tendency for pronominal clitics to associate with either prominent constituents or verbs (observed in Cysouw 2003) and the overwhelming tendency for prominent constituents to occur initially in Australian languages, it seems that both Wambaya and Garrwa have conflated the pragmatic and syntactic features into one category: second position. The verb-initial status of these languages may have prevented the kind of gravitation towards complementisers found in Ngumpin-Yapa languages, resulting in the type of auxiliary complex we see in Warlpiri. There is no evidence at this stage of an association with the category "verb", as has occurred in many Australian languages.

The placement of modal clitics in Garrwa (and to some extent Wambaya) and complementisers in Warlpiri, together with the grammaticalisation of tense-aspect information in the clitic clusters of all three languages, suggests that Cysouw's (2003) typology for pronominal clitic placement may be extended to other categories, a feature already seen in the description of "floating clitics". Cysouw suggested that languages vary according to whether they place information about arguments (i.e., pronominal clitics) close to predicates (as the core of the clause) or close to focused information (as an attraction of the least prominent information to the most prominent). In Garrwa and Wambaya, and to some extent Warlpiri, clausal information has also been influenced by the intersection of the association between a focused initial position and an attraction to focus.[36] However, the fact that second position phenomena are also found attached to non-focused elements (e.g., Wambaya and Garrwa verbs), and, in the case of Warlpiri, may occur elsewhere in the clause, supports McConvell's (1996, forthcoming) analysis for Ngumpin languages – that second position

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is no evidence that it associates with any particular category (i.e., verb), as past and present morphemes do.

36. An alternative analysis might be that such categories are trying to get close to the verb and that results in an association with initial position in these languages.

phenomena can only be explained through a careful analysis of both pragmatic and syntactic environments.

5. Conclusion

Accounting for the behaviour of clitic systems has largely been the domain of formal syntax and phonology. While these approaches have uncovered and indeed explained much about the patterns of clitics and their relationship to second position in many languages, much still remains to be explained. This article has explored a side of this story largely ignored in the literature on clitics – the relationship between pragmatics and syntax in the development of second position clitic clusters.

The results of the current investigation of second position phenomena in three different languages spoken in a particular area of Australia has shown that despite the potential for contact-related similarities between the languages, their second position clitic clusters derive from quite different sources (e.g., complementisers, inflected verbs, free pronouns). There are also differences in whether the clitic clusters can be described as an accumulation and then grammaticalisation of different grammatical categories in second position, as we see in different ways with Warlpiri and Garrwa, or an association of an already-formed cluster of grammatical categories with second position, as we see with Wambaya. What unites these quite different grammatical systems is the overall motivation to place more schematic grammatical information like person-number or tense-aspect marking directly after the most prominent information in the clause, which here I have called "focus". In Warlpiri, this pragmatic explanation is complicated by the differing degrees to which the elements of the clitic cluster (i.e., complementiser, base, and pronominal clitics) orient to second position. In Wambaya and Garrwa, the pragmatic explanation is complicated by the use of the verb as a pragmatically neutral initial constituent.

The result of this investigation raises many questions and issues for future research on this topic. If we assume, as I have done here, that language use is the driving force behind language change, then we need more analysis of how speakers use grammatical information, and why it might congregate in second position. One hypothesis is related to what we know about the chunking of information in utterances. It has been shown that in actual discourse there is a tendency for utterances to contain only one new or prominent "idea" (Chafe 1994). Utterances frequently consist of this focused information, expressed as a substantial constituent, with grammatical information providing more schematic orientation and reference for the rest of the utterance. If the language is one in which this "substantial constituent" occurs initially, such as the languages examined here, then utterances will very frequently consist

of an initial "new or prominent idea", the rest of the grammatical information in the clause, and nothing else. The result is a congregation of grammatical information in second position.

A hypothesis such as this must of course be tested through a detailed analysis of spontaneous spoken language, a task which goes far beyond the scope of this article. Here I hope to have demonstrated both the range of categories that may develop a grammatical relationship with second position, and a range of ways that such categories may end up there. I also hope to have exposed some new ideas about the relationship between first and second position more generally and opened up some areas for further inquiry.

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Abbreviations: A transitive subject; ABS absolutive; ACC accusative; ALL allative; ANAPH anaphoric element; AUX auxiliary; CAT catalyst; CAUS causative; CENTR centralised coincidence; CL classifier; COLL collective; COMP complementiser; CONN connective; DAT dative; DIR directional; DM discourse marker; DU dual; ERG ergative; EXCL exclusive; F feminine; FUT future tense; HAB habitual aspect; INCL inclusive; IND indicative; INFER inferential; IO indirect object; IRR irrealis; LOC locative; NACT non-actual; NEG negative; NM non-masculine; NOM nominative; NPAST non-past tense; NS non-subject; NSG non-singular; O object; P transitive patient; PAST past tense; PL plural; PRES present tense; PRIV privative; PROG progressive; PROP proprietive; REDUP reduplication; REMPINFR remore past inferred; S intransitive subject; SG singular; TAM tense-aspect-modality; TH thematic consonant; TOP topic; I/II/III/IV class, I/II/III/IV gender.

References

Aikhenvald, Alexandra (2002). Typological parameters for the study of clitics, with special reference to Tariana. In R. M. W. Dixon & Alexandra Aikhenvald (eds.), *Word: A Cross-Linguistic Typology*, 42–78. Cambridge: Cambridge University Press.

Anderson, Stephen R. (1993). Wackernagel's revenge: Clitics, morphology, and the syntax of second position. *Language* 69: 68–98.

— (2005). *Aspects of the Theory of Clitics*. Oxford: Oxford University Press.

Austin, Peter (2001). Word order in a free word order language: The case of Jiwarli. In Jane Simpson, David Nash, Mary Laughren, Peter Austin, & Barry Alpher (eds.), *Forty Years On: Ken Hale and Australian Languages* (Pacific Linguistics, 512), 305–323. Canberra: Australian National University.

Austin, Peter & Joan Bresnan (1996). Non-configurationality in Australian Aboriginal languages. *Natural Language & Linguistic Theory* 14: 215–268.

Baker, Mark (2001). The natures of nonconfigurationality. In Mark Baltin & Chris Collins (eds.), *The Handbook of Contemporary Syntactic Theory*, 407–438. Oxford: Blackwell.

Barbosa, Pilar (1996). Clitic placement in European Portuguese and the position of subjects. In Halpern & Zwicky (eds.) 1996, 1–40.

Blake, Barry (1983). Structure and word order in Kalkatungu: The anatomy of a flat language. *Australian Journal of Linguistics* 3: 143–175.

— (1990). Languages of the Queensland/Northern Territory border: Updating the classification. In Peter Austin, R. M. W. Dixon, Tom Dutton, & Isobel White (eds.), *Language and History: Essays in Honour of Luise A. Hercus* (Pacific Linguistics, C-116), 49–66. Canberra: Australian National University.

Bowe, Heather (1990). *Categories, Constituents, and Constituent Order in Pitjantjatjara: An Aboriginal Language of Australia.* London: Routledge.

Breen, Gavan (2003). Wanyi and Garrwa comparative data. In Evans (ed.) 2005, 425–462.

Camdzic, Amela & Richard Hudson (2006). Serbo-Croat clitics and Word Grammar. *Research in Language 4*. http://www.phon.ucl.ac.uk/home/dick/sc%20clitics.htm

Chafe, Wallace (1994). *Discourse, Consciousness and Time*. Chicago: Chicago University Press.

Choi, Hye-Won (1999). *Optimizing Structure in Context: Scrambling and Information Structure.* Stanford, Cal.: CSLI.

Condoravdi, Cleo & Paul Kiparsky (2001). Clitics and clause structure. *Journal of Greek Linguistics* 2: 1–40.

Cysouw, Michael (2003). Towards a typology of pronominal cliticization. Paper presented at the 5th meeting of the Association for Linguistic Typology, Cagliari, Italy. Handout downloadable at http://email.eva.mpg.de/~cysouw/pdf/cysouwALTV.pdf

Dixon, R. M. W. (2002). *Australian Languages: Their Nature and Development*. Cambridge: Cambridge University Press.

Donaldson, Tamsin (1980). *Ngiyambaa: The Language of the Wangaaybuwan.* Cambridge: Cambridge University Press.

É. Kiss, Katalin (1998). Identificational versus informational focus. *Language* 74: 245–273.

Evans, Nicholas (2003). Comparative non-Pama-Nyungan and Australian historical linguistics. In Evans (ed.) 2003, 3–25.

— (2005). Australian languages reconsidered: A review of Dixon (2002). *Oceanic Linguistics* 44: 242–286.

Evans, Nicholas (ed.) (2003). *The Non-Pama-Nyungan Languages of Northern Australia*. (Pacific Linguistics, 552.) Canberra: Australian National University.

Facundes, Sidney Da Silva (2000). The language of the Apurinã people of Brazil. Doctoral dissertation, State University of New York at Buffalo.

Furby, Christine E. (1972). The pronominal system of Garawa. *Oceanic Linguistics* 11: 1–31.

Gerlach, Birgit & Janet Grijzenhout (eds.) (2000). *Clitics in Phonology, Morphology and Syntax.* Amsterdam: Benjamins.

Green, Ian (1995). The death of "prefixing": Contact-induced typological change in northern Australia. *Berkeley Linguistics Society* 21: 414–425.

Green, Ian & Rachel Nordlinger (2004). Revisiting proto-Mirndi. In Claire Bowern & Harold Koch (eds.), *Australian Languages: Classification and the Comparative Method*, 291–312. Amsterdam: Benjamins.

Hale, Kenneth (1973). Person marking in Walbiri. In Stephen Anderson & Paul Kiparsky (eds.), *A Festschrift for Morris Halle,* 308–344. New York: Holt, Rinehart & Winston.

— (1983). Warlpiri and the grammar of non-configurational languages. *Natural Language & Linguistic Theory* 1: 5–47.

— (1992). Basic word order in two "free word order" languages. In Payne (ed.) 1992, 63–82.

Halpern, Aaron L. (1995). *On the Placement and Morphology of Clitics*. Stanford, Cal.: CSLI.

Halpern, Aaron L. & Arnold M. Zwicky (eds.) (1996). *Approaching Second: Second Position Clitics and Related Phenomena*. Stanford, Cal.: CSLI.

Hercus, Luise A. (1994). *A Grammar of the Arabana-Wangkangurru Language, Lake Eyre Basin, South Australia*. (Pacific Linguistics, C-128.) Canberra: Australian National University.

Jelinek, Eloise (1984). Empty categories, case and configurationality. *Natural Language & Linguistic Theory* 2: 39–76.

Kärkkäinen, Elise (2002). *Epistemic Stance in English Conversation: A Description of its Interactional Functions, with a Focus on* I Think. Amsterdam: Benjamins.

Keen, Sandra (1983). Yukulta. In R. M. W. Dixon & Barry J. Blake (eds.), *Handbook of Australian Languages, Volume 3*, 190–304. Amsterdam: Benjamins.

Laughren, Mary (1982). A preliminary description of propositional particles in Warlpiri. In Stephen Swartz (ed.), *Papers in Warlpiri Grammar: In Memory of Lothar Jagst*, 129–163. Darwin: Summer Institute of Linguistics.

— (2002). Syntactic constraints in a "free word order" language. In Mengistu Amberber & Peter Collins (eds.), *Language Universals and Variation*, 83–130. Westport, Conn.: Praeger.

Laughren, Mary, Rob Pensalfini, & Tom Mylne (2004). Accounting for verb initial in an Australian Language. In Andrew Carnie, Heidi Harley, & Sheila Ann Dooley (eds.), *Verb First: Papers on the Syntax of Verb Initial Languages*, 367–401. Amsterdam: Benjamins.

Legate, Julie (2002). Warlpiri: Theoretical implications. Doctoral dissertation, Massachusetts Institute of Technology.

— (forthcoming). Warlpiri and the theory of second position clitics. *Natural Language & Linguistic Theory.*

Martin, Jim (2004). Metafunctional profile: Tagalog. In Alice Caffarel, Jim Martin, & Christian Matthiessen (eds.), *Language Typology: A Functional Perspective*, 255–304. Amsterdam: Benjamins.

McConvell, Patrick (1996). The functions of split-Wackernagel clitic systems: Pronominal clitics in the Ngumpin Languages (Pama-Nyungan family, Northern Australia). In Halpern & Zwicky (eds.) 1996, 299–331.

— (2006). Grammaticalization of demonstratives in subordinate complementizers in Ngumpin-Yapa. *Australian Journal of Linguistics* 26: 107–137.

— (forthcoming). Contrast, topic and clitic placement in Eastern Ngumpin Languages: Synchronic variation and diachronic transition. In Mushin & Baker (eds.) forthcoming.

McGregor, William (1990). *A Functional Grammar of Gooniyandi*. Amsterdam: Benjamins.

Mithun, Marianne (1992). Is basic word order universal? In Payne (ed.) 1992, 15–62.

Mushin, Ilana (2001). *Evidentiality and Epistemological Stance: Narrative Retelling*. Amsterdam: Benjamins.

— (2002). Garrwa tense/aspect/modal clitics – a discourse-pragmatic account. Paper presented at the Australian Linguistics Society annual meeting, Sydney.

— (2004). Loosening the ties: Variation in Garrwa tense/aspect/mood placement. Paper presented at the Workshop on Discourse and Grammar in Australian Languages, Melbourne.

— (2005a). Second position clitic phenomena in North-Central Australia: Some pragmatic considerations. In Ilana Mushin (ed.), *Proceedings of the 2004 Conference of the Australian Linguistics Society.* Available at http://ses.library.usyd.edu.au/handle/2123/93

— (2005b). Word order pragmatics and narrative functions in Garrwa. *Australian Journal of Linguistics* 25: 253–273.

Mushin, Ilana & Brett Baker (eds.) (forthcoming). *Discourse and Grammar in Australian Languages*.

Mushin, Ilana & Jane Simpson (2005). Discourse prominence in four Australian languages. Paper presented at the Australian Linguistics Society annual meeting, Melbourne.

Nash, David (1986). *Topics in Warlpiri Grammar*. New York: Garland.

Nordlinger, Rachel (1998). *A Grammar of Wambaya, Northern Territory (Australia).* (Pacific Linguistics, C-140.) Canberra: Australian National University.

O'Grady, Geoffrey N., Charles F. Voegelin, & Florence M. Voegelin (1966). Languages of the world: Indo-Pacific (Fascicle 6). *Anthropological Linguistics* 8-2: 1–161.

O'Shannessy, Carmel (2005). Light Warlpiri: A new language. *Australian Journal of Linguistics* 25: 31–57.

Payne, Doris (1992). Nonidentifiable information and pragmatic order rules in 'O'odham. In Payne (ed.) 1992, 137–167.

Payne, Doris (ed.) (1992). *Pragmatics of Word Order Flexibility.* Amsterdam: Benjamins.

Pensalfini, Rob (2003). *A Grammar of Jingulu, an Aboriginal Language of the Northern Territory*. (Pacific Linguistics, 536.) Canberra: Australian National University.

Rooth, Mats (1996). Focus. In Shalom Lappin (ed.), *The Handbook of Contemporary Semantic Theory*, 271–297. London: Blackwell.

Schultze-Berndt, Eva (2000). *Simple and Complex Verbs in Jaminjung*. (MPI Series in Psycholinguistics.) Nijmegen: Max Planck Institute for Psycholinguistics.

Sharp, Janet (2004). *Nyangumarta, a Language of the Pilbara Region of Western Australia*. (Pacific Linguistics, 556.) Canberra: Australian National University.

Simpson, Jane (1991). *Warlpiri Morphosyntax: A Lexicalist Approach*. Dordrecht: Kluwer.

— (2002). *A Learner's Guide to Warumungu*. Alice Springs: IAD Press.

— (forthcoming). Expressing pragmatic constraints on word order in Warlpiri. In Annie Zaenen, Jane Simpson, Christopher Manning, & Jane Grimshaw (eds.), *Architectures, Rules, and Preferences: A Festschrift for Joan Bresnan*. Stanford, Cal.: CSLI.

Simpson, Jane & Ilana Mushin (forthcoming). Clause initial in four Australian languages. In Mushin & Baker (eds.) forthcoming.

Smith, Ian & Steve Johnson (2000). Kugu Nganhcara. In R. M. W. Dixon & Barry Blake (eds.), *The Handbook of Australian Languages*, Volume 5: *Grammatical Sketches of Bunuba, Ndjébbana, and Kugu Nganhcara*, 357–507. Melbourne: Oxford University Press.

Swartz, Stephen (1988). Pragmatic structure and word order in Warlpiri. In *Papers in Australian Linguistics No. 17* (Pacific Linguistics, A-71), 151–166. Canberra: Australian National University.

Terrill, Angela (1998). *Biri.* (Languages of the World/Materials, 258.) München: Lincom Europa.

Vallduví, Enric & Maria Vilkuna (1998). On rheme and contrast. In Peter Culicover & Luise McNally (eds.), *The Limits of Syntax* (Syntax and Semantics, 29), 79–108. San Diego: Academic Press.

Wackernagel, Jacob (1892). Über ein Gesetz der indogermanischen Wortstellung. *Indogermanische Forschungen* 1: 333–436.

Zwicky, Arnold M. (1977). *On Clitics*. Bloomington, Ind.: Indiana University Linguistics Club.