# Topic and Focus in Ngardi 

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A thesis submitted in partial fulfilment of the requirements for the degree of Bachelor of Arts (Honours)

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## Acknowledgements

This thesis would not be possible without the generosity of Lee Cataldi and Tjama Napanangka, who transcribed and translated the texts upon which this thesis is based. I'm also very grateful to Lee for her work compiling a lexicon and grammar sketch, upon which my work is based.

I'd like to thank my supervisors Jane Simpson and Bill Foley for their guidance, support and patience. I'd like to thank my family for their support throughout this difficult last year.

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## 1 Introduction

In this paper I will be looking at pronominal clitics and their role in expressing Information Structure of the Australian language Ngardi. Ngardi is a language spoken natively now by only a handful of people. Ngardi is a free word order language, and as such, conditioning of word order appears not to be by grammatical function, but by some other means.

The theoretical framework within which I will be examining the Information Structure of Ngardi is Sentence Topic and Focus theory put forward by Lambrecht (1994). The theory revolves around the idea of determining the differences between sentences with the same logico-semantic content, but differing surface forms. The key to understanding these differences is incorporating the context in which they occur.

I argue that pronominal encliticisation, combined with the relative identifiability of a referent allows that referent as focal information in the sentence. I posit a natural positioning of the pronominal clitics based on examination of equational sentences, and show how variant forms indicate special focus structures. I conclude that obligatory use of pronominal clitics appears to dramatically increase the surface form variance and expressability in Ngardi. Based upon the evidence that I have gathered, that pronominal encliticisation and a mix of positioning and identifiability, can establish a referent as part of the focus. Positionally relative to this element other referents are then either topical or focal.

## 2 Theoretical Framework

When discussing discourse pragmatics it is extremely important to be clear about the meaning of the terminology used. Historically there has been much confusion, with certain theoretical frameworks adopting near identical terminology, sometimes with the exact opposite meaning to a similar framework.

### 2.1 Information Structure

In many languages a sentence with a certain logico-semantic value may be realised in many different ways. These sentence variants are all grammatical, yet the speaker will choose one form over another in discourse. What differentiates these sentences is Discourse Pragmatics.

The domain of Discourse Pragmatics falls somewhere between syntax, semantics and pragmatics, encompassing aspects of each of these systems. Discourse Pragmatics is one part of the larger Information Structure of discourse. Vallduvi uses the term Information Packaging to "denote...nonsyntactic non-logico-semantic structuring of sentences." (1990:12) while Lambrecht describes it as "a component of sentential grammar" which pairs propositional content and lexico-grammatical structures while paying attention to interlocutors' mental states (Lambrecht 1994). The interlocutors then use this information structure to both guide interpretation of their own utterances and themselves interpret the information within utterances they hear.

### 2.1.1 Information

The label "Information Structure" naturally implies that we are structuring information. But what is the information that we are structuring?

The "Information" of a given sentence is described by Vallduvi in terms of the propositional content of the sentence and the knowledge store of the hearer.
Propositional content and the knowledge store are both sets of logico-semantic values. The information within a given sentence is the values within the set of propositional content but outside the hearer's knowledge store. Simply put, Information is what is being conveyed to the hearer.

This means that the information within a sentence can be realised in three different ways:

- If the propositional content of a sentence is completely known to the hearer, then no information is being imparted.
- If the propositional content is completely unknown to the hearer, then all propositional content is being imparted to the hearer.
- If the propositional content is partially known to the speaker then the information being imparted is the propositional content minus the known content.

In this take on Information Structure, Information does not mean the logico-semantic value of a sentence but its value relative to the hearer's knowledge store. Vallduvi argues that in addition to this the speaker is conscious of the hearer's knowledge store and incorporates this into the theory of Information Structure.

Lambrecht expands upon this to a broader definition incorporating the mental states of both interlocutors. The propositional content of a speaker's utterance is a subset of the knowledge store of the speaker. The imparting of information is therefore the transference of some values within the knowledge store of the speaker to the knowledge store of the hearer. Included in the knowledge store of the speaker are values relating to assumptions of the contents of the hearer's knowledge store. The speaker incorporates this knowledge through the information structure of their sentence but even so, the intersection between the set of propositional content provided by the speaker and the inverse set of the knowledge store of the hearer will vary in size.

An important point of clarification to make here is that "propositional" content does not equate with truth-values. This propositional content is drawn from the knowledge stores of speakers and these mental states have nothing to do with truth in an abstract and absolute logical sense. Lambrecht often uses the term "entity" to denote this "propositional content" in recognition of the fact that this content is not always propositional in a logical sense. I will use both terms in the same way.

Our understanding and interaction with the world is driven by Information. According to Clark (1996), what drives our interaction with others is the belief that we share information with others. Clark calls this shared information "Common Ground". Common Ground is made up of multiple people perceiving something, believing their counter-parts to perceive this, and the incorporation of the perception of this perceiving itself. That is, perception is recursively defined as the act of perceiving and the perception of that act of perceiving. With multiple people, we are conscious not just of our own act of perception, but also the perceptions and acts of perception of others.

For instance, I may sit and watch television. I perceive both what is happening on the TV show, and the act of watching the TV as well. Someone joins me and we both watch the TV. Because I am watching the TV and my perception is of the TV and the act itself, I assume this of the second person as well and incorporate this into my perception. Because I perceive in this way, I also assume that my counterpart is doing the same thing. Therefore I incorporate this into my perception.

I could continue, folding more perception of perception into my argument, but there is an upper limit - difficult to define, but easy to recognise - on how far I can take this. If there was a drama on the TV, which had two characters, Fred and Mary, and it became apparent that Fred liked Mary, then not only do I believe that Fred likes Mary, but also that the person watching the TV with me believes that Fred likes Mary. Holding beliefs about others' minds, about their beliefs and desires is known as Intersubjectivity, or Theory of Mind. This lattice of perception is based on my beliefs about the beliefs of others believing something. After much research in the field of psychology, the number of levels that that an average human can operate at has been determined to be 4 . That is we can understand the Fred and Mary sentence above, but adding extra levels of perception to this becomes difficult. Common Ground incorporates not just a simple assumption of what our counterpart knows or perceives, rather it incorporates this lattice of perception of perception.

Watching television is just one context that leads to the creation of Common Ground. Two people may share a knowledge of physics, or through having a conversation, they may create a context of Common Ground. What I will call Context (capitalised),

Lambrecht calls the Schema or Frame. Information cannot exist free of some kind of context and so Context is a key concept in establishing Common Ground. I take Context in Common Ground as possibly broad, as in a shared knowledge of Physics, or narrow as in a shared personal experience. It can be physical, as in the Context created of shared perceptions of physical surroundings, or abstract, as in a context created purely through a conversation of, for instance, hypothetical nature.

In a generic sense, in a sentence what is regarded as new information is that which the speaker hopes to add to the speaker's knowledge. What is regarded as old information is that which the speaker assumes is known by the hearer. However, the assumptions of the speaker can lead to a mismatch of what is regarded between speaker and hearer as new or old in a sentence. Common Ground is created in the mind. We make a lattice of assumptions about our counterpart as a starting point to a conversation and then modify our understanding of this Common Ground as we progress. Context creates the raw bounds of our Common Ground, but it too is essentially dynamic. Therefore tracking what the Context and Common Ground are is an important part of communication. Identification and tracking of what is new information and what is old is an essential part of the dynamic nature of Common Ground.

Lambrecht (1994:51) distances himself from the terms old and new information, which have (roughly speaking) traditional interpretations of correlating with constituents of the sentence. He uses the terms Pragmatic Presupposition (or often just Presupposition) and Assertion, which I will adopt for this thesis so as to avoid confusion.

### 2.1.2 Presupposition and Assertion

Presupposed content is essentially material in the Common Ground as defined above. In Lambrecht and Vallduvi's framework, presupposed content is drawn from the set of shared knowledge states which is drawn from both your own knowledge stores and perception of your counter-part's knowledge store. By being in the Common Ground, it can be derived from Context.

Asserted content is that which is believed by the speaker to be outside the Common Ground. In Lambrecht and Vallduvi's framework, asserted content is drawn from the set of knowledge states that the speaker believes to be outside the hearer's knowledge store. That is, the speaker wishes to impart something that they assume is not already known by the hearer and is also not derivable from Context.

### 2.1.3 Discourse Referents

Within a piece of information we refer to objects (in a non-grammatical sense).These things can be abstract or physical, present or not present, known or unknown. These objects I will label "Discourse Referents". One simple realisation of discourse referents in a sentence is through the use of anaphoric pronominals: I, you, them, it, and so on.

Important in the discussion of referents in discourse is the bounds within which these discourse referents can be created and tracked. Our mind imposes upon us limitations as the number and accessibility of discourse referents. We cannot switch between a current conversation and something discussed a week ago (without sufficient reorientation of the conversation), and at any given time there are a limited number of things that we can be talking about.

Lambrecht uses the terms Identifiability and Activation to describe these limitations. Identifiability refers to the assessment of whether a given discourse referent is within the Common Ground, while Activation is the degree to which a given discourse referent, already within Common Ground, is "lit-up" or fresh in the interlocutors' minds.

### 2.1.3.1 Identifiability

Identifiability does not equate with presupposition, as presupposition is an indication that some entity or propositional content is within the common ground. An identifiable discourse referent could occur in a presupposition, but it could also occur within an assertion. In the minds of the interlocutors, identifiable discourse referents would be in both interlocutors' minds, while unidentifiable referents would be only in the mind of the speaker. However, Identifiability is not a binary value, but rather a scale. Because it is derived from a subjective judgement by the speaker as to the
likelihood that a hearer can identify a discourse referent, it is underlyingly a gradation. One simple example to show this would be to consider drawing discourse referents from a physical context. Proximal referents could potentially be considered more Identifiable that distal referents. Unseen physical referents may be unidentifiable.

Lambrecht (1994:79) argues that in many languages there appears to be some correlation between Identifiability and the grammatical/semantic category of definiteness. That is, in some languages, the Identifiability of a discourse referent may be indicated explicitly through its expression as a definite or indefinite. For instance, the difference between:
"Pass me the knife"
and:
"Pass me a knife"
is the definiteness, indicated in English the definite article "the" and the indefinite article " a ". In using either of the sentences above I am indicating the identifiability of the referent. The referent of "the knife" is identifiable, while the referent of "a knife" is (generally) unidentifiable.

The expression of the split of definiteness and indefiniteness varies from language to language. Because Identifiability is a gradation rather than a binary value, a mapping of definiteness to Identifiability is going to vary based upon where a given language defines the split within the gradation

Where referents are unidentifiable, Lambrecht makes a further distinction of anchored versus unanchored. If I add some contextually orienting material, say "my aunt", to some unidentifiable referent "Mary", then I anchor the unidentifiable referent to a context within which my hearer will be able to identify it. Unidentified unanchored discourse referents have no contextual anchoring, becoming identifiable only within the context of the conversation within which they occur.

### 2.1.3.2 Activation

At any given time there are a limited number of discourse referents that can be salient within discourse. The concept of Activation represents the cognitive constraint of

Memory upon discourse. Like Identifiability, Activeness is a gradation. Upon mentioning a discourse referent in conversation, if the referent remains unmentioned after that, it decays in accessibility over time. Lambrecht breaks the gradation of Activation into three terms: Active, Semi-Active and Inactive.

An Active discourse referent is one that is current within the discourse. In other words, it is a referent that has been mentioned very recently in the conversation. After a referent's first mention, after which it is active, it would typically be represented in many languages through some kind of anaphora.

An inactive referent is simply a referent that has not been used prior to its utterance. Subsequently the referent is active. Cross-linguistically an inactive referent might be indicated by full lexical coding and/or through some accentuation (1994:96).

A Semi-Active referent naturally sits between Active and Inactive. It has either become less active through its lack of use as a formerly Active referent or is SemiActive because it is determinable contextually. As I mentioned above, an active referent that ceases to be referenced decays in "activeness" over time, until it is Semiactive. Also, by merit of being contextually construable, an inactive referent that is determined by the speaker to be identifiable is considered semi-active. The category of Semi-Active really holds two rather different types of discourse referents; for this reason I would prefer to discuss them explicitly as "Formerly Active" and "Contextually Construable" Discourse Referents. However, the relation between them is that they are both contextually construable. Formerly Active referents are construable through the context of the discourse itself. As such they may be realised through some kind of deictic anchoring to their given context, in order to make them more identifiable.

While Identifiability seems to have some correlates with the grammatical category of definiteness, Activation seems to correlate with Prosody and Morphology. In English (and other languages) Lambrecht argues (1994:93) that weak prosodic stress, pronominalisation and zero coding can indicate the Active status of a referent.

Pronominals naturally fit into the role of active discourse referents. As they are by definition anaphoric, that is, used to refer to a referent previously mentioned in some fashion, they are (almost always) active referents. Pronominals are a mix of semantic, Information Structure and Morpho-Syntactic features (Bresnan 2001). Crosslinguistically they are realised as varying mixes of these three features. Semantically, they are anaphoric and shift their reference relative to the speaker (for instance, "I" doesn't refer to a single person in the world of two interlocutors, it always refers to the speaker). Morpho-syntactically they may be realised with features of agreement such as person, number and gender. Their relation to Information Structure is a major part of this thesis, which I will discuss in Sections 4, 5 and 6. Bresnan (2001) describes a natural, cross-linguistic scale for the grammatical expression of pronominal forms:

Zero Bound Clitic Weak Pronoun Zero has no morpho-syntactic realisation, Bound are morphologically bound pronominals, Clitics have a place in syntax but are phonologically bound to some host, Weak pronominals are free, but don't have primary sentence stress, and Pronouns are free with primary sentence stress. These forms are different mixes of the features I mention above. No language has all these forms, but many have more than 1. As we shall see in Ngardi, the difference between types allows for expression of different kinds of information structure.

I should stress that these Morpho-syntactic and Prosodic features do not equate with Activation, as definiteness does not equate with Identifiability, rather they are structures available to the speaker to indicate the perceived activeness of that referent. Prototypically, they do correlate, and indeed there are strong semantic links between them. Other constraints may result in variation of the expression of Activeness. For instance, for disambiguation of reference to one of two active coordinated candidates, a fully lexicalised NP (Noun Phrase) might be used where a pronominal could have grammatically expressed a referent.

As I mentioned above, weak prosodic stress may indicate Activeness, but there is no corresponding contrast for use of strong prosodic stress. This means that use of prosodic stress, at least in terms of Activeness, is the unmarked form.

### 2.1.4 Discourse Pragmatics

So far we have features of grammar and cognitive constraints working together to define the Information Structure of a sentence, but there is a third aspect which combines with these to further define this structure. As I mentioned above, while two differently formed sentences might express the same logico-semantic content, the difference expressed by the use of one form or another is the realm of Discourse Pragmatics. This is normally broken down into the identification of Topic and Focus (and discourse neutral) sections of a sentence. As above, Topic and Focus do not simply align with features of grammar but there is a strong relation between them. There are various grammatical forms used to express Topic and Focus.

### 2.1.4.1 Topic

Generically, Topic is defined as what a sentence is about. In this thesis I will be using Lambrecht's notion of Topic. Topic is short for Topic constituent or Topic phrase. It does not refer to the Discourse topic.

If someone was introducing me to someone else, and they said:
"Tom speaks Japanese"
The Topic is myself, and the Topic Phrase or Topic NP is "Tom". I am the entity about which something is being said. The information being imparted is about me. The pragmatic predicate "x speaks Japanese" would be the focus in this utterance.

Topic does not equate to the traditional (English oriented) grammatical notion of subject but most of the time the two do align. The prototypical expression of Topic in many European languages is as the subject of a sentence, but in some circumstances the grammatical subject of sentence is less prominent than other constituents. There is a natural relation between Topic and presupposition, in as much as, for a sentence to be about something, that something should be presupposed. However, as with Topic and Subject, Topic and Presupposition roughly align rather than equate. Again, one might draw a connection between Topic and Activeness but as I will discuss below, Active referents can in fact be Focal.

The partial alignment of Topic with all these features is not what defines Topic status, rather, it is a pragmatically construed sentence relation. That is, it is actually construed from discourse context. While this is often realised through various kinds of syntactic, prosodic and morphological marking, and may often align with other cognitive states, this alignment does not define Topic status, but rather indicates it to the hearer.

A Topic relation is the relation of a cognitive representation of a discourse referent and a proposition about that referent. So in using the term Topic I am referring to this topical discourse referent. The notion of discourse referent is distinct from the linguistic expression of that referent however. As I have discussed previously, Discourse Referents are given bounds by Context and the limitations of the mind (represented by the cognitive categories of Identifiability and Activation). They are then realised morpho-syntactically. When referring to the actual constituent in a sentence I will explicitly use Topic Constituent, or more specifically Topic NP.

Topics can vary in their pragmatic acceptability in use in a sentence. Discourse referents may be given bounds by Common Ground but there is a range of points within that common ground that topics can be drawn from. Lambrecht defines a scale of acceptability from most acceptable to least (Lambrecht 1994:165):
a. active
b. semi-active (formerly active)
c. unused (contextually construable and within the common ground)
d. brand-new anchored (unidentifiable, but given context)
e. brand-new unanchored (unidentifiable)
(a) is a referent currently being used. (b) is a formerly active referent that has become semi-active. (c) is an inactive referent that is contextually construable and within the common ground. It is critical that it is within the common ground as this means that the speaker assumes it is construable to the hearer. For (d) and (e) the referent is inactive but not contextually construable. Anchoring gives the hearer a contextual framework within which to understand the otherwise unrecognisable referent, bringing it into the common ground. For instance "rex" may be completely unknown to the hearer, but "my dog Rex" anchors this otherwise unidentifiable referent as the dog belonging to the speaker.

### 2.1.4.2 Focus

Generically, Focus is defined as new information. As with Topic it is a pragmatically construed form related to, but not equating with a number of grammatical forms. In terms of Common Ground, Focal elements are considered by the speaker to be outside Common Ground and are packaged in a sentence to indicate this.

In the example I gave in the previous section "Tom speaks Japanese", I said that the pragmatic predicate "x speaks Japanese" is the focus. The relationship between the grammatical predicate "speaks Japanese" and the pragmatic predicate "x speaks Japanese" is subtle. While Topic NPs and Focal Predicates may be marked in a sentence, Focus is actually more like a semantic notion, than a region in a sentence.

Focus roughly aligns with that which is asserted by the speaker, but assertion implies propositional content. Focal elements could simply contain discourse referents Unidentifiable to the hearer, or could be propositional information about given Active referents.

Focus is often defined as the complement of Topic, in the sense that it prototypically is the pragmatic predicate to the topical discourse referent. However, in the practice of the application of the label, the definition between what falls under Topic and Focus can be blurred. So it is useful instead to define it as a separate discourse pragmatic category, rather than in terms of the Topic.

### 2.1.4.3 Newness and Prominence

Choi (2001) defines Information Structure in terms of the binary features of Newness (NEW) and Prominence (PROM). NEW marks whether an element is new to the conversation or not. This is the new/old information dichotomy that I mention above. PROM is an indication of the importance of this information. The combination of these two features results in a 4-way contrast of Discourse Pragmatic structures which neatly covers some of the variation in Topic and Focus, but not in terms of Topic and Focus.

The idea behind the binary features is that there are two driving forces behind expressing information structure in a sentence. The first is the contrast between New and Old information. What is new is generally what you're trying to convey, but you need to occasionally frame it with old material to give it context. On the other hand, regardless of whether the information is new or not, some parts are simply more important or relevant than others. This is what the PROM feature is trying to express.

For instance in "Tom speaks Japanese", "Tom" is +PROM -NEW and "x speaks Japanese" is -PROM + NEW. If the person I was being introduced to said: "I speak Japanese", " $I$ " is +PROM +NEW and "x speaks Japanese" is -NEW -PROM. If that person said "I speak Chinese" then "I" is +PROM +NEW and "Chinese" is +NEW +PROM.

|  | + PROM | -PROM |
| :--- | :--- | :--- |
| -NEW | Topic, link, $\ldots$ | Tail, $\ldots$ |
| +NEW | Contrastive Focus, $\ldots$ | Completive/Presentational Focus, $\ldots$ |

Figure 2.1 Newness and prominence structures (from Choi 2001)

The table above shows some example mappings of NEW and PROM to some commonly used discourse pragmatic categories. I will draw upon these variations in further explanations of the difference between categories of Information Structures in Ngardi. As we will see, prominence is a useful distinction in differentiating structures.

The labels TOPIC and FOCUS actually group several different types of Topic and Focus together. Topic and Focus can combine in a number of patterns forming different Information Structures. This is a motivation in naming different kinds of Topic and Focus. Some of the labels arise from the realisation of Topic or Focus as some kind of marked morpho-syntactic structure. I will cover these variations in the next section.

### 2.1.5 Categories of Information Structure

The core idea in Lambrecht's theory of Information Structure is the differentiation of "allo-sentences" through the indication of the Discourse Pragmatic elements. Allosentences are sentences with the same logico-semantic value, but with different surface forms. The discourse context is what creates these different surface forms. That is, the variation in surface form is driven by the need to package the information in a way that expresses salience to the context within which it was uttered. These allo-sentences could also be considered in terms of markedness, by which I mean that one sentence form can usually be considered more marked than its allo-sentence counterpart. The simplest method of considering what is marked and unmarked is statistical distribution. That is, the most frequently occurring pattern would be considered unmarked, while an infrequent pattern would be considered marked.

There is a plethora of Information Structures (patterns of Discourse Pragmatics) and Discourse Pragmatic types (Types of Topic, Focus, and so on). The motivation for this seeming excess, is the number of ways in which Topical and Focal elements can deviate from a norm to produce further subtleties in Information Structure. Many of these differences are labelled in terms of the morpho-syntactic deviation necessary to express these subtleties.

Information Structure categories can be broken down on a number of dimensions. In doing so we can see that bringing to the forefront some aspect of grammar motivates the creation of some of the terminology.

On a purely Discourse Pragmatic level, we know that Topic, Focus and Discourse Neutral regions can be marked in a sentence. Because of this we would expect several potential variants: Sentences with topic and focus; Sentences with just Focal elements; Sentences with just Topical elements; and sentences with Discourse Neutral material that may or may not include Topical and Focal elements. A sentence composed only of Topical elements is possible but rare, for instance a sentence which is a clarification of a previous statement ${ }^{1}$ :

A: "We leave at 10:30"

[^0]B: "(OK,) 10:30".
Sentences composed of purely focal material are said to have Sentential Focus. For example, in the following:

Q: What Happened?
A: The tree fell over!

The answer is entirely Focal.

Topical and Focal regions ${ }^{2}$ can be marked in a sentence, and so we should expect different orderings of Topic and Focus regions. Simply put, we could have Topic then Focus or Focus then Topic. To form allo-sentences, we can use morphosyntactic or prosodic variants. These will allow us to express different orderings of Topic and Focus.

Using Question Answer pairs, we can identify the Focal parts of the answer. The question establishes what is known and the answer is new information.

A sentence like:
"John went to the zoo"
can have different Information Structure depending on context within which it is said. If the question was:
"Where did John go?" (Underlining represents primary stress) then in the reply, "John" is Topical, while "to the zoo" is Focal. If the question was:
"who went to the zoo"
then it is reversed "John" is Focal and "went to the zoo" is Topical. Actually, the semantic notion "somebody/x went to the zoo" is Topical, rather than the Verb Phrase "went to the zoo". In English the Focal status of John is indicated by prosodic stress. Arguably, "John went to the zoo" (in response to "Where is John?") might be considered the proto-typical form. Lambrecht calls this a Topic-Comment or Predicate-Focus sentence. Where an argument is given prominence, such as in "John went to the zoo", Lambrecht calls this Argument-Focus.

[^1]This is a simple example of Prosody indicating a difference in Information Structure brought about by context. Precisely how Information Structure interacts with Ngardi grammar is the subject of this thesis.

### 2.2 Realisation of Topic and Focus in Ngardi

In this thesis I will be examining my interlinearisations of two transcripts by Lee Cataldi and Tjama Napanangka of a group of people playing cards on two separate occasions. The first recording was made at Malan on the 17/8/00, and the second was made at Balgo $21 / 10 / 00^{3}$. The conversation within these transcripts is primarily about the card game that they are all playing. There is occasional code-switching, but it is clear that the people involved were asked to speak in Ngardi only, as they will often repeat a phrase in Ngardi. It is also clear that they are conscious of being recorded and on a couple of occasions modify their language upon realisation that they are being recorded. Altogether there are approximately 1000 lines of utterances ${ }^{4}$ (i.e. of speaker's turns, which may be one word or several sentences).

The transcription marks individual speaker's turns, but does not identify each speaker. There is also inconsistent prosodic marking and no data on intonation. This lack of data limits the potential for a more thorough analysis. Certainly, prosody and intonation are key features in identifying discourse pragmatic structures, and inability to identify individual speakers limits my ability both to identify idiosyncrasies, and also track topical and focal material over lengthy conversations.

In terms of the idiosyncrasies, I have interlinearised several other narrative texts by individuals from which I can identify some speakers' idiosyncrasies. Some of the transcriptions are from 1991, and these texts appear rather different to the materials recorded in 2000 and 2001, but analysing the differences between these texts is beyond the scope of this thesis. Altogether, these additional texts, from which I have gathered statistics on categorical attachment of pronominal clitics and so on, represent another 1000 lines of text. There are further texts which have not been

[^2]interlinearised totalling roughly a further 1000 lines of Ngardi, from which I have drawn information on confirmation of irregular lexical forms.

In the absence of intonation, and the inconsistent marking of prosody I have focused my analysis mainly on morpho-syntactic features of Ngardi. As we shall see in the next section, there are several studies of identification of morpho-syntactic structures carrying information structure properties. However, I must note that in the absence of prosody and intonation, I cannot give a complete picture of Ngardi Information Structure. Instead, this thesis will cover what I argue are morpho-syntactic features whose realisation reflects their discourse pragmatic conditioning.

In Ngardi there are two central features that indicate discourse pragmatics. First, there is a pattern of categorical and positional pronominal encliticisation, and its interaction with a modal auxiliary that indicates that what precedes it is discourse salient. Second, there appear to be specialised syntactic slots that hold specific discourse pragmatic values.

## 3 Features of Neighbouring and other similar Languages

Ngardi has a number of features in common with its neighbouring languages. There are several studies of the Information Structure of these neighbouring languages, as well as studies of Information structure in other non-neighbouring languages formed by features that occur in Ngardi.

### 3.1 Australian Languages

Australian languages are roughly divided into two groups: Pama-Nyungan in the south and Non Pama-Nyungan in the north. Pama-Nyungan languages can be identified by their mostly suffixing morphology, while Non Pama-Nyungan languages can be identified roughly by the presence of both suffixing and prefixing morphology and also by the presence of noun classes in some of the languages.

### 3.2 Ngumbin-Yapa Languages

Ngardi is a Pama-Nyungan language, and as such is essentially a suffixing only language. Ngardi is described by Cataldi (n.d.) as closely related to Southern Jaru and Eastern Walmajarri, which along with Gurindji, (both of which are also closely related to Ngardi) and Mudburra form the Ngumbin language group. Speakers of Ngardi report Warlpiri as the most closely related language. Warlpiri is a member of the Ngarrkic language group. Together, Ngumbin and Ngarrkic languages form the Ngumbin-Yapa language group. Ngardi also has some relationship with Kukatja, a Western Desert language. Many speakers come from the Balgo area in which Kukatja is one of the primary languages. Essentially, Ngardi is located at the intersection of these three language groups.

### 3.3 Morpho-Syntactic Features

My discussion of neighbouring and similar languages will revolve around the features that I mention at the end of Section 2, critical to defining a specific subset of discourse pragmatics. These features are grouped under the banners of Nonconfigurationality, and Pronominalisation.

### 3.3.1 Non-Configurationality

Non-configurationality has been the source of much debate in linguistic circles. The issue began with Kenneth Hale's analysis in the 1980's of Warlpiri as a language where phrase structure played no role in determining grammatical function. That is, beyond the word level there were no syntactic categories.

Non-configurationality is a feature that is often grouped with others. Nonconfigurationality means that the language has (relatively) free word order. In analysis of many Australian languages Non-configurationality has often been grouped with the use of null anaphora and "discontinuous noun phrases" (Austin and Bresnan 1996; Nordlinger 1998; Simpson 2004).

Free word order at the clause level means that there is more than one possible ordering of constituents in a sentence. In other words, ordering of major constituents is not based upon grammatical function.

The use of null anaphora means that arguments licensed by the predicator may not be realised lexically. In the absence of an overtly expressed argument, the argument place is assumed to be filled by a previously mentioned referent. In Warlpiri's case (and many other Australian languages), the absence of an overtly expressed argument is interpreted as a reference to third person singular definite.

Discontinuous Noun Phrases, sometime referred to as "Split NPs" are NPs that form a single semantic unit but are spread discontinuously throughout a clause. Only case marking (and coordination in some circumstances) marks them as being part of the same "phrasal" constituent, in as much as this discontinuous NP will represent as a whole, an argument that is licensed by the predicator. Cross-linguistically in Australian languages, discontinuous NPs can be realised as single word NPs spread throughout the sentence, and in some languages such as Warlpiri, complex and single word NPs spread throughout the sentence.

Hale's analysis of the presence of these features as a non-configurational language broke a number of assumptions about the universality of languages central to

Chomsky's notion of Universal Grammar (UG). UG binds grammatical function to syntactic ordering of phrasal constituents, and so the free reordering of these constituents meant that phrasal coordination could not be the central source of definition of grammatical function. Indeed even a core notion like constituency seemed to be broken in this language. Null anaphora meant that verbs that licensed arguments would not have their requirements filled, breaking the projection principle. Separately, any of these features cause trouble for UG. Together they posed even more of a problem.

I will not go too much into the history of the argument about non-configurationality, which has been covered extensively elsewhere (Austin and Bresnan 1996; Nordlinger 1998; Austin 2001). Currently, there are two models that deal with the presence of these non-configurational features. The Dual Structure Hypothesis abandons the projection principle, separating constituency and functional representation. The Pronominal Argument Hypothesis solves the problems mentioned above by arguing that Pronominal Clitics fill the core arguments, and that the nominals are just adjuncts (Austin and Bresnan 1996).

The Dual Structure Hypothesis requires breaking the binding between constituents and associated grammatical functions. Typically this can be represented in theoretical frameworks like Lexical Functional Grammar (LFG) in terms of Obliqueness Hierarchies (Nordlinger 1998). For the purposes of illustration here (and throughout this thesis) I will be using a simplified version of LFG similar to that used by Kroeger (2004).

LFG breaks down grammar into a number of separate systems which are linked together. The core systems are (Austin and Bresnan 1996; Kroeger 2004):

- a(rgument) structure, which links the number and type of arguments with a predicate
- f(unctional) structure, which models the grammatical relations among syntactic functions
- c(onstituent/categorical) structure, which shows the constituency and coordination of syntactic categories

These structures are linked explicitly to define their inter-relationships. Additional structures are sometimes incorporated, but I will not be covering these here. Because a grammatical relation does not have to be linked directly to phrase structure, this frees up LFG to define non-configurational languages in a different way.

The result of this means of analysis is that the features that make up nonconfigurationality are not so tightly bound together. This is supported crosslinguistically as there are a number of languages that contain variations on the degree of expression of these features, and yet still appear to be non-configurational (Austin and Bresnan 1996).

Most critically, the dual hypothesis gives a syntactic explanation that allows for discourse pragmatic conditioning of elements. I will return to a syntactic model of this in section 3.4.

The Pronominal Argument Hypothesis, by using the pronominal clitics as core arguments, conveniently brings all the anomalies that Hale mentions together to once again define the language as configurational. The result of this solution is a unified approach to all of the features of non-configurationality, which also gives a syntactic explanation for split-ergative case marking, whereas, in previous models this was an unrelated feature.

In Warlpiri and some other Australian languages, case marking on arguments is coindexed with the pronominal clitic core arguments. Nominative Pronominal Clitics co-index absolutive case marking on arguments in intransitive sentences and ergative case marking on arguments in transitive sentences. Accusative Pronominal Clitics coindex absolutive case marking on arguments in transitive sentences and dative case marking in di-transitive sentences. Finally, Dative Pronominal Clitics co-index dative case marked arguments in sentences involving third person clitics. All other case marking on NPs simply marks them as adjuncts.

Austin and Bresnan (1996) argue that there are some problems with this model, specifically as it relates to Warlpiri and cross-linguistically in Australian languages.

NPs spread throughout the sentence in Warlpiri can be (semantically) definite or indefinite, but the Pronominal Clitics attached to the Auxiliary base are always definite. The case marking on NPs can also vary between a complex NP, and "discontinuous" single word NPs each with their own case marking. Also, some verbally licensed arguments receive allative case marking as they are semantically required. These mismatches are not captured by the Pronominal Argument Hypothesis.

Case frames appear to be lexically determined in Warlpiri. That is, case is not always semantically predictable. Simpson (1991) argues that it is not possible to assign case in isolation and it is the verb that carries the case frame information.

Null pronominals can occur in the absence of an auxiliary (Simpson 1991; Austin and Bresnan 1996). So a pronominal interpretation of Warlpiri is independent of the presence of an Auxiliary. Indeed cross-linguistically in Australian languages there is quite a range of realisations of the auxiliary, from none at all, to almost always obligatory. I will return to this in section 3.3.3.

Finally Austin and Bresnan's arguments against the Pronominal Argument Hypothesis round up with evidence in Warlpiri that there are unregistered arguments occurring in some situations. There are argument NPs marked with non core cases which are not cross-referenced by the Pronominal clitics. For instance the allative case marked arguments optionally required by some verbs such as "to talk" (wangka) are not cross-referenced by a pronominal clitic.

In the distantly related Jiwarli (Austin and Bresnan 1996; Austin 2001) some, but not all features of non-configurationality are represented. In the absence of an auxiliary and Pronominal Clitics (which are at the core of the pronominal argument hypothesis), Jiwarli still manages to exhibit non-configurational properties. That is, Jiwarli still appears to have free word ordering.

Configurationality and non-configurationality can be considered as different means to establishing grammatical functions in a given language. Nordlinger (1998) breaks down the realisation of non-configurationality, not as a binary value, but as a
gradation with extreme non-configurationality (for instance, many Australian languages) at one end and extremely configurational languages (like English) at the other. She argues that most languages around the world actually sit somewhere in the middle of this spectrum.

Austin and Bresnan break down identification of non-configurationality in Australian languages into the presence of some (but not necessarily all) of a number of features. The original three, free word order, discontinuous NPs and null anaphora are still there, but are joined by the presence or absence of pronominal encliticisation, the pattern of affixation (either individually case marked nominals or both coordinated case marked NPs and individual case marked nominals), and the patterning of core cases (Ergative-absolutive, Split-ergative or Nominative-accusative). The spread of these features show that there is a range of realisation of non-configurational languages, and the presence of all features is not entirely necessary for marking of non-configurational status. For instance, the absence of pronominal clitics in Jiwarli does not force it to become configurational. It still has free word order, Discontinuous NPs and Null anaphora.

Non configurational features are realised in the neighbours of Ngardi in the following ways:

Jaru (the southern dialect of which is closely related to Ngardi), according to Tsunoda, is a so called "split-ergative" language (1981:91). Roughly speaking, it has cross-referencing pronominal clitics which are nominative-accusative. Case marking on nominals and free pronominals is roughly absolutive-ergative. NPs can be single word items spread discontinuously, but can also be complex (and still discontinuous). Word order is quite free, but Tsunoda notes favoured or statistically prevalent word orderings and some situations where the word order is fixed (1981:92). Null Anaphora occurs in Jaru.

Walmajarri (the eastern dialect of which is closely related to Ngardi), according to Hudson (1978; Richards and Hudson 1990), is also a split ergative language, with a similar case marking and pronominal clitic system to Jaru. Word order is reasonably free, except where it concerns the verbal auxiliary (Hudson 1978:18).

Kukatja is a Western Desert Language spoken at Balgo, where many Ngardi speakers live. Austin and Bresnan (1996:262) describe Western Desert languages as splitergative, with case marking on complex NPs and single word NPs. Like Jaru they have a cross-referencing pronominal clitic system, Null Anaphora, and free word order. In contrast to the other neighbouring languages I discuss here, it does not have a verbal auxiliary. In Kukatja all tense, aspect and mood variants are captured in the verb form (Valiquette 1993).

Gurindji is a related language which behaves in much the same fashion as Jaru, however, there is a topical suffix - $m a$ which does not occur in any of the other languages I discuss here (McConvell 1996). This topical suffix appears to be similar (but only in form) to the auxiliary base in Walmajarri. I will return to this in section 3.3.3. Together Gurindji, Jaru and Walmajarri are part of the Ngumbin sub group of languages. Ngardi is another member of this group.

Warlpiri is not a Ngumbin language, but is grouped with the Ngumbin languages in the broader Ngumbin-Yapa language group. To summarize the features in Warlpiri, it has ergative-absolutive core cases, complex and single word case marked NPs, nominative-accusative pronominal clitics, null anaphora, discontinuous NPs and free word order (Austin and Bresnan 1996:262).

### 3.3.2 Pronominal Encoding

As I mentioned in section 2.1.3, pronominals are very important in discourse pragmatics. Bresnan (2001) even includes Information Structure as one of the possible dimensions from which pronominals are formed. To briefly recap, Bresnan argues that pronominals vary in three different dimensions: Semantic (anaphora and shift-reference), Morpho-Syntactic realisation (agreement on person, number, gender, and so on) and Information Structure (Topical and Focal). Cross-linguistically, pronominals can be realised in many ways, as varying combinations of these features. As we will see, pronominals, both their form and their use are critical in determining the discourse pragmatics in many Australian languages.

I have already mentioned the bound pronominal forms used in many Australian languages (although they are missing in the non-configurational language Jiwarli (Austin 2001)), but in all the languages I mention above (Ngumbin-Yapa languages and the Western Desert language Kukatja), there are also free pronominal forms that appear to have a contrasting discourse pragmatic use, associated with focus (McConvell 1996). That is, if obligatory bound pronominals are used in a language, then use of free form in addition to this is breaking the Gricean Maxim of Quantity, unless use is conveying more than just the semantic content of the pronominal (in the sense that Bresnan breaks down pronominals). Both the bound and free forms carry agreement markers, and so what differentiates the two is that the free pronominals have some Information Structure qualities.

The bound forms however also have a role in determining the discourse pragmatics of many Australian languages. McConvell (1996) argues that in the Ngumbin languages Mudburra and Gurindji incorporate Information Structure through a contrast between positional and categorical encliticisation. A tendency for encliticisation of bound pronominals in second position to the first word or constituent is sometimes termed a Wackernagel system, and when encliticisation to a specific category also occurs, McConvell terms this a split-Wackernagel system. McConvell argues that split-Wackernagel systems arise when a language makes the transition from purely positional cliticisation to a fixed categorical encliticisation.

In Jaru, Tsunoda (1981:124) notes that the bound forms will attach to a catalyst (or auxiliary base), interrogatives, adverbs of modality, conjunctions, imperative, purposive or hortative verbs and rarely, nominals (when sentence initial), though he notes encliticisation to nominals is a common pattern in southern dialects of Jaru (which includes Ngardi). He regards the encliticisation pattern by category as a hierarchy of priority: the catalyst is most likely while the verbs are least likely.

Hudson (1978; Richards and Hudson 1990) analyses the pronominal clitics in Walmajarri as part of a modal auxiliary. The modal root is dropped in some cases (such as imperative sentences) and the pronominal clitics attach to the verb or are realised as null when indicating third singular nominative and accusative pronominals.

In Gurindji, McConvell (1996) argues that attachment to a (neutral) auxiliary base is the norm, but this is replaced by (initial) interrogatives, negative particles and subordinate complementizers where the auxiliary base would occur. The neutral auxiliary is dropped for imperatives, as are second person clitics. Any pronominal clitics that do occur, attach to this imperative verb.

In Warlpiri, Simpson (1991) argues that the pronominal clitics are part of the auxiliary complex. Clitics can end up being attached to a verb like in Walmajarri and I will look at this closer in cross-linguistic discussion of the Auxiliary complex in the next section.

In contrast to these Ngumbin-Yapa languages above, Kukatja does not have an auxiliary. Instead the pronominal clitics in Kukatja attach to the first word or constituent in the clause, although this is less a fixed rule than a statistical likelihood (Valiquette 1993:452-453).

### 3.3.3 The AUX

All of the Ngumbin-Yapa languages discussed above have an auxiliary that indicates some combination of tense, aspect and/or mood, but there is a fair amount of variation between the meaning and realisation of these auxiliaries cross-linguistically. The table below summarises the differences between the neighbours of Ngardi:

| Language <br> (label used) | AUX | Used to indicate: |
| :--- | :--- | :--- |
| Jaru (catalyst) | ba/wa | imperative, hortative |
|  | ngu | declarative |
|  | $\varnothing$ |  |
| Walmajarri <br> (modal <br> auxiliary) | pa (ma, ngu) | indicative (with irrealis verb), intentive (with <br> realis), negative (with negative realis) |
|  | nga | Interrogative (with irrealis), admonitive (with <br> realis), prohibitive/inabilative (with negative realis) |
|  | $\varnothing$ | hortatory (irrealis), imperative (realis) |
| Gurindji <br> (auxiliary) | ngu | "neutral" |
| Warlpiri <br> (auxiliary <br> base) | ka | (there may be more) |
| Kukatja | lpa | present |
|  | none | imperfective |

Table 3.1 Ngumbin-Yapa (mono-syllabic) auxiliaries

The auxiliary in Warlpiri is a complex of an optional sentential particle, aspect and pronominal clitics. It is phonologically constrained when it is monosyllabic, and can become enclitic to initial words or phrases because of this. It is optional in nominal headed sentences, but obligatory in verbally headed sentences (Simpson 1991).

In Gurindji there is a neutral auxiliary $n g u$. McConvell argues that this has historically descended from a subordinating complementizer (1996). Interestingly Gurindji has a topicalisation marker - $m a$ which may be related to the $m a$ auxiliary base in other Ngumbin languages including Ngardi.

Walmajarri has a neutral auxiliary as well. Hudson (1978) describes two modal roots $p a$ and $n g a$ which contrast with null. There are allomorphs for $p a$ : $p a, m a$ and $n g u$. As I mentioned above, $p a$ can be dropped optionally in the absence of overt pronominal clitics.

Jaru has the following auxiliary bases (referred to as catalysts by Tsunoda): $n g u$, and $b a / w a$. Tsunoda notes that the common position for the catalyst is in second position, but variations are possible, including initial position (which is not possible for monosyllabic bases in Warlpiri). Ngu is used in declarative sentences. Ba/wa is used in imperative or question sentences with intonation, and implies hortation or command/advice (Tsunoda 1981:124).

All the auxiliaries above fall into rough groupings of a monosyllabic base or polysyllabic base. Generally speaking, the mono-syllabic based auxiliaries will become enclitic to initial elements as they receive weak prosodic stress in second position. In some languages like Warlpiri phonological rules restrict the positioning of monosyllabic based auxiliaries (especially from initial position). Not all languages analyse poly-syllabic auxiliaries as auxiliaries. Roughly speaking, these poly-syllabic auxiliaries often function as complementizers.

All of these Ngumbin-Yapa languages prefer auxiliaries in second position in a sentence, but for all these languages this is not a rule but a preference.

### 3.4 Discourse Pragmatics

In discussion of the free word ordering in all of the languages above, many authors have noted that the ordering of constituents appears to be roughly along discourse pragmatic lines. For instance, as I mention above, word order is relatively free (excluding the verbal auxiliary) in Walmajarri. It appears that certain positions within the clause appear to receive special focus, given a thematic analysis (Hudson 1978).

Austin and Bresnan's (1996) and Simpson's (2004) analysis of Information Structure of Warlpiri built upon Hale's original observations that pre-verbal (or pre-predicator) constituents appear to convey new information. They also incorporate Swartz' observation that the pre-auxiliary position appears to carry some kind of discourse prominence. Zero anaphora allows for explicit arguments to be dropped and so it is significant that full NPs are used, and the position in which they occur. Simpson adopts Choi's (2001) binary features of $\pm$ NEW and $\pm$ PROM (covered in Section 2.1.4.3) to unify Hale's notion of pre-predicator as +NEW and Swartz notion of preaux as + PROM:


Figure 3.1 New and Prominent regions in Warlpiri (Simpson 2004)

Mithun (Austin and Bresnan 1996; Austin 2001; Simpson 2004) argued that left-toright ordering in radically free word ordering languages reflected a quality of "newsworthiness", with the left being most newsworthy. Lambrecht counters that if this is true then the topic-first principle that drives the traditional arguments of prototypical ordering of constituents in European languages does not apply to these languages with free word ordering. Sentence initial position is certainly regarded by many as a discourse salient position usually labelled "emphatic", and sometimes "topical" or "focal". Lambrecht argues that initial position is almost never reserved for just Topic or Focus cross-linguistically. Topic and Focus are instead indicated through additional phonological, morpho-syntactic and semantic means such as accent (Lambrecht 1994:199-201).

McConvell (1996) notes that second position pronominal encliticisation appears to occur on discourse salient elements in the Ngumbin languages Gurindji and Mudburra. As a starting point he argues that the inherently focal question words and sentential negators appear to gravitate to initial position and replace (or form an enclitic host to) the auxiliary, which is often the statistical norm for these Ngumbin languages. He also argues that initial subordinating or relativising complementizers which behave in the same way are "out-of-out-of-focus", in as much as their sentential operation is semantically analogous to negation which in contradicting a prior statement is focal, but the rest of the sentence is presupposed (McConvell 1996:317).

Austin, Bresnan and McConvell all propose similar syntactic structures that include a discourse pragmatically conditioned XP node on the left of the tree. Austin and Bresnan (1996) propose the following c-structure for Warlpiri:


Figure 3.2 Proposed c-structure for Warlpiri (Austin and Bresnan 1996)

The optional Specifier for the IP has a discourse pragmatic function; the I is taken up by the Auxiliary complex of a Auxiliary base and pronominal clitics. The exocentric (i.e. non projecting) S may contain NPs and or a V (Warlpiri allows for nominally headed sentences).

Simpson (2004) builds upon Austin and Bresnan's analysis of Warlpiri to incorporate significant complexities in the pre-auxiliary position.

The first complexity is verb initial sentences. Simpson argues that the prosodic inversion that Austin and Bresnan use to explain an AUX encliticising to verb host when SpecIP is empty is insufficient, but extending the left periphery is unnecessary. Simpson examines Laughren's claim that initial verbs may have some discourse pragmatic status. However, after exploring focus realisation in Warlpiri by analysing Question/Answer pairs, Simpson concludes that in answers where the predicate is in focus, the verb does not move to initial position.

The next complexity is that more than one discourse pragmatically conditioned constituent can occur before the auxiliary and there can be different combinations of Topic and Focus. Left dislocated topics are possible in Warlpiri. Non-dislocated Topical expressions can occur before a focal element as well. This focal element is optional and so an initial topical expression is possible as well.

Simpson proposes the following c-structure to capture all these complexities:


Figure 3.3 Proposed c-structure for Warlpiri (Simpson 2004)

The Specifier of the expression node allows for left dislocated topics. SpecCP allows for optional explicit expression of Topic. The C node allows for a pre-aux lexical V. The remaining structure is similar to Austin and Bresnan's analysis.

McConvell's structural analysis of Gurindji (which incorporates movement) is a CP headed structure:


Figure 3.4 McConvell's proposed structure for Gurindji

There is both a C and COMP position in the CP. Focal elements fill the COMP position in the absence of a complementizer, INFL moves to C position and the bound pronoun encliticise to this C . When INFL and hence C is null, the bound pronouns encliticise to the COMP. The negating element kula is generated in INFL and will move to C when there is not a complementizer in C or a WH-phrase in COMP. The reason for this is that when there is a question with a negator, the clitic will attach to the WH-word in COMP, not kula raised to C (McConvell 1996:314315).

Here is an example of McConvell's contrastive construction in Gurindji:

## Example 3.4.1 Contrastive construction in Gurindji (McConvell 1996:318-319):

```
a. yirrap -ma ngu =rna -yina parik wanyja -ni VRD -la
    one.mob TOP AUX 1SgS 3PlO leave leave PAST VRD LOC
b. yirrap -ma =rna -yina wart ka -nya murla -ngkurra
    one.mob TOP 1SgS 3Pl0 back take PAST here ALL
c. murla -ngka -rni ngu =lu karri -nyana
    here LOC ONLY AUX 3PIS be PRES
a. One lot I left at VRD.
b. The other lot I brought back here.
C. They are still here.
```

In this example, McConvell argues that the initial constituent in (b) is under what he terms "double focus" or "contrastive topic". The combination of a topic suffix and direct encliticisation, he argues, is extremely marked, resulting in a mix of topical and focal features. This requires further clarification if considering it from an Information Structure perspective as defined by Lambrecht. Also, I believe that there are some other factors to consider beyond positioning and topic suffix + pronominal clitics use in determining the Information Structure of this sentence.

McConvell argues that this is a marked new topic, hence attracting the clitics directly. Without further information on the auxiliary, it is possible that it was dropped in order to indicate a different mood, not to favour categorical encliticisation.

Sentence (a) has two topics, the first is the speaker, and the second is the referent of yirrap. That would make sentence (a) an example of a Topic-Comment sentence. It also shows that in using the auxiliary, no argument has been brought into prominent focus, and the post auxiliary material is part of the pragmatic predicate to the two topics. In sentence (b), the speaker is a topic (but less prominent perhaps), but whether the referent of yirrap is also a Topic is critical to understanding the "contrastive construction".

The referent of yirrap in (b) is a different mob to the referent of yirrap in (a). The referent expression in (b) has the same topical suffix, yet has replaced the auxiliary,
which McConvell argues marks a constituent within the focus. Interestingly there is contrasting information to indicate the topical or focal status of the referent of yirrap in (b).

It would be useful to consider the referent of yirrap in (b) in terms of the topic acceptability scale (see section 2.1.4.1). In the immediate discourse context the mob that (a) refers to is active for the speaker in (b). The referent in (b) is (presumably) not active, but nor is it unidentifiable. I would argue that the referent of yirrap in (b) sits somewhere in the middle of the topic acceptability scale, making its topic/focus status ambiguous.

The speakers want to indicate a different mob to (a), but must use the same word to refer to it. Consider alternate codings of the referent expression in (b). Use of anaphora would have indicated the same (topical) referent as (a). Full lexical use in an unmarked position, post verbally or even post auxiliary say (auxiliary initial sentences are possible) would also have indicated the same referent. Full lexical use with the topic suffix in initial position would also indicate the same referent.

There are two other possible forms: full lexical use in initial position with or without the auxiliary. If the referent was inactive or unidentifiable then full lexicalisation in the auxiliary position would mark the referent both focal, and non-topical (through the absence of the topic marker). If the referent was semi-active then presumably it is a reasonable candidate for the topic suffix, yet the Topic-Comment form of sentence (a) is an unavailable strategy as this would indicate the same referent as the referent of yirrap in (a).

If the referent of yirrap in sentence (b) is topical because it sits within the Topic acceptability scale and has a TOPIC suffix, then it has still replaced the auxiliary to be in a position that conditions it as focal.

I would argue that the contrast between (a) and (b) is not the central function here. When discussing contrastive focus Lambrecht argues that the notion of contrast is a gradient. Negation is a clear case of contrast, but that often what we perceive as
contrast "arises from particular inferences which we draw on the basis of given conversational acts" (1994:290).

Full lexical coding in a special focal slot is what is necessary in sentence (b) to distinguish the referent of yirrap in (a) from the referent of yirrap in (b). I would argue that the combination of topic marker and second position encliticisation maintains topical status for the referent while disambiguating the referent of yirrap. I suggest that this form is about identifying a referent as distinct from another. However, this argument hinges on understanding what the topic suffix is doing, and also on my assumptions about the identifiability of the referents. More information on the definiteness of yirrap, the context of sentence (a) and the function of the topic suffix would help to further understand what is going on here.

Mithun's (1987) inventory of initial position candidates are (McConvell 1996):
a. Indefinites
b. New information
c. Newsworthiness
d. New topic
e. Focus of contrast

McConvell argues that (b) is the kind of focal candidate with which he is commonly concerned (replacing the auxiliary and taking the pronominal clitics), while (d) and (e) capture the much rarer contrastive construction. Considering it in terms of Lambrecht's theory, these can all be classified as mostly focal.

In Section 2.1.3.1 I noted Lambrecht's observation that Identifiability and definiteness appear to correlate in many languages. Here, the indefiniteness serves to indicate the status of a referent as unidentifiable, potentially marking it focal. New information is simply focal by definition. New topics are focal as well, at least in contrast to old topics. But considering the topic acceptability scale (section 2.1.4.1), new topics could be acceptable as Topical if within the common ground to some degree. Focus of contrast is usually analysed as focal, but as I argue above, what seems focal could be argued to be topical in some situations. In truly contrastive focus, the focal element may be active, but new information is conveyed through its contrastive use. The most difficult to classify in this list is the Newsworthiness.

Newsworthiness could include both topical and focal material. McConvell posits that there may be an implicational hierarchy of these candidates governing the use of split-Wackernagel systems. He regards the ordering above as a listing of least to most marked.

What is clear from all of these analyses is that for all these free word order languages the pronominal clitics are a central marker for a region of discourse pragmatic structure dynamism. In Gurindji we can see that the auxiliary is replaced by an element to make it focal, but that pre-auxiliary topics are possible thanks to a topical suffix. The contrastive construction shows that there are some further intricacies to the interaction of these two structures. In Warlpiri, there appears to be a much freer system of encoding topical and focal material in the pre-auxiliary slot. This follows Lambrecht's predictions of so called "focus-first" languages not reserving initial position for focal material only (1994:199-201). In Gurindji we see competing markers for Topic (a suffix) and Focus (a special syntactic position) combining to produce what McConvell argues is a contrastive construction, but I suggest is a Topic whose reference needs to be disambiguated in context. In Warlpiri we see an emerging pattern of expressing topic and focus expressed through syntactic structure. Across all these languages, it seems that the core of examining the sentence initial discourse pragmatics of these languages are the realisation of the auxiliary complex and the pronominal clitics.

## 4 Grammar Sketch of Ngardi

Ngardi is an endangered language. Approximately 5-10 people used it every day at the end of 2004. There is a community of speakers totalling about 80-100 with varying degrees of proficiency in Ngardi.

Speakers are typically multi-lingual, speaking a mix of Warlpiri, Kukatja, Walmajarri, Jaru, Gurindji, Kriol and others. Code-switching is not uncommon and at times there appears to be some influence from other languages on the Ngardi grammar.

All but one of the eight informants for Cataldi's work were women. The informants used are almost all above the age of fifty five as well, and so it should be assumed that this work reflects the language use of this specific subset of speakers.

### 4.1 Phonology and Orthography

The vowels in Ngardi are as follows:

|  | Front | Central | Back |
| :--- | :---: | :---: | :---: |
| High | i |  | u |
| Low |  | a |  |

The consonants are as follows (please note use of digraphs):

|  | Lamino-Alveolar | Dorso-Velar | Bilabial | Apico-Alveolar | Apico-Postalveolar |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Stop | j | k | p | t | rt |
| Nasal | ny | ng | m | n | rn |
| Lateral | ly |  |  | l | rl |
| Trill/Tap |  |  |  | rr |  |
| Semiconsonants |  |  | w | y | r |

### 4.2 Word Classes

The major word classes of Ngardi are Nominals and Verbs, with the smaller classes being Auxiliaries, Preverbs, Propositional Particles, Conjunctions and Complementizers. Cataldi (n.d.) describes Ngardi roughly as having the pronominal and case marking systems of Warlpiri while having similar conjugation classes to Jaru.

### 4.2.1 Nominals

As with neighbouring languages there is no distinction between noun and adjective in Ngardi. "Nominals" is just a convenient grouping, and are further broken down into the following Ngardi word classes: plain, proper, anaphoric, demonstrative, kinship, question and temporal nominals. They all inflect for case and number.

Ngardi - like its neighbours - is a split ergative language. Nominals in transitive sentences are marked ergative, while the pronominal clitics that cross-reference them use nominative/accusative. The dative, locative and allative cases may be crossreferenced by pronominal clitics. Elative, comitative/instrumental, possessive, perlative, and purposive cases are not cross-referenced by pronominal clitics. Only the dual is marked on nominals, otherwise number can be given by the crossreferenced pronominal clitic.

There are a few anaphoric nominals used in Ngardi. Jangu or yangka refer to the aforementioned referent. Wali, wala and sometimes ngula are used anaphorically to indicate the period after an aforementioned event.

Demonstratives take the same case marking as regular nominals (with some morphophonemic irregularities). The proximal demonstratives are mula/mura, nyampa and пуатри "this" or "this one here". The distal demonstratives are yali "that", minya "that one there" and nyantu or nyanungu "that" (which are sometimes used as third person pronominals). Kuja is demonstrative of manner and does not normally take case marking (although Cataldi (n.d.) indicates that it is possible).

Ngardi has a rich system of kinship terms (which take case marking like ordinary nominals) but also has nominal suffixing to indicate kinship relationships for ordinary nominals.

Question words typically appear at the beginning of the sentence and the pronominals tend to encliticise directly to them in this position. There are some exceptions to this which are covered in section 6.2.2. All of the question words can be indefinite as well, indicating something or someone.

Temporal Nominals do not inflect like regular nominals but can take a number of suffixes relating to time, and bound pronominals do encliticise to them.

The pattern of affixation of core cases in Ngardi is for individual NPs to receive case marking, or nominals in a phrase to receive case marking. Ngardi has "discontinuous NPs", that is, NPs that form a single semantic unit can be spread throughout the clause.

### 4.2.2 Pronominals

Like many Pama-Nyungan languages, pronominals in Ngardi can be either free or bound. The bound form is most common, and so use of the free form appears to have some Information Structure properties which I will cover in sections 5 and 6 . The bound forms are obligatory except in a few special cases.

Pronominal clitics are nominative-accusative. There is a special set of clitics which cross-reference nominals marked with dative, locative and allative. The pronominal clitics mark number in Ngardi. For animate objects, number can be singular, dual or plural. Third singular Subject and Object are null however, but this is the only gap, so that absence of a Pronominal Clitic for either subject or object always means that it is third singular.

Free pronouns can take the same ergative-absolutive case marking as ordinary nominals, as well as non cross-referenced cases, and they can even attract pronominal clitics. But ergative case marking is not always marked. There are forms for singular, dual and plural. Nyanungu (which is a determiner used for third singular, dual or plural) can be marked for dual.

### 4.2.3 Preverbs

There is a limited set of verb forms in Ngardi. These combine with preverbs to radically expand the range of expressions. Preverbs are often used elsewhere as plain nominals. For instance, parnti "odour" combined with nyanya "saw/perceived" makes parnti-nyanya "sniffed/smelled". There is a speaker by speaker variation as to whether speakers adds a phonological filler at the end of consonant final preverbs. Unlike Warlpiri, nothing except this phonological filler inserts between the preverb and verb in Ngardi.

### 4.2.4 Verbs

The verbs in Ngardi have been divided up by Cataldi into 4 classes (allowing for irregularities in one class). The main verbal inflections express a range of tense, aspect and mood information. Tense is broken down into past, present and future. Aspect can be incorporated to make past and future continuous; past completive as well as a past continuous completive. There are also forms for imperative and irrealis moods.

### 4.2.5 Auxiliaries

As we saw in the previous section, Ngumbin-Yapa and Western Desert languages all have quite free word ordering, and all use pronominal clitics which cross-reference grammatical function. Many languages in this region have an auxiliary base that is often the locus of these pronominal clitics.

There are two kinds of Auxiliary base in Ngardi, one group carry modal information, while the others function more like Complementizers. The four main auxiliary bases in Ngardi are $m a$ (used in negative or counterfactual statements), $k a$ (used in affirmative statements), $n g u$ "consequently" and $n g a$ "then". Ma and $k a$ tend to occur in second position, but nga and $n g u$ can occur in initial position and second position.

Interestingly, in the three neighbouring languages Warlpiri, Walmajarri and Jaru, Warlpiri is the only language which has an auxiliary base $k a$, which indicates present tense (Nash 1986:60). Walmajarri has the modal auxiliary bases $m a$, and $n g u$ which are allomorphs of $p a$, and $n g a$. But $m a$ changes from $p a$ when followed by an nasal initial morpheme, and $n g u$ is an irregular form (Hudson 1978). Pa does not occur in Ngardi. In Jaru, there is an auxiliary base nga but there is no precise indication of its role given by Tsunoda other than that it is used in declarative sentences (1981).

### 4.3 Propositional Particles

There are several propositional particles in Ngardi. Wakurra is the negative, behaves like an auxiliary complementizer, tending to initial position and attracting pronominal clitics. Mayi is used sentence finally to establish a yes/no question, but mean "probably" elsewhere. Parda means "perhaps". Ngayi "I say, indeed" is common clause initially. Kala and wali are both used to assert was is said as the truth.

### 4.4 Clauses

Ngardi has three conjunctions kala "but", тапи "and", and yalayi "so" and three auxiliary complementizers kuja "when", kaji "if", and ngarra "in case" (although this list is probably incomplete). These all tend to occur clause initially and attract pronominal clitics.

### 4.5 Word Order

Cataldi (n.d.) argues that word order in Ngardi is quite free at the clause level.
Determination of word order appears to be on a Discourse Pragmatic level, which will be covered in further detail in sections 5 and 6 .

## 5 Discourse Pragmatics of Ngardi

Looking at the neighbouring languages of Ngardi, it is clear that the use of pronominal clitics and the auxiliary are central to defining the discourse pragmatics of these languages.

Simpson (2004), and Austin and Bresnan (1996) argue that the auxiliary complex of an auxiliary base and the pronominal clitics form a marker around which forms relating to discourse pragmatics occur. McConvell argues that the auxiliary base is replaced by constituents in initial position to mark it as part of the focus of the sentence.

Simpson argued that to the left of the auxiliary there appeared to be certain syntactic slots available for different discourse pragmatic functions.

With all this in mind I examined the distribution of the auxiliary to see whether there was a strong tendency towards second position, and also to see what kinds of candidates occurred before the auxiliary (see section 6.1.1) for more details. It appears that there is a limited number of candidates that can appear in the preauxiliary position. These are, an optional initial Exclamation, a left-dislocated NP, a conjunction, NP or a Verb. Combinations are possible. An exclamation can precede any of the other candidates, conjunctions precede NPs or verbs, left-dislocated NPs can precede NPs.

Auxiliary bases do not occur very frequently in Ngardi, roughly less than $10 \%$ of the time. Cataldi (n.d.) describes them as optional. In my examinations I show that the distribution of the individual auxiliaries shows that 2 of the 4 auxiliaries have a function similar to auxiliary complementizers.

McConvell (1996) argues that in the Ngumbin languages, there is a pattern of "downward-migration" of pronominal encliticisation moving from being a strongly positional tendency to being a strongly categorical tendency.

With this in mind I examined the categorical attachment of pronominal clitics in Ngardi. I show in section 6.1.2 that pronominal clitics can attach to a broad range of word types. I also show that the distribution of attachment is split roughly evenly between nominals, verbs and auxiliaries/complementizers/conjunctions.

Looking at second position cliticisation by word class it is clear that certain classes, as the clitic host, prefer second position over others. Nominals of all kinds were not only the most common host for clitics, but also showed the most flexibility in allowing arguments and adjuncts to precede it. Verbs (of which imperatives seemed to attract clitics most strongly) roughly evenly favoured being in initial position and having a preceding argument. Conjunctions and Complementizers strongly favoured initial position.

With these patterns in mind I examined the discourse pragmatic structure in equational sentences and questions, and in the answers to questions. This is covered in detail in section 6.2 but I will discuss my findings here.

### 5.1 Realisation of Topic and Focus in Ngardi

The proto-typical Information Structure for equational sentences is topic-comment, or predicate-focus. Expression of discourse pragmatics in equational sentences is limited as there are subjects and predicates, limiting the range of expression of different Information Structures.

Equational sentences are nominally headed for present tense, and verbally headed otherwise. Nominally headed sentences are formed by placing one NP after another. The default ordering of constituents is subject predicate, and with two NPs alone, the word order seems fixed. When free pronouns are used as arguments, pronominal clitics appear to be optional. Ergative case marking is not used on subjects.

Previous analysis of neighbouring languages focused on the focus first nature of these languages, but I suggest that they are underlyingly topic first, at least superficially on the basis of this ordering in equational sentences. I will return to this point later in my argument.

Use of free pronouns in the absence of pronominal clitics appears to have no special discourse pragmatic value. Reversal of ordering is not possible. There are no "discontinuous $\mathrm{N} ; \mathrm{Ps}$ " only an argument and predicate are allowed, but complex NPs are possible. When pronominal clitics are used however, the result is the apparent ability to form a variety of different sentences with different discourse pragmatic values.

First of all to maintain topic-comment structure, the pronominal clitic must attach to the predicate, not the subject, and the word order must be preserved. The topical subject then becomes optional. This allows the single word utterances that are common for both verbally and nominally headed sentences. In looking for question/answer pairs it became very obvious that topic epenthesis is extremely common in Ngardi.

Subjects can be complex NPs with no significant change to the sentence, but if the predicate is a complex NP, then, in combination with pronominal clitics this NP is "split". The pronominal clitic attaches to the initial word, not the candidate. Indeed in more complex examples it was often the case that a salient member of a semantic unit formed by multiple NPs spread discontinuously throughout the phrase would be chosen as an enclitic host. Focus is after all, not a region in the sentence but the pragmatic predicate to the topic, and so a whole region of a sentence need not be marked in a way that indicates topic or focus, part of the semantic notion appears to suffice.

So far we have the following variants for nominally headed equational sentences:

| Subject <br> (Complex) NP <br> Topic | Predicate <br> (Complex) NP <br> Comment |
| :---: | :---: |
| Subject | Subject |
| (Complex) NP | $\mathrm{NP}+$ Pronominal Clitics |
| Topic | Comment |
| Subject | Subject |
| $\emptyset$ |  |
| Topic | $\mathrm{NP}+$ Pronominal Clitics |
| Cubject | Comment |
|  | Subject |
| Topic | Pronominal Clitics N |
| Comment |  |

Table 5.1 topic-comment variant forms

Pronominal clitics can attach to the subject NP as well. The effect of this depends on the nature of the referent expression. If the referent is a full pronoun, this is what is commonly referred to as contrastive focus. I suggest that contrast is rarely what this construction is used for, but rather it is used for sentential-focus.

Full pronouns are high on the topic acceptability scale (section 2.1.4.1) but demonstratives are lower. When a demonstrative subject in a nominally headed equational sentence has clitics attached, it remains perhaps still somewhere in the middle of the topic acceptability scale. In the example in section 6.2 .1 (which I will repeat here for convenience) the referent in (b) is not known to the hearers at the beginning of the utterance, but the bluff is given value by adding extra specification at the end of the sentence.

## Example 5.1.1

```
jalangu-rla-yi yi-nya wiyarru
today-3SgOb-1SgDa to.give-PAST pity
a) this time you have given me (good cards) out of pity
minya ma-rna kulurr, kirda
this Neg.aux-1SgNo testicle big
b) this one I (have) the ballocks, the king
```

This strategy of after-thought is quite common throughout the data.

I suggest that sentence (b) above has sentential-focus. The otherwise Topic NP is weakened by underspecification, and sentence final specification means that it is adding information to an otherwise unidentifiable referent.

Nominally headed question sentences appear to mirror the form of equational sentences, but reverse the topic comment ordering and consistently attach clitics to the question word.

Question sentences have a strong preference for the question word to occur in sentence initial position, however, in section 6.2 .2 we see that left-dislocated topics are possible. In the absence of consistent prosodic data, it is possible that more active referents are able to appear immediately before the question word.

I suggest that this topic NP is the same as the optional topic NP in the equational sentence. This is a slot available for non-prominent coding of the topic. Leftdislocation is a more marked form of encoding.

In the limited range of sentence forms that I examine here, pronominal encliticisation to a constituent appears to consistently mark that candidate as part of the focus of the sentence. As per Lambrecht's prediction that initial position is never reserved solely for topic or focus, it appears that slots are available to the left of the enclitic host to allow for both marked and unmarked lexicalisation of a topic NP. Candidates for pronominal encliticisation are quite broad in Ngardi, and so I would suggest not all candidates function in the same way. As I note above there is a contrast in inherent topicality in some referent expressions, that becomes more obvious in marked uses.

For the purposes of clarity and readability, I have concluded my argument in this section. The next section provides detailed evidence and arguments in support of my conclusions.

## 6 Features of Ngardi

In this section I will be examining some of the features that express Information Structure in Ngardi closely.

### 6.1 Discourse Pragmatic Bearing Structures

There are three important areas that determine a specific subset of the Information Structure of Ngardi. They are the auxiliary base, its interaction with the positional and categorical attachment of pronominal clitics, and the syntactic configuration of sentences.

Due to the data source that I have analysed, incorporating intonation and prosody into this analysis is either difficult (in the case of prosody) or beyond the scope of this thesis (See section 2.2 for more details on the texts analysed). However, I should stress that a complete picture of Information Structure in a language should incorporate this kind of information, as cross-linguistically it appears to be a major source of determination of discourse pragmatic functions.

As we saw in section 3, the discourse pragmatics of the neighbouring languages of Ngardi seem to revolve around the auxiliary and pronominal clitics. In section 6.1.1 I will first examine the realisation of the auxiliary and then the range of candidates that can occur before it. In section 6.1.2 I examine the patterns of encliticisation to other word classes, and the range of candidates that occur before these encliticised elements.

### 6.1.1 The Auxiliary Base

The auxiliary has been examined quite differently in the languages surrounding Ngardi. As I described in section 3.3.3, many regard the auxiliary as a complex that incorporates the pronominal clitics, while others regard it simply as a base that pronominal clitics are drawn to. There are many labels for the auxiliary base, such as modal root or catalyst, but I will refer to it as the auxiliary base.

In Ngardi, when there is an overt auxiliary base, which in the texts I examined occurs roughly $10 \%$ of the time ${ }^{5}$, the pronominal clitics will consistently encliticise to this base. The only case where pronominal clitics are drawn away from the base is with an imperative verb (see the 6.1.2 for more details).

As I mentioned in section 4.2.5, there are really only two auxiliaries in Ngardi, depending on how you analyse the auxiliary complementizers. The most frequent of these is the auxiliary base $m a$. Cataldi (n.d.) describes it as the "negative" auxiliary, in that it frequently occurs in negative sentences. Indeed it appears to carry some kind of counterfactual or potential mood, as the sentence does not have to negate when it is used:

## Example 6.1.1

```
pirlurr ma-rlipa-nyanu wawu-karra la-nanta
spirit negative-1PlInNo-Rflx-AD upsetting-while to.upset-PRES
This shouting is upsetting our spirits
```

However, an initial negative element is not uncommon in sentences that include $m a$ :

## Example 6.1.2

```
Waku=ma-n nyuntu lurij, boy.
no-neg.aux-2SgNo 2Sg finished boy
You're a goner, boy
```


## Example 6.1.3

```
["which two were fighting?" "was it you?"]
wakurra, ngaju ma-rna waku
negative 1Sg negative-1SgNo no
not me, indeed I no (ie "not so, Me it was not")
```

$M a$ appears consistently in second position in the sentence. An exclamation such as waraa "hey" or a swear word (or negative reply as per Example 6.1.3) with a pause following may appear before the "initial" word. It is unclear from the data whether the auxiliary base $m a$ consistently encliticises to the initial constituent, but it certainly

[^3]always follows it in what I shall label "second position". The only examples where I find $m a$ following complex NPs is with English complex NPs (as per Example 6.1.4 below). In these cases I still refer to the slot that the auxiliary fills as second position. I have no examples of it with an imperative, which is the only situation where I might expect it to have an irregular positioning as imperatives seem to consistently attract the pronominal clitics (see section 6.1.2 for details).

## Example 6.1.4

```
thirty dollar ma-rna ka-ngu-rni,
thirty dollar Aux-1SgNo bring-?INF-PAST
but I brought thirty dollars,
```

I have only two examples where the auxiliary appears to be in initial position:

## Example 6.1.5

```
ma-rna-nyanu.
negative-1SgNo-Rflx-AD
for me.
```


## Example 6.1.6

```
["stop hanging onto your cards!"]
Wakurra, ma-rna marda-naninyirra kiji-nu-kungarnti-rlu
no neg.aux-1SgNo to.keep-CONT.COMP throw-INF-preparative-ERG
no, I was just keeping them ready to throw them
```

I suggest that Example 6.1.5 shows a sentence fragment, but Example 6.1.6 is genuinely problematic, unless the pause is incorrect. Given that a pause is indicated, I cannot assume that the auxiliary is enclitic to the initial constituent (and thus in second position) in this example.

Of the thirty-six examples of $m a$ in the discourse data, 23 were in second position (as per Example 6.1.1 and Example 6.1.2), 11 began with an initial exclamation and then were in second position (as per Example 6.1.3) and the two remaining were the irregularities shown above. ${ }^{6}$

[^4]The auxiliary base $k a$ appears to carry the indicative mood. Cataldi (Cataldi) calls it an emphatic auxiliary. Like $m a$ it appears consistently in second position and I am unable to determine from the data whether it consistently encliticises to the initial word. Also like $m a, k a$ appears in "second position", after an initial exclamation followed by a pause and then sits after the next constituent:

## Example 6.1.7

```
ngaju ka-rna yunpa-rni.
1Sg emph.aux-1SgNo to.sing-PAST
I-EMPH sang.
```


## Example 6.1.8

```
wara nyurnu ka-rna marda-nanta minya,
wow! dead emph.aux-1SgNo to.have-PRES this.one
wow, I've got the dead one here
```

I found no irregularities in terms of $k a$ appearing in initial position, but I did find that in second position it was preceded by an irrealis verb twice in the data, and a verb in the future tense once:

## Example 6.1.9

```
pat-ka-nyi ka-lu kayi
putting.down-carry-Irrealis emph.aux-3PlNo north
They put heavy things down just here north,
```

Example 6.1.10

```
No, maninja-nku ka-n yawiyi.
No to.go.and.get-FUT emph.aux-2SgNo poor.thing
No, you may go and get it, poor thing.
```

The examples above may be indicative of a change in mood, but examining these differences is beyond the scope of this thesis. Alternatively, this ordering of constituents could be giving special prominence to the verb.

Of the twenty-two examples of $k a$ I found occurring in the card game texts, fourteen were clearly in second position (as per Example 6.1.7), while five were in second position following an initial exclamation (as per Example 6.1.8). The remaining three were the irregular forms discussed above.

The remaining monosyllabic auxiliary bases, $n g a$ and $n g u$, appear to function a bit more like conjunctions. Cataldi (n.d.) labels them both sequential auxiliaries.

Positionally, they are a bit more spread than $m a$ and $k a$ above.
$N g a$ is glossed by Cataldi as "then, now, so, there" and appears to function much like a conjunction. It appears in a range of positions. Clause initially it appears seven times, as per Example 6.1.11, and in second position it appears eight times, as per Example 6.1.12, with three of those being after a verb, as per Example 6.1.13. Clause initially it appears mid utterance three times apparently linking clauses, while in second position it appears mid utterance three times.

## Example 6.1.11

```
nga-rnalu ma-nankura kuja-lku
Seq.aux-1PlExNo get-CONT.FUT thus-then
we will be getting these
```


## Example 6.1.12

```
yalampu nga-rna kiji-rni kapanku-rlu
there Seq.aux-1SgNo to.discard-PAST quickly-ERG
I have put down there quickly
```

Example 6.1.13

```
Marda-nanta nga-n thirty dollar?
to.have-PRES Seq.aux-2SgNo thirty dollar
Do you have thirty dollars?
```

As with $k a$ I suspect that the post verbal auxiliary could be indicative of a different mood, but examining this is beyond the scope of this thesis. Again it could also be marking the verb as prominent, at least relative to the argument.

There are a few examples of an initial exclamation preceding both the clause initial form and second position forms described above:

## Example 6.1.14

```
wurra, nga-rna-ngku pi-ngi
wait Seq.aux-1SgNo-2SgAD to.hit/do-Irrealis
wait i might beat you
```


## Example 6.1.15

```
Yaa, yangi nga ya-nanta fifty dollar
Yes one Seq.aux to.go-PRES fifty dollar
Yes, one of these will get fifty dollars
```

Example 6.1.14 shows the same form as Example 6.1.11 preceded by an exclamation, while Example 6.1.15 shows the same form as Example 6.1.12 preceded by an exclamation.
$N g u$ is glossed by Cataldi as "so, as a consequence, therefore, then", and indeed it appears to indicate consequential action. It appears clause initially five out of twelve times (four of those are mid utterance). Clause initially it only appears once at the beginning of a sentence, and the remaining four are mid-utterance like this one:

## Example 6.1.16

```
Ita wali kiji-rni, wali ita-rra ngaju-yi,
little like to.discard-PAST after.that little-other 1Sg-1SgAD
She now threw out a small one, now I another small one,
ngu-rna kirda karri-ju waku wali.
Seq.aux-1SgNo big be-FUT no after.that
anyway I will hold the big ones
```

$N g u$ appears in second position seven times. Two of those are mid utterance, and three are post verbal:

## Example 6.1.17

```
waraa, ear hole-rla langa-ngka mari ka-ngka-lu maju
hey ear hole-LOC ear-LOC distant take-IMP-3PlNo indeed
you all take away it in the ear (noise) a long way
nirrjirri-nankura ngu-nta,
make.noise-CONT.FUT Seq.aux-2PlNo
you all will be taking that noise away,
mari ngu-n nirrjirri-nankura
distant Seq.aux-2SgNo make.noise-CONT.FUT
you will take that noise a long way
```

Example 6.1.17, which is a single utterance, shows a post-verbal auxiliary in second position (in the second line) and a post nominal auxiliary (in the third line). In second position $n g u$ appears to be indicating a different mood, rather than behaving like a complementizer.

I only have one example of $n g u$ following an initial exclamation:

## Example 6.1.18

```
Waraa, wurna ngu-rna ya-nku nganayi-kurra
hey journey Seq.aux-1SgNo to.go-FUT you.know-allative
waraa, i will now go to you know.
```

I suggest though, that a use similar to that shown in Example 6.1.14 may be possible. In the absence of an example showing it, I suggest it may be possible to have an
initial exclamation with a pause, followed by a $n g u$ auxiliary, given that $n g u$ otherwise shows the same distribution as $n g a$.

Ngu appears sentence initially only once, while nga appears both initially and midutterance. Although the numbers are too low to assert a pattern, it may be possible that nga is more common sentence initially in response to someone else's statements.

Monosyllabic auxiliaries in Ngardi show a strong preference to sit in second position. However, the sequential auxiliaries $n g a$ and $n g u$ appear to function as conjunctions when in clause initial position. Prefixing an initial exclamation seems possible on all variants of the auxiliaries' individual distributions. Beyond this, the auxiliary does not travel any further to the right.

So there are two patterns of pre-auxiliary behaviour: the sequential auxiliaries may occur sentence initially in a complementizer-like role, or they, along with the remaining auxiliaries $m a$ and $k a$ may exist to the right of one, two or three elements. This appears to be similar to the range of initial elements that Simpson has argued (2004).

### 6.1.2 Clitic Attachment

As I mentioned in the previous section, when the auxiliary base occurs in sentences, it will always attract the pronominal clitics (except when there is an imperative verb). But if auxiliaries are occurring in only roughly $10 \%$ of all sentences, then what are the pronominal clitics attaching to otherwise, and are they attaching in second position or further down the sentence?

Table 6.1 below shows the attachment of clitics to different word classes based not just on the card game texts, but also the other texts that I have inter-linearised (see section 2.2 for more details):

| Word class | Part of Speech | Count (card game count) | \% of Total (cards game total) |
| :---: | :---: | :---: | :---: |
| Nominals | N (plain) | 247 (50) | 15.7\% (12.4\%) |
|  | PN (proper) | 34 (4) | 2.2\% (0.9\%) |
|  | Na (Anaphoric) | 42 (20) | 2.7\% (4.9\%) |
|  | Nd (Demonstrative) | 156 (25) | 9.9\% (6.2\%) |
|  | Nt (temporal) | 26 (7) | 1.7\% (1.7\%) |
|  | Nk (Kin terms) | 38 (5) | 2.4\% (1.2\%) |
|  | Nq (question) | 53 (29) | 3.4\% (7.2\%) |
|  | Nominals Sub Total: | 596 (140) | 37.9\%(34.8\%) |
| Auxiliaries | monosyllabic | 309 (64) | 19.6\% (15.9\%) |
|  | complementizers | 102 (50) | 6.5\% (12.4\%) |
|  | Auxiliaries Sub Total: | 411 (114) | 26.1\%(28.3\%) |
| Verbs | Tense/Aspect | 370 (54) | 23.5\% (13.4\%) |
|  | Mood | 107 (66) | 6.8\% (16.4\%) |
|  | Verbs Sub Total: | 477 (120) | 30.3\%(29.8\%) |
| Interjections | INTJ | $5 \quad$ (1) | 0.3\% (0.2\%) |
| Conjunctions | CONJ | 39 (1) | 2.5\% (0.2\%) |
| Propositional Particles | PROP:PART | 40 (24) | 2.5\% (5.9\%) |
| Other Complementizers | ?COMP | 5 (2) | 0.3\% (0.4\%) |
|  | TOTAL: | 1573 (402) |  |

Table 6.1 Pronominal Clitic attachment by word class ${ }^{7}$
This data presents a broader range of genres than just the card game data that I have been focused on so far. The counts from the card game data are in brackets. What is clear from this data, is that the distribution of pronominal clitic attachment is roughly even across verbs, auxiliaries (and complementizers/conjunctions) and nominals, so I suggest that there is no statistically prevalent categorical preference across all sentence types. Also, it is clear that the pronominal clitics can attach to a broad range of categories of words. This is not to say that certain sentence forms will not favour

## ${ }^{7}$ Some caveats:

- Some words cover multiple classes, for instance, some demonstratives behave like complementizers, question words are sometimes indefinite and so on.
- The numbers in brackets represent the counts from the card games text.
- The nominal counts in this data may be disproportionately represented due to incorrectly identifying the suffixes -rla/-ngka/-yi which can all be either ergative case marking or pronominal clitics. This is less likely with the card game data shown in brackets, as I proper prosodic marking has made it easier to analyse with confidence.
- The monosyllabic auxiliaries include the ngu/nga auxiliaries which operate somewhere between a complementizer and a plain monosyllabic auxiliary.
certain hosts, for this is certainly the case for sentence types like questions. Certain contexts will force a choice of host too, such as in single word utterances, where the host can only be the verb or nominal used.

Looking at each word class, it appears that there is a strong preference for attachment to an initial constituent, placing the pronominal clitics in second position. There are also some consistent, but statistically less prevalent patterns of constituents appearing before the encliticised element.

With nominals (plain, proper, anaphoric, question, demonstrative and temporal) the main pattern of encliticisation was in second position; alternatively this would be preceded by an initial exclamation, such as "yes/no" or "wow", and a pause. Another NP or a demonstrative preceded the encliticised element in a few cases (possibly with a pause separating them). In all cases there was no auxiliary or imperative verb to attract the pronominal clitics.

## Example 6.1.19

```
warlka-rna wangka-nya
a.lie-1SgNo to.say-PAST
I was pretending
```


## Example 6.1.20

```
jalangu-rla-yi yi-nya wiyarru
today-3SgDLO-1SgAD to.give-PAST pity
this time you have given me (good cards) out of pity
```

Example 6.1.19 shows a typical example, the pronominal clitic(s) attach to an intial constituent. Example 6.1.20 shows a temporal nominal filling the same slot.

## Example 6.1.21

```
ngumparna jangu-nta-yanu Walmajarri-kulu marda-nanta
lover that-2PlNo-3PlADL walmajarri-comitative to.have-PRES
You all have Walmajarri lovers
```


## Example 6.1.22

```
wakurra, ngaka-rla-n kiji-rni
no after-3SgDLO-2SgNo throw.away-PAST
no, after to it you threw out
```

Example 6.1.21 shows a complex NP as an enclitic host. The NPs that form the single semantic unit "Those Walmajarri lovers" is spread discontinuously through the clause. Example 6.1.22 shows the enclitic host, a temporal nominal, being preceded by an exclamation and pause.

## Example 6.1.23

```
nyuntu wali-n down-ya-nku
2Sg like-2SgNo down-to.go-FUT
now you will go down
```

Example 6.1.23 shows an argument preceding the encliticised element.

## Example 6.1.24

```
ma-nku-rna-nyanu kuja palka-rni
get-FUT-1SgNo-Rflx-Da so in.existence-1SgLoc
i will have them so present
```


## Example 6.1.25

```
kala nyuntu nyampa-n?
but 2Sg what-2SgNo
but what have you got?
```

Initial complementizers or conjunctions can precede the enclitic host, and precede an argument that is in front of the encliticised element.

I have already shown the positioning of the auxiliary base when used, but have yet to discuss the auxiliary complementizers. The most common auxiliary complementizer is the sentential negator wakurra (which is also used as an exclamation meaning "nothing"). When pronominal clitics attach to this auxiliary complementizer, it will typically be in clause initial position. However, like the nominals there are some variants. Again, an initial exclamation and pause may precede the enclitic host, as can an NP when in an initial clause.

## Example 6.1.26

```
wakurra-n-nyanu ngarri-nankura
negative-2SgNo-Rflx-Da to.tell -CONT.FUT
you will not be saying things like that
```


## Example 6.1.27

```
three ace, ngaju kaji-rna kiji-lku
three ace, 1Sg when-1SgNo to.throw-FUT
three aces, when will I throw out?
```

Example 6.1.28

```
kala kaji-rna yangi last down
but who-1SgNo one last down
But I will go down last with one card
```

Example 6.1.26 shows a typical example of an auxiliary complementizer with pronominal clitics attached. In Example 6.1.27 kaji is preceded by a free pronoun. Example 6.1.28 shows an initial conjunction preceding the complementizer.

## Example 6.1.29

```
waraa, soap, wakurra-rna ma-ni
oh.no soap not-1SgNo get-PAST
oh no, I did not get any soap
```

Finally, an initial exclamation is possible. In Example 6.1 .29 we have both an initial exclamation and an argument preceding the enclitic host.

As I mentioned earlier, imperative verbs seem to attract the pronominal clitics above all other candidates. Again, as with other pronominal clitic hosts, the statistically preferred position is initial position, with the clitics sitting in second position. Imperatives have much the same pattern as the other hosts; an exclamation can precede the host, followed by a pause. An argument is possible before the verb (but statistically not favoured).

## Example 6.1.30

```
ma-nta-ngku wiyarru
get-IMP-2SgAD poor.thing
take your card poor thing
```


## Example 6.1.31

```
mukurra ya-nta-lu
here go-IMP-3PlNo
you all come here
```


## Example 6.1.32

```
ngapa yala yu-ngka-rni
water that give-IMP-1SgLO
give me that water
```

Example 6.1.30 shows a typical example of the imperative. With imperatives, the third person plural nominative pronominal clitic is used for second person plural nominative, the third dual nominative is used for the second dual nominative and the third singular nominative (null) is used for the second person nominative singular. Example 6.1.31 shows a demonstrative occurring before the verb. Example 6.1.32 shows a complex NP occurring before the verb.

## Example 6.1.33

```
yaa, yi-ngka-rni card
yes give-IMP-1SgLO card
give me a card
```

Example 6.1.33 shows an initial exclamation preceding the verb.

## Example 6.1.34

```
nyuntu-n kurlirra pukan-karri-ya.
2Sg-2SgNo south sleep-be-IMP
you will sleep just to the south.
```

While imperatives seem to attract clitics over all others, I have found one example above where the clitics attach to a different host, a full pronominal, in initial position. As can be seen in many of the examples above a full pronoun is often the argument that is occurring before the otherwise second position encliticised host.

Verbs with tense and/or aspect marked that attract clitics behave in much the same fashion as imperative verb positionally, and are preceded by the same kinds of constituents.

The tables below summarise the positional and categorical attachment of pronominal clitics in the card game data:

| Occurs <br> after: | N | PN | Nd | Na | Nk | Nt | Nq | Total: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| (Initial) | 23 | 3 | 12 | 16 | 3 | 4 | 26 | 87 |
| NP | 4 | 1 | 8 | 2 | 0 | 0 | 3 | 18 |
| Excl | 10 | 0 | 3 | 2 | 0 | 1 | 0 | 16 |
| Excl, NP | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 5 |
| Comp/Conj | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Comp/Conj <br> NP | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Verb | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| NP, NP | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Total: | 46 | 4 | 25 | 20 | 3 | 5 | 31 | 134 |

Table 6.2 Distribution of Attachment of Pronominal Clitics to Nominals
The table above shows the strong preference for attachment of clitics to an initial element $65 \%$ of the time, but that initial NPs and Exclamations are not uncommon.

| Occurs after: | Imperative Verb | Other Verb | Total Verb: |
| :--- | :--- | :--- | :--- |
| (initial) | 31 | 25 | 56 |
| NP | 22 | 8 | 30 |
| Exclamation | 5 | 6 | 11 |
| Excl, NP | 4 | 0 | 4 |
| NP Aux | 1 | 0 | 1 |
| Aux:Comp NP | 0 | 1 | 1 |
| Total: | 70 | 34 | 104 |

Table 6.3 Distribution of Attachment of Pronominal Clitics to verbs
The table above shows that there is a seemingly less strong prevalence of encliticisation to initial verbs. Roughly half the time the verb will be initial, while one third of the time it will be preceded by an argument NP.

| Occurs <br> after: | Auxiliary <br> Complementizer | Propositional <br> Particle | Interjection | Conjunction | Other <br> Comp. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| (initial) | 36 | 10 | 0 | 0 | 2 |
| NP | 6 | 11 | 7 | 1 | 0 |
| Excl. | 3 | 0 | 0 | 0 | 0 |
| Excl., NP | 4 | 1 | 0 | 0 | 0 |
| CONJ | 1 | 0 | 0 | 0 | 0 |
| Verb | 0 | 0 | 1 | 0 | 0 |
| XP, <br> Infinitive/ <br> Irrealis | 0 | 2 | 0 | 0 | 0 |
| Total: | 50 |  |  |  |  |

Table 6.4 Distribution of Attachment of Pronominal Clitics to other categories

The table above shows the strong preference for initial position for auxiliary complementizers (and other complementizers), but for the remaining categories both the prevalence and preference for initial position is not shown. Propositional Particles have a broad range of functions and distribution throughout sentences. See section 6.2.2.1 for more discussion of the propositional particle mayi. Interjections when attracting pronominal clitics appear to prefer to encliticise to an initial NP or V.

As with the auxiliary, nominal and verbal enclitic hosts seem to have the same dynamic range in terms of what can appear before it. That is, before the enclitic host an argument NP, and exclamation or an argument NP and an exclamation may occur. Conjunctions may occur before the enclitic host, as may a conjunction and an argument NP. Even complementizers showed this pattern of NPs and exclamations occurring before it, however, is statistically much less prevalent.

### 6.2 Simple types of sentences

Here I will look at a limited subset of sentence forms that help to reveal topic and focus structure.

### 6.2.1 Equational Sentences

Sentences in Ngardi can be verbally or nominally headed. Equational sentences in Ngardi are simply two NPs placed together. If anything other than the present tense is required the verb karri-"be/stay" is used with the required tense. The auxiliary is optional in nominally headed sentences, and attracts pronominal clitics, otherwise the pronominal clitics will attach to either the subject or the predicate. Different orderings are possible when there are pronominal clitics are used. Pronominal clitics appear to be optional in sentences that use full pronouns.

Given the nature of the data that I have analysed for this thesis, the examples will be a little difficult. The context of the data is a card game, and most of the conversation revolves around what cards everyone has, who is winning or losing, and so on:

## Example 6.2.1

```
Napanangka wina
F.Skin winner
Napanangka is the winner
```

Example 6.2.1 shows a straight-forward topic-comment, or predicate-focus sentence. The subject Napanangka in initial position is the Topic NP, and the pragmatic predicate "x is the winner" follows. Any tense other than present is indicated by the use of the verb karri- "be/stay" as shown in Example 6.2.2.

## Example 6.2.2

```
wina-karri-nya-n
winner-be-PAST-
you were the winner
```


## Example 6.2.3

```
ngalarri-ngalarri-lu
one.who.always.laughs-3PlNo
they are always laughing
```


## Example 6.2.4

```
lirra-n tartpari
mouth-2SgNo having.gaps.between.items
you mouth with no teeth!
```

Example 6.2.2 also shows that an overt Topic NP can be dropped, and represented by the pronominal clitic. This is still a predicate focus sentence. The second position pronominal clitic appears to indicate that the predicate it is attached to is in focus, and the pragmatic predicate is " x was the winner". Example 6.2 .3 shows a nominal predicate with a pronominal clitic. Use of an overt free pronominal has been dropped here. So both nominally and verbally headed equational sentences can drop a topical subject. Example 6.2.4 is an example of a so called "discontinuous NP". The topical subject is dropped and part of the predicate is marked prominent by attachment of the pronominal clitic.

## Example 6.2.5

```
jalangu-rla-yi yi-nya wiyarru
today-3SgOb-1SgDa to.give-PAST pity
a) this time you have given me (good cards) out of pity
minya ma-rna kulurr, kirda
this Neg.aux-1SgNo testicle big
b) this one I (have) the ballocks, the king
```


## Example 6.2.6

```
minya card twenty-kujarra-pula,
this CARD 20-pair.of-3DuNo
these cards are two tens
```

In Example 6.2 .5 (a) is boasting that they have good cards today, and in this context (b) responds by saying they've got bad cards. First of all, sentence (b) shows the use of an auxiliary in an equational sentence. I would argue that the proximal demonstrative minya is fairly low on the Topic acceptability scale (section 2.1.4.1), or is at least being used in contrast to the card that (a) is referring to, and so, with the auxiliary and pronominal clitic complex sitting in second position, it is also marked as focal. Lastly, the after-thought kirda which in this context means "the king" is adding information to this sentence. The referent is being further specified after it has been indicated demonstratively.

Example 6.2.6 shows that in a topic comment sentence, the pronominal clitics will attach to the predicate. The ordering of constituents is much the same as Example 6.2.1 but instead of the pronominal clitics moving to second position they attach to the predicate again, indicating that it is in focus.

## Example 6.2.7

ngaju twenty-seven.
$15 g$ twenty-seven
a) I am twenty-seven (i.e. I have twenty-seven)

Ngaju-rna seven.
1Sg-1SgNo seven
b) I (Emphatic) am seven (i.e. I have seven)

In Example 6.2.7, sentence (a) shows a simple topic-comment sentence. The full pronoun is the subject and twenty-seven is the predicate. The lack of pronominal clitic shows it is optional when a full pronominal is used. The lack of pronominal clitics also means that the initial element is not in focus, but is instead a Topic NP. In sentence (b) however, the speaker chooses to place their statement in contrast to (a). A full pronoun and the bound form are used together. While the free pronominal here is usually argued to be in contrastive focus, I suggest that this construction allows sentential focus.

### 6.2.1.1 Conclusions

The default ordering of constituents in equational sentences is subject predicate, for both nominally and verbally headed equational sentences. Pronominal clitics appear to be optional when a full pronominal is used. Without pronominal clitics, these sentences appear to be topic comment sentences, with the subject being the topic and the predicate being the focus.

When pronominals are used, this significantly increases the expressive potential of the sentence in terms of discourse pragmatics. To maintain a topic-comment Information structure, the pronominal clitics must attach to the predicate. When the pronominal clitics attach to the predicate the topical NP becomes optional.

When the pronominal clitics attach to the subject, and the subject is a free pronoun, this appears to establish contrastive focus. I suggest that it is the combination of initial position and pronominal clitic attachment that establish this contrastive focus, but it is also possible that it is established by the use of a complex of full pronominal and pronominal clitics.

Example 6.2.4 shows a predicate with the topical NP dropped, and the first NP of two that represent the semantic unit that is the predicate attracts the clitics, rather than the last of the two. It seems that with complex NP predicates second position is favoured. In the absence of further examples, I suggest that predicate focus is established by placing one NP in initial position and the pronominal clitics in second and placing the remaining NPs after this. This would be disproved by the existence of a complex NP predicate with pronominal clitics attaching to the right edge, but I am unable to find one.

Demonstratives are lower on the topic acceptability scale than pronominals. I suggest that Example 6.2 .5 shows that when a proximal demonstrative subject and not a pronominal is used in initial position with a pronominal clitic in second position, it is focal. The after-thought NP at the end of the sentence further specifies the referent of the demonstrative in a way that adds more information, rather than helps to orient the hearers to the location of the referent.

### 6.2.2 Question/Answer sentence pairs

Answers to different questions reveal the expression of focal elements. The form of the question can reveal the ways in which focus and topic are indicated in a language. Given that interrogatives are inherently focal, their morpho-syntactic realisation is also revealing of focal positions and structures.

There are two forms of question sentences in Ngardi: Yes/No questions and WHquestions. Yes/No questions are formed by placing the propositional particle mayi "perhaps" at the end of the sentence. WH-questions are formed by using a sentence initial question word which attracts pronominal clitics. This question word is indefinite when used elsewhere.

### 6.2.2.1 Yes/No Questions

Here are a few examples of simple Yes/No questions:

## Example 6.2.8

```
minya mayi?
```

this perhaps
this one?

## Example 6.2.9

```
maju ngantany-kuny-warru mayi?
indeed an.Aboriginal.man-POSS-indeed perhaps
indeed (he) is an aboriginal person, no?
```


## Example 6.2.10

```
Mula-rlipa karri-ju tirrip mayi?
here-1PlInNo be-FUT overnight.stop perhaps
are we going to sleep overnight here?
```

A statement (nominally headed or verbally headed) is followed by the propositional particle mayi thus forming a question. Answers are either "yes", or "no" sometimes followed by clarification.

### 6.2.2.2 WH-questions

WH-questions are either nominally or verbally headed. First I will look at nominally headed questions:

## Example 6.2.11

```
nyamparu yalayi?
what that
What are these?
```

The question word comes first, followed by an NP:

## Example 6.2.12

```
Nyampa minya makunta?
what this relative
what is this relative?
["relative" here refers to a member of a family of a card]
Pronominal clitics, if present, tend to attach to the question word:
```


## Example 6.2.13

```
Nyampa-n nyuntu?
what-2SgNo 2Sg
what do you have?
```

Finally:

## Example 6.2.14

```
nyampa jalangu Saturday?
what today Saturday
is today Saturday?
```

Here the question is "what is today" with a tentative answer afterwards.
Next, verbally headed sentences work in much the same way:

## Example 6.2.15

```
Nyampa-n kiji-rni?
what-2SgNo to.discard-PAST
what did you throw out?
```

Pronominal clitics attach to the question word in initial position.

## Example 6.2.16

```
ngantu yala stove yirra-rni?
who that stove to.turn.on-PAST
who put the stove on?
```

Example 6.2.17

```
Ngantu-rla yirra-rni stove
who-3SgDLO to.turn.on-PAST stove
Who put the stove on?
```

Example 6.2.16 and Example 6.2.17 show the relative free word ordering of argument and predicate after the question word. I would suggest that the ordering is
based on the relative prominence of pragmatic predicate "x turned on the stove" and the stove that is the discourse referent.

The propositional particle mayi is frequently used in WH-question sentences to modify the mood, but not in final position:

## Example 6.2.18

```
Ngantu mayi yirra-rni?
who perhaps to.put.down-PAST
Who put down?
```

Complementizers can precede the question word:

## Example 6.2.19

kaji nyajangu?
so how.many
but how many?

But unfortunately I have no examples of this with pronominal clitics, so I cannot indicate which will preferentially take them.

## Example 6.2.20

```
Nyampa-ngku karri-nya?
what-2SgAD be-PAST
What card was there for you?
```

Nominally headed sentences cannot indicate tense other than present. To indicate a different tense, the verb karri- must be used.

### 6.2.2.3 Complications

First, nominally headed questions:

## Example 6.2.21

```
ngapa wanji-rla?
water where-LOC
where is the water?
```


## Example 6.2.22

```
[everybody is talking about what cards they might have]
kala nyuntu nyampa-n?
but 2Sg what-2SgNo
but what have you got?
```


## Example 6.2.23

```
[everybody is talking about what cards they might have]
ngaju, nyampa minya?
1Sg what this
I, what is this one? (ie, as for me... what's this!)
```

The expected word order in Example 6.2.21 is reversed. The question word is not at the beginning of the sentence. Compare Example 6.2.22 with Example 6.2.13. In Example 6.2.22 the sentence begins with the complementizer kala, and in context it is clear that nyuntu is sentential-focus. This does not answer why a full pronoun is used after the question word in Example 6.2.13, but I suggest that this usage allows optional unmarked use of the pronoun in this position.

In Example 6.2.23 it is clear from the pause, and the use of a full pronoun, that ngaju is a left dislocated topic preceding an otherwise normally formed sentence.

Now I will look at verbally headed questions:

## Example 6.2.24

```
Nyampa ma-n mardananta, minya kiji-ka maju
Why NEG.AUX-2SgNo to.keep -PRES this to.throw-IMP indeed
why are you keeping that, you can throw it?
```


## Example 6.2.25

```
Nakarra wanji-rla ya-ni?
F.Skin where-LOC to.go-PAST
Nakarra where did she go?
```


## Example 6.2.26

```
Ngunju, wanji-rna yirrarni?
tobacco where-1SgNo to.put -PAST
Where did I put my tobacco?
```

Example 6.2.24 shows that when the optional auxiliary base $m a$ is used, the clitics attach to this auxiliary base and not to the initial questions. This auxiliary is most likely enclitic to the question word. Example 6.2.25 like Example 6.2.21 shows an element appearing before the question word, most likely a left-dislocated topic (in the absence of clear prosodic marking). Example 6.2.26, like Example 6.2.23, shows a clear case of a left-dislocated topic. Ngunju is followed by a pause, a question word with clitics attached, and the verb.

## Example 6.2.27

```
[receiving cards]
nyampa-rlu yalayi marluka kuna-puru-rlu
what-ERG that king shit-possessive-ERG
a) this one is the boss of excrement
ngana jangu-ngku-rla ngarri-rni?
who that-2SgD-3SgO to.tell-PAST
b) who did she say that to you about?
```

In the example above (b) is responding to (a)'s comment. The pronominal clitics have moved from the initial question word to the anaphoric nominal jangu "the aforementioned". It could be that the speaker (b) is trying to place prominent stress on jangu here and that this overrules the preference for attachment to the question word. Given that this is the only example of this kind, it is difficult to come to a conclusion on this matter.

## Example 6.2.28

```
Nyuntu-ku jaja, yi-nya-rla-ngku-lu?
2Sg-POSS grandchildren to.give-PAST-3SgO-2SgA-3PlNo
your grandchild, they been give it to you?
```

The example above shows a question sentence formed by intonation alone. The pronominal clitics have attached to the verb, and there is a pause marked between the initial constituent and the verb. The Topic NP appears to be left-dislocated given the break.

### 6.2.2.3.1 Conclusions

Placing the indefinite interrogative in initial position and the pronominal clitics in second position forms a simple nominal headed question. This establishes the focal status of the question word. As with the equational sentences, when pronominal clitics are used this frees up further expressive possibilities.

The default ordering in nominally headed question sentences is Focus-Topic, but a topic can be made prominent through two strategies. If there are no pronominal clitics (that is, the referent is third person singular and hence null), then a leftdislocated topic can be used to make a prominent topic. If pronominal clitics are present either a left-dislocated topic can be used or placing the topic NP in initial position without the pronominal clitics is possible. It is possible, in the absence of
further prosodic information, that this is not the case however, and that there is consistently a pause between initial topics in question sentences, and that they are always dislocated.

Verbally headed sentences appear to show free ordering of verbs and arguments after an initial question word. The same topicalisation strategies as nominally headed sentences appear to be available.

### 6.2.2.4 Answers to Questions

Many of the questions above were rhetorical. These, and most non-rhetorical questions often remained unanswered. The answers to the questions like those above (where they have actually been answered) usually came in the form of a single word reply, and so this line of analysis did not reveal so many focal structures. Never the less I will show some of the answers that were given here. Generally speaking, many times during the conversation, it may be a while before a question is answered if at all. For this reason I include only few examples here, as this discourse data does not clearly reveal focus structures.

## Example 6.2.29

Nyampa-n kiji-rni?
what-2SgNo to.discard -PAST
a) what did you throw out?
raka
five
b) a five

As might be expected, the great majority of answers to simple questions (where they occur) are focal content with topical content dropped altogether.

## Example 6.2.30

```
Wanjirla-rli parnta-naninyirra?
where-1DuInNo to.rub-CONT.COMP
where did we rub her?
kakarra, Awutupiya-rla.
east Utopia-LOC
east, at Utopia.
```

In Example 6.2.30 there is a similar answer to Example 6.2.29 in that the answer is entirely focal, but in Example 6.2.30 the answer is added to with an after-thought, thus it is given greater specificity by adding on the name of the location.

## Example 6.2.31

```
ngaju, nyampa minya?
1Sg what this
a) I what is this one?
nyuntu wali-n down- ya-nku
2Sg now-2SgNo down- to.go-FUT
b) now you will go down
kirda ma-rna marda-nanta
big Neg.Aux-1SgNo to.have -PRES
a) but I have the big one (i.e. the king)
```

Example 6.2.31, uses a question form with a left-dislocated topic (discussed above). (b) chooses to respond by using the full pronoun in initial position, but there is no indication that it is a left dislocated topic. The pronoun is a Topic NP, and is not the host for the enclitics. This appears to be a topic-comment sentence, but with the topic fully specified. It is not contrastive so the pronominal clitics do not attach to it, but it is prominent. (a)'s response is that they have a king. This response appears to be predicate focus. The most salient part of their response further specifies the referent of the demonstrative in the first sentence.

Many of the questions throughout the card game set up new topics. They remain unanswered but establish a new topic. In many cases this new topic can be indicated through zero anaphora:

## Example 6.2.32

```
Wanjirla ya-ni Napaljarri?
where to.go-PAST F.Skin
a) where did Napaljarri go?
minya ka-nya jarrala-ni, jaru nga-rla wurra ma-nanta
this bring-PAST set.up-PAST word seq.aux-3SgO later get-PRES
b) she brought it here and set it up, it has recorded the
words already.
```

Again the topic is dropped and the answer is focal.

## Example 6.2.33

[why can't that son which is here look after them properly?]
paniya-yi kaninjarra wuruly-karri-nankura
sight-1SgAD inside hidden-be-CONT.FUT
that person is sitting down inside without seeing out

Again, in this response the most salient part moves to the front.

### 6.2.2.4.1 Conclusions

The answers to questions were fairly minimal in the data that I examined. Most of the answers were entirely focal. Where answers included pronominal clitics, the most salient part of the answer appears to be the clitic host. However, in the absence of further data, it is difficult to make further conclusions. Not surprisingly, in this natural conversation data, topic epenthesis is quite common.
(Return to Section 5 for overall conclusions)

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[^0]:    ${ }^{1}$ Although arguably this is focal in the sense of meaning " $10: 30$, not any other time"

[^1]:    ${ }^{2}$ But these regions do not equate with the Topic and Focus of a sentence.

[^2]:    ${ }^{3}$ Copies of these transcripts are available through Lee Cataldi, but they contain restricted materials, so I have not included them with this thesis.
    ${ }^{4}$ I use this term throughout this paper to refer to a sentence or group of sentences. Each person's turn in the conversation is an "utterance"

[^3]:    ${ }^{5}$ This estimate is based on the total count of auxiliaries across the two card game texts (see section 2.2 for more details on texts used). I do not have an exact figure on the number of sentences or clauses within which the auxiliary might occur, so this is based on a count of 89 auxiliaries (of the monosyllabic kind) over 774 total utterances, which include a minimum of one, but often more sentences. Also, this figure does not include the auxiliary complementizers. Strictly speaking, because I consider the $n g u$ and $n g a$ auxiliary bases to behave like complementizers, the total count of plain, monosyllabic auxiliaries is actually 58 (i.e. they occur within $7 \%$ of utterances).

[^4]:    ${ }^{6}$ These counts on their own are indicative of nothing but the relative confidence I have in my assertions of syntactic pattern. Further investigation is needed to confirm the existence and frequencies of the irregularities that I note, and especially the patterns I assert that are based on particularly low counts.

