A REFERENCE GRAMMAR OF JAMBI MALAY

by

Yanti

A dissertation submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Linguistics

Spring 2010

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by

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LIST OF ABBREVIATIONS

1	:	First person
2	:	Second person
3	:	Third person
ABST	:	Abstract
ACT	:	Active
AGT	:	Agentive
APPL	:	Applicative
CIRC	:	Circumfix
CLF	:	Classifier
COMP	:	Complementizer
COP	:	Copula
DEM.DIST	:	Demonstrative Distal
DEM.PROX	:	Demonstrative Proximate
EMPH	:	Emphatic
EPIT	:	Epithet
EXCL	:	Exclamative
FILL	:	FIller
INTR	:	Intransitive
k.o.	:	kind of
LOC	:	Locative
N	:	Nasal
NEG	:	Negation
NMLZ	:	Nominalizer
PART	:	Particle
PARTRED	:	Partial Reduplication
PASS	:	Passive
PFCT	:	Perfective
PFCT.PASS	:	Perfective Passive
PL	:	Plural
PROG	:	Progressive
Q	:	Question marker
RED	:	Reduplication
REL	:	Relativizer
SG	:	Singular
TRU	:	Truncation

ABSTRACT

The purpose of this dissertation is to provide a comprehensive reference grammar of Jambi Malay, a group of closely related Malay dialects spoken in the Jambi Province of southern Sumatra, Indonesia. The dissertation concentrates on the Jambi Malay spoken in the area around Jambi City, and covers three dialects, namely the Tanjung Raden dialect, the Mudung Darat dialect, and the City dialect, with a focus on the Tanjung Raden dialect. These dialects share similarities in many aspects of the grammar, but they also show differences in other aspects of the grammar.

The data for this grammar are based on naturalistic recordings collected over several years and on elicited data that complements the naturalistic data. The naturalistic data are comprised of texts consisting of traditional folk stories, personal narratives and conversations representing everyday interactions between speakers.

This dissertation follows the *Lingua Descriptive Studies Questionnaire* (Comrie and Smith, 1977) and covers three main linguistic areas: the syntax, the morphology, and the phonology. These are presented in Chapter 1, Chapter 2, and Chapter 3, respectively. In addition to providing the facts about Jambi Malay in as theoretically neutral a fashion as possible, the dissertation also proposes analyses for a number of topics with respect to significant issues in linguistic theory as applied to Austronesian languages. These topics include the voice system, clause structure, *wh*-questions, and relative clauses (among others).

Chapter 0

INTRODUCTION

0.1. Background

Malay-Indonesian is an Austronesian language comprised of a large number of varieties/dialects, many of which are not mutually comprehensible, and, hence, are really separate languages. It is a major world language (group) and if viewed as a single language, it is the fourth most widely spoken language in the world (see for example Collins, 1998). According to Adelaar (1992:1), Malay dialects, together with other closely related languages such as Minangkabau, Kerinci, Iban and Kendayan, make up the 'Malayic' linguistic subgroup within the Western Malayo-Polynesian branch of the Austronesian language family. Malay is mostly spoken in Indonesia, Malaysia, Singapore, and Brunei.

It is believed that Malay is originated in Sumatra (Tadmor, 2002) and spread from Sumatra throughout the region. The larger Malayic family may have originated in Borneo and spread to Sumatra (cf. Blust, 1988; Adelaar, 1988; Adelaar, 1992). In any case, Malay has been spoken continuously in Sumatra for thousands of years, and Sumatra constitutes the Malay 'heartland'. Yet, almost no thorough scientific descriptions of Sumatran Malay have been written based on the actual spoken language of the area. Grammars which are currently available are based merely on the standard or standard-like language, and thus, they do not provide accurate descriptions of the actual languages/dialects.

Malay varieties can be classified into two groups. The first group consists of contact varieties, i.e. varieties of Malay which emerge out of language contact. while the second group contains varieties which have an unbroken chain of transmission back to Proto-Malay and are not from language contact. Jakarta Indonesian, spoken in the capital city of Indonesia, Jakarta, is one example of a contact variety (Tjung, 2006; Sneddon, 2006). The urban koine of Jakarta is based on Betawi, the native language of indigenous inhabitants of Jakarta, but has been influenced by the standardized language, Standard Indonesian as well as by Javanese and Sundanese. It is also important to note that Standard Indonesian was designed by language planners and has a rich grammatical system, whereas contact varieties have a simpler system. The relative simplicity of the morpho-syntax of contact varieties of Malay-Indonesian raises the question of whether any 'naturally occurring' Malay varieties display a rich morpho-syntax comparable to that of the standard language. This dissertation is intended to show that there are, indeed, naturally occurring varieties of Malay present in the Malay heartland of central Sumatra that display such richness, but the complex morpho-syntax of the language has started to break down as a result of koineization and contact with other Malay varieties.

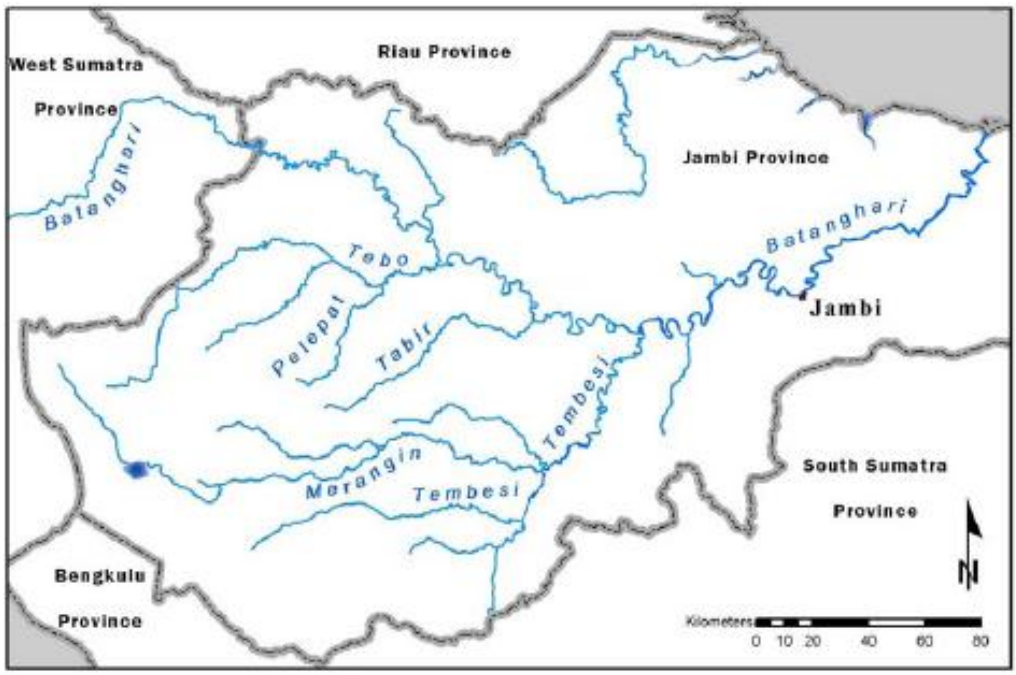
This dissertation describes the grammar of Jambi Malay, a Malay variety spoken in the Jambi Province of Southern Sumatra. Being the cradle of Malay civilization and of the Malay language, Jambi is very important for understanding the above-mentioned dichotomy (cf. Anderbeck, 2003). While spoken in Jambi for thousands of years, Jambi Malay has not yet been thoroughly and accurately described. In addition, although Jambi Malay is not in immediate danger of extinction, the dialect spoken in Jambi City is in the advanced stages of koineization and is spreading rapidly

in the province. Standard Indonesian and Jakarta Indonesian have been considered more prestigious in everyday life than local varieties throughout Indonesia. This explains the inroads of these varieties in Jambi and elsewhere in the Malay heartland. Koineization, in contrast, is a process by which dialects within the Jambi region lose their distinctive features and, hence, become increasingly similar to each other. As this process continues and spreads to the rural areas, it is would appear inevitable that the dialects spoken in the rural areas will gradually become extinct.

Husin et al. (1985) claim that Jambi exhibits six indigenous languages: Jambi Malay, Batin, Penghulu, Kubu, Kerinci and Bajau. However, this claim was revised by Anderbeck (2003), who claims that indigenous varieties of Jambi cover downstream (of Batanghari River) Jambi Malay, Batin (upstream Jambi Malay), Kubu and Kerinci, which are all Malay varieties.

Map 0.1, adapted from Anderbeck (2003:3), shows the Batanghari watershed.

Map 0.1 Batanghari Watershed



This dissertation focuses on the Jambi Malay spoken in the downstream area. It covers three dialects spoken in that area, namely the Jambi City dialect, the Tanjung Raden dialect, and the Mudung Darat dialect, with a focus on the Tanjung Raden dialect.

As its name suggests, the Jambi City dialect is the dialect spoken by people who live in the city of Jambi. As mentioned earlier, the variety spoken in Jambi City is a koine. Kristen Anderbeck (2003) states that the dialect spoken in Jambi City is an intermediate variety, bearing resemblances to both Jambi Malay and Standard Indonesian. The Tanjung Raden dialect is spoken in a village named Tanjung Raden (which literally means 'Prince Cape'), a village separated from the city by the Batanghari River. People refer to the dialect spoken in Tanjung Raden and its

neighboring villages as *Baso Seberang* 'the language from across' because it is spoken in the area across the river from the city of Jambi. These villages, ranging from the upper stream to the lower stream of the Batanghari, are: Pasir Panjang, Tanjung Raden, Tanjung Pasir, Olak Kemang, Ulu Gedong, Kampung Tengah, Kampung Jelmu, Mudung Laut, Arab Melayu, Pelayangan, Tahtul Yaman, and Tanjung Johor.[1] The Mudung Darat dialect is the dialect spoken in Mudung Darat village. This village is further upstream on the river and the area is more inland. Thus, Mudung Darat is not categorized as *Baso Seberang* by the people. The Tanjung Raden and Mudung Darat dialects together are considered as 'traditional Jambi Malay' for purposes of our study.

Similarities and differences are found in these dialects in all aspects of grammar, and are shown in the subsequent chapters. However, in many aspects, the Tanjung Raden dialect is more similar to the Mudung Darat dialect than to the city dialect. For example, the phonemic inventory of the Tanjung Raden dialect is very similar to that of Mudung Darat. I refer to the Tanjung Raden dialect and the Mudung Darat dialect jointly as the Rural Jambi Malay dialects and the city dialect as the City dialect.

0.2. The Influence of Javanese and Speech Levels

Javanese has had a major influence on the Malay of central and south Sumatra. Andaya (1993), in her book *To Live as Brothers*, describes in details the close connections of the royal courts of Jambi and Palembang. In addition, both were

[1] Although people refer to the dialect spoken in the villages across the city of Jambi jointly as the *Seberang* language, there are differences between the dialects. One of them is the vowel harmony rule discussed in section 3.1.3.2.2. However, this dissertation does not intend to describe differences between *Seberang* dialects.

also connected to Javanese kingdoms. Andaya (1993:14) points out that "the chronology of Java's expansion in southeast Sumatra remains uncertain, but from at least the late fifteenth century the region was subject to the north coast port of Demak, and in the seventeenth the central Javanese kingdom of Mataram was the acknowledged overlord."

Because of the close connection between Jambi and Javanese in the past, the influence of Javanese on Jambi Malay is still discernable. Some basic vocabulary items have been borrowed into the language from Javanese, such as *kapan* 'when', *lawaŋ* 'door', *kupiŋ* 'ear', *dewe?* 'alone/self, *salawe ~səlawe* 'twenty five', *lanaŋ* 'male' (only in the Jambi City), and *watas* 'limit' (only in rural dialects). Moreover, the enclitic *–e*, a native-Malay form, is being reinforced by Javanese. This enclitic form is only observed in Tanjung Raden (and other *Seberang* dialects) and Mudung Darat. Furthermore, Tanjung Raden, which literally means 'Prince Cape', is the village in which the descendants of Jambi royal family live, and the Javanese influence is found in their personal names. The Javanese titles *raden* 'prince' and *ratu mas* 'princess', become the titles of the males and females, respectively, and are still used in the village, especially by the older generation.

The influence of Javanese is also reflected by the presence of Javanese-style speech levels in the vocabulary of Tanjung Raden. As discussed in previous works, (Yanti, 2003 and Tadmor and Yanti, 2006), speech levels are found in Jambi Malay: *basó kasar* (literally means 'rough language') and *basó alós* (literally means 'fine language') or *basó kuló ŋgᵍé* (literally means the language of 'I' and 'yes'). *Basó kuló ŋgᵍé* is modelled after Javanese *Krama* (a higher speech level; used by people of a higher social status) and is only used in Tanjung Raden and Tanjung Pasir. However,

some speakers mentioned that it also exists in Arab Melayu, Tanjung Johor, and Tahtul Yaman.

The *kuló ŋgᵍé* speech level is used for addressing elder people or people from a higher socio-economic status. In the past, this honorific speech level was mainly used for addressing the descendants of the royal family. The *basó kasar* is employed for daily communication and it was used by elder people speaking to younger people or people from lower social and economic status, and among peers.

Interestingly, unlike Javanese, this speech level does not demonstrate separate morphological and syntactic marking, but rather only a set of fixed expressions (lexical items).

0.3. Jambi Malay and Minangkabau

Anderbeck (2003) observes innovations based on a strong Minangkabau connection in the upper stream dialects of Jambi Malay. Interestingly, the downstream dialects, especially the Rural Jambi Malay dialects also share some linguistic features with Minangkabau. First, in the Rural dialects, the syllable coda agrees in place of articulation with the fricative of the following syllable onset word-internally (see section 3.1.2.1.3). The agreement in place of articulation between the coda of a syllable and the onset of the following syllable has undergone dissimilation in the City dialect and in Standard Indonesian. In the Rural dialects, the words for 'swan', 'nation', 'direct', and 'faint', for example, are *anso*, *banso*, *lansuŋ*, and *pensan*, respectively. In the City dialect, these words are *aŋso, baŋso, laŋsuŋ,* and *peŋsan*, and in Standard Indonesian, they are *aŋsa, baŋsa, laŋsuŋ,* and *piŋsan*. Some words in Minangkabau that show word-internal assimilation are *lansuang* 'direct', *pinsan* 'faint', *banso* 'nation', which pattern like the rural dialects.

Second, the Rural dialects also share some lexical features with Minangkabau. For examples, the words *gdaŋ* 'big', *iko* 'this', *elo?* 'beautiful', and *siko* 'here' are *gadaŋ, iko, elo?,* and *siko* in Minangkabau. In the City dialect, however, these lexical items are rarely used.

Third, some prefixes found in the Rural dialects are similar to those in Minangkabau, such as *ba-*, *sa-, ka-*, and *ta-*. In the City dialect, *bə-, sə-, kə-,* and *tə-* are used, where the schwa is an innovation from the /a/ phoneme.

0.4. Koineization

Koineization is a contact-induced process that leads to rapid, and occasionally dramatic, change (Kerswill, 2004:669). As was mentioned earlier, the City dialect has undergone koineization. There are indications that that koineization has spread to the villages across from the city of Jambi.

First, younger speakers of Tanjung Raden and other villages from across the river are using fewer traditional features of the language. The third person enclitic pronoun *–e,* for example, is often replaced by *-ɲo,* the *koine* form used in the city dialect.

Second, in word final position, voiceless stops (/p/, /t/, /k/) are often pronounced as unreleased stops ([p˙], [t˙], [k˙]) instead of prenasalized stops (/^{m}p/, /^{n}t/, /^{ŋ}k/) and simple nasals (/m/, /n/, /ŋ/) as simple nasal instead of pre-occluded nasals (^{b}m, ^{d}n, ^{g}ŋ). Prenasalized stops and pre-occluded nasals are two of the features specific to the Rural dialects and are not observed in the city dialect. Speakers of older generations of the Rural dialects are more consistent in using the final prenasalized stops and pre-occluded nasals. However, younger speakers are beginning to lose these features in their speech.

Third, many of the traditional lexical items are not used and may not be recognized by young speakers. The words *pati kalapo*, *maronoŋ, maroso*, and *bɯcʊt*, for example, are traditional forms for 'coconut milk', 'swim', 'stab', and 'swell', respectively. Instead of using these forms, young speakers use *santan*, *barnaŋ, tuja/tikam,* and *bŋka?*, respectively, forms adopted from Indonesian.

0.5. Typological Characteristics

In this section I provide a brief typological overview of Jambi Malay. The topics discussed here are presented in much more detail later in the dissertation. Similar to other Malay dialects, Jambi Malay has a basic word order of SVO. However VOS word order is also possible. Jambi Malay is a head-initial language, with modifiers coming after the head. For instance, in noun phrases, adjectives and other modifiers, such as relative clauses and possessors, follow the head noun. A numeral (with or without a classifier), however, may precede or follow the head noun. In verb phrases, the complement follows the verb. In prepositional phrases, the preposition precedes its complement.

The voice system of Jambi Malay (like Standard Malay/Indonesian) is similar to the "Philippine-type" voice systems, which are considered to be "symmetric" voice systems (the voice system reconstructed for Proto-Austronesian). However, the Jambi Malay voice system shows considerable simplification in comparison with e.g. the languages of the Phillipines. The voice system of Jambi Malay is presented in section 1.1.1.

Like other Malay varieties, *wh*-questions in Jambi Malay can be formed using several strategies: *wh-in situ*, moved *wh*-phrases (fully or partially), as well as

clefted *wh*-phrases. The description of *wh*-question is provided in section 1.1.3.2.2 and the structure of clefted *wh*-phrases is presented in section 1.1.3.2.2.2.4.

The strategies for forming relative clauses in the world's languages are: the gap strategy, the relative pronoun strategy, the resumptive pronoun strategy, and the full NP strategy. Only the first three strategies are attested in Jambi Malay. A description of the relative clause is provided in section 1.1.4.2.

Word formation processes in Jambi Malay include affixation, reduplication, compounding, and truncation. There is no clear distinction between inflectional affixes and derivational affixes. Affixes often pattern like inflectional affixes in that they do not change the part of speech of the root they attach to, but at the same time pattern like derivational affixes in that they derive a word whose word class is distinct from the root (see section 2.2.1.6).

The Rural Jambi Malay dialects exhibit more phonemic segments than the city dialect. If glides are analyzed as derived from high vowels, Rural Jambi Malay has twenty native consonants and one loan consonant, whereas the city dialect has sixteen native consonants and one loan consonant. The extra four consonants in the Rural dialects are the four post-occluded nasals /m^b/, /n^d/, /$ɲ^j$/, and /$ŋ^g$/. Glides have a different status in different Malay varieties. Some of them are phonemic, whereas others are derived from high vowels (among others Macdonald, 1976:13; Grinjs, 1991:16; Teoh, 1994:29-30). The vowel inventory of the Rural Jambi Malay dialects is also more complex. The status of schwa in Jambi Malay is complicated. However, I take the stand of treating schwa to be non-phonemic in the rural dialects, but phonemic in the city dialect. Seven vowels are found to be phonemic in the rural dialects and six vowels are found in the city dialect.

0.6. Previous Studies

There has been no earlier work that provides a comprehensive description of Jambi Malay, and nearly no description of Tanjung Raden, Mudung Darat, and Jambi City dialects has been carried out. Only three works appear to have made a significant contribution to the study of Jambi Malay.

First, Anderbeck (2003) in his MA thesis entitled 'Malay Dialects of the Batanghari River Basin (Jambi, Sumatra)' provides a dialectological study of Jambi Malay based on word lists collected from native Jambi people who identify themselves as *orang Jambi* 'Jambinese', who live on or around the Batanghari river and its tributaries. Anderbeck's work is an excellent example of traditional dialect geography. However, as pointed out by Anderbeck, the main goal of his research was to determine the oldest forms and patterns to better understand the history of Jambi Malay. Thus, the goal was not to provide a description of the language from a synchronic point of view. In his work, Anderbeck focuses on lexical and phonetic differences among the word lists collected at various data points and therefore does not contain a systematic analysis of the phonology, the morphology, or the syntax of the language.

Second, Kristen Anderbeck (2003) has described the sociolinguistic situation in two traditional Jambi Malay speaking areas. Like Anderbeck's work, this study also does not aim at providing a description of the structure of the language.

Third, Yulisma et al. (1997) compiled an Indonesian-Jambi Malay dictionary. Although numerous errors are found in the dictionary, it has proven to be of some value for research purposes.

In addition to these three works on Jambi Malay, there are a number of works presented in Indonesian (and published in Indonesia). Among them are Husin et al. (1985), Gani et al. (2000), and Wiboyo et al. (1996). However, these works do not

provide an accurate description of Jambi Malay so I have largely disregarded them in preparing this dissertation.

In their work entitled *Struktur Bahasa Melayu Jambi* 'The structure of Jambi Malay, Husin et al. (1985) present the phonology, morphology, and syntax of Jambi Malay. However, their areal population is too broad. According to Husin et al. (1985), Jambi Malay is used by people living in most areas of Jambi province, which mainly covers those who live in the city of Jambi, Batanghari regency, Tanjung Jabung regency, Sarolangun regency, Bangko regency, and some of Bungo Tebo regency. The writers appear not to be aware of the very large differences among the dialects spoken in these areas.

In this dissertation, phonological, morphological, and syntactic differences are observed within a smaller geographical area. Differences are found between the city dialect and some rural dialects spoken in the villages across from the city, and also among rural dialects.

Another problem with the work by Husin et al. (1985) is that, as also pointed out in Anderbeck (2003:23), the description gives an impression that Jambi Malay looks significantly similar to Standard Indonesian. In the subsequent chapters, I show that while Jambi Malay demonstrates features which are similar to Indonesian, there are also significant differences.

Gani et al. (2000) provide more or less the same description as Husin et al. (1985). Like Husni et al. (1985), in their grammar book entitled *Tata Bahasa Melayu Jambi* 'The Grammar of Jambi Malay', Gani et al. (2000) cover a very broad area of research without even mentioning whether or not there are any differences found among these areas. Moreover, they also make Jambi Malay look nearly identical to

Standard Indonesian. However, Gani et al (2000) provide much better data than Husin et al. (1985).

Wibowo et al. (1996) take a closer look at the structure of adjectives and adverbials in Jambi Malay in *Struktur Adjectiva dan Adverbia Bahasa Melayu Jambi*. They present the forms of adjectives and adverbials, their grammatical meanings and their characteristics. Their research areas include some regencies (Sarolangun Bangko, Bungo Tebo, Batanghari, Tanjung Jabung) and the city of Jambi. However, like previous studies, no differences between the areas are documented.

There are other works, such as by Wiryatmojo (1983), Dahlan et al. (1985), etc. I shall not discuss them. The reader is referred to Anderbeck (2003:21-22), which reviews other previous works on Jambi Malay.

Furthermore, a recent work done by Hustarna (2009) provides an analysis for polysemous verbs in Jambi Malay using Optimality Theoretic Semantics. However, again, her intention is not to describe the grammar of Jambi Malay.

0.7. Database

This grammar is mainly based on naturalistic recordings collected over several years (2005 – 2008), elicitation and observation of everyday interactions over several field trips. As for the elicitation data from the city dialect, the writer's judgments as a native speaker were mainly taken as the source. However, judgments from other speakers were also gathered. These data were transcribed and documented in a database using a program called Filemaker Pro. The database was developed by Bradley Taylor, an IT expert from the Jakarta Field Station of the Max Planck Institute for Evolutionary Anthropology.

0.8. Organization of the Grammar

This grammatical description follows Bernard Comrie and Norval Smith's 1977 Lingua Descriptive Studies Questionnaire. I deviate from the organization set by the questionnaire in cases where certain categories/topics can be better understood if they are discussed in a different order from that of the Questionnaire. For example, the voice system of Jambi Malay is discussed in the syntax chapter rather than in the morphology chapter because without understanding the voice system of the language, the reader will encounter difficulties in understanding other main syntactic issues of the language. In addition, I did not include the last two minor chapters from the Questionnaire: (i) ideophones and interjections and (ii) lexicon. Therefore, this reference grammar only covers the three main linguistic aspects of Jambi Malay: (i) syntax, (ii) morphology, and (iii) phonology.

In chapter 1, I present the syntax of Jambi Malay. The chapter is divided into 16 sections: general properties, structural properties, coordination, negation, anaphora, reflexivity, reciprocals, comparison, equatives, possession, emphasis, topic, heavy shift, other movement processes, other minor sentences, and word classes. In chapter 2, the morphology of Jambi Malay is presented in 2 main sections: inflection and derivational morphology. The chapter on the phonology of Jambi Malay (chapter 3) is comprised of five sections: phonological units, phonotactics, suprasegmentals, morphophonological processes, and stress and intonation.

In addition to these chapters, I also provide a list of basic vocabulary and a short sample text in the appendices.

0.9. Orthography

Jambi Malay does not have a standardized orthography. Local newspapers often have sections written in Jambi Malay. For that purpose, they use an orthography based on the Standard Indonesian orthography, which does not accurately represent the phonemic system of the language.

The orthography employed in this dissertation is mainly phonemic. In presenting the examples, I use the International Phonetic Alphabet (IPA), with a few modifications in order to accommodate readers who are familiar with works in Malay/Indonesian orthography. The letters /c/ and /j/ are employed to represent palatal stops. In addition, /y/ is the symbol for a palatal glide. In addition, while the IPA symbol for a velar fricative is /ɣ/, I employ /r/ in the transcription.

In addition, in the phonology chapter (section 3.1.2.2.8), I show that although glides can simply be proposed to be phonemes in the language, they can also be viewed as derived from high vowels. However, I assume that glides are phonemic and are therefore transcribed as such in the examples provided in this dissertation. There are also epenthetic glides (section 3.1.3.2.7.2) and I do not encode inserted glides in the transcription.

Furthermore, in section 3.1.3.2.1, high mid vowels /ɪ/ and /ʊ/ in Rural Jambi Malay dialects can be analyzed using two analyses. The first analysis is that high mid vowels are present in their phonemic inventory and the second analysis is that high mid vowels are derived from the corresponding high vowels. I take the position that /ɪ/ and /ʊ/ are synchronically present in the phonemic inventory of the Rural dialects and thus in examples from the Rural dialects, I distinguish high vowels /i/ and /u/ from /ɪ/ and /ʊ/, respectively.

Finally, I show in section 3.1.3.2.4 that the status of schwa is complicated in Jambi Malay. I take the position that schwa is not phonemic in the Rural Jambi Malay dialects, but is phonemic in the city dialect. Therefore, in the transcription, I encode schwa in examples taken from the city dialect, but not in those taken from Rural Jambi Malay dialects. Words for ‘buy’ and ‘pick up’, for example, are transcribed as /bəli/ and /jəmput/ in the City dialect and /bli/ and /jmpʊt/ in the Rural dialects.

Chapter 1

THE SYNTAX OF JAMBI MALAY

The syntax of Jambi Malay has not been adequately described in the literature. Two examples of previous works are *Struktur Bahasa Melayu Jambi* 'The Structure of Jambi Malay' (Husin et al., 1985) and *Tata Bahasa Melayu Jambi* 'The Grammar of Jambi Malay' (Gani et al., 2000). Each of these grammars contains a chapter describing the syntax of Jambi Malay. However, as it was pointed out in the introduction, the descriptions provided are inaccurate and descriptively inadequate. Both descriptions incorrectly describe Jambi Malay syntax as being much like Indonesian syntax. In addition, they to capture differences among different dialects of Jambi Malay.

As a reminder to the reader, this dissertation covers three dialects: the Tanjung Raden dialect (TR), the Mudung Darat dialect (MD), and the Jambi City dialect (JC). I refer to the Tanjung Raden and Mudung Darat dialects jointly as the Rural Jambi dialects, the Jambi City dialect as the City dialect, and use Jambi Malay as a general term to refer to all three dialects. Although this dissertation covers three dialects, the main focus of this dissertation is the Tanjung Raden dialect, and unless otherwise noted, most examples presented are taken from Tanjung Raden naturalistic data.[1]

[1] Elicited data from the Tanjung Raden dialect are marked with (TR, E). Naturalistic and elicited data from the Mudung Darat dialect are marked with (MD, N) and (MD, E), respectively, whereas naturalistic and elicited data from the City dialect are marked with (JC, N) and (JC, E), respectively.

The three dialects are similar to each other in most aspects of syntax. However, differences are observed, either between the City dialect and the Rural Jambi dialects, between the two Rural Jambi dialects (TR and MD), or even among all three dialects. These differences are stated explicitly in the description.

This description of the syntax of Jambi Malay covers 16 sections, namely general properties, structural properties, coordination, negation, anaphora, reflexives, reciprocals, comparison, equatives, possession, emphasis, topic, heavy NP shift, other movement processes, minor sentence types, and word classes. Each section is divided into subsections.[2]

1.1. General Properties

The description of the general syntactic properties of Jambi Malay covers four main topics: voice system, structural properties of the clause, sentence types, and subordination.

1.1.1. The Voice System[3]

In this section, I shall present the voice system of Jambi Malay. The voice system discussed in this section covers only the three main voice constructions,

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[2] I follow the 16 main sections in the Lingua Descritiptive Studies Questionnaire (Comrie and Smith, 1977). However, I have shifted the location of some subsections so that the description will be easier to follow.

[3] In the Lingua Descriptive Studies Questionnaire (Comrie and Smith, 1977), this topic is presented under the morphology chapter. However, I decided to shift the description of the voice system to the syntax chapter because the voice system of Jambi Malay is closely intertwined with restrictions on extractions. Therefore, before discussing other areas of syntax, it is essential to describe the voice system and the limitation on extractions.

namely active voice, passive voice, and object voice. Other passive constructions are discussed in section 2.1.3.1.1.

This section is organized as follows. Section 1.1.1.1 describes different types of voice in Jambi Malay. Section 1.1.1.2 presents extraction facts in Jambi Malay which are important for the analysis of voice. Section 1.1.1.3 presents the analysis of voice. Section 1.1.1.4 examines passive voice, object voice, and object fronting in the Tanjung Raden and City dialects; in particular, I shall show that a collapse of the voice system has apparently begun to occur in these dialects.

1.1.1.1. Different Types of Voice in Jambi Malay

Jambi Malay shows three sentence constructions which resemble the three voice types found in Standard Indonesian: namely active voice, passive voice, and object voice.[4] In this section, I shall only provide a factual description of these three constructions in the language. I shall also show that the Mudung Darat dialect is significantly different from the Tanjung Raden and City dialects in that the object voice in the Mudung Darat dialect has collapsed with the active voice; thus, it only exhibits the active voice and the passive voice.

1.1.1.1.1. Active Voice

The active voice in Jambi Malay is marked by the nasal prefix and its phonological variants.[5] In other Malay varieties, such as Standard Indonesian,

[4] These voice types found in Standard Indonesian are presented in among others: Macdonald and Dardjowidjojo, 1967; Chung, 1976b; Sie, 1988; Sneddon, 1996. I shall compare the voice system of Jambi Malay and that of Standard Indonesian later in section 1.1.1.3.

[5] A description of the phonological environment that triggers different surface forms of the nasal prefix is presented in section 3.4.1.

Sarolangun Malay, and Sarang Lan, the nasal prefix is obligatory in the active voice (Cole et al., 2008). I shall later show in this section that the nasal prefix on the active verb is not obligatory, but its presence is preferred.

In an active sentence, the agent appears as the subject of the sentence and the patient/theme surfaces as the direct object of the verb.

(1) a. aku mrkam-la diri aku dewe?
1SG ACT-record-EMPH self 1SG alone
'[So], I recorded myself.'

b. awa? mgaŋ tip di pon^{d}o?
1/2/3 ACT-hold tape LOC hut
'We use a tape in the hut.'
[Lit. 'We hold a tape in the hut.']

c. awa? make taŋan paɲ^{j}aŋ galo
1/2/3 ACT-use hand long all
'We all were wearing long sleeves.'

d. dio? m^{b}uat saraŋ
3 ACT-make nest
'They made a web.'

e. ha, dio? niɲ^{j}u ramzi-tu, kan
EXCL 3 ACT-fist Ramzi-DEM.DIST Q
'Well, he punched Ramzi, you know.'

f. dio? ɲ^{j}ual gta ka jam^{b}i, lalu balaɲ^{j}o-la (MD, N)
3 ACT-sell sap to Jambi then shopping-EMPH
'She sold the sap in Jambi, then [she] went shopping.'

g. ʊ, dio?-tu biso ŋam^{b}ɪ? ikan-tu
uh-huh 3-DEM.DIST can ACT-take fish-DEM.DIST
'I see, he could catch the fish.'

Arguments in Jambi Malay can be dropped in clear contexts. In the following examples, the dropped argument is translated in square brackets. The

omitted argument is marked by Ø and the location of the omitted argument is based on the canonical word order in Jambi Malay (cf. section 1.1.2.2.1.1).

(2) Agent Drop

a. Ø mᵇawaʔ cewеʔ pulaʔ ka siko
ACT-bring female PART to here
'[He] brought a girl here.'

b. Ø nkʊt bʊrʊŋ di kumpe, kan
ACT-k.o.small.bird.trap bird LOC Kumpe Q
'[We] trapped small birds in Kumpe, you know.'

(3) Patient Drop

a. ado kau mᵇawaʔ Øʔ
exist 2SG ACT-bring
'Do you bring [it]?'

b. "daʔ, kami suda mᵇli Ø," kato-ɲo
NEG 1 finish ACT-buy word-3
'"No, we have bought [them]," she said.'
[Lit. '"No, we have bought [them]" were her words.']

In addition, if an auxiliary or negation is present in an active sentence, it precedes the active verb, as shown in square brackets in (4).

(4) a. kami… eko tadi… eko [la] ŋantar tanᵈo la
1 Eko earlier Eko PFCT ACT-deliver sign PFCT
ce, trʊs traŋ be-la
TRU-older.sister continue bright just-EMPH
'We… Eko…, to be frank, Eko has engaged, Sis.'
[Lit. 'We… Eko… Eko has sent a sign, Sis, to be frank.']

b. aku [la] ɲʲual hapɪ-tu (TR, E)
1SG PFCT ACT-sell cell.phone-DEM.DIST
'I have sold the cell phone.'

c. ʊ, dioʔ-tu [biso] ŋamᵇɪʔ ikan-tu
uh-huh 3-DEM.DIST can ACT-take fish-DEM.DIST
'I see, he could catch the fish.'

d. joʔ, aku [daʔ] prna gi ɲʲarɪŋ kini-tu
friend 1SG NEG ever more ACT-net now-DEM.DIST
'Well, I never set a net anymore now.'

e. datʊʔ kau-tu [daʔ] nᵈaʔ mᵇuat ruma
grandfather 2SG-DEM.DIST NEG want ACT-make house
'Your grandfather didn't want to build a house.'

f. aku [daʔ biso] minum kopi susu
1SG NEG can drink coffee milk
'I can't drink milk coffee.'

Although the word order in Jambi Malay seems quite constrained as I have just shown, the word order in the Mudung Darat dialect is freer than that of the other two other dialects in that the auxiliary or negation may be in other positions. The auxiliary/negation appears in square brackets in the following examples.

(5) Auxiliary/Negation before Predicate

a. kalu maʔ aku masɪ ado, yo waya kini-du
if mother 1SG still exist yes time now-DEM.DIST
[la] nanam cabe-la-ko (MD, N)
PFCT ACT-plant chili-EMPH-DEM.PROX
'If my mother were still alive, we would have planted chili at this time.'

b dioʔ [daʔ] prna mᵇagɪ anaʔ-e duwɪt (MD, N)
3 NEG ever ACT-give child-3 money
'He never gives his children money.'

(6) Auxiliary/Negation after the Verb and before the Direct Object

nanam [daʔ] gi-la cabe (MD, N)
ACT-plant NEG more-EMPH chili
'[We] don't grow chili anymore.'

(7) Auxiliary/Negation in Clause-final Position

a. bapo taʊn datʊʔ tiŋᵍal di siko [la]? (MD, N)
how.much year grandfather stay LOC here PFCT
'How many years have you lived here?'
[Lit. 'How many years has Grandfather lived here?']

b. “aku nᵈaʔ ŋeloʔi uma [daʔ],
1SG want ACT-beautiful-APPL house NEG
aku, uma aku jadi-la-ko,” to-ku (MD, N)
1SG house 1SG become-EMPH-DEM.PROX word-1SG
‘I said, “I don’t want to renovate my house, my current house is enough.”’
[Lit. ‘“I don’t want to make my house nice, my house is okay” were my words.’]

It should be pointed out that although the negation/auxiliaries are not constrained with respect to their position in the clause, speakers of nearby dialects often stereotype Mudung Darat as a dialect that has post-verbal sentential auxiliary/negation.[6] In fact some Mudung Darat speakers explicitly said that their language differs from that of other villages in that they always put *daʔ* ‘NEG’*, la* ‘PFCT’*,* or *blʊm/lʊm* ‘not yet’ at the end of the sentence. This pattern is interesting as it is observed neither in the Tanjung Raden dialect nor in the Jambi City dialect because the negation/auxiliary in the Tanjung Raden and City dialects appears before the predicate. Some additional naturalistic data are presented below.

(8) Post-verbal Use of Negation

a. cuma paʔ-ku mŋaŋi tukaŋ [daʔ] (MD, N)
only father-1SG ACT-sing can NEG
‘However, my father couldn’t sing.’

b. aku ŋawat-e [daʔ] (MD, N)
1SG ACT-care-3 NEG
‘I don’t take care of them.’

c. aku-ko oraŋ siko-siko, oraŋ bakʊŋ [daʔ] (MD, N)
1SG-DEM.PROX person RED-here person Bakung NEG
‘I’m from here, I’m not from Bakung.’

[6] Speakers from the surrounding villages label the dialect spoken in Mudung Darat (and another village called Kedap) as *baso iyo daʔ* ‘the language of yes and no*’*. This is simply due to the fact that the negation in this dialect is generally in sentence-final position.

d. make aŋin [daʔ]; make bintaŋ [daʔ];
ACT-make wind NEG ACT-make star NEG
make aeʔ (MD, N)
ACT-use water
'[We] don't use wind; [we] don't use stars; [we] use water.'

e. "aku kuraŋ duwɪt [daʔ]," to-ku (MD, N)
1SG less money NEG word-1SG
'"I don't lack money," I said.'
[Lit. '"I don't lack money" were my words.']

f. tmpat-e jaʊ [daʔ] (MD, N)[7]
place-3 far NEG
'The place is not far.'

(9) Post-verbal Use of Auxiliaries

a. bibiʔ mryam jual-e payo-tu [la] (MD, N)
aunt Maryam sell-3 marsh-DEM.DIST PFCT
'Aunt Maryam had sold the marsh.'

b. soraŋ-tu ɪdʊp [lagi] (MD, N)
one-person-DEM.DIST alive PROG
'One is still alive.'

c. oraŋ mᵇuat laʊʔ, masaʔ [lʊm] (MD, N)
person ACT-make side.dish cook not.yet
'She is cooking the side dish and it hasn't cooked yet.'

d. bapo taʊn datʊʔ tiŋᵍal di siko [la]? (MD, N)
how.much year grandfather stay LOC here PFCT
'How many years have you lived here?'
[Lit. 'How many years has Grandfather lived here?']

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[7] I heard this sentence during my visit to our assistant's (Titin) house in Mudung Darat with Peter Cole, Gabriella Hermon, and Uri Tadmor. We were invited to go to the wedding of one of Titin's relatives in another village. We were doubtful about whether or not we would go to the wedding. Then, Titin's mother encouraged us to go by saying that the wedding was not far from where we were. As a native speaker of the City dialect, I was not aware that she was making a statement that the place was not far. Thus, I responded by saying that I did not know whether or not it was far. Then, some other people from the family explained to me that Titin's mother meant that the wedding place was not far.

With respect to the presence of the nasal prefix in active sentences, the initial impression is that there is a slight difference between the City dialect on the one hand and the Rural Jambi dialects on the other hand. In the Rural Jambi dialects, the issue of whether or not the nasal prefix is present in active sentences is a matter of preference. Generally, the speakers prefer verbs with the nasal prefix to bare verb forms in active sentences with the canonical word order (cf. section 1.1.2.2.1.1). However, the presence of the nasal prefix on active verbs is not obligatory. Both naturalistic and elicited data confirm that the nasal prefix is optional.

Text counts on two sample naturalistic recordings indicate that nasal verbs are much more frequently used than bare verb forms in active (transitive and ditransitive) sentences.[8] 119 sentences were found to have the nasal prefix on the verb and only 17 sentences appeared with a bare verb form. In other words, 87.5% of the transitive and ditransitive verbs bear the nasal prefix and only 12.5% of these verbs bear no prefix. This shows that verbs with the nasal prefix are more frequently used than bare verbs.[9]

In elicitation, speakers accepted active sentences with both nasal verb forms and bare verb forms. However, speakers typically claim that sentences with nasal verb forms are preferred or more commonly used than those with bare verbs. The following sentences are taken from naturalistic data ((10) to (13)) as well as from elicited data ((14) to (17)).

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[8] These two recordings (TJR-090306_b and TJR-050805_b) have the duration of about 53 and 21 minutes, respectively.

[9] This finding is in contrast to what Hidajat (forthcoming) observed in colloquial Jakarta Indonesian. The occurrence of the nasal prefixed verbs in Jakarta Indonesian is more restricted than that of the bare verb forms.

(10) Naturalistic Active Transitive Sentences with Nasal Verbs from TR

a. aku masaŋ tmᵇilar
1SG ACT-set k.o.fish.trap
'I set a fish trap.'

b. aku daʔdo ŋʊbʊŋ dioʔ
1SG NEG.exist ACT-relate 3
'I did not contact him.'

c. bŋen-ko edaʔ no, aku ŋiŋon kamᵇɪŋ
before-DEM.PROX Q TRU-female 1SG ACT-breed goat
'Once, you know, I raised goats.'

(11) Naturalistic Active Transitive Sentences with Bare Verbs from TR

a. bli lagi tlor, rami lagi
buy more egg hatch-APPL more
'[I] bought more eggs and hatched [them] again.'

b. bawaʔ pulaʔ ayam di balɪʔ
bring PART chicken earlier return
'[They] brought the chickens back.'

(12) Naturalistic Active Transitive Sentences with Nasal Verbs from MD

a. dioʔ ɲʲual gta ka jamᵇi, lalu blaɲʲo-la (MD, N)
3 ACT-sell sap to Jambi then shopping-EMPH
'She sold the sap in Jambi, then [she] went shopping.'

b. eloʔ ɲan dioʔ make batɪʔ (MD, N)
beautiful very 3 ACT-use batik
'She is very beautiful wearing batik.'

c. dioʔ mᵇawaʔ duwɪt sajuta lbɪ (MD, N)
3 ACT-bring money one-million more
'She brought money of over one million.'

(13) Naturalistic Active Transitive Sentences with Bare Verbs from MD

a. oaŋ bŋen pake clano daʔ, kan (MD, N)
person before use pants NEG Q
'Old people didn't wear pants, you know.'

b. aku taŋo nomor hapɪ-e la, catat-la (MD, N)
1SG ask number cell.phone-3 TRU-Sila note-EMPH
'Sila, I asked their cell phone number [and then I] wrote [it] down.'

c. waʔ itam haitu jual go (MD, N)
uncle.or.aunt black before sell also
'Uncle Black also sold [it].'

(14) Elicited Active Transitive Sentences with Nasal Verbs from TR

a. aku la ŋɪrɪm surat-tu (TR, E)
1SG PFCT ACT-send letter-DEM.DIST
'I have sent the letter.'

b. aku blʊm mᵇayar kuɪ-tu (TR, E)
1SG not.yet ACT-pay cake-DEM.DIST
'I haven't paid for the cake.'

c. aku daʔ narɪʔ kudo-e (TR, E)
1SG NEG ACT-pull horse-3
'I didn't pull the horse.'

(15) Elicited Active Transitive Sentences with Bare Verbs from TR

a. aku la kɪrɪm surat-tu (TR, E)
1SG PFCT send letter-DEM.DIST
'I have sent the letter.'

b. aku blʊm bayar kuɪ-tu (TR, E)
1SG not.yet pay cake-DEM.DIST
'I haven't paid for the cake.'

c. aku daʔ tarɪʔ kudo-e (TR, E)
1SG NEG pull horse-3
'I didn't pull the horse.'

(16) Elicited Active Transitive Sentences with Nasal Verbs from MD

a. mariana neŋoʔ pilem ktʊn (MD, E)
mariana ACT-look film cartoon
'Mariana watches a cartoon movie.'

b. sayo ɲepaʔ bola di dpan uma (MD, E)
1SG ACT-kick ball LOC front house
'I kicked the ball in front of the house.'

c. sayo ntaʔ bataŋ kayu (MD, E)
1SG ACT-cut tree wood
'I cut a tree.'

(17) Elicited Active Transitive Sentences with Bare Verbs from MD

a. mariana teŋoʔ pilem ktʊn (MD, E)
mariana look film cartoon
'Mariana watches a cartoon movie.'

b. sayo sepaʔ bola di dpan uma (MD, E)
1SG kick ball LOC front house
'I kicked the ball in front of the house.'

c. sayo ttaʔ bataŋ kayu (MD, E)
1SG cut tree wood
'I cut a tree.'

Although the examples provided in both (14) and (15) are grammatical, some speakers of the Tanjung Raden dialect claimed that the sentences in (15) are less natural or less common than those in (14). All speakers of the Mudung Darat dialect consulted agreed that the sentences in both (16) and (17) are equally good.

At first glance, the requirement for the nasal prefix in the City dialect seems to be more complicated. Generally, speakers accept active sentences with both the nasal prefix verb forms, as in (18) and the bare verb forms, as in (19). However, some speakers, similar to some speakers of the Tanjung Raden dialect, said that the sentences with the nasal prefix in (18) were more commonly used or sounded more natural.

(18) Active Transitive Sentences with Nasal Prefix Verb Forms from Jambi City

a. yanti lagi ɲari buku-ɲo di kamar-ɲo (JC, E)
Yanti PROG ACT-seek book-3 LOC room-3
'Yanti is looking for her book in her room.'

b. tono la naroʔ piriŋ kotor di dapur (JC, E)
Tono PFCT ACT-put plate dirty LOC kitchen
'Tono has put the dirty plates in the kitchen.'

c. arman daʔ ŋambeʔ anduʔ-ɲo (JC, E)
Arman NEG ACT-take towel-3
'Arman did not take his towel.'

(19) Active Transitive Sentences with Bare Verb Forms from Jambi City

a. yanti lagi cari buku-ɲo di kamar-ɲo (JC, E)
Yanti PROG seek book-3 LOC room-3
'Yanti is looking for her book in her room.'

b. tono la taroʔ piriŋ kotor di dapur (JC, E)
Tono PFCT put plate dirty LOC kitchen
'Tono has put the dirty plates in the kitchen.'

c. arman daʔ ambeʔ anduʔ-ɲo (JC, E)
Arman NEG take towel-3
'Arman did not take his towel.'

It should be noted, however, that speakers of the City dialect, especially those of Chinese descent only accepted bare verb forms and rejected nasal verb forms for verbs which have voiced-consonant-initial stem, as illustrated in (20) and (21). Some speakers of Malay descent claimed that (20)a and (20)b were acceptable and (20)c and (20)d were unacceptable.

(20) Active Transitive Sentences with Nasal Verbs

a. *budi məli/mbəli motor baru (JC, E)
Budi ACT-buy motorcycle new
'Budi bought a new motorcycle.'

b. *edi ɲəmput/ɲjəmput adeʔ-ɲo (JC, E)
Edi ACT-pick.up younger.sibling-3
'Edi picked his younger sister up.'

c. *eni daʔ mawaʔ/mbawaʔ duwit (JC, E)
Eni NEG ACT-bring money
'Eni did not bring money.'

d. *aku la ɲual/ɲjual ruma-tu (JC, E)
1SG PFCT ACT-sell house-DEM.DIST
'I have sold that house.'

(21) Active Transitive Sentences with Bare Verbs

a. budi bəli motor baru (JC, E)
Budi buy motorcycle new
'Budi bought a new motorcycle.'

b. edi jəmput adeʔ-ɲo (JC, E)
Edi pick.up younger.sibling-3
'Edi picked his younger sister up.'

c. eni daʔ bawaʔ baju kau (JC, E)
Eni NEG bring garment 2SG
'Eni did not bring your clothes.'

d. aku la jual ruma-tu (JC, E)
1SG PFCT sell house-DEM.DIST
'I have sold that house.'

The active verbs in (20) are in nasal form and the sentences are ungrammatical, whereas the active verbs in (21) are in bare forms and the sentences are grammatical. The fact that *mbəli* 'ACT-buy', *ɲjəmput* 'ACT-pick.up', *mbawaʔ* 'ACT-bring', and *ɲjual* 'ACT-sell' in (20) are not acceptable can be explained phonologically. A consonant cluster that consists of a nasal followed by a stop is not a possible consonant cluster in Jambi Malay (section 3.2.1.3 presents possible consonant clusters in Jambi Malay). However, it is unclear why *məli* 'ACT-buy', *ɲəmput* 'ACT-pick.up', *mawaʔ* 'ACT-bring', and *ɲual* 'ACT-sell'are also unacceptable as these forms do not have illicit consonant clusters and are phonologically acceptable. One possible explanation is that voiced-initial verbs never take nasal form in the City dialect.

To conclude, the verb in active sentences is marked by the nasal prefix *ŋ-*. The presence of the nasal prefix is not obligatory, but is preferred.[10] In the City dialect, some voiced-initial verbs must appear without nasal forms. However, I do not have a clear explanation to account for the fact.

[10] Benjamin Bruening (p.c) raises the issue that the use of the bare root forms in active sentences might suggest that the sentence has a different voice or another structure. However, other than the presence of the nasal prefix, no other differences are observed between the sentence with a nasal verb and the one with a bare verb. I shall discuss the use of the null prefix in section 1.1.1.3 and show that the null prefix marks active voice with direct object fronting and object voice in section 1.1.1.4.

1.1.1.1.2. Passive Voice

In the literature on Indonesian, the passive voice is also known as canonical passive (Chung, 1976b; Sie, 1988) and also passive type one (Sneddon, 1996; Cole et al., 2006). In many Malay varieties familiar to me, the passive voice is marked by the *di-* prefix. These include Standard Indonesian, Jakarta Indonesian, Sarolangun Malay, Kuching Malay, Kuala Lumpur Malay, Riau Indonesian, Sarang Lan and many others.[11] Kelantanese Malay, however, does not exhibit passive contruction with *di-* prefix (Mahmood, 1994).

In passives, the patient/theme appears as the surface subject and the agent appears as an adjunct (discussed later in this section). This adjunct can be a bare NP or a prepositional phrase, headed by *buat/samo/dŋan* 'by'. *Buat/dŋan* is only used in the Rural Jambi dialects, whereas *samo* is used by speakers of all three dialects of Jambi Malay covered in this dissertation. [12] The sentences below in (23) are the passive counterparts of the sentences in (22).

(22) Active Sentences[13]

a. budi ɲʲolaʔ siti pagi tadi (TR, E)
Budi ACT-push Siti morning earlier
'Budi pushed Siti this morning.'

b. abaŋ aku la ŋaŋkat kardʊs-tu (TR, E)
older.brother 1SG PFCT ACT-lift box-DEM.DIST
'My elder brother has lifted the box.'

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[11] In Sarang Lan, geminateness is another marker for passives (Cole et al., 2008).

[12] Some speakers of the Tanjung Raden dialect claimed that *samo* 'by' is not native to the dialect, but is used by speakers of other surrounding villages, such as Kampung Tengah, Ulu Gedong, and especially by the speakers of the City dialect.

[13] As previously pointed out in section 1.1.1.1.1, in active transitive sentences both nasal verbs and bare verbs may be used. However, I only give examples with nasal verbs here.

c. bapaʔ-tu lagi nam^{b}at prau-tu (TR, E)
father-DEM.DIST PROG ACT-tie canoe-DEM.DIST
'The man is tying up the canoe.'

(23) Passive Sentences

a. siti dijolaʔ ((buat) budi) pagi tadi (TR, E)
siti PASS-push by Budi morning earlier
'Siti was pushed by Budi this morning.'

b. kardʊs-tu la diaŋkat ((buat) abaŋ aku) (TR, E)
box-DEM.DIST PFCT PASS-lift by older.brother 1SG
'The box has been lifted by my older brother.'

c. prau-tu lagi ditam^{b}at ((samo) bapaʔ-tu) (TR, E)
canoe-DEM.DIST PROG PASS-tie by father-DEM.DIST
'The canoe is being tied up by that man.'

The preposition *buat/samo/dŋan* 'by' is obligatory when the agent does not come immediately after the verb, as shown in the following examples.[14]

(24) a. ʊpɪʔ dibawaʔi baju baru buat maʔ-e (TR, E)
Upik PASS-bring-APPL garment new by mother-3
'Upik was brought new clothes by her mother.'

b. *ʊpɪʔ dibawaʔi baju baru maʔ-e (TR, E)
Upik PASS-bring-APPL garment new mother-3
'Upik was brought new clothes by her mother.'

(25) a. en^{d}aŋ dikɪrɪmi tas ijo samo abaŋ-e (TR, E)
Endang PASS-send-APPL bag green by older.sibling-3
'Endang was sent a green bag by his brother.'

b. *en^{d}aŋ dikɪrɪmi tas ijo abaŋ-e (TR, E)
Endang PASS-send-APPL bag green older.sibling-3
'Endang was sent a green bag by his brother.'

In Standard Indonesian, the agent in the passive voice is limited to non-first and second person (Sie, 1988). Jambi Malay is unlike Standard Indonesian in that

[14] The same observation is noticed in Standard Indonesian (among others: Sie, 1988; Cole et al., 2008).

the agent in the passive voice can be first, second, or third person, or even an NP. In (26)a and (26)b below, the agents are first person and second person, respectively, yet the sentences are perfectly grammatical. The corresponding sentences in prescriptive Standard Indonesian would be ungrammatical.

(26) a. maŋkʊʔ-e la suda dibawaʔ (buat) aku (TR, E)
bowl-3 PFCT finish PASS-bring by 1SG
'The bowl has been brought by me.'

b. adɪʔ aku daʔ dijmpʊt kau (TR, E)
younger.sibling 1SG NEG PASS-pick.up 2SG
'My younger sister wasn't picked up by you.'

In addition, third person pronoun enclitics (*-e* and *-ɲo*) can also be the agent in the passive, as exemplified in (27).[15]

(27) a. isi-e diam^{b}ɪʔ-e
contents-3 PASS-take-3
'The contents were taken by them.'

b. awaʔ ŋjar, klagi awaʔ dikapaʔ-e
1/2/3 ACT-chase later 1/2/3 PASS-axe-3
'[If] we chase them, we will be axed by them.'

c. neŋoʔ oraŋ batino, dikjar-e
ACT-look person female PASS-chase-3
'[When they] saw females, [they] would be chased by them.'

d. tabʊŋ gas-tu dilarii-ɲo
tube gas-DEM.DIST PASS-run-APPL-3
'The gas tube was stolen by him.'
[Lit. 'The gas tube was run away by him.']

[15] The enclitic pronoun *–e* is only used in the Rural Jambi dialects, whereas the enclitic *-ɲo* is utilized in all dialects. However, *-ɲo* in the Rural dialects is a borrowed form from the City dialect. See section 2.1.2.1.9.1 in which enclitics *-ɲo* and *–e* are discussed.

e. la diramali-ɲo
PFCT PASS-predict-APPL-3
'[It] has been predicted by him.'

Note that the passive voice is often employed to express commands (imperatives), as described in section 1.1.3.4.4.

I shall now examine the structure of the passive voice in Jambi Malay. First, I shall examine the status of agentive prepositional phrases. In Standard Indonesian, the passive with or without *samo/buat/dɨŋan* 'by' is taken to be an adjunct and the main argument comes from reflexive facts (see Arka and Manning, 1998). The same argument can be used to make the same claim for the passive agent in Jambi Malay. The agent with or without the preposition *samo* in (28), for example, cannot be the antecedent for the reflexive form *dio? dewe?* 'himself' is in subject position.[16]

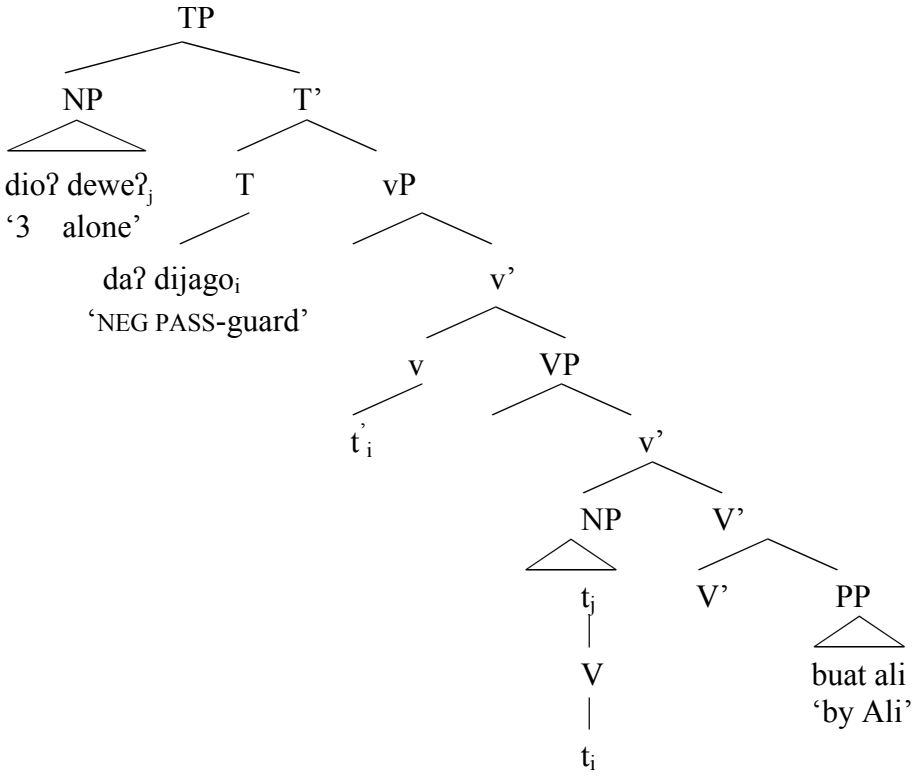
(28) a. *dioʔ dewe? daʔ dijago ali (TR, E)
3 alone NEG PASS-guard Ali
'Himself wasn't taken care of by Ali.'

b. ?dioʔ dewe? daʔ dijago buat ali (TR, E)
3 alone NEG PASS-guard by Ali
'Himself wasn't taken care of by Ali.'

The fact that the agent, *Ali,* cannot be the antecedent of the reflexive form *dio? dewe?* 'himself', indicates that the agent is in an adjunct position, which is generated below the patient. As a result, the agent cannot c-command the patient, and cannot be the antecedent for the patient, as illustrated in the following structure.

[16] Sentence (28)b was judged to be marginal by one speaker, but was judged ungrammatical by another speaker.

(29)



Second, I will show that the theme in *di-* passives is indeed in the subject position, i.e. spec of TP. Guilfoyle et al. (1992) claims that the theme in the canonical passive in Indonesian moves to spec of TP. I claim that in Jambi Malay, the theme in passive sentences also moves to the spec of TP, and not to some kind of topic position. The argument comes from reflexives. Let us consider the following example.[17]

(30) budi, arwa bini-e blʊm dikɪrɪm ka dioʔ dewe?
Budi soul wife-3 not.yet PASS-send to self alone
buat malaikat -tu (TR, E)
by angel-DEM.DIST
'Budi, his wife's soul has not been returned to herself by the angel.'
*Budi, his wife's soul has not been returned to Budi by the angel.'

Sentence (30) is grammatical if *dio?dewe?* refers to Budi's wife and it is ungrammatical if it refers to the topic *budi*. In section 1.5.1.3, I will show that in the

[17] Thanks to Lanny Hidajat for suggesting this test.

Rural Jambi dialects, no dedicated reflexive forms are found. However, the fact that *dio? dewe?* in (30) can only be used as a reflexive to refer to *arwa bini-e* 'his wife's soul' indicates that the noun phrase *arwa bini-e* 'his wife's soul' is in spec of TP, whereas *budi* is assumed to be in the topic position. I shall return to this issue in section 1.1.1.4.

To conclude, the passive voice is found across the three dialects of Jambi Malay covered in this dissertation and similar to many other Malay varieties, this type of passive is marked by the *di-* prefix. In such a passive construction, the patient/theme appears as the surface subject, spec of TP, whereas the agent is demoted to an adjunct position.

1.1.1.1.3. Object Voice

The term object voice was introduced by MacDonald and Dardjowidjojo (1967). Object voice is also known as object preposing (Chung, 1976a and Chung, 1976b), passive type two (Sneddon, 1996 and Cole et al., 2006), pronominal passive or ergative (Aldridge, 2008).

As previously described, both the active and passive voices are attested across the three dialects covered in this dissertation regardless of the slight differences found among them. However, with respect to the object voice, the situation is more complicated. I shall show that the Tanjung Raden and City dialects exhibit object voice, while the Mudung Darat dialect does not demonstrate evidence for it. However, later in sections 1.1.1.3 and 1.1.1.4, I provide more detailed discussions of the object voice in the Tanjung Raden and City dialects and show that the object voice in these two dialects has, in fact, also begun to collapse.

1.1.1.1.3.1. Object Voice in Tanjung Raden

The object voice in Malay/Indonesian varieties, in general, has the following four properties (among others: Chung, 1976b; Sie, 1988):

(31) a. Negation and auxiliaries obligatorily precede the agent and the agent must be adjacent to the verb.
b. The agent cannot be omitted.
c. The verb must be in bare form.
d. The agent is limited to first and second person pronouns[18]

The Tanjung Raden dialect reveals the first three properties in the object voice construction, as illustrated in the following examples.

(32) a. budi daʔ siti jolaʔ (TR, E)
Budi NEG Siti push
'Budi wasn't pushed by Siti.'

b. *budi daʔ jolaʔ (TR, E)
budi NEG push
'Budi wasn't pushed.'

c. *budi daʔ siti ɲʲolaʔ (TR, E)
Budi NEG Siti ACT-push
'Budi wasn't pushed by Siti.'

(33) a. bulʊ-tu lagi maʔ aku krat (TR, E)
bamboo-DEM.DIST PROG mother 1SG cut
'The bamboo is being cut by my mother.'

b. *bulʊ-tu lagi krat (TR, E)
bamboo-DEM.DIST PROG cut
'The bamboo is being cut.'

c. *bulʊ-tu lagi maʔ aku ŋrat (TR, E)
bamboo-DEM.DIST PROG mother 1SG ACT-cut
'The bamboo is being cut by my mother.'

[18] For many speakers, however, the agent is not limited to first and second person pronouns, even in Standard Indonesian (MacDonald and Dardjowidjojo, 1967).

(34) a. padi-ɲo la aku tanam (TR, E)
rice.plant-3 PFCT 1SG plant
'The rice has been planted by me.'

b. *padi-ɲo la tanam (TR, E)
rice.plant-3 PFCT plant
'The rice has been planted.'

c. *padi-ɲo la aku nanam (TR, E)
rice.plant-3 PFCT 1SG ACT-plant
'I have planted the rice.'

Sentences (32)a, (33)a, and (34)a exhibit the first three characteristics of the object voice shown in (31). First, the agent appears right after the auxiliary/negation and immediately before the verb. Second, the verb is in bare form. Finally, the agent is present. In (32)b, (33)b, and (34)b, the agent is absent, which means the requirement in (31)b is violated; thus, the sentences are ungrammatical. In short, despite the fact that arguments in Jambi Malay can be dropped in clear contexts, the agent in object voice is obligatorily present. In addition, (32)c, (33)c, and (34)c are ungrammatical because the verb is in nasal form, violating (31)c.

In (32)a, (33)a, and (34)a the auxiliary/negation in object voice appears before the agent and the sentences. It should be noted that the auxiliary/negation in the Tanjung Raden dialect is also allowed to appear between the agent and the bare verb, as shown below.

(35) a. budi siti daʔ jolaʔ (TR, E)
Budi Siti NEG push
'Budi, Siti did not push.'

b. bulʊ-tu maʔ aku lagi krat (TR, E)
bamboo-DEM.DIST mother PROG 1SG cut
'The bamboo, my mother has cut.'

c. padi-ɲo aku la tanam (TR, E)
rice.plant-3 1SG PFCT plant
'The rice, I have planted.'

The sentences in (35) are different from sentences (32)a, (33)a, and (34)a only in one manner, i.e. the agent comes before the auxiliary/negation. Yet, the sentences are still grammatical. The sentences in (35), however, are not examples of the object voice because they violate (31)a. I will argue in section 1.1.1.4 that these sentences are active sentences with object fronting/topicalization.

The fourth property of object voice in Malay/Indonesian, i.e. that the agent must be the first or second person pronoun, does not hold in Tanjung Raden.[19] Although I did not find any naturalistic data with agents other than the first and second person agent in object voice sentences, elicited data suggest that native speakers do not reject the object voice construction with an agent other than the first and second person pronouns. In (32)a and (33)a, for example, the agent of the sentence is a proper name *Siti*, a noun phrase, and *maʔaku* 'my mother', respectively. This indicates that the agent is not limited to the first or second person.

In the naturalistic data, there are not many utterances that can be analysed to have the object voice structure.[20] However, some examples which have overt auxiliaries can be provided below.

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[19] As mentioned in the previous footnote, for many speakers, however, the agent is not limited to first and second person pronouns, even in Standard Indonesian (MacDonald and Dardjowidjojo, 1967).

[20] The reason for this fact is that in many cases, the object voice clauses are found to have [patient – agent – bare verb] order. However, it is unclear what the structure of this word order is, as no negation/auxiliary is present. Only the presence of an auxiliary/negation can help determine whether those sentences have the structure of object voice (as discussed in this section) or direct object extraction/topicalization of an active sentence (as discussed in section 1.1.1.2).

(36) a. tu baarti-ɲo anaʔ oraŋ-ko
DEM.DIST INTR-meaning-3 child person-DEM.PROX
la suda kito pinaŋ
PFCT finish 1 propose
'It means this person's daughter has been proposed to by us.'

b. suda-tu hipatikal tadi bole kau baco
finish-DEM.DIST hipattikal earlier may 2SG read
'Then, the *hipattikal* may be read by you.'

c. dagɪŋ biso kito makan
meat can 1 eat
'The meat can be eaten by us.'

To conclude, the Tanjung Raden dialect exhibits sentences which have the properties of object voice. In section 1.1.1.3, I shall show that unlike in Standard Indonesian, the zero morpheme which is used to mark object voice does not exclusively mark the object voice, but it also marks the active voice with object fronting. Moreover, in section 1.1.1.4, I shall present the issue of what object voice really is in the Tanjung Raden and Jambi City dialects and show that the object voice in these dialects has also begun to collapse.

1.1.1.1.3.2. Object Voice in Jambi City

As in the Tanjung Raden dialect, the object voice is also observed in the Jambi City dialect. Consider the following examples.

(37) a. kayu-tu la aku potoŋ (JC, E)
wood-DEM.DIST PFCT 1SG cut
'The wood has been cut by me.'

b. jruʔ-ɲo daʔ edi koceʔ (JC, E)
orange-3 NEG Edi peel
'The orange wasn't peeled by Edi.'

As in Standard Indonesian (among others: Chung, 1976b; Sie, 1988; Cole et al., 2008) and also in the Tanjung Raden dialect, the sentences in (37) are analyzed as object

voice because the auxiliary/negation appears before the agent and the verb is in bare form.

One can recall that as in the Tanjung Raden dialect, when the auxiliary/negation appears after the agent, the sentences are also grammatical, as shown in (38) below. However, the sentences in (38) have the structure of direct object extraction (see section 1.1.1.2 and section 1.1.1.4).[21]

(38) a. kayu-tu aku la potoŋ (JC, E)
wood-DEM.DIST 1SG PFCT cut
'The wood, I have cut.'

b. jruʔ-ɲo edi daʔ koceʔ (JC, E)
orange-3 Edi NEG peel
'The orange, Edi didn't peel.'

As in the Tanjung Raden dialect, the agent in object voice in the City dialect is obligatorily present, as the sentences without an agent, such as those in (39) are ungrammatical.

(39) a. *kayu-tu la potoŋ (JC, E)
wood-DEM.DIST PFCT cut
'The wood has been cut.'

b. *jruʔ-ɲo daʔ koceʔ (JC, E)
orange-3 NEG peel
'The orange wasn't peeled.'

Besides, the verbs employed in the object voice must be in bare form. The sentences in (40) have the word order of object voice, but the verb takes the nasal prefix and they are ungrammatical.

[21] Sentences that have the word order like that of (38) are ungrammatical in prescriptive Standard Indonesian, but are claimed to also have the structure of direct object extraction in semi-standard Indonesian (Chung, 1976a and 1978).

(40) a. *kayu-tu la aku motoŋ (JC, E)
wood-DEM.DIST PFCT 1SG ACT-cut
'The wood has been cut by me.'

b. *jruʔ-ɲo daʔ edi ŋoceʔ (JC, E)
orange-3 NEG Edi ACT-peel
'The orange wasn't peeled by edi.'

Finally, as in Tanjung Raden, the agent of the object voice in Jambi City does not need to be a first or second person pronoun, as shown by example (38)b above.

To conclude, the City dialect of Jambi Malay, similar to what was seen in the Tanjung Raden dialect, demonstrates the properties of object voice. I shall later show in section 1.1.1.3 that the City dialect and the Tanjung Raden dialect are similar in that the zero morpheme does not exclusively mark the object voice because it also marks active voice with direct object extraction. In addition, in section 1.1.1.4, I shall show that the object voice has in fact begun to collapse in the City dialect.

1.1.1.1.3.3. Object Voice in Mudung Darat

In our previous work (Cole et al., 2008), we point out that the Mudung Darat dialect appears initially to exhibit the object voice construction as seen in the following examples.

(41) a. paraʔ-tu daʔ aku potoŋ (MD, E)
rubber-DEM.DIST NEG 1SG cut
'The rubber wasn't cut by me.'

b. hapɪ-tu daʔ sayo palɪŋ (MD, E)
cell.phone-DEM.DIST NEG 1SG steal
'The cell phone wasn't stolen by me.'

c. uma-ko lagi dioʔ buat (MD, E)
house-DEM.PROX PROG 3 make
'The house is being built by him.'

In (41), the negation/auxiliary appears before the agent and the agent immediately precedes the verb. In addition, the verb is in bare form. Thus, it appears that the sentences in (41) demonstrate properties of object voice.

Nevertheless, we further show that the Mudung Darat dialect is, in fact, lacking object voice in that the zero morpheme does not mark object voice, but rather extraction of the object in active voice. One piece of evidence for this claim comes from the freedom of word order. The use of bare verb forms is not necessarily a sign of object voice because the auxiliary/negation can intervene between the agent and the verb, as exemplified below.[22]

(42) a. paraʔ-tu aku daʔ potoŋ (MD, E)
rubber-DEM.DIST 1SG NEG cut
'The rubber, I didn't cut.'

b. hapɪ-tu sayo daʔ palɪŋ (MD, E)
cell.phone-DEM.DIST 1SG NEG steal
'The cell phone, I didn't steal.'

c. uma-ko dioʔ lagi buat (MD, E)
house-DEM.PROX 3 PROG make
'This house, he is building.'

In fact, the order of negation or auxiliaries vis-à-vis the agent is generally very free in Mudung Darat (see also section 1.1.1.1.1). Negation and auxiliaries may even occur post-verbally, as shown in the following examples.

(43) a. joda-ko daʔ kau buat (MD, E)
cake-DEM.PROX NEG 2SG make
'You didn't make this cake.'

[22]As previously described, the Jambi City and Tanjung Raden dialects also have this word order, which is claimed to have the structure of object extraction of an active sentence (discussed in section 1.1.1.3.2).

b. daʔ kau buat joda-ko (MD, E)
NEG 2SG make cake-DEM.PROX
'You didn't make this cake.'

c. kau daʔ buat joda-ko (MD, E)
2SG NEG make cake-DEM.PROX
'You didn't make this cake.'

d. kau buat joda-ko daʔ (MD, E)
2SG make cake-DEM.PROX NEG
'You didn't make this cake.'

e. joda-ko kau daʔ buat (MD, E)
cake-DEM.PROX 2SG NEG make
'You didn't make this cake.'

(44) a. siti la aku jmpʊt (MD, E)
Siti PFCT 1SG pick.up
'I have picked Siti up.'

b. la aku jmpʊt siti (MD, E)
PFCT 1SG pick.up Siti
'I have picked Siti up.'

c. aku la jmpʊt siti (MD, E)
1SG PFCT pick.up Siti
'I have picked Siti up.'

d. aku jmpʊt siti la (MD, E)
1SG pick.up Siti PFCT
'I have picked Siti up.'

e. siti aku la jmpʊt (MD, E)
Siti 1SG PFCT pick.up
'I have picked Siti up.'

The negation in (43)a and the perfective marker in (44)a appear before the agent. In the (b) sentences in (43) and (44), the negation/auxiliary appears in sentence-initial position. The negation/auxiliary in (c) and (e) sentences in (43) and (44) appear between the agent and the verb, whereas in the (d) sentence, the negation/auxiliary surfaces in clause-final position.

In short, the data in (43) and (44) indicate that the word order in the Mudung Darat dialect is quite free. Thus, the fact that the sentences in (41) appear to have the word order of object voice does not ensure that they are instances of sentences that have object voice structure because this word order could simply be a type of word order of an active clause. In section 1.1.1.1.1, I shall show that the word order in active sentences with the nasal prefix is also relatively free. Therefore, since the word order is rather free in Mudung Darat, the speakers would not distinguish active sentences with object extraction from object voice sentences. In other words, sentences which have the structure that resembles object voice are treated as one possible word order of active sentences.

More evidence to support the claim that the Mudung Darat dialect does not manifest object voice comes from the fact that the agent is optional in object-voice-like structure, as exemplified in (45) (see also Cole et al., 2008).

(45) a. uma-ko la buat (MD, E)
house-DEM.PROX PFCT make
'This house was already built.'

b. paraʔ-tu la potoŋ (MD, E)
rubber-DEM.DIST PFCT cut
'The rubber has been cut.'

The sentences in (45) lack an agent, but they are still grammatical in Mudung Darat. Such sentences are considered ungrammatical in the other two dialects.

To conclude, although the Mudung Darat dialect initially appeared to demonstrate the object voice, empirical data have shown otherwise. First, the word order in the Mudung Darat dialect is free with respect to the auxiliary and negation; thus, speakers cannot distinguish active voice from object voice. This is unlike the Tanjung Raden and City dialects, in which the zero morpheme marks either active

with object fronting or object voice. Second, the agent is not obligatory in object-voice-like constructions. Third, the agent does not have to be adjacent to the verb. Since the null prefix or the zero morpheme marks both object fronting and object voice in the Tanjung Raden and City dialects, this seems to suggests that the zero morpheme is like an additional voice type. I shall return to this issue in section 1.1.1.4.

1.1.1.2. Extraction Facts in Jambi Malay

As mentioned in the introduction to the voice system, extraction facts are related to voice. In this section, I shall only describe the extraction facts in the language. I shall show how these extraction facts are related to voice later in section 1.1.1.3.

1.1.1.2.1. Extraction in Tanjung Raden

Extraction of subjects and adjuncts is possible when the nasal verb is used. However, the extraction of direct objects over nasal verbs is generally unacceptable. Examples follow.

(46) Subject Extraction

a. maʔ$_i$, siti pɪkɪr t_i ɲ^{j}ual umo-tu ka edi (TR, E)
mother Siti think ACT-sell paddy-DEM.DIST to Edi
'Mother, Siti thinks sold the paddy field to Edi.'

b. budi$_i$, maʔ pcayo t_i daʔ ŋam^{b}ɪʔ duwɪt-tu (TR, E)
Budi mother believe NEG ACT-take money-DEM.DIST
'Budi, mother believes did not take the money.'

(47) Adjunct Extraction

a. kapan$_i$ ʊdɪn ŋam^{b}ɪʔ duwɪt t_iʔ (TR, E)
when Udin ACT-take money
'When did Udin take money?'

b. di mano$_i$ budi m^{b}aŋkʊŋ aaŋ t$_i$? (TR, E)
LOC which Budi ACT-hit Aang
'Where did Budi hit Aang?'

c. ŋapo$_i$ titin ɲ^{j}ual ruma-e t$_i$? (TR, E)
why Titin ACT-sell house-3
'Why did Titin sell her house?'

(48) Direct Object Extraction

a. *krdʊs-tu$_i$ jalıl biso ŋaŋkat t$_i$ (TR, E)
box-DEM.DIST Jalil can ACT-lift
'The box, Jalil could lift.'

b. *pisaŋ-tu$_i$ maʔ sdaŋ nanam t$_i$ (TR, E)
banana-DEM.DIST mother PROG ACT-plant
'The bananas, mother is planting.'

c. *surat-tu$_i$ aku la ŋırım t$_i$ (TR, E)
letter-DEM.DIST 1SG PFCT ACT-sent
'That letter, I have sent.'

In (48), the direct object is extracted over a nasal verb and the sentences are ungrammatical. In contrast, the adjunct extraction over a nasal verb, as in (47), is acceptable. In (46), the subject is extracted and the sentences are grammatical. It should be noted, however, that subject extraction in (46) does not happen across a nasal-prefixed verb in that the nasal verb is only in the embedded clause.

The sentences in (48) are, however, grammatical if the verb is in bare form, as indicated in (49), or if a resumptive pronoun is present after the nasal verb, as shown in (50). Note that the resumptive pronoun must be a clitic.

(49) Direct Object Extraction across Bare Verb

a. buku-ko$_i$ dioʔ blʊm baco t$_i$ (TR, E)
book-DEM.DIST 3 not.yet read
'This book, he hasn't read.'

b. kuı-tu$_i$ aku blʊm bayar t$_i$ (TR, E)
cake-DEM.DIST 1SG not.yet pay
'The cake, I haven't paid.'

c. surat-tu$_i$ aku la kırım t$_i$ (TR, E)
letter-DEM.DIST 1SG PFCT sent
'The letter, I have sent it.'

(50) Direct Object Extraction with a Resumptive Pronoun

a. krdʊs-tu$_i$ jalıl biso ŋaŋkat-e$_i$ (TR, E)
box-DEM.DIST Jalil can ACT-lift-3
'The box, Jalil could lift it.'

b. pisaŋ-tu$_i$ maʔ sdaŋ nanam-e$_i$ (TR, E)
banana-DEM.DIST mother PROG ACT-plant-3
'The bananas, mother is planting them.'

c. surat-tu$_i$ aku la ŋırım-e$_i$ (TR, E)
letter-DEM.DIST 1SG PFCT ACT-sent-3
'The letter, I have sent it.'

Regarding *wh*-question extraction, the same facts are observed. Local extraction over a nasal verb is barred (see section 1.1.3.2.2.1.1.2.1), as exemplified below.

(51) a. *apo$_i$ rita narıʔ t$_i$? (TR, E)
what Rita ACT-pull
'What did Rita pull?'

b. *siapo$_i$ ʊpıʔ nampar t$_i$? (TR, E)
who Upik ACT-slap
'Who did Upik slap?'

As shown in (51), the question words questioning the direct object are fronted and the questions are ungrammatical because the verb takes the nasal prefix.

Long distance extraction over nasal verbs is also ungrammatical (see section 1.1.3.2.2.1.2.1), as shown below.

(52) a. *apo$_i$ titin n^{d}ŋar t'$_i$ hendra m^{b}li t$_i$? (TR, E)
what Titin ACT-listen Hendra ACT-buy
'What did Titin hear Hendra bought?'

b. *apo$_i$ budi daʔ kiro t'$_i$ edi m^{b}awaʔ t$_i$
what Budi NEG think Edi ACT-bring
ka ruma ʊpɪʔʔ (TR, E)
to house Upik
'What does not Budi think Edi brought to Upik's house?'

Some additional data in which extraction has occurred are presented below.[23]

(53) Subject Extraction

siapo yaŋ malɪŋ, paman?
who REL ACT-steal uncle
'Who stole [it], Uncle?'

(54) Adjunct Extraction

a. ya alla-e, di mano$_i$ kau di mancɪŋ t$_i$?
EXCL Allah-3 LOC which 2SG earlier ACT-fishing.rod
'O my God, where did you go fishing?'

b ŋapo$_i$ dioʔ daʔdo n^{d}aʔ nole t$_i$?
why 3 NEG.exist want ACT-look
'Why didn't he want to look at you?'

(55) Direct Object Extraction

naŋ pen^{d}eʔ-tu kami daʔ bawaʔ (TR, E)
REL short-DEM.DIST 1 NEG bring
'The short ones, we did not bring.'

In sentence (53), the subject is extracted, but the extraction does not occur over the nasal verb. In (54), the adjunct is extracted and the verb used is in nasal form. The

[23] One utterance with direct object extraction over the nasal prefix is found in the naturalistic database. When this sentence was given during elicitation to some other speakers, it was accepted.

dioʔ$_i$ maʔ-e daʔdo ɲ^{j}mpʊt t$_i$
3 mother-3 NEG.exist ACT-pick.up
'Her mother didn't pick her up.'

sentence in (55) indicates the extraction of the direct object; however, the verb used in (55) is in bare form.

In the object voice, only the surface subject can be extracted. The agent must stay in situ. Examples follow.

(56) a. Object Voice

umo-ko	la	budi	tanam	(TR, E)
paddy-DEM.PROX	PFCT	Budi	plant	

'This paddy field has been planted by Budi.'

b. Surface Subject Extraction (via Relativization)

apo	yaŋ la	budi	tanam?	(TR, E)
what	REL PFCT	Budi	plant	

'What is it that has been planted by Budi?'

c. Agent In Situ

umo-ko	la	siapo	tanam?	(TR, E)
paddy-DEM.PROX	PFCT	who	plant	

'Who has planted this paddy field?'

d. Agent Extraction

*siapo	umo-ko	la	tanam?	(TR, E)
who	paddy-DEM.PROX	PFCT	plant	

'Who has planted this paddy field?'

Sentence (56)a has the structure of object voice because the agent appears immediately before the verb, the auxiliary precedes the agent and the verb is in bare form. The surface subject of (56)a is questioned via relativization (cf. section 1.1.4.2.2.4.1), as shown in (56)b. The *wh*-phrase questioning the agent in (56)c stays in situ and the sentence is grammatical. In contrast, when the agent *wh*-phrase is fronted, as demonstrated in (56)d, the sentence is ungrammatical.

The surface subject of ditransitive sentences can be extracted in the passive voice. In addition, theme extraction is also possible for some speakers. Agent

extraction is only possible if the preposition pied-pipes with the agent. Examples follow.

(57) a. Subject Extraction (via Relativization) in Passive Voice

siapo$_i$	yaŋ	t_i	dibreʔ	kuɪ	buat	siti?	(TR, E)
who	REL		PASS-give	cake	by	Siti	

'Who is it that was given cakes by Siti?'

b. Agent In Situ in Passive Voice

ana	dibreʔ	kuɪ	buat	siapo?	(TR, E)
Ana	PASS-give	cake	by	who	

'By who was Ana given cakes?'

c. Agent Extraction in Passive Voice

*siapo	ana	dibreʔ	kuɪ	buat	t_i?	(TR, E)
who	Ana	PASS-give	cake	by		

'By who was Ana given cakes?'

d. Agent Extraction with the Preposition

[buat	siapo]$_i$	ana	dibreʔ	kuɪ$_i$?	(TR, E)
by	who	Ana	PASS-give	cake	

'By whom was Ana given cake?'

e. Theme In Situ in Passive Voice

ana	dibreʔ	apo	buat	siti?	(TR, E)
Ana	PASS-give	what	by	Siti	

'What was Ana given by Siti?'

f. Theme Extraction in Passive Voice (TR, E)

#apo	yaŋ	ana	dibreʔ	buat	siti?[24]
what	REL	Ana	PASS-give	by	Siti

'What is it that Ana was given by Siti?'

In (57)a, the surface subject of the passive sentence is being extracted and the sentence is grammatical. In (57)b, the agent of the passive voice is being questioned and the *wh*-phrase stays in situ. Thus, the sentence is grammatical. In contrast, in (57)c, the

[24] Some speakers claim that theme extraction is possible, while others claim it is not.

wh-phrase questioning the agent is extracted and the sentence is ungrammatical. In (57)d, the *wh*-phrase questioning the agent is fronted together with the preposition and the sentence is grammatical. In (57)e, the theme *wh*-phrase stays in situ and the sentence is grammatical. In contrast, in (57)f, the theme *wh*-phrase is extracted via relativization and the grammaticality of the sentence is unclear, as it was judged to be grammatical by some speakers, but ungrammatical by others.

To conclude, in active sentences, argument extraction with the nasal verb is limited to the subject. In contrast, if the verb is in bare form, both subject and direct object extractions are allowed. Extraction of adjuncts is possible regardless of the verb form. In the object voice, only the surface subject can be extracted, whereas the agent must stay in situ. In passive sentences, the surface subject and the theme of ditransitive verbs can be extracted; and the agent can only be extracted if the preposition pied-pipes. Note that not all speakers agreed that theme extraction of ditransitive verbs is allowed. Similarly to the agent in the object voice, the agent in passives cannot be extracted. I shall return to the issue of how extraction is related to voice in section 1.1.1.3.

1.1.1.2.2. Extraction in Jambi City

As in the Tanjung Raden dialect, extraction of subjects in the City dialect is possible when the verb is in both bare and nasal forms, as exemplified below. Note however, that although extraction of subjects is possible when the verb is in nasal form, the extraction never crosses a nasal verb.

(58) Subject Extraction

a.	siapo$_i$	yaŋ	t$_i$	daʔ	cuci	baju	kau?	(JC, E)
	who	REL		NEG	wash	garment	2SG	
	'Who is it that didn't wash your clothes?'							

b. yanti$_i$, iwan kiro t_i la ŋambeʔ minum-ɲo (JC, E)
Yanti Iwan think PFCT ACT-take drink-3
'Yanti, Iwan thinks has taken the drink.'

c. siapo$_i$ yaŋ iwan kiro t_i la ŋambeʔ minum-ɲoʔ (JC, E)
who REL Iwan think PFCT ACT-take drink-3
'Who is it that Iwan thinks has taken the drink?'

Direct object extraction in the City dialect, again, as in the Tanjung Raden dialect, is only allowed when the verb used is in bare form, as shown in the following examples.

(59) Direct Object Extraction with Bare Verb

a. [baju kami]$_i$, maʔ daʔ cuci t_i (JC,E)
garment 1 mother NEG wash
'Our clothes, mother did not wash.'

b. minum-ɲo$_i$, iwan kiro yanti la ambeʔ t_i (JC, E)
drink-3 Iwan think Yanti PFCT take
'The drink, Iwan thinks Yanti has taken.'

c. apo$_i$ iwan kiro yanti la ambeʔ t_i?[25] (JC, E)
what Iwan think Yanti PFCT take
'What does Iwan think Yanti has taken?'

(60) Direct Object Extraction with Nasal Verb

a. *[səpatu ririn]$_i$, edi sdaŋ ɲari t_i (JC, E)
shoe Ririn Edi PROG ACT-seek
'Ririn's shoes, Edi is looking for.'

b. *apo$_i$ yaŋ dioʔ nanam t_i? (JC, E)
what REL 3 ACT-plant
'What is it that he plants?'

c. *bua pisaŋ$_i$, eka nanam t_i di kəbon kami (JC, E)
fruit banana Eka ACT-plant LOC garden 1
'Bananas, Eka plants in our garden.'

[25] This sentence can also be a yes-no question if *apo* is a question marker (see section 1.1.3.2.1.1.1).

(61) Direct Object Extraction with Nasal Verb in Complex Sentences

a. *apo$_i$ dioʔ saŋko siti la ŋambeʔ t$_i$? (JC, E)
what 3 think Siti PFC ACT-take
'What does he think Siti has taken?'

b. *buku-tu$_i$, dioʔ saŋko siti la ŋambeʔ t$_i$ (JC, E)
book-DEM.DIST 3 think Siti PFCT ACT-take
'The book, he thinks Siti has taken.'

As shown in (59), the direct object is extracted over a bare verb and the sentences are grammatical. In contrast, in (60) and (61), the direct object is extracted over a nasal verb and this extraction results in ungrammatical sentences.

Furthermore, adjunct extraction is possible over both nasal and bare verbs, as shown by the following examples.

(62) Adjunct Extraction

a. di mano$_i$ ali matai toŋkat-tu t$_i$? (JC, E)
LOC which Ali ACT-broken-APPL stick-DEM.DIST
'Where did Ali break the stick?'

b. kapan$_i$ ali matai toŋkat-tu t$_i$? (JC, E)
when Ali ACT-broken-APPL stick-DEM.DIST
'When did Ali break the stick?'

c. ŋapo$_i$ ali patai toŋkat-tu t$_i$? (JC, E)
why Ali broken-APPL stick-DEM.DIST
'Why did Ali break the stick?'

d. macam mano$_i$ ali patai toŋkat-tu t$_i$? (JC, E)
sort which Ali broken-APPL stick-DEM.DIST
'How did Ali break the stick?'

Like the object voice in the Tanjung Raden dialect, only the surface subject can be extracted in the City dialect, whereas the agent must stay in situ, as exemplified below.

(63) a. Object Voice

jruʔ-ɲo daʔ edi koceʔ (JC, E)
orange-3NEG Edi peel
'The orange wasn't peeled by Edi.'

b. Surface Subject Extraction

apo yaŋ daʔ edi koceʔ (JC, E)
what REL NEG Edi peel
'What is it that wasn't peeled by Edi?'

c. Agent In Situ

jruʔ-ɲo daʔ siapo koceʔ (JC, E)
orange-3 NEG who peel
'The orange wasn't peeled by who?'

d. Agent Extraction

*siapo yaŋ jruʔ-ɲo daʔ koceʔ (JC, E)
who REL orange-3 NEG peel
'Who is it that the orange wasn't peeled by?'

(64) a. Object Voice

maliŋ-tu sdaŋ polisi taɲoi (JC, E)
thief-DEM.DIST PROG police ask-APPL
'The thief is being investigated by the police.'

b. Surface Subject Extraction

siapo yaŋ sdaŋ polisi taɲoi? (JC, E)
who REL PROG police ask-APPL
'Who is being investigated by the police?'

c. Agent In Situ

maliŋ-tu sdaŋ siapo taɲoi? (JC, E)
thief-DEM.DIST PROG who ask-APPL
'The thief is being investigated by who?'

d. Agent Extraction

*siapo yaŋ maliŋ-tu sdaŋ taɲoi? (JC, E)
who REL thief-DEM.DIST PROG ask-APPL
'Who is it that the thief is being investigated by?'

The sentences in (63)a and (64)a have the structure of object voice as previously described in section 1.1.1.1.3. The surface subject of the (b) sentences in (63) and (64) is being extracted via relativization; and the sentences are grammatical. The *wh*-phrase questioning the agent of the object voice sentence in (63)c and (64)c stays in situ and the sentences are grammatical. In contrast, the *wh*-phrase questioning the agent of the object voice in (63)d and (64)d is extracted via relavization and the sentences are ungrammatical.

Finally, in the passive voice, as in the Tanjung Raden dialect, only the surface subject can be extracted. The agent can be extracted only if the preposition pied-pipes. Examples follow.

(65) a. Passive Voice

budi	la	dipaŋgil	(samo)	guru-ɲo	(JC, E)
Budi	PFCT	PASS-call	by	teacher-3	

'Budi has been called by his teacher.'

b. Extraction of Subject of Passive Voice

siapo	la	dipaŋgil	(samo)	guru-ɲo?	(JC, E)
who	PFCT	PASS-call	by	teacher-3	

'Who has been called by his teacher?'

c. Extraction of Passive Agent

*siapo	budi	la	dipaŋgil	(samo)?	(JC, E)
who	Budi	PFCT	PASS-call	by	

'By whom has Budi been called?'

d. Extraction of Passive Agent When the Preposition Pied-pipes

samo	siapo	budi	la	dipaŋgil?	(JC, E)
with	who	Budi	PFCT	PASS-call	

'By whom has Budi been called?'

As shown in (65)b, when the *wh*-phrase questioning the surface subject of the passive voice is extracted, the sentence is grammatical. In contrast, when the *wh*-phrase questioning the agent is extracted, leaving the preposition stranded, as in (65)c, the

sentence is ungrammatical. The sentence in (65)c, however, is grammatical because the preposition *samo* 'by' pied-pipes, as shown in (65)d.

In ditransitive passive sentences, the surface subject can be extracted. However, agents cannot be extracted unless the preposition pied-pipes. In addition, the theme can be extracted. Examples follow.

(66) a. Ditransitive Passive Voice

bujaŋ	daʔ	dibagi	kue	(samo)	maʔ-ɲo	(JC, E)
Bujang	NEG	PASS-give	cake	by	mother-3	

'Bujang wasn't given cake by his mother.'

b. Extraction of the Surface Subject of Ditransitive Passive Voice

siapo	yaŋ	daʔ	dibagi	kue	(samo)	maʔ-ɲo?	(JC, E)
who	REL	NEG	PASS-give	cake	by	mother-3	

'Who is it that wasn't given cake by his mother?'

c. Extraction of the Agent of Ditransitive Passive Voice

*siapo$_i$	bujaŋ	daʔ	dibagi	kue	(samo)	t_i? (JC, E)
who	Bujang	NEG	PASS-give	cake	by	

'By whom wasn't Bujang given cake?'

d. Extraction of the Agent together with the Preposition

[samo siapo]$_i$	bujaŋ	daʔ	dibagi	kue	t_i?	(JC, E)
by who	Bujang	NEG	PASS-give	cake		

'By whom wasn't Bujang given cake?'

e. Extraction of the Theme (JC, E)

apo$_i$	bujaŋ	daʔ	dibagi	t_i samo	maʔ-ɲo?
what	Bujang	NEG	PASS-give	by	mother-3

'What wasn't given to Bujang by his mother?'

In (66)b, the *wh*-phrase questioning the surface subject of the passive sentence is extracted via relativization and the sentence is grammatical. In contrast, (66)c shows that when the *wh*-phrase questioning the agent is extracted with the preposition stranded, the sentence is ungrammatical. However, (66)d indicates that the agent can

be extracted if the preposition is also preposed. Furthermore, (66)e shows that the theme can be extracted.

To conclude, the City dialect is similar to the Tanjung Raden dialect in that it shows both subject and direct object extraction in active sentences. Adjunct extraction is possible, as well. However, extraction of the direct object in active sentences is only possible if the verb is in bare form. In subject and adjunct extraction, no restriction is observed with respect to the form of the verb employed. As for subject extraction, the extraction does not cross the verb; thus, regardless of the verb form, subject extraction is acceptable. In object voice, only the surface subject can be extracted. Extraction of the agent in an object voice sentence results in ill-formed sentences. Moreover, in the passive voice, the agent can be extracted only when the preposition is also preposed. Finally, the theme can be extracted.

1.1.1.2.3. Extraction in Mudung Darat

As in the Tanjung Raden and City dialects, extraction of a direct object over a nasal verb is generally not allowed in the Mudung Darat dialect, as shown below.

(67) a. *paraʔ$_i$ aku motoŋ t$_i$ (MD, E)
rubber 1SG ACT-cut
'Rubber, I cut.'

b. *uma-ko$_i$ paʔ aku la m^{b}uat t$_i$ (MD, E)
house-DEM.PROX TRU-father 1SG PFCT ACT-make
'This house, my father has built.'

c. *[adɪʔ sayo]$_i$ sayo ɲ^{j}mpʊt t$_i$ (MD, E)
younger.sibling 1SG 1SG ACT-pick.up
'My younger sister, I picked.'

d. *hape-tu$_i$ sayo malɪŋ t$_i$ (MD, E)
cell.phone-DEM.DIST 1SG ACT-steal
'The cell phone, I stole.'

If a resumptive pronoun is present after the verb of the sentences in (67), the sentences are grammatical, as shown in (68) below.

(68) a. [paraʔ-tu]$_i$ aku prna motoŋ-e$_i$ (MD, E)
rubber-DEM.DIST 1SG ever ACT-cut-3
'The rubber, I have cut it.'

b. [uma-ko]$_i$ paʔ aku la m^{b}uat-e$_i$ (MD, E)
house-DEM.PROX TRU-father 1SG PFCT ACT-make-3
'This house, my father has built it.'

c. [adɪʔ sayo]$_i$ sayo ɲmpʊt-e$_i$ (MD, E)
younger.sibling 1SG 1SG ACT-pick.up-3
'My younger sister, I picked her up.'

d. [hape-tu]$_i$ sayo malɪŋ-e$_i$ (MD, E)
cell.phone-DEM.DIST 1SG ACT-steal-3
'The cell phone, I stole it.'

In addition, object extraction is possible if the verb used is in bare form, as shown below.

(69) a. paraʔ-tu$_i$ aku daʔ potoŋ t$_i$ (MD, E)
rubber-DEM.DIST 1SG NEG cut
'Rubber, I did not cut.'

b. uma-ko$_i$ paʔ aku la buat t$_i$ (MD, E)
house-DEM.PROX TRU-father 1SG PFCT make
'This house, my father has built.'

c. [adɪʔ sayo]$_i$ sayo ɲmpʊt t$_i$ (MD, E)
younger.sibling 1SG 1SG pick.up
'My younger sister, I picked up.'

d. hape-tu$_i$ sayo daʔ palɪŋ t$_i$ (MD, E)
cell.phone-DEM.DIST 1SG NEG steal
'The cell phone, I didn't steal.'

The data in (67) to (69) provide evidence that direct object extraction over a nasal prefix is disallowed.

The same facts are observed in *wh*-question formation. *Wh*-phrases that question direct objects, formed using the cleft structure, must not have verbs with the nasal prefix, as the following examples show (see also section 1.1.3.2.2.1.1.2 and section 1.1.3.2.2.2.4).

(70) a. *siapo$_i$ naŋ joni m^{b}aŋkʊŋ t_i di pasar? (MD, E)
who REL Joni ACT-hit LOC market
'Who is it that Joni hit at the market?'

b. *apo$_i$ naŋ siti m^{b}li t_i di jakata? (MD, E)
what REL Siti ACT-buy LOC Jakarta
'What is it that Siti bought in Jakarta?'

c. *budi am^{b}ɪʔ sarap$_i$ naŋ ʊpɪʔ la m^{b}uaŋ t_i (MD, E)
Budi take rubbish that Upik PFCT ACT-throw.away
'Budi took the garbage that Upik has thrown away.'

In contrast, extraction is allowed if the verb does not have the nasal prefix, as shown below.

(71) a. siapo$_i$ naŋ joni baŋkʊŋ t_i di pasar? (MD, E)
who REL Joni hit LOC market
'Who is it that Joni hit at the market?'

b. apo$_i$ naŋ siti bli t_i di jakata? (MD, E)
what REL Siti buy LOC Jakarta
'What is it that Siti bought in Jakarta?'

c. budi am^{b}ɪʔ sarap$_i$ naŋ ʊpɪʔ la buaŋ t_i (MD, E)
Budi take rubbish that Upik PFCT throw.away
'Budi took the garbage that Upik has thrown away.'

The direct object or the *wh*-phrase questioning the direct object in (70) is relativized and the verb from which the direct object is relativized is in nasal form. Thus, the

sentences are ungrammatical. In contrast, the direct object of the sentences in (71) is extracted via relativization over bare verbs and the sentences are grammatical.

However, as pointed out in our previous work (Cole et al., 2008), there are some verbs which seem to allow extraction over the nasal prefix. The sentences in which the direct object is extracted from the nasal form of verbs of this group are also judged to be rarely used and/or less preferred. This means that the native speakers have started to accept direct object extraction in which the verb is in nasal form. Examples follow (Cole et al., 2008:1543).[26]

(72) a. ??[naŋ baru m^{b}li maʔ-e] budi ɲ^{j}ual-tu (MD, E)[27]
REL just ACT-buy mother-3 Budi ACT-sell-DEM.DIST
'Budi sold the one that his mother just bought.'

b. ??hen neŋoʔ budaʔ naŋ anjɪŋ lagi ŋ^{g}igɪt (MD, E)
Hendra ACT-look kid REL dog PROG ACT-bite
'Hendra is looking at the kid that the dog is biting.'

c. ??jantan naŋ titin neŋoʔ gaga (MD, E)
male REL Titin ACT-look handsome
'The boy whom Titin saw is handsome.'

Furthermore, we also found occasional cases in which extraction over the nasal prefix occurs in the naturalistic data, as shown below.

(73) a. naŋ ŋun^{d}aŋ, naŋ ŋun^{d}aŋ daʔ daʔ (MD, N)
REL ACT-invite REL ACT-invite NEG NEG
'[The magicians] that came to the party were those who were invited [by the host].'
[Lit. 'Those who were invited, those who werent', wouldn't.']

---

[26] The bare form of the verbs are still used in passive forms like *diundaŋ* 'be invited', *dibli* 'be bought'.

[27] The double question mark means that the sentence is not judged to be ungrammatical by native speakers, but they claimed that the sentence is rarely used or less preferred.

b. naŋ mᵇli aitu-la copot-tu? (MD, N)
REL ACT-buy before-EMPH Copot-DEM.DIST
'[What about] the paddy field Copot bought?'

Finally, similar to the other two dialects of Jambi, adjuncts in the Mudung Darat dialect can be extracted regardless of the verb form, as shown below.

(74) Adjunct Extraction

a. kapan ʊsɪn mᵇli motor? (MD, E)
when Husin ACT-buy motorcycle
'When did Husin buy a motorcycle?'

b. di mano lasmi ɲiaŋ ikan? (MD, E)
LOC which Lasmi ACT-clean fish
'Where did Lasmi clean the fish?'

To conclude, extraction facts generally indicate that extraction over a nasal prefix is not allowed in the three dialects discussed in this dissertation. However, the Mudung Darat dialect also possesses a group of verbs from which extraction over nasal forms is not totally ungrammatical for the speakers.

To sum up section 1.1.1.2, the voice system of the Tanjung Raden dialect is more similar to that of the Jambi City dialect than to that of the Mudung Darat dialect. The summary of the voice system of Jambi Malay is shown in (75) and (76) below.

(75) Tanjung Raden and Jambi City Voice System

a. The active is preferably marked by the nasal prefix *ŋ-*.
b. A null prefix is used for object voice, object extraction, and active voice.
c. The word order for object voice is: aux/negation agent bare verb.
d. The word order for object extraction is: agent aux/neg bare verb.
e. The passive is obligatorily marked by *di-*.
f. No extraction over a nasal prefixed verb is allowed.

(76) Mudung Darat Voice System

a. The active voice is optionally marked by *ŋ-*.
b. The passive is obligatorily marked by *di-*.
c. The object voice is not attested.
d. The null prefix only marks active voice, with or without extraction.
e. Extraction over a nasal verb is generally barred, but is possible for some verbs.

1.1.1.3. The Analysis of Voice

The study of Austronesian voice has been one of the greatest as well as most challenging topics of interest for many linguists. In our previous work (Cole et al., 2008), we point out that Malay/Indonesian exhibits a voice system that is similar to the voice system reconstructed for Proto-Austronesian, which is known as the "Philippine-type" voice system. "Philippine-type" voice systems are still found in the Philippine languages, Malagasy, Seediq and many other Western Austronesian languages. The voice systems found in these languages have a number of important characteristics shown in (77), which suggest that they are "symmetric" voice systems (Foley, 1998; Kroeger, 1998; Arka, 2002).

(77) a. All forms of the verb are marked for voice.
b. In "passive-like" constructions, agents are not demoted to adjuncts, but rather are arguments of the predicate.
c. There are a variety of passive-like voices, promoting nominals, exhibiting different grammatical and semantic relations to surface subjecthood.

The examples taken from Foley (1998) below illustrate the symmetry of the voice system in Tagalog, one of the Philippine-type languages.

(78) a. b-*um*-ili ng isda sa indahan *ang* *lalake*
VC-buy CORE fish OBL store man
'The man bought fish in the store.' [agent is subject]

b. bi-bilh-*in* ng lalake sa tindahan *ang* *isda*
IRR-buy-VC CORE man OBL store fish
'The man will buy fish in the store.' [theme is subject]

c. bi-bilh-*an* ng lalake ng isda *ang tindahan*
IRR-buy-VC CORE man CORE fish store
'The man will buy fish in the store.' [location is subject]

d. *ipam*-bi-bili ng lalake ng isda *ang salapi*
VC-IRR-buy CORE man CORE fish money
'The man will buy fish with the money.' [instrument is subject]

e. *i*-bi-bili ng lalake ng isda *ang bata*
VC-IRR-buy CORE man CORE fish child
'The man will buy fish for the child.' [benefactive is subject]

As shown in (78), different affixes (*-um-, -in, -an, ipaN-,* and, *i-*) are employed to mark different varieties of voice. The grammatical/semantic relation of the surface subject (the NP that follows *ang*) determines the choice of affix to employ. In (78)a, the verb takes the infix *–um-* when the NP following *ang* is the agent, the buyer. In (78)b, the verb takes the suffix *–in* because *ang* is followed by the theme. Furthermore, in (78)c, the verb takes the suffix *–an* when the NP following *ang* is the location, etc.

In addition to the symmetric voice system, the Philippine-type languages also manifest several restrictions on extraction processes like *wh*-questions and relativization. In Tagalog, for example, the only nominal that can be questioned or relativized is the (surface) subject (examples are taken from Kroeger, 1993:23-24).[28]

(79) a. isda=ng i-b-in-igay ng=lalake sa=bata
fish=LNK OV-PERF-give GEN=man DAT=child
'the fish which was given to the child by the man'

b. bata=ng b-in-igy-an ng=lalake ng=isda
child=LNK PERF-give-DV GEN=man GEN=fish
'the child which was given fish by the man'

c. *isda=ng nag-bigay ang=lalake sa=bata
fish=LNK AV-PERF-give NOM=man DAT=child
(FOR: 'the fish which the man gave to the child')

[28] There exist a few exceptions which are not relevant here.

d. *isdas=ng b-in-igy-an ng=lalake ang=bata
fish-LNK PERF-give-DV GEN=man NOM=child
(FOR: 'the fish which the child was given by the man')

As shown in (79), the only noun phrase that can be relativized in Tagalog is the *ang* noun phrase (the surface subject). *Wh*-phrase movement and other extraction constructions also have similar restrictions.

As we pointed out in our previous work (Cole et al., 2008), the voice system of Malay/Indonesian voice system is similar to those of Philippine-type languages; however, significant differences are observed. The Indonesian type languages have a more reduced version of the Philippine-type system. Prescriptive Standard Indonesian, for example, only exhibits two voice types which are corollary to the Philippine-type languages voice types, namely the active voice and the object voice (among others: Macdonald and Dardjowidjojo, 1967; Chung, 1976b; Sie, 1988; Sneddon, 1996).

The active voice in Standard Indonesian is marked by the nasal prefix *meng-,* and the word order for the active transitive sentence is subject (agent), verbal predicate, and direct object (patient/theme). If negation or an auxiliary is present, it appears before the verb. The object voice in Standard Indonesian is marked by the zero prefix. The word order for the object voice sentence is patient/theme, agent, and verbal predicate and if negation or an auxiliary is present, it should precede the agent. Examples follow.

(80) a. Dia tidak membeli tas ini di toko itu.
3 NEG MENG-buy bag this LOC store that
'He didn't buy this bag at that store.'
b. *Dia tidak beli tas ini di toko itu.
3 NEG buy bag this LOC store that
'He didn't buy this book at that store.'

(81) a. Tas ini tidak dia beli di toko itu.
bag this NEG 3 buy LOC store that
'This bag wasn't bought by him at the store.'
b. Tas ini tidak dia membeli di toko itu.
bag this NEG 3 MENG-buy LOC store that
'This bag wasn't bought by him at that store.'
c. *Tas ini dia tidak beli di toko itu.
bag this 3 NEG buy LOC store that
'This bag wasn't bought by him at that store.'

As shown in (80), the verb of the active sentence in Standard Indonesian must be marked by the nasal prefix *meng*- and the word order of the clause is subject (agent), negation/auxiliary, verbal predicate, direct object (theme). In contrast, the object voice must be marked by the zero morpheme, and the word order is subject (theme), negation/auxiliary, agent, and the verbal predicate, as indicated in (81). In short, the active sentence is different from the object voice in that the agent is in subject position in active voice, whereas the theme is in subject position in object voice. Moreover, the two voices are also different as the verb form in the active verb takes the nasal prefix while the verb of the object voice takes the zero morpheme. Finally, the auxiliary/negation appears after the agent and before the verb in the active sentence, but in the object voice sentence, the auxiliary/negation must appear before the agent and the agent appears immediately before the verb.

In addition to the two above-mentioned voice types, Standard Indonesian also exhibits the European-type passive (among others: Macdonald and Dardjowidjojo, 1967; Chung, 1976b; Sie, 1988; Sneddon, 1996). The passive voice, which is not observed in the Philippine-type languages, is marked by the *di*- prefix. The word order of the passive construction is theme/patient followed by the *di*-verb and optionally followed by an agent. If an agent is present, it is optionally preceded by the preposition *oleh* 'by'.

(82) Tas ini dibli ((oleh) Andi) di toko buku itu.
bag this PASS-buy by Andi LOC store book that
'This bag was bought by Andi at that book store.'

In section 1.1.1.1, I have described different voice types observed in Jambi Malay. The voice system of the Tanjung Raden and City dialects is similar but not identical to that of Standard Indonesian. The Tanjung Raden and Jambi City dialects are significantly different from Standard Indonesian in that these two Jambi dialects allow object extraction in active sentences. When this kind of extraction occurs, the verb of the sentence must not have the nasal prefix. The difference between object extraction/fronting over a bare verb and object voice is in the word order of the agent and the auxiliary/negation. I shall return to this issue in section 1.1.1.4. In addition, in active sentences in Jambi Malay, the presence of the nasal prefix is preferred, but it is not obligatory, whereas in Standard Indonesian the presence of the nasal prefix is obligatory.

Unlike the two other dialects of Jambi Malay, the Mudung Darat dialect only demonstrates two voices: the active voice and the passive voice. The object voice in this dialect has collapsed with the active voice as the order of the auxiliary and negation is relatively free, and thus, the active voice and object voice are indistinguishable in this dialect. Furthermore, speakers have begun to accept extraction over nasal verbs (see section 1.1.1.2.3).

In what follows, I shall first present our previous analysis (Cole et al., 2008) to explain the fact that adjunct extractions in Jambi Malay (as well as in Standard Indonesian) are possible. Then, I shall further show that this analysis can account for the voice system of Jambi Malay. The theoretical context for this analysis is Minimalism and this analysis is based on Rackowski and Richards (2005). It is also largely based on our earlier work (Cole et al., 2008).

Rackowski and Richards (2005) propose that UG dictates that only the highest constituent in vP can be extracted from vP. Universal Grammar predicts that only the nominal that becomes the subject (moves to spec of TP) can undergo A-bar movement since only one constituent can be extracted from the vP and the EPP requires a subject to be present.

In our previous work (Cole et al., 2008) we question whether the extraction constraints should really be viewed as following bare principles of Universal Grammar or whether it is the reflex of a language specific, morphological restriction. Following Rackowski and Richards (2005), we take the constraint against relativization across verbs with a nasal prefix to be due to the impossibility of extracting a nominal that is not on the edge of the vP. In this case, the direct object, for example, is not on the edge of the vP in active clauses. Thus, the edge of vP is the highest specifier of vP; therefore, specifiers lower than vPs should not be treated as instances of the vP edge. As a result, nominals in lower specifiers cannot be extracted. With this system, only a single DP can move out of vP to a higher position, regardless of whether the position to which it moves is an A-position or an A-bar position. Still a UG requirement, the EPP requires that the surface subject position (specifier of TP) be filled. Therefore, the single DP that escapes from the vP must be the DP that can satisfy the EPP, that is, the surface subject.

The above mechanism appears to make correct predictions for the voice systems of Philippine-type languages as well as part of the Standard Indonesian voice system. However, if we consider languages outside the Austronesian family, this mechanism cannot make correct predictions for most languages of the world. In English, for example, agents in active clauses are assumed to be generated as the

specifier of vP, and move from the specifier of vP to the specifier of TP. However, the extraction of the agent from vP to specifier of TP does not block the A-bar extraction of other constituents, as shown below.

(83) [$_{CP}$ What$_i$ will [$_{TP}$ you$_j$ [$_{vP}$ t_j[t_j [$_{VP}$ see t_i in Montana]]]]]

In (83) both the direct object 'what' and the subject 'you' are extracted from the vP. It has been claimed that the vP is universally a phase and that extraction from a phase can only be via the edge of the phase. Based on this assumption, (83) is predicted to be ungrammatical by Rackowski and Richard's analysis because only the highest DP (the one at the edge of the phase) is accessible to a probe outside the phase and thus extractable from vP. However, derivations like (83) are in fact well-formed in most languages. Only in the Philippine-type voice systems are derivations analogous to (83) ill-formed.

To resolve this contradiction, Cole et al. (2008), propose an analysis called the Voice Agreement Hypothesis (VAH).[29] According to this hypothesis, Philippine-type voice systems have two related but independent properties. The first property is a morphological requirement in that the voice system reflects the position from which extraction has taken place. In Standard Indonesian, for example, the *meng-/N-* is required when the agent is moved out of the vP to the specifier of TP. Likewise, the null prefix is needed when an object is extracted from vP. This property, however, is language-specific. In English, for example, adjunction to vP and agreement with v are presumably required if an object is to move out of the vP, but the morphology of English voice does not reflect this agreement. The active voice in English reflects the

[29] See Cole et al. (2008) for a more detailed summary of Rackowski and Richards' system and how their system accounts for the voice systems of Philippine-type languages.

fact that the agent is generated as specifier of the vP and the passive reflects the opposite fact in that the agent is not generated as the specifier of vP. The Philippine-type voice system differs from others in that voice morphologically reflects the position from which extraction takes place.

The second property of a Philippine-type voice system is needed to prevent extraction of constituents which morphosyntactically conflict with those of other constituents in determining the choice of voice. Cole et al. (2008) further point out that this constraint is morphological in nature. The constraint claims that the voice marker in question cannot bear conflicting features regarding the case (or, alternatively, the thematic role) of the extracted elements:

(84) *[$_v$ f(x) & f(y)]

where x and y range over the overt morphological instantiation on v of the case/thematic role features + nominative/agent and + accusative/patient.

Because the EPP must be satisfied, these two morphological requirements predict that the surface subject is the only argument that can move out of the vP. The ungrammaticality of extracting a non-subject is also due to a morphological requirement that blocks the presence of conflicting voice features on v.

As for English, the requirement in (84) does not apply to sentences like (83) because the voice system of English does not morphologically express the position from which extraction has occurred. That v agrees syntactically with the extracted nominal in English is a syntactic fact, and does not violate the morphological filter in (84). If (84) is assumed to be a morphological filter specific to Philippine-type voice systems, the difference in extraction possibilities between Philippine-type languages and other languages can be explained.

In short, the Voice Agreement Hypothesis (VAH) appears to correctly predict the differences between Standard Indonesian on the one hand and English on the other hand. In what follows, I show how the VAH accounts for extraction facts regarding adjuncts in Jambi Malay. Then, I demonstrate how the voice system of Jambi Malay can be accounted for.

1.1.1.3.1. Adjunct Extractions in Jambi Malay

Adjunct extraction in Jambi Malay, as in Standard Indonesian, is possible, as indicated in the following examples.

(85) a. ŋapo$_i$ dioʔ daʔdo n^{d}aʔ nole t$_i$?
why 3 NEG.exist want ACT-look
'Why didn't he want to look at you?'

b. kapan$_i$ Budi ŋam^{b}ɪʔ duwɪt t$_i$? (TR, E)
when Budi ACT-take money
'When did Budi take money?'

According to the VAH, the structure for (85)b, can be illustrated as follows.

(86) [$_{VoiceP}$ budi$_j$ ŋam^{b}ɪʔ$_k$ [$_{vP}$ *t*$_j$ *t*$_k$ [$_{VP}$ *t*$_k$ duwɪt kapan$_i$]]]
Budi {ŋ} wh
nom nom
N N +WH

Assuming that the voice marker *ŋ-* is the probe, it requires a goal +N, nominative. Then, it attracts *budi* 'Budi' to its specifier position. The morpheme *ŋ-* has the property that the syntactic features [N nom] are represented morphologically on the voice marker {ŋ-}, and thus, license the occurrence of {ŋ- N Nom]. In the next stage, *kapan* 'when' adjoins to VoiceP, presumably having moved to satisfy its +WH feature, as illustrated in (87) below.

(87) [$_{VoiceP}$ kapan$_i$ [$_{VoiceP}$ budi$_j$ ŋam^{b}ɪʔ$_k$ [$_{vP}$ t_j t_k [$_{VP}$ t_k duwɪt t_i]]]

wh	Budi	{MENG}
+WH	nom	nom
	N	N

AGREE copies the features of the question word *kapan* 'when' to the voice head:

(88) [$_{VoiceP}$ kapan$_i$ [$_{VoiceP}$ Budi$_j$ ŋam^{b}ɪʔ$_k$ [$_{vP}$ t_j t_k [$_{VP}$ t_k duwɪt t_i]]]

when	Budi	{MENG}
+WH	nom	nom
	N	N
		+WH

[+WH] does not constitute the phi feature of an N constituent, so this feature is not represented in the morphological representation of Voice, but rather only in the syntactic representation. In Jambi Malay (and Standard Indonesian and other Indonesian-type languages), the [+WH] feature does not reflect the phi features of constituents other than those that bear the feature N. Therefore, the extraction of elements that have the [+wh] feature does not trigger feature conflict and therefore, adjunct extraction is irrelevant for the well-formedness of voice in Jambi Malay and other Malay dialects.

1.1.1.3.2. The Analysis of Jambi Malay Voice System

As previously shown, the Tanjung Raden and City dialects are very similar with respect to the voice types and extraction facts. Furthermore, I have also mentioned that the voice system of the Mudung Darat dialect is slightly different from that of the Tanjung Raden and City dialects; i.e. unlike the other two dialects, the Mudung Darat dialect does not exhibit object voice. In what follows, I shall first show how the VAH accounts for the data in the Tanjung Raden and City dialects; then, I shall also present how the Mudung Darat voice system is explained.

1.1.1.3.2.1. Analyzing the Voice System of Tanjung Raden and Jambi City

The voice systems of the Tanjung Raden and City dialects are similar, but not identical to that of Standard Indonesian, as summarized in (75), repeated below.

(89) Tanjung Raden and Jambi City Voice System

a. The active is preferably marked by the nasal prefix *ŋ-*.
b. The null prefix is used for object voice, object extraction, and active voice.
c. The word order for object voice is: aux/negation agent bare verb.
d. The word order for object extraction is: agent aux/neg bare verb.
e. The passive is obligatorily marked by *di-*.
f. No extraction over a nasal prefixed verb is allowed.

The Tanjung Raden and City dialects are significantly different from Standard Indonesian in that the two Jambi dialects allow object extraction in active sentences. When this kind of extraction occurs, the verb of the sentence cannot have the nasal prefix, but instead the null prefix. The difference between object extraction over a bare verb and object voice is in the word order of the agent and the auxiliary/negation.[30] In addition, in active sentences, the nasal prefix is preferred, but not obligatory in Tanjung Raden and Jambi City. Let us first examine how the VAH accounts for the extraction of the direct object and then how this analysis accounts for the nasal prefix requirement in active sentences.

In the Tanjung Raden and City dialects, objects can be extracted, as exemplified below.

(90) apo$_i$ yaŋ budi la am^{b}ɪʔ t_i? (TR, E)
what REL Budi PFCT take
'What did Budi take?'

In (90), the extraction of the direct object *apo* 'what' via relativization has active word order since the perfective marker *la* appears between the agent and the verb.

[30] I shall return to this issue in section 1.1.1.4.

In contrast, extraction over the nasal prefix is not allowed in these two dialects of Jambi Malay, as shown below.

(91) *aku neŋoʔ oraŋ$_i$
1SG ACT-look person
[$_{CP}$ OP$_i$ [$_{TP}$ yaŋ [$_{TP}$ polisi-tu$_j$ [$_{VoiceP}$ t$_i$ [$_{VoiceP}$ t$_j$ naŋkap t$_i$]]]] (JC, E)
REL police-DEM.DIST ACT-catch
'I saw the person that the police caught.'

According to the VAH, direct object extraction is blocked by a morphological requirement in Standard Indonesian, not a parameterized definition of phase edge. The difference in extraction facts between Standard Indonesian on the one hand and the Tanjung Raden and City dialects on the other hand is due to a minor modification of the morphological constraints in these two dialects of Jambi Malay. According to the VAH, object extraction in Standard Indonesian is barred because all voice morphemes are subject to (84), repeated below.

(84)*[$_V$ f(x) & f(y)]

where x and y range over the overt morphological instantiation on the voice *head* of the case features accusative and nominative.

The Tanjung Raden and the City dialects differ from Standard Indonesian in that the null prefix in these two Jambi dialects is "defective" in the sense that it is not subject to (84). The fact that the Tanjung Raden and City dialects do not have the constraint blocking the co-occurrence of features specified in (84) is due to the morphological peculiarity of the null prefix. This makes the zero morpheme a separate 'voice' which allows more word order freedom. Therefore, the Tanjung Raden and City dialects allow the feature matrix in (92) when the voice head bears the null prefix.

(92) {Ø N Nom Acc}

If the voice head bears the *ŋ-* prefix, object extraction is impossible because the nasal prefix is subject to (84).

(93) *{N- N Nom Acc}

The zero morpheme and the nasal prefix are different voices here. In short, extraction over the nasal prefix is ungrammatical in the Tanjung Raden and City dialects because the nasal prefix is not morphologically defective, and thus it is blocked by the feature configuration in (93).

The fact that the null prefix in (92) is not subject to (84) does not mean that the null prefix is assigned differently in the Tanjung Raden and City dialects than in Standard Indonesian. The null prefix in sentences in which object extraction occurs can be explained on the basis of the same principles that govern the distribution of voice prefixes as those found in Standard Indonesian. The difference is that the null prefix in Standard Indonesian always correlates with the object voice, whereas in the Tanjung Raden and City dialects the null prefix does not exclusively mark the object voice because it also marks active voice with object extraction. When the null prefix is used in an object voice-like construction, it marks argument shift, and in object extraction it marks the fact that object extraction has occurred in such sentences. In short, the null prefix in the Tanjung Raden and City dialects has two functions, namely (a) marking the object voice as well as (b) object shift.[31] Thus, the null prefix used for marking object shift is morphologically defective in the sense that the null prefix does not impose a morphological requirement.

Now, I shall turn to the fact that the nasal prefix is not obligatory in the Tanjung Raden and City dialects. Note that although the nasal prefix is not obligatory,

[31] I shall return to this issue in section 1.1.1.4.

its presence is preferred. I would claim that this is further evidence for the 'defectiveness' of the null prefix in in the sense that the native speakers also use it to mark active sentences without extraction. Regardless of the fact that in active sentences without direct object extraction, verbs with the nasal prefix are preferred, speakers of the Tanjung Raden and City dialects also accept bare verb forms in such a construction.[32]

1.1.1.3.2.2. Analyzing the Mudung Darat Voice System

As pointed out previously in section 1.1.1.1.3.3, object voice in the Mudung Darat dialect has collapsed with the active voice. Thus, the Mudung Darat dialect only exhitbits two voice types, namely active voice (see section 1.1.1.1.1) and passive voice (see section 1.1.1.1.2).

1.1.1.4. A Closer Look at Passive Voice, Object Voice and Object Fronting in Jambi Malay[33]

I have previously claimed that the Tanjung Raden and City dialects exhibit object voice, whereas object voice in the Mudung Darat dialect has collapsed and is indistinguishable from active voice. It has also been shown that object voice and active voice with object fronting share two similar properties: i.e, the theme/patient is in clause-initial position, preceding the verb and the verb must be in bare form.

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[32] Note that the Tanjung Raden and City dialects are not the only Malay varieties that allow both the bare verb and the nasal verb in active sentences. In colloquial Jakarta Indonesian, for example, both forms are also used in active sentences. In fact, as observed by Hidajat (forthcoming), bare active verbs occur more frequently in the Jakarta Indonesian corpus collected by the Jakarta Field Station of the Max Planck Institute for Evolutionary and Anthropology.

[33] I use the terms 'object fronting', 'object topicalization' and 'object extraction' interchangeably.

However, these two voice types have different word orders with respect to the position of negation or the auxiliary. Following Cole et al. (2008), I have claimed that negation or the auxiliary in object voice appears before the agent and the opposite order occurs in active voice with object fronting.

The fact that object voice and active voice with object extraction are only different in the ordering of the auxiliary/negation and the agent might suggest that these two voices are simply one voice type, but that the word order of the agent and auxiliary/negation is free.[34]

In what follows, I shall examine whether these two voice types are indeed two different voice types or whether they are simply a variation of one voice type. To do so, it is important to examine the status of the patient/theme which appears in sentence-initial position, preceding the agent and the verb, in these two constructions. If the patient/theme in both constructions is in an argument position, i.e. the subject position (spec of TP), it would follow that both voice types are actually variations of one voice type, i.e. the object voice. If the patient/theme of the two structures is in a non-argument position, presumably a topic position, this suggests that the two constructions are active voices with object fronting/topicalization. The two structures are indeed different voice types if the position of the patient/theme in both structures differs in that the patient/theme is in an argument position in one, while the patient/theme is in a non-argument position in the other.

In section 1.1.1.1.2, I claimed that the theme/patient in the canonical passive moves to spec of TP. The claim is supported by the data from reflexives, as exemplified in the following example (repeated from example (30)).

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[34] Thanks to Benjamin Bruening for raising this issue.

(94) budi, arwa bini-e blʊm dikɪrɪm ka dioʔ deweʔ
Budi soul wife-3 not.yet PASS-send to self alone
buat malaikat -tu (TR, E)
by angel-DEM.DIST
'Budi, his wife's soul has not been returned to herself by the angel.'
*Budi, his wife's soul has not been returned to Budi by the angel.'

In (94), while *budi* cannot be the antecedent for the reflexive *dioʔ deweʔ*, *bini* can. This suggests that the NP *arwa bini-e* 'his wife's soul' is in spec of TP, whereas *budi* is not. Rather, *budi* is presumably in topic position.

The same test can be used to examine the two voice types I am concerned with in this section: the object voice and the active voice with object fronting. The test suggests that there is no distinction between object voice and object fronting, as shown in the following examples.

(95) a. Object Voice Word Order
brahɪm, arwa bini-e blʊm malekat-tu kɪrɪm
Brahim soul wife-3 not.yet angel-DEM.DIST send
ka dioʔ deweʔ (TR, E)
to 3 alone
'Brahim, his wife's soul has not been sent to herself by the angel.'
'Brahim, his wife's soul has not been sent to him (Brahim) by the angel.'

b. Object Fronting Word Order
brahɪm, arwa bini-e malekat-tu blʊm kɪrɪm
Brahim soul wife-3 angel-DEM.DIST not.yet send
ka dioʔ deweʔ (TR, E)
to 3 alone
'Brahim, the angel has not sent his wife's soul to herself.'
''Brahim, the angel has not sent his wife's soul to him (Brahim).'

Based on the ordering of the auxiliary and the agent, the clause following the topic *brahɪm* in (95)a has the structure ascribed to object voice, whereas that of (95)b has the structure ascribed to object fronting or object topicalization. If the clause following *brahɪm* in (95)a indeed has the structure of object voice, *bini* 'wife' would be expected

to be the only possible antecedent for the reflexive *dio?dewe?*. However, *brahm* can also serve as the antecedent for *dio?dewe?*. Likewise, in (95)b, either *bini* or *brahm* can be the antecedent for *dio?dewe?*. In short, the data in (95) show that object voice and object fronting are not distinguishable. Although this test can be used in claiming that the theme/patient in the canonical passive is in the spec of TP, this test does not seem to be able to suggest the position of the theme/patient in both object-voice-like structure and object-fronting-like structure. This might be due to the fact that this dialect does not have true reflexives as described in section 1.5.1.3. Therefore, the reflexive test does not work.

Since the reflexive test does not work, I shall now take into account some other tests to distinguish object voice and active sentences with object extraction. These tests were initially used by Chung (1976b) to distinguish object preposing, which is object voice in Standard Indonesian, from topicalization. When using these tests to distinguish object voice and active voice sentences with object extraction/topicalization, I shall also include passive voice. The main reason for including the canonical passive voice is to examine which construction patterns more like the canonical passive voice in which the theme/patient is claimed to be the subject (spec of TP).

I shall first show some tests that indicate that object voice patterns like passive voice. However, other tests show that object voice and passives seem to be indistinguishable from object fronting. The tests that can distinguish passives and object voice on the one hand and the active voice with direct object extraction on the other hand are the government test, complement of factive test, and discourse phenomena. In contrast, the tests that appear not to be able to distinguish these two

constructions are the subject tests which include subject to object raising, control (equi deletion), and derived subject raising tests. I shall explain how each test works below.

1.1.1.4.1. Government Test

Government test is one of the syntactic characteristics that distinguish passives from topicalizations. Chung (1976b: 76) claims that governed rules have been characterized as rules with lexical exceptions or rules whose application is determined by semantic as well as syntactic categories.

In the Tanjung Raden and City dialects, the passive and object voice have lexical exceptions, whereas object topicalization does not. The sentences in (96) are sentences from which the passives in (97) are derived.

(96) a. aku daʔ snaŋ batino-tu (TR, E)
1SG NEG glad female-DEM.DIST
'I don't like that girl.'

b. aku la lupo payʊŋ kami (TR, E)
1SG PFCT forget umbrella 1
'I have forgotten our umbrella.'

c. siti daʔ mırıp maʔ kau (TR, E)
Siti NEG resemble mother 2SG
'Siti doesn't resemble your mother.'

(97) Passives

a. *batino-tu daʔ disnaŋ ((buat) aku) (TR, E)
female-DEM.DIST NEG PASS-glad by 1SG
'The girl isn't liked by me.'

b. *payʊŋ kami la dilupo ((buat) aku) (TR, E)
umbrella 1 PFCT PASS-forget by 1SG
'Our umbrella has been forgotten by me.'

c. *maʔ kau daʔ dimırıp ((buat) siti) (TR, E)
mother 2SG NEG PASS-resemble by Siti
'Your mother isn't resembled by Siti.'

The sentences in (97) meet the structural description of passives; however, the passivization fails to apply, as indicated by the ungrammaticality of the sentences. This indicates that the passivization has lexical exceptions because it does not apply to all lexical verbs.

Similar to the passive voice, the object voice is restricted to certain lexical verbs, as shown below.

(98) Object Voice

a. *batino-tu daʔ aku snaŋ (TR, E)
female-DEM.DIST NEG 1SG glad
'The girl isn't liked by me.'

b. *payʊŋ kami la aku lupo (TR, E)
umbrella 1 PFCT 1SG forget
'Our umbrella has been forgotten by me.'

c. *maʔ kau daʔ siti mɪrɪp (TR, E)
mother 2SG NEG Siti resemble
'Your mother isn't resembled by Siti.'

Again, syntactically, object voice should be able to apply in (98). However, the data show otherwise. In short, similar to the passive voice, object voice has lexical exceptions.

Unlike the passive voice and the object voice, object fronting is not restricted to certain verbs. The verbs used in (99) are the same as those used in (97) and (98). However, the sentences in (99) are grammatical.

(99) Object Fronting

a. batino-tu, aku daʔ snaŋ (TR, E)
female-DEM.DIST 1SG NEG glad
'That girl, I don't like.'

b. payʊŋ kami, aku la lupo (TR, E)
umbrella 1 1SG PFCT forget
'Our umbrella, I have forgotten.'

c. maʔ kau siti daʔ mɪrɪp (TR, E)
mother 2SG Siti NEG resemble
'Your mother, Siti doesn't resemble.'

To conclude, object voice patterns like passives because it is restricted to certain verbs, whereas object fronting is not. Thus object fronting is an example of topicalization.

1.1.1.4.2. Complement of Factive Verbs

The second syntactic characteristic of passives is that they can occur as complements of factive verbs such as *takjʊt* 'be surprised', *ɲsal* 'regret', *mara* 'angry', etc., while topicalization does not occur as a complement of these verbs. The examples in (100) and (101) show that sentences which have the structure of passive voice and of object voice can be the complement of a factive verb. In contrast, the sentences in (102) indicate that sentences which have the structure of object fronting are not allowed to appear as complements of a factive verb.

(100) Passives

a. oraŋ-tu takjʊt buda?-ko daʔ
person-DEM.DIST surprised kid-DEM.PROX NEG
digbʊk aku (TR, E)
PASS-hit 1SG
'That person was surprised that this kid wasn't beaten by me.'

b. maʔ mara motor-tu daʔ dijual aku (TR, E)
mother angry motorcycle-DEM.DIST NEG PASS-sell 1SG
'Mother is angry that the motorcycle wasn't sold by me.'

(101) Object Voice

a. oraŋ-tu takjʊt buda?-ko daʔ aku gbʊk (TR, E)
person-DEM.DIST surprised kid-DEM.PROX NEG 1SG hit
'That person was surprised that this kid wasn't beaten by me.'

b. maʔ mara motor-tu daʔ aku jual (TR, E)
mother angry motorcycle-DEM.DIST NEG 1SG sell
'Mother is angry that the motorcycle wasn't sold by me.'

(102) Object Fronting

a. *oraŋ-tu takjʊt budaʔ-ko aku daʔ gbʊk (TR, E)
person-DEM.DIST surprised kid-DEM.PROX 1SG NEG hit
'That person was surprised that this kid I didn't beat.'

b. *maʔ mara motor-tu aku daʔ jual (TR, E)
mother angry motorcycle-DEM.DIST 1SG NEG sell
'Mother is angry that the motorcycle I didn't sell.'

To conclude, while the object voice patterns like the passive voice in that it can be the complement of a factive verb, object fronting cannot be the complement of a factive verb.

1.1.1.4.3. Constraints on Topicalization

The third test that can be used to distinguish passivesx from topicalization is constraints on topicalization.[35] Chung (1976b) claims that if one constituent of a sentence has been topicalized, it is generally impossible to topicalize another constituent. In Jambi Malay, if a constituent of a sentence has been topicalized, it is still possible to topicalize an additional constituent. However, sentences with more than one topicalization are judged to be less natural or rarely used as compared to sentences with one topicalization followed by passivization. Examples follow.

(103) Passives

a. ka budi, sarʊŋ edi la dikırım kami (TR, E)
to Budi sarong Edi PFCT PASS-send 1
'To Budi, Edi's sarong has been sent by us.'

b. ka suŋe, pancıŋ-ko daʔ dibawaʔ dioʔ (TR, E)
to river fishing.rod-DEM.PROX NEG PASS-bring 3
'To the river, this fishing rod wasn't brought by him.'

[35] Chung (1976b) refers to this as discourse phenomena.

(104) Object Voice

a. ka budi, sarʊŋ edi la kami kırım (TR, E)
to Budi sarong Edi PFCT 1 send
'To Budi, Edi's sarong has been sent by us.'

b. ka suŋe, pancıŋ-ko daʔ dioʔ bawaʔ (TR, E)
to river fishing.rod-DEM.PROX NEG 3 bring
'To the river, this fishing rod wasn't brought by him.'

(105) Object Fronting

a. ?ka budi, sarʊŋ edi kami la kırım (TR, E)
to Budi sarong Edi 1 PFCT send
'To budi, Edi's sarong, we have sent.'

b. ?ka suŋe, pancıŋ-ko dioʔ daʔ bawaʔ (TR, E)
to river fishing.rod-DEM.PROX 3 NEG bring
'To the river, this fishing rod, he did not bring.'

Assuming that the themes *sarʊŋ edi* 'Edi's sarong' and *pancıŋ-ko* 'this fishing rod' in (103) have undergone a leftward movement, the fact that the prepositional phrases *ka budi* 'to Budi' and *ka suŋe* 'to the river' can also move to the left of the theme suggests that the movement of the theme is not a topicalization. Likewise, the theme in the sentences in (104) has undergone a leftward movement and the prepositional phrase can still be fronted to the sentence-initial position. This, again, suggests that the movement of the theme is not topicalization. In contrast, the theme in the sentences in (105) has moved to the left. However, unlike the ones in (103) and (104), the movement of the theme followed by the leftward movement of the prepositional phrase generates sentences which are judged to be less grammatical or less common. The crucial point is that since the sentences in (105) are judged to be less grammatical, we can conclude that double topoicalization results in reduced grammaticality. In short, the theme of the passive voice and object voice appear to undergo a non-

topicalized leftward movement, whereas the theme of the object fronting undergoes topicalization.

To conclude, I have shown that based on the three tests above (namely: the government test, the factive verb test, and the constraints on topicalization test), the theme in object voice, like the one in the passive voice, undergoes passivization. In contrast, the theme of the object fronting construction undergoes topicalization.

In addition to the three tests I have just presented, Chung (1976b) utilizes other tests which appear to be able to distinguish passivization and object preposing (object voice) in Indonesian. These tests include the subject-to-object raising, control (equi deletion), and derived subject raising. However, in what follows I shall show that these tests cannot be used to distinguish passivization and topicalization in Jambi Malay.

1.1.1.4.4. Subject-to-Object Raising

According to Chung (1976b), a typical syntactic characteristic that distinguishes passives from topicalization is that passives are subject-creating in that they turn a non-subject into the subject of its clause, while topicalization is not subject-creating. The subject-to-object raising only applies to a noun phrase which is the syntactic subject of its clause (Chung, 1976b).

In the Tanjung Raden and City dialects, complement clauses appear after the matrix verb, as exemplified below.[36, 37]

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[36] As shown in 1.1.4.1.4, a complementizer can be optionally present to introduce the complement clauses.

[37] The same observation is found in the Mudung Darat dialect.

(106) a. siti ŋiro oraŋ-tu la
Siti ACT-think person-DEM.DIST PFCT
ŋam^{b}eʔ pırıŋ-e (TR, E)
ACT-take plate-3
'Siti thinks the man has taken the plates.'

b. oraŋ saŋko dio la suda mati (TR, E)
person think 3 PFCT finish dead
'People thought he had already died.'

The subject of the embedded clause in (106) can be raised to become the direct object of the matrix clause. This subject-to-object raising rule is optional and is governed by higher verbs like '*kiro*' 'think', *saŋko* 'think', *pcayo* 'believe', etc. After the raising rule has applied, the raised NP can undergo passivization in the higher clause, as shown below.

(107) a. oraŋ-tu dikiro (siti) la ŋam^{b}eʔ pırıŋ-e (TR, E)
person-DEM.DIST PASS-think Siti PFCT ACT-take plate-3
'The man was thought by Siti to have taken the plates.'

b. dioʔ disaŋko ((buat) oraŋ) la suda mati(TR, E)
3 PASS-think by person PFCT finish die
'He was thought by people to have died.'

Assuming that the subject-to-object raising rule only applies to syntactic subjects, it is predicted that this rule should only interact with object voice and passive voice, but not with object topicalization. However, this prediction is not borne out as subject-to-object raising applies to all three sentence structures, as illustrated in the following examples.

(108) Passives
a. buku-tu$_{i}$ dikiro siti t_{i} la
book-DEM.DIST PASS-think Siti PFCT
dibaco edi (TR, E)
PASS-read Edi
'That book was thought by Siti had been read by Edi.'

b. bola-tu$_i$ disaŋko bujaŋ t_i
ball-DEM.DIST PASS-think Bujang
aku blʊm buaŋ (TR, E)
1SG not.yet throw.away
'The ball was thought by Bujang had not been thrown away by me.'

(109) Object Voice

a. krbʊʔ-tu dikiro bujaŋ la siti am^{b}ɪʔ(TR, E)
container-DEM.DIST PASS-think Bujang PFCT Siti take
'That container was thought by Bujang had been taken by Siti.'

b. pɪrɪŋ-tu disaŋko bujaŋ blʊm maʔ basʊ(TR, E)
plate-DEM.DIST PASS-think Bujang not.yet mother wash
'The plates were thought by Bujang hadn't been washed by mother.'

(110) Object Fronting

a. pɪrɪŋ-tu disaŋko bujaŋ maʔ blʊm basʊ(TR, E)
plate-DEM.DIST PASS-think Bujang mother not.yet wash
'The plates were thought by Bujang mother hadn't washed.'

b. krbʊʔ-tu dikiro bujaŋ siti la am^{b}ɪʔ (TR, E)
container-DEM.DIST PASS-think Bujang Siti PFCT take
'The container was thought by Bujang Siti has taken.'

The sentences in (108), (109), and (110) are all grammatical. This suggests that the object voice and the active sentence with an object fronting pattern are like the canonical passives.

One possible account to explain why the sentences in (110) are grammatical is the fact that the sentences in (110) can be analyzed as examples of long distance topicalization. The underlying sentences before the topicalization for the sentences in (110) are shown in (111). The structures in (112) show the intermediate position of the topicalized theme before being further topicalized to the clause-initial position.

(111) a. disaŋko bujaŋ maʔ blʊm basʊ pɪrɪŋ-tu (TR, E)
PASS-think Bujang mother not.yet wash plate-DEM.DIST
'It is thought by Bujang that mother has not washed the plates.'

b. dikiro bujaŋ siti la amᵇɪʔ krbʊʔ-tu (TR, E)
PASS-think Bujang Siti PFCT take container-DEM.DIST
'It is thought by Bujang that Siti has taken the container.'

(112) a. disaŋko bujaŋ pɪrɪŋ-tu$_i$ maʔ
PASS-think Bujang plate-DEM.DIST mother
blʊm basʊ t_i (TR, E)
not.yet wash
'It is thought by Bujang that mother has not washed the plates.'

b. dikiro bujaŋ krbʊʔ-tu$_i$ siti
PASS-think Bujang container-DEM.DIST Siti
la amᵇɪʔ t_i (TR, E)
PFCT take
'It is thought by Bujang that Siti has taken the container.'

In short, the subject-to-object raising test cannot be used to distinguish passive and object fronting in Jambi Malay because sentences which appear to have subject-to-object raising may be analyzed using two structures.

1.1.1.4.5. Equi Deletion (Control) Test

The next test that Chung (1976b) employs is the control test which she refers to as the equi deletion test. This test is a subject-creating test and applies to adverbial complements of purpose. In Jambi Malay, adverbial complements of purpose are introduced by the complementizer *biaʔ* 'so that', as exemplified below.

(113) a. aku mᵇawaʔ bɪbɪt baru-tu biaʔ maʔ
1SG ACT-bring seed new-DEM.DIST so.that mother
biso nanam-e (TR, E)
can ACT-plant-3
'I brought the new seeds so that mother can plant them.'

b. edi mᵇli baju-tu biaʔ dio biso make-e (TR, E)
Edi ACT-buy garment-DEM.DIST so.that 3 can ACT-use-3
'Edi bought the shirt so that he could wear it.'

According to Chung, when the subject of the complement clause corefers with an NP in the higher clause, it can optionally be deleted. She further points out that NPs which are deleted by equi must be syntactic subjects at the time when the rule applies. Since equi deletion can only apply to syntactic subjects, it is predicted that equi deletion cannot apply to object topicalization. A description of control structure is provided in section 1.1.4.1.4.1.

Assuming that equi deletion does not apply to object topicalization in Jambi Malay, it is predicted that deletion of the theme/patient in a complement clause that has the structure of object fronting will generate ungrammatical sentences. Furthermore, deletion of the theme/patient in a complement clause that has the structure of passive or object voice should be allowed. However, deletion of the patient/theme in a complement clause is possible in passive, object voice, and object fronting sentences.

(114) Passive

a. Before Equi Deletion

aku	mᵇawaʔ	bɪbɪt	baru-tu	biaʔ
1SG ACT-bring		seed	new-DEM.DIST	so.that
bɪbɪt	baru-tu		biso ditanam	maʔ (TR, E)
seed	new-DEM.DIST		can PASS-plant	mother

'I brought the new seeds so that the new seeds could be planted by mother.'

b. After Equi Deletion

aku	mᵇawaʔ	bɪbɪt	baru-tu	biaʔ
1SG ACT-bring		seed	new-DEM.DIST	so.that
PRO	biso ditanam		maʔ	(TR, E)
	can PASS-plant		mother	

'I brought the new seeds so that [they] could be planted by mother.'

(115) Object Voice

a. Before Equi Deletion

aku m^{b}awaʔ bɪbɪt baru-tu biaʔ
1SG ACT-bring seed new-DEM.DIST so.that
bɪbɪt baru-tu biso maʔ tanam (TR, E)
seed new-DEM.DIST can mother plant
'I brought the new seeds so that the new seeds could be planted by mother.'

b. After Equi Deletion

aku m^{b}awaʔ bɪbɪt baru-tu biaʔ
1SG ACT-bring seed new-DEM.DIST so.that
PRO biso maʔ tanam (TR, E)
can mother plant
'I brought the new seeds so that [they] could be planted by mother.'

(116) Object Fronting

a. Before Equi Deletion

aku m^{b}awaʔ bɪbɪt baru-tu biaʔ
1SG ACT-bring seed new-DEM.DIST so.that
bɪbɪt baru-tu maʔ biso tanam (TR, E)
seed new-DEM.DIST mother can plant
'I brought the new seeds so that the new seeds could be planted by mother.'

b. After Equi Deletion

aku m^{b}awaʔ bɪbɪt baru-tu biaʔ
1SG ACT-bring seed new-DEM.DIST so.that
PRO maʔ biso tanam (TR, E)
mother can plant
'I brought the new seeds so that [they] could be planted by mother.'

The data in (114) through (116) show that no distinction can be made between the passive voice and the object voice on the one hand and object fronting on the other hand because all sentences with equi NP deletion are grammatical.

Nevertheless, I should point out that it is unclear what the structure of (116)b is. Since Jambi Malay is a pro-drop language, it could be the case that the

structure for (116)b is as shown in (117) and thus, the fact that (116)b is grammatical does not provide any evidence about the position of the theme/patient.

(117) aku mᵇawaʔ bɪbɪt baru-tu biaʔ
1SG ACT-bring seed new-DEM.DIST so.that
maʔ biso tanam Ø (TR, E)
mother can plant
'I brought the new seeds so that [they] could be planted by mother.'

To conclude, the equi deletion (control) test fails to distinguish passivization (canonical passives) from topicalization (object voice).

1.1.1.4.6. Derived Subject Raising

Finally, Chung (1976b) uses the derived subject raising test. This test makes use of raising verbs/adjectives. According to Chung, under certain condition, an NP from the embedded clause of a raising adjective/verb can be raised to become the subject of the adjective/verb. In Indonesian, the derived subject in the canonical passive and the derived subject in the object preposing (object voice) can be raised and become the subject of the adjective. However, the underlying subject cannot be raised.

In Jambi Malay, the derived subject of the passive and object voice can also be raised and become the subject of a raising verb, as illustrated below (see also section 1.1.4.1.4.2).

(118) Passive

a. Before Derived Subject Raising
nampaʔe paraʔ-tu daʔ dipotoŋ dioʔ (TR, E)
seem rubber-DEM.DIST NEG PASS-cut 3
'It seems the rubber wasn't cut by him.'

b. After Derived Subject Raising
paraʔ-tu nampaʔe daʔ dipotoŋ dioʔ (TR, E)
rubber-DEM.DIST seem NEG PASS-cut 3
'The rubber seems wasn't cut by him.'

(119) Object Voice

a. Before Derived Subject Raising

nampaʔe	buku-tu	blʊm	dioʔ	baco	(TR, E)
seem	book-DEM.DIST	not.yet	3	read	

'It seems the book hasn't been read by him.'

b. After Derived Subject Raising

buku-tu	nampaʔe	blʊm	dioʔ	baco	(TR, E)
book-DEM.DIST	seem	not.yet	3	read	

'The book seems hasn't been read by him.'

In addition, the theme of an object-fronting embedded clause can also be raised and become the subject of the raising verb, as shown in the following examples.

(120) Object Fronting

a. Before Derived Subject Raising

nampaʔe	buku-tu	dioʔ	blʊm	baco	(TR, E)
seem	book-DEM.DIST	3	not.yet	read	

'It seems the book he hasn't read.'

b. After Derived Subject Raising

buku-tu	nampaʔe	dioʔ	blʊm	baco	(TR, E)
book-DEM.DIST	seem	3	not.yet	read	

'The book seems he hasn't read.'

If the derived subject raising rule only applies to derived subjects, it would be expected that sentence (120)b is ungrammatical. However, the sentence is grammatical. Thus, it seems that no distinction can be made between the object voice and the passive voice on the one hand and the object fronting on the other hand.

To conclude, at the beginning of this section, I have shown that the reflexive test, which I previously used as a test to argue that the theme/patient in the canonical passive is in subject position (spec of TP), cannot be used to distinguish object voice and object fronting. However, I mentioned that this is probably due to the fact that this dialect does not have true reflexive forms. Therefore, we needed additional tests to examine the issue.

Following Chung (1976b), I show that some tests can still distinguish object voice and object fronting. They are the government test, the complement of factive verbs test, and the constraints on topicalization test. These three tests indicate that object fronting and object voice are different in that object fronting patterns like topicalization, and object voice patterns like *di-* passivization. However, subject-to-object raising, equi deletion (control), and derived subject raising tests show that object fronting and object voice seem indistinguishable. I have shown that the subject-to-object raising test fails to distinguish object voice from object fronting because the structure can be analyzed using different structures (section 1.1.1.4.4). With respect to equi deletion (control), I have shown that this test fails to distinguish the two structures because it is unclear what the structure of the sentence is when an NP is missing from the complement clause (section 1.1.1.4.5). Finally, as for the derived subject raising, I do not have an explanation for why it cannot be used to separate object voice from object fronting.

1.1.2. Structural Properties of the Clause[38]

A basic clause contains a subject and a predicate. In addition to a subject and a predicate, adjuncts can optionally be present in a clause. Based on whether or not the predicate of the clause contains a verbal predicate, clauses in Jambi Malay are divided into two types: non-verbal clauses and verbal clauses.

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[38] In the Lingua Questionnaire, the internal structure of the clause is located under structural properties (section 1.2). However, I decided to shift this topic to an earlier section of this chapter because the structural properties of the clause is related to the voice system which is discussed earlier in section 1.1.1 and understanding the structural properties of the clause is crucial for understanding other syntactic patterns of the language.

This section is divided into two parts. Section 1.1.2.1 presents a description of non-verbal clauses. Section 1.1.2.2 provides a description of verbal clauses. Each of these sections consists of subsections.

1.1.2.1. Non-verbal Clauses

A non-verbal clause is a clause in which the predicate is not a verb phrase. The predicate of a non-verbal clause can either be a noun phrase, an adjectival phrase, or a prepositional phrase.[39] These predicates form so-called nominal clauses (section 1.1.2.1.1.1), adjectival clauses (section 1.1.2.1.1.2), and prepositional clauses (section 1.1.2.1.1.3), respectively.

Unlike English, a copula is optionally present in Jambi Malay non-verbal clauses. In order words, non-verbal clauses can have a copula, but the presence of a copula is not obligatory, as described later in section 1.1.2.1.2. In section 1.1.2.1.3, the discussion of the structure of non-verbal clauses is presented.

Before discussing each non-verbal clause type further, it is essential to show what the subject of a non-verbal clause is. In traditional approaches to linguistics, the subject of a clause is generally defined as the entity/item that is being discussed. Sneddon (1996:232) defines it as the 'theme' of the utterance. The subject of a non-verbal clause may be a noun phrase, a personal pronoun, a demonstrative pronoun, or a clause. Non-verbal predicates with different subjects are exemplified in the following examples.

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[39] The description of the noun phrase, the adjective phrase, and the prepositional phrase is provided in section 1.2.2.4, section 1.2.2.1, and section 1.2.2.3, respectively. Different word classes are presented in section 1.16.

(121) Adjectival Clause with NP as Subject
ha, [baraŋ] mahal
EXCL thing expensive
'Well, goods are expensive.'

(122) Adjectival Clause with Pronoun as Subject
[kami] sgan nian (TR, E)
1 reluctant very
'We are very reluctant.'

(123) Nominal Clause with Demonstrative as Subject
ha, [iko] mato-ɲo
EXCL DEM.PROX eye-3
'Well, this is the hook.'
[Lit. 'Well, this is the eye.']

(124) Adjectival Clause with Clause as Subject
[mncari-e] srɪt
ACT-seek-3 difficult
'To find them is difficult.'

I assume that the subject in non-verbal clauses surfaces in the specifier of TP.

1.1.2.1.1. Different Types of Non-verbal Clauses

1.1.2.1.1.1. Nominal Clauses

Nominal clauses are non-verbal clauses in which the predicate is filled by a noun phrase.[40] The noun phrase can be an ordinary noun phrase (including a pronoun and a proper name), a numeral followed by a classifier, a numeral without a classifer, and a numeral followed by a measurement, as exemplified in (125), (126), (127), and (128), respectively. In addition, indefinite numbers, such as *baɲa?* 'a lot' and *dɪkɪt* 'a little' (cf. section 2.1.6.4 and section 2.1.2.7) and indefinite numbers

[40] The description of the noun phrases is provided in section 1.2.2.4 and the operational definition of nouns is presented in section 1.16.1.

formed via reduplication with the *ba-* prefix (cf. section 2.2.1.2.1.1.1.1) are also noun phrases and thus can be the predicate of a nominal clause, as shown in (129).

(125) a. [$_{TP}$ [$_{NP1}$ namo-e] [$_{NP2}$ Wulan]] (TR, E)
name-3 Wulan
'Her name is Wulan.'

b. [$_{TP}$ [$_{NP1}$ bini dioʔ-ko]
wife 3-DEM.PROX
[$_{NP2}$ oraŋ kampʊŋ-ko go-la]]
person village-DEM.PROX also-EMPH
'His wife is also from this village.'
[Lit. 'His wife is also this village person.']

c. [$_{TP}$ [$_{NP1}$ maʔ-e] [$_{NP2}$ jan^{d}o]]
mother-3 widow
'Her mother is a widow.'

d. [$_{TP}$ [$_{NP1}$ "kami] [$_{NP2}$ oraŋ taɲ^{j}ʊŋ.pasɪr]]," kate de-e
1 person Tanjung.Pasir word 3-3
'"I'm from Tanjung Pasir," he said.'
[Lit. '"I'm a Tanjung Pasir person" were his words.']

e. [$_{TP}$ [$_{NP1}$ dioʔ-tu] [$_{NP2}$ guru esdɪ]] (TR, E)
2-DEM.DIST teacher elementary.school
'He is an elementary school teacher.'

(126) a. [$_{TP}$ [$_{NP2}$ mpat ribu ekoʔ] [$_{NP1}$ bɪbɪt-e]]
four thousand CLF seed-3
'The chicks are four thousand.'
[Lit. 'The seeds are four thousand.']

b. [$_{TP}$ [$_{NP1}$ bɪbɪt-ɲo] [$_{NP2}$ duo blas kaleŋ]]
seed-3 two teen can
'The seeds are twelve cans.'

c. [$_{TP}$ [$_{NP2}$ sabʊtɪr-tu-la] [$_{NP1}$ batino-e]]
one-grain-DEM.DIST-EMPH female-3
'Only one is female.'

(127) a. [$_{TP}$ [$_{NP2}$ duo] [$_{NP1}$ anaʔ-e]]
two child-3
'His children are two.'

b. iyo, [$_{TP}$ [$_{NP2}$ mpat] [$_{NP1}$ bini-e]]
yes four wife-3
'Right, his wives are four.'

(128) a. paɲʲaŋ... kalu daʔ sala [$_{TP}$[$_{NP1}$ paɲʲaŋ-e]
long if NEG wrong long-3
[$_{NP2}$ mpat meter]]
four meter
'It was long; if I'm not mistaken the length was four meters.'

b. ha, [$_{TP}$ [$_{NP1}$ jaraʔ tanᵈʊr-tu] [$_{NP2}$ satu sto]]
EXCL distance plant.rice-DEM.DIST one cubit
'The planting distance is about half a meter.'

(129) a. "[$_{TP}$ [$_{NP2}$ baŋaʔ] [$_{NP1}$ ayam kau]], lʊrʔ" kate-e
a.lot chicken 2SG TRU-sibling word-3
'"Do you have many chickens?" he asked.'
[Lit.'"Are your chickens many?" were his words.']

b. [$_{TP}$ [$_{NP1}$ ɪtɪʔ oraŋ-tu] [$_{NP2}$ baratʊs-ratʊs]] (TR, E)
duck person-DEM.DIST INTR-RED-hundred
'That man's ducks are hundreds.'

In (125) through (129), NP_1 denotes the subject of the clause and NP_2 denotes the predicate of the clause. It should be noted that although I label these clauses as nominal clauses, the entire clause is not a nominal; instead they are simply clauses which contain a nominal predicate.

The word order of nominal clauses is [NP_1] [NP_2]. However, the two NPs may be reversed and the ordering of [NP_2] [NP_1] is also allowed.[41] Thus, the sentences in (125), for examples, may also have [NP_2] [NP_1] word order, as shown in (130). Moreover, examples in (126)a, (126)c, (127)a, (127)b, and (129)a also have [NP_2] [NP_1] word order.The structure of non-verbal clauses is provided later in section 1.1.2.1.3.

[41] When NP_2 precedes NP_1, there is often a short pause after NP_2

(130) a. [$_{TP}$ [$_{NP2}$ wulan] [$_{NP1}$ namo-e]]
Wulan name-3
'Wulan is her name.'

b. [$_{TP}$ [$_{NP2}$ oraŋ kampʊŋ-ko go-la]
person village-DEM.PROX also-EMPH
[$_{NP1}$ bini dioʔ-ko]] (TR, E)
wife 3-DEM.PROX
'His wife is also from this village.'
[Lit. 'His wife is also this village person.']

c. [$_{TP}$ [$_{NP2}$ jan^{d}o] [$_{NP1}$ maʔ-e]] (TR, E)
widow mother-3
'Her mother is a widow.'

d. [$_{TP}$ [$_{NP2}$ oraŋ taɲ^{j}ʊŋ.pasɪr] [$_{NP1}$ kami]] (TR, E)
person Tanjung.Pasir 1
'I'm from Tanjung Pasir.'
[Lit. 'I'm a Tanjung Pasir person.']

e. [$_{TP}$ [$_{NP2}$ guru esdɪ] [$_{NP1}$ dioʔ-tu]] (TR, E)
teacher elementary.school 3-DEM.DIST
'He is an elementary school teacher.'

That both [NP_1 NP_2] and [NP_2 NP_1] orders are possible raises the question of how to determine whether an NP is the subject or the predicate in a nominal clause. One simple diagnostic test is the negation test. Nominal clauses can be negated using *kɲoʔ/ɲoʔ* 'not' and *bukan* 'not'.[42] As described in section 1.4.1, a sentential negation appears before the predicate, as exemplified below.

[42] *Kɲoʔ* or *ɲoʔ* is only used in TR and MD. Although *bukan* 'not' is found in naturalistic data, speakers from Tanjung Raden and Mudung Darat considered it a borrowing from Indonesian. In the City dialect, however, *bukan* is the only item that is used to negate nominals (see also section 1.4.1.2).

(131) *kɲoʔ/ɲoʔ* 'NEG'

[TP [NP1 ruma bibi-ko] [NEGP kɲoʔ [NP2 ruma-ko]]], naʔ
house aunt-DEM.PROX not house-DEM.PROX TRU-child
'My house wasn't this one, Honey.'
[Lit. 'Auntie's house was not this one, Honey.']43

(132) *bukan* 'not'

dioʔ, [TP [NP1 dioʔ-tu] [NEGP bukan [NP2 iŋonan]]]
3 3-DEM.DIST not breed-NMLZ
'They were not livestock.'
[Lit. 'They are not for breeding']

In (131) and (132), the nominal negation *kɲoʔ* and *bukan* appear before the predicate *ruma-ko* 'this house' and *iŋonan* 'livestock', respectively.

When a nominal clause has [NP_2 NP_1] word order, the negation also appears before NP_2, the predicate. Thus, if sentences (125)b and (125)c, for example, are negated, the negation also appears before NP_2, regardless of the word order of the sentences, as shown in (133)a, (134)a, (133)b and (134)b. In sentences (133)c and (134)c, the negation appears before NP_1 and thus, they are ungrammatical.

(133) a. bini dioʔ-ko kɲoʔ oraŋ kampʊŋ-ko (TR, E)
wife 3-DEM.DIST not person village-DEM.PROX
'His wife is not someone from this village.'

b. kɲoʔ oraŋ kampʊŋ-ko bini dioʔ-ko (TR, E)
not person village-DEM.PROX wife 3-DEM.PROX
'His wife is not someone from this village.'

c. *oraŋ kampʊŋ-ko kɲoʔ bini dioʔ-ko (TR, E)
person village-DEM.PROX not wife 3-DEM.PROX
'His wife is not someone from this village.'

(134) a. maʔ-e kɲoʔ jan^{d}o
mother-3 not widow
'Her mother is not a widow.'

43 See section 2.1.2.1.6 in which I explain that proper names can be used as first and second pronouns.

b. kɲoʔ jan^{d}o maʔ-e
not widow mother-3
'Her mother is not a widow.'

c. *jan^{d}o kɲoʔ maʔ-e
widow not mother-3
'Her mother is not a widow.'

Note that sentences (133)c and (134)c are grammatical if the negation negates *bini dioʔ-ko* and *maʔ-e* and the sentences are translated as 'Someone from this village is not his wife' and 'A widow is not his mother', respectively. In such cases, the predicate of sentence (133)c is *bini dioʔ-ko* 'his wife' and in sentence (134)c it is *maʔ-e* 'her mother'.[44]

To conclude, a nominal clause is a non-verbal clause which has a noun phrase as its predicate. The word order of a nominal clause is either [NP_1] [NP_2] or [NP_2] [NP_1], in which NP_1 denotes the subject and NP_2 is the predicate. The nominal negative marker *kɲoʔ/ɲoʔ/bukan* always appears before NP_2 regardless of the word order of the nominal clause. A discussion on the structure of non-verbal clauses is provided in section 1.1.2.1.3.

1.1.2.1.1.2. Adjectival Clauses

An adjectival clause is a non-verbal clause in which the predicate is an adjective phrase, as shown below in (135).[45] It should be noted that by labeling the

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[44] If a slight pause is present between the nominal negator *kɲoʔ* and *bini dioʔ-ko* 'his wife' and *maʔ-e* 'her mother', respectively, the sentences are acceptable. These sentences are used for contrastive reason.

[45] A description of the adjective phrase is provided in section 1.2.2.1. Moreover, the operational definition of an adjective is provided in section 1.16.3. It should be borne in mind that the adjectival clause is different from a relative clause. A detailed discussion of relative clauses is presented in section 1.1.4.2.

clause name as 'adjectival clause', I do not make the claim that the entire clause is an adjective; instead I claim that the entire clause is a TP.

(135) a. [$_{TP}$ [$_{NP}$ badan-e] [$_{AP}$ bsaʔ bnar-la]]
body-3 big right-EMPH
'Her body is really big.'

b. [$_{TP}$ [$_{NP}$ awaʔ] [$_{AP}$ lolo ŋla]]
1/2/3 stupid indeed
'I really did badly.'
[Lit. 'I was really dumb.']

c. [$_{TP}$ [$_{NP}$ tali-ŋo] [$_{AP}$ alʊs]]
rope-3 small
'The string is thin.'

The word order of the elements that form the adjectival clause can either be [NP] [AP] or [AP] [NP]. Thus, the predicate of the sentences in (135) can be fronted to sentence-initial position, as the sentences in (136) show.

(136) a. [$_{TP}$ [$_{AP}$ bsaʔ bnar-la] [$_{NP}$ badan-e]] (TR, E)
big right-EMPH body-3
'Her body is very big.'

b. [$_{TP}$ [$_{AP}$ lolo ŋla] [$_{NP}$ awaʔ]] (TR, E)
stupid indeed 1/2/3
'I really did badly.'
[Lit. 'I was really dumb.']

c. [$_{TP}$ [$_{AP}$ alʊs] [$_{NP}$ tali-ŋo]] (TR, E)
small rope-3
'The string is thin.'

As in nominal clauses, the negative marker in adjectival clauses must appear before the predicate in both [NP] [AP] and [AP] [NP] word orders, as exemplified below. The negative marker for negating an adjective is *daʔ*.[46]

[46] A detailed description of negation is provided in section 1.4.

(137) a. [$_{TP}$ [$_{NP}$ kawa-tu] [$_{NEGP}$ daʔ [$_{AP}$ eloʔ]]] (TR, E)
big.frying.pan-DEM.DIST NEG beautiful
'The frying pan is not good.'

b. [$_{TP}$ [$_{NEGP}$ daʔ [$_{AP}$ eloʔ]] [$_{NP}$ kawa-tu]]
NEG beautiful big.frying.pan-DEM.DIST
'The frying pan is not good.'

In sum, an adjectival clause is a type of non-verbal sentence in which the predicate is an adjective phrase. The word order of an adjectival clause is [NP] [AP] or [AP] [NP]. If a negative marker is present, the negative marker always appears before the predicate (AP).

1.1.2.1.1.3. Prepositional Clauses

A prepositional clause is a non-verbal clause type in which the predicate is a prepositional phrase.[47] The predicate of a prepositional clause, like that of a nominal clause or an adjectival clause, may follow or precede the subject. Thus, the possible word orders are [NP] [PP] and [PP] [NP], as the examples in (138) show.

(138) a. [$_{TP}$ [$_{NP}$ damar-tu] [$_{PP}$ ʊntʊʔ dmpʊl]]
resin-DEM.DIST for caulking
'The resin was for caulking.'

b. [$_{TP}$ [$_{NP}$ bɪbɪt di] memaŋ [$_{PP}$ dari blan^{d}o]]
seed earlier indeed from Netherlands
'The seeds were indeed from the Netherlands.'

c. [$_{TP}$ [$_{PP}$ di kasaŋ] [$_{NP}$ tana-ɲo]]
LOC Kasang soil-3
'The land is in Kasang.'

As in nominal clauses and adjectival clauses, a negative marker in a prepositional phrase, if present, must appear before the predicate, as shown below.[48]

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[47] A description of prepositional phrases is provided in section 1.2.2.3.

[48] A description of negation is provided in section 1.4.

(139) daʔ-tu [$_{TP}$ [$_{NP}$ dioʔ-tu [$_{NEGP}$ daʔ bole [$_{PP}$ ka sano]]]
NEG-DEM.DIST 3-DEM.DIST NEG may to there
'Otherwise, he may not go there.'

To sum up, prepositional clauses are clauses in which the predicate is a prepositional phrase. The order of a prepositional clause is either [NP] [PP] or [PP] [NP]. In addition, if present, a negative marker must precede the predicate.

1.1.2.1.2. The Copula in Non-verbal Clauses

As mentioned in the introduction to section 1.1.2.1, a copula is not obligatory in non-verbal clauses. In fact, non-verbal clauses with a copula are rarely used. I shall show in section 1.1.2.1.3 that the copula in non-verbal clauses is generated under the same projection as the nominal negation and thus, it is not a verb.

Although it is rarely used, a copula can be used to link the subject and the predicate of a non-verbal clause. The copulas in Jambi Malay are *iyola* and *adola*. Examples follow.

(140) *iyola*

a. [$_{TP}$ [$_{NP1}$ bini yaŋ partamo tadi] iyola
wife REL first earlier COP
[$_{NP2}$ waʔ mazna tadi]]
uncle.or.aunt Maznah earlier
'The first wife was aunt Maznah.'

b. prnti naŋkap dioʔ-tu... iyola [$_{NP2}$ jarıŋ]]
for ACT-catch 3-DEM.DIST COP net
[$_{TP}$ [$_{NP1}$ baraŋ prnti naŋkap-ɲo-tu]]
thing for ACT-catch-3-DEM.DIST
'The tool for catching them is a net.'

c. [$_{TP}$ [$_{NP1}$ bibi aku-tu] iyola
aunt 1SG-DEM.DIST COP
[$_{NP2}$ maʔ bapaʔ kau]]
mother father 2SG
'My aunt is your father's mother.'

(141) *adola*

[$_{TP}$ [$_{NP1}$ ika itu] adola [$_{NP2}$ inu kartopati]]
Ika DEM.DIST COP Inu Kartopati
'Ika stands for Inu Kartopati.'
[Lit. 'Ika is Inu Kartopati.']

Although the sentences in (140) and (141) were found in the naturalistic data, I claim that these copulas are borrowed from Indonesian. The evidence for this claim is that very few non-verbal sentences with a copula were found in the naturalistic data. In addition, the presence of a copula in non-verbal clauses is optional. Moreover, most native speakers of all three dialects rejected non-verbal sentences with *iyola/adola*, such as those in (142) and (143) below. Furthermore, speakers who accepted the sentences in (142) and (143) still claimed that sentences without *iyola*/*adola* sounded more natural.[49]

(142) *iyola*

a. #bibi dioʔ iyola padagaŋ sayʊr[50] (TR, E)
aunt 3 COP AGT-trade vegetable
'Her aunt is a vegetable seller.'

b. #siti-tu iyola anaʔ waʔ aku (TR, E)
Siti-DEM.DIST COP child uncle.or.aunt 1SG
'Siti is my aunt's daughter.'

(143) *adola*

a. #bini budi adola adıʔ hamdan (TR, E)
wife Budi COP younger.sibling Hamdan
'Budi's wife is Hamdan's sister.'

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[49] Note that the speakers who accepted the use of copula also claimed that *iyola* is more natural than *adola*. They claimed that the use of *adola* seems to be a non-natural/uncommon way of speaking Jambi Malay.

[50] The # symbol indicates that the sentences are not unanimously judged as grammatical by all consulted speakers. In other words, some speakers rejected those sentences, while some accepted them.

b. #alat naŋkap ikan-tu adola pukat (TR, E)
tool ACT-catch fish-DEM.DIST COP dragnet
'The tool for catching fish is a dragnet.'

Interestingly, the copulas *iyola* and *adola*, unlike English 'be', can only be used in nominal clauses, and not in other types of non-verbal clauses, as the following examples are ungrammatical.

(144) a. *eko adola padeʔ (JC, E)
Eko COP clever
'Eko is clever.'

b. *maʔ iyola di pasar (JC, E)
mother COP LOC market
'Mother is at the market.'

Finally, more interestingly, *iyola* and *adola* cannot co-occur with the nominal negation *kŋoʔ/bukan*, as shown by the ungrammaticality of sentence (145). This is contrary to English 'be' because 'be' and negation can co-occur, as shown in (146). I shall return to this issue in section 1.1.2.1.3.

(145) *dioʔ adola kŋoʔ maʔ aku (TR, E)
3 COP NEG mother 1SG
'She is not my mother.'

(146) Mary is not a doctor.

1.1.2.1.3. The Structure of Non-verbal Clauses

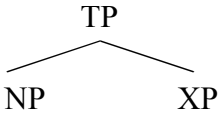
As previously mentioned, I claim that non-verbal clauses in Jambi Malay are clauses (TPs). In this section, I shall discuss two issues. The first issue is concerning the word order of the subject and the predicate in non-verbal clauses and the second issue is related to the structure of non-verbal clauses with a copula.

In section 1.1.2.1.1.1 to section 1.1.2.1.1.3, I have shown that the predicate of non-verbal clauses can appear either after or before the subject. Thus, the word order of a non-verbal clauses is either [NP] [XP] or [XP] [NP]; NP is the subject

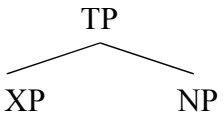
of the clause and XP, depending on the predicate of the clause, is either an NP, an AP, or a PP.

In light of these possible orderings, one could argue that non-verbal clauses have free word order, as illustrated below.

(147) a.



b.

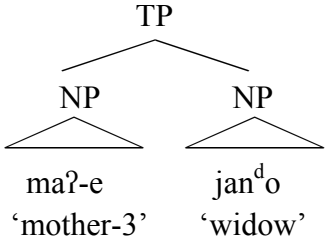


Based on the structures in (147), sentences (125)c and (130)c, repeated in (148)a and (148)b, can be illustrated in (149)a and (149)b, respectively.

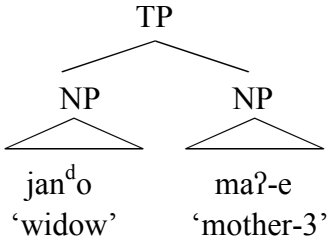
(148) a. [$_{TP}$ [$_{NP1}$ maʔ-e] [$_{NP2}$ jan^{d}o]]
mother-3 widow
'Her mother is a widow.'

b. [$_{TP}$ [$_{NP2}$ jan^{d}o] [$_{NP1}$ maʔ-e]] (TR, E)
widow mother-3
'Her mother is a widow.'

(149) a.



b.



However, the assumption that both structures are possible encounters a problem when we consider negation. It was discussed earlier that negation always appears before the predicate of the non-verbal clause, regardless of the word order of the clause. Let us consider the examples in (134), repeated below in (150).

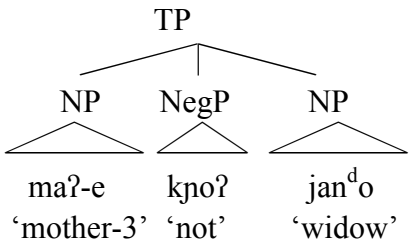
(150) a. maʔ-e kɲoʔ jan^{d}o
mother-3 not widow
'Her mother is not a widow.'

b. kɲoʔ jan^{d}o maʔ-e
not widow mother-3
'Her mother is not a widow.'

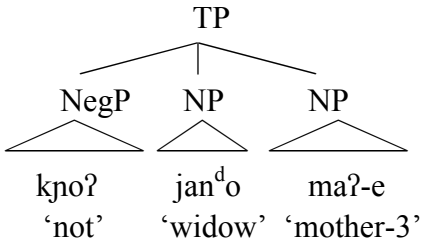
c. *jan^{d}o kɲoʔ maʔ-e
widow not mother-3
'Her mother is not a widow.'

Sentences (150)a and (150)b could simply be represented by adding a node for negation, as shown below.

(151) a.

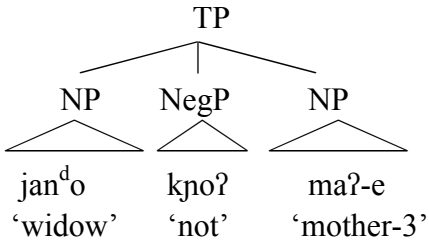


b.



Likewise, sentence (150)c could be illustrated below.

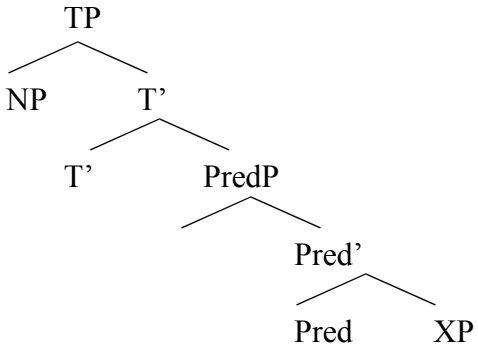
(152)



As shown in (152), sentence (150)c can be represented by reversing the node for NegP and the node for the NP *jan^{d}o* ‘widow’. However, the sentence is ungrammatical. The ungrammaticality of sentence (150)c is not predicted by the flat structure with free word order that has just been proposed. Thus, this analysis appears to be incorrect.

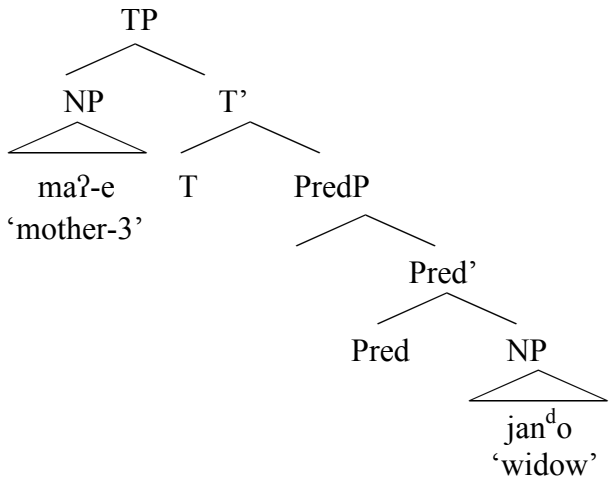
To resolve the problem encountered by the flat structure hypothesis, an alternative hypothesis can be proposed. According to this proposal, the structure of non-verbal clauses is not simply a flat structure. Instead, non-verbal clauses consist of an NP and a predicate phrase (PredP); and XP (either an NP, a AP, or a PP) is generated under PredP, as shown below.

(153)



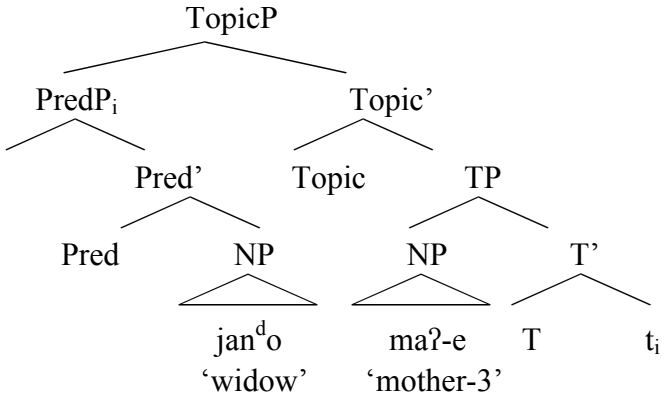
The structure in (153) can be used to derive the sentences in (148)a, as illustrated below in (154).

(154)



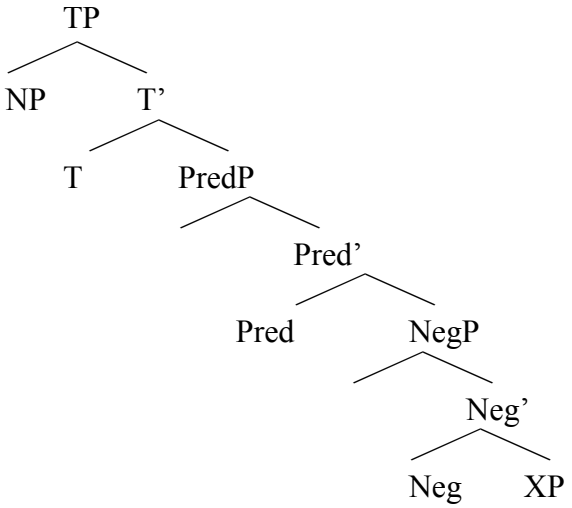
Furthermore, the sentence in (148)b can be derived by fronting the predicate phrase to some specifier position higher than TP, presumably a topic position, as illustrated below.

(155)



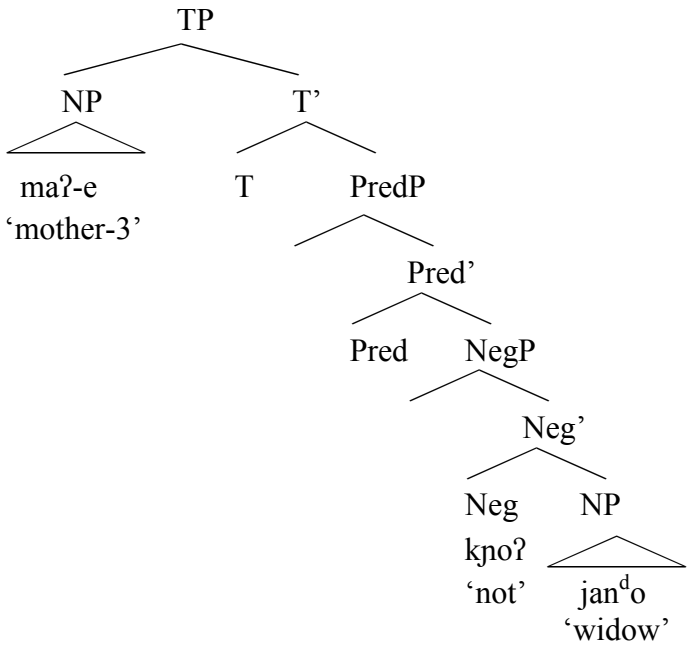
As for non-verbal clauses with a negation, the negation is projected under the predicate phrase, as shown below.

(156)

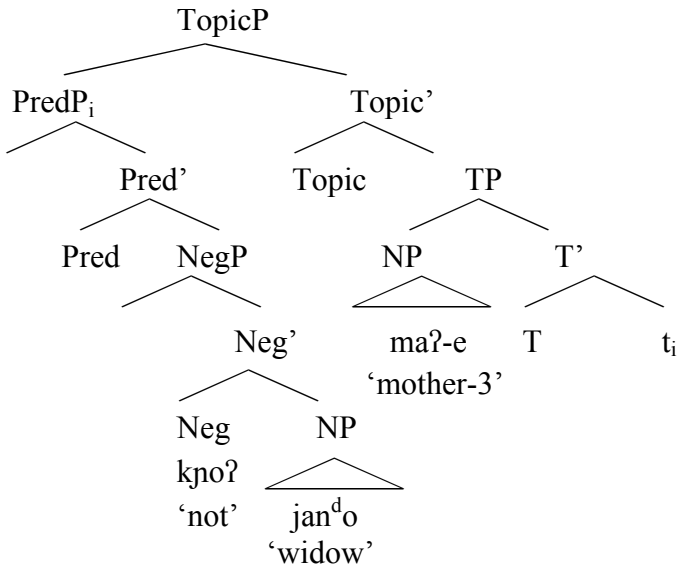


Based on the structure in (156), sentences (150)a and (150)b can be derived, as illustrated in (157)a and (157)b, respectively.

(157) a.



b.



The structure in (157)a is the base-generated structure which derives sentence (150)a. In (157)b, the entire PredP moves to spec of TopicP in order to generate sentence (150)b.

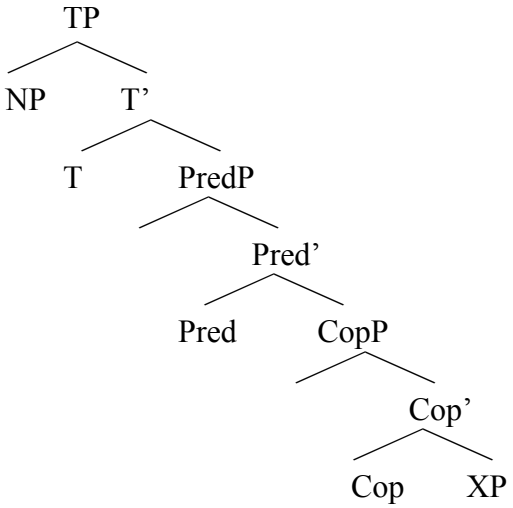
In addition, in order to derive the word order in (150)c, the NP *jan^{d}o* 'widow' needs to move out of the predicate phrase, which has undergone movement to the specifier of TopicP. However, this movement is not allowed because an element inside a moved constituent cannot to move out of it. This is known as the freezing effect (cf. among others: Ross, 1967; Wexler and Culicover, 1980; Müller, 1998). Because of this freezing effect, sentence (150)c is predicted to be ungrammatical and the prediction is borne out.

I shall now discuss the second issue, i.e. the structure of non-verbal clauses with a copula. In section 1.1.2.1.2, I have described the fact that the copula in Jambi Malay, unlike English copulas, can only be used in nominal clauses. I have also shown that the copula in Jambi Malay does not co-occur with negation. The fact that the copula and the negation do not co-occur suggests that the copula and the negation

is projected under the same maximal projection; and therefore, only one of them can be present.

On the basis of the fact that the copula and the negation are projected under the same maximal projection and departing from the structure in (156), I propose the following structure for non-verbal sentences with a copula. The projection for negation is substituted by the projection for copula.

(158)



Let us now examine how the structure in (158) accounts for non-verbal sentences with a copula. Consider the following examples.

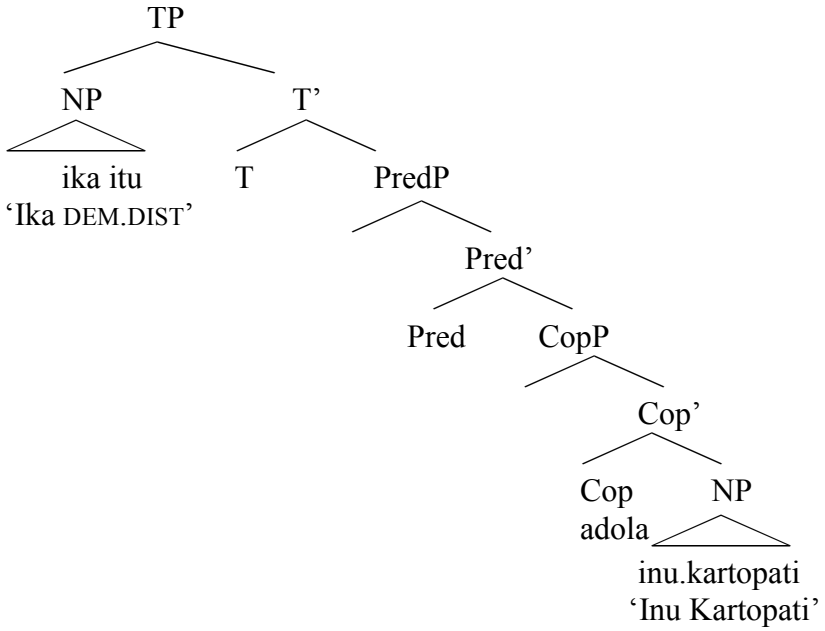
(159) a. ika itu adola inu kartopati
Ika DEM.DIST COP Inu Kartopati
'Ika stands for Inu Kartopati.'
[Lit. 'Ika is Inu Kartopati.']

b. adola inu kartopati ika itu (TR, E)
COP Inu Kartopati Ika DEM.DIST
'Ika stands for Inu Kartopati.'
[Lit. 'Ika is Inu Kartopati.']

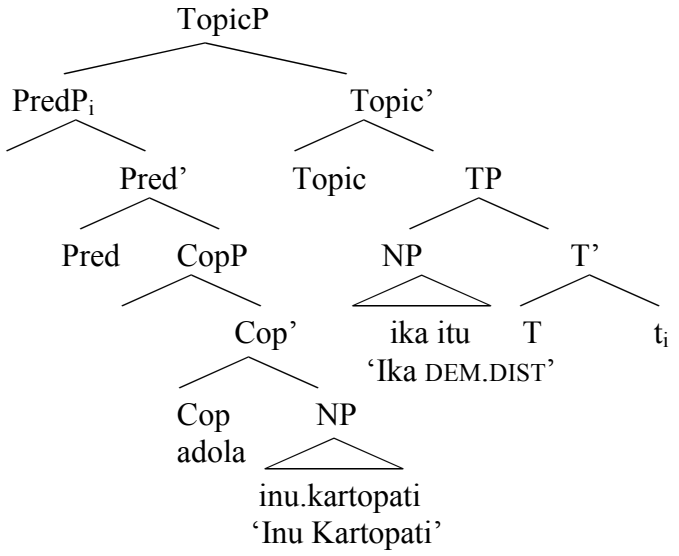
Sentences (159)a and (159)b can be accounted for by using the structure in (158). Sentence (159)a has the base-generated structure, whereas sentence (159)b is derived

by fronting the predicate phrase to a topic position, as shown in (160)a and (160)b, respectively.

(160) a.



b.



In short, similar to non-verbal clauses with or without negation, the predicate of non-verbal clauses with a copula is projected under the predicate phrase.

To sum up, section 1.1.2.1 describes different types of non-verbal clauses, the copula in non-verbal clauses, and the structure of non-verbal clauses. Based on the predicate type, there are three types of non-verbal clauses: nominal clauses, adjectival clauses, and prepositional clauses. Jambi Malay exhibits two loan copulas from Standard Indonesian: *iyola* and *adola.* Unlike the English copula 'be', which can be used in any kind of non-verbal clause, *iyola* and *adola* can only be used in nominal clauses. I do not have any syntactic explanation for this. This is probably language specific. In addition, unlike English 'be', a copula in Jambi Malay cannot co-occur with negation. This suggests that the copula in Jambi Malay is projected under the same maximal projection as the negation and that the copula is not a verb.

The base-generated structure for non-verbal clauses proposed in this section is [NP] [PredP ([NegP]/[CopP]) [XP]]. X in XP represents the phrase type of the predicate. Furthermore, PredP can precede the subject NP. When PredP precedes the subject, PredP has moved to spec of TopicP and this process is known as predicate fronting (see also section 1.1.2.2.2.2).

1.1.2.2. Verbal Clauses

Verbal clauses are clauses in which the predicate is a verb phrase. Based on the number of arguments that the verb takes, verbal clauses can be divided into four types: transitive clauses, intransitive clauses, pseudo-intransitive clauses, and ditransitive clauses, which are discussed in section 1.1.2.2.1.1, section 1.1.2.2.1.2, section 1.1.2.2.1.3, and section 1.1.2.2.1.4, respectively. In section 1.1.2.2.2, I discuss the structure of Jambi Malay clauses.

1.1.2.2.1. Different Types of Verbal Clauses

In section 1.1.2.2.1.1 through section 1.1.2.2.1.4, I simply describe the facts and do not include any discussion of the structures. The structure of Jambi Malay clauses is provided in section 1.1.2.2.2.

1.1.2.2.1.1. Transitive Clauses

Transitive clauses are clauses whose verbs require two arguments syntactically and semantically, namely the subject (external argument) and the direct object (internal argument). The canonical word order of the active transitive clause is SVO, as exemplified in the following examples.[51]

(161) a. [$_{TP}$[$_{Subj}$ sigit] [$_{VP}$ ŋam^{b}ɪʔ [$_{Obj}$ ruko]]]
Sigit ACT-take rowhouse
kan di tamsi]
Q LOC Muara.Tembesi
'Sigit bought a rowhouse in Muara Tembesi, you know.'
[Lit. 'Sigit took a rowhouse in Muara Tembesi, you know.']

b. [$_{TP}$[$_{Subj}$ aku][$_{VP}$ m^{b}awaʔ [$_{Obj}$ nanas sapʊlʊ ekoʔ]]]
1SG ACT-bring pineapple one-ten CLF
'I brought ten pineapples.'

c. [$_{TP}$ [$_{Subj}$ awaʔ] [$_{VP}$ mgaŋ [$_{Obj}$ tip]] di pon^{d}oʔ]
1/2/3 ACT-hold tape LOC hut
'We use a tape in the hut.'
[Lit. 'We hold a tape in the hut.']

d. [$_{TP}$[$_{Subj}$ aku][$_{VP}$ masaŋ [$_{Obj}$ tm^{b}ilar]]]
1SG ACT-set k.o.fish.trap
'I set a fish trap.'

In addition to SVO word order, Jambi Malay also exhibits transitive clauses with other word orders: VOS, OSV, and VSO.

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[51] The word order in the Mudung Darat dialect is relatively free as compared to the Tanjung Raden and City dialects (cf. section 1.1.1.1.1 and section 1.1.1.1.3.3).

In VOS word order, the subject appears to follow the verb and the direct object, as exemplified in (162).[52] I shall later show in section 1.1.2.2.2.2 that VOS clauses are analyzed as VP raising/ VP fronting.

(162) a. [$_{TP}$[$_{VP}$ minum [$_{Obj}$ te]]$_i$ [$_{Subj}$ kito] t_i malam-ko][53]
drink tea 1 night-DEM.PROX
'We drink tea tonight.'

b. [$_{TP}$[$_{VP}$ dapat [$_{Obj}$ duwɪt]]$_i$ [$_{Subj}$ dioʔ-e] t_i]
get money 3-3
'He got money.'

c. [$_{TP}$[$_{VP}$ ŋucap [$_{Obj}$ trimo kasɪ baŋaʔ]]$_i$ [$_{Subj}$ dioʔ-e] t_i]
ACT-express accept love a.lot 3-3
'He thanked [me] a lot.'

d. [$_{TP}$[$_{VP}$ masaŋ [$_{Obj}$ tm^{b}ilar]] t_i [$_{Subj}$ aku]] (TR, E)
ACT-set k.o.fish.trap 1SG
'I set a fish trap.'

In OSV word order, the direct object is in sentence-initial position and it is followed by the subject and the verb, as exemplified below.

(163) a. naŋ pen^{d}eʔ n^{d}aʔ kami sam^{b}ʊŋ
REL short want 1 connect
'The ones that are broken will be repaired by us.'
[Lit. 'The ones that are short will be connected by us.']

b. bulʊ-tu maʔ aku lagi krat (TR, E)
bamboo-DEM.DIST mother PROG 1SG cut
'My mother has cut the bamboo.'

c. krbʊʔ, paraŋ kito siapi
container machete 1 prepare
'A container, a short machete we prepare.'

---

[52] There is a slight pause before the subject in VOS word order.

[53] Note that I only provide rough structures in the examples. See section 1.1.2.2.2.2 for the structure of VOS word order.

d. ha, badan-e be kito amᵇɪʔ
EXCL body-3 just 1 take
'Well, we just take its body.'

Sentences like the one in (163)a have the structure of object voice (see section 1.1.1.1.3), whereas sentences like the one in (163)b is an active sentence with object extraction (see section 1.1.1.2). Nevertheless, the structure of sentences (163)c and (163)d is unclear as they can be analyzed to have two alternative structures, i.e. object voice and object fronting. The structural ambiguity is due to the fact that no auxiliary or negation is present (cf. sections 1.1.1.1.3, 1.1.1.2, and 1.1.2.2.2.3).

In VSO word order, the verb is in sentence-initial position and the verb is followed by the subject and the direct object, as exemplified below. I shall return to this word order later in section 1.1.2.2.2.4.

(164) a. iyo, ɪkʊt aku pestipal
yes follow 1SG festival
'Then, I joined in the festival.'

b. knal kau teap, daʔ?
know 2SG Teap NEG
'Do you know Teap?'

Similarly to many other Malay varieties, Jambi Malay is a pro-drop language in that in clear contexts, arguments may be omitted. That is, an argument can be left out if it is understood from the context, as shown in the following examples. Note that I mark the omitted element with Ø; however, I do not make a claim that that position is the only possible position of the omitted element as Jambi Malay has several possible word orders. I simply locate Ø based on the canonical word order, SVO (cf. section 1.1.2.2.1.1).

(165) Omission of Subject

a. Ø ŋam^{b}ɪʔ-la akar ka darat-tu
ACT-take-EMPH root to land-DEM.DIST
'[We] took the root at the land area.'

b. saari-tu Ø dapat sapʊlʊ ribu
one-day-DEM.DIST get one-ten thousand
'[She] got ten thousand a day.'

c. Ø m^{b}li anaʔ-e
ACT-buy child-3
'[I] bought young trees.'
[Lit. '[I] bought the kids.']

(166) Omission of Direct Object

a. aku n^{d}aʔ nanam Ø bla darat-ko
1SG want ACT-plant side land-DEM.PROX
'I'll plant [them] at the land side.'

b. aku neŋoʔ Ø di tipi
1SG ACT-look LOC television
'I watch [it] on TV.'

c. dioʔ masaŋ Ø di mano?
3 ACT-set LOC which
'Where did he set [it]?'

The claim that the element marked by Ø in (165) and (166) is omitted is supported by the fact that an overt NP, including a pronoun and an enclitic pronoun can be inserted into the slot marked by Ø, as illustrated below in square brackets in (167) and (168).[54]

(167) a. [Upɪk] ŋam^{b}ɪʔ-la akar ka darat-tu (TR, E)
Upik ACT-take-EMPH root to land-DEM.DIST
'Upik took the root at the land area.'

[54] See section 2.1.2.1.9 for discussion of clitic pronouns.

b. sahari-tu [dioʔ] dapat sapʊlʊ ribu (TR, E)
one-day-DEM.DIST 3 get one-ten thousand
'She got ten thousand a day.'

c. [aku] m^{b}li anaʔ-e (TR, E)
1SG ACT-buy child-3
'I bought young trees.'
[Lit. 'I bought the kids.']

(168) a. aku n^{d}aʔ nanam [bataŋ duren] bla darat-ko (TR, E)
1SG want ACT-plant tree durian side land-DEM.PROX
'I'll plant durian trees at the land side.'

b. aku neŋoʔ-[e] di tipi (TR, E)
1SG ACT-look-3 LOC television
'I watched it on TV.'

c. dioʔ masaŋ [pukat-e] di mano? (TR, E)
3 ACT-set dragnet-3 LOC which
'Where did he set the net?'

The proper name *ʊpɪʔ* 'Upik' in (167)a, the third person pronoun *dioʔ* in (167)b, and the first person pronoun *aku* in (167)c fill the omitted subject position; and the sentences are grammatical. *Bataŋ duren* 'durian trees' in (168)a, the third person enclitic pronoun *–e* in (168)b and the noun phrase *pukat-e* 'the net' in (168)c fill the omitted direct object slot and the sentences are grammatical.

In fact, Jambi Malay allows omission of other elements in clear contexts, such as indirect objects and adjuncts, as shown below.

(169) a. Indirect Object Omission
iyo, kkiro jam sapʊlʊ kito bagɪ-la Ø makan
yes PARTRED-about hour one-ten 1 give-EMPH eat
'We give [them] food at around ten.'

b. Adverbial Omission
kami pgi-tu Ø oraŋ nam
1 go-DEM.DIST person six
'The six of us went [there].'

1.1.2.2.1.2. Intransitive Clauses

Intransitive clauses are clauses which only require one argument, the surface subject (external argument). An intransitive clause contains a subject and an intransitive verbal predicate, as illustrated below.

(170) a. [$_{TP}$ [$_{Subj}$ yayaŋ [$_{VP}$ naŋis]]]
Yayang ACT-cry
'Yayang is crying.'

b. [$_{TP}$ [$_{Subj}$ dioʔ-ko [$_{VP}$ lari]]]
3-DEM.PROX run
'She was running.'

c. [$_{TP}$ [$_{Subj}$ padi-tu] [$_{VP}$ tʊm^{b}ʊ]] (TR, E)
rice.plant-DEM.DIST grow
'The rice plants grow.'

One might claim that the sentences in (170) have an omitted object, just like the sentences in (166). However, this claim cannot be justified because when an overt NP (including a pronoun and an enclitic pronoun) is placed after the verb in the sentences in (170), the sentences become ungrammatical, as (171) shows.

(171) a. *[$_{TP}$ [$_{Subj}$ yayaŋ [$_{VP}$ naŋis dioʔ]]] (TR, E)
Yayang ACT-cry 3
*'Yayang is crying him.'

b. *[$_{TP}$ [$_{Subj}$ dioʔ-ko [$_{VP}$ lari-e]]] (TR, E)
3-DEM.PROX run-3
*'She was running him.'

c. *[$_{TP}$ [$_{Subj}$ padi-tu] [$_{VP}$ tʊm^{b}ʊ daʊn]] (TR, E)
rice.plant-DEM.DIST grow leaf
*'The rice plants grow leaves.'

As in transitive clauses, the predicate of an intransitive clause can be fronted, as illustrated in the following examples.

(172) a. [$_{TP}$ [$_{VP}$ balɪʔ-la]$_i$ [$_{Subj}$ budaʔ-ko] t_i tadi]
return-EMPH kid-DEM.PROX earlier
'They went home then.'

b. ha suda-tu [$_{TP}$[$_{VP}$baraŋkat-la]$_i$
EXCL finish-DEM.DIST leave.for-EMPH
[$_{Subj}$ kami tadi-ko] t_i]]
1 earlier-DEM.PROX
'After that, we left.'

c. [$_{TP}$ [$_{VP}$ la tʊm^{b}ʊ]$_i$ [$_{NP}$ bulu kasar] t_i]]
PFCT grow body.hair big
'The wings have grown.'
[Lit. 'The big feathers have grown.']

In addition, as in active transitive clauses, in clear contexts, the external argument of an intransitive clause can be omitted, as exemplified below.

(173) a. Ø baraŋkat jam sablas dari suŋe.asam
leave.for hour one-teen from Sungai.Asam
'[We] left Sungai Asam at eleven.'

b. Ø la lʊmpʊ, Ø daʔ biso gi bajalan
PFCT paralyzed NEG can more INTR-walk
'[He] is paralyzed, [he] can't walk anymore.'

c. waktu Ø pgi ka muaro.jam^{b}i, kau ŋapo daʔdo pgi?
time go to Muara.Jambi 2SG why NEG.exist go
'When [we] went to Muara Jambi, why didn't you go?'

Intransitive verbs in many world languages, such as English, French, and Dutch, can be distinguished into two types: unaccusative verbs and unergative verbs. In these languages, the subject of an unaccusative verb is not agentive, whereas that of an unergative verb is agentive.

In Jambi Malay, intransitive verbs can also be classified into two types: unaccusative verbs and unergative verbs. Verbs such as *jatu* 'fall', *pensan* 'faint', *tɟ^{g}lam* 'sink', *pca* 'broken', *tʊm^{b}ʊ* 'grow', and *tibo* 'arrive' are unaccusative verbs,

and verbs such as *barɪŋ* 'lie down', *loncat* 'jump', *lari* 'run', *taŋis* 'cry' and *jalan* 'walk' are unergative verbs.

Based on the prefix that the intransitive verb can take, intransitive verbs can be distinguished into four groups. The first group of intransitive verbs consists of verbs which take a zero prefix. These include *jatʊ* 'fall', *pensan* 'faint', *tŋ^{g}lam* 'sink', *trbaŋ* 'fly', *bocor* 'leak', *tʊmbʊ* 'grow', and *tibo* 'arrive', as exemplified below.[55]

(174) a. malam miŋ^{g}u dioʔ tibo, malam snen eko baraŋkat
night Sunday 3 arrive night Monday Eko leave.for
'He arrived on Saturday night and Eko left on Monday night.'

b. *malam miŋ^{g}u dioʔ batibo
night Sunday 3 INTR-arrive
'He arrived on Sunday night.'

c. *malam miŋ^{g}u dioʔ nibo
night Sunday 3 ACT-arrive
'He arrived on Sunday night.'

The second group of intransitive verbs is a group of verbs that mainly take a *ba-* prefix, which include *rʊn^{d}ɪŋ* 'discuss', *pɪkɪr* 'think', and *cʊkʊr* 'shave' (see section 2.2.1.2.1 in which the description of the prefix *ba-* is presented), as shown in the following examples.

(175) a. kalu dioʔ la sakola klagi-tu,
if 3 PFCT school later-DEM.DIST
bapɪkɪr dioʔ-e
INTR-think 3-3
'When they already go to school later, they will be able to think.'
[Lit. 'When they already go to school later, they will think.']

[55] The verb *jatʊ* 'fall' can take the prefix *ta-* and the meaning is 'accidentally fall' (see section 2.1.3.1.1.2).

b. kalu oraŋ-tu tibo,
if person-DEM.DIST arrive
muko barʊnᵈɪŋ
that's.why INTR-make.an.agreement
'If they arrive, they will make a deal.'

A few verbs fall into the third group of intransitive verbs, i.e. verbs that only take the nasal prefix, such as *ldok* 'explode', *ttas* 'hatch', *taŋis* 'cry', and *loncat* 'jump' (see also section 2.1.3.1.1), as shown below.

(176) a. dioʔ tigo pʊlʊ ari la ntas
3 three ten day PFCT ACT-hatch
'When it is already thirty days, it hatches.'

b. *dioʔ tigo pʊlʊ ari la ttas (TR, E)
3 three ten day PFCT hatch
'When it is already thirty days, it hatches.'

c. *dioʔ tigo pʊlʊ ari la battas (TR, E)
3 three ten day PFCT INTR-hatch
'When it is already thirty days, it hatches.'

Finally, other intransitive verbs may take more than one prefix. *Lari* 'run' and *jalan* 'walk', for example, may take the zero prefix or the *ba-* prefix, as illustrated in the following examples.

(177) a. jin-tu baraŋkali bajalan di balakaŋ-tu
genie-DEM.DIST perhaps INTR-walk LOC behind-DEM.DIST
'Perhaps the genie walked behind [him].'

b. jin-tu baraŋkali jalan di balakaŋ-tu (TR, E)
genie-DEM.DIST perhaps walk LOC behind-DEM.DIST
'Perhaps the genie walked behind [him].'

The general pattern that can be observed with respect to the different types of intransitive verbs and the prefix that each of them can take is as follows. Unaccusative verbs take the zero prefix, whereas unergative verbs take the *ba-* prefix. Of course this observation only indicates a general tendency because some unergative

verbs may take the nasal prefix (for examples *taŋis* 'cry' and *ttas* 'hatch') or the zero prefix (*lari* 'run' and *jalan* 'walk).

1.1.2.2.1.3. Pseudo-intransitive Clauses

The verb of a transitive clause by definition requires a direct object (a complement) whereas the verb of an intransitive clause must not have a direct object or a complement. In addition, there exists a group of verbs which Sneddon (1996:242-243) refers to as pseudo-intransitive verbs.

The verb of a pseudo-intransitive clause does not require an overt direct object. However, the action expressed by this type of verb implies an object. In other words, pseudo-intransitive verbs are verbs which are syntactically intransitive but semantically transitive. Consider the following examples.

(178) a. ʊpɪʔ la suda masaʔ (TR, E)
Upik PFCT finish cook
'Upik has cooked.'

b. joʔ, aku daʔ prna gi ɲʲarɪŋ kini-tu
friend 1SG NEG ever more ACT-net now-DEM.DIST
'Well, I don't set a net anymore now.'

The verbs *masaʔ* 'cook' in (178)a and *ɲʲarŋ* 'set a net' in (178)b are not followed by an overt direct object. The speaker focuses more on the action of cooking and setting a net than what is being cooked or what is being caught by setting up the net.

The crucial point is that verbs like those in (178) are different from intransitive verbs. Intransitive verbs such as *taŋis* 'cry', *lari* 'run', and *tʊm^{b}ʊ* 'grow' cannot take an object (see the examples in (170) and (171)). In contrast, an object may be present after pseudo-intransitive verbs, as illustrated below.

(179) a. ʊpɪʔ la suda masaʔ laʊʔ (TR, E)
Upik PFCT finish cook side.dish
'Upik has cooked side dishes.'

b. aku daʔ prna lagi ɲʲarɪŋ balɪwɪs kini-tu (TR, E)
1SG NEG ever more ACT-net k.o.bird now-DEM.DIST
'I don't catch wild ducks anymore.'

Verbs which can be categorized as pseudo-intransitive include *mukat* 'catch fish using a kind of net', *minum* 'drink', *ɲapu* 'sweep', *nulis* 'write', *nan^{d}ʊr* 'plant rice', *naŋkʊl* 'catch fish', and *ɲaɲi* 'sing', and *batanaʔ* 'cook rice'. Note that many of these verbs are derived by adding the nasal prefix to a noun; the resulting verb means to do something using the noun.

As in transitive clauses and intransitive clauses, in pseudo-intransitive clauses, the verb may be in sentence-initial position, as shown in (180).

(180) a. [$_{TP}$ [$_{VP}$ lagi masaʔ] [$_{Subj}$ dioʔ]] (TR, E)
PROG cook 3
'She is cooking.'

b. [$_{TP}$ [$_{VP}$ la suda nan^{d}ʊr] [$_{Subj}$ kami-ko]] (TR, E)
PFCT finish ACT-plant.rice 1-DEM.PROX
'We have planted rice.'

To sum up, on the one hand, the verb in pseudo-intransitive clauses is similar to the verb in intransitive clauses because it requires one argument, which is the subject. On the other hand, pseudo-intransitive verbs are different from intransitive verbs because pseudo-intransitive verbs may take an object argument, whereas intransitive verbs must not take an object. With respect to word order, pseudo-intransitive clauses are similar to transitive and intransitive verbs in that they may have subject-initial word order as well as verb-initial word order.

1.1.2.2.1.4. Ditransitive Clauses

Ditransitive clauses are clauses which contain three arguments: the subject, the direct object, and the indirect object. Ditransitive clauses in Jambi Malay can be categorized into two types. In the first type of ditransitive clause, the indirect

object is realized as a noun phrase and the order of the elements that form the clause is [Subject]-[Verb]-[NP-Indirect Object]-[NP-Direct Object] ([S]-[V]-[NP-IO]-[NP-DO]). In the second type of ditransitive clause, the indirect object is realized as a prepositional phrase and the order of the elements that form the clause is [Subject]-[Verb]-[NP-Direct Object]-[PP-Indirect Object] ([S]-[V]-[NP-DO]-[PP-IO]). Examples follow.

(181) [S]-[V]-[NP-IO]-[NP-DO]

a. kito biaso di jam^{b}an m^{b}agi antu aeʔ makan
1 usual LOC toilet ACT-give ghost water eat
'We used to give the water ghost food on the toilet.'

b. jalɪl la nanami ɲai-tu pisaŋ(TR, E)
Jalil PFCT ACT-plant-APPL grandmother-DEM.DIST banana
'Jalil has planted bananas for that old lady.'

(182) [S]-[V]-[NP-DO]-[PP-IO]

a. eko la masaŋi jarɪŋ
Eko PFCT ACT-set net
ʊntʊʔ ɲai-tu (TR, E)
for grandmother-DEM.DIST
'Eko has set a net for that old lady.'

b. aku tadi-ko pɪkɪr ati n^{d}aʔ mlpaʔ
1SG earlier-DEM.PROX think liver want ACT-place
motor di sano takʊt, kan
motorcycle LOC there afraid Q
'I was thinking about putting [my] motorcycle there, [but] I was afraid, you know.'

Argument(s) of a ditransitive clause may also be dropped in clear contexts, as the following examples suggest.

(183) a. kan awaʔ ŋantar Ø ka ban^{d}ara be
EMPH 1/2/3 ACT-deliver to airport just
'We just sent [them] to the airport.'

b. iyo, kkiro jam sapʊlʊ kito bagɪ-la Ø makan
yes PARTRED-about hour one-ten 1 give-EMPH eat
'So, we give [them] food at around ten o'clock.'

c. bibi galaʔ go ŋɪrɪm niku Ø, daʔ?
aunt often also ACT-send DEM.DIST NEG
'You also often send it [to him], don't you?'

Note that the position in which I mark with Ø is not the only position for the omitted argument. In (183)b, for example, the omitted element can be after *makan* which literally means 'eat' but is employed to mean 'meal/food'. If the omitted element is after *makan,* it means the PP-IO is being omitted.

Similar to transitive, intransitive, and pseudo- intransitive clauses, ditransitive clauses may have the predicate in sentence-initial position, as illustrated in (184) below. Note that there is a slight pause before the agent.

(184) a. la masaŋi ɲai-tu
PFCT ACT-set-APPL grandmother-DEM.DIST
jarɪŋ eko (TR, E)
net Eko
'Eko has set a net for that old lady.'

b. m^bagɪ km^baŋ ka ʊpɪʔ edi (TR, E)
ACT-take flower to Upik Edi
'Edi gave flowers to Upik.'

c. m^bagɪ ʊpɪʔ km^baŋ edi (TR, E)
ACT-take Upik flower Edi
'Edi gave Upik flowers.'

Importantly, verbs such as *bagɪ* 'give' and *lpaʔ* 'put' are inherently ditransitive. Most ditransitive verbs are derived by adding an applicative suffix (either suffix *–i* or suffix *–kan*) to a transitive verb. Descriptions of the suffix *–i* and the suffix *–kan* are provided in section 2.2.1.2.2 and section 2.2.1.2.3, respectively.

1.1.2.2.2. The Structure of Verbal Clauses[56]

As described previously, in addition to SVO word order, Jambi Malay exhibits other possible word orders, namely VOS, OSV, and VSO. I shall now turn to providing potential derivations for these various word order options.

Varieties of Malay/Indonesian belong to the Western Malayo-Polynesian group, a sub-branch of the Austronesian language family. Typologically, many languages in this language group (such as Tagalog, Malagasy, Chomoro, and Palauan) have a verb-initial structure. Chung (2008) examines the structure of SVO and VOS word orders in Indonesian; in particular Chung examines whether a unified analysis can be used in accounting for the clause structure of Indonesian and those of verb-initial Western Malayo-Polynesian languages. Chung shows that the clause structure of Indonesian cannot be the same as that of verb-initial Western Malayo-Polynesian languages.

Adopting Chung's tests, I shall examine the structure of SVO and VOS clauses in Jambi Malay. In addition, I shall also discuss the structures of OSV and VSO clauses.

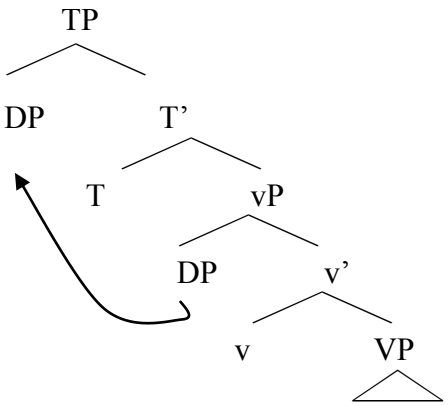
1.1.2.2.2.1. The Structure of SVO Clauses

One hypothesis for the structure of SVO clauses is that the clause structure of Jambi Malay is similar to the structure of English. Note that this structure was first

[56] In particular, I focus on the Tanjung Raden dialect; and thus, when I refer to Jambi Malay in this section, I am referring to Tanjung Raden. However, my judgments from the City dialect do not differ. I do not have data from Mudung Darat.

proposed by Guilfoyle et al. (1992) to account for the clause structure in Malay/Indoenesian, and is also argued for in Chung (2008:1555).[57]

(185)



As shown in (185), the preverbal subject DP is generated in the specifier of the functional head v, a position outside the VP. Then, it raises to the specifier of the clause head T.

In fact, without raising the DP to the spec of TP, the structure in (185) is already in the SVO word order. One question to address is whether or not the preverbal DP really needs to move from its base-generated position to the specifier of TP. If so, the next question is whether the DP moves to a position even higher than specifier of TP, presumably a topic position.

There are reasons for arguing that the preverbal DP does not stay in its base-generated position, i.e. the specifier of vP. In section 1.1.2.2.2.1.1, I shall show that *cuma(n)* 'only' and its association with focus indicate that the preverbal agentive DP does not stay in its base-generated position, the spec of vP. In section 1.1.2.2.2.1.2, I present facts from direct object extraction in relative clauses, noun phrases that

[57] Guilfoyle et al. (1992) employ the term Bahasa to refer to dialects of both Bahasa Malaysia (Malay) and Bahasa Indonesia (Indonesian).

contain a possessor, and familiarity (definiteness) which indicate that the preverbal DP is not a topic. In section 1.1.2.2.2.1.3, I claim that the preverbal DP moves to Spec of TP.

1.1.2.2.2.1.1. Preverbal Agentive DPs must Move out of vP

The claim that preverbal DPs must move out of vP comes from the association of the adverbial *cuma(n)*'only' with focus.

Following Chung's (2008:1569) analysis of Indonesian *hanya, cuma(n)* 'only' in Jambi Malay associates with a focused constituent which is in its c-command domain. Consider the following example.

(186) budi cuma [la nanam padi] (TR, E)
Budi only PFCT ACT-plant rice.plant
'Budi has only planted rice.'

In (186), *cuma* 'only' precedes the auxiliary and the verb. In this position, *cuma* 'only' can associate with a focused constituent that is a projection of v (in square brackets). This position can be analyzed as left-adjoined to vP.

Cuma 'only' can also associate with a focus that is a complement of V or an adjunct to VP, as the examples in (187) show. The focus element is in square brackets.

(187) a. maʔ cuma ŋᵍoreŋ [pisaŋ-ko] (TR, E)
mother only ACT-fry banana-DEM.PROX
'Mother fried only these bananas.'

b. kami cuma mᵇawaʔi kuɪ [ʊntʊʔ ʊpɪʔ] (TR, E)
1 only ACT-bring-APPL cake for Upik
'We brought cakes only for Upik.'

c. kua-ko cuma aku masʊʔi [gulo pasɪr] (TR, E)
gravy-DEM.PROX only 1SG go.in-APPL sugar sand
'I put only sugar into this soup.'

d. dioʔ cuma naŋkap ikan [di suŋe] (TR, E)
3 only ACT-catch fish LOC river
'They only catch fish in the river.'

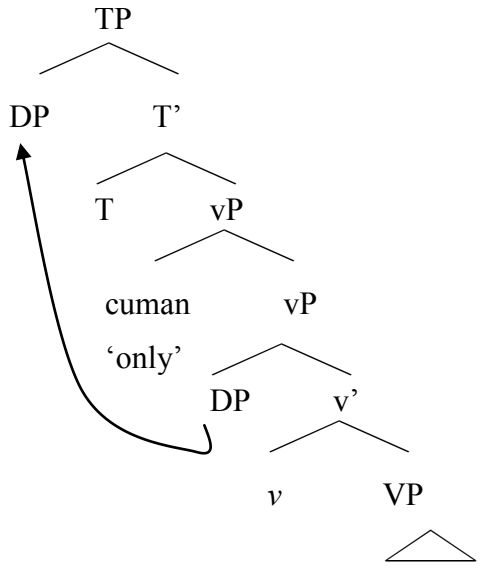
In contrast, *cuma(n)* 'only' cannot be associated with a focus that is in preverbal position, as illustrated in (188).

(188) a. *[maʔ] cuma(n) ŋ^{g}oreŋ pisaŋ-ko (TR, E)
mother only ACT-fry banana-DEM.PROX
('Only *mother* fried these bananas.')

b. *[maŋkʊʔ-ko] cuma(n) kami piŋ^{j}am (TR, E)
bowl-DEM.PROX only 1 borrow
('We borrowed only *these bowls.*')

The pattern in (188) is expected as we consider the structure in (185) (modified with *cuma(n)* 'only' adjunction in (189) below) in which *cuma(n)*'s c-commanding domain does not include the specifier of T. Thus, assuming that *cuma(n)* 'only' is interpreted in the surface structure, it cannot be associated with a focus that occupies the specifier of T.

(189)



To conclude, the fact that *cuma(n)* 'only' cannot associate with the preverbal DP in SVO clauses indicates that the preverbal DP has moved out of vP, presumably to the spec of T or to the spec of a topic position. In next section, I shall show that preverbal DPs in SVO clauses are not topics.

1.1.2.2.2.1.2. Preverbal DPs of SVO Clauses are not Topics

In the Austronesian literature, two different positions have been proposed for the preverbal DP, namely the spec of a topic position and spec of TP. Pearson (2005), for example, claims that the 'subjects' in Malagasy are topics. In contrast, Guilfoyle et al. (1992), claim that the preverbal DP in Malay/Indonesian is in the specifier of TP.

There are three pieces of evidence which show that the preverbal DP in Jambi Malay SVO clauses is not a topic.

The first piece of evidence comes from relativization of a direct object. *Wh*-island effects are considered to be the result of intervention (Chomsky, 1986 and Rizzi, 1990). The moved *wh*-phrase of an embedded question blocks a more deeply embedded *wh*-phrase from being able to move past it to a higher specifier of C, as shown below (example is taken from Chung, 2008:1565).

(190) *How quickly do they know [why Joe fixed it___]

In (190), the *wh*-phrase 'how quickly' is blocked from moving to the specifier of a higher CP by the *wh*-phrase 'why'.

The generalization is that a constituent in an A-bar specifier position prevents a more deeply embedded constituent from moving to a higher A-bar specifier position. Moving the adjunct *wh*-question in (191)b 'how quickly' across the topic 'that car', for example, generates an ungrammatical sentence.

(191) a. I think that that car, John fixed.
b. *How quickly do you think that that car, John fixed?

Assuming that the data in (191) is relevant in Jambi Malay, if the preverbal DP in SVO clauses were a topic, it would be expected that it occupies an A-bar position and then it would block other instances of A-bar movement across it.

In Jambi Malay, the movement involved in relative clauses is an instance of A-bar movement. Although I showed in section 1.1.1.4.3 that multiple topicalization is not entirely ungrammatical, I showed that sentences with multiple topicalizations were less acceptable. If the preverbal DP were a topic, and hence an A-bar element, it would be predicted to block relativization of the direct object; at the least, sentences which involve relativization of the direct object would be less acceptable.[58]

However, this prediction is not borne out. As discussed in section 1.1.1.1.1 active sentences in Jambi Malay are marked by both the nasal prefix and the zero prefix. Relativization of a direct object with bare verbs is possible in Jambi Malay (see also section 1.1.4.2.2.4.2). Sentences (192) through (195) demonstrate that relativization of direct objects with bare verbs is perfectly grammatical.

(192) ko-la [jarɪŋ yaŋ
DEM.PROX-EMPH net REL
[paʔ ŋa la pasaŋ___]] (TR, E)
TRU-father TRU-middle PFCT set
'This is the net that Uncle Middle has set.'

(193) [sampan yaŋ [budi blʊm baɪʔi___]]] tabakar (TR, E)
canoe REL Budi not.yet good-APPL PFCT.PASS-burn
'The canoe that Budi hasn't fixed got burnt.'

[58] In section 1.1.4.2.2.3.1, I assume that relativization using the gap strategy involves operator movement.

(194) [batino [yaŋ budi suko__]-tu] elo? nian (TR, E)
female REL Budi like –DEM.DIST beautiful very
'The girl that Budi likes is very pretty.'

(195) [ruma [yaŋ kami peŋen__] la laku (TR, E)
house REL 1 want PFCT sell.well
'The house that we want has been sold.'

Sentence (192) cannot be claimed to have the structure of object voice because the perfective marker *la* appears between the agent and the verb (see section 1.1.1.1.3 in which a description of object voice is provided). Likewise, sentence (193) also cannot have the structure of object voice because *blʊm* 'not yet' intervenes between the agent and the verb. The verbs *suko* 'like', and *peŋen* 'want' in (194) and (195) are psychological verbs. Psychological verbs idiosyncratically cannot be passivized (see Musgrave, 2001). Thus, the direct object of the sentences in (192) through (195) must have undergone *wh*- operator movement (see section 1.1.4.2.2.3.1). The fact that it is possible to relativize direct object with bare verbs indicates that the preverbal DP is not in an A-bar position.

The second argument for claiming that preverbal DPs are not topics comes from DPs that contain a possessor. Chung (2008:1566-1567) shows that the subject (preverbal DP) in Standard Indonesian is not a topic. The argument comes from facts regarding the possessor in NPs. The possessor can be extracted out of a DP. If the DP that contains a possessor and the possessee is in preverbal position, the fact that the possessor can be extracted indicates that the preverbal DP cannot be in a topic position.

The possessor in Jambi Malay follows the possessee within a DP (see section 1.2.2.4.2.4).

(196) a. [kam^{b}ɪŋ [oraŋ-tu]] duo pʊlʊ ekoʔ (TR, E)
goat person-DEM.DIST two teen CLF
'That man's goats are twenty.'

b. motor [adɪʔ [dioʔ]] rusaʔ (TR, E)
motorcycle younger.sibling 3 broken
'His younger brother's motorcycle is broken.'

Furthermore, the possessor of the subject may appear at the left edge of the clause. In such a construction, the possessor occurs first, then, it is followed by the predicate and then followed by the possessee (see examples in (197) below). Within the subject, the resumptive pronoun *–e* or *-ɲo* functions as a copy of the possessor.[59, 60]

(197) a. [oraŋ-tu], duo pʊlʊ ekoʔ [kam^{b}ɪŋ-e] (TR, E)
person-DEM.DIST two teen CLF goat-3
'That man has twenty goats.'

b. [adɪʔ dioʔ], la tibo [motor-e] (TR, E)
younger.sibling 3 PFCT arrive motorcycle-3
'His younger brother's motorcycle has arrived.'

c. [ali], mulaʔi tiŋ^{g}i [badan-e] (TR, E)
Ali begin-APPL tall body-3
Ali's body is getting taller.'

d. [ina], baɲaʔ [kawan-ɲo] (JC, E)
Ina a.lot friend-3
'Ina has a lot of friends.'
[Lit. 'Ina's friends are a lot.']

---

[59] This fact is also observed in Indonesian (see Kaswanti Purwo, 1984:69 and Sneddon, 1996:278). Enclitic pronoun *–e* is only used in the Tanjung Raden and Mudung Darat dialects, whereas *-ɲo* is used in all three dialects (see 2.1.2.1.9.1)

[60] Enclitic pronoun *–e* is only used in the Tanjung Raden and Mudung Darat dialects, whereas *-ɲo* is used in all three dialects (see 2.1.2.1.9.1).

Thus, the possessor in [possessor -predicate -possessee – resumptive pronoun] order can be claimed to be a topic based on the word order and the intonation pattern (see also section 1.11.2.3 in which I present topic-comment sentences). I employ a comma after the possessor in the above examples to show that there is a short pause after it. Such a claim can be justified if the preverbal position in SVO clauses were positioned in the specifier of Top, to which either the subject or its possessor could raise. When the subject raises to that position, it leaves a trace and when the possessor raises, it leaves a resumptive pronoun.[61]

However, the left-edge possessor can also be followed by the possessee before the predicate, as suggested in (198) below. This provides counter evidence to the claim that the subject is a topic in SVO clauses.

(198) a. [oraŋ-tu], [kam^{b}ɪŋ-e] duo pʊlʊ ekoʔ (TR, E)
person-DEM.DIST goat-3 two teen CLF
'That man has twenty goats.'

b. [adɪʔ dioʔ, [motor-e] la tibo (TR, E)
younger.sibling 3 motorcyle-3 PFCT arrive
'His younger brother's motorcycle has arrived.'

c. [ali], [badan-e] mulaʔi tiŋ^{g}i (TR, E)
Ali body-3 begin-APPL tall
'Ali's body is getting taller.'

d. [ina], [kawan-ɲo] baŋaʔ
Ina friend-3 a.lot
'Ina has a lot of friends.'
[Lit. 'Ina's friends are a lot.']

In (198), the possessor is in the initial position and the comma indicates that there is a little pause before the rest of the sentence. The DP that contains the possessee has a resumptive pronoun following it. The possessor that is extracted in (198) can be

[61] Indonesian is similar (Chung, 2008).

analyzed as being in a topic position, and thus the DP that contains the possessee and the resumptive pronoun does not occupy a topic position. In other words, in constructions such as those in (198), the possessor is in the topic position and this suggests that the DP that contains the possessee and the resumptive pronoun cannot be in a topic position.

The third argument to support the claim that preverbal DPs in Jambi Malay are not in topic position comes from familiarity. Chung (2008) points out that a topic needs to be familiar in the sense that it should be definite or universally quantified. The preverbal DP in Jambi Malay SVO clauses does not need to be familiar, as exemplified in the following examples.

(199) a. kalu oraŋ n^{d}aʔ m^{b}li Ø, dijual
if person want ACT-buy PASS-sell
'If someone wants to buy it, [it] will be sold.'

b. oraŋ biaso bajalan di siko (TR, E)
person usual INTR-walk LOC here
'People usually walk here.'

c. plisi-tu naɲo siapo ŋ^{g}bʊk, siapo digbʊk (TR, E)
police-DEM.DIST ACT-ask who ACT-hit who PASS-hit
'The police asked who hit and who was hit.'

d. bn^{d}o apo biso trbaŋ dewe?? (TR, E)
thing what can fly alone
'What thing can fly by itself?'

The preverbal DP of the conditional clause in (199)a and the preverbal DP of the intransitive clause in (199)b, *oraŋ* 'person', is an indefinite pronoun. The DP that precedes the verbs *ŋ^{g}bʊk* 'to hit' and *digbʊk* 'to be hit' in (199)c is an interrogative phrase *siapo* 'who'. Finally, in (199)d, the preverbal DP is also an interrogative phrase *bn^{d}o apo* 'what thing'. These examples indicate that preverbal DPs are not familiar

and thus it cannot be the case that the preverbal noun phrases have raised to the specifier of TopP.

1.1.2.2.2.1.3. Preverbal DP Moves to Spec of TP

Section 1.1.2.2.2.1.1 claims that the preverbal DP in SVO clauses needs to move out of the spec of vP and section 1.1.2.2.2.1.2 shows that the preverbal DP in SVO clauses is not a topic. Assuming that a topic is projected in a topic phrase immediately above TP and TP is the maximal projection immediately above vP, it should follow that the preverbal DP in SVO clauses moves from the spec of vP to the spec of TP, just as in English clauses.

To conclude, I have shown one possible analysis to derive SVO clauses in Jambi Malay. According to this hypothesis, to derive SVO clauses, preverbal DPs in Jambi Malay do not stay in their base-generated position and do not move to the spec of a topic position. Instead, preverbal DPs, like English DPs, move to the specifier of T.

Later in section 1.1.2.2.2.2, I shall show that VOS word order involves VP raising. Therefore, it is important to examine whether SVO clauses themselves actually involve some kind of VP raising in the derivation. This alternative hypothesis is inspired by the structure of Toba Batak, a language of Indonesia which is spoken in North Sumatra (Cole and Hermon, 2008).[62] The same question is raised by Chung (2008) for Indonesian.

According to this hypothesis, VP must raise to the specifier of the clause head T and SVO is generated when the preverbal DP raises even higher, to the

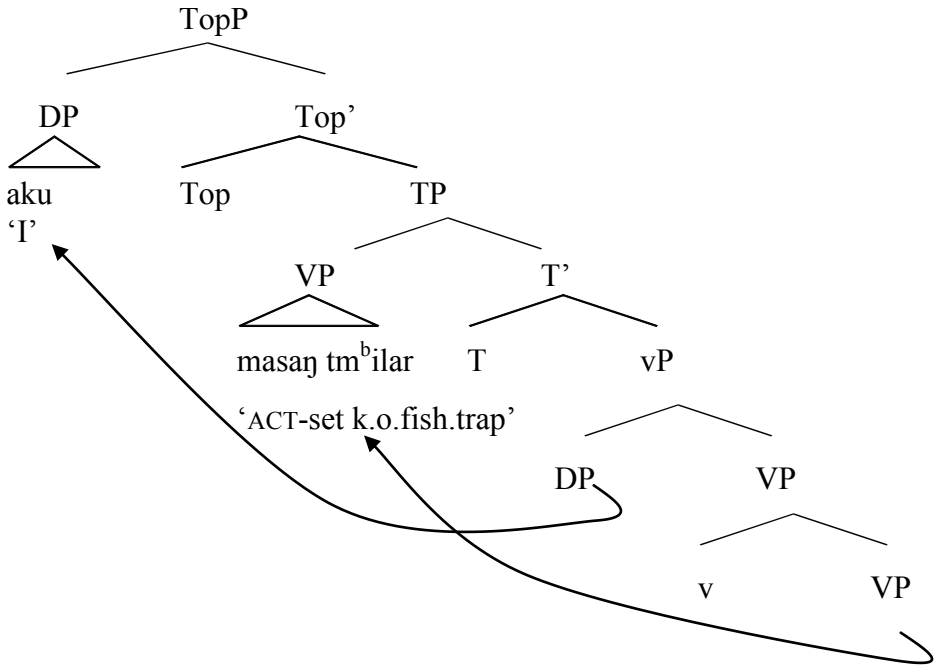
[62] See also Schachter (1984)a, Schachter (1984)b, Chung (2006), among others.

specifier of a functional head Top. Although, I have just argued that preverbal DPs do not move to the spec of a topic position, it is still important to investigate whether there is some kind of VP raising involved in deriving SVO clauses in Jambi Malay.

Based on this hypothesis, a transitive clause like (161)d, repeated in (200) below, can be derived using the structure in (201).

(200) aku masaŋ tm^{b}ilar
1SG ACT-set k.o.fish.trap
'I set a fish trap.'

(201)



As shown in (201), VP raises to the specifier of the head T and then the preverbal DP also raises to the specifier of TopP. The structure in (201) seems to be able to generate SVO clauses in Jambi Malay, just as it generates the SVO structures in Toba Batak.

However, adopting the tests employed by Chung (2008), I shall show that this analysis is not the correct analysis for Jambi Malay SVO clauses. I address the same questions that Chung raised when she analyzed Indonesian clause structure: (i)

whether the VP raises in SVO clauses and (ii) whether the preverbal DP is really a topic in SVO clauses.

With respect to the second question, I have shown in section 1.1.2.2.2.1.2 that three pieces of evidence support the claim that preverbal DPs in SVO clauses are not topics. First, the fact that relativizaton of direct objects is not barred supports the claim that the preverbal DP does not occupy an A-bar position, which is assumed to be a position for a topic. Second, the fact that a possessor from a preverbal DP can be fronted, leaving a resumptive pronoun in its position, indicates that the preverbal DP is not a topic. Third, the fact that the preverbal DPs do not need to be familiar also suggests that they are not topics.

In what follows, I shall only focus on the first question, i.e. whether or not VP raises in VOS clauses.

1.1.2.2.2.1.4. Does VP Raise in SVO Clauses?

Chung (2008) uses two tests to show that VP does not raise in Indonesian SVO clauses, namely mirror-image effects and islands. However, the mirror-image effect test is irrelevant for Jambi Malay because the data suggest that it is unclear whether Jambi Malay exhibits mirror image effects.[63] Therefore, I shall only employ the island effect test and show that VP in Jambi Malay clauses does not raise.

In languages like Malagasy, a VP that raises to a specifier position forms an island (Rackowski and Travis, 2000). Thus, if VP is not an island for further

[63] It is unclear whether Jambi Malay exhibits mirror image effects as in Malagasy (Pearson, 2000 and Rackowski and Travis, 2000). A non-specific direct object in Jambi Malay only occurs to the left of an adverbial (as in Malagasy). However, unlike in Malagasy, a specific direct object can occur either to the left or the right of an adverbial. Therefore, mirror image effects cannot be used as a test for vP raising.

extraction, this is evidence that VP does not raise (Aldridge, 2002; Chung, 2006; Chung, 2008).

In Jambi Malay, I assume that relativization with the gap strategy in Jambi Malay involves operator movement, as discussed in section 1.1.4.2.2.3.1. In Jambi Malay, both subjects and direct objects can be relativized using the gap strategy, as exemplified below.

(202) a. di sabla darat-ko
LOC one-side land-DEM.PROX
[ado jugo oraŋ [yaŋ ___ mancɪŋ-tu]]
exist also person REL ACT-fishing.rod-DEM.DIST
'On this land side, there are also people who go fishing.'

b. [bʊrʊŋ [yaŋ __ dicari-tu]] namo-e bʊrʊŋ roaʔroaʔ
bird REL PASS-seek-DEM.DIST name-3 bird k.o.bird
'The name of the birds that we're looking for is '*roaqroaq*'.'

(203) a. ko-la [jarɪŋ yaŋ
DEM.PROX-EMPH net REL
[paʔ ŋa la pasaŋ___]][64] (TR, E)
TRU-father TRU-middle PFCT set
'This is the net that Uncle Middle has set.'

b. [batino [yaŋ budi suko__]-tu]
female REL Budi like –DEM.DIST
eloʔ nian (TR, E)
beautiful very
'The girl that Budi really likes is very pretty.'

c. [ruma [yaŋ kami peŋen__] la laku (TR, E)
house REL 1 want PFCT sell.well
'The house that we want has been sold.'

[64] Note that this sentence is only grammatical if the verb has a zero prefix (see section 1.1.1.2 in which I discuss object extraction and section 1.1.4.2.2.4.2 in which I present direct objects).

d. [kʊcɪŋ [yaŋ siti sayaŋ__]-tu] ilaŋ (TR, E)
cat REL Siti love DEM.DIST disappear
'The cat that Siti loves disappeared.'

The sentences in (202) are examples of subject relativization. In these sentences, the subject is extracted and becomes the head of the clause introduced by the relativizer *yaŋ*.[65] In (203), the direct object is extracted and becomes the head of the clause introduced by the relativizer *yaŋ*. If the VP in SVO clauses indeed raises to the specifier of TP, it would be expected that this VP forms an island. If VP is an island, extracting an element from the VP, such as the direct object, should be barred. In other words, direct object extraction, like the case in gap relativization in (203), is predicted to be ungrammatical. The sentences in (203) are however in fact grammatical. This suggests that the VP in SVO clauses is not an island; and thus, it cannot be analyzed as having been moved to the specifier of TP from its base-generated position.

In short, the island effect test shows that there is no supportive evidence for the claim that Jambi Malay manifests VP raising.

To conclude section 1.1.2.2.2.1, I have compared two hypotheses to account for the structure of Jambi Malay SVO clauses. The first hypothesis claims that Jambi Malay SVO clauses are like English clauses in that the preverbal DP moves from its base-generated position in the specifier of vP to the spec of TP. The second hypothesis claims that VP moves to the spec of T and the preverbal DP moves even higher to the spec of TopP. Provided that preverbal DPs do not stay in their base-generated position and that they are not topics, I have claimed that the preverbal DP in SVO clauses moves to the spec of T. In addition, since VP in SVO clauses are not islands, the VP could not have been raised to the spec of T as suggested by the second

[65] The discussion of relative clauses is presented in section 1.1.4.2.

hypothesis. Thus, the first hypothesis provides a better account for the structure of Jambi Malay SVO clauses.

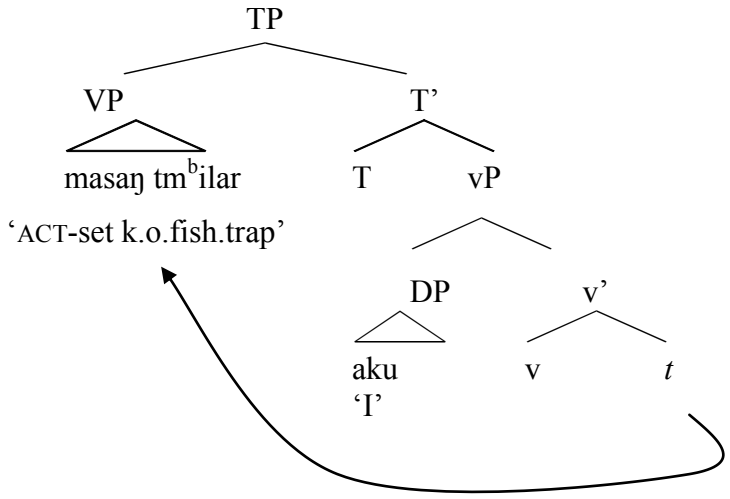
1.1.2.2.2.2. The Structure of VOS Clauses

As in SVO clauses, two possible hypotheses can be proposed to derive VOS clauses in Jambi Malay. According to the first hypothesis, VOS clauses in Jambi Malay are derived by moving VP to the spec of TP and the agent stays in its base-generated position.

Thus, the structure for sentences such as (162)d, repeated in (204) below, can be illustrated in (205).[66]

(204) masaŋ tm^{b}ilar aku
ACT-set k.o.fish.trap 1SG
'I set a fish trap.'

(205)



[66] I follow Chung in assuming that if VP indeed raised, it would create a structure in which the VP is in spec of TP, as illustrated in (205).

As shown in (205), in order to derive (204), VP raises to the specifier of T and the agent DP remains in its base-generated position, the spec of vP.[67] This mechanism appears to be sufficient to derive the surface VOS word order.

However, I shall now show that this analysis cannot be the correct account for deriving VOS clauses in Jambi Malay because the agent DP must move out of its base-generated position (specifier of vP) to the specifier of T and VP cannot move to spec of TP.

In order to make the claim that the post-verbal agent DP raises to the specifier of TP, it is crucial to show that it does not stay in its base-generated position (as a subconstituent of vP). In section 1.1.2.2.2.2.1, I shall show that the post-verbal agent DP does not end up as a subconstituent of vP. The next question is where the agent of DP raises to. In section 1.1.2.2.2.2.2, I shall show that the post-verbal agent DP does not raise to a topic position. In section 1.1.2.2.2.2.3, I shall claim that the post-verbal agent DP occupies the highest specifier of the clause, i.e. the spec of TP. Finally, in section 1.1.2.2.2.2.4, I shall show that VP must move out of its base-generated position and I assume it moves to the specifier of the topic position.

1.1.2.2.2.2.1 Post-verbal DPs must Move out of vP

In section 1.1.2.2.2.1.1, it has been shown that *cuma(n)* 'only' cannot be associated with a focused preverbal DP in SVO clauses. The argument is that *cuma(n)* 'only' is adjoined to the spec of vP and that the preverbal DP moves to the specifier of TP, which is outside the c-commanding domain of *cuma(n)* 'only'.

[67] I refer to the Subject in VOS clauses as a post-verbal agent DP.

In VOS clauses, *cuma(n)* 'only' cannot be associated with the agent DP either, as the following examples suggest.

(206) a. *cuma masaŋ tarʊp-ko [budaʔ-tu] (TR, E)
only ACT-set awning-DEM.PROX kid-DEM.DIST
('They set only this awning.')

b. *cuma mᵇawaʔ ikan [aku] (TR, E)
only ACT-bring fish 1SG
('I only brought fish.')

In (206), *cuma* 'only' can only be associated with the direct object DP, not the post-verbal agent DP. The fact that *cuma* 'only' cannot be associated with the post-verbal agent DP suggests that the post-verbal agent DP must end up in a position outside *cuma's* c-commanding domain. In other words, the post-verbal agent DP must have raised out of VP.

1.1.2.2.2.2.2. Post-verbal Agent DPs are not Topics

Like preverbal DPs, post-verbal DPs do not have to be familiar and thus are not topics, as shown in the following examples.

(207) a. dibuaŋ-e lagi aeʔ saemᵇer (TR, E)
PASS-throw.away-3 PROG water one-pail
'Another pail of water was thrown away again by him.'

b. biaso bajalan kaki oraŋ (TR, E)
usual INTR-walk foot person
'People usually walk.'

In (207), indefinite nouns can be the subject VOS clauses. So, VOS agent DPs are similar to SVO agent DPs in that they do not move to topic position.

1.1.2.2.2.2.3. Post-verbal Agent DPs End up in the Specifier of T

Section 1.1.2.2.2.2.1 claims that post-verbal agent DPs do not end up as a subconstituent of vP and section 1.1.2.2.2.2.2 demonstrates that post-verbal agent DPs

are not topics, just like the subjects of SVO clauses. Assuming that TP is the highest maximal projection in a clause, that vP is the maximal projection below TP, and that topic phrase (TopP) is a projection higher than the clause (TP), it would appear to follow that the subject of verb-initial clauses are in the highest specifier of T, as in English clauses and Jambi Malay SVO clauses.[68]

To conclude, the post-verbal agent DP is similar to the preverbal agent DP in that they both do not stay in their base-generated position and both are not topics. Since post-verbal DPs are not topics and must move out of the spec of vP, I assume that like preverbal agent DPs, post-verbal agent DPs raise to the spec of T.

1.1.2.2.2.2.4. Does VP raise in Verb-initial Clauses?

It has previously been demonstrated that the post-verbal agent DP in Jambi Malay VOS clauses ends up in the specifier of T. Logically, if the highest specifier of T is already filled by the agent DP, VP cannot raise to that position.

In what follows, I shall show that VP in VOS clauses raises using a test from *wh*-movement of direct objects (adapted from Chung, 2008).[69]

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[68] Chung (2008:1570:1572) employs an argument from *wh*-movement and resumptive possessors to show that the post-predicate subject ends up in the specifier of TP. However, it is unclear to me why posssessor extraction that leaves a resumptive pronoun is analyzed as *wh*-movement by Chung. Thus, I do not think this test is relevant. In addition, Chung also points out that the possessor of a non-subject is not accessible to relativization with resumption while the possessor of a subject is accessible to relativization in Indonesian. This test is used to claim that only subjects are in spec of TP. In Jambi Malay, however, relativization of both subject and non-subject possessors are possible, and thus, this test is also irrelevant for Jambi Malay.

[69] Chung (2008) also employs the mirror image test to show that VPs in Indonesian do not end up in the specifier of T. In Jambi Malay, mirror image effects are not clearly observed and thus, they are irrelevant.

As previously discussed, in Jambi Malay direct object extraction in relative clauses is allowed.[70] Recall the examples from (192) and (193), repeated in (208) below.

(208) a. ko-la [jarɪŋ yaŋ
DEM.PROX-EMPH net REL
[paʔ ŋa la pasaŋ ___]] (TR, E)
TRU-father TRU-middle PFCT set
'This is the net that Uncle Middle has set.'

b. [batino [yaŋ budi suko_]-tu]
female REL Budi like – DEM.DIST
eloʔ nian (TR, E)
beautiful very
'The girl that Budi really likes is very pretty.'

If the VP raises, it would be an island and *wh*-movement of the direct object should be barred. This is confirmed as the sentences in (209) below are ungrammatical.

(209) a. * ko-la [jarɪŋ
DEM.PROX-EMPH net
[yaŋ [la pasaŋ ___] paʔ ŋa]] (TR, E)
REL PFCT set TRU-father TRU-middle
'This is the net that Uncle Middle has set.'

b. *[batɪk [yaŋ [suko nian __] maʔ]] eloʔ ɲla (TR, E)
batik REL like very mother beautiful indeed
'The batik that mother loves is very beautiful.'

The fact that the sentences in (209) are ungrammatical provides evidence that the VP raises and forms an island. This supports the claim that VP has moved/raised although it is unclear to which position the VP has raised in VOS

[70] Note that I only focus on bare verbs here because bare verbs are possible in active transitive sentences and thus, the extraction of a direct object with a bare verb is treated as an extraction out of an active sentence.

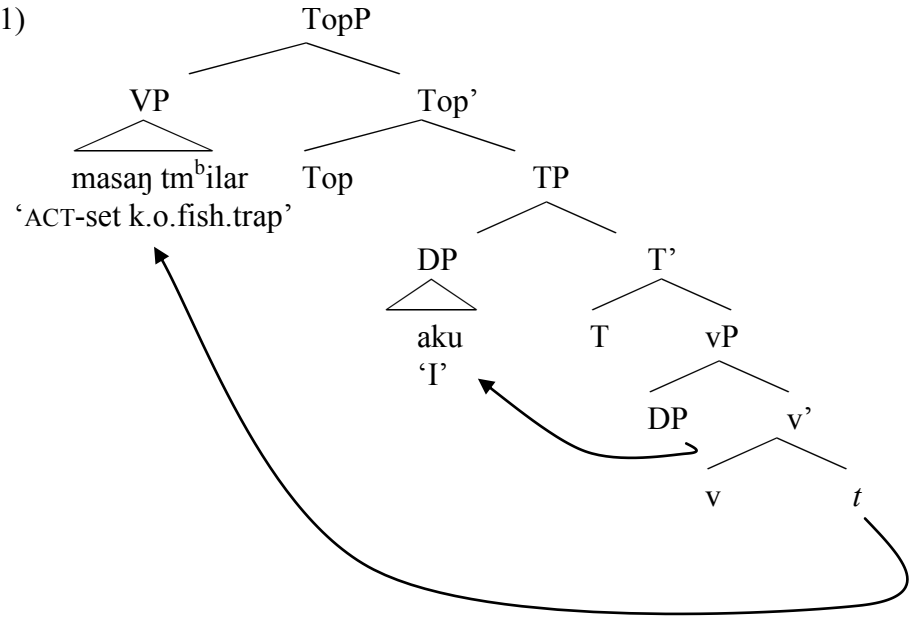
clauses. However, it is clear that the position should not be the spec of TP since that position has been occupied by the agent DP which has moved from the spec of vP. Thus, I assume the VP has moved to the spec of a topic position.

In short, the analysis that claims VOS clauses can be derived by raising VP to the spec of TP, leaving the agent in the spec of vP, is not a correct analysis.

An alternative hypothesis to the analysis I have just presented can be proposed to account for VOS clauses. According to this hypothesis, in order to derive VOS clauses, the agent DP moves from the spec of vP to the spec of TP and subsequently VP raises out of the clause, presumably to a topic position. Thus, sentences like (162)d, repeated in (210) below can be derived using the structure in (211).

(210) masaŋ tm^{b}ilar aku
ACT-set k.o.fish.trap 1SG
'I set a fish trap.'

(211)



As shown in (211), the agent DP raises to the specifier of T and VP raises even higher to a position outside the clause, presumably a topic position. This is similar to predicate fronting in non-verbal clauses discussed in section 1.1.2.1.3.

Two issues arise as we consider this hypothesis: (i) whether agent DPs move to the spec of TP and (ii) whether the VP really moves to a spec higher than TP. The first issue has been dealt with in section 1.1.2.2.2.2.1 through section 1.1.2.2.2.2.3. In these sections, it has been shown that post-verbal DPs must move out of their base-generated position, that post-verbal DPs are not topics, and that post-verbal DPs move to the spec of TP. If the post-verbal DP moves to the spec of TP, VP cannot move to the spec of TP as it has been occupied by the post-verbl DP. Consequently, VP needs to move to a specifier higher than TP. It has been argued earlier in this section that VP must move and presumably to a position higher than spec TP. It is unclear to me which position VP needs to move to. I assume that it is a topic position.[71]

1.1.2.2.2.3. The Structure of OSV Clauses

OSV clauses may have two structures. If an auxiliary/negation is present and it precedes the agent DP, the clause is claimed to have an object voice structure (see section 1.1.1.1.3). In contrast, if the auxiliary/negation follows the agent DP and thus intervenes between the agent and the verb, the clause is claimed to have the structure of direct object extraction of an active sentence, which is known as object fronting/object topicalization (see section 1.1.1.2). Since the clause structure depends

[71] Benjamin Bruening (p.c) has suggested that this position could be the spec of CP. However, I do not have any tests to show which position is the position to which VP moves in VOS clauses.

on the position of the auxiliary/negation, when an auxiliary/negation is absent, the clause may be analyzed as both an object voice clause and an object fronting clause. Note that in section 1.1.1.4, I have discussed that object voice and object fronting have begun to lose their distinction. However, some tests still indicate that they are distinguishable.

1.1.2.2.2.4. The Structure of VSO Clauses

I mentioned in section 1.1.2.2.1.1 that VSO is one of the possible word orders found in Jambi Malay. One of the examples presented in section 1.1.2.2.1.1 is repeated below.

(212) iyo, ɪkʊt aku pestipal
yes follow 1SG festival
'Then, I joined in the festival.'

It is still unclear what the structure of VSO clauses in Jambi Malay is. However, it is clear that the sentence in (212) does not have the structure of object voice (see section 1.1.1.1.3). One possible analysis is that V raises out of its base-generated position, presumably to a topic head position. Another possible hypothesis is subject lowering. However, more work needs to be done to propose a structure for VSO clauses. I shall leave this issue for further study.

1.1.3. Sentence Types

This description of sentence types is divided into five sub-sections: (i) declarative sentences; (ii) interrogative sentences; (iii) answers to questions; (iv) imperatives; and (v) other sentence types, which include exclamative sentences and existential sentences.

1.1.3.1. Declarative Sentences

Declarative sentences are sentences by which speakers convey information, ideas, opinions as well as thoughts to the interlocutor. Declarative sentences are also known as statements and can be divided into indirect speech and direct speech. Indirect speech is also known as reported speech or indirect quotation, whereas direct speech is also known as direct quotation.

In reporting what has previously been said by someone, speakers of Jambi Malay prefer to use direct quotation rather than indirect quotation. The reported speech is indicated by the use of *kato ~ kate*, which literally means 'word', followed by a noun phrase, usually, but not necessarily a pronoun. [72, 73] *Kato ~ kate* 'word' are sometimes shortened and become *to ~ te.* The quote usually comes first, as shown in examples (213)a through (213)e; however, although not very common, the quote can also come later, as shown in example (213)f. [74]

(213) a. "ika da? biso bamasa?," kato dio?-e[75]
Ika NEG can INTR-cook word 3-3
'"I cannot cook," she said.'
[Lit. '"Ika cannot cook" were her words.']

[72] *Kate* is only used in the Tanjung Raden and Mudung Darat dialects, whereas *kato* is used in all three dialects.

[73] The symbol "~" indicates free variation.

[74] Following the conventions for Standard Indonesian, I employ double quotation marks to mark direct speech.

[75] As it is discussed in section 2.1.2.1.6, speakers of Jambi Malay also use personal names as first and second person pronouns.

b. “baŋaʔ ayam kau, lʊrʔ” kate-e
a.lot chicken 2SG TRU-sibling word-3
‘”Do you have many chickens, Brother?” he asked.’
[Lit. ‘”Are your chickens many?” were his words.’]

c. “nuŋᵍu ktʊʔ rajo-ko ha,” kato-e
ACT-guard gong king-DEM.PROX EXCL word-3
‘“[I’m] keeping an eye on this gong of the king’s,” he said.’
[Lit.’”[I’m] keeping an eye on this gong of the king’s” were his words.’]

d. “ajaʔ-la ko dioʔ bajajalan!
invite-EMPH TRU-Eko 3 INTR-PARTRED-walk
kasian neŋoʔ-e,” kato-ku
pity ACT-look-3 word-1SG
‘”Eko, I pity them, so take them to go around!” I said.’
[Lit. ‘“Eko, take them to go around, I pity them!” were my words.’]

e. “aku jam lapan giʔ balɪʔ-la,” te-e
1SG hour eight later return-EMPH word-3
‘”I will come back at eight,” he said.’
[Lit. ‘”I will return later at eight” were his words.’]

f. kato-ku, “ʊntʊʔ apo-la tʊm-e, lbɪ
word-1SG for what-EMPH TRU-Kaltum-EXCL more
baɪʔ trnaʔ laɪn”
good livestock other
‘I said, “What is it for, Kaltum?; It’s better if you raise other livestock.”’]
[Lit. ‘My words were “What is it for, Kartum?; Other livestock is better.”’]

The root *kato* ‘word’ is also used to mark indirect speech, but usually the form is verbalized with the nasal prefix and optional *–kan ~ -an* suffix.[76] So *ŋato ~ ŋatokan* is a verb meaning ‘to say’, as illustrated in (214) below.

(214) a. bapaʔ aku-ko nᵈaʔ ŋatokan
father 1SG-DEM.PROX want ACT-word-APPL
aku-ko nᵈaʔ babini-la
1SG-DEM.PROX want INTR-wife-EMPH
‘My father wanted to say that I would like to have a wife.’

[76] The discussion of *–kan ~ -an* is provided in section 2.2.1.2.3.

b. ŋatokan dunio nᵈaʔ kiamat
ACT-word-APPL world want doomsday
'[He] said that doomsday was coming.'

c. dioʔ ŋato aku-tu padeʔ mʊlʊt
3 ACT-word 1SG-DEM.DIST clever mouth
'He said that I was talkative.'

In addition to using *kato* 'word' or *kate* 'word', the verb *bilaŋ* 'to say' is also used for conveying both direct speech and indirect speech. This form, however, is borrowed from colloquial Indonesian and is very common in the City dialect. The claim that this form is a loan form is supported by speakers' judgments. In elicitation, speakers of the Tanjung Raden and Mudung Darat dialects rejected this form and claimed that it was not native to the language. Speakers of the City dialect accepted this form and said that both *kato* 'word' and *bilaŋ* 'to say' could be used. Examples follow.

(215) *Bilaŋ* Used in Direct Speech

a. bapaʔ cece bilaŋ-tu, "ado baliwɪs daʔ sbraŋ?"[77]
father older.sister say-DEM.DIST exist wild.duck NEG across
'Your father said, "Are there any wild ducks in *Seberang*?"'
[Lit. 'Cece's father said, "Are there or are not wild ducks in the other side [of the river]?"']

[77] This utterance is the only one example of the use of *bilaŋ* 'say' found in the naturalistic data from Tanjung Raden and was uttered by a speaker who was extensively influenced by the City dialect since she socialized a lot with speakers from the City dialect and had lived in Jambi City for the last couple of years.

[78] Kinship terms and proper names can be used to refer to first and second person pronoun references (see sections 2.1.2.1.5 and 2.1.2.1.6).

b. jadi, bilaŋ-ɲo-la ka pkaʔ,
so say-3-EMPH to deaf
“kaʔ,” kato dioʔ, “abu,” kato dio (JC, N)[79]
TRU-deaf word 3 dust word 3
‘So, he told the deaf man; “Deaf, it’s dust, “he said.’
[Lit. ‘So, he said to the deaf man; “Deaf, it’s dust” were his words.’]

(216) *Bilaŋ* Used in Indirect Speech

dioʔ bilaŋ dioʔ malas nian naʔ pəgi (JC, E)
3 say 3 reluctant very want go
‘He said that he was really reluctant to go.’

Note that there is a difference between direct speech and indirect speech with respect to the reference of first person and second person. If the speaker quotes someone else who uses a first person reference such as the pronoun *aku, sayo, kulo,* or *kami,* the pronoun used in the reported speech is the third person pronoun *dioʔ.* If the speaker quotes someone else who uses the second person reference, the pronoun *kau,* the reference used in the reported speech is the first person. In (217)a below, the first person singular pronoun *aku* and the second person singular pronoun *kau* are used in the direct speech. In the reported speech in (217)b, *aku* and *kau* become *dioʔ* and *aku*, respectively.

(217) a. siti bilaŋ, “aku biso bawaʔi kau nasiʔ
Siti say 1SG can bring-APPL 2SG cooked.rice
duo buŋkus” (JC, E)
two pack
‘Siti said, “I can bring you two packs of cooked rice.”’

[79] This utterance was uttered by a speaker from a village across the river from the City of Jambi (a neighboring village of Tanjung Raden) who had lived in the City of Jambi for more than twenty years.

b. siti bilaŋ dioʔ biso bawaʔi aku nasiʔ
Siti say 3 can bring-APPL 1SG cooked.rice
duo buŋkus (JC, E)
two pack
'Siti said that she could bring me two packs of cooked rice.'

However, if the speaker quotes what has previously been said by himself/herself, no difference is made with respect to the first person reference, whereas the second person reference becomes the third person reference in the indirect speech, as exemplified below.

(218) a. aku bilaŋ, "aku daʔ neŋoʔ kau di sano" (JC, E)
1SG say 1SG NEG ACT-look 2SG LOC there
'I said, "I didn't see you there."'

b. aku bilaŋ aku daʔ neŋoʔ dioʔ di sano (JC, E)
1SG say 1SG NEG ACT-look 2SG LOC there
'I said that I didn't see him there.'

1.1.3.2. Interrogative Sentences

Two main types of interrogative sentences are yes-no questions (section 1.1.3.2.1) and question-word questions, which I shall later refer to as *wh*-questions (section 1.1.3.2.2).

1.1.3.2.1. Yes-no Questions

A yes-no question is defined as a question for which an answer of 'yes' or 'no' is acceptable. This description of yes-no questions in Jambi Malay consists of two parts. Section 1.1.3.2.1.1 presents the description of different types of yes-no questions in Jambi Malay and section 1.1.3.2.1.2 discusses the structure of yes-no questions in Jambi Malay.

1.1.3.2.1.1. Different Types of Yes-no Questions

1.1.3.2.1.1.1. Neutral

There are three strategies for forming yes-no questions which are neutral with respect to the expected answer. What is meant by neutral is that the speaker does not have a particular expectation with respect to the answer that the interlocutor will provide.

The first strategy is to make use of a declarative sentence, but assign a different intonational contour at the end of the sentence. In a declarative sentence, the intonation employed is falling intonation whereas in a yes-no question the intonation employed is rising-falling intonation.

What I mean by "intonation" is pitch contour. In addition, I should point out that the pitch contour described here, distinguishing a declarative sentence from a yes-no question, is simply a general tendency and is based on impressionistic observation. The context in which the utterance is uttered provides a more precise picture about whether or not an utterance is a statement or a question and further study is needed to have a better picture of the intonational pattern of the langauge (see also section 3.5.2).

In a yes-no question, the final syllable is often lengthened. The rising-falling pitch shows up on the last syllable. The pitch rises on the penultimate syllable of a foot and it falls on the final syllable of the foot. (219)a is a declarative sentence and (219)b is its yes-no question counterpart. In (220)a and (220)b, the illustration of the pitch contour of (219)a and (219)b is presented.[80]

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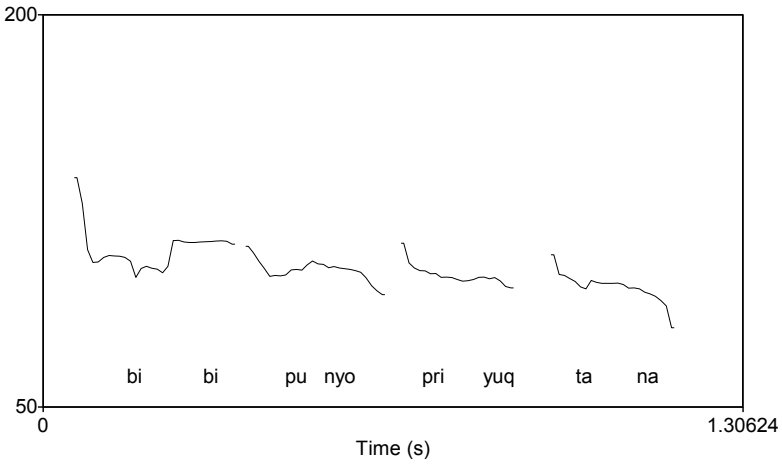
[80] The illustrations of pitch provided in this section are obtained by using a linguistic tool called *praat* which can be downloaded from http://www.fon.hum.uva.nl/praat/.

(219) a. bibi puŋo priyʊʔ tana[81] (TR, E)
aunt have pan soil
'I have a clay pot.'
[Lit. 'Aunt has a clay pot.']

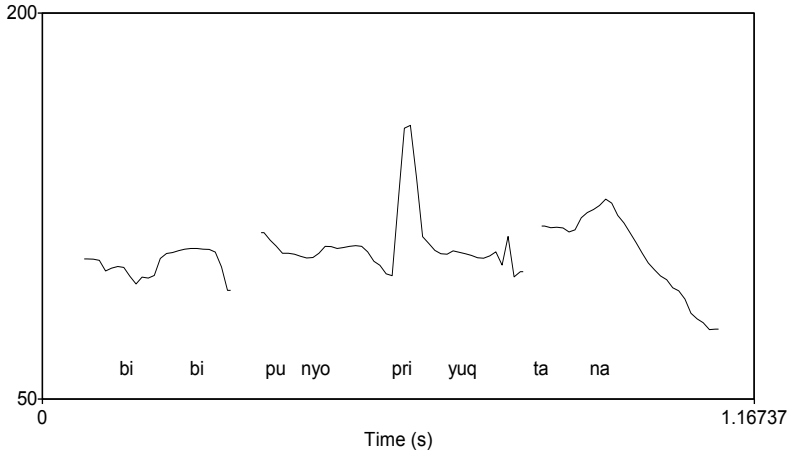
b. bibi puŋo priyʊʔ tana?
aunt have pan soil
'Do you have a clay pot?'
[Lit. 'Does Aunt have a clay pot?']

(220) a.



[81] In sections 2.1.2.1.5 and 2.1.2.1.6, I explain that kinship terms and proper names can be used to refer to first and second person references.

b.



As shown in (220)a, the pitch falls on *ta,* the first syllable of the word *tana* 'soil', and falls to even lower pitch on *na,* the last syllable of *tana* 'soil'. This falling pitch marks a statement. In (220)b, the pitch rises on *na* and it falls on the lengthened vowel of *na.* This rising-falling intonation marks a yes-no question.

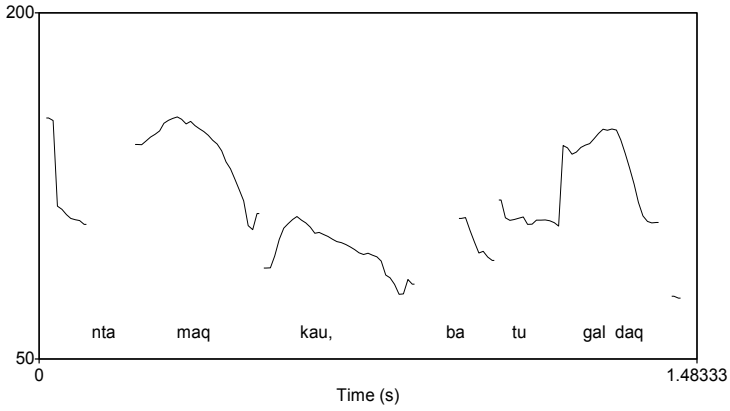
The second strategy for forming a neutral yes-no question is to use a question tag at the end of a declarative sentence. Question tags for formulating neutral yes-no questions are *daʔ* 'NEG' and *lʊm/blʊm* 'not yet'. The use of *lʊm* or *blʊm* 'not.yet' is found if the main statement is associated with the use of the perfective marker (glossed as 'PFCT'), the auxiliary *biso* 'can', and the future marker $n^{d}aʔ$ which literally means, and is therefore glossed as 'want'. The pitch of the main statement rises on the last syllable of the main clause and then it falls rather sharply on the question tag. Examples are shown in (221) and the pitch contours of sentences (221)a and (221)c are presented in (222)a and (222)b, respectively.

(221) a. nta ma? kau, batugal, da??
not.know mother 2SG INTR-dibble NEG
'[I] don't know about your mother, did she make holes using a dibble?'
[Lit. '[I don't know about your mother, did she dibble?']

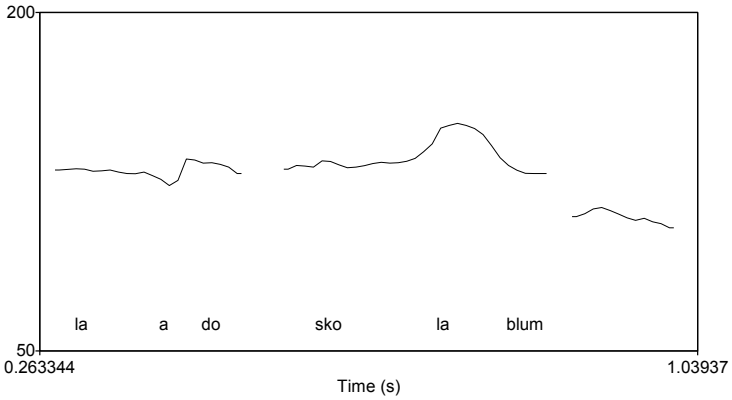
b. kau campʊr makan lim^{b}a-lim^{b}aan, daʔ?
2SG mix eat RED-waste-NMLZ NEG
'Do you mix the food with waste?'

c. la ado sakola, blʊm?
PFCT exist school not.yet
'Was there a school yet?'

(222) a.



b.



As shown in (222)a, the pitch rises rather significantly on the last syllable of the main clause, *gal* in *batugal* 'make holes', and the question tag *daʔ* 'NEG' receives a falling pitch. Likewise, in (222)b, the pitch of the last syllable of the main clause, *la* in *sakola* 'school', rises quite extremely and then it falls on the question tag *blʊm* 'not yet'.

Note that the question tag can also appear immediately after the verb, or if an auxiliary is present, it appears after the auxiliary and before the verb. In such cases, there is a little pause after the question tag. I mark the pause with a comma in the following examples.

(223) a. kau knal daʔ, dŋan bujaŋ?
2SG know NEG with Bujang
'Do you know Bujang?'

b. dioʔ biso daʔ, dataŋ isʊʔ? (TR, E)
3 can NEG come tomorrow
'Can he come tomorrow?'

Note that sentences (223)a and (223)b cannot have the meanings 'Do you not know Bujang?' and 'Can't he come tomorrow?', respectively. In order to have these translations, *daʔ* 'NEG' needs to appear before the verb, as shown below.[82]

(224) a. kau daʔ knal dŋan bujaŋ? (TR, E)
2SG NEG know with Bujang
'Don't you know Bujang?'

b. dioʔ daʔ biso dataŋ isʊʔ? (TR, E)
3 NEG can come tomorrow
'Can't he come tomorrow?'

The third strategy for forming neutral yes-no questions is to use the question marker *apo* 'Q'. Note that *apo* has three meanings in Jambi Malay. First, *apo* is simply a *wh*-question word for questioning a non-human entity and is translated as 'what' (see section 1.1.3.2.2). Second, *apo* is a conjunction which corresponds to English 'or' (see section 1.3.1.3). Third, *apo* can appear in the initial position of a yes-

[82] This is only true for the Tanjung Raden and Jambi City dialects because the position of negation/auxiliary in the Mudung Darat dialect is quite free (cf. sections 1.1.1.1.1 and 1.1.1.1.3.3). See also section 1.4 in which a description of negation is presented.

no question and is glossed as 'Q'. In section 1.1.3.2.1.2, I show that there are two types of *apo* in yes-no questions. Examples follow.

(225) a. apo oraŋ bsaʔ jugo?
Q person big also
'Was he also a rich man?'
[Lit. 'Was he also a big man?']

b. apo itɪʔ bntɪ baŋaʔ?
Q duck EPIT a.lot
'Do you have many ducks?'
[Lit. 'Are your ducks many?']

1.1.3.2.1.1.2. Expecting a Yes Answer

In a yes-no question that expects a 'yes' answer, the speaker expects the interlocutor to agree with the information/opinion/idea expressed in the question. Question tags can also be used to formulate yes-no questions that expect a 'yes' answer from the interlocutor. These question tags include *yo* 'yes', *yo daʔ* 'right' [Lit. 'yes NEG'], *edaʔ* 'Q', *kan* 'Q', *ɲoʔ* 'not', *ŋᵍɪ* 'yes', and *daʔ* 'NEG'.[83] Different pitch contours, namely falling pitch, rising, and rising-falling pitch, are used if different question tags are employed. The falling pitch is used if the *yo* 'yes' question tag is used. If *ŋᵍɪ* 'yes', *kan* 'Q', and *daʔ* 'NEG' are used, rising pitch is employed.[84] For *ɲoʔ* 'not', *yo daʔ* 'right', *edaʔ* 'Q', the rising-falling pitch is used. Examples including

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[83] *ŋᵍɪ* 'yes' is an honorific term for 'yes', only found in the Tanjung Raden dialect and a dialect spoken in its neighboring village called Tanjung Pasir. *Kan* originates from the nominal negator *bukan* (see section 1.4). *ɲoʔ* is also a nominal negator and its full form is *kɲoʔ* (see section 1.4.1.1).

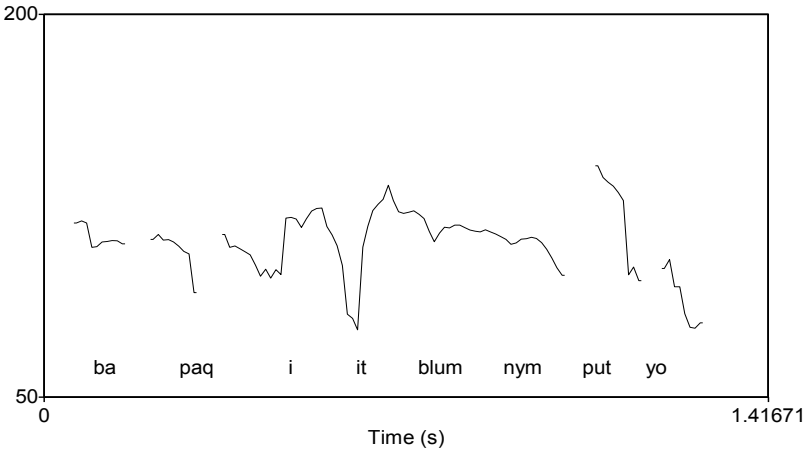
[84] Note that the speaker often employs *kan* 'Q' without expecting an answer from the interlocutor. In this case the speaker is very positive about what he/she is saying and does not expect a confirmation or an answer from the interlocutor.

pitch contours are presented below. Note that I only provide the pitch intonation of one example for each question tag.

(226) *Yo* 'Yes'

a. bapaʔ ɪit blʊm ɲʲmpʊt, yo?
father Iit not.yet ACT-pick.up yes
'Your father hasn't picked you up, right?'
[Lit. 'Iit's father hasn't picked [Iit] up, right?']

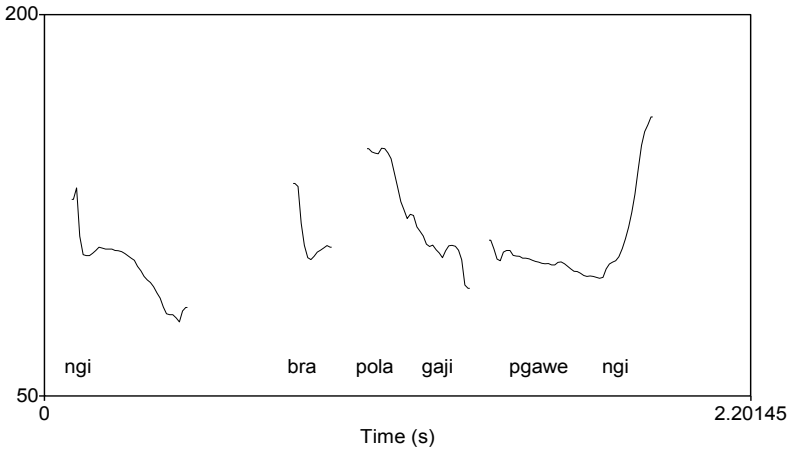
b.



(227) *ŋᵍɪ* 'Yes'

a. ŋᵍɪ, brapo-la gaji pgawai, ŋᵍɪ?
yes how.much-EMPH salary employee yes
'That's right, how much money can an employee make, right?'
[Lit. 'Right, how much is an employee's salary, right?']

b.



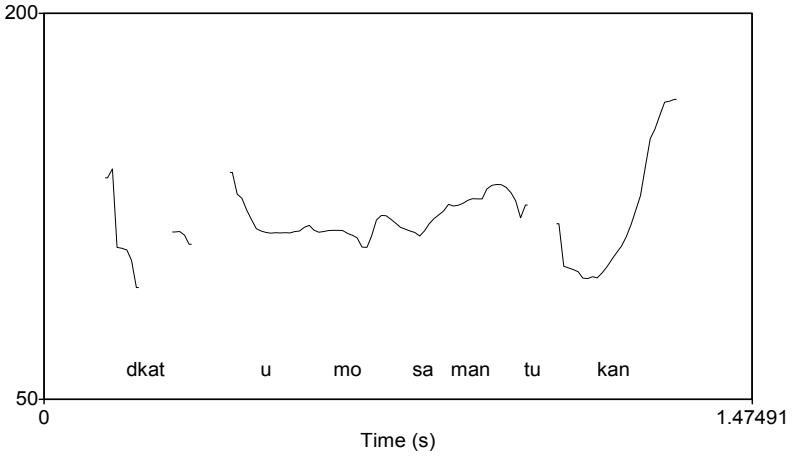
c. kalu ikan ruan kato-ɲo asal.muasal-e
TOP fish cork.fish word-3 origin-3
dari ular, ŋ^{g}ɪ?
from snake yes
'Cork fish were originally from snakes, right?'

(228) *Kan* 'Q'

a. oraŋ kan neŋoʔ kasian, kanʔ
person EMPH ACT-look pity Q
'When people saw him, they pitied him, right?'

b. dkat umo saman-tu, kanʔ
near paddy Saman-DEM.DIST Q
'It is close to Saman's paddy, isn't it?'

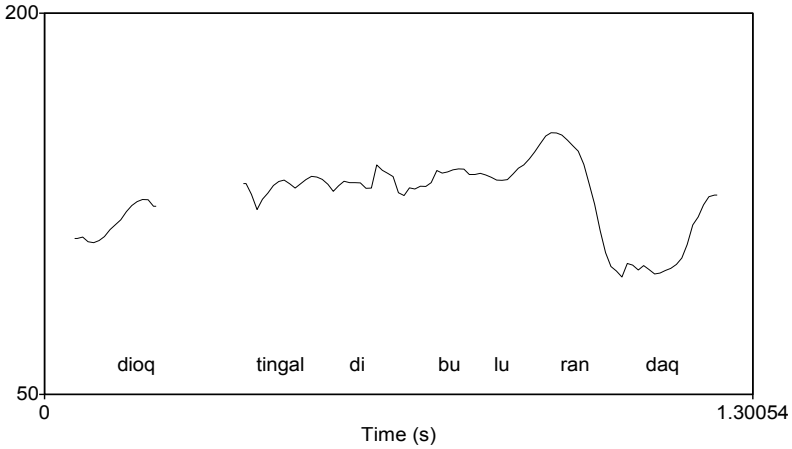
c.



(229) *Daʔ* 'NEG'

a. dioʔ tiŋ^{g}al di bʊlʊran, daʔ?
3 stay LOC Buluran NEG
'She lives in Buluran, doesn't she?'

b.

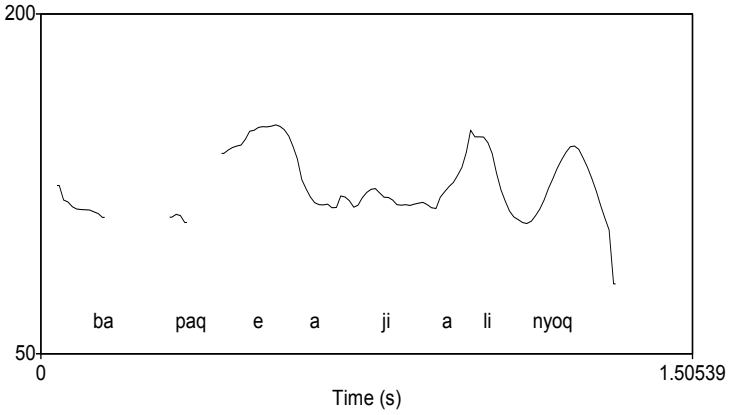


c. ado jalo taŋsi kamu-tu, daʔ?
exist casting.net k.o.rope 2-DEM.DIST NEG
'You have a casting net made of plastic rope, don't you?'

(230) *ɲoʔ* 'Not'

a. bapaʔ-e aji ali, ɲoʔ?
father-3 Hajj Ali not
'Is his father Hajj Ali?'

b.

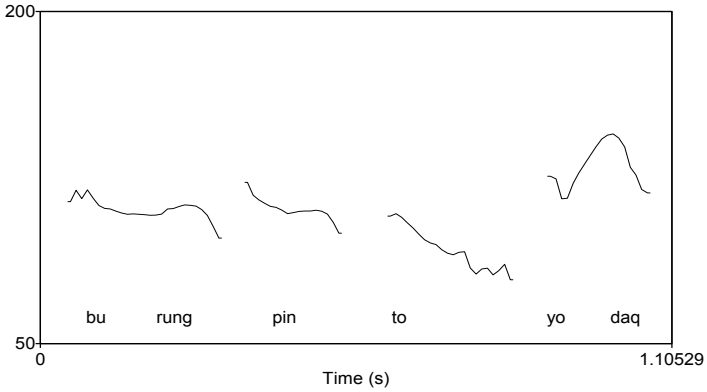


c. abaŋ kau plisi, ɲoʔ? (TR, E)
older.brother 2 police not
'Is your brother a police officer?'

(231) *Yo daʔ* 'Yes NEG'

a. bʊrʊŋ pinto, yo daʔ?
bird Pinto yes NEG
'The birds are Pinto, aren't they?'

b.

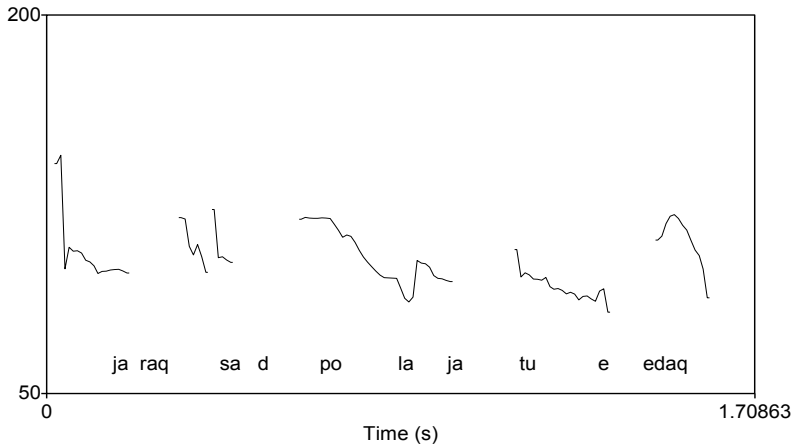


c. kalo am^{b}ʊt tta? pasa, elo?, yo da?? (MD, N)
if hair cut market beautiful yes NEG
'Our hair will look nice if we have it cut at a salon at the market.'
[Lit. 'If [we] cut [our] hair at the market, it will be beautiful, right?']

(232) *Eda?* 'NEG'

a. jara? sadpo-la jatʊ-e, eda??
distance one-cubit-EMPH fall-3 Q
'It's about one cubit, right?'
[one cubit is two meters and a half]

b.



c. tapi buda?-tu la pade?, eda??
but kid-DEM.DIST PFCT clever Q
'But, they are good, aren't they?'
[Lit. 'But, they are clever [in helping their parents], aren't they?']

1.1.3.2.1.1.3. Expecting a No Answer

There is no yes-no question contruction where the interlocutor is expected to disagree with what the speaker is saying. Any of the question types above can receive a negative response, but there are no dedicated questions that lead to a 'no' answer. Possible answers that the interlocutor may provide are discussed in section 1.1.3.3.

There are questions in which the speaker makes a negative statement and he/she expects the interlocutor to confirm the statement that he or she is making. For this type of question, different question tags may be employed, namely *kan* 'Q', *yo* 'yes', *eda?* 'Q', *yo da?* 'right', *ŋᵍɪ* 'yes', and *ɲo?* 'not'. The interlocutor can certainly respond to the question with a negative response if he/she does not agree with the statement. In addition to these question tags, the question marker *apo* 'Q' can also be employed; however, if the question marker *apo* 'Q' is used, the speaker does not have any expectation with respect to the response from the interlocutor. Examples of different yes-no questions which contain a negative statement followed by a question tag are provided below.

(233) *Kan* 'Q'

ʊpɪʔ	daʔ	mᵇawaʔ	buku-e,	kan?	(TR, E)
Upik	NEG	ACT-bring	book-3	Q	

'Upik did not bring the book, did she?'

(234) *Yo* 'Yes'

edi	daʔ	dataŋ,	yo?	(TR, E)
Edi	NEG	come	yes	

'Edi didn't come, did he?'

(235) *Eda?* 'Q'

edi	ɲoʔ	guru,	eda??	(TR, E)
Edi	not	teacher	Q	

'Edi is not a teacher, is he?'

(236) *Yo Da?* 'Right'

ita	blʊm	ŋamᵇɪʔ	maŋkʊʔ-e,	yo	daʔ?	(TR, E)
Ita	not.yet	ACT-take	bowl-3	yes	NEG	

'Ita has not taken the bowl, has she?'

(237) *Ɲᵍɪ* 'Yes'

ani	daʔdo	pgi	ka sano,	ŋᵍɪ?	(TR, E)
Ani	NEG.exist	go	to there	yes	

'Ani did not go there, did she?'

(238) *ɲoʔ* 'Not'

paʔ kau ɲoʔ plisi, ɲoʔ? (TR, E)
TRU-father 2SG not police not
'Your father is not a police officer, is he?'

(239) *Apo* 'Q'

apo brahɪm blʊm masʊʔi baraŋ-e? (TR, E)
Q Ibrahim not.yet go.in-APPL thing-3
'Has he not put the thing in?'

1.1.3.2.1.1.4. Alternative

Alternative yes-no questions are like neutral yes-no questions in that the speaker does not have a particular expectation with regard to the answer that the interlocutor will provide. Alternative yes-no questions consist of two parts: the first part is the statement and the second part is the alternative using a conjunction *apo* which literally means 'or' and is followed by a negative marker, such as *daʔ* 'NEG', *lʊm/blʊm* 'not yet', and *ɲoʔ* 'not' (see section 1.1.3.2.1.2 in which I argue that *apo* in alternative questions is a conjunction). Examples are provided below.

(240) *Apo Daʔ* 'or NEG'

a. ado nla sakolaan-e dulu, apo daʔ?
exist indeed school-NMLZ-3 before or NEG
'Was there indeed a school before, or not?'

b. dulu nika-e-tu dijodoi,
before get.married-3-DEM.DIST PASS-partner-APPL
apo daʔ? (MD, N)
or NEG
'When you got married, was it an arranged married, or not?'

(241) *Apo Blʊm/lʊm* 'or Not Yet'

a. eko n^{d}aʔ baraŋkat, apo lʊm?
Eko want leave.for or not.yet
'Does Eko want to leave, or doesn't he?'

b. siti la makan, apo blʊm? (TR, E)
Siti PFCT eat or not.yet
'Has Siti eaten yet, or not?'

c. kau la batmu dioʔ, apo lʊm? (TR, E)
2 PFCT INTR-meet 3 or not.yet
'Have you met him yet, or not?'

(242) *Apo ɲoʔ* 'Or Not'

mᵇoʔ kau parawat apo ɲoʔ? (TR, E)
older.sister 2SG AGT-take.care or not?
'Is your mother a doctor, or not?'

In (240) through (242), the yes-no questions consist of two parts. The first part is the statement and the second part contains *apo* followed by negation.

Note that the statement in alternative yes-no questions is generally affirmative. Most speakers rejected examples in which the statement was a negative statement. Thus, native speakers prefer the sentences in (244) over those in (243). Some speakers strongly rejected the sentences in (243).

(243) a. */?dioʔ blʊm biso jalan, apo la?[85] (TR, E)
3 not.yet can walk or PFCT
'He hasn't been able to walk, has he?'

b. */?kau daʔ masaŋ-ko, apo yo? (TR, E)
2SG NEG ACT-set-DEM.DIST or yes
'You didn't set this up, did you?'

(244) a. dioʔ la biso jalan, apo lʊm? (TR, E)
3 PFCT can walk or not.yet
'He has been able to walk, hasn't he?'

b. kau masaŋ-ko, apo daʔ? (TR, E)
2SG ACT-set-DEM.DIST or NEG
'You set it up, didn't you?'

[85] */? indicates that most speakers rejected the sentence and some speakers did not like it but still accepted it.

To conclude section 1.1.3.2.1.1, I have described three types of yes-no questions in Jambi Malay, namely neutral, leading 'yes' answers, and alternative questions. I have also mentioned that there is no type of yes-no question which leads to an oblgatory 'no' answer. However, there are yes-no questions which contain a negative statement. In addition to different types of yes-no questions, I have also described four different strategies for forming yes-no questions. The first strategy is by assigning different pitch contour to a statement. The second strategy is by employing a tag question, such as *yo* 'yes', *da?* 'NEG', *kan* 'Q', *eda?* 'Q' and *lʊm* 'not.yet' after a statement. The third strategy is by using a question marker *apo* 'Q' at the beginning of a statement. The fourth strategy is by forming an alternative using the conjunction *apo* 'or' followed by a negative marker, such as *da?* 'NEG' and *lʊm* 'not yet'.

1.1.3.2.1.2. The Structure of Yes-no Questions in Jambi Malay

In discussing the syntax of Jambi Malay yes-no questions, I only focus on two strategies for forming yes-no questions, i.e. the one which employs *apo* at the beginning of the question and the one which employs *apo* followed by a negative marker after the main utterance. Particularly, I shall examine whether *apo* in both strategies represents a single element and claim that there are two types of *apo* yes-no questions. I have indicated that these two types of *apo* are different in the glossing.

Examples presented earlier of yes-no questions with *apo* at the beginning of the question and those with *apo* followed by a negative marker at the end of the question are repeated below.

(245) *Apo* 'Q'

a. apo oraŋ bsaʔ jugo?
Q person big also
'Was he also a rich man?'
[Lit. 'Was he also a big man?']

b. apo itɪʔ bntɪ baŋaʔ
Q duck EPIT a.lot
'Do you have many ducks?'
['Lit. 'Are your ducks many?']

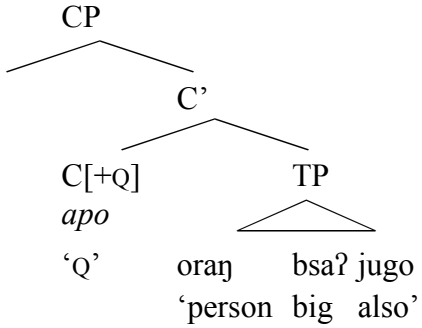
(246) *Apo Daʔ* 'or NEG'/ *Apo Lʊm* 'or Not Yet'

a. ado nla sakolaan-e dulu, apo daʔ?
exist indeed school-NMLZ-3 before or NEG
'Was there indeed a school, or not?'

b. eko n^{d}aʔ baraŋkat, apo lʊmʔ
Eko want leave.for or not.yet
'Is Eko going to leave soon, or not yet?'

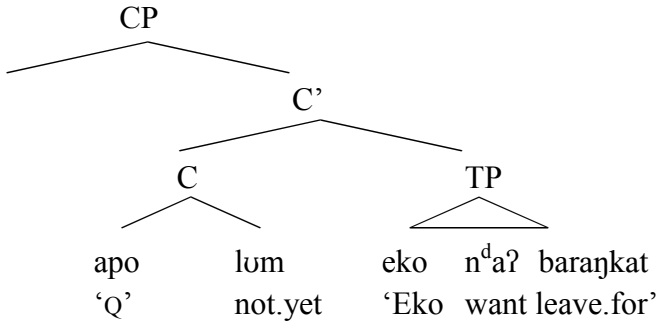
One possible analysis to account for the data in both (245) and (246) is to propose that *apo* is a question marker which is generated under C. The following structure shows the structure of sentence (245)a.

(247)

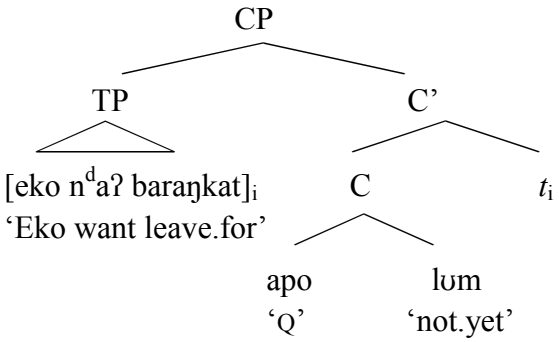


Furthermore, in order to derive sentences like those in (246), the negative marker simply adjoins to C and to derive the word order in (246), the TP moves to the spec of CP, as illustrated in (248) below.

(248) a.



b.



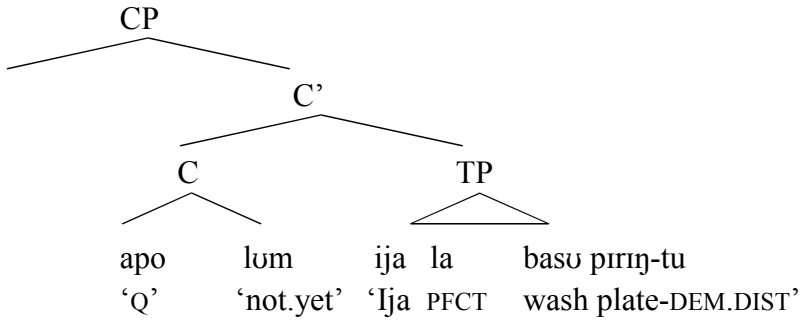
The structure in (248)a is the base-generated structure for sentence (246)b and in (248)b the entire TP has moved to the spec of CP to derive the order in (246)b.

However, there are two problems if the derivations in (247) (the same derivation in (248)a) and (248)b are adopted. The first problem is that it is unclear why the TP in (247) does not move and the one in (248) needs to move. In addition, it is also unclear what forces the TP to move to yield (248)b.

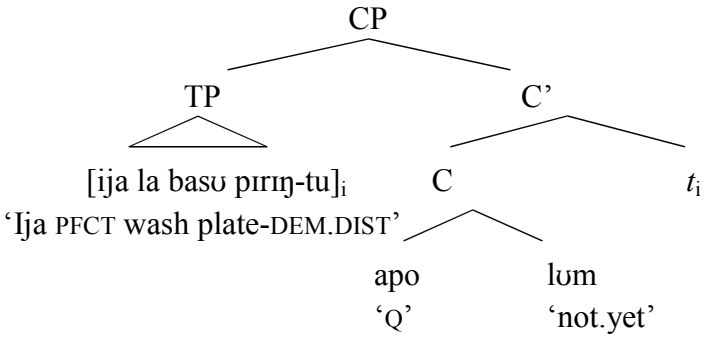
A second problem occurs if the derivations in (248) are used to account for yes-no questions such as the one in (249). The statement of the yes-no question in (249) has the structure of object fronting (cf. sections 1.1.1.2 and 1.1.1.4). Deriving sentence (249) using the structure in (248) can be shown in (250).

(249) pɪrɪŋ-tu ija la basʊ, apo lʊm? (TR, E)
plate-DEM.DIST Ija PFCT wash or not.yet
'Has Ija washed the plates?'

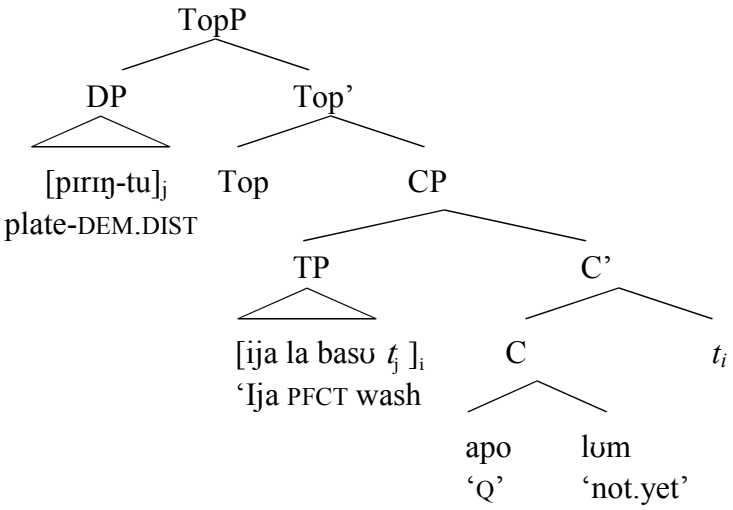
(250) a. Based-generated Position



b. TP Moves



c. Topicalization

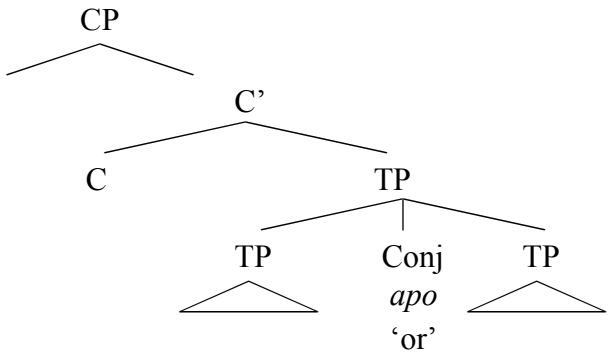


(250)a shows the base-generated structure for sentence (249). In (250)b, the entire TP moves to the spec of CP (following the derivation suggested in (248)) and in (250)c, the direct object DP *pɪrɪŋ-tu* 'the plate' inside the moved TP moves to the spec of the topic phrase. In other words, the direct object *pɪrɪŋ-tu* 'the plates' in (249) moves to

sentence-initial position due to object fronting (presumably topicalization) (cf. section 1.1.1.4). However, if the entire TP *pɾɪŋ-tu ija la basʊ* 'Ija has washed the plates' moved to the specifier of CP, further extraction of *pɾɪŋ-tu* 'the plates' is predicted to be impossible. The moved element would be expected to be subject to freezing effects, since it is a widely held assumption that an element from a moved constituent cannot further topicalize out of that constituent (among others: Ross, 1967; Wexler and Culicover (1980); Müller, 1998). However, this prediction is not borne out because sentence (249) is perfectly grammatical.

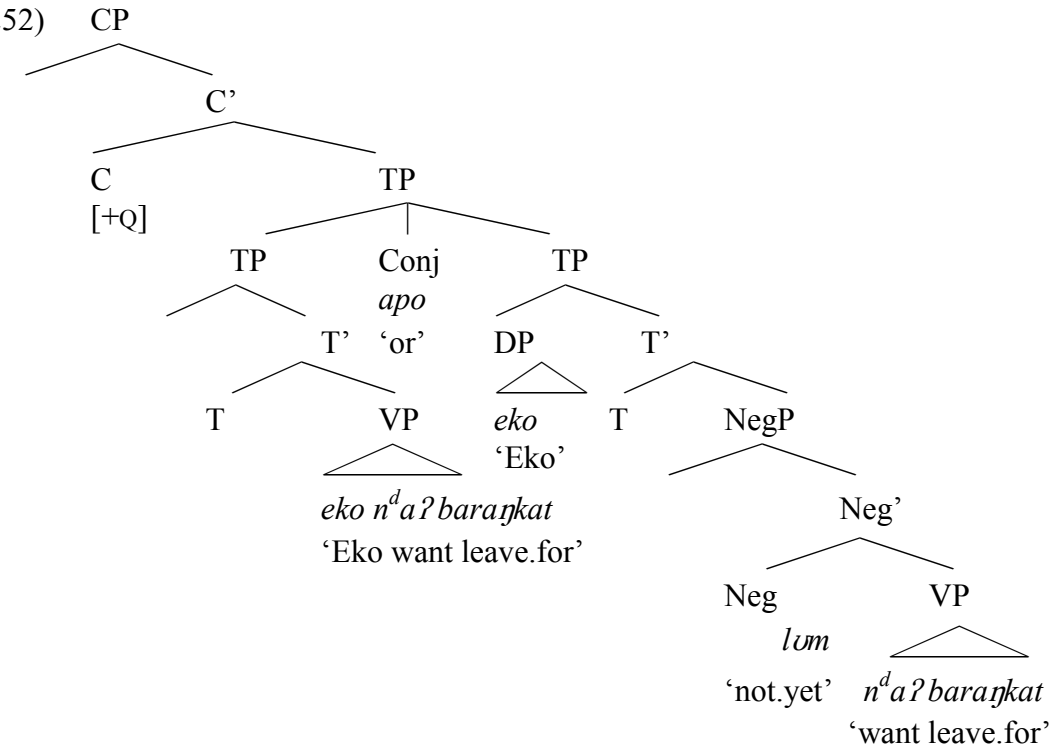
An alternative hypothesis is to claim that *apo* in (245) and *apo* in (246) are generated in different positions. *Apo* 'Q' in a clause-initial yes-no question, as exemplified in (245) could then be generated under C, whereas *apo* in (246) can be analyzed as a conjunction which links two TPs, as shown in (251).

(251)



Thus, the base structure for sentence (246)b, for example, would be as illustrated below.

(252)



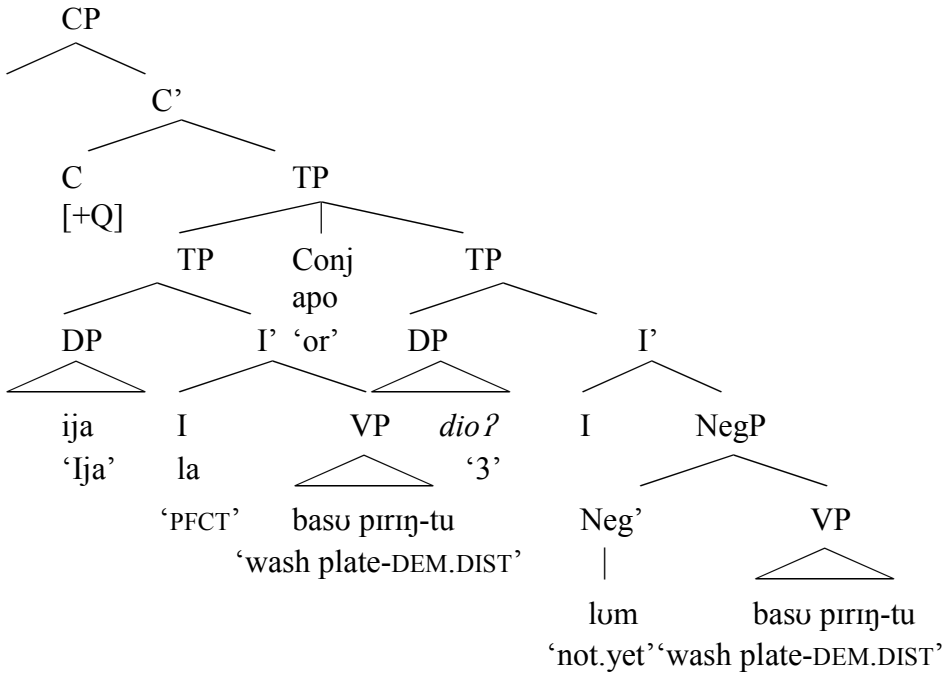
As shown in (252), the base-generated structure for sentence (246)b is *eko n^{d}a? baraŋkat apo eko lʊm n^{d}a? baraŋkat* 'Eko is going to leave or Eko is not going to leave yet'. The first VP of the second clause is omitted under identity (see section 1.3.5) and the subject DP of the second clause is omitted (possibly due to subject drop). Thus, the surface representation is *eko n^{d}a? baraŋkat apo lʊm* and since C contains the [+Q] feature, the sentence is a yes-no question. Thus, this alternative hypothesis correctly derives sentences like those in (246).[86]

In addition, this hypothesis is also able to account for sentence (249), repeated in (253), as illustrated in (254) below.

[86] The question feature [+Q] gives the yes-no meaning and nothing moves to that position to satisfy the feature (just as in sentences in which the intonation alone gives the yes-no meaning).

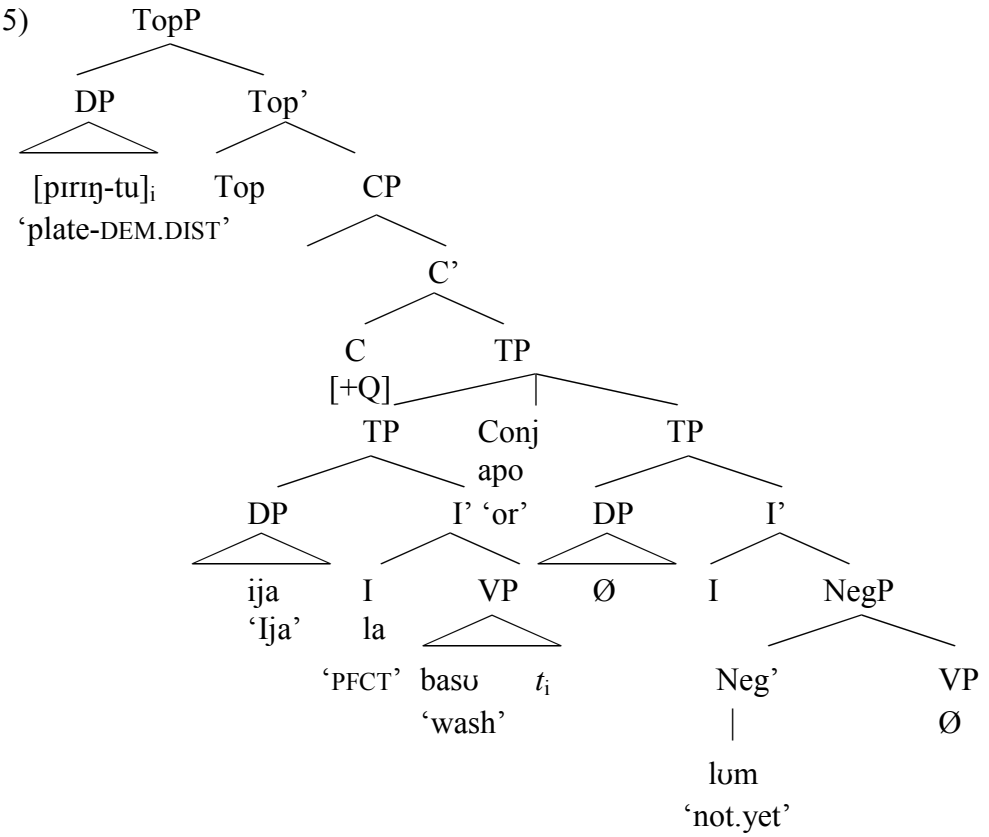
(253) pɪrɪŋ-tu ija la basʊ, apo lʊm? (TR, E)
plate-DEM.DIST Ija PFCT wash or not.yet
'Has Ija washed the plates?'

(254)



As shown in (254), sentence (253) consists of the clause *ija la basʊ pɪrɪŋ-tu* 'Ija has washed the plates', followed by a conjunction *apo* 'or', and followed by another clause *ija lʊm basʊ pɪrɪŋ-tu* 'Ija has not washed the plates'. Then, this structure undergoes two omission processes. The first omission is the pro-drop of *dio?* 'she' and the second omission is the omission of the VP *basʊ pɪrɪŋ-tu* 'wash the plates'; under indentity. Therefore, the sentence is left with *ija la basʊ pɪrɪŋ-tu apo lʊm* and the question marker in C marks the sentence as a yes-no question. Finally, in sentence (253), the object of the sentence is fronted for topicalization reasons. Thus, the surface structure of (253) is the one below.

(255)



As shown in (255), object extraction to the topic position is allowed as it is an extraction from a TP that does not undergo movement. Thus, the hypothesis that claims that *apo* in (245) and *apo* in (246) are in different projection predicts that sentence (253) is grammatical and this prediction is borne out.

The suggested derivation in (255), however, may be problematic. Three issues can be addressed regarding this derivation. The first issue is how the question feature is checked. The second issue is related to pro-drop of the subject of the second clause. The last issue is related to the coordinate structure constraint.

Regarding how the question feature is checked, I assume that C in both types of yes-no questions (the one with *apo* in initial position and the one with *apo* as a conjunction) has the question feature. The difference between the two is the

expression of *apo.* In yes-no questions which have an initial *apo*, the feature is expressed overtly by *apo*, whereas in alternative yes-no questions, the question feature is not expressed overtly. For both types of yes-no questions, the feature in C makes the structure a question.

The second issue is related to pro-drop in alternative yes-no question in which *apo* is a conjunction. I have claimed that the subject of the second clause in (252) and in (254) undergoes pro-drop. A problem for this derivation is that in general pro-drop in Jambi Malay is not obligatory (see section 1.1.1.1.1). In (252) and in (254), pro-drop is obligatory because an overt NP or pronoun is not allowed to be present. To resolve the problem, let us observe English tag questions below.

(256) a. This plate, Mary has washed many times, hasn't she?

b. *This plate, Mary has washed many times, hasn't Mary?

c. *This plate, Mary has washed many times, hasn't?

As shown in (256)a, English tag questions need a pronoun. (256)b shows that only a pronoun can be in the tag part of English tag questions because if an overt NP instead of a pronoun is present, the sentence is ungrammatical. (256)c indicates that the pronoun is obligatory, and thus, it cannot be omitted.

Therefore, I assume that alternative yes-no questions in Jambi Malay are like tag questions in English. Just as English requires a pronoun to be present in tag questions, pro-drop in structures like (252) and (254) is obligatory in Jambi Malay. So, while English tag questions require a pronoun, alternative questions in Jambi Malay require pro-drop since Jambi Malay is a pro drop language in general.In other words, alternative questions (tag questions) can impose additional requirements on whether

the subject of the second conjunct is a pronoun (English) or a null pronoun (Jambi Malay).

The third issue regarding the hypothesis is related to the coordinate structure constraint (Ross, 1967). According to the Coordinate Structure Constraint (CSC), no element contained in a conjunct can be moved out of the conjunct. Due to this constraint, the structure in (255) is supposed to be ungrammatical because *pɪrɪŋ-tu* 'the plates' is generated in a conjunct structure and moving the NP to topic position would be a violation of the CSC. However, following Ross (1967), I treat the movement of *pɪrɪŋ-tu* 'the plates' in (255) as a kind of 'Across-the-Board' movement. According to Ross (1967), the CSC does not apply if the same constituent is moved out of each conjunct in a coordinate structure, as the following example is grammatical.

(257) This plate$_i$ [Mary likes e$_i$] and [Peter dislikes e$_i$]

Therefore, as for the structure in (255), I assume that the NP *pɪrɪŋ-tu* 'the plates' from both conjucts moves to the topic position before the VP in the second conjunct is deleted.

To conclude, I have argued that *apo* in yes-no questions is of two types. The first type is a question marker which is generated under C. *Apo* which is generated under C surfaces at the beginning of the yes-no question. The second type of *apo* is a conjunction marker. This type of *apo* appears after the statement and is followed by negation.

1.1.3.2.2. Question-word Questions

Question-word questions are questions in which answers need to be more informative than just a 'yes' or a 'no' answer. The main question-phrases are those

corresponding to the English *wh*-phrases, as shown in (258) below. For presentation purposes, I shall use the term *wh*-questions to refer to question-word questions and *wh*-phrases to refer to the question phrases.

(258)	*sapo / siapo*	'who'
	apo	'what'
	mano	'which'
	kapan/bilo[87]	'when'
	bɪapo/bapo/pintan[88]	'how much'
	ŋapo/knapo	'why'

Compound *wh*-phrases are shown below in (259):

(259)	*macam mano/maʔano*	'how'
	yaŋ/naŋ mano	'REL-which' ('which one')
	di mano	'LOC which' ('where')
	dari mano	'from which' ('whence')
	ka mano	'to where '
	samo/dŋan siapo	'with whom'
	pake apo	'use what' ('with what' or 'using what')

The compound *wh*-phrases in (259) are not memorized forms; instead, they are compositional. Each compound *wh*-phrase consists of a basic *wh*-word and a preposition preceding it, except for *yaŋ/naŋ mano* which consists of a relativizer *yaŋ/naŋ* 'REL' and the question word *mano* 'which'.

In Jambi Malay, all elements, except for the verb of a sentence can be questioned using *wh*-phrases. I shall return to this in section 1.1.3.2.2.1.1.1. With

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[87] No examples of the use of *bilo* are found in the naturalistic data. However, in elicitation, some speakers came up with this item and claimed that *bilo* is an old word for 'when', but now people mostly use *kapan*. This is also true in the city. People under the age of 50 barely use *bilo*, but people from older generations still make use of *bilo* when they ask a question for getting information about time.

[88] *Pintan* is an honorific term for asking about quantity, only found in Tanjung Raden and Tanjung Pasir, a neighboring village.

respect to how *wh*-questions are formed, Jambi Malay allows several types of *wh*-questions, namely *wh*- in situ, fronted *wh*-, and *wh*-questions with the relativizer *yaŋ/naŋ*. I shall later claim that *wh*-questions with *yaŋ/naŋ* are cleft questions in section 1.1.3.2.2.2.4.

In what follows, I first describe the elements that can be questioned in different constructions: in simple clauses (section 1.1.3.2.2.1.1), in complement clauses (section 1.1.3.2.2.1.2), in noun phrases (section 1.1.3.2.2.1.3), in prepositional phrases (section 1.1.3.2.2.1.4), and in coordinate structures (section 1.1.3.2.2.1.5). In section 1.1.3.2.2.1.6, I describe sentences with more than one question phrase. In each construction, I shall also describe different possible strategies for forming *wh*-questions questioning different element. In section 1.1.3.2.2.2, I provide a theoretical analysis of the different strategies for forming *wh*-questions in Jambi Malay.

1.1.3.2.2.1. Elements of the Sentence that can be Questioned

1.1.3.2.2.1.1. The Simple Clause

In this section, I shall first show elements that can be questioned in simple clauses. Then, I shall show possible strategies for forming *wh*-questions. It should be noted that in discussing the possible strategies for forming *wh*-questions, I first merely describe the facts and provide no analysis. The analysis of different *wh*-question strategies is presented later, in section 1.1.3.2.2.2.

1.1.3.2.2.1.1.1. Questioning the Elements of the Simple Clause

All elements of the simple clause can be questioned. To question a non-verbal element, a *wh*-phrase is employed (examples are provided in (260) through (270)). To question the verb of a sentence, Jambi Malay speakers employ two

strategies. The first strategy is to use the phrase *apo gawe* which literally means 'what work' and the second one is to convert the *wh*-form *apo* 'what' into a verb by adding a nasal prefix and the suffix *–i* to it, as in examples (271) and (272) (a description of suffix *–i* is presented in section 2.2.1.2.2). Note that although the *wh*-phrase in most examples provided in (260) to (270) remains in situ, other possible strategies are available. Different strategies for forming *wh*- questions in simple clauses are described later in section 1.1.3.2.2.1.1.2.

(260) Questioning the Subject of an Active Sentence

a. siapo mᵇli-e?
who ACT-buy-3
'Who bought it?'

b. siapo-la mᵇagi makan?
who-EMPH ACT-give eat
'Who fed [them]?'

(261) Questioning the Subject of a Passive Sentence[89]

a. siapo ditrajaŋ ʊsɪn (TR, E)
who PASS-kick Husin
'Who was kicked by Husin?'

b. apo diamᵇɪʔ ka darat?
what PASS-take to land
'What did [you] take to the landside?'

(262) Questioning the Subject of an Object Voice Sentence[90]

a. apo la dioʔ baco? (TR, E)
what PFCT 3 read
'What has been read by him?'

b. siapo la dioʔ jmpʊt? (TR, E)
who PFCT 3 pick.up
'Who has been picked up by him?'

[89] See section 1.1.1.1.2 for a detailed discussion on passive voice.

[90] See section 1.1.1.1.3 for a detailed discussion on object voice.

(263) Questioning a Direct Object

a. kau mᵇagɪ dioʔ apo? (TR, E)
2SG ACT-give 3 what
'What did you give him?'

b. dioʔ nembaʔ, nembaʔ apo?
3 ACT-shoot ACT-shoot what
'He shot, what did he shoot?'

c. ɲʲmpʊt siapo?
ACT-pick.up who
'Whom are [they] going to pick up?'

(264) Questioning an Indirect Object

a. NP Indirect Object
kau mᵇagɪ siapo kuɪ-tu? (TR, E)
2SG ACT-give who cake-DEM.DIST
'Whom did you give the cake to?'

b. PP Indirect Object
kau mᵇagɪ kuɪ-tu ka siapo? (TR, E)
2SG ACT-give cake-DEM.DIST to who
'Whom did you give the cake to?'

(265) Questioning an Adverb of Time

kapan kau naeʔ-e?
when 2SG go.up-3
'When did you perform?'
[Lit. 'When did you go up?']

(266) Questioning an Adverb of Place

dioʔ masaŋ di mano?
3 ACT-set LOC which
'Where did he set [it] up?'

(267) Questioning an Adverb of Reason

ŋapo kau makan daʔ laʊʔ aku? (MD, N)
why 2SG eat NEG side.dish 1SG
'Why didn't you eat my side dish?'

(268) Questioning an Adverb of Means and Manner

macam mano ŋam^{b}ɪʔ-e, tʊʔ?
sort which ACT-take-3 TRU-grandfather
'How did you take it, Grandpa?'

(269) Questioning Quantity

kito batanaʔ-ko barapo?
1 INTR-cook.rice-DEM.PROX how.much
'How much rice will we cook?'

(270) Questioning an Element of an Non-verbal Sentence

a. apo sakit-e?
what sick-3
'What is her sickness?'

b. bini-e, siapo namo-e?
wife-3 who name-3
'His wife, what is her name?'

c. siapo namo bapaʔ abaŋ leman-tu?
who name father older.brother TRU -Sulaiman-DEM.DIST
'What is Sulaiman's father's name?'

(271) Questioning a Verb using *Apo Gawe* 'What Work'

a. biaso suda masaʔ niki, apo gawe bibi?
usual finish cook DEM.PROX what work aunt
'What do you usually do after cooking?'

b. apo gawe siti pagi tadi di suŋe-tu? (TR, E)
what work Siti morning earlier LOC river-DEM.DIST
'What did Siti do at the river this morning?'
[Lit. 'What was Siti's activity at the river this morning?']

(272) Questioning a Verb using *ŋapoi*

siti ŋapoi di toko ali dŋat-tu? (TR, E)
Siti ACT-what-APPL LOC shop Ali moment-DEM.DIST
'What did Siti do at Ali's store yesterday?'

1.1.3.2.2.1.1.2. Strategies to Form *Wh*-questions in the Main Clause

In discussing strategies to form *wh*-questions, I distinguish between argument *wh*-questions and adjunct *wh*-questions.

1.1.3.2.2.1.1.2.1. Argument *Wh*-phrases

Arguments of a sentence include the subject of an active sentence, the subject of a passive sentence, the subject of an object voice sentence, the subject of a non-verbal sentence, the direct object of an active sentence, the indirect object of an active sentence, and the agent of the object voice.[91] In what follows, I shall go through each argument and present possible strategies for questioning it.

Subject of an Active Sentence

The subject of an active sentence can be questioned using two strategies: *wh*-in situ or *wh*-phrase followed by *yaŋ*/*naŋ* 'REL'. If the *wh*-in-situ strategy is used, the subject of the sentence is simply replaced by a *wh*-phrase (*siapo* 'who' or *apo* 'what'). Examples follow.

(273) a. Statement

maʔ	m^blo	ɪtɪʔ-tu	(TR, E)
mother	ACT-keep	duck-DEM.DIST	

'Mother raises the ducks.'

b. *Wh*- in Situ

siapo	m^blo	ɪtɪʔ-tu?	(TR, E)
who	ACT-keep	duck-DEM.DIST	

'Who raises the ducks?'

c. *Wh*-phrase with *Yaŋ*

siapo	yaŋ	m^blo	ɪtɪʔ-tu?	(TR, E)
who	REL	ACT-keep	duck-DEM.DIST	

'Who is it that raises the ducks?'

The *wh*-phrase *siapo* 'who' in (273)b is substituted for the subject of its declarative counterpart in (273)a. The question in (273)c is formulated using the *wh*-phrase followed by *yaŋ* strategy.

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[91] See sections 1.1.1.1.2 and 1.1.1.1.3 for a detailed discussion on passive voice and object voice.

Subject of a Passive Sentence

Similar to the subject of an active sentence, the subject of a passive sentence can be questioned using two strategies: *wh*-in situ or a *wh*-phrase with the relativizer *yaŋ/naŋ*, as shown in (274)b and (274)c below.

(274) a. Statement

buku-e dibawaʔ (buat) tono (TR, E)
book-3 PASS-bring by Tono
'The book was brought by Tono.'

b. *Wh*- in Situ

apo dibawaʔ (buat) tono? (TR, E)
what PASS-bring by Tono
'What was brought by Tono?'

c. *Wh*-phrase with *Yaŋ*

apo yaŋ dibawaʔ (buat) tono? (TR, E)
who REL PASS-bring by Tono
'What is it that was brought by Tono?'

The question in (274)b is forumulated using the *wh*-in-situ strategy as the *wh*-word *apo* 'what' is substituted for the subject of its declarative counterpart, *buku-e* 'the book'. In (274)c, the *wh*-question is formulated using the *wh*-phrase *apo* 'what' followed by *yaŋ*.

Subject of an Object Voice Sentence

Similar to the subject of an active sentence and of a passive sentence, the subject of an object voice sentence can be questioned using two strategies, namely *wh*-in situ or a *wh*-phrase with *yaŋ/naŋ*, as exemplified below in (275)b and (275)c, respectively.

(275) a. Statement

motor-tu la dioʔ jual (TR, E)
motorcycle-DEM.DIST PFCT 3 sell
'The motorcycle has been sold by him.'

b. *Wh-* in Situ

apo la dioʔ jual? (TR, E)
apo PFCT 3 sell
'What has been sold by him?'

c. *Wh*-phrase with *Yaŋ*

apo yaŋ la dioʔ jual? (TR, E)
apo REL PFCT 3 sell
'What is it that has been sold by him?'

Subject of a Non-verbal Sentence

The subject of a non-verbal sentence can be questioned using either the *wh*-in-situ strategy or the *wh*-phrase with *yaŋ/naŋ* strategy. Examples follow.

(276) a. Statement

adɪʔ-ɲo dgɪl (JC, E)
younger.sibling-3 naughty
'His brother is naughty.'

b. *Wh-* in Situ

siapo dgɪl (JC, E)
who naughty
'Who is naughty?'

c. *Wh*-phrase with *Yaŋ*

siapo yaŋ dgɪl (JC, E)
who REL naughty
'Who is it that is naughty?'

Direct Object of a Sentence

To question the direct object of a clause, three strategies can be employed. The first strategy is *wh-* in situ, as illustrated in (277)b and (278)b.

(277) a. Statement

titin m^{b}agɪ duwɪt ka en^{d}aŋ (TR, E)
Titin ACT-give money to Endang
'Titin gave money to Endang.'

b. *Wh*- in Situ

titin m^{b}agɪ apo ka en^{d}aŋ? (TR, E)
Titin ACT-give what to Endang
'What did Titin give to Endang?'

(278) a. Statement

taupik daʔ ŋ^{g}bʊk edi? (TR, E)
Taufik NEG ACT-hit Edi
'Taufik didn't hit Edi.'

b. *Wh*- in Situ

taupik daʔ ŋ^{g}bʊk siapo? (TR, E)
Taufik NEG ACT-hit who
'Who didn't Taufik hit?'

The second strategy for forming a *wh*-question questioning the direct object of a clause is to use the fronted *wh*-phrase strategy.[92] This strategy, however, is only possible if the verb employed is in bare form, and not in nasal form (cf. section 1.1.1.2 in which extraction is discussed). It should be noted that these bare verbs are analyzed as active verbs due to the placement of negation/auxiliary, i.e. between the agent and the verb (see sections 1.1.1.1.3, 1.1.1.2, and 1.1.1.4). Consider the following examples.

(279) a. Statement

taupik daʔ ŋ^{g}bʊk edi (TR, E)
taupik NEG ACT-hit Edi
'Taufik didn't hit Edi.'

[92] 'Fronted' here simply means appear before the sentence (on the left edge) and no analysis for movement is implied.

b. Fronted *Wh*-phrase with Bare Verb

siapo taupik daʔ gbʊkʔ (TR, E)
who Taupik NEG hit
'Who didn't Taupik hit?'

c. Fronted *Wh*-phrase with Nasal Verb

* siapo taupik daʔ ŋ^{g}bʊkʔ (TR, E)
who Taufik NEG ACT-hit
'Who didn't Taufik hit?'

In (279)b, the *wh*-phrase *siapo* 'who' is fronted to question-initial position and the verb is in bare form; thus, the sentence is grammatical. In contrast, the verb used in (279)c is in nasal form and the sentence is ungrammatical.

The third strategy for forming a *wh*-question questioning the direct object of a sentence is to use the *wh*-phrase with *yaŋ/naŋ* strategy. When this strategy is used, the verb must also be in bare form, as illustrated below in (280).

(280) a. Statement

taupik daʔ ŋ^{g}bʊk edi (TR, E)
Taufik NEG ACT-hit Edi
'Taufik didn't hit Edi.'

b. Fronted *Wh*-phrase with *Yaŋ* and Bare verb

siapo yaŋ taupik daʔ gbʊkʔ (TR, E)
who REL Taupik NEG hit
'Who didn't Taufik hit?'

c. Fronted *Wh*-phrase with *Yaŋ* and Nasal Verb

* siapo yaŋ taupik daʔ ŋ^{g}bʊkʔ (TR, E)
who REL Taupik NEG ACT-hit
'Who didn't Taufik hit?'

In (280)b and (280)c, the questions are formulated using the *wh*-phrase followed by *yaŋ* strategy. However, sentence (280)c is ungrammatical because the verb has the nasal prefix attached to it.

Indirect Object of a Sentence

There are two types of indirect objects, namely NP indirect object and PP indirect object (see also section 1.1.2.2.1.4). The NP indirect object can be questioned using the *wh*-in situ strategy as shown in (281)b, the fronted *wh*-phrase strategy as shown in (281)c, and the *wh*-phrase with *yaŋ/naŋ* strategy with bare verb as shown in (281)e. Like questioning the direct object of a sentence, the verb must be in bare form when questioning the NP indirect object using the fronted *wh*-phrase and the *wh*-phrase with *yaŋ/naŋ* strategies.

(281) a. Statement – NP Indirect Object

titin daʔ m^{b}agı ʊpıʔ duwıt (TR, E)
Titin NEG ACT-give Upik money
'Titin didn't give Upik money.'

b. *Wh*- in Situ

titin daʔ m^{b}agı siapo duwıt? (TR, E)
Titin ACT-give who money
'Who didn't Titin give money to?'

c. Fronted Wh-phrase with Bare Verb

*siapo titin daʔ bagı duwıt?[93] (TR, E)
who Titin NEG give money
'Who didn't Titin give money to?'

d. Fronted *Wh*-phrase with Nasal Verb

*siapo titin daʔ m^{b}agı duwıt?[94] (TR, E)
who Titin NEG ACT-give money
'Who didn't Titin give money to?'

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[93] Some speakers did not like this sentence. However, when the same speakers were given such sentences using other ditransitive verbs, they did not have problems accepting them.

[94] Some speakers did not like this sentence. However, when the same speakers were given such sentences using other ditransitive verbs, they did not have problems accepting them.

e. *Wh*-phrase with *Yaŋ* and Bare Verb

siapo yaŋ titin daʔ bagı duwit? (TR, E)
who REL Titin NEG give money
'Who is it that Titin didn't give money to?'

f. *Wh*-phrase with *Yaŋ* and Nasal Verb

*siapo yaŋ titin daʔ m^{b}agı duwit? (TR, E)
who REL Titin NEG give money
'Who is it that Titin didn't give money to?'

In (281)b, the *wh*-phrase questioning the indirect object remains in situ. The *wh*-phrase in (281)c is fronted to question-initial position and the verb is in its bare form (without the nasal prefix). The *wh*-phrase in (281)d is also fronted to question-initial position, but the verb bears the nasal prefix, and thus, the question is ungrammatical. The *wh*-question in (281)e is formulated using the *wh*-phrase with *yaŋ* and the verb is in its bare form. The *wh*-question in (281)f is similar to the one in (281)e, except that the verb takes the nasal prefix and (281)f is ungrammatical.

A PP indirect object can also be questioned using the *wh*-in situ strategy, the fronted *wh*-phrase strategy, and the *wh*-phrase followed by *yaŋ* strategy, as exemplified in (282)b, (282)c, and (282)d, respectively. Unlike questiong an NP indirect object, questioning PP indirect objects using the fronted *wh*-phrase strategy and the *wh*-phrase followed by *yaŋ/naŋ* does not require the verb to be in bare form, as shown in (282)c and (282)d.

(282) a. Statement – PP Indirect Object

titin daʔ m^{b}agı duwıt ka ʊpıʔ (TR, E)
Titin NEG ACT-give money to Upik
'Titin didn't give money to Upik.'

b. *Wh*- in Situ

titin daʔ m^{b}agı duwıt ka siapo? (TR, E)
Titin NEG ACT-give money to who
'Whom didn't Titin give money to?'

c. Fronted *Wh*-phrase with Nasal/Bare Verb

ka siapo titin daʔ m^{b}agɪ/bagɪ duwɪt? (TR, E)
to who Titin NEG ACT-give/give money
'Whom didn't Titin give money to?'

d. *Wh*-phrase with *Yaŋ* and Nasal/Bare Verb

ka siapo yaŋ titin daʔ m^{b}agɪ/bagɪ duwɪt? (TR, E)
to who REL Titin NEG ACT-give/give money
'Whom was it that Titin gave money to?'

Agent of an Object Voice Sentence

To question the agent of the object voice, only the *wh*-in-situ strategy is possible. The fronted *wh*-phrase and *wh*-phrase followed by *yaŋ/naŋ* strategies cannot be used to question the agent of an object voice sentence.

(283) a. Statement

ktan-ko la ida am^{b}ɪʔ (TR, E)
sticky.rice-DEM.PROX PFCT Ida take
'This sticky rice cake has been taken by Ida.'

b. *Wh*-in Situ

ktan-ko la siapo am^{b}ɪʔ? (TR, E)
sticky.rice-DEM.PROX PFCT who take
'By who this sticky rice has been taken?'

c. Fronted *Wh*-phrase

*siapo ktan-ko la am^{b}ɪʔ?[95] (TR, E)
who sticky.rice-DEM.PROX PFCT take
'By who this sticky rice has been taken?'

d. *Wh*-phrase with *Yaŋ*

*siapo yaŋ ktan-ko la am^{b}ɪʔ? (TR, E)
who REL sticky.rice-DEM.PROX PFCT take
'By who was it that this sticky rice has been taken by?'

[95] It is actually unclear whether the *wh*-phrase questioning the agent is fronted from an object voice structure or an object fronting structure in this sentence.

In sum, three strategies can be used to formulate argument *wh*-questions, namely *wh*- in situ, fronted *wh*-phrase, and *wh*-phrase followed by the relativizer *yaŋ/naŋ*. The *wh*-in-situ strategy can be used for formulating *wh*-questions questioning all kinds of arguments. The fronted *wh*-phrase strategy can be used for questioning the direct object and the NP indirect object of a sentence as long as the verb is in bare form. *Wh*-questions questioning a PP indirect object can be formed using the fronted *wh*-phrase strategy regardless of the verb form, just like questioning adjunct *wh*-phrases (discussed in the next section). The third strategy, *wh*-phrase followed by the relativizer *yaŋ/naŋ*, can be employed to question all subjects, direct objects, and NP indirect objects, and PP indirect objects. The verb must be in its bare form when questioning the direct object and NP indirect object using the *wh*-phrase with *yaŋ/naŋ* strategy. When questioning the PP indirect object, it can be in either its bare form or nasal prefixed form. Table 1.1 below summarizes strategies for questioning different elements of the simple clause.

Table 1.1 Strategies for Questioning Different Elements of the Simple Active Clause

	Wh- in situ	*Moved wh*- with Nasal Verb	*Moved wh*- with Active Bare Verb	*Wh*-phrase with *yaŋ/naŋ* and with Nasal Verb	*Wh*-phrase with *yaŋ/naŋ* and with Active Bare Verb
Subject	✓	✓	✓	✓	✓
DO	✓	*	✓	*	✓
NP IO	✓	*	✓	*	✓
PP IO	✓	✓	✓	✓	✓

1.1.3.2.2.1.1.2.2. Adjunct *Wh*-phrases

Unlike argument *wh*-questions, adjunct *wh*-questions cannot be formed via the *wh*-phrase followed by the relativizer *yaŋ/naŋ* strategy. Adjunct *wh*-questions can only be formulated using the *wh*-in situ and fronted *wh*-phrase strategies, as illustrated in the following examples. It should again be noted that I only present the facts in this section. The analysis of *wh*-questions is provided later in section 1.1.3.2.2.2.

(284) *Kapan* 'When'

a. Statement

aku nae?-e malam tadi (TR, E)
1SG go.up-3 night earlier
'I performed last night.'
[Lit. 'I went up at last night.']

b. *Wh*- in Situ

kau nae?-e kapan? (TR, E)
2SG go.up-3 when
'When did you perform?'
[Lit. 'When did you go up?']

c. Fronted *Wh*-phrase

kapan kau nae?-e?
when 2SG go.up-3
'When did you performed?'
[Lit. 'When did you go up?']

d. *Wh*-phrase with *Yaŋ*

*kapan yaŋ kau nae?-e? (TR, E)
when REL 2SG go.up-3
'When was it that you performed?'
[Lit. 'When was it that you went up?']

(285) *Di mano* 'Where'

a. Statement

jalıl	naŋkap	malıŋ-tu	di	pasar	(TR, E)
Jalil	ACT-catch	thief-DEM.DIST	LOC	market	

'Jalil caught the thief at the market.'

b. *Wh-* in Situ

jalıl	naŋkap	malıŋ-tu	di	mano?	(TR, E)
Jalil	ACT-catch	thief -DEM.DIST	LOC	which	

'Where did Jalil catch the thief?'

c. Fronted *Wh*-phrase

di	mano	jalıl	naŋkap/taŋkap	malıŋ-tu?	(TR, E)
LOC	which	Jalil	ACT-catch/catch	thief -DEM.DIST	

'Where did Jalil catch the thief?'

d. *Wh*-phrase with *Yaŋ*

*di	mano	yaŋ	jalıl	naŋkap	malıŋ-tu?	(TR, E)
LOC	which	REL	Jalil	ACT-catch	thief -DEM.DIST	

'Where was it that Jalil caught the thief?'

(286) *Macam Mano* 'How'

a. Statement

en^{d}aŋ	ŋam^{b}ıʔ	kuı-tu	cpat-cpat	(TR, E)
Endang	ACT-takecake-DEM.DIST		RED-quick	

'Endang ate the cake quickly.'

b. *Wh-* in Situ

en^{d}aŋ	ŋam^{b}ıʔ	kuı-tu	macam	mano?	(TR, E)
Endang	ACT-take	cake-DEM.DIST	sort	which	

'How did Endang eat the cake?'

c. Fronted *Wh*-phrase

macam	mano	en^{d}aŋ	ŋam^{b}ıʔ/am^{b}ıʔ	kuı-tu?	(TR, E)
sort	which	Endang	ACT-take/take	cake-DEM.DIST	

'How did Endang eat the cake?'

d. *Wh*-phrase with *Yaŋ*

*macam	mano	yaŋ	en^{d}aŋ	ŋam^{b}ıʔ	kuı-tu?	(TR, E)
sort	which	REL	Endang	ACT-take	cake-DEM.DIST	

'How was it that Endang ate the cake?'

(287) *ŋapo* 'Why'

a. Statement

en^{d}aŋ	makan	kuɪ-tu	cpat-cpat	
Endang	eat	cake-DEM.DIST	RED-quick	
karno	lapar			(TR, E)
because	hungry			

'Endang ate the cake quickly because he was hungry.'

b. *Wh-* in Situ

en^{d}aŋ	makan	kuɪ-tu	cpat-cpat	ŋapo?	(TR, E)
Endang	eat	cake-DEM.DIST	RED-quick	why	

'Why did Endang eat the cake quickly?'

c. Fronted *Wh*-phrase

ŋapo	en^{d}aŋ	makan	kuɪ-tu	cpat-cpat	(TR, E)
why	Endang	eat	cake-DEM.DIST	RED-quick	

'Why did Endang eat the cake quickly?'

d. *Wh*-phrase with *Yaŋ*

*ŋapo	yaŋ	en^{d}aŋ	makan	kuɪ-tu	cpat-cpat?	(TR, E)
why	REL	Endang	eat	cake-DEM.DIST	RED-quick	

'Why was it that Endang ate the cake quickly?'

The adjunct *wh*-phrase in (284)b, (285)b, (286)b, and (287)b remains in situ, whereas the *wh*-phrase in (284)c, (285)c, (286)c, and (287)c is fronted to question-initial position. When the fronted *wh*-phrase strategy is used, the verb can be in its nasal form, as shown in (285)c and (286)c. Finally, the *wh*-question in the (d) sentences in (284) through (287) shows that the *wh*-phrase followed by *yaŋ* strategy cannot be used to formulate a *wh*-question questioning an adjunct of a sentence.

In the naturalistic data, most adjunct *wh*-phrases in simple verbal clauses are fronted. Text counts from the Tanjung Raden naturalistic data are shown below. However, in elicitation speakers indicated no doubt that both in situ and fronted adjunct *wh*-phrases (to the initial position/leftmost position) were acceptable.

Table 1.2 Text Count for In situ *vs.* Leftmost Position *Wh*-phrases in TR[96]

	In Situ	Moved	% In Situ	% Moved
kapan 'when'	0	9	0%	100%
di mano 'where'	12	14	46%	54%
macam mano 'how'	0	2	0	100%
ŋapo 'why'	0	29	0	100%

Some examples of in-situ *wh*-phrases and fronted *wh*-phrases taken from naturalistic recordings are presented below.

(288) In-situ Adjunct *Wh*-phrase

a. main-main apdʊl mʊlʊʔ-tu kapan? (MD, N)
RED-play Abdul Muluk-DEM.DIST when
'When did [they] play Abdul Muluk?'

b. dioʔ masaŋ di mano?
3 ACT-set LOC which
'Where did he set [it] up?'

(289) Fronted Adjunct *Wh*-phrase

a. kapan balɪʔ ka jam^{b}iʔ
when return to Jambi
'When did [he] return to Jambi?'

b. di mano kau sʊrʊʔan?
LOC which 2SG hide-APPL
'Where do you hide [it]?'

c. macam mano ŋam^{b}ɪʔ-e, tʊʔ?
sort which ACT-take-3 TRU-grandfather
'How did you take it, Grandpa?'

d. ŋapo daʔ ɲ^{j}aɪt di ruma?
why NEG ACT-sew LOC house
'Why didn't you sew [it] at home?'

[96] These text counts only cover full simple verbal sentences.

In addition to these two positions, adjunct *wh*-phrases may appear after the subject of the sentence, as shown in the following examples.

(290) a. kau kapan naeʔ-e? (TR, E)
2SG when go.up-3
'When did you perform?'
[Lit. 'When did you go up?']

b. jalɪl di mano naŋkap malɪŋ-tu? (TR, E)
Jalil LOC which ACT-catch thief-DEM.DIST
'Where did the people catch the thief?'

c. en^{d}aŋ macam mano makan kuɪ-tu? (TR, E)
Endang sort which eat cake-DEM.DIST
'How did Endang eat the cake?'

d. en^{d}aŋ ŋapo makan kuɪ-tu cpat-cpat? (TR, E)
Endang why eat cake-DEM.DIST RED-quick
'Why did Endang eat the cake quickly?'

In addition, for time and location adjuncts, the *wh*-phrase may even appear between the verb and the direct object, as shown in (a) and (b) below. In contrast, the *wh*-phrase questioning a manner or reason adjunct cannot appear between the verb and the direct object, as shown in (c) and (d) below.

(291) a jalɪl m^{b}awaʔ kapan motor-tu? (TR, E)
Jalil ACT-bring when motorcycle-DEM.DIST
'When did Jalil ride the motorcycle?'

b. jalɪl naŋkap di mano malɪŋ-tu? (TR, E)
Jalil ACT-catch LOC which thief-DEM.DIST
'Where did the people catch the thief?'

c. *en^{d}aŋ makan macam mano kuɪ-tu? (TR, E)
Endang eat sort which cake-DEM.DIST
'How did Endang eat the cake?'

d. *en^{d}aŋ makan ŋapo kuɪ-tu cpat-cpat? (TR, E)
Endang eat why cake-DEM.DIST RED-quick
'Why did Endang eat the cake quickly?'

To sum up, adjunct *wh*-phrases in Jambi Malay may either remain in situ or be fronted. When the *wh*-phrase is fronted, the verb does not need to be in its bare form. In contrast to a *wh*-question questioning the argument of a simple sentence, a *wh*-question questioning an adjunct cannot be formulated using the *wh*-phrase followed by the relativizer *yaŋ/naŋ* strategy. In addition, adjunct *wh*-phrases may appear after the subject. Furthermore, while time and location adjunct *wh*-phrases can also appear between the verb and the direct object, manner and reason adjunct *wh*-phrases cannot appear between the verb and the direct object.

1.1.3.2.2.1.2. Complement Clause

It should again be noted that in what follows I simply provide the facts; a theoretical discussion is provided later in section 1.1.3.2.2.2.

1.1.3.2.2.1.2.1. Questioning Elements of the Complement Clause

All elements of the complement clause can be questioned. In this section, I present different strategies for forming *wh*-questions, first where arguments of a complement clause are questioned and second, where adjuncts of the complement clause are questioned.

1.1.3.2.2.1.2.1.1. Questioning Arguments of a Complement Clause

In what follows, I shall describe strategies that can be employed in forming *wh*-questions for each element of a complement clause.

Questioning the Subject of a Complement Clause

Wh-questions questioning the subject of a complement clause can be formulated using the in-situ *wh*-phrase, fronted *wh*-phrase, and *wh*-phrase followed by the relativizer *yaŋ/naŋ*.

In (292)b, (293)b, (294)b, and (295)b below, the *wh*-phrase questioning the subject of the complement clause remains in situ.

(292) a. Active Complement Clause

siti	ŋiro	maʔ	m^baŋkʊŋ	budi	pagi	tadi (TR, E)
Siti	ACT-think	mother	ACT-hit	Budi	morning	earlier

'Siti thinks mother hit Budi this morning.'

b. *Wh*-in Situ

siti	ŋiro	siapo	m^baŋkʊŋ	budi	pagi	tadi?(TR, E)
Siti	ACT-think	who	ACT-hit	Budi	morning	earlier

'Who does Siti think hit Budi this morning?'

(293) a. Passive Complement Clause

aku	dŋar	motor-tu	la	dibli
1SG	hear	motorcycle-DEM.DIST	PFCT	PASS-buy

(buat) ʊpɪʔ (TR, E)
by Upik
'I heard that the motorcycle had been bought by Upik.'

b. *Wh*- in Situ

kau	dŋar	apo	la	dibli	(buat)	ʊpɪʔ?	(TR, E)
2SG	hear	what	PFCT	PASS-buy	by	Upik	

'What did you hear that has been bought by Upik?'

(294) a. Object Voice Complement Clause

aku	dŋar	tali-tu	la	ʊpɪʔ	bawaʔ	(TR, E)
1SG	hear	rope-DEM.DIST	PFCT	Upik	bring	

'I heard the rope has been brought by Upik.'

b. *Wh*-in Situ

kau	dŋar	apo	la	ʊpɪʔ	bawaʔ?	(TR, E)
2SG	hear	what	PFCT	Upik	bring	

'What did you hear that has been brought by Upik?'

(295) a. Non-verbal Complement Clause

aku n^{d}ŋar dioʔ dgɪl (TR, E)
1SG ACT-hear 3 naughty
'I heard he was naughty.'

b. *Wh*-in Situ

kau n^{d}ŋar siapo dgɪl? (TR, E)
2SG ACT-hear who naughty
'Who did you hear was naughty?'

In (296), (297), (298), and (299) below, the *wh*-phrase questioning the subject of the complement clauses is fronted to the question-initial position in the matrix clause and the verb of the matrix clause must be in bare form. This is indicated by the grammaticality of sentence (a) whose matrix verb is in the bare form and the ungrammaticality of sentence (b) whose matrix verb bears the nasal prefix.

(296) Fronted *Wh*-phrase Questioning the Subject of an Active Complement Clause

a. Fronted *Wh*-phrase with Bare Matrix Verb

siapo maʔ daʔ kiro m^{b}aŋkʊŋ budi pagi tadi?(TR, E)
who mother NEG think ACT-hit Budi morning earlier
'Who doesn't mother think hit Budi this morning?'

b. Fronted *Wh*-phrase with Nasal Matrix Verb

*siapo maʔ daʔ ŋiro m^{b}aŋkʊŋ budi
who mother NEG ACT-think ACT-hit Budi
pagi tadi? (TR, E)
morning earlier
'Who doesn't mother think hit Budi this morning?'

(297) Fronted *Wh*-phrase Questioning the Subject of a Passive Complement Clause

a. Fronted *Wh*-phrase with Bare Matrix Verb

apo kau daʔ dŋar la dibli ʊpɪʔ? (TR, E)
what 2SG NEG hear PFCT PASS-buy Upik
'What didn't you hear that has been bought by Upik?'[97]

[97] Note that this sentence is ambiguous as it is also a yes-no question if *apo* is a question marker (see section 1.1.3.2.1.1.1)

b. Fronted *Wh*-phrase with Nasal Matrix Verb

*apo	kau	daʔ	nᵈŋar	la	dibli	ʊpɪʔ? (TR, E)
what	2SG	NEG	ACT-hear	PFCT	PASS-buy	Upik

'What didn't you hear that has been bought by Upik?'

(298) Fronted *Wh*-phrase Questioning the Subject of an Object Voice Complement Clause

a. Fronted *Wh*-phrase with Bare Matrix Verb

siapo	maʔ	daʔ	saŋko	la	dioʔtarɪʔ	kuat-kuat?(TR, E)
who	mother	NEG	think	PFCT	3 pull	RED-strong

'Who doesn't mother think has been pulled strongly by him?'

b. Fronted *Wh*-phrase with Nasal Matrix Verb

*siapo	maʔ	ŋiro		la	dioʔtarɪʔ	kuat-kuat?(TR, E)
who	mother	ACT-think		PFCT	3 pull	RED-strong

'Who does mother think has been pulled strongly by him?'

(299) Fronted *Wh*-phrase Questioning the Subject of a Non-verbal Complement Clause

a. Fronted *Wh*-phrase with Bare Matrix Verb

siapo	kau	daʔ	saŋko	dgil? (JC, E)
who	2SG	NEG	think	naughty

'Who didn't you think was naughty?'

b. Fronted *Wh*-phrase with Nasal Verb

*siapo	kau	daʔ	ɲaŋko	dgil?	(JC, E)
who	2SG	NEG	ACT-think	naughty	

'Who didn't you think was naughty?'

In addition to the in-situ *wh*-phrase and fronted *wh*-phrase strategies, the *wh*-phrase followed by *yaŋ/naŋ* strategy and the fronted *wh*-phrase followed by *yaŋ/naŋ* strategy can be used to question the subject of a complement clause. I shall later claim that *wh*-phrases followed by *yaŋ/naŋ*, which are referred to as clefted *wh*-phrases have the structure of NP-NP (see section 1.1.3.2.2.2.4). An example of a *wh*-question that is formed using this strategy is shown below.

(300) siti kiro siapo yaŋ mᵇaŋkʊŋ budi pagi tadi? (TR, E)
Siti think who REL ACT-hit Budi morning earlier
'Who does Siti think hit Budi this morning?'

When the fronted *wh*-phrase followed by *yaŋ/naŋ* strategy is used, the verb of the matrix verb must be in bare form, as shown below.

(301) a. siapo yaŋ siti kiro mᵇaŋkʊŋ budi pagi tadi? (TR, E)
who REL siti think ACT-hit Budi morning earlier
'Who is it that Siti thinks hit Budi this morning?'

b. *siapo yaŋ siti ŋiro mᵇaŋkʊŋ budi pagi tadi?(TR, E)
who REL siti ACT-think ACT-hit Budi morning earlier
'Who is it that Siti thinks hit Budi this morning?'

Questioning the Object of the Complement Clause

Strategies that can be used to formulate *wh*-questions questioning direct objects, NP indirect objects, and PP indirect objects of the complement clause include the *wh*-in situ strategy, the partially-fronted *wh*-phrase strategy, and the fully fronted *wh*-phrase strategy. Partially-fronted *wh*-phrases occur when the *wh*-phrase is fronted to the position between the verb of the matrix clause and the subject of the complement clause. Fully-fronted *wh*-phrases occur when the *wh*-phrase is fronted all the way to question-initial position. In addition to these strategies, the *wh*-phrase with *yaŋ/naŋ* strategy can also be used.

In (302) to (304) below, the *wh*-phrase questioning different kinds of objects of the complement clause remains in situ.

(302) Questioning the Direct Object
maʔ yakın eko narıʔ siapo kuat-kuat? (TR, E)
mother believe Eko ACT-pull who RED-strong
'Who does mother believe Eko pulled strongly?'

(303) Questioning NP Indirect Object

maʔ	yakın	siti	m^{b}agı	siapo	kuı-tu?	(TR, E)
mother	know	Siti	ACT-give	who	cake-DEM.DIST	

'Who does mother believe Siti gave the cake to?'

(304) Questioning PP Indirect Object

edi	yakın	ʊpıʔ	m^{b}agı	kuı-tu	ka	siapo?	(TR, E)
Edi	believe	Upik	ACT-give	cake-DEM.DIST	to	who	

'Who does Edi believe Upik gave the cake to?'

The partially-fronted *wh*-phrase strategy can be used to question all types of objects: direct objects, NP indirect objects, as well as PP indirect objects. When the *wh*-phrase is partially-fronted, the verb in the complement clause must be in bare form, except for questioning the PP indirect object, as illustrated below.

(305) Questioning the Direct Object

a.

maʔ	yakın	siapo	eko	la	tarıʔ	kuat-kuat?(TR, E)
mother	believe	who	Eko	PFCT	pull	RED-strong

'Who does mother believe Eko has pulled strongly?'

b.

*maʔ	yakın	siapo	eko	la	narıʔ	kuat-kuat?(TR, E)
mother	believe	who	Eko	PFCT	ACT-pull	RED-strong

'Who does mother believe Eko has pulled strongly?'

(306) Questioning the NP Indirect Object

a.

maʔ	yakın	siapo	budi	la	bawaʔi	
mother	believe	who	Siti	PFCT	bring-APPL	
topi	baru?					(TR, E)
hat	new					

'Who does mother believe Budi has brought a new hat to?'

b.

*maʔ	yakın	siapo	budi	la	m^{b}awaʔi	
mother	believe	who	Siti	PFCT	ACT-bring-APPL	
topi	baru?					(TR, E)
hat	new					

'Who does mother believe Budi has brought a new hat to?'

(307) Questioning the PP Indirect Object

a. edi yakın ka siapo ʊpɪʔ la bagɪ kuɪ-tu? (TR, E)
Edi believe to who Upik PFCT give cake-DEM.DIST
'Who does Edi believe Upik has given the cake to?'

b. edi yakın ka siapo ʊpɪʔ la m^{b}agɪ kuɪ-tu?(TR, E)
Edi believe to who Upik PFCT ACT-give cake-DEM.DIST
'Who does Edi believe Upik has given the cake to?'

In (305)a, the *wh*-phrase questioning the direct object of the complement clause *siapo* 'who' is fronted to the position between the verb of the matrix clause and the subject of the complement clause. The verb of the complement clause is in bare form in this example. In contrast, in (305)b, the verb bears the nasal prefix and thus, the sentence is ungrammatical. In (306)a, the *wh*-phrase questioning the NP indirect object of the complement clause *siapo* 'who' is also fronted to the position between the higher verb and the subject of the complement clause and the lower verb is in bare form. Sentence (306)b is only different from sentence (306)a in that the lower verb used in (306)b is in nasal form; thus, the sentence is ungrammatical. In contrast to questioning the direct object and the NP indirect object of the complement clause, questioning the PP indirect object using the partially fronted *wh*-phrase strategy does not require the lower verb to be in bare form. Sentence (307)b, for example, is grammatical although the lower verb bears the nasal prefix.

Similarly to the partially-fronted *wh*-phrase strategy, the fully-fronted *wh*-phrase strategy can be employed to question all types of objects of the complement clause. The same requirement applies with respect to the verb form. Since the *wh*-phrase is fronted all the way to question-initial position (i.e. before the subject of the matrix clause), both the matrix verb and the embedded verb need to be in bare form, except for questioning the PP indirect object. This explains why the (b) sentences in (308) and (309) below are ungrammatical, whereas the one in (310) is grammatical.

(308) Questioning the Direct Object

a. siapo maʔ saŋko edo la tarıʔ kuat-kuat? (TR, E)
who mother think Edo PFCT pull RED-strong
'Who does mother think Edo has pulled strongly?'

b. *siapo maʔ ɲaŋko edo la tarıʔ kuat-kuat?(TR, E)
who mother ACT-think Edo PFCT pull RED-strong
'Who does mother think Edo has pulled strongly?'

(309) Questioning the NP Indirect Object

a. siapo maʔ saŋko siti la bagı kuı-tu? (TR, E)
who mother think Siti PFCT give cake-DEM.DIST
'Who does mother think Siti has given the cake to?'

b. *siapo maʔ ɲaŋko siti la
who mother ACT-think Siti PFCT
m^bagı kuı-tu? (TR, E)[98]
ACT-give cake-DEM.DIST
'Who does mother think Siti has given the cake to?'

(310) Questioning the PP Indirect Object

a. ka siapo edi saŋko ʊpıʔ daʔ m^bagı kuı-tu? (TR, E)
to who Edi think Upik NEG ACT-give cake-DEM.DIST
'To whom does Edi think Upik didn't give the cake?'

b. ka siapo edi ɲaŋko ʊpıʔ daʔ
to who Edi ACT-think Upik NEG
m^bagı kuı-tu? (TR, E)
ACT-give cake-DEM.DIST
'To whom does Edi think Upik didn't give the cake?'

The *wh*-phrase with the relativizer *yaŋ/naŋ* strategy can also be used to formulate *wh*-questions questioning the NP direct object of the complement clause. The *wh*-phrase can be partially-fronted to the position after the matrix verb and is followed by *yaŋ/naŋ*. In addition, it can be fully-fronted to question-initial position,

[98] Some people accepted this sentence.

leaving *yaŋ/naŋ* between the verb of the matrix clause and the subject of the lower clause. Examples follow.

(311) Partially-Fronted *Wh*-phrase with *Yaŋ*

a. maʔ yakın siapo yaŋ eko la tarıʔ kuat-kuat? (TR, E)
mother believe who REL Eko PFCT pull RED-strong
'Who does mother believe Eko has pulled strongly?'

b. maʔ yakın siapo yaŋ siti daʔ bagı kuı-tu? (TR, E)
mother believe who REL Siti NEG give cake-DEM.DIST
'Who does mother believe Siti didn't give the cake to?'

(312) Fully-Fronted *Wh*-phrase with *Yaŋ*

a. siapo maʔ yakın yaŋ eko la tarıʔ kuat-kuat? (TR, E)
who mother believe REL Eko PFCT pull RED-strong
'Who does mother believe Eko has pulled strongly?'

b. siapo yaŋ maʔ yakın siti daʔ bagı kuı-tu (TR,E)
who REL mother believe Siti NEG givecake-DEM.DIST
'Who does mother believe Siti didn't give the cake to?'

Wh-questions questioning the PP indirect object of the complement clause can also be formulated using a *wh*-phrase with *yaŋ/naŋ* strategy, as shown in the following examples.

(313) a. edi yakın ka siapo yaŋ ʊpıʔ la
Edi believe to who REL Upik PFCT
bagı kuı-tu? (TR, E)
give cake-DEM.DIST
'To whom does Edi believe Upik has given the cake?'

b. ka siapo yaŋ edi yakın ʊpıʔ la bagı kuı-tu?(TR, E)
to who REL Edi believe Upik PFCT give cake-DEM.DIST
'To whom does Edi believe Upik gave the cake?'

1.1.3.2.2.1.2.1.2. Questioning the Adjuncts of a Complement Clause

There are three strategies for forming *wh*-questions that question the adjunct of a complement clause: *wh*-in situ, partially-fronted *wh*-phrase, and fully-

fronted *wh*-phrase. Similarly to questioning the adjuncts of simple clauses, the *wh*-phrase followed by *yaŋ/naŋ* strategy is not allowed in questioning the adjunct of the complement clause. Examples of questioning different adjuncts of the complement clause using different strategies are provided in (314) to (317). It should be pointed out that in each strategy of questioning the adjunct of the complement clause, the question is ambiguous with respect to which locus the *wh*-phrase refers to. In (314)a, for example, the question may be used for asking the time of hearing as well as the time of selling. However, I am only concerned with the reading in which the adjunct *wh*-phrase originates inside the complement clause (the lower clause reading).

(314) *Kapan* 'When'

a. *Wh*- in Situ

padila n^{d}ŋar somat baru ɲ^{j}ual motor-e kapan?(TR, E)
Padila ACT-hear Somat just ACT-sell motorcycle-3 when
'When did Padila hear Somat had just sold his motorcycle?'

b. Partially-Fronted *Wh*-phrase

padila n^{d}ŋar kapan somat baru ɲ^{j}ual motor-e?(TR, E)
Padila ACT-hear when Somat just ACT-sell motorcycle-3
'When did Padila hear Somat had just sold his motorcycle?'

c. Fully-Fronted *Wh*-phrase

kapan padila n^{d}ŋar somat baru ɲ^{j}ual motor-e? (TR, E)
when Padila ACT-hear Somat just ACT-sell motorcycle-3
'When did Padila hear Somat had just sold his motorcycle?'

d. Fully-Fronted *Wh*-phrase with *Yaŋ*

*kapan yaŋ padila n^{d}ŋar somat
when REL Padila ACT-hear Somat
baru ɲ^{j}ual motor-e? (TR, E)
just ACT-sell motorcycle-3
'When was it that Padila heard Somat had just sold his motorcycle?'

(315) *Di Mano* 'Where'

a. *Wh*- in Situ

maʔ	yakın	eko	narıʔ	edi	di	mano?	(TR, E)
mother	believe	Eko	ACT-pull	Edi	LOC	which	

'Where does mother believe Eko pulled Edi?'

b. Partially-Fronted *Wh*-phrase

maʔ	yakın	di	mano	eko	narıʔ	edi?	(TR, E)
mother	believe	LOC	which	Eko	ACT-pull	Edi	

'Where does mother believe Eko pulled Edi?'

c. Fully-Fronted *Wh*-phrase

di	mano	maʔ	yakın	eko	narıʔ	edi?	(TR, E)	
LOC	which	mother	believe	Eko	ACT-pull	Edi		

'Where does mother believe Eko pulled Edi?'

d. Fully-Fronted *Wh*-phrase with *Yaŋ*

*di	mano	yaŋ	maʔ	yakın	eko	narıʔ	edi?	(TR, E)
LOC	which	REL	mother	believe	Eko	ACT-pull	Edi	

'Where was it that mother believes Eko pulled Edi?'

(316) *Macam Mano* 'How'

a. *Wh*- in Situ

siti	yakın	edi	m^baŋkʊŋ	budi	macam	mano?	(TR, E)
Siti	believe	Edi	ACT-hit	Budi	sort	which	

'How does Siti believe Eko hit Budi?'

b. Partially-Fronted *Wh*-phrase

siti	yakın	macam	mano	edi	m^baŋkʊŋ	budi?	(TR, E)
Siti	believe	sort	which	Edi	ACT-hit	Budi	

'How does Siti believe Eko hit Budi?'

c. Fully-Fronted *Wh*-phrase

macam	mano	siti	yakın	edi	m^baŋkʊŋ	budi?	(TR, E)
sort	which	Siti	believe	Edi	ACT-hit	Budi	

'How does Siti believe Eko hit Budi?'

d. Fully-Fronted *Wh*-phrase with *Yaŋ*

*macam	mano	yaŋ	siti	yakın	edi	m^baŋkʊŋ	budi?(TR, E)
sort	which	REL	Siti	believe	Edi	ACT-hit	Budi

'How was it that Siti believes Edi hit Budi?'

(317) *ŋapo* 'Why'

a. *Wh*- in Situ

kau n^{d}ŋar ʊpɪʔ m^{b}li baju baru ŋapo? (TR, E)
2SG ACT-hear Upik ACT-buy garment new why
'Why did you hear Upik bought new clothes?'

b. Partially-Fronted *Wh*-phrase

kau n^{d}ŋar ŋapo ʊpɪʔ m^{b}li baju baru? (TR, E)
2SG ACT-hear why Upik ACT-buy garment new
'Why did you hear Upik bought new clothes?'

c. Fully-Fronted *Wh*-phrase

ŋapo kau n^{d}ŋar ʊpɪʔ m^{b}li baju baru? (TR, E)
why 2SG ACT-hear Upik ACT-buy garment new
'Why did you hear Upik bought new clothes?'

d. Fully-Fronted *Wh*-phrase with *Yaŋ*

*ŋapo yaŋ kau n^{d}ŋar ʊpɪʔ m^{b}li baju baru?(TR, E)
why REL 2SG ACT-hear Upik ACT-buy garment new
'Why was it that you heard Upik bought new clothes?'

To conclude, *wh*-questions questioning the subject of the complement clause can be formulated using the in situ *wh*-phrase*, wh*-phrase with *yaŋ/naŋ,* and fronted *wh*-phrase to the initial position strategies*. Wh*-questions questioning the direct object and indirect object of the complement clause can be formed using the *wh*-phrase in situ, partially-fronted *wh*-phrase, fully-fronted *wh*-phrase, partially-fronted *wh*-phrase with *yaŋ/naŋ,* and fully-fronted *wh*-phrase with *yaŋ/naŋ* strategies. When the fronted *wh*-phrase and fronted *wh*-phrase followed by *yaŋ/naŋ* strategies are used to question the direct object, the verb must be in bare form. However, the requirement for the verb to be in bare form does not apply when these strategies are used to question PP indirect objects. *Wh*-questions questioning the adjunct of an object subordinate clause can be formulated using the *wh*-phrase-in-situ*,* partially-fronted *wh*-phrase and fully-fronted *wh*-phrase strategies*.*

1.1.3.2.2.1.3. Elements of Noun Phrases that can be Questioned

It has been shown in previous sections that an NP can be questioned, as in (318) below.

(318) a. aku m^{b}li [motor eko] (TR, E)
1SG ACT-buy motorcycle Eko
'I bought Eko's motorcycle.'

b. kau m^{b}li apo? (TR, E)
2SG ACT-buy what
'What did you buy?'

In addition, elements inside an NP can be questioned. Both the possessor and the possessee in an NP can be questioned if the *wh*-phrase remains in situ, as exemplified below.

(319) a. Questioning the Possessor in an NP
kau m^{b}li motor siapo? (TR, E)
2SG ACT-buy motorcycle who
'Whose motorcycle did you buy?'

b. Questioning the Possessee in an NP
kau m^{b}li apo eko? (TR, E)
2SG ACT-buy what eko
'What property of Eko did you buy?'

As previously described, a *wh*-phrase can be fronted to question an object NP. When questioning the possessor of an NP, the entire NP that contains the *wh*-phrase must be fronted. If the possessor is fronted, leaving the possessee behind, the derived structure is ungrammatical.

(320) a. [motor siapo]$_{i}$ kau bli t_{i}? (TR, E)
motorcycle who 2SG buy
'Whose motorcycle did you buy?'

b. *siapo$_{i}$ kau bli [motor t_{i}] ? (TR, E)
who 2SG buy motorcycle
'Whose motorcycle did you buy?'

The same rule applies when the possessee is questioned. The whole NP must be fronted.

(321) a. [apo eko]$_i$ la kau bli t_i ? (TR, E)
what Eko PFCT 2SG buy
'What property of Eko have you bought?'

b. *apo$_i$ kau la bli [t_i eko]? (TR, E)
what 2SG PFCT buy Eko
'What property of Eko have you bought?'

Wh-phrases with the relativizer *yaŋ/naŋ* cannot be used to question the possessor or the possessee in an NP.

(322) a. *siapo$_i$ yaŋ kau la bli motor t_i? (TR, E)
who REL 2SG PFCT buy motorcycle
'Whose motorcycle have you bought?'

b. *apo$_i$ yaŋ kau la bli t_i eko? (TR, E)
what REL 2SG PFCT buy Eko
'What property of Eko have you bought?'

Wh-phrases with *yaŋ/naŋ* can be employed if the entire NP is fronted, as shown below.

(323) a. motor siapo yaŋ kau la bli? (TR, E)
motorcycle who REL 2SG PFCT buy
'Whose motorcycle have you bought?'

b. apo eko yaŋ kau la bli? (TR, E)
what Eko REL 2SG PFCT buy
'What property of Eko have you bought?'

Beside the possessor and the possessee, other noun modifiers, such as a noun (in square brackets in (324)) can also be questioned, as shown in (325) (see section 1.2.2.4.2 in which a description of noun modifiers is presented).

(324) aku baru mtɪʔ duo taŋke km^{b}aŋ [mawar] (TR, E)
1SG just ACT-pick two stalk flower rose
'I just picked two stalks of roses.'

(325) kau baru mtɪʔ duo taŋke kmᵇaŋ [apo]? (TR, E)
2SG just ACT-pick two stalk flower what
'You just picked two stalks of what flower?'

In (325), the *wh*-phrase *apo* 'what' is substituted for the element that is being questioned, *mawar* 'rose'. Again, if the *wh*-phrase is fronted, the whole NP containing the *wh*-phrase must be fronted, as in (326)a. The rest of the NP cannot be left behind while the *wh*-phrase is fronted, as in (326)b. Clefted *wh*-phrases cannot be employed to question the adjectival modifier of an NP ((326)c).

(326) a. [duo taŋke kmᵇaŋ apo]$_i$ baru kau ptɪʔ t_i? (TR, E)
two stalk flower what just 2SG pick
'Two stalks of what flower did you just pick?'

b. *apo kau baru mtɪʔ [duo taŋke kmᵇaŋ t_i](TR, E)
what 2SG just ACT-pick two stalk flower
'Two stalks of what flower did you just pick?'

c. *apo yaŋ kau baru mtɪʔ duo taŋke kmᵇaŋ? (TR, E)
what REL 2SG just ACT-pick two stalk flower
'Two stalks of what flower did you just pick?'

Furthermore, the quantity (cardinal number) of an NP can also be questioned and the *wh*-word must stay in situ; if the *wh*-word is fronted, the entire phrase containing the *wh*-word must be fronted, as shown in the following examples.

(327) a. kau baru mtɪʔ barapo taŋke kmᵇaŋ mawar?(TR, E)
2SG just ACT-pick how.much stalk flower rose
'How many stalks of flowers did you just pick?'

b. [barapo taŋke kmᵇaŋ mawar]$_i$ kau baru mtɪʔ t_i ?(TR, E)
how.much stalk flower rose 2SG just ACT-pick
'How many stalks of flowers did you just pick?'

c. *[barapo]$_i$ kau baru mtɪʔ t_i taŋke kmᵇaŋ mawar?(TR, E)
how.much 2SG just ACT-pick stalk flower rose
'How many stalks of flowers did you just pick?'

d. *barapo$_i$ yaŋ kau baru mtıʔ t_i taŋke
how.much REL 2SG just ACT-pick stalk
km^{b}aŋ mawar? (TR, E)
flower rose
'How many stalks of flowers did you just pick?'

In addition, the ordinal number can be questioned and the *wh*-phrase can either remain in situ or be fronted. The *yaŋ* strategy can also be used. If the *wh*-phrase is fronted, the whole phrase containing the *wh*-word must be fronted. Examples follow.

(328) a. kau la prna neŋoʔ presiden
2SG PFCT ever ACT-look president
kabarapo kito? (TR, E)
NUM-how.much 1
'Which president of ours have you seen?'
[Lit. 'President number what of ours have you seen?']

b. [presiden kabarapo kito]$_i$
president NUM-how.much 1
kau la prna teŋoʔ t_i? (TR, E)
2SG PFCT ever look
'Which president of ours have you seen?'
[Lit. 'President number what of ours have you seen?']

c. [presiden kabarapo kito]$_i$ yaŋ
president NUM-how.much 1 REL
kau la prna teŋoʔ t_i? (TR, E)
2SG PFCT ever look
'Which president of ours is it that you have seen?'
[Lit. 'President number what of ours have you seen?']

d. *[kabarapo]$_i$ kau la prna knal
NUM-how.much 2SG PFCT ever know
presiden t_i kito? (TR, E)
president 1
'Which president of ours have you seen?'

In short, the *wh*-word in an NP must stay in situ, or if it moves, the entire NP must move. This shows that the NP is an island and extraction from NPs is ill-formed (see section 1.1.3.2.2.2.3 for a discussion of extraction from islands).

1.1.3.2.2.1.4. Elements of Prepositional Phrases that can be Questioned

The complement of the preposition in a prepositional phrase in (329) may be questioned using the *wh*- in situ strategy, as shown in (330).

(329) aku ŋomoŋ samo siti təntaŋ anaʔ-ɲo (JC, E)
1SG ACT-talk with Siti about child-3
'I talked to Siti about her child.'

(330) kau ŋomoŋ samo siti təntaŋ siapo? (JC, E)
2SG ACT-talk with Siti about who
'About who did you talk to Siti?'

If the *wh*-word is fronted, the head (preposition) cannot be left behind. Instead, the entire prepositional phrase must be fronted. In other words, pied-piping is required.

(331) a. [təntaŋ siapo]$_i$ kau ŋomoŋ samo siti t_i ? (JC, E)
about who 2SG ACT-talk with Siti
'About who did you talk to Siti?'

b. *siapo$_i$ kau ŋomoŋ samo siti təntaŋ t_i? (JC, E)
who 2SG ACT-talk with Siti about
'About who did you talk to Siti?'

The data in this section indicates that no prepositional stranding is allowed in Jambi Malay.

1.1.3.2.2.1.5. Elements of Coordinate Sentences that can be Questioned

Conjunctions that can be used to form coordinate structures are, among others, *samo* 'with' and *apo* 'or' (see section 1.3). The coordinated elements after the conjunction can be questioned using the in-situ-*wh*-phrase strategy.

(332) a. kami bariŋon ɪtɪʔ samo ayam di umo (TR, E)
1 INTR-breed duck with chicken LOC paddy
'We raise ducks and chickens at the paddy.'

b. kamu bariŋon ɪtɪʔ samo apo di umo? (TR, E)
2 INTR-breed duck with what LOC paddy
'You raise ducks and what at the paddy?'

(333) a. aku tadi batmu [$_{NP}$ siti samo eko] (TR, E)
1SG earlier INTR-meet Siti with Eko
'I met Siti and Eko earlier.'

b. kau tadi batmu [$_{NP}$ siti samo siapo]? (TR, E)
2SG earlier INTR-meet Siti with who
'You met Siti and who earlier?'

In (332)b and (333)b, the NP *ayam* 'chicken' in (332)a and the proper name *eko* 'Eko' in (333)a are questioned by simply replacing the NP with *apo* 'what' and *siapo* 'who', respectively.

1.1.3.2.2.1.6. More than one Question Phrase in a Sentence

In Jambi Malay, it is possible to have more than one *wh*-phrase in a sentence, as shown in (334) below.

(334) a. kau tadi bli apo di mano? (TR, E)
2SG earlier buy what LOC which
'What did you buy where?'

b. siapo bawaʔ apo ɪsʊʔ-tu? (TR, E)
who bring what tomorrow-DEM.DIST
'Who will bring what tomorrow?'

c. siapo bawaʔ apo ka mano ɪsʊ-tuʔ (TR, E)
who bring what to which tomorrow-DEM.DIST
'Who will bring what to where tomorrow?'

In English, when two or more *wh*-phrases are present in a question, only one *wh*-phrase moves and the other *wh*-phrase(s) must stay in situ. The *wh*-phrase that

moves must be the one that is the closest to the landing position. This is known as the superiority effect, as shown in (335) .

(335) a. Who bought what at the market?
b. ??What did who buy at the market?

In Jambi Malay, such a constraint does not apply, as the sentences in (336) and (337) were all judged to be equally grammatical.[99]

(336) a. siapo la mᵇli apo tadi? (TR, E)
who PFCT ACT-buy what earlier
'Who has bought what?'

b. apo$_i$ siapo la bli t_i tadi? (TR, E)
what who PFCT bought earlier
'Who has bought what?'

(337) a. siapo la ŋamᵇɪʔ apo [di mano]? (TR, E)
who PFCT ACT-take what LOC which
'Who has taken what where?'

b. [di mano]$_i$ siapo la ŋamᵇɪʔ apo t_i? (TR, E)
LOC which who PFCT ACT-take what
'Who has taken what where?'

c. . [di mano]$_i$ apo$_j$ siapo amᵇɪʔ t_j t_i? (TR, E)
LOC which what who take
'Who took what where?'

1.1.3.2.2.2. The Analysis of *Wh*-questions in Jambi Malay

In this section, I shall first discuss the structure of *wh*-questions in which the *wh*-phrase remains in situ and those in which the *wh*-phrase is fronted in both simple and complement clauses. I shall then discuss islandhood and show that subjacency holds in Jambi Malay. Finally, I shall discuss the structure of *wh*-questions

[99] It should again be remembered that if the wh-phrase questioning the object is fronted, the verb must be in bare form (see section 1.1.3.2.2.1.1.2.1).

that are formulated using a *wh*-phrase followed by the relativizer *yaŋ/naŋ*, which I shall refer to as cleft *wh*-questions.

1.1.3.2.2.2.1. In-situ-*wh*-questions in Simple and Complement Clauses

As described previously, the in-situ-*wh*-phrase strategy can be used to question both arguments and adjuncts in simple clauses as well as in complement clauses. In-situ-*wh*-questions are formulated when a *wh*-phrase is substituted for an element that is being questioned, as exemplified below.

(338) a. Simple Clause

[$_{CP}$[$_{IP}$ jalıl[$_{VP}$ naŋkap malıŋ-tu] di pasar]] (TR, E)
Jalil ACT-catch thief-DEM.DIST LOC market
'Jalil caught the thief at the market.'

b. In-situ-*wh*-phrase Questioning the Subject

[$_{CP}$[$_{IP}$ siapo[$_{VP}$ naŋkap malıŋ-tu] di pasar]]? (TR, E)
who ACT-catch thief-DEM.DIST LOC market
'Who caught the thief at the market?'

c. In-situ-*wh*-phrase Questioning the Direct Object

[$_{CP}$[$_{IP}$ jalıl [$_{VP}$ naŋkap siapo] di pasar]]? (TR, E)
Jalil ACT-catch who LOC market
'Who did Jalil catch at the market?'

d. In-situ-*wh*-phrase Questioning the Adjunct

[$_{CP}$[$_{IP}$ jalıl[$_{VP}$ naŋkap malıŋ-tu] di mano]]?(TR, E)
Jalil ACT-catch thief-DEM.DIST LOC which
'Where did Jalil catch the thief?'

(339) a. Complement Clause Statement

[$_{CP}$[$_{IP}$ siti[$_{VP}$ yakın [$_{CP}$[$_{IP}$ edi [$_{VP}$ m^{b}aŋkuŋ budi]
Siti believe Edi ACT-hit Budi
malam tadi]]]]] (TR, E)
night earlier
'Siti believes that Edi hit Budi last night.'

b. In-situ *Wh*-phrase Questioning the Subject

[$_{CP}$[$_{IP}$ siti[$_{VP}$ yakın [$_{CP}$[$_{IP}$ siapo [$_{VP}$ m^{b}aŋkʊŋ budi]
Siti believe who ACT-hit Budi
malam tadi]]]]]? (TR, E)
night earlier
'Who does Siti believe hit Budi last night?'

c. In-situ *Wh*-phrase Questioning the Direct Object

[$_{CP}$[$_{IP}$ siti [$_{VP}$ yakın [$_{CP}$[$_{IP}$ edi [$_{VP}$ m^{b}aŋkʊŋ siapo]
Siti believe Edi ACT-hit who
malam tadi]]]]]? (TR, E)
night earlier
'Who does Siti believe Edi hit last night?'

d. In-situ *Wh*-phrase Questioning the Adjunct

[$_{CP}$[$_{IP}$ siti [$_{VP}$ yakın [$_{CP}$[$_{IP}$ edi [$_{VP}$ m^{b}aŋkʊŋbudi]
Siti believe Edi ACT-hit Budi
kapan?]]]]] (TR, E)
when
'When does Siti believe Edi hit budi?'

In-situ-*wh*-questions are also found in other Malay varieties, such as Standard Indonesian (among others: Dardjowidjojo, 1967; Sneddon, 1996; Alwi et al., 1998), Kuching Malay (Pincus et al., 2006), and Standard Malay (Kader, 1981; Cole and Hermon, 1998; Aman, 1999). In-situ-*wh*-questions are not exclusive to Malay as they are also found in many languages, among them Chinese and Japanese (Huang, 1982; Aoun and Li, 1993 among many others).

Wh-questions in Jambi Malay and other Malay varieties are different from languages like Chinese because in Jambi Malay the *wh*-phrase does not need to be in situ; rather the in-situ-*wh*-phrase is only one of the possible strategies for forming *wh*-questions, as shown previously in various places in section 1.1.3.2.2. In contrast, the *wh*-phrase in Chinese must be in situ, as illustrated by the following Mandarin Chinese examples.

(340) a. Zhangsan xiangxin zhuotian Lisi mai-le shu.
Zhangsan believe yesterday Lisi buy-ASP book
'Zhangsan believes Lisi bought books yesterday.'

b. Zhangsan xiangxin zhuotian shei mail-le shu?
Zhangsan believe yesterday who buy-ASP book
'Who does Zhangsan believe bought books yesterday?'

c. *Shei Zhangsan xiangxin zhuotion mail-le shu.
Who Zhangsan believe yesterday buy-ASP book
'Who does Zhangsan believe bought books yesterday?'

(341) a. Zhangsan xiangxin zhuotian Lisi mai-le shemme?
Zhangsan believe yesterday Lisi buy-ASP what
'What does Zhangsan believe Lisi bought yesterday?'

b. *Zhangsan xiangxin zhuotian shemme Lisi mai-le?
Zhangsan believe yesterday what Lisi buy-ASP
'What does Zhangsan believe Lisi bought yesterday?'

c. *Shemme Zhangsan xiangxin zhuotian Lisi mai-le?
what Zhangsan believe yesterday Lisi buy-ASP
'What does Zhangsan believe Lisi bought yesterday?'

In (340)b and (341)a, the *wh*-phrases *shei* 'who' and *shemme* 'what' stay in their base-generated positions and the sentences are grammatical. In (340)c, *shei* 'who' moves to the question-initial position and the sentence is ungrammatical. Likewise, *shemme* 'what' in (341)b moves to the position before the complement clause and the sentence is ungrammatical. Similarly, in (341)c, *shemme* 'what' moves to the question-initial position and the sentence is ungrammatical. In short, on the surface, *wh*-phrases in Chinese must be in situ.

In the literature on Chinese *wh*-questions, although the *wh*-phrase must remain in situ, it was originally claimed to undergo covert movement (LF) to its scopal position, e.g. by Huang (1982). However, Aoun and Li (1993) and many later writers argue that the *wh*-phrase does not move at LF. In section 1.1.3.2.2.2.3, I shall claim

that island facts suggest that in-situ-*wh*-phrases in Jambi Malay do not undergo movement at any level in the derivations, including at LF.

1.1.3.2.2.2.2. Moved *Wh*-phrases in Simple and Complement Clauses

As was also previously described, in addition to the *wh*-in-situ strategy, *wh*-questions can be formulated using the fronted *wh*-phrase strategy. In simple clauses, the *wh*-phrase is fronted from its base-generated position to the question-initial position. In complement clauses, there are two types of fronted *wh*-phrases. The first type is what has been labeled in the literature as partially-fronted *wh*-phrases. In partially-fronted *wh*-phrases, the *wh*-phrase is fronted from its base-generated position to the position between the higher verb and the subject of the lower verb, i.e. the position right before the left edge of the complement clause. The second type is the fully-fronted *wh*-phrase. In this type, the *wh*-phrase is fronted all the way from its base-generated position to the beginning of the matrix clause.

In what follows, I shall describe the structure of fronted-*wh*-phrases. I shall first begin with fronted *wh*-phrase in simple clauses. Then, I shall continue with fully-fronted *wh*-phrase in complement clauses. Finally, I shall discuss partially-fronted *wh*-phrases in complement clauses.

As was previously described in sections 1.1.3.2.2.1.1 and 1.1.3.2.2.1.2, the fronted *wh*-phrase strategy in simple clauses can be used for forming *wh*-questions questioning direct objects, NP indirect objects, PP indirect objects, and adjuncts. It has also been shown that when the fronted *wh*-phrase strategy is used for forming *wh*-questions questioning direct objects and NP indirect objects in simple clauses, the verb of the clause must be in bare form. However, if the fronted *wh*-phrase strategy is used to formulate *wh*-questions questioning the PP indirect object or adjunct, the verb of the

clause does not need to be in bare form. Some examples presented earlier are repeated below.

(342) a. Fronted *Wh*-phrase Questioning the Direct Object with Bare Verb

siapo taupik daʔ gbʊk? (TR, E)
who Taupik NEG hit
'Who didn't Taupik hit?'

b. Fronted *Wh*-phrase Questioning the Direct Object with Nasal Verb

*siapo$_i$ taupik daʔ ŋ^{g}bʊk t$_i$? (TR, E)
who Taupik NEG ACT-hit
'Who didn't Taupik hit?'

(343) a. Fronted *Wh*-phrase Questioning the Adjunct with Bare Verb

di mano jalɪl taŋkap malɪŋ-tu? (TR, E)
LOC which Jalil catch thief -DEM.DIST
'Where did Jalil catch the thief?'

b. Fronted *Wh*-phrase Questioning the Adjunct with Nasal verb

di mano jalɪl naŋkap malɪŋ-tu? (TR, E)
LOC which Jalil ACT-catch thief -DEM.DIST
'Where did Jalil catch the thief?'

The *wh*-questions in (342) show that the *wh*-phrase questioning the direct object of the clause, *siapo* 'who', is fronted from its base-generated position to the question-initial position, and the verb must be in bare form. The fact that the nasal prefix is obligatorily absent when the *wh*-phrase questioning the direct object is fronted, such as that in (342), is a piece of evidence for claiming that the *wh*-phrase in (342) has undergone movement. Note that this restriction is observed when an object is extracted, as discussed in section 1.1.1.2. As in English, the landing position is taken to be the specifier of CP. The same position was proposed by Saddy (1991, 1992) for Indonesian and Cole and Hermon (1998) for Malay. Thus, the structure for (342) is as illustrated in (344).

(344) [$_{CP}$ siapo [$_{IP}$ taupik daʔ gbʊk t_i]]? (TR, E)
who Taupik NEG hit
'Who did Taupik hit?'

In contrast, when the *wh*-phrase questioning the adjunct is fronted, such as in example (343), the verb of the clause does not need to be in the bare form. As was discussed in the voice section, the [+wh] feature of a *wh*-phrase questioning adjunct is irrelevant for the well-formedness of voice (see section 1.1.1.3 for a detailed discussion). In addition, in a statement, an adjunct can appear in sentence-initial position, as shown in (345)a. Thus, the *wh*-phrase in (345)b can be claimed to have been base-generated in the initial position.

(345) a. tadi-tu dioʔ la ŋam^{b}ɪʔ nasiʔ (TR, E)
earlier-DEM.DIST 3 PFCT ACT-take cooked.rice
'He took the cooked rice earlier.'

b . kapan dioʔ la ŋam^{b}ɪʔ nasiʔ? (TR, E)
when 3 PFCT ACT-take cooked.rice
'When did he take the cooked rice?'

Next, I shall turn the discussion to fronted *wh*-phrases in complement clauses. As was previously described, the *wh*-phrase in complement clauses can be fronted either partially, to a position between the verb of the matrix clause and the subject of the lower clause (i.e. the position before the complement clause), or fully, to a position before the matrix clause. As in simple sentences, if the *wh*-phrase questioning the direct object is fronted, the verb that the *wh*-phrase crosses must not bear the nasal prefix. Thus, if the *wh*-phrase is partially-fronted to a position before the complement clause, the verb of the complement clause must not bear the nasal prefix and the matrix verb does not need to be in bare form. However, if the *wh*-phrase is fully-fronted to a position before the matrix clause, both the verb of the complement clause and that of the matrix clause must not bear the nasal prefix. The restrictions on

verb form only apply to *wh*-extraction questioning the subject, direct objects and NP indirect objects (NP arguments) and do not apply to *wh*-extraction questioning adjuncts or PP arguments. Consider some examples below.

(346) Partially Fronted *Wh*-phrase Questioning the Direct Object

a. maʔ yakın siapo$_i$ eko daʔ tarıʔ t$_i$ kuat-kuat? (TR, E)
mother believe who Eko NEG pull RED-strong
'Who does mother believe Eko didn't pull strongly?'

b. *maʔ yakın siapo$_i$ eko daʔ narıʔ t$_i$ kuat-kuat? (TR, E)
mother believe who Eko NEG ACT-pull RED-strong
'Who does mother believe Eko didn't pull strongly?'

(347) Partially Fronted *Wh*-phrase Questioning the Adjunct
padila n^{d}ŋar kapan$_i$ somat baru ɲ^{j}ual
Padila ACT-hear when Soma just ACT-sell
motor-e t$_i$? (TR, E)
motorcycle-3
'When did Padila hear Somat had just sold sold his motorcycle?'

(348) Fully Fronted *Wh*-phrase Questioning the Direct Object

a. siapo$_i$ maʔ daʔ saŋko t'$_i$ eko la
who mother NEG think Eko PFCT
tarıʔ t$_i$ kuat-kuat? (TR, E)
pull RED-strong
'Who doesn't mother think Eko has pulled strongly?'

b. *siapo$_i$ maʔ daʔ ɲaŋko t'$_i$ eko la
who mother NEG ACT-think Eko PFCT
tarıʔ t$_i$ kuat-kuat? (TR, E)
pull RED-strong
'Who doesn't mother think Eko has pulled strongly?'

(349) Fully Fronted *Wh*-phrase Questioning the Adjunct
kapan$_i$ padila n^{d}ŋar t'$_i$ somat baru ɲ^{j}ual
when Padila re-hear Somat just ACT-sell
motor-e t$_i$? (TR, E)
motorcycle-3
'When did Padila hear Somat had just sold his motorcycle?'

As shown in (346), the *wh*-phrase questioning the direct object is partially-fronted to the position before the complement clause; thus, only the lower verb must be in bare form. In (348), the *wh*-phrase questioning the direct object is fully-fronted to the position before the matrix clause and therefore, both the matrix and the lower verbs must be in bare form.[100] The data in (347) and (349) indicate that the bare verb requirement does not apply when the *wh*-phrase questioning an adjunct is fronted.

The fact that a w*h*-phrase questioning an argument crosses an obligatorily bare form verb indicates that movement is involved in both partially and fully-fronted *wh*-phrases (see Saddy, 1991, 1992; Cole and Hermon, 1998). The *wh*-phrase questioning an argument which is partially-fronted has moved from its base-generated position to the spec of the lower CP and the *wh*-phrase questioning an argument which is fully-fronted has moved from its base-generated position, first to the spec of lower CP and then to the spec of the matrix CP. Thus, the structure for (346)a and (348)a, can be illustrated below. In section 1.1.3.2.2.2.3 below, I will show that island facts provide more evidence to support the claim that movement is involved in such structures.

(350) a. [$_{CP}$ [$_{IP}$ maʔ yakın [$_{CP}$ siapo$_i$
mother believe who
[$_{IP}$ eko daʔ tarıʔ t_i kuat-kuat?]]]] (TR, E)
Eko NEG pull RED-strong
'Who does mother think Eko didn't pull strongly?'

[100] The *wh*-phrase in (346)a and (348)a cannot be claimed to be fronted from the subject position of an object complement. The negation/auxiliary intervenes between the agent and the verb and thus, the complement clause cannot be analyzed to have the structure of object voice (cf. sections 1.1.1.1.3 and 1.1.1.2.3).

b. [$_{CP}$ siapo [$_{IP}$ maʔ daʔ saŋko[$_{CP}$ t'$_i$ [$_{IP}$ eko
who mother NEG think Eko
la tarıʔ t_i kuat-kuat?]]]] (TR, E)
PFCT pull RED-strong
'Who doesn't mother think Eko has pulled strongly?'

1.1.3.2.2.2.3. Islandhood

In this section, I shall present how in-situ *wh*-phrases and fronted *wh*-phrases pattern in island constructions.

It was described previously that *wh*-questions questioning both arguments and adjuncts in Jambi Malay, in either simple or complement clauses, can be formulated via the *wh*-in-situ strategy. In in-situ languages such as Chinese, it has been claimed by some authors (e.g. Huang, 1982) that the *wh*-phrase undergoes covert movement (LF) to its scopal position. However, as noted above, Aoun and Li (1993) and others argue that the *wh*-phrase does not move at LF. Despite the controversies regarding the analysis of in-situ *wh*-phrases in Chinese, it is essential to examine whether or not in-situ *wh*-phrases in Jambi Malay undergo movement at any level in the derivation (presumably at LF).

In-situ *wh*-phrases questioning both arguments and adjuncts in Jambi Malay can appear in island constructions, as shown in the following examples.

(351) a. In-situ Argument *Wh*-phrase in Sentential Subject
edi ŋ^{g}bʊk siapo di pasar m^{b}uat maʔ mara? (TR, E)
Edi ACT-hit who LOC market ACT-make mother angry
'That Edi hit who at the market made mother angry?'

b. In-situ Adjunct *Wh*-phrase in Sentential Subject
edi ŋ^{g}bʊk budi di mano m^{b}uat maʔ mara? (TR, E)
Edi ACT-hit Budi LOC which ACT-make mother angry
'That Edi hit Budi where made mother angry?'

(352) a. In-situ Argument *Wh*-phrase in Complex NP Island

kau n^{d}ŋar kabar oraŋ-tu naŋkap
2SG ACT-hear news person-DEM.DIST ACT-catch
apo malam tadi? (TR, E)
what last night
'You heard the news that the man caught what last night?'

b. In-situ Adjunct *Wh*-phrase in Complex NP Island

kau n^{d}ŋar kabar oraŋ-tu naŋkap
2SG ACT-hear news person-DEM.DIST ACT-catch
ikan di mano? (TR, E)
fish LOC which
'You heard the news the man caught fish where?'

(353) a. In-situ Argument *Wh*-phrase in Adjunct Island

lita mara karno eko ŋam^{b}ɪʔ apo di klas? (TR, E)
Lita angry because Eko ACT-take what LOC class
'Lita was angry because Eko took what in class?'

b. In-situ Adjunct *Wh*-phrase in Adjunct Island

lita mara karno eko ŋam^{b}ɪʔ pena-e ŋapo? (TR, E)
Lita angry because Eko ACT-take pen-3 why
'Lita was angry because Eko took her pen why?'

(354) a. In-situ Argument *Wh*-phrase in *Banso* Island

ali pcayo banso budi ŋam^{b}ɪʔ apo di sano? (TR, E)
Ali believe COMP Budi ACT-take what LOC there
'Ali believes that Budi took what there?'

b. In-situ Adjunct *Wh*-phrase in *Banso* Island

ali pcayo banso budi la ŋam^{b}ɪʔ aeʔ
Ali believe COMP Budi PFCT ACT-take water
di mano? (TR, E)
LOC which
'Ali believes that Budi has taken water where?'

As shown in (351) to (354), the *wh*-phrase which remains in-situ may appear inside island constructions. This suggests that the in-situ *wh*-phrase never moves in any derivation, not even at LF.

Next, I shall turn the discussion to fronted *wh*-phrases in islands. Generally, a fronted *wh*-phrase in island constructions is only possible if the *wh*-phrase is fronted within the island. Note that as was discussed in section 1.1.3.2.2.1.1.2.1 and section 1.1.3.2.2.1.2.1.1, when an argument *wh*-phrase is fronted, the verb that the *wh*-phrase crosses must not bear the nasal prefix. In section 1.1.3.2.2.2.2, I claim that the bare verb requirement is an indication that the fronted *wh*-phrase has undergone movement. Thus, I shall not repeat the discussion of the restriction on the verb used in fronted *wh*-questions below and shall only focus on whether or not island constraints apply to fronted *wh*-phrases. I shall show that fronted *wh*-phrases in Jambi Malay obey subjacency and thus, island constraints hold in the language.

All argument *wh*-phrases can be fronted within an island. In (355) to (357) below, it is shown that an argument *wh*-phrase that is fronted within an island is grammatical. I simplify the structure I provide for ease of presentation and discussion.

(355) Complex NP Island

kau	$n^{d}ŋar$	kabar	apo_i	[IP	oraŋ-tu		la		
2SG	ACT-hear	news	what		person-DEM.DIST		PFCT		
taŋkap	t_i	malam	tadi]?						(TR, E)
catch		last	night						

'You heard the news that the man has caught what last night?'

(356) Adjunct Island

lita	mara	karno	apo_i	[IP	eko	la	$am^{b}ɪʔ$	t_i	
Lita	angry	because	what		Eko	PFCT	take		
di	klas]?								(TR, E)
LOC	class								

'Lita was angry because Eko has taken what in class?'

(357) *Banso* Island

ali	pcayo	banso	apo_i	[IP	budi	la	$am^{b}ɪʔ$	t_i]? (TR, E)
Ali	believe	COMP	what		Budi	PFCT	take	

'Ali believes that Budi has taken what?'

Similarly, adjunct *wh*-phrases can be fronted within an island, as shown in the following examples.

(358) Complex NP Island

kau n^{d}ŋar kabar ŋapo$_i$ [$_{IP}$ oraŋ-tu
2SG ACT-hear news why person-DEM.DIST
naŋkap bujaŋ t$_i$]? (TR, E)
ACT-catch Bujang
'You heard the news they caught Bujang why?'

(359) Adjunct Island

lita mara karno ŋapo$_i$ [$_{IP}$ eko am^{b}ɪʔ pena-e t$_i$]? (TR, E)
Lita mara because why Eko take pen-3
'Lita is angry because Eko took her pen why?'

(360) *Banso* Island

ali pcayo [$_{CP}$ banso [di mano]$_i$ [$_{IP}$ budi la
Ali believe COMP LOC which Budi PFCT
ŋam^{b}ɪʔ aeʔ t$_i$]]? (TR, E)
ACT-take water
'Ali believes that Budi has taken water where?'

Unlike a *wh*-phrase that is fronted within an island, an argument *wh*-phrase that is fronted out of an island results in an ungrammatical sentence, as shown in the following examples.

(361) Complex NP Island

a. *kau n^{d}ŋar apo$_i$ [$_{NP}$ kabar [$_{CP}$ [$_{IP}$ oraŋ-tu
2SG ACT-hear what news person-DEM.DIST
la taŋkap t$_i$ malam tadi]]]? (TR, E)
PFCT catch last night
'You heard the news that the man had caught what last night?'

b. *apo$_i$ kau dŋar [$_{NP}$ kabar [$_{CP}$ [$_{IP}$ oraŋ-tu
what 2SG hear news person-DEM.DIST
la taŋkap t$_i$ malam tadi]]]? (TR, E)
PFCT catch last night
'You heard the news that the man had caught what last night?'

(362) Adjunct Island

a. *lita mara apo$_i$ [$_{CP}$ karno [$_{IP}$ eko la am^{b}ɪʔ t$_i$
Lita angry what because Eko PFCT take
di klas]]? (TR, E)
LOC class
'Lita was angry because Eko had taken what in class?'

b. *apo$_i$ lita mara [$_{CP}$ karno [$_{IP}$ eko la am^{b}ɪʔ t$_i$
what Lita angry because Eko PFCT take
di klas]]? (TR, E)
LOC class
'What was Lita angry because Eko took in class?'

(363) *Banso* Island

a. *ali pcayo apo$_i$ [$_{CP}$ banso [$_{IP}$ budi la
Ali believe what COMP Budi PFCT
am^{b}ɪʔ t$_i$ di sano]]? (TR, E)
take LOC there
'Ali believes that Budi has taken what there?'

b. *apo$_i$ ali pcayo [$_{CP}$ banso [$_{IP}$ budi la
who Ali believe COMP Budi PFCT
am^{b}ɪʔ t$_i$ di sano]]? (TR, E)
push LOC there
'What does Ali believe that Budi has taken there?'

Similarly, *wh*-questions in which the adjunct *wh*-phrase is fronted out of an island are also ungrammatical, as shown in the following examples.

(364) Complex NP Island[101]

a. *kau n^{d}ŋar ŋapo$_i$ [$_{NP}$ kabar [$_{CP}$ [$_{IP}$ oraŋ-tu
2SG ACT-hear why news person-DEM.DIST
naŋkap bujang t$_i$]]]? (TR, E)
ACT-catch Bujang
'You heard the news they caught Bujang why?'

[101] Some speakers claim that these two sentences are grammatical.

b. *ŋapo kau n^{d}ŋar [$_{NP}$ kabar [$_{CP}$ [$_{IP}$ oraŋ-tu
why 2SG ACT-hear news person-DEM.DIST
naŋkap bujang t_i]]]? (TR, E)
ACT-catch Bujang
'You heard the news they caught Bujang why?'

(365) Adjunct Island

a. *lita mara [di mano]$_i$ [$_{CP}$ karno [$_{IP}$ eko ŋam^{b}ɪʔ
Lita mara LOC which because Eko ACT-take
pena-e t_i]]? (TR, E)
pen-3
'Lita is angry because Eko took her pen where?'

b. *[di mano]$_i$ lita mara [$_{CP}$ karno [$_{IP}$ eko ŋam^{b}ɪʔ
LOC which Lita mara because Eko ACT-take
pena-e t_i]]? (TR, E)
pen-3
'Lita is angry because Eko took her pen where?'

(366) *Banso* Island

a. *ali pcayo [ŋapo]$_i$ [$_{CP}$ banso [$_{IP}$ budi
Ali believe why COMP Budi
la ŋam^{b}ɪʔ aeʔ t_i]]? (TR, E)
PFCT ACT-take water
'Ali believes that Budi has taken water why?'

b. *[ŋapo]$_i$ ali pcayo [$_{CP}$ banso [$_{IP}$ budi
why Ali believe COMP Budi
la ŋam^{b}ɪʔ aeʔ t_i]]? (TR, E)
PFCT ACT-take water
'Ali believes that Budi has taken water why?'

In short, fronted *wh*-phrases in Jambi Malay are only allowed within an island. *Wh*-phrase movement out of an island generates ungrammatical sentences. This indicates that subjacency holds in Jambi Malay because *wh*-movement out of the island crosses two or more maximal projections, as shown in the examples in (361) through (366) (Chomsky, 1973).

In addition, in section 1.1.3.2.2.1.3, I show that a *wh*-word in an NP must stay in situ and if it moves, the entire NP must move. This suggests that extraction from an NP is not allowed. It should be noted that the fact that extraction out of NPs is ill-formed is also due to subjacency, as exemplified below.

(367) *[$_{CP}$ siapo [$_{IP}$ kau la bli [$_{NP}$ motor t_i]]] (TR, E)
who 2SG PFCT buy motorcycle
'Whose motorcycle did you buy?'

In (367), *siapo,* the *wh*-phrase questioning the possessor of the object NP that contains a possessor and a possessee is extracted out of the NP. This extraction is ungrammatical because the *wh*-phrase crosses two maximal projections, an NP and an IP.

To sum up, in-situ *wh*-phrases in Jambi Malay never move at any level. In contrast, fully-fronted *wh*-phrases in Jambi Malay undergo *wh*-movement because they obey the island constraints. In addition, an element of an NP also cannot move out of the NP. The fact that fronted *wh*-phrases obey islandhood and that no element in an NP can be moved out of it is due to subjacency.

1.1.3.2.2.2.4. Clefted *Wh*-phrases

In this section, I shall discuss the structure of *wh*-questions that are formulated using a *wh*-phrase with the relativizer *yaŋ/naŋ.* This structure is referred to as the cleft structure. Some examples of *wh*-questions that have this structure are presented below.

(368) a. siapo yaŋ malɪŋ, paman?
who REL ACT-steal uncle
'Who was it that stole [it], Uncle?'

b. hay, apo naŋ kau bawaʔ-tu tadi?
EXCL what REL 2SG bring-DEM.DIST earlier
'Hey, what did you bring before?'

c. kalu di kbon-tu apo naŋ kau tanam?
if LOC garden-DEM.DIST what REL 2SG plant
'If [you're] in the garden, what is it that do you plant?'

Sentence (368)a questions the subject of stealing, whereas sentence (368)b and (368)c question the object of bringing and planting, respectively.

The question to ask is what the structure of the sentences in (368) should be. It should be remembered that in Jambi Malay questions like those in (368) can also appear without the relativizer *yaŋ/naŋ*. The following questions appear without *yaŋ/naŋ*.

(369) a. siapo m^{b}lo-e?
who ACT-keep-3
'Who took care of them?'

b. apo diam^{b}ɪʔ ka darat?
what PASS-take to land
'What did you take there?'

c. apo titɪn bli di pasar? (TR, E)
what Titin buy LOC market
'What did Titin buy at the market?'

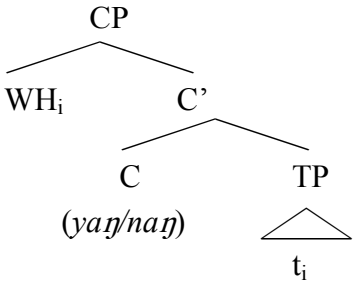
Examples (369)a and(369)b question the subject of the clause, whereas sentence (369)c questions the direct object of the clause.

In order to account for the structure of the sentences in (368) and (369), I shall consider two hypotheses: the Null Complementizer Hypothesis and the Headless Relative Clause Hypothesis, adopted from Cole et al. (1999). I shall show that the Headless Relative Clause Hypothesis is superior to the Null Complementizer Hypothesis.

1.1.3.2.2.2.4.1. The Null Complementizer Hypothesis

Given the sentences in (368) and (369), one might hypothesize that (368) and (369) have the same structure and that *yaŋ/naŋ* is optional, as illustrated in (370) below (Cole et al., 1999:3).

(370)



According to the structure in (370), the sentences in (368) and those in (369) are only different in one way, i.e. the complementizer in the sentences in (368) is filled with *yaŋ/naŋ,* whereas the one in the sentences in (369) is left empty. In other words, the Null Complemetizer Hypothesis claims that *wh*-questions like those in (368) are different from those in English only in that Jambi Malay allows the complementizer position in the main clause to be filled, whereas English does not.

However, in what follows I shall show that the analysis provided by the Null Complementizer Hypothesis is problematic as it does not make correct predictions regarding other facts. I adopt two of the three tests utilized by Cole et al. (1999) to show that the Null Complementizer Hypothesis is inadequate. The reason for not adopting the third argument is because it is not applicable to the data in Jambi Malay.

The first argument is based on the restrictions of *yaŋ/naŋ* in questions. For most speakers from whom I elicited data, questions without *yaŋ/naŋ* can be formed using the full range of question words. Some examples are presented below.

(371) a. siapo ditrajaŋ usɪn? (TR, E)
who PASS-kick Husin
'Who was kicked by Husin?'

b. apo titin makan? (TR, E)
what Titin eat
'What did Titin eat?'

c. kapan kau naeʔ-eʔ (MD, N)
when 2SG go.up-3
'When did you perform?'

d. macam mano ŋamᵇɪʔ-e, tʊʔ?
sort which ACT-take-3 TRU-grandfather
'How did you take it, Grandpa?'

e. ŋapo daʔ dimakan?
what NEG PASS-eat
'Why aren't [they] eaten?'

In contrast, questions with *yaŋ/naŋ* are restricted to argument questions. *Yaŋ/naŋ* questions with *apo* 'what' and *siapo* 'who' were well-accepted among the speakers, but questions with other *wh*-phrases were generally rejected by the speakers, as indicated below.

(372) a. siapo yaŋ ditrajaŋ ʊsɪn? (TR, E)
who REL PASS-kick Husin
'Who is it that was kicked by Husin?'

b. apo yaŋ titin makan? (TR, E)
what REL Titin eat
'What is it that was eaten by Titin?'

(373) a. *kapan yaŋ kau naeʔ-eʔ (TR, E)
when REL 2SG go.up-3
'When is it that you performed?'

b. *macam mano yaŋ ŋambᵇɪʔ-e, tʊʔ? (TR, E)
sort which REL ACT-take-3 TRU-grandfather
'How is it that you took it, Grandpa?'

c. *ŋapo yaŋ daʔ dimakan? (TR, E)
why REL NEG PASS-eat
'Why is it that [they] aren't eaten?'

Speakers had unanimous intuitions that the sentences in (372) are well-formed. In contrast, most speakers claimed that the sentences in (373) are ungrammatical. However, a few speakers thought that the sentences were rarely heard, but could still be understood.

The fact that the sentences in (372) are fully acceptable to native speakers while those in (373) are not, is problematic for the Null Complementizer Hypothesis, as the Null Complementizer Hypothesis makes no prediction for why the sentences in (372) and (373) should differ in grammaticality. One possible stipulative solution to this problem would be to claim that the sentences in (372) and (373) are different because the *wh*-phrase in (372) is an argument, whereas the one in the sentences in (373) is an adjunct. However, there is no reason to believe that the grammatical status of the element filling the spec of CP would affect the grammaticality of a filled complementizer position. Thus, the Null Complementizer Hypothesis fails to account for why the sentences in (372) are grammatical, while those in (373) are not grammatical or less grammatical.

The second argument that shows the Null Complementizer Hypothesis is inadequate comes from the responses to *wh*-questions with *yaŋ/naŋ* and those without *yaŋ/naŋ*. *Wh*-questions without *yaŋ/naŋ* are not usually replied to with *yaŋ/naŋ* responses. The questions in (371)a and (371)b, repeated in (374)a and (375)a, are best responded to by the answers in (374)b and (375)b, but not those in (374)c and (375)c, respectively (cf. section 1.1.3.3.2).

(374) a. siapo ditrajaŋ ʊsɪn? (TR, E)
who PASS-kick Husin
'Who was kicked by Husin?'

b. bujaŋ ditrajaŋ ʊsɪn (TR, E)
Bujaŋ PASS-kick Husin
'Bujang was kicked by Husin.'

c. ?yaŋ ditrajaŋ ʊsɪn bujaŋ (TR, E)
REL PASS-kick Husin Bujang
'The one that was kicked by Husin is Bujang.'

(375) a. apo titin makan? (TR, E)
what Titin eat
'What did Titin eat?'

b. titin makan kuɪ (TR, E)
Titin eat cake
'Titin ate a cake.'

c. ?yaŋ titin makan kuɪ (TR, E)
REL Titin eat cake
'What Titin ate was a cake.'

Sentences (374)c and (375)c show that the presence of the headless relative clause is inappropriate in responding to questions without *yaŋ/naŋ*. In contrast, the presence of the headless relative clause is appropriate when it is used to respond to *yaŋ/naŋ* questions, as shown in (376) and (377) below.

(376) a. siapo yaŋ ditrajaŋ ʊsɪn? (TR, E)
who REL PASS-kick Husin
'Who is it that was kicked by Husin?'

b. bujaŋ ditrajaŋ ʊsɪn (TR, E)
Bujaŋ PASS-kick Husin
'Bujang was kicked by Husin.'

c. yaŋ ditrajaŋ ʊsɪn bujaŋ (TR, E)
REL PASS-kick Husin Bujang
'The one that was kicked by Husin is Bujang.'

(377) a. apo yaŋ titin makan? (TR, E)
what REL Titin eat
'What did Titin eat?'

b. titin makan kuɪ (TR, E)
Titin eat cake
'Titin ate a cake.'

c. yaŋ titin makan kuɪ (TR, E)
REL Titin eat cake
'What Titin ate was a cake.'

We saw that questions with *yaŋ/naŋ* can be answered with a headless relative clause, but those without *yaŋ/naŋ* cannot be answered using a headless relative clause. This fact poses another challenge to the Null Complementizer Hypothesis. The Null Complementizer Hypothesis claims that sentences with and without the complementizer *yaŋ/naŋ* have the same structure, except for whether or not the complementizer is present. This suggests that responses with or without a complementizer should be equally acceptable. However, the facts show otherwise. In English, whether or not a complementizer is present in the answer to a question without a complementizer is not a problem, as shown below.

(378) a. What do you think Mary ate?
b. I think Mary ate a cake.
c. I think that Mary ate a cake.

Therefore, the Null Complementizer Hypothesis cannot account for the fact that the (c) sentences of (374) and (375) are ungrammatical/less acceptable.

In short, the Null Complementizer Hypothesis fails to distinguish different patterns shown by *wh*-questions with *yaŋ/naŋ* and those that do not have *yaŋ/naŋ* in Jambi Malay.

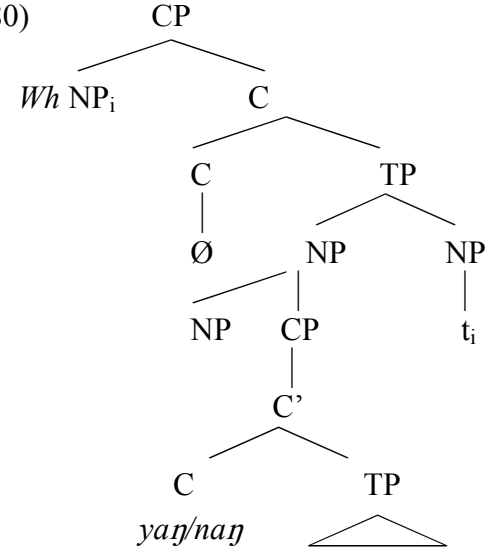
1.1.3.2.2.2.4.2. The Headless Relative Clause Hypothesis

This alternative hypothesis is labeled as the Headless Relative Clause Hypothesis (HRCH) (again, following Cole et al., 1999). According to the HRCH, the sentences in (368) and (369) have different structures. The HRCH claims that the questions in (369) have a structure like that of English *wh*-questions, whereas the questions in (368) do not. Instead, questions like those in (368) are nominal or null copula sentences like (379).

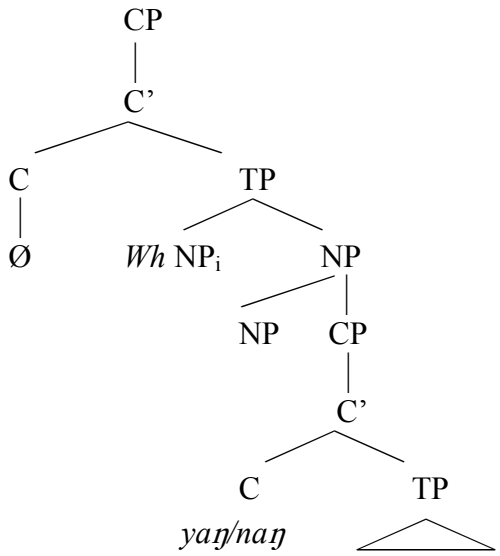
(379) bujaŋ abaŋ aku (TR, E)
Bujaŋ older.brother 1SG
'Bujang is my elder brother.'

Presumably, sentence (379) consists of a TP or a small clause that is comprised of two NPs. According to the HRCH, sentences like those in (368) also consist of two NPs, a headless relative clause and the *wh*-phrase *apo* 'what' or *siapo* 'who', which are related in the same way that *bujaŋ* 'Bujang' and *abaŋ aku* 'my older brother' are related in (379). The structure is as described in (380) or (381). The structure in (380) involves predicate fronting (discussed in section 1.1.2.1.3) (cf. section 1.1.2.2.2.2).

(380)



(381)



Following Cole et al. (1999), I assume that (380) is the correct structure. The important point is whether the Headless Relative Clause Hypothesis can explain the facts that cannot be accounted for by the Null Complementizer Hypothesis.

The first problem shown earlier is that the Null Complementizer Hypothesis cannot account for the fact that *yaŋ* questions with *apo* 'what' and *siapo* 'who' *wh*-phrases are completely well-formed, whereas those with other *wh*-phrases (such as PP and adjuncts) are less acceptable or even rejected by most speakers. According the Headless Relative Clause Hypothesis, *yaŋ/naŋ* is not the complementizer of the whole CP. Instead, it is the complementizer that introduces a headless relative clause. Therefore, according to the HRCH, the restriction in what can be questioned follows from the restriction on which positions can be relativized in headless relative clauses (cf. section 1.1.4.2.2.6). Speakers who reject questions in which the adjunct is relativized with *yaŋ/naŋ*, such as those in (373), also reject sentences like those below.

(382) a. *yaŋ budi pgi ka buŋo (TR, E)
REL Budi go to Bungo
'The place that Budi went to is Bungo.'

b. *yaŋ jalıl dimarai karno dioʔ malas (TR, E)
REL Jalil PASS-angry-APPL because 3 lazy
'Why Jalil was scolded is because he was lazy.'

c. *yaŋ budi maŋkʊŋ edi pake kayu (TR, E)
REL Budi ACT-hit Edi use wood
'The way that Budi hit Edi is with a stick.'

Unlike the sentences in (382), the sentences in (383) below are completely grammatical.

(383) a. yaŋ aku bawaʔ kuı (TR, E)
REL 1SG bring cake
'The thing that I brought is a cake.'

b. yaŋ ditrajaŋ ʊsın bujaŋ (TR, E)
REL PASS-kick Husin Bujang
'The one who was kicked by Husin is Bujang.'

The conclusion that can be drawn is that arguments can be relativized by headless *yaŋ/naŋ* relative clause because NP arguments can be relativized in Jambi Malay, whereas non-NP arguments and adjuncts cannot be relativized.

According to the HRCH, the sentences in (372) are based on headless relative clauses, like those in (383), whereas the sentences in (373) are assumed to be based on headless relative clauses like sentences in (382) and thus are predicted to be ungrammatical. Therefore, the HRCH is able to account for the ungrammaticality of the sentences in (373).

The second problem encountered by the Null Complementizer Hypothesis is that it cannot account for the fact that the questions without *yaŋ/naŋ* cannot be replied to using *yaŋ/naŋ* answers, whereas questions with *yaŋ/naŋ* can be replied to using *yaŋ/naŋ* answers. This problem is overcome by the HRCH in the following way:

Questions with *yaŋ/naŋ* like those in (376)a and (377)a have the structure of a headless relative clause followed by an NP. Thus, it is unsurprising that the headless relative clause can be used in answers. The fact that headless relative clauses are rejected for questions without *yaŋ/naŋ* is also predictable because the answer to a question is expected to preserve the overall structure of the question asked.

To conclude, I have shown that the Headless Relative Clause Hypothesis makes better predictions than the Null Complementizer Hypothesis for clefted *wh*-questions.

1.1.3.3. Answers

Answers to questions are dependent on what information needs to be gathered from the interlocutor. In what follows, I shall describe possible answers for each question type that has been described previously.

1.1.3.3.1. Answers to Yes-no Questions

Answers to yes-no questions may simply be *yo/iyo/ŋ^{g}ɪ* 'yes' or *daʔ* 'no', as exemplified in (384) and (385), as well as *nta* 'not.know' or *daʔ tau* 'NEG know', as shown in (386).

(384) Speaker A: ʊ... bsaʔ, yo?
EXCL big yes
'Oh, was [it] big?'

Speaker B: iyo
yes
'Yes.'

(385) Speaker A: bapaʔ bntɪ daʔ dapat?
father EPIT NEG get
'Your father didn't get [it]?'

Speaker B: daʔdo
NEG.exist
'No.'

(386) Speaker A: ko palɪŋ ado mpat kaleŋ, daʔ?
this most exist four can NEG
'At most, this can be four cans, right?'

Speaker B: nta
not.know
'I don't know.'

Frequently, yes-no questions are not always answered by using a 'yes' or 'no' answer. Instead, speakers use the element(s) of the question as the answer, such as the aspect marker, the verb, and a noun, as shown in (387) to (391) below.

(387) Speaker A: lʊm baraŋkat?
not.yet leave.for
'Hasn't [he] left?'

Speaker B: lʊm
not.yet
'Not yet.'

(388) Speaker A: poto-e ado, daʔ
photo-3 exist NEG
'Does anyone have his photograph?'
[Lit. 'Is there his photograph?']

Speaker B: daʔ tɪʔ
NEG not.exist
'No.'

(389) Speaker A: abaŋ kau ado yaŋ bawaʔ mʊbɪl, daʔ?
older.brother 2SG exist REL bring car NEG
'You have a brother who is a driver, don't you?'
[Lit. 'You have a brother who drives a car, right?']

Speaker B: ado
exist
'Yes.'

(390) Speaker A: kau dewe?an la, yo? (MD, N)
2SG alone-NMLZ TRU-Sila yes
'Do you [work on it] by yourself?'
[Lit. 'Are you alone, Sila?']

Speaker B: dewe?an
alone-NMLZ
'Yes.'

(391) Speaker A: "baɲa? ayam kau lʊr?" kate-e
a.lot chicken 2SG TRU-sibling word-3
'"Do you have many chickens?" he asked.'
[Lit.'"Are your chickens many?" were his words.']

Speaker B: "ado-la dikit," kato aku
exist-EMPH a.little word 1SG
'"I have some," I said.'
[Lit. '"[I] have some" were my words.']

If the answer contradicts the information in the question, the person who answers the question may simply provide the right information, instead of answering with 'no'.

(392) Speaker A: duo pʊlʊ tigo pʊlʊ, yo?
two ten three ten yes
'It's twenty or thirty, isn't it?'

Speaker B: mpat pʊlʊ
four ten
'Forty.'

(393) Speaker A: bagian apo krjo-e?
divide-NMLZ what work-3
'What division is his work?'

Speaker A: elektronik?
electronics
'Is it electronics?'

Speaker B: tekstil
textile
'Textile.'

1.1.3.3.2. Answers to Question-word Questions

Answers to question-word questions consist of the information that the question asker needs, as exemplified below.

(394) Speaker A: paŋanten di mano?
bride.or.bridegroom LOC which
'Where did you get married?'

Speaker B: di uma maʔ aku-tu
LOC house mother 1SG-DEM.DIST
'At my mother's house.'

(395) Speaker A: ŋapo ayam rɪbʊt nian buŋi-e?
why chicken noisy very sound-3
'Why are the chickens so noisy?'

Speaker B: n^{d}aʔ nloʔ, dioʔ n^{d}aʔ nloʔ
want ACT-egg 3 want ACT-egg
'They are about to lay eggs.'

It has been discussed previously that question-word questions can be formulated via the cleft *wh-* strategy. It should be noted that a question-word question that is formed via the cleft *wh-* strategy can be answered using a cleft structure as well as a non-cleft structure, as exemplified in (396). The answer to (396)a may have the cleft structure ((396)b) as well as the non-cleft structure ((396)c).

(396) a. ha, siapo naŋ batanaʔ-ko?
EXCL who REL INTR-cook.rice-DEM.DIST
'Well, who was it that cooked this rice?'

b. aku naŋ batanaʔ-ko (TR, E)
1SG REL INTR-cook.rice-DEM.DIST
'I was the one who cooked this rice.'

c. aku batanaʔ-ko
1SG INTR-cook.rice-DEM.DIST
'I cooked this rice.'

In contrast, if a question-word question is formed via the non cleft *wh*-strategy, the complete answer to the question cannot have a cleft structure, as shown in (397) below (see also section 1.1.3.2.2.2.4.1).

(397) a. siapo mᵇli-e (MD, N)
who ACT-buy-3
'Who bought it?'

b. waʔ ramli mᵇli-e (TR, E)
TRU-uncle Ramil ACT-buy-3
'Uncle Ramli bought it?'

c. */?waʔ ramli yaŋ mᵇli-e (TR, E)
TRU-uncle Ramli REL ACT-buy-3
'Uncle Ramli bought it?'

As shown in (397)b, the answer to the question in (397)a contains no *yaŋ* and the sentence is perfectly grammatical, whereas in (397)c, the answer is with *yaŋ* and was judged to be ungrammatical by most speakers, but judged to be rare by a few speakers.

1.1.3.4. Imperatives

An imperative is a special grammatical mood that is used to indicate a command, or a request. Imperatives are used when someone directs someone else to do something. Some imperatives are commands, some are requests, and others are simply suggestions.

Generally, there are two types of imperatives: positive imperatives (section 1.1.3.4.1) and negative imperatives (section 1.1.3.4.2). In addition, speakers of Jambi Malay also use passive contructions as imperatives (section 1.1.3.4.3). Other types of imperatives are also available, as discussed in section 1.1.3.4.4.

1.1.3.4.1. Positive Imperatives

Positive imperatives are commands to the interlocutor that the interlocutor do what is expected.

(398) iyo, iyo, yo... ha, amᵇɪɪʔ-tu!
yes yes yes EXCL take-DEM.DIST
'Right, take it!'

(399) ha, suda-tu giʔ sʊrʊ dioʔ nᵈŋar!
EXCL finish-DEM.DIST later ask 3 ACT-listen
'Well, after that, ask her to listen!'

Note that the verbs used in the imperative are in the bare form, not in nasal form.

(400) a. tampar budaʔ- tu! (TR, E)
slap kid-DEM.DIST
'Slap him!'

b. *nampar budaʔ-tu! (TR, E)
ACT-slap kid-DEM.DIST
'Slap him!'

(401) a. amᵇɪʔ aeʔ panas-tu! (TR, E)
take water hot-DEM.DIST
'Take the hot water!'

b. *ŋamᵇɪʔ aeʔ panas-tu (TR, E)
ACT-slap water hot-DEM.DIST
'Take the hot water!'

1.1.3.4.2. Negative Imperatives

Negative imperatives are marked by *jaŋan* 'don't', as shown below.

(402) a. motor jaŋan dibawaʔ! (TR, E)
motorcycle don't PASS-bring
'Don't ride the bike!'

b. jaŋan bapantaŋ satŋa-satŋa
don't INTR-forbidden RED-one-middle
'Don't follow the rules only half way!'

1.1.3.4.3. Passive Imperatives

Imperatives with transitive verbs can be expressed using a passive construction, with prefix *di-*. Such imperatives are considered more polite and sometimes are considered as suggestions directed at the interlocutor or a third person.[102] Examples follow.

(403) a. ʊbat-tu diminum!
medicine-DEM.DIST PASS-drink
'Drink the medicine!'

b. aeʔ-tu diminum, bi!
water-DEM.DIST PASS-drink TRU-aunt
'Have your drink, please!'

c. ha, kawa dijrang-la situ!
EXCL big.frying.pan PASS-put.on.fire-EMPH there
'Okay, put the big frying pan on the fire!'

Furthermore, passive imperatives may also use the negative marker *jaŋan* 'don't', as exemplified below.

(404) a. jaŋan dimaini, ay, yo!
do.not PASS-play-APPL EXCL yes
'Don't play it!'

b. jaŋan dipɪcɪt!
do.not PASS-press
'Don't press [it]!'

If there is no agent DP present in a sentence with a *di-* passive, it is impossible to decide whether it is an imperative or a normal passive sentence. Only the context can tell us whether a *di-* passive sentence is a statement or an imperative.

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[102] Passives used as imperatives are also observed in Standard Indonesian (Sneddon, 1996:326). In Jakarta Indonesian, the same fact is also observed (observation made on the Child Language Database of the Jakarta Field Station, Max Planck Institute for Evolutionary Anthropology).

Without knowing the context, sentences in (403) can be interpreted as normal passive sentences. However, if an agent DP is present, the sentence is a declarative sentence because a passive imperative cannot have an agent.

1.1.3.4.4. Other Imperatives and Requests

In addition to the three types of imperatives described above, other types of imperatives are also found. These includes imperatives with the emphatic marker *–la*, imperatives with the tag *yo* 'yes' and requests with *tʊlʊŋ* 'help', *cubo* 'try', *payʊ* 'let's', *bia?* 'let', and *minta?* 'ask.for'.

Imperatives with the emphatic marker *–la* is similar to positive imperatives, as shown in (405).

(405) ambɪʔ-la dewеʔ situ!
take-EMPH alone there
'Help your self!'
[Lit. 'Take it yourself!']

The tag *yo* 'yes' in imperatives softens the assertion, as illustrated in (406).

(406) buaŋ sarap-e, yo, kalu kau pgi (TR, E)
throw.away garbage-3 yes if 2SG go
'Throw the garbage away, won't you, when you go.'

Requests are forms of polite/soft imperatives. The use of *tʊlʊŋ* 'help', *cubo* 'try', *payʊ* 'let's', and *minta?* 'ask.for' are demonstrated in (407). *Tʊlʊŋ* 'help' is used when the interlocutor is older or from a higher social status. In addition, to make the imperative even more polite, an epithet is also employed before the imperative.

(407) a. *tʊlʊŋ* 'help'
waʔ, tʊlʊŋ bukaʔ lawaŋ! (TR, E)
uncle.or.aunt` help open door
'Open the door, please!'

b. *cubo* 'try'

cubo kau pake topi metro-tu!
try 2SG use hat Metro-DEM.DIST
'Try to wear the Metro cap!'

c. *payʊ* 'let's

no, no, payʊ sam^{b}ɪl-ko
TRU-female TRU-female come.on while-DEM.PROX
diminum ae?-ko!
PASS-drink water-DEM.PROX
'Come on, honey, have this drink, please!'

d. *minta?* 'ask for'

minta? tape, niŋ!
ACT-ask.for k.o.food TRU-yellow
'Give me *tape*, Auntie.'

To conclude, imperatives in Jambi Malay cover positive imperatives, negative imperatives, passive imperatives, and other imperatives which are more polite or soften and can be categorized as requests.

1.1.3.5. Other Sentence Types

In this section, I shall describe other sentence types which are observed in Jambi Malay, namely exclamative sentences (section 1.1.3.5.1) and existential sentences (section 1.1.3.5.2).

1.1.3.5.1. Exclamative Sentences

Exclamatory sentences are used to express the speaker's feelings or attitude towards something, in an emphatic way. As in Indonesian (Sneddon, 1996:334), many exclamations are single words and are called interjections. In such cases, speakers express their immediate reaction to some event, express surprise, anger, love, and so on. Examples follow.

(408) a. adʊ!
EXCL
'Oh!'

b. wai!
EXCL
'Wow!/Oh dear!'

c. adʊ maʔ-e!
EXCL mother-3
'Oh mine!'

Exclamatory sentences can be expressed using an interjection followed by a statement, as illustrated in the following examples.

(409) a. way, bini-ɲo kasar nian! (JC, N)[103]
EXCL wife-3 rude very
'My goodness, how rude is his wife!'

b. adʊ maʔ! gatal palaʔ aku!
EXCL mother itchy head 1SG
'Oh Gosh! My head is itchy!'

1.1.3.5.2. Existential Sentences

Jambi Malay has an existential verb *ado*. The verb *ado* 'exist' has seven interesting properties. First, in many cases, *ado* means 'exist', as shown in (410) below.

(410) *ado* 'exist'

a. suda-tu ado pulaʔ sakolaan,
finish-DEM.DIST exist PART school-NMLZ
itu di titian tras
DEM.DIST LOC Titian Teras
'Then there is a school, it is Titian Teras.'

[103] This utterance is uttered by a speaker who was originally from one of the villages in *Seberang*, but he had lived in the city for more than twenty years.

b. memaŋ ado tapa kato bapaʔ aku
indeed exist k.o.fish word father 1SG
'My father said that *tapa* fish indeed exist.'

Secondly, *ado* can be translated as 'there'.

(411) *ado* 'there'

a. ado kotaʔ meʔ-ko buat-e, ha
exist box like-DEM.PROX make-3 EXCL
'There is a box, he made it like this.'

b. siko ado bada meʔ-tuʔ
here exist container like-DEM.DIST
'Is there a container like that here?'

Third, *ado* can be preceded by negation, temporal markers and modals, as shown below.

(412) *Ado* Preceded by Negation/Modal/Time Adverbial

a. kalu lbaran-tu daʔ ado, kami jaraŋ mᵇli tloʔ
if Lebaran-DEM.DIST NEG exist 1 seldom ACT-buy egg
'We don't, no, I mean… we seldom buy eggs on Lebaran day.'

b. kalu dioʔ blʊm ado make-e priyʊʔ
if 3 not.yet exist ACT-use-3 pan
kʊkʊs-tu, pake-la dulu
steam-DEM.DIST use-EMPH before
'If she doesn't use the steaming pan, you can use it then.'

Fourth, the *ado* construction corresponds to the English expression 'some (are)', as illustrated below.

(413) *Ado* 'some are'/'one is'

a. ado yaŋ tukaŋ clʊp, kan?
exist REL AGT dip Q
'One of them works as a dipper, right?'

b. oraŋ ado oraŋ ɲadap
person exist person ACT-tap
'Some people tapped.'

Fifth, in other constructions, *ado* means 'have, own', occurring with an obligatory complement (which indicates the thing owned), as in (414) below.

(414) *Ado* 'have, own'

a. kini-tu barapo eko? ado bntɪ lmari luar?
now-DEM.DIST how.much CLF exist EPIT wardrobe out
'Now how many cupboards do you have outside?'

b. ado jalo taŋsi kamu-tu, da??
exist casting.net k.o.plastic 2-DEM.DIST NEG
'You have a plastic casting net, don't you?'

Sixth, it functions as a linking verb meaning 'be' when it occurs before the locative preposition *di,* as exemplified below.

(415) *Ado* as 'linking verb'

a. elo? be malam-ko dio? ado di ruma
beautiful just night-DEM.PROX 3 exist LOC house
'It's great that he is at home tonight.'

b. ado di luar-tu gna-e
exist LOC out-DEM.DIST place-3
'The container is outside.'
[Lit. 'The place is outside.']

Seventh, *ado* functions as an intensifier/emphatic marker when it comes before a verb.[104]

(416) *Ado* as 'intensifier'

a. ado batanam kacaŋ ijo
exist INTR-plant bean green
'[I] once planted mung beans.'

[104] Sneddon (1996:265) points out that when *ada* 'exist' appears before a verb, it cannot be treated as a verb because its role is similar to that of emphatic 'do' in English.

b. kami yo ado diam di umo-ko saritu,
1 yes exist reside LOC paddy-DEM.PROX before
ŋiŋon ɪtɪʔ
ACT-breed duck
'When we once stayed at this paddy field, raising ducks.'

These seven properties presented above are also observed with regard to Indonesian *ada* 'exist' (Sneddon, 1996). In addition, we can unify the functions of *ado* to be underlyingly a verb and an intensifier. When *ado* is followed by a verb, it functions as an intensifier. This is exactly as pointed out by Sneddon (1996) for *ada* in Indonesian. When *ado* is followed by other parts of speech, it functions as a verb.

To conclude, in section 1.1.3, I have described different types of sentences: declarative sentences, interrogative sentences, and imperatives. In addition, I have also presented different answers to different types of questions. Finally, I have also presented two other sentence types: exclamatory sentences and existential sentences.

1.1.4. Subordination

A complex clause consists of two clauses where one clause is dependent upon the other clause. The clause that does not stand by itself is the subordinate clause, whereas the clause that can stand alone is the main clause.

In Jambi Malay, three types of subordinate clauses are observed, i.e. argument clauses, relative clauses, and adverbial clauses.[105] This section is organized as follows: section 1.1.4.1 discusses the argument clause; section 1.1.4.2 describes the

[105] The questionnaire refers to these subordinate clause types as noun clauses, adjective clauses, and adverb clauses, respectively (Comrie and Smith, 1977). In traditional typological studies, as pointed out by Thompson and Longacre (1985:172) and Besnier (2000:46), these three types of subordinate clauses are found cross-linguistically.

relative clause; section 1.1.4.3 presents the adverbial clause; and section 1.1.4.4 describes the subordinate clause without subordinators.

1.1.4.1. Argument Clauses

An argument clause is defined as a clause that fills the position of an argument, i.e. subject position and object position. Examples follow.

(417) a. Subject Position

[m^{b}lo kakanaʔ-ko] bapahalo
ACT-keep PARTRED-child-DEM.PROX INTR-merit
'To take care of children brings merit.'

b. Direct Object Position

dioʔ tau [aku daʔ puŋo]
3 know 1 NEG have
'They knew that I didn't have any.'

There are two types of clauses which can be used as an argument clause, namely: simple clauses (see section 1.1.4.1.1) and nominalized clauses (see section 1.1.4.1.2). In section 1.1.4.1.3, I describe subject argument clauses, which I refer to as subject clauses. In section 1.1.4.1.4, I describe object argument clauses which I refer to as complement clauses. Regarding the complement clause, I also include a description of control constructions and raising constructions in Jambi Malay.

1.1.4.1.1. Simple Clauses

A simple clause is a clause that could be an independent sentence. A simple clause may fill the subject position of the main clause, the object position of the main clause, and the complement of a preposition, as exemplified in square brackets in (418) below. In these cases, the simple clause functions like a noun phrase because it fills the position that a noun phrase occupies.

(418) a. [mncari-e] srɪt
ACT-seek-3 difficult
'To find them is difficult.'

b. dioʔ ŋato [aku-tu padeʔ mʊlʊt]
3 ACT-word 1SG-DEM.DIST clever mouth
'He said that I was talkative.'

c. a, tu crito-e no tntaŋ
EXCL DEM.DIST story-3 TRU-female about
[bibi bariŋon ɪtɪʔ-ko tadi]
aunt INTR-breed duck-DEM.PROX earlier
'Well, that's the story about me raising ducks.'

In (418)a, the simple clause *mncari-e* 'to find them' serves as the subject of the matrix clause and in (418)b, the simple clause *'aku-tu padeʔ mulut* 'I was talkative' functions as the object of the matrix clause. Similarly, the simple clause *bibi bariŋon ɪtɪʔ-ko tadi* 'me raising ducks' in (418)c is the complement of the preposition *tntaŋ* 'about'.

Simple argument clauses can be introduced by the complementizer *banso~baso* 'COMP', shown in (419). This complementizer is used in the Tanjung Raden and Mudung Darat dialects, but it is not used in the City dialect. Some young speakers of the Tanjung Raden dialect rejected the use of *banso~baso* for subject clauses and some others claim that only older people used it. As for complement clauses, the same speakers would still accept the use of *banso~baso* as a complementizer despite the fact that they claimed that people rarely used it.

(419) a. [banso dioʔ n^{d}aʔ nika] la dibagɪ
COMP 3 want get.married] PFCT PASS-give
tau ka maʔ-e (TR, E)
know to mother-3
'That he wants to get married has been reported to his mother.'

b. kau daʔ tntu [banso dunio-ko n^{d}aʔ kiamat]?
2SG NEG know COMP word-DEM.PROX want doomsday
'Don't you know that doomsday is coming?'

c. ha, soretu bibi lapor-la ka dioʔ
EXCL yesterday aunt report-EMPH to 3
[baso ɪtɪʔ-tu la mati]
COMP duck-DEM.DIST PFCT dead
'So, I told him that the ducks died yesterday.'

1.1.4.1.2. Nominalized Clauses

A nominalized clause is different from a simple clause because a simple clause can appear as an independent clause, whereas a nominalized clause cannot appear by itself as a complete sentence. A nominalized clause is formulated by applying a morpho-syntactic process to a clause. A clause can be nominalized by adding the enclitic *–e/-ɲo* to the verb of the clause and having the verb appear before the subject (see section 2.1.2.1.9.1 in which I describe the enclitics *–e* and *-ɲo* and section 3.4.7 in which I claim that *–e* and *-ɲo* are clitics). Clauses with both intransitive and transitive verbs can be nominalized.

In deriving a nominalized clause from an intransitive clause, the enclitic *–e/-ɲo* attaches to the verb and the subject of the clause must appear after the nominalized verb. (420) contains examples of simple intransitive clause and in (421) these clauses become nominalized clauses by adding the enclitic *–e/-ɲo* (shown in square brackets) to the verb and the subject of the intransitive clause appears after the encliticized verb.

(420) a. budi dataŋ (TR, E)
Budi come
'Budi came.'

b. mubil-ko rusaʔ (TR, E)
car-DEM.PROX broken
'This car is broken.'

(421) a. [dataŋ-e budi] mᵇuat kami mara (TR, E)
come-3 Budi ACT-make 1 angry
'Budi's arrival made us angry.'

b. [rusaʔ-e mʊbɪl-ko] la dibagɪ
broken-3 car-DEM.PROX PFCT PASS-give
tau ka maʔ (TR, E)
know to mother
'The breakage of this car has been reported to mother.'

The nominalized clause *dataŋ-e budi* 'Budi's arrival' in (421)a and the nominalized clause *rusaʔ-e mʊbɪl-ko* 'the breakage of this car' in (421)b serve as the subject of the matrix clause.

The agent of the nominalized clause must appear after the encliticized verb and when it appears before the encliticized verb, the sentences are ungrammatical, as shown in (422) below.[106]

(422) a. *[budi dataŋ-e] mᵇuat kami mara (TR, E)
Budi come-3 ACT-make 1 angry
'Budi's arrival made us angry.'

b. *[mʊbɪl-ko rusaʔ-e] la dibagi tau ka maʔ (TR, E)
car-DEM.DIST broken-3 PFCT PASS-give know to mother
'The breakage of this car has been reported to mother.'

Nominalizing a transitive clause requires more processes than nominalizing an intransitive clause. First, like nominalizing an intransitive clause, the enclitic *–e/-ɲo* is cliticized onto the transitive verb. Second, the verb must be in passive form, i.e. prefixed with the passive marker *di-* (see section 1.1.1.1.2 for a discussion of passives). Third, as a consequence of the passivization of the verb, the subject/ agent of the transitive clause is demoted and appears in an agentive

[106] The sentences in (422) are grammatical if there is a slight pause after the agent and are translated as 'As for Budi, his arrival made us angry' (422)a and 'As for this car, its breakage has been reported to mother' (422)b.

prepositional phrase. (423) contains simple transitive sentences and these sentences can become nominalized clauses, as shown in square brackets in (424).

(423) a. bujaŋ ŋam^{b}ɪʔ baju-tu (TR, E)
Buang ACT-take garment-DEM.DIST
'Bujang took the clothes.'

b. eko ɲepak bola-tu (TR, E)
Eko ACT-kick ball-DEM.DIST
'Eko kicked the ball.'

(424) a. [diam^{b}ɪʔ-e baju-tu buat bujaŋ]
PASS-take-3 garment-DEM.DIST by Bujang
m^{b}uat siti snaŋ (TR, E)
ACT-make Siti glad
'The taking of the clothes by Bujang makes Siti happy.'

b. [disepak-e bola-tu buat eko]
PASS-kick-3 ball-DEM.DIST by Eko
la diteŋoʔ bujaŋ (TR, E)
PFCT PASS-look Bujang
'The kicking of the ball by Eko has been seen by Bujang.'

The verb in the nominalized clause in (424)a *diam^{b}ɪʔ-e* and the one in (424)b *disepak-e* is prefixed with the passive prefix *di-* and it is encliticized by *–e.* The verb is immediately followed by the direct object *baju-tu* 'the clothes' in (424)a and *bola-tu* 'the ball' in (424)b. Furthermore, the agent of the verb appears in an agentive prepositional phrase, *buat bujaŋ* 'by Bujang' in (424)a and *buat eko* 'by Eko' in (424)b. The agentive prepositional phrases *buat bujaŋ* 'by Bujang' in (424)a and *buat eko* 'by Eko' in (424)b follow the direct object.

The ungrammaticality of the sentences in (425) below shows that the nominalized verb cannot take the nasal prefix (with or without the agentive prepositional phrase).

(425) a. *[ŋam^{b}ɪʔ-e baju-tu (buat bujaŋ)]
ACT-take-3 garment.DEM.DIST by Bujang
m^{b}uat siti snaŋ (TR, E)
ACT-make Siti glad
'The taking of the clothes by Bujang makes Siti happy.'

b. *[ɲepak-e bola-tu (buat eko)]
ACT-kick-3 ball-DEM.DIST by Eko
la diteŋoʔ bujaŋ (TR, E)
PFCT PASS-look Bujaŋ
'The kicking of the ball by Eko has been seen by Bujang.'

I showed in section 1.1.1.1.2 that the preposition of the agentive prepositional phrase is optional in passive clauses. In the nominalized clause, the preposition is obligatory because the absence of the preposition *buat* 'by' results in ungrammatical sentences, as shown in (426). This can be explained by the fact that in passive sentences the preposition is obligatory if the noun is not adjacent to the verb (see section 1.1.1.1.2).

(426) a. *diam^{b}ɪʔ-e baju-tu bujaŋ
PASS-take-3 garment-DEM.DIST Bujang
m^{b}uat siti mara (TR, E)
ACT-make Siti angry
'The taking of the clothes by Bujang makes Siti angry.'

b. *disepak-e bola-tu eko la diteŋoʔ bujaŋ(TR, E)
PASS-kick-3 ball-DEM.DIST Eko PFCT PASS-look Bujang
'The kicking of the ball by Eko has been seen by Bujang.'

I shall now continue with the issue of what clauses may undergo nominalization. I have just shown that nominalization using the enclitic *–e/-ɲo* applies to both intransitive and transitive clauses and that nominalizing transitive clauses requires more processes than nominalizing intransitive clauses because transitive clauses must be passivized using the prefix *di-*, in addition to encliticization and having the agent appears after the verb.

However, one might consider a different view about the above facts and claim that nominalization only applies to intransitive clauses. To do so, the definition of intransitive clauses must be broadened to cover both clauses that have inherent intransitive verbs and those that have derived intransitive verbs, such as passives. This analysis is presumably better because by broadening the definition of intransitive clauses, no additional processes (as explained above) are needed in normalizing sentences which have a transitive base. This analysis is also used by Tjung (2006) for Jakarta Indonesian.

1.1.4.1.3. Subject Clauses

A subject clause is a clause that occupies the subject position of the matrix clause. Both simple clauses and nominalized clauses may serve as the subject of the clause, as exemplified below.

(427) a. [ɲari krjo kini-tu] paya (TR, E)
ACT-seek work moment-DEM.PROX difficult
'To find a job at this moment is difficult.'

b. [naeʔ kapal laʊt-tu] mᵇuat aku pniŋ (TR, E)
go.up ship sea-DEM.DIST ACT-make 1SG dizzy
'To go by ship makes me dizzy.'

c. [pca-e sampan-tu] mᵇuat kami takjʊt (TR, E)
broken-3 boat-DEM.DIST ACT-make 1 PFCT.PASS-surprise
'The breakage of the boat surpised us.'

As pointed out in section 1.1.4.1.1, the subject clause in the Tanjung Raden and Mudung Darat dialects can be introduced by the complementizer *banso~baso* 'COMP' as exemplified below.

(428) a. baso dioʔ malɪŋ baraŋ-tu blʊm
COMP 3 ACT-steal thing-DEM.DIST not.yet
dilaporkan ka plisi (TR, E)
PASS-report-APPL to police
'That he stole that thing has not been reported to the police.'

b. banso tibo-e budi la dibagɪ
COMP arrive-3 Budi PFCT PASS-give
tau ka maʔ (TR, E)
know to mother
'The arrival of Budi has been told to mother.'

1.1.4.1.4. Complement Clauses

In this section, I first describe complement clauses. Then, I show that Jambi Malay does not require obligatory overt syntactic tense marking and does not overtly distinguish finite from non-finite verb forms. These facts are relevant to the discussion of control and raising constructions (see sections 1.1.4.1.4.1 and 1.1.4.1.4.2).

A complement clause is a clause that serves as a complement of the matrix verb, as exemplified in square brackets below.

(429) a. cuma kito-ko daʔ tau [mrawat-e]
only 1-DEM.PROX NEG know ACT-take.care-3
'But we don't know how to take care of it.'

b. dioʔ tau [aku daʔ puŋo]
3 know 1 NEG have
'They knew I didn't have any.'

c. aku raso [palɪŋ aman dioʔ di jam^{b}i]
1SG think most safe 3 LOC Jambi
'I think the safest place for them is in Jambi.'

The clause *mrawat-e* 'to take care of it' in (429)a and the clause *aku daʔpuŋo* 'I didn't have any' in (429)b are the complement of the same matrix verb, i.e. *tau* 'know'. In

addition, in (429)c, the clause *palɪŋ aman dioʔ di jam^{b}i* ‘the safest place for them is in Jambi’ is the complement clause of the matrix verb *raso* ‘think’.

In addition to the complementizer *banso ~baso* ‘that’ (cf. section 1.1.4.1.1), complement clauses are sometimes introduced using another complementizer *kalu*, as shown in (430) below. Note that *kalu* that is glossed as ‘if’ is more often used to introduce adverbial clauses, more specifically, conditional clauses (see section 1.1.4.3.6).

(430) elo ʔ be, aku-tu da ʔ ɲaŋko bnar ɲla
beautiful just 1SG-DEM.DIST NEG ACT-think right indeed
da ʔ kalu aku-tu dapat nomor
NEG COMP 1SG-DEM.DIST get number
‘It was just nice, I had never thought that I would have won a prize.’
[Lit. ‘It was just nice, I had never thought that I would have gotten a number.’]

Before turning the discussion to control and raising constructions, I shall first show some facts related to tense markers and finiteness vs. non-finiteness in Jambi Malay because they are relevant to these constructions.

As described in the morphology chapter (section 2.1.3.2), Jambi Malay is similar to many other Malay varieties like Indonesian, in that, unlike English, it does not have an overt syntactic tense marker on the verb; however, it has aspectual markers and time adverbials to indicate the time of the event. Consider the sentences in (431) and (432) below.

(431) a. aku nanam padi-ko (kini-ko) (TR, E)
1SG ACT-plant rice.plant-DEM.PROX moment-DEM.PROX
‘I plant/I’m planting these rice plants (now).’

b. aku nanam padi-ko (soretu) (TR, E)
1SG ACT-plant rice.plant-DEM.PROX yesterday
I planted these rice plants yesterday.’

(432) a. aku lagi nanam padi-ko
1SG PROG ACT-plant rice-plant-DEM.PROX (TR, E)
'I'm planting these rice plants now.'

b. aku n^{d}aʔ nanam padi-ko ɪsʊʔ.pagi (TR, E)
2SG want ACT-plant rice.plant-DEM.PROX tomorrow
'I will plant these rice plants tomorrow.'

In (431) and (432), the verb *nanam* 'to plant' does not undergo any formal changes although it is used in sentences denoting different aspects/tenses: present/progressive in (431)a, past in (431)b, progressive in (432)a, and future in (432)b. The time of the event of the sentences in (431) is determined by the presence of a time adverbial which indicates the time, like *kini-ko* 'now' in (431)a and *soretu* 'yesterday'in (431)b.

There are also aspectual markers like the progressive aspectual marker *lagi* in (432)a and the future aspectual marker *n^{d}aʔ* in (432)b.[107] Sentences without any time adverbials or aspectual markers are usually interpreted as occurring simultenously with the time of the utterance or as depending on the event properties of the verb.

Since Jambi Malay does not display overt syntactic tense marking, the translation equivalent to both finite and non-finite verbs often appear to have the same form (see section 2.1.3.6). In English, the difference between finite and non-finite verbs is obvious, as (433) shows.

(433) a. John believed that Mary had gone to Indonesia.
b. John believed Mary to have gone to Indonesia.

[107] *N^{d}aʔ* literally means 'want' and is barely distinguishable from 'will' because it can be used to mean both 'want' and 'will' (a future marker).

In (433)a, the embedded clause ‘Mary had gone to Indonesia’ is a finite clause, whereas in (433)b, the embedded clause ‘Mary to have gone to Indonesia’ is non-finite.

Unlike English, no overt syntactic marking is made with respect to the finiteness of the verb in Jambi Malay, as shown in (434) below.

(434) a. siti tau eko pgi ka jakarta (TR, E)
Siti know Eko go to Jakarta
‘Siti knows that Eko went to Jakarta.’

b. siti ɲuru eko pgi ka jakarta (TR, E)
Siti ACT-ask Eko go to Jakarta
‘Siti asked Eko to go to Jakarta.’

The embedded clauses in (434)a and in (434)b appear to have a similar form. Although the embedded clauses in (434)a and in (434)b have no overt morphological indication with respect to their finiteness, the two embedded clauses are different with respect to their finiteness. The one in (434)a is finite and the one in (434)b is non-finite. The main argument for the claim that the embedded clause in (434)a is a finite clause while the one in (434)b is a non-finite clause comes from the fact that the embedded clause in (434)a can take an aspectual marker such as *la* ‘PFCT’ or *lagi* ‘PROG’, whereas the one in (434)b cannot, as shown below.

(435) a. siti tau eko la pgi ka Jakarta (TR, E)
Siti know Eko PFCT go to Jakarta
‘Siti knows that Eko has gone to Jakarta.’

b. *siti ɲuru eko la pgi ka Jakarta (TR, E)
Siti ACT-ask Eko la go to Jakarta
‘Siti asked Eko to have gone to Jakarta.’

1.1.4.1.4.1. Control Constructions

A sentence is claimed to have a control structure if there is a relation of referential dependence between an unexpressed argument in the embedded clause (controlled argument) and an expressed or unexpressed argument (the controller) in the matrix clause (Bresnan, 1982:317).

There are two types of control constructions in Jambi Malay, namely obligatory control and non-obligatory control (see Hornstein 1999 and Landau 1999). The main difference between obligatory control and non-obligatory control lies on the referent of the unexpressed argument in the embedded clause. In an obligatory control structure, the unexpressed argument in the embedded clause must refer to an argument in the matrix clause, whereas in a non-obligatory control structure, the unexpressed argument in the embedded clause can have a referent other than an argument in the matrix clause. Examples follow.

(436) Obligatory Control

a. dioʔ ɲʊrʊ sʊpɪʔ$_i$ [___$_i$ minum] (JC, E)
3 ACT-ask Supik drink
'She asked Supik to drink.'

b. aku$_i$ ɲobo go [__$_i$ ɲ^{j}ʊlʊ di… di ɪlɪ-tu] (MDD, N)
1SG AGT-try also ACT-fish LOC LOC lower.course-DEM.DIST
'I also tried to fish at the lower course.'

(437) Non-obligatory Control

a. budi$_i$ bilaŋ [___$_{i/j}$ masaʔ nasi gampaŋ] (JC, E)
Budi say cook cook.rice easy
'Budi said that cooking rice is easy.'

b. ali$_i$ tau [__$_{i/j}$maen gitar daʔ gampaŋ] (JC, E)
Ali know play guitar NEG easy
'Ali knows that playing guitar is not easy.'

The sentences in (436) have an obligatory control structure because the unexpressed argument in the embedded clause can only have a matrix argument as a referent. In

contrast, the sentences in (437) have a non-obligatory control structure because the unexpressed argument in the embedded clause can have a referent from the matrix clause as well as one from outside the matrix clause, as shown by the indexes.

Although obligatory control and non-obligatory control constructions are different with respect to the possible referents for the unexpressed argument in the embedded clause, these two constructions also share one similarity. In section 1.1.4.1.4, I have shown that although Jambi Malay does not show syntactic tense marking, finite clauses and non-finite clauses are still distinguishable in Jambi Malay. The verb of a finite clause in Jambi Malay can take an auxiliary, whereas that of a non-finite clause cannot. Interestingly, Jambi Malay is like English in that the embedded clause of a control construction (either obligatory or non-obligatory) must be a non-finite clause since no aspectual marker can be present. The presence of an aspectual marker in the embedded clause of a control construction results in an ungrammatical sentence, as the following examples show.

(438) a. *dioʔ ɲʊrʊ sʊpɪʔ lagi minum (JC, E)
3 ACT-ask Supik PROG drink
'She asked Supik to be drinking.'

b. *aku cobaʔ la naŋkap ikan (JC, E)
1SG AGT-try PFCT ACT-catch fish
'I tried to have caught the fish.'

c. *budi bilaŋ lagi masaʔ nasi gampaŋ (JC, E)
Budi say PROG cook cook.rice easy
'Budi said that be cooking rice is easy.'

b. *ali tau la maen gitar daʔ gampaŋ] (JC, E)
Ali know PFCT play guitar NEG easy
'Ali knows that have played guitar is not easy.'

With respect to the position of the referent in the matrix clause, obligatory control constructions can be distinguished into two types: subject control and object

control. The referent of the embedded unexpressed argument in a subject control construction is the subject (example (436)b), while that in an object control it is the object (example (436)a).

To conclude, Jambi Malay exhibits both obligatory and non-obligatory control constructions. The main difference between these two control types is that the unexpressed argument in an obligatory control construction must have a referent in the matrix clause, whereas that in an non-obligatory control construction can have a referent other than one in the matrix clause. Despite their differences, obligatory and non-obligatory control constructions share one main similarity, i.e. they cannot have a finite embedded clause. Furthermore, obligatory control constructions can be divided into two types: subject control and object control.

1.1.4.1.4.2. Raising Constructions

Like control constructions, raising constructions can be distinguished into two types: raising to subject verbs and raising to object verbs. Raising to subject verbs include *nampaʔe* 'seem' and *mulaʔi* 'begin', whereas raising to object verbs are like *ŋarap* 'hope', *ŋiro* 'think', and *saŋko* 'think'. Examples follow.

(439) Raising to Subject

ha,	kanti	aku-tu	nampaʔe	la
EXCL	friend	1SG-DEM.DIST	seem	PFCT
ŋam^{b}ɪʔ	pancɪŋ-tu			
ACT-take	fishing.rod-DEM.DIST			

'My friends seemed to have taken the fishing rod.'

(440) Raising to Object

a.

aku ŋarap	maʔ	aku m^{b}awaʔ	kuɪ	masuba (TR, E)
1SG ACT-hope	mother	1SG ACT-bring	cake	k.o.cake

'I hope my mother brings *masuba* cake.'

b. budi ŋiro biso dataŋ (JC, E)
Budi ACT-think can come
'Budi thought he could come.'

In what follows, I shall discuss the issue of how one can distinguish a control construction from a raising construction. The are two tests that can be used to distinguish these two structures: the idiomatic test and the finiteness test.

The first test tobe illustrated is the idiomatic test. An idiomatic expression that appears with a control verb, such as *ɲobo* 'try', loses its idiomaticity. However, if it appears with a raising verb, such as *nampaʔe* 'seem', the idiomatic reading remains.

There is one idiomatic expression in the Rural dialects, as shown below.

(441) aeʔ mato nɪtɪʔ ka dalam (TR, E)
water eye ACT-drop to inside
'Someone keeps her/his sadness to herself/himself.'
[Lit. 'Tears drop into the inside.']

When the idiomatic expression in (441) appears with *ɲobo* 'try', as shown in (442)a, the idiomatic interpretation is not retained. However, when it appears with *nampaʔe* 'seem', as in (442)b the idiomatic reading remains.

(442) a. aeʔ mato ɲobo nɪtɪʔ ka dalam (TR, E)
water eye ACT-try ACT-drop to inside
'Tears try to drop into the inside.'
*Someone tries to keep her/his sadness to herself/himself.'

b. aeʔ mato nampaʔe nɪtɪʔ ka dalam (TR, E)
water eye seem ACT-drop to inside
'It seems that she/he keeps her/his sadness to herself/himself.'
[Lit. 'Tears seem to drop into the inside.']

The second test to distinguish a control construction from a raising construction is the finiteness test, which is marked by the ability of the embedded clause to have an aspectual marker. In section 1.1.4.1.4.1, I have shown that the embedded clause of a control construction cannot be a finite clause and thus an

aspectual marker cannot be present. In contrast, the embedded clause of a raising construction is a finite clause and thus an aspectual marker can be present. Sentence (443)a below, for example, is a control construction and is ungrammatical because of the presence of an aspectual marker (see section 1.1.4.1.4.1). However, an aspectual marker can be present in the embedded clause of a raising construction like the one in (443)b.

(443) a. *dioʔ ɲuru supɪʔ lagi minum (JC, E)
3 ACT-ask Supik PROG drink
'She asked Supik to be drinking.'

b. ha, kanti aku-tu nampaʔe la
EXCL friend 1SG-DEM.DIST seem PFCT
ŋam^{b}ɪʔ pancɪŋ-tu
ACT-take fishing.rod-DEM.DIST
'My friends seemed to have taken the fishing rod.'

1.1.4.2. Relative Clauses

A relative clause construction is defined as a clause that modifies a noun. In Jambi Malay, this modifying clause is introduced by the relativizer *yaŋ*. In addition, the relativizer *naŋ* is also used in the Mudung Darat, Tanjung Raden, and other neighboring dialects across the river from the city of Jambi.[108] Examples follow.

(444) a. [$_{NP}$ buda ʔ [$_{RC}$ yaŋ tiŋ^{g}i-tu]] biso ŋaŋkat prau (TR, E)
kid REL high-DEM.DIST can ACT-lift canoe
'The boy that is tall can lift a canoe.'

[108] Note that although the relative clause in Jambi Malay is mainly introduced by *yaŋ/naŋ*, there are other strategies that can be used to formulate relative clauses. See section 1.1.4.2.2.3 in which I present different means of relativization.

b. batmu [$_{NP}$ oraŋ [$_{RC}$ naŋ m^{b}uat-e-tu]]
INTR-meet person REL ACT-make-3-DEM.DIST
'[He] found the man who bewitched her.'
[Lit. '[He] met the man who did that.']

In (444)a, the modifying clause *yaŋ tiŋ^{g}i-tu* 'that is tall' modifies the head noun *buda?* 'kid', and in (444)b, the modifying clause *naŋ m^{b}uat-e* 'that bewithched her' modifies the head noun *oraŋ* 'person'.

The relative clause in Jambi Malay has a range of functions which includes the functions of both restrictive and non-restrictive relative clauses in other languages, as exemplified in the following examples.

(445) Restrictive Relative Clause

buda?	yaŋ	sdaŋ	ŋjar	layaŋ-tu	ana?	aku	(TR, E)
kid	REL	PROG	ACT-chase	kite-DEM.DIST	child	1SG	

'The kid who is chasing the kite is my son.'

(446) Non-restrictive Relative Clause

nikolas,	yaŋ	lagi	nae?	sapeda,	ana?	aku	(TR, E)
Nicholas	REL	PROG	go.up	bike	son	1SG	

'Nicholas, who is riding a bike, is my son.'

I am not aware of any syntactic or morphological differences between non-restrictive and restrictive relative clauses in Jambi Malay. The only difference between a restrictive relative clause and a non-restrictive one is the short pause which is present after the head of the non-restrictive relative clause. Therefore, I shall not discuss these two types separately.

With respect to whether or not the head noun is present, relative clauses in Jambi Malay can be distinguished into two types, namely headed relative clauses and

headless relative clauses.[109] Headless relative clauses are discussed later in section 1.1.4.2.2.6. Examples follow.

(447) Headed Relative Clause

a. dataŋ-tu nʊm^{b}ʊr [$_{NP}$ jarɪŋ [$_{RC}$ yaŋ kito
come-DEM.DIST ACT-hit net REL 1
bntaŋ tadi-ko]]
spread.over earlier-DEM.PROX
'[It] comes and hits the net that we set before.'

b. baŋaʔ conto-e, [$_{NP}$ gawe [$_{RC}$ yaŋ daʔ baasɪl-tu]]
a.lot example-3 work REL NEG INTR-product-DEM.DIST
'There are many examples of jobs that are useless.'

(448) Headless Relative Clause

a. Ø [$_{RC}$ yaŋ batino] mpat pʊlʊ limo,
REL female four ten five
Ø [$_{RC}$ yaŋ jantan-ɲo] sakitar sapʊlʊ ekoʔ
REL male-3 one-about one-ten CLF
'The ones that are female are forty five and the ones that are male are ten.'

b. Ø [$_{RC}$ naŋ kasar] dapat rgo mahal
REL big get price expensive
'The ones that are big are expensive.'
[Lit. 'The ones that are big get an expensive price.']

In discussing the relative clause in Jambi Malay, we need to pay attention to both its external and internal syntax.

1.1.4.2.1. The External Syntax of the Relative Clause

Both headed and headless relative clauses in Jambi Malay have the same distribution as an NP. The NP in square brackets in the (a) sentence in the examples

[109] Standard Indonesian, Jakarta Indonesian, and many other varieties of Malay also exhibit these two types of relative clauses (among others: Sneddon, 1996; Cole et al., 1999; and Tjung, 2006).

below are replaced by a headed relative clause in the (b) sentence and by a headless relative clause in the (c) sentence.

(449) a. NP in Subject Position

[buda?-tu] m^{b}awa? kaleŋ (TR, E)
kid-DEM.DIST ACT-bring can
'The kid is carrying a can.'

b. Headed RC in Subject Position

[buda? [yaŋ sdaŋ ŋjar layaŋ-tu]]
kid REL PROG ACT-chase kite-DEM.DIST
m^{b}awa? kaleŋ (TR, E)
ACT-bring can
'The kid who is chasing the kite is carrying a can.'

c. Headless RC in Subject Position

[Ø [yaŋ sdaŋ ŋjar layaŋ-tu]]
REL PROG ACT-chase kite-DEM.DIST
m^{b}awa? kaleŋ (TR, E)
ACT-bring can
'[The one] who is chasing the kite is carrying a can.'

(450) a. NP in Direct Object Position

kagi? bʊrʊŋ-tu dataŋ, nʊm^{b}ʊr [jarɪŋ kito] (TR, E)
later bird-DEM.DIST come ACT-hit net 1
'Birds will come and hit our net.'

b. Headed RC in Direct Object Position

dataŋ-tu nʊm^{b}ʊr [jarɪŋ [yaŋ
come-DEM.DIST ACT-hit net REL
kito bntaŋ tadi-ko]]
1 spread.over earlier-DEM.PROX
'[It] comes and hits the net we set before.'

c. Headless RC in Direct Object Position

datan-tu nʊm^{b}ʊr [Ø [yan
come-DEM.DIST ACT-hit REL
kito bntan tadi-ko]] (TR, E)
1 spread.over earlier-DEM.PROX
'[It] comes and hits [the one] we set before.'

(451) a. NP in Indirect Object Position

aku m^{b}agɪ [adɪʔ bujaŋ] baju baru (TR, E)
1SG ACT-give younger.sibling Bujang garment new
'I gave Bujang's younger brother a new shirt.'

b. Headed RC in Indirect Object Position

aku m^{b}agɪ [budaʔ [yaŋ sdaŋ ŋjar layaŋ-tu]]
1SG ACT-give kid REL PROG ACT-chase kite-DEM.DIST
baju baru (TR, E)
garment new
'I gave the kid who is chasing a kite a new shirt.'

c. Headless RC in Indirect Object Position

aku m^{b}agɪ [Ø [yaŋ sdaŋ ŋjar layaŋ-tu]]
1SG ACT-give REL PROG ACT-chase kite-DEM.DIST
baju baru (TR, E)
garment new
'I gave [the one] who is chasing a kite a new shirt.'

(452) a. NP in Complement of Prepositional Phrase Position

ɪtɪʔ aku baŋaʔ di [umo]
duck 1SG a.lot LOC paddy
'I have a lot of ducks at the paddy.'

b. Headed RC in Complement of Prepositional Phrase Position

ɪtɪʔ aku baŋaʔ di [umo [yaŋ baru aku bli]] (TR, E)
duck 1SG a.lot LOC paddy REL just 1SG buy
'I have a lot of ducks at the paddy that I just bought.'

c. Headless RC in Complement of Prepositional Phrase Position

ɪtɪʔ aku baŋaʔ di [Ø [yaŋ baru aku bli]] (TR, E)
duck 1SG a.lot LOC REL just 1SG buy
'I have a lot of ducks at [the one] that I just bought.'

To conclude, both headed and headless relative clauses have the same external syntax.

1.1.4.2.2. The Internal Syntax of the Relative Clause

In discussing the internal syntax of the relative clause, I shall divide this section into six topics: i.e. the position of the modifying clause, possible modifying clauses for the relative clause, means of relativization, which positions can be relativized and which strategies can be used to relativize each position, islandhood in relative clauses, and the headless relative clause.

1.1.4.2.2.1. The Position of the Modifying Clause

A modifying clause always follows the head noun, as illustrated in the following examples.

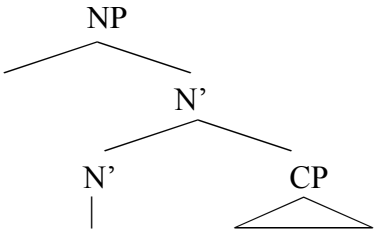
(453) a. dataŋ-tu nʊm^{b}ʊr
come-DEM.DIST ACT-hit
[$_{NP}$ jarɪŋ [$_{RC}$ yaŋ kito bntaŋ tadi-ko]]
net REL 1 spread.over earlier-DEM.PROX
'[It] comes and hits the net that we set before.'

b. *nʊm^{b}ʊr [[yaŋ kito bntaŋ tadi-ko]
ACT-hit REL 1 spread.over earlier-DEM.PROX
jarɪŋ $_{NP}$] (TR, E)
net
'[It] hits the net that we set before.'

As shown in (453)a, the modifying clause in the inner square brackets *yaŋ kito bntaŋ tadi-ko* 'that we set before' follows the head noun *jarɪŋ* 'net' and the word order is well-formed. In contrast, the modifying clause in (453)b precedes the head noun and the sentence is ungrammatical.

The structure of the relative clause in (453)a can be illustrated in (454) below.

(454)



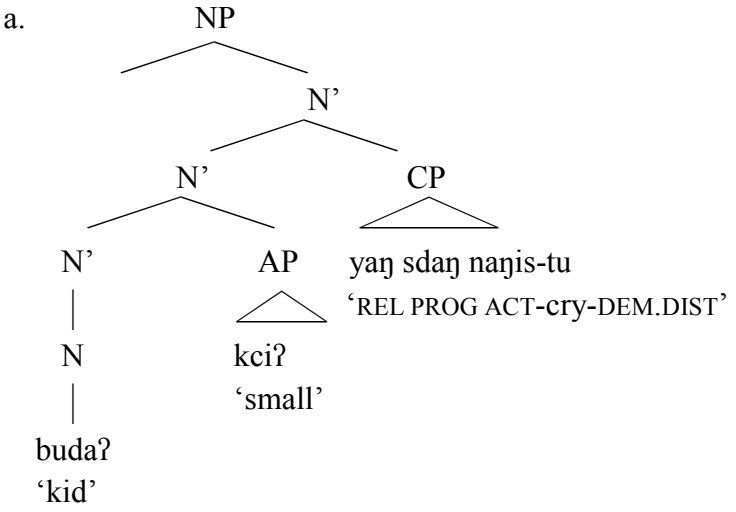
In (454), the modifying clause *yaŋ kito bntaŋ tadi-ko* 'that we set before' modifies the head noun *jarɪŋ* 'net'.

Although the modifying clause always follows the head noun, it does not have to be adjacent to the head noun. Elements such as adjectives and possessors may intervene between the head noun and the modifying clause, as exemplified in (455) and the structure is illustrated in (456).

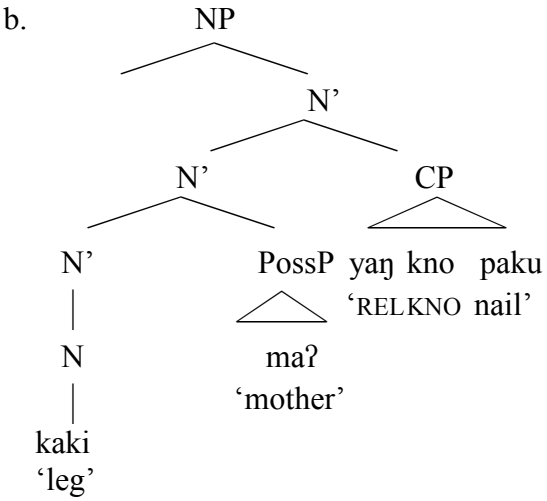
(455) a. buda? kci? yaŋ sdaŋ naŋis-tu
kid small REL PROG ACT-cry-DEM.DIST
adɪ? aku (TR, E)
younger.sibling 1SG
'The little kid who is crying is my brother.'

b. kaki ma? yaŋ keno paku masɪ bŋka? (TR, E)
foot mother REL KNO nail still swollen
'Mother's leg which got hurt by a nail is still swollen.'

(456) a.



b.



1.1.4.2.2.2. Possible Modifying Clauses in Relative Clauses

Both verbal and non-verbal clauses can be used as a modifying clause, as exemplified below.

(457) Active Sentence as a Modifying Clause

[budaʔ	[yaŋ	sdaŋ	ŋjar	layaŋ-tu]]	anaʔ aku (TR, E)
kid	REL	PROG	ACT-chase	kite-DEM.DIST	child 1SG

'The kid who is chasing the kite is my son.'

(458) Passive Sentence as a Modifying Clause

[bʊrʊŋ	[yaŋ	dicari-tu]]	namo-e	bʊrʊŋ	roaʔroaʔ
bird	REL	PASS-seek-DEM.DIST	name-3	bird	k.o.bird

'The name of the birds that are being sought is *roaqroaq*.'

(459) Object Voice Sentence as a Modifying Clause

[sarap	[yaŋ	la	budi	buaŋ]]	diam^{b}ɪʔ	siti	(TR, E)
garbage	REL	PFCT	Budi	throw.away	PASS-take	Siti	

'The garbage that Budi had thrown away was taken by Siti.'

(460) Non-verbal Sentence as a Modifying Clause

[motor	[yaŋ	rusaʔ-tu]]	la	dibawaʔ	eko	(TR, E)
motorcycle	REL	broken-DEM.DIST	PFCT	PASS-bring	Eko	

The motorcycle which is broken has been taken by Eko.'

In addition to full clauses, a determiner, a simple adjective, a prepositional phrase, or a numeral can also be the modifying element that appears after the relativizer, as exemplified below. In these examples, the element that comes after the relativizer modifies the head noun.

(461) a.

[mato	pancɪŋ	[naŋ-ko]]	rusaʔ	(TR, E)
eye	fishing.rod	REL-DEM.DIST	broken	

'This fishing hook is broken.'

b.

daʔ, aku	n^{d}ŋar	[ikan	pari	[naŋ	gdaŋ-di]],
NEG 1SG	ACT-listen	fish	rayfish	REL	big-earlier
ko-di-la		baru			
DEM.PROX-earlier-EMPH		new			

'No, this is the first time I've heard of a stingray which is that big.'

c.

[msjɪt	[yaŋ	bsaʔ]]
mosque	REL	big

'the mosque that is big'

d.

[kapalo	kampʊŋ	[yaŋ	kaduo]]?
head	village	REL	NUM-two

'Was [she] the second village chief?'
[Lit. 'Was [she] the village chief which is number two?']

e. yo, naŋ batino, [anaʔ aku [yaŋ di sŋpʊr kini]]
yes REL female child 1SG REL LOC Singapore now
'Well, the one that is female, [she is] my child who is in Singapore at the moment.'

1.1.4.2.2.3. Means of Relativization

In the literature, four strategies have been identified for forming relative clauses in the world's languages (Keenan, 1985; Comrie 1989; Song, 2001; Kroeger, 2004). They are the gap strategy, the relative pronoun strategy, the resumptive pronoun strategy, and the full NP strategy.The first three strategies (the gap strategy, the relative pronoun strategy, and the resumptive pronoun strategy) account for the formation of relative clauses in most of the world's languages. The fourth strategy is very rarely found in the world languages.

Up to this point, I have presented examples of relative clauses which are formulated using the gap strategy (see section 1.1.4.2.2.3.1 in which I present the gap strategy). In fact, Jambi Malay exhibits the three strategies which are commonly found in other languages, i.e. the gap strategy, the resumptive pronoun strategy, and the relative pronoun strategy. The other strategy (the full NP) is not attested. In what follows, I shall describe each of these possible strategies for forming relative clauses. I should emphasize that in this section I mainly focus on the relative clause formation using these strategies. In section 1.1.4.2.2.4, I present which position can be relativized and what possible strategies can be used to relativize each position.

1.1.4.2.2.3.1. The Gap Strategy

A strategy for forming a relative clause is called the gap strategy when the relativized element is encoded as a gap in the relative clause. As previously mentioned, relative clauses in Jambi Malay are introduced by the general clausal

relativizer *yaŋ* or *naŋ*. The gap is found inside the relative clause. I assume that abstract operator movement is involved in relativization using the gap strategy (see also section 1.1.4.2.2.5). Examples follow.

(462) a. Active Transitive Sentence

[$_{SUBJ}$ oraŋ-tu] la m^barʔi
person-DEM.DIST PFCT ACT-good-APPL
[$_{DO}$ tipi-ko] (TR, E)
television-DEM.PROX
'That man has fixed this television.'

b. Relativization of the Subject of an Active Sentence

[oraŋ$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ t$_i$ la m^barʔi tipi-ko]]]
person REL PFCT ACT-good-APPL television-DEM.PROX
la pgi (TR, E)
PFCT go
'The man who has fixed this television has gone.'

c. Relativization of the Direct Object of an Active Sentence[110]

[tipi$_i$ [$_{CP}$ OP$_i$ [$_{TP}$ yaŋ oraŋ-tu la barʔi t$_i$]]]
television REL person-DEM.DIST PFCT good-APPL
rusaʔ lagi (TR, E)
broken more
'The television that the man has fixed is broken again.'

(463) a. Passive Sentence

[$_{SUBJ}$ tipi-ko]$_i$ la dibarʔi t$_i$ oraŋ-tu (TR, E)
television-DEM.PROX PFCT PASS-good-APPL person-DEM.DIST
'This television has been fixed by that man.'

[110] Relativization of the direct object of an active sentence is generally only allowed if the verb does not bear the nasal prefix. See section 1.1.4.2.2.4.2 for a thorough discussion of relativization of direct objects.

b. Relativization of the Derived Subject of Passive

[tipi$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ t'$_i$ la dibaɪʔi t$_i$
television REL PFCT PASS-good-APPL
oraŋ-tu]]] rusaʔ lagi (TR, E)
person-DEM.DIST broken more
'The television that has been fixed by that man is broken again.'

(464) a. Object Voice Sentence

[$_{SUBJ}$ tipi-ko]$_i$ la dio baɪʔi t$_i$ (TR, E)
television-DEM.PROX PFCT 3 good-APPL
'This television has been fixed by him.'

b. Relativiztion of the Derived Subject of Object Voice

[tipi$_i$[$_{CP}$ OP$_i$ yaŋ [$_{TP}$ t$_i$ la dioʔbaɪʔi]]] rusaʔ lagi (TR, E)
television REL PFCT 3 good-APPL broken more
'The television that has been fixed by him is broken again.'

It should be noted that Jambi Malay generally allows an NP to be null if the NP is understood from the context (see also section 1.1.1.1.1), as exemplified below.[111]

(465) a. X: [aaŋ]$_i$ pgi ka mano? (TR, E)
Aang go to which
'Where is Aang going?'

b. Y: Ø$_i$ pgi ka umo (TR, E)
go to paddy
'[He] is going to the rice paddy.'

(466) a. X: aku la baco [buku-ko]$_i$ (TR, E)
1SG PFCT read book-DEM.PROX
'I have read this book.'

b. Y: ani jugo la baco Ø$_i$ (TR, E)
Ani also PFCT read
'Ani has also read [it].'

[111] The same fact is found in other Malay varieties such as Jakarta Indonesian (Tjung, 2006) and other languages such as Korean, Japanese, and Chinese (Huang, 1984).

From the facts in (465) and (466), one might suggest that the gap in relative clauses in Jambi Malay is simply a null pronoun argument. However, the gap in a relative clause is different from the null pronoun argument shown in (465)b and (466)b. If an overt pronoun/NP is inserted in a sentence that contains a null argument like (465)b and (466)b, the sentence is still grammatical, as illustrated in (467) and (468), respectively.

(467) dioʔ pgi ka umo (TR, E)
3 go to paddy
'He is going to the rice paddy.'

(468) ani jugo la baco buku-ko (TR, E)
Ani also PFCT read book-DEM.PROX
'Ani has also read this book.'

In contrast, if an overt pronoun is inserted into the gap of a relative clause construction, the sentence is ill-formed, as illustrated below.

(469) *[oraŋ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ dioʔ$_i$ la mᵇaɪʔi
person REL 3 PFCT ACT-good-APPL
tipi-ko]]] la pgi (TR, E)
television-DEM.PROX PFCT go
'The person who he has fixed this television has gone.'

In (469), an overt pronoun is not allowed in the gap position of a relative clause; this indicates that a relative clause with a gap is not simply a relative clause with a null pronoun.

An example of a relative clause which contains both a null object argument and a gap in subject position is presented below.

(470) Relative Clause with a Subject Gap and a Null Object
[oraŋ$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ t$_i$ mᵇaɪʔi Ø]]] tiŋᵍi nian (TR, E)
person REL ACT-good-APPL high very
'The person who fixed (it) is very tall.'

If the gap in (470) is filled by an overt pronoun, the sentence is ungrammatical, as demonstrated in (471). In contrast, if the null object argument is filled by an overt pronoun, the sentence is grammatical, as illustrated in (472).

(471) *[oraŋ$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ dioʔ mᵇaɪʔi Ø]]] tiŋᵍi nian (TR, E)
person REL 3 ACT-good-APPL high very
'The person that he fixed (it) is very tall.'

(472) [oraŋ$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ t$_i$ mᵇaɪʔi-e]]] tiŋᵍi nian (TR, E)
person REL ACT-good-APPL-3 high very
'The person who fixed it is very tall.'

In short, since the gap in the relative clause cannot be filled with an overt NP, the gap is not a null argument.

1.1.4.2.2.3.2. The Resumptive Pronoun Strategy

In the resumptive pronoun strategy the relativized NP is encoded using a pronominal copy of the head noun, i.e. a resumptive pronoun. The resumptive pronoun occurs in the position where the relativized constituent is interpreted.

There are two types of resumptive pronouns in Jambi Malay. They are the non-locative resumptive pronouns and the locative resumptive pronoun. The non-locative resumptive pronouns are *–e, -ɲo,* and *dioʔ* '3'.[112] The locative resumptive pronoun is *sano* 'there'.

In (473)a below, the resumptive pronoun *–e* is present in the position where the relativized constituent is interpreted, i.e. the object of the verb *naŋkap* 'to catch'. Likewise, the resumptive pronoun *-ɲo* (473)b appears in the position where the relativized constituent is interpreted (the object of the verb *neŋoʔ* 'to see').

[112] As discussed in the morphology chapter, the enclitic *–e* is only found in the Rural Jambi Malay dialects (see section 2.1.2.1.9.1).

(473) Relativizing Direct Objects using a Resumptive Pronoun

a. maʔ naŋo tntaŋ ɪtɪʔ$_i$ [$_{CP}$ yaŋ
mother ACT-ask about duck REL
[$_{TP}$ kau la naŋkap-e$_i$]] (TR, E)
2SG PFCT ACT-catch-3
'Mother asked about the ducks you had caught them.'

b. buku$_i$ [$_{CP}$ yaŋ [$_{TP}$ aku neŋoʔ-ɲo$_i$]]
book REL 1SG ACT-look-3
puŋo abaŋ aku (TR, E)
possess older.brother 1SG
'The book that I saw it belongs to my brother.'

In section 1.1.1.1.1, I showed that the nasal prefix in an active sentence is optional. Interestingly, the presence of the nasal prefix *ŋ-* in relative clauses that are formed via the resumptive pronoun strategy is obligatory. The sentences in (474), for example, are ungrammatical because the verb employed is in its bare form. I do not have an explanation for this fact.

(474) a. *maʔ naŋo tntaŋ ɪtɪʔ$_i$ [$_{CP}$ yaŋ
mother ACT-ask about duck REL
[$_{TP}$ kau la taŋkap-e$_i$]]]] (TR, E)
2SG PFCT catch-3
'Mother asked about the ducks that you had caught them.'

b. *buku$_i$ [$_{CP}$ yaŋ aku [$_{TP}$ teŋoʔ-ɲo$_i$]]
book REL 1SG look-3
puŋo abaŋ aku (TR, E)
possess older.brother 1SG
'The book that I saw it belongs to my brother.'

Finally, the locative resumptive pronoun *sano* 'there' in (475) below is used to relativize the complement of a locative adjunct (see section 1.1.4.2.2.4.4).

(475) pasar$_i$ [$_{CP}$ yaŋ [$_{TP}$ siti m^{b}li baju di sano$_i$]] rame(TR, E)
market REL Siti ACT-buy garment LOC there crowded
'The market where Siti bought this shirt there is crowded.'

1.1.4.2.2.3.3. The Relative Pronoun Strategy

The relative pronoun strategy employs a relative pronoun in forming a relative clause. This strategy is mostly found in European languages, such as German and English (Comrie, 1989). In English, the relative pronouns employed for introducing relative clauses are derived from interrogative elements, such as 'who', 'where', and 'which'.

In Jambi Malay, the relative pronoun strategy, which presumably would employ *wh*-question words, especially *siapo* 'who' and *yaŋ mano* 'which one', cannot be used for relativization, as the following sentences are ungrammatical.

(476) a. *oraŋ$_i$ [$_{CP}$ siapo [$_{TP}$ t$_i$ lagi masaʔ]]
person who PROG cook
adɪʔ kami (TR, E)
younger.sibling 1
'The person who is cooking is my younger sister.'

b. *bəndo [$_{CP}$ yaŋ mano [$_{TP}$ aku teŋoʔ t$_i$]] itam nian (JC, E)
thing REL which 1SG see black very
'The thing which I saw was very black.'

The relative pronoun using *di mano* 'where', as exemplified in (477), is claimed to be ungrammatical by some speakers, but grammatical by a few other speakers. I suggest that this structure is not native to Jambi Malay, but is adopted from Indonesian.[113]

(477) ʔruma$_i$ [$_{CP}$ di mano [$_{TP}$ dioʔ tiŋ^{g}al t$_i$]] jaʊ nian (TR, E)
house LOC which 3 stay far very
'The house where he lives is very far.'

[113] Tjung (2006), however, notes that some speakers of Indonesian claim that the relative clause which is formulated using this strategy is borrowed from English.

To relativize a locative adjunct, Jambi Malay makes use of the NP *tmpat* 'place' which functions like a relative pronoun, as exemplified below (478). I refer to this strategy as the NP *tmpat* 'place' strategy.

(478) ruma$_i$ [$_{CP}$ tmpat [$_{TP}$ aku neŋoʔ ija t$_i$]] puŋo budi (TR, E)
house place 1SG ACT-look Ija possess Budi
'The house where I saw Ija belongs to Budi.'

Because Jambi Malay exhibits the NP *tmpat* 'place' strategy for relativizing the locative oblique, one might wonder whether another NP, presumably using the NP *oraŋ* 'person' or *bn^{d}o* 'thing', can be used to relativize NPs such as subjects or direct objects. However, such a strategy does not exist, as the following examples show.

(479) a. *budaʔ$_i$ [$_{CP}$ oraŋ [$_{TP}$ t$_i$ ɲ^{j}ual motor-tu]]
kid person ACT-sell motorcycle-DEM.DIST
la pgi (TR, E)
PFCT go
'The kid who sold the motorcycle has gone.'

b. *buku$_i$ [$_{CP}$ bn^{d}o [$_{TP}$ oraŋ-tu baco t$_i$]] eloʔ (TR, E)
book thing person-DEM.DIST read beautiful
'The book that the man is reading is nice.'

In addition, for a relative time adjunct, Jambi Malay use the NP *waktu* 'time' or *pas* (which literally means 'exact' and used to mean 'at the same time as') strategy which also functions like the relative pronoun strategy, as exemplified below.

(480) malam$_i$ [$_{CP}$ waktu/pas [$_{TP}$ dioʔ dataŋ t$_i$]] aku daʔdo
night time/exact 3 come 1SG NEG.exist
di ruma (JC, E)
LOC home
'The night when he came I wasn't at home.'

In short, the relative pronoun strategy in Jambi Malay are of two types: the NP *tmpat* 'place' strategy, for relativizing locative adjuncts and the NP *waktu* 'time'/*pas* 'exact', for relativizing time adjuncts.

To conclude, Jambi Malay employs three strategies to form relative clauses, namely the gap strategy, the resumptive pronoun strategy and the relative pronoun strategy. The resumptive pronoun strategy can be distinguished into two types, i.e. the non-locative resumptive pronoun and the locative resumptive pronoun strategies. The relative pronoun strategy is also divided into two types, i.e. the NP *tmpat* 'place' and the NP *waktu* 'time'/*pas* 'exact' strategies. In section 1.1.4.2.2.4 below, I shall present what positions can be relativized and which of the available strategies can be used to relativize each position.

1.1.4.2.2.4. Positions that can be Relativized and their Possible Strategies

Keenan and Comrie (1977) have proposed that the grammatical functions of many of the world languages are arranged in a hierarchy of accessibility to relativization, as presented below.

(481) Accessibility Hierarchy
Subject > Direct Object > Indirect Object > Obliques > Genitive > Object of Comparison

The hierarchy above says that subject is the most frequent position that can be relativized and the object of comparison is the least possible function that can be relativized. If a language can relativize direct objects, it can also relativize subjects. If a language can relativize genitives, it can relativize subjects, direct objects, indirect objects and obliques. Likewise, if a language cannot relativize direct objects, it cannot relativize indirect objects, obliques, genitives or objects of comparison.

In what follows, I shall examine which position can be relativized, what strategy can be employed for relativizing it, and show their restrictions, if any. The positions that will be discussed are only those which are relevant to Jambi Malay, i.e. subjects, direct objects, indirect objects, objects of preposition, agents of passive sentences, agents of the object voice, and time adjuncts.

1.1.4.2.2.4.1. Relativizing Subjects

Subjects can be relativized using the gap strategy, as exemplified in the following examples.

(482) a. batmu [oranŋ$_i$ [$_{CP}$ OP$_i$ naŋ [$_{TP}$ t$_i$ m^{b}uat-e-tu]]]
INTR-meet person REL ACT-make-3-DEM.DIST
'[He] found the man who bewitched her.'
[Lit. '[He] met the person who did that.']

b. ha, [baraŋ-baraŋ$_i$ [$_{CP}$ OP$_i$ naŋ [$_{TP}$ t'$_i$ n^{d}aʔ
EXCL RED-thing REL want
dimasaʔ-tu t$_i$]]], siap-la situ, parida!
PASS-cook-DEM.DIST ready-EMPH there Parida
'Well, prepare the things that we will cook there, Parida!'

c. [tipi$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ t$_i$ la dioʔ baɪʔi]]]
television REL PFCT 3 good-APPL
rusaʔ lagi (TR, E)
broken rusaʔ
'The television that has been fixed by him is broken again.'

d. ko-ko [kisa [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ t$_i$ pen^{d}eʔ be]]]
DEM.PROX-DEM.PROX story REL short just
'This is a story which is short.'

However, subjects cannot be relativized using the resumptive pronoun strategy. In the examples in (483) below, the subject is relativized using the resumptive pronoun strategy and the sentences are ungrammatical.

(483) a. *oraŋ$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ dioʔ/-e/-ɲo$_i$ la
person REL 3/3/3 PFCT
m^{b}aɪʔi tipi-ko]]] baru pgi (TR, E)
ACT-good-APPL television-DEM.PROX just go
'The person who he has fixed the television has just gone.'

b. *budaʔ$_i$ [$_{CP}$ OP$_i$ yaŋ [dioʔ/-e/-ɲo$_i$ blʊm ŋɪrɪm
kid REL 3/3/3 not.yet ACT-send
baraŋ-tu]]] sakit (TR, E)
thing-DEM.DIST sick
'The kid who he has not sent the thing is sick.'

Finally, since the NP *tmpat* 'place' strategy is only used to relative locative oblique, it cannot be used to relativize subjects (cf. section 1.1.4.2.2.3.3).

To sum up, subjects can only be relativized using the gap strategy.

1.1.4.2.2.4.2. Relativizing Direct Objects

Direct object relativization with bare verbs using the gap strategy is possible, as illustrated in (484) below. (484)a is the simple active transitive sentence from which the relative clause in (484)b is derived.

(484) a. Active Transitive Sentence
[$_{Subj}$ budaʔ-tu lagi ŋjar [$_{Obj}$ malɪŋ-tu]] (TR,E)
kid-DEM.DIST PROG ACT-chase thief-DEM.DIST
'The kid is chasing the thief.'

b. Relativizing the Direct Object with a Bare Verb using the Gap Strategy
[malɪŋ$_i$ [OP$_i$ yaŋ [$_{TP}$ budaʔ-tu lagi kjar t$_i$]]
thief REL kid-DEM.DIST PROG chase
balari cpat nian (TR, E)
INTR-run quick very
'The thief that the boy is chasing is running very quickly.'

The resumptive pronoun strategy cannot be employed to relativize the direct object of bare verbs, as shown by the ungrammaticality of the sentence below.

(485) *[malɪŋ$_i$ [$_{CP}$ yaŋ [$_{TP}$ buda?-tu lagi kjar-e$_i$]]]
thief REL kid-DEM.DIST PROG chase-3
balari cpat nian (TR, E)
INTR-run quick very
'The thief that the boy is chasing is running very quickly.'

Similar to relativizing subjects, relativizing direct objects with bare verbs using the relative pronoun (NP *tmpat* 'place') strategy is not allowed.

In contrast to relativizing the direct object with a bare verb, relativizing the direct object with a nasal prefixed verb using the gap strategy is ungrammatical. In (486)b, for example, the direct object *malɪŋ* 'thief' is relativized with a nasal prefixed verb and the sentence is ungrammatical.

(486) a. Active Transitive Sentence
[$_{Subj}$ buda?-tu lagi ŋjar [$_{Obj}$ malɪŋ-tu] (TR, E)
kid-DEM.DIST PROG ACT-chase thief-DEM.DIST
'The kid is chasing the thief.'

b. Relativizing the Direct Object with a Nasal Verb in the RC (using the Gap Strategy)
*[malɪŋ [OP$_i$ yaŋ [$_{TP}$ buda?-tu lagi ŋjar t$_i$]]
thief REL kid-DEM.DIST PROG ACT-chase
balari cpat nian (TR, E)
INTR-run quick very
'The thief that the boy is chasing is running very quickly.'

However, relativization of the direct object with a nasal prefixed verb is possible if the resumptive pronoun strategy is used, as shown in (487)b.

(487) a. Active Transitive Sentence
[$_{Subj}$ buda?-tu lagi ŋjar [$_{Obj}$ malɪŋ-tu] (TR, E)
kid-DEM.DIST PROG ACT-chase thief-DEM.DIST
'The kid is chasing the thief.'

b. Relativizing the Direct Object with a Nasal Verb using the Resumptive Pronoun Strategy

[malɪŋ$_i$ [$_{CP}$ yaŋ [$_{TP}$ budaʔ-tu lagi ŋjar-e$_i$]]]
thief REL kid-DEM.DIST PROG ACT-chase-3
balari cpat nian (TR, E)
INTR-run quick very
'The thief that the kid is chasing is running very quickly.'

Finally, the NP *tmpat* 'place' strategy cannot be used to relativize direct objects with nasal prefixed verbs.

In sum, the gap strategy can be used to relativize direct objects with bare verbs, but it cannot be employed to relativize direct objects with nasal prefixed verbs. In contrast, the resumptive pronoun strategy cannot be utilized to relativize direct objects with bare verbs, but this strategy is applicable to relativizing direct objects with nasal prefixed verbs. Finally, the NP *tmpat* 'place' strategy cannot be used to relativize direct objects with either nasal prefixed or bare verbs.

However, a complication to the pattern described above was observed. Two speakers of the Tanjung Raden dialect accepted direct object relativization with nasal prefixed verbs, as exemplified in (488).

(488) a. ?[kuɪ$_i$ [OP$_i$ yaŋ [$_{TP}$ en^{d}aŋ la m^{b}awaʔ t$_i$]]] enaʔ (TR, E)
cake REL Endang PFCT ACT-bring delicious
'The cake that Endang has brought is delicious.'

b. ?[buku$_i$ [OP$_i$ yaŋ [$_{TP}$ kau daʔ m^{b}aco t$_i$]]] eloʔ (TR, E)
book REL 2SG NEG ACT-read beautiful
'The book that you didn't read is good.'

c. ?[padi$_i$ [OP$_i$ yaŋ [$_{TP}$ maʔ la nanam t$_i$]]] baŋaʔ (TR, E)
rice.plant REL mother PFCT ACT-plant a.lot
'The rice plants that mother has planted are numerous.'

Although these two speakers accepted sentences which pattern like those in (488), I would like to emphasize that most speakers rejected the sentences in (488). Furthermore, the speakers who accepted the sentences in (488) claimed that the

sentences sound better if the verbs were in their bare form and they rejected sentences with the same pattern, but different verbs. This fact is further supported by the naturalistic data as only one sentence was found to have a structure like as those in (488). In Mudung Darat, as pointed in section 1.1.1.2.3, some sentences which have the same structure as those in (488) were found in the naturalistic data. People who speak the City dialect, however, never accepted sentences with this pattern.

The same complication is also present to a larger extent with ditransitive verbs, as most speakers in the Rural Malay dialects accepted direct object extraction with nasal prefixed verbs with almost all verbs that were tested. Examples follow.

(489) a. [ikan [OP$_i$ yaŋ [$_{TP}$ aku la naŋkapi
fish REL 1SG PFCT ACT-catch-APPL
oraŋ-tu t$_i$]]] bsaʔ (TR, E)
person-DEM.DIST big
'The fish that I have caught for the person is big.'

b. [rokoʔ$_i$ [OP$_i$ yaŋ [$_{TP}$ siti la m^{b}agɪ
cigarette REL Siti PFCT ACT-give
oraŋ-tu t$_i$]]] baŋaʔ (TR, E)
person-DEM.DIST a.lot
'The cigarettes that Siti gave the man are many.'

In short, the grammar of Jambi Malay generally rejects direct object relativization across nasal prefixed verbs using the gap strategy. It seems that the restriction against relativization of direct objects over nasal verbs is being lost in the Rural dialects as some speakers have begun to accept relativization with certain nasal prefixed transitive verbs. The change in the restrictions on relativization in the Rural dialects is especially obvious in direct object relativization with ditransitive verbs because speakers allow direct object relativization with nasal prefixed ditransitive verbs using the gap strategy. A similar fact is observed with respect to the restriction

against extraction across nasal prefixed verbs. I claim that this is a sign of the collapse of the voice system (cf. section 1.1.1.3 and section 1.1.1.2.3).

1.1.4.2.2.4.3. Relativizing Indirect Objects

There are two types of indirect objects: NP indirect objects and PP indirect objects.

To relativize an NP indirect object, the gap strategy and the non-locative resumptive pronoun strategy can be used, but the relative pronoun (NP *tmpat* 'place') strategy cannot be used.

Speakers of the Rural dialects allow NP indirect object relativization with both bare and nasal prefixed verbs using the gap strategy, as shown in the following examples.

(490) Relativizing the NP Indirect Object of Bare Verbs

a. [batino$_i$ [OP$_i$ yaŋ [$_{TP}$ dani la tanami t_i pisaŋ]]]
female REL Dani PFCT plant-APPL banana
adɪʔ aku (TR, E)
younger.sibling 1SG
'The girl for whom Dani has planted bananas is my younger sister.'

b. [budaʔ$_i$ [OP$_i$ yaŋ [$_{TP}$ Siti la bawaʔi t_i kuɪ-tu]]]
kid REL Siti PFCT bring-APPL cake-DEM.DIST
lagi makan (TR, E)
PROG eat
'The kid that Siti has brought the cake for is eating.'

(491) Relativizing the NP Indirect Object of Nasal Verbs

a. [batino$_i$ [OP$_i$ yaŋ [$_{TP}$ dani la nanami t_i pisaŋ]]]
female REL Dani PFCT ACT-plant-APPL banana
adɪʔ aku (TR, E)
younger.sibling 1SG
'The girl for whom Dani has planted bananas is my younger sister.'

b. [buda?$_i$ [OP$_i$ yaŋ [$_{TP}$ siti la m^{b}awa?i t$_i$ kuɪ-tu]]]
kid REL Siti PFCT ACT-bring-APPL cake-DEM.DIST
lagi makan (TR, E)
PROG eat
'The kid that Siti has brought the cake for is eating.'

The NP indirect object *batino* 'female' in (490)a and *buda?* 'kid' in (490)b is relativized across the non-nasal ditransitive verb *tanami* 'plant for' and *bawaʔi* 'bring for', respectively, whereas in (491)a and (491)b, the same NP indirect object is relativized across their nasal counterparts. The sentences in both (490) and (491) are equally grammatical to the speakers.

As for the non-locative resumptive pronoun strategy, relativization of the NP indirect object is only grammatical with nasal verbs, as exemplified below.

(492) a. [buda?$_i$ [$_{CP}$ yaŋ[$_{TP}$ aku ŋam^{b}ɪʔi-e$_i$ buku]]] padeʔ (TR, E)
kid REL 1SG ACT-take-APPL-3 book clever
'The kid for whom I took a book is clever.'

b. [ɲai$_i$ [$_{CP}$ yaŋ [$_{TP}$ jalɪl nanami-e$_i$ pisaŋ]]]
grandmother REL Jalil ACT-plant-APPL-3 banana
snaŋ (TR, E)
glad
'The old lady that Jalil planted bananas for is happy.'

(493) a. *[buda?$_i$ [$_{CP}$ yaŋ [$_{TP}$ aku am^{b}ɪʔi-e$_i$ buku]]] padeʔ (TR, E)
kid REL 1SG take-APPL-3 book clever
'The kid for whom I took a book is clever.'

b. *[ɲai$_i$ [$_{CP}$ yaŋ [$_{TP}$ jalɪl tanami-e$_i$ pisaŋ]]] snaŋ (TR, E)
grandmother REL Jalil plant-APPL-3 banana glad
'The old lady that Jalil planted bananas for is happy.'

The sentences in (493) are ungrammatical because the verb is in its bare form. This suggests that NP indirect object relativization using the non-locative resumptive pronoun strategy can only occur with nasal prefixed verbs. I do not have any

explanation for why a resumptive pronoun would force the nasal prefix to be on the verbs.[114]

The complement of the PP indirect object cannot be relativized using the gap strategy regardless of the verb form, as exemplified below. This indicates that no preposition stranding is not allowed in this language.

(494) a. *[buda$ʔ_i$ [OP_i yaŋ [$_{TP}$ eko sdaŋ naŋkapi
kid REL Eko PROG ACT-catch-APPL
ikan ʊntʊʔ t_i]]] tatawo (TR, E)
fish for PARTRED-laugh
'The kid for whom Eko is catching fishing is laughing.'

b. *[batino$_i$ [OP_i yaŋ [$_{TP}$ ʊpɪʔ bagɪ duɪt ka t_i]]]
female REL Upik give money to
snaŋ (TR, E)
glad
'The girl to whom Upik gave money is happy.'

However, the complement of the PP indirect object can be relativized using the non-locative resumptive pronoun strategy, as shown below. Note that the resumptive pronoun in these cases cannot be a clitic because no clitic can be cliticized onto a preposition.

(495) a. [datʊʔ$_i$ [$_{CP}$ yaŋ [$_{TP}$ siti ŋam^{b}ɪʔi rokoʔ
grandfather REL Siti ACT-take-APPL cigarette
ʊntʊʔ dioʔ$_i$/*-e$_i$]]] sdaŋ makan (TR, E)
for 3/3 PROG eat
'The old man for whom Siti took the cigarette is eating.'

[114] Peter Cole (p.c.) suggests that there could be morpohological restrictions that require *–e* and *-ɲo* to be encliticized to nasal verbs. However, I do not have any evidence to support or reject this proposal.

b. [batino$_i$ [$_{CP}$ yaŋ [$_{TP}$ ʊpɪʔ bagɪ duɪt
female REL Upik give money
ka dioʔ$_i$/*-e$_i$]]] snaŋ (TR, E)
to 3/3 glad
'The girl to whom Upik gave money is happy.'

Finally, the NP *tmpat* 'place' strategy cannot be employed to relativize the complement of the PP indirect object.

To conclude, the NP indirect object can be relativized using the gap strategy across both nasal and bare verbs and the non-locative resumptive pronoun strategy with nasal verbs. The PP indirect object can only be relativized using the non-locative resumptive pronoun strategy. In addition, it cannot be relativized using the gap strategy. Finally, neither the NP indirect object nor the PP indirect object can be relativized using the NP *tmpat* 'place' strategy.

1.1.4.2.2.4.4. Relativizing the Object of a Preposition

In section 2.1.5.1, I initially note that Jambi Malay has simple prepositions and compound prepositions.[115] The strategies that can be used to relativize the object of a preposition depend on whether the preposition is simple or compound.

The gap strategy cannot be employed to relativize the object of a simple preposition, as shown by the ungrammaticality of (496).

(496) Relativizing the Object of a Preposition using the Gap Strategy
*[pasar$_i$ [$_{CP}$ yaŋ [$_{TP}$ siti m^{b}li baju-ko
market REL Siti ACT-buy garment-DEM.PROX
di t$_i$]]] rame (TR, E)
LOC crowded
'The market where Siti bought this shirt is crowded.'

[115] In section 2.1.5.1.2, however, I claim that compound prepositions are simply a sequence of a preposition followed by a noun. This claim is also supported by the facts found in this section.

In addition, the object of a simple preposition can be relativized using the locative resumptive pronoun strategy, as shown in (497), but it cannot be relativized using the non-locative resumptive pronoun strategy, as shown in (498).

(497) a. [pasar$_i$ [$_{CP}$ yaŋ [$_{TP}$ siti m^{b}li baju
market REL Siti ACT-buy garment
di sano$_i$]]] rame (TR, E)
LOC there crowded
'The market where Siti buys clothes is crowded.'

b. [ruma$_i$ [$_{CP}$ yaŋ [$_{TP}$ aku neŋoʔ ija di sano$_i$]]]
hourse REL 1SG ACT-look Ija LOC there
puŋo budi (TR, E)
possess Budi
'The house where I saw Ija belongs to Budi.'

(498) *[pasar$_i$ [$_{CP}$ yaŋ [$_{TP}$ siti m^{b}li baju-ko di-e$_i$]]]
market REL Siti ACT-buy garment-DEM.PROX LOC-3
rame (TR, E)
crowded
'The market where Siti bought this shirt is crowded.'

Finally, the NP *tmpat* 'place' strategy can be used to relativize the object of a simple presposition. When this strategy is used, no preposition is needed, as shown below in (499).

(499) [ruma$_i$ [$_{CP}$ tmpat [$_{TP}$ aku neŋoʔ ija t$_i$]]] puŋo budi (TR, E)
house place 1SG ACT-look Ija possess Budi
'The house where I saw Ija belongs to Budi.'

Next, I shall discuss relativization of the object of a compound preposition. Similar to relativizing the object of a simple preposition, relativizing the object of a compound preposition cannot be done using the gap strategy. The sentences in (500) below use the gap strategy to relativize the object of a compound preposition and the sentences are ungrammatical.

(500) a. *[bupet$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ aku lpaʔi cincin
buffet REL 1SG put-APPL ring
di dalam t$_i$]]] rusaʔ (TR, E)
LOC inside broken
'The buffet in which I put a ring is broken.'

b. *[ruma$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ siti baru masʊʔ ka dalam t$_i$]]]
house REL Siti just go.in to inside
elоʔ (TR, E)
beautiful
'The house that Siti has just entered is beautiful.'

Unlike the object of a simple preposition, the object of a compound preposition can be relativized using both the non-locative and locative resumptive pronoun strategies, as shown below.

(501) a. [bupet$_i$ [$_{CP}$ yaŋ [$_{TP}$ aku lpaʔi cincin di dalam-e$_i$]]]
buffet REL 1SG put-APPL ring LOC inside-3
rusaʔ (TR, E)
broken
'The buffet in which I put a ring is broken.'

b. [ruma$_i$ [$_{CP}$ yaŋ [$_{TP}$ Siti baru masʊʔ ka dalam-e$_i$]]]
house REL Siti just go.in to inside-3
elоʔ (TR, E)
beautiful
'The house that Siti has just entered is beautiful.'

(502) [ruma$_i$ [$_{CP}$ yaŋ [$_{TP}$ siti baru masʊʔ ka dalam sano$_i$]]]
house REL Siti just go.in to inside there
elоʔ (TR, E)
beautiful
'The house that Siti has just entered is beautiful.'

The fact that the non-locative resumptive pronoun in (501) can be used to relativize the complement of a compound preposition is interesting. It was previously shown that *–e* or *-ɲo* cannot be encliticized onto a preposition. However, the examples in (501) appear to be counter examples to this claim. One possible explanation is that words

like *dalam* ‘inside’ in (501) are nouns, rather than prepositions. Therefore, *di dalam* ‘LOC inside’ for example, is not a compound preposition; rather, it is the preposition *di* followed by the noun *dalam* (see section 2.1.5.1.2).

Furthermore, similar to the object of a simple preposition, the object of a compound preposition can be relativized using the NP *tmpat* ‘place’ as shown below.

(503) a. [bupet$_i$ [$_{CP}$ tmpat [$_{TP}$ aku lpaʔi cincin t$_i$]]]
buffet place 1SG put-APPL ring
rusaʔ (TR, E)
broken
‘The buffet in which I put a ring is broken.’

b. [ruma$_i$ [$_{CP}$ tmpat [$_{TP}$ siti baru masʊʔ t$_i$]]] eloʔ (TR, E)
house place Siti just go.in beautiful
‘The house that Siti has just entered is beautiful.’

To conclude, the object of a preposition cannot be relativized using the gap strategy and non-locative resumptive pronoun strategy. However, the object of a preposition can be relativized using the locative resumptive pronoun strategy and the NP *tmpat* ‘place’ strategy.

1.1.4.2.2.4.5. Relativizing the Passive Agent

The passive agent cannot be relativized using the gap strategy, as shown below.

(504) a. *[datʊʔ$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ pancɪŋ-ko dibuat
grandfather REL fishing.rod-DEM.PROX PASS-make
(buat) t$_i$]]] la pgi (TR, E)
by PFCT go
‘The old man who this fishing rod was made by has left.’

b. *[ɲai$_i$ [$_{CP}$ OP$_i$ [$_{TP}$ yaŋ maŋkʊʔ-tu la diam^{b}ɪʔ
grandmother REL bowl-DEM.DIST PFCT PASS-take
(buat) t$_i$]]] baɪʔ nian (TR, E)
by good very
'The old lady who this bowl has been taken by is very nice.'

However, the non-locative resumptive pronoun strategy can be employed to relativize the passive agent, as illustrated below.

(505) a. [ɲai [$_{CP}$ yaŋ [$_{TP}$ maŋkʊʔ-tu la diam^{b}ɪʔ-e$_i$]]]
grandmother REL bowl-DEM.DIST PFCT PASS-take-3
baɪʔ nian (TR, E)
good very
'The old lady by whom the bowls have been taken is very nice.'

b. [oraŋ [$_{CP}$ yaŋ siti digbʊk-e$_i$]]] la pgi (TR, E)
person REL Siti PASS-hit-3 PFCT go
'The man by whom Siti was hit has gone.'

Finally, the agent of the *di-* passive voice cannot be relativized using the relative pronoun strategy.

To conclude, the agent of the *di-* passive voice can only be relativized using the non-locative resumptive pronoun strategy.

1.1.4.2.2.4.6. Relativizing the Agent of the Object Voice

The agent of object voice can not be relativized using the gap strategy, as shown in (507). However, it can be relativized using the non-locative resumptive pronoun strategy, shown in (508).

(506) Object Voice

a. ida daʔ bujaŋ-tu jolaʔ (TR, E)
Ida NEG bachelor-DEM.DIST push
'Ida wasn't pushed by the young man.'

b. buku-ko la datʊʔ-tu baco (TR, E)
book-DEM.DIST PFCT grandfather-DEM.DIST read
'This book has been read by that old man.'

(507) Ungrammatical Relativization of the Object Voice Agent using the Gap Strategy

a. *[bujaŋ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ ida daʔ t$_i$ jolaʔ]]] mara [116] (TR, E)
bachelor REL Ida NEG push angry
'The young man by whom Ida wasn't pushed is angry.'

b. *[datuʔ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ buku-ko la t$_i$ baco]]]
grandfather REL book-DEM.PROX PFCT read
lagi tɪdʊr (TR, E)
PROG sleep
'The old man by whom the book has been read is sleeping.'

(508) Grammatical Relativization of the Object Voice Agent using the Resumptive Pronoun Strategy

a. [bujaŋ [$_{CP}$ yaŋ [$_{TP}$ ida daʔ dioʔ jolaʔ mara (TR, E)
bachelor REL Ida NEG 3 push angry
'The young man that Ida wasn't pushed by him is angry.'

b. [datʊʔ [$_{CP}$ yaŋ [$_{TP}$ buku-ko la dioʔ baco
grandfather REL book-DEM.PROX PFCT 3 read
lagi tɪdʊr (TR, E)
PROG sleep
'The old man that this book has been read by him is sleeping.'

To conclude, the agent of the object voice can only be relativized using the non-locative resumptive pronoun strategy.

1.1.4.2.2.4.7. Relativizing Time Adjuncts

Time adjuncts can be relativized using the NP *waktu* 'time' or *pas* 'exact' strategy and the gap strategy, as exemplified below.

(509) Relativizing a Time Adjunct Using the Gap Strategy

[malam$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ dioʔ dataŋ t$_i$]]] aku daʔ di ruma (JC, E)
night REL 3 come 1SG NEG LOC house
'The night when he came I wasn't at home.'

---

[116] This sentence is grammatical if *bujaŋ* is the patient and the sentence has the structure of direct object extraction (cf. section 1.1.1.2)

(510) Relativizing a Time Adjunct Using NP *Waktu* 'Time' Strategy

malam$_i$ [$_{CP}$ waktu [$_{TP}$ dioʔ dataŋ t$_i$]] aku daʔdo
night time 3 come 1SG NEG.exist
di ruma (JC, E)
LOC home
'The night when he came I wasn't at home.'

1.1.4.2.2.5. Islandhood in Relative Clauses

In section 1.1.3.2.2.2.3, I argued that moved *wh*-phrases in Jambi Malay *wh*- undergo movement because *wh*-questions with the moved-phrase obey island constraints. The same argumentation should apply to relativization. In this section, I show that island facts indicate that movement is involved in relative clause formation using the gap strategy, while in the relative clause formation using the resumptive pronouns stratetegy, no movement is involved.

1.1.4.2.2.5.1. Using the Gap Strategy in Island Constructions

With respect to how the head noun is connected to the modifying clause in the gap strategy, two possible analyses have been proposed in the literature. The first analysis is known as the head-raising analysis (among others: Schachter, 1973, Vergnaud, 1973; Kayne, 1994). According to this analysis, the head noun originates inside the relative clause CP together with a null or an overt relative operator before moving to its surface position. The structure according to this analysis can be illustrated in the following example.

(511) [[$_{DP}$ oraŋ]$_j$ [$_{CP}$ [OP oraŋ$_j$]$_i$ yaŋ [$_{TP}$ t$_i$ m^{b}aɪʔi
person person REL ACT-good-APPL
tipi-ko]]]] la pgi (TR, E)
television-DEM.DIST PFCT go
'The man who has fixed this television has gone.'

The second analysis is the head-internal hypothesis (Chomsky, 1977). According to this hypothesis, there is no direct transformational relationship between the head noun and the relativization site. The head noun is based-generated outside the relative clause CP. Inside the relative clause CP there is A-bar movement of a null or overt relative operator (OP) which facilitates the semantic relationship between the trace in the relativization site and the head noun, as shown below.

(512) [[$_{DP}$ budaʔ]$_i$ [$_{CP}$ [OP$_i$ yaŋ [$_{TP}$ t$_i$ m^{b}aɪʔi
person REL ACT-good-APPL
tipi-ko]]]] la pgi (TR, E)
television-DEM.DIST PFCT go
'The man who has fixed this television has gone.'

I do not have clear evidence for one analysis over the other. In this dissertation, I adopt the OP movement analysis rather than the head-raising analysis.

The question is now whether or not movement is indeed involved in relavization which uses the gap strategy. In what follows, I shall show that the gap strategy is subject to island constraints and, thus, I conclude that it involves movement.

In previous sections, I have shown that the gap strategy can be used to relativize the subject, the direct object of bare verbs and the NP indirect object. In this section, I show that relative clause formation using the gap strategy is sensitive to islands. I shall focus on subject and direct object relativization.

Before showing the island constructions, I will show that gap relativization can be long distance, as illustrated below.

(513) a. Complex Sentence

edi ŋiro oraŋ-tu la
Edi ACT-think person-DEM.DIS PFCT
ɲʲual motor-tu (TR, E)
ACT-sell motorcycle-DEM.DIST
'Edi thinks the man has sold the motorcycle.'

b. Relativizing the Subject using the Gap Strategy

[oraŋ$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ edi kiro [$_{CP}$ t'$_i$ [$_{TP}$ t$_i$ la
person REL Edi think PFCT
ɲʲual motor-tu]]]]] dataŋ lagi (TR, E)
ACT-sell motorcycle-DEM.DIST come more
'The person that Edi thought has sold the motorcycle came again.'

c. Relativizing the Direct Object using the Gap Strategy

[motor$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ budi kiro
motorcycle REL Budi think
[$_{CP}$ t'$_i$ [$_{TP}$ oraŋ-tu la jual t$_i$]]]]] masɪ baru(TR, E)
person-DEM.DIST PFCT sell still new
'The motorcycle that Budi thinks the man has sold is still new.'

As shown in (513)b and (513)c, the subject and the direct object of the embedded clause can be relativized using the gap strategy.

Now, let us observe whether the gap strategy obeys island constraints.

The first island type is the complex NP island (CNPC). The gap strategy is found to be sensitive to the complex NP island because relativizing an element in a complex NP is not allowed, as shown below.

(514) a. Relativizing the Direct Object of a Relative Clause using the Gap Strategy

*budaʔ$_i$ [$_{CP}$ yaŋ [$_{TP}$ budi teŋoʔ [$_{NP}$ batino
kid REL Budi look female
[$_{RC}$ yaŋ baŋkʊŋ t$_i$]]]] la pgi (TR, E)
REL hit PFCT go
'The kid that Budi saw the girl hit has left.'

b. Relativizing the Direct Object of a Clause within an NP using the Gap Strategy

*ɪtɪʔ$_i$ [$_{CP}$ yaŋ [$_{TP}$ budi dŋar [$_{NP}$ crito [$_{TP}$ budaʔ-tu la
duck REL Budi hear story kid-DEM.DIST PFCT
blo t_i bsaʔ-bsaʔ]]]][117] (TR,E)
keep RED-big
'The ducks that Budi heard the story that the kid had raised are big.'

In (514)a, the direct object *budaʔ* 'kid' in the relative clause *batino yaŋ baŋkuŋ budaʔ* 'the girl who hit the kid' is relativized using the gap strategy and the sentence is ungrammatical. Likewise, the direct object *ɪtɪʔ* 'duck' (514)b is relativized from its position in a complex NP using the gap strategy and the sentence is ungrammatical. The ungrammaticality of the sentences in (514) suggests that relativization which leaves a gap is subject to complex NP islands.

The second type of island is sentential subjects. In Jambi Malay, relativizing the subject or the object of the sentential subject using the gap strategy is not allowed. This indicates that relativization is sensitive to the sentential subject constraint. Examples follow.

(515) a. Gap Relativization of the Subject of a Sentential Subject

*budaʔ$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{CP}$ banso [$_{TP}$ t_i m^{b}li baju baru-tu]]]
kid REL COMP ACT-buy garment new-DEM.DIST
snaŋ nian (TR, E)
glad very
'The kid who that bought the new clothes is very happy.'

b. Gap relativization of the Direct Object of a Sentential Subject

*[baju baru]$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{CP}$ banso [$_{TP}$ budaʔ-tu bli t_i]]]
garment new REL COMP kid-DEM.DIST buy
mahal nian (TR, E)
expensive glad
'The new clothes that the kid bought were expensive.'

---

[117] Some speakers claimed this sentence is better that the one in (514)a.

Interestingly, the sentences in (515) are grammatical if the complementizer is absent. One possible account for this is that the complementizer is in the spec of CP position and thus blocks the movement of the operator.

The third island constraint is adjunct islands. Adjuncts form islands for extraction. In Jambi Malay, relativization of the subject and the direct object of the adjunct clause is not allowed, as illustrated in (516) below.

(516) a. Gap Relativization of the Subject of an Adjunct

*buda$ʔ$	yaŋ	budi	dimarai	karno t_i	jatʊ	naŋis	(TR, E)
kid	REL	Budi	PASS-angry-APPL	because	fall	ACT-cry	

'The kid that Budi was scolded because fell cried.'

b. Gap Relativization of the Direct Object of an Adjunct

*buda$ʔ_i$	yaŋ	budi	dimarai	karno	dio	jola t_i	da$ʔ$
kid	REL	Budi	PASS-angry-APPL	because	3	push	NEG
naŋis	lagi						(TR, E)
cry	more						

*'The kid that Budi was scolded because he pushed doesn't cry anymore.'

In (516)a, the subject of the adjunct clause *buda?* 'kid' is relativized using the gap strategy and the sentence is ungrammatical. The direct object of the adjunct clause in (516)b, *buda?* 'kid' is also relativzed using the gap strategy and this relativization results in a ungrammaticality. In short, relativization with gaps is sensitive to adjunct islands.

The fourth island type is *wh*-islands. The speakers' judgments vary with respect to whether or not the subject and the direct object of a *wh*-island can be relativized. Some speakers claimed that the sentences in (517) were grammatical, but some speakers claimed otherwise.

(517) a. Gap Relativization of the Subject of a *Wh*-island

?buda?$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ budi da? tau [$_{CP}$ di mano
kid REL Budi NEG know LOC which
[$_{TP}$ t$_i$ ŋam^{b}ɪ? pisaŋ-tu]]] snaŋ nian (TR, E)
ACT-take banana-DEM.DIST glad very
'The kid that Budi did not know where he took bananas is very happy.'

b. Gap Relativizaton of the Direct Object of a *Wh*-island

?pisaŋ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ budi da? tau [$_{CP}$ di mano
banana REL Budi NEG know LOC which
[$_{TP}$ buda?-tu am^{b}ɪ? t$_i$]]]] manis (TR, E)
kid-DEM.DIST take sweet
'The bananas that Budi did not know where the kid took are sweet.'

The fifth island type is the negative island. Neither relativization of the subject nor relativization of the direct object is sensitive to negative islands, as the sentences in (518) below are grammatical.

(518) a. Gap Relativization of the Subject of a Negative Island

buda?$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ siti da? saŋko t$_i$ biso jola?
kid REL Siti NEG think can push
adɪ?-e]]] dgɪl nian (TR, E)
younger.sibling-3 naughty very
'The kid that Siti did not think could push her sister is very naughty.'

b. Gap Relativization of the Direct Object of a Negative Island

buku$_i$ [$_{CP}$ OP$_i$ yaŋ [$_{TP}$ siti da? saŋko adɪ?-e
book REL Siti NEG think younger.sibling-3
biso baco t$_i$ elo? (TR, E)
can read beautiful
'The book that Siti didn't think her sister could read it is good.'

To conclude, gap relativization of both subjects and direct objects in Jambi Malay is sensitive to complex NP islands, the sentential subject islands, and adjunct islands. However, it is not sensitive to negative islands which suggests that negative islands are not actually islands. As for *wh*-islands, speakers' intuitions vary. Previous studies on Malayic languages indicate that gap relativization is subject to

islandhood (Cole et al.,1999; Tjung, 2006). The fact that gap relativization is subject to islands but not to negative islands is interesting. I do not have a clear explanation for this fact. One possible reason is that negative islands are not actually islands in Jambi Malay.

1.1.4.2.2.5.2. Using the Resumptive Pronoun Strategy in Island Constructions

The resumptive pronoun strategy is not sensitive to island constraints. The sentences in (519) to (522) show relativization of the direct object in different island constructions using the resumptive pronoun strategy.

(519) a. Relativizing the Direct Object of an RC Clause using the Resumptive Pronoun Strategy

buda?$_i$ yaŋ budi teŋo? batino yaŋ m^{b}aŋkʊŋ-e$_i$
kid REL Budi look female REL ACT-hit-3
la pgi (TR, E)
PFCT go
'The kid that Budi saw the girl hit her has left.'

b. Relativizating the DO of a Clause within an NP using the Resumptive Pronoun Strategy

ɪtɪ?$_i$ yaŋ budi dŋar crito buda?-tu la
duck REL Budi hear story kid-DEM.DIST PFCT
m^{b}lo-e$_i$ bsa?-bsa? (TR, E)
ACT-keep-3 RED-big
'The ducks that Budi heard the story that the kid has raised them are big.'

(520) Resumptive Pronoun Relativization of the Direct Object in a Sentential Subject

baju$_i$ yaŋ buda?-tu m^{b}li-e$_i$
garment REL kid-DEM.DIST ACT-buy-3
m^{b}uat ma? snaŋ (TR, E)
ACT-make mother glad
'The new clothes that the kid bought them made mother happy.'

(521) Resumptive Pronoun Relativization of the Direct Object of an Adjunct

buda?$_i$ yaŋ budi dimarai karno dio? ɲ^{j}ola?-e$_i$
kid REL Budi PASS-angry-APPL because 3 ACT-push-3
da? naɲis lagi (TR, E)
NEG ACT-cry more
'The kid that Budi was scolded because he pushed her doesn't cry anymore.'

(522) Resumptive Pronoun Relativization of the Direct Object of a Negative Island

buku$_i$ yaŋ siti da? saŋko adɪ?-e biso
book REL siti NEG think younger.sibling-3 can
m^{b}aco-e$_i$ mahal (TR, E)
ACT-read-3 expensive
'The book that Siti did not think her sister could read it is expensive.'

In (519) to (522), the direct object in different types of island constructions is relativized using the resumptive pronoun strategy. The sentences are all grammatical. This indicates that resumptive pronoun relativization is not subject to islandhood at all and that there is no movement involved in relative clause formation using the resumptive pronoun strategy.

1.1.4.2.2.6. The Headless Relative Clause

Headless relative clauses are very frequently used in Jambi Malay.[118] The only difference between headed relative clauses and headless relative clauses is that headless relative clauses lack overt heads. Headless relative clauses are said to have null heads because overt heads can be present. Additionally, when a headless relative clause is used, there is an understood noun modified by the relative clause. In many other syntactic aspects headed relative clauses and headless relative clauses are not different. First, as mentioned in the beginning of section 1.1.4.2, the external syntax of

[118] The same fact is observed for Jakarta Indonesian (Tjung, 2006).

the headless relative clause is not different from that of the headed relative clause in that it has the same distribution as an NP, as exemplified in (523) to (525).

(523) a. NP Subject

[buda?-tu] kɲo? oraŋ kampʊŋ-ko? (TR, E)
kid-DEM.DIST not people village-DEM.PROX
'Weren't they from the village?'

b. Headless RC subject

[Ø [yaŋ malɪŋ-tu]] kɲo? oraŋ kampʊŋ-ko?
REL ACT-steal-DEM.DIST not person village-DEM.PROX
'Weren't the ones who stole [it] from this village?'

(524) a. NP Direct Object

aku dulu dapat [ikan] (TR, E)
1SG before get fish
'I once got a fish.'

b. Headless RC Direct Object

aku dulu dapat [Ø [yaŋ sakɪlʊ
1SG before get REL one-kilogram
lapan mato]], dulu
eight unit.of.weight before
'I once got one which weighed a kilogram and eight hundred grams.'

(525) a. NP Complement of Prepositional Phrase

ado ana? duo dari bini-e (TR, E)
exist child two from wife-3
'He has two children from his wife.'

b. Headless Headless NP Complement of Prepositional Phrase

ado ana? duo dari [Ø [yaŋ patamo]] (TR, E)
exist child two from REL first
'He has two children from the one that was first.'

The (a) sentences in (523) to (525) contain an NP in different sentence positions and in the (b) sentences a headless relative clause is substituted for the NP.

Second, all possible modifying clauses for a headed relative clause can be used as a headless relative clause, as illustrated in the following examples.

(526) Active Sentence

[Ø [yaŋ nraŋi umo]] nraŋi umo,
REL ACT-bright-APPL paddy ACT-bright-APPL paddy
[Ø [yaŋ ndarkan]] ndarkan
REL ACT-young.rice-APPL ACT-young.rice-APPL
'The one who cleans the paddy field does the cleaning and the one who plants the rice does the planting.'

(527) Non-verbal Sentences

a. [Ø [naŋ kasar]] dapat rgo mahal
REL big get price expensive
'The big ones are expensive.'

b. [Ø [naŋ-ko]] rusaʔ
REL-DEM.PROX broken
'This one is broken.'

c. kalu [Ø [naŋ di kampʊŋ-ko]]
if REL LOC village-DEM.PROX
jlataŋ niru
k.o.plant k.o.basket
'The ones in this village are *jelatang niru.*'

d. [Ø [yaŋ numur limo]] raden budi iskan^{d}ar
REL number five Raden Budi Iskandar
'The fifth one is Raden Budi Iskandar.'

Third, the strategies that can be employed to formulate headed relative clauses can also be utilized to form headless relative clauses. The gap strategy can be used to relativize the subject, the direct object of bare verbs, and the NP indirect object. All the constraints for headed relative clauses discussed earlier also apply to headless relative clauses. Some examples of headless relative clause formation using the different strategies are presented below.

(528) Headless Relative Clause with Gap in Subject Position

[Ø OP_i yaŋ [$_{TP}$ t_i m^bli batik-ko]]
REL ACT-buy batik-DEM.PROX
adɪʔ budi (TR, E)
younger.sibling Budi
'The one who bought this batik is Budi's younger sister.'

(529) Headless Relative Clause with Gap in Direct Object Position

[Ø OP_i [yaŋ [$_{TP}$ bujaŋ bli t_i]]] la dibalɪʔi (TR, E)
REL Bujang buy PFCT PASS-return-APPL
'The thing that Bujang bought has been returned.'

(530) Headless Relative Clause with Resumptive Pronoun in Direct Object Position

[Ø [yaŋ[$_{TP}$ bujaŋ m^bawaʔ-e]]] rusaʔ (TR, E)
Rel Bujang ACT-bring-3 broken
'The thing that Bujang has brought it is broken.'

(531) Headless Relative Clause with Relative Pronoun in the Object of Preposition

[Ø [tmpat [$_{TP}$ aku m^bli baraŋ-ko]]] jaʊ (TR, E)
place 1SG ACT-buy thing-DEM.PROX far
'The place where I bought this thing is far.'

Finally, movement or relativization out of a headless relative clause is just as bad as out of a headed relative clause, as exemplified in the following examples.

(532) a. [buda$ʔ_i$ OP_i [yaŋ [$_{TP}$ t_i lagi m^buat prau]]]
kid REL PROG ACT-make canoe
n^daʔ pgi mancɪŋ (TR, E)
want go ACT-fishing.rod
'The kid who is making a canoe wants to go fishing.'

b. *[$prau_j$ OP_j [yaŋ [buda$ʔ_i$ OP_i [yaŋ[$_{TP}$ t_i lagi buat t_j]]]]
canoe REL kid REL PROG make
bsaʔ (TR, E)
big
'The canoe that the kid that is making is big.'

(533) a. [Ø OP$_i$ [yaŋ [$_{TP}$ t$_i$ lagi m^{b}uat prau]]]
REL PROG ACT-make canoe
n^{d}aʔ pgi mancɪŋ (TR, E)
want go ACT-fishing.rod
'The one who is making a canoe wants to go fishing.'

b. *[prau$_j$ OP$_j$ [yaŋ [Ø OP$_i$ [yaŋ[$_{TP}$ t$_i$ lagi buat t$_j$]]]]
canoe REL REL PROG make
bsaʔ (TR, E)
big
'The canoe that that person that is making is big.'

The NP *prau* 'canoe' is relativized out of a headed relative clause in (532)b and of a headless relative clause in (533)b and both sentences are ungrammatical.

To conclude, headless relative clauses do not show a different pattern from headed relative clauses. Note that the *wh*-questions with *yaŋ* strategy also involve headless relative clauses (cf. section 1.1.3.2.2.1.1.2 and section 1.1.3.2.2.2.4).

1.1.4.3. Adverbial Clauses

The third type of subordinate clause is the adverbial clause. An adverbial clause is a clause that functions like an adjunct in a sentence. Depending on the relationship between the subordinate clause and the main clause, there are several types of adverbial clause and they will be discussed in section 1.1.4.3.1 through section 1.1.4.3.9. Each adverbial clause type is marked by different subordinators. I assume that the subordinator in adverbial clauses is generated in C.

1.1.4.3.1. Adverbial Clauses Denoting Time

A clause of time indicates when the action/event of the main clause occurs. Time subordinators include: *sablʊm* 'before', *sasuda* 'after', *sampe* 'until', *munsila* 'until', *waktu* 'when', *pas* 'at the same time', *sjaʔ* 'since', and *(sa)abɪs* 'after'. Examples of clauses of time are provided in brackets in the following sentences.

(534) a. dioʔ mᵇuat paspor di batam, [sablʊm baraŋkat
3 ACT-make passport LOC Batam, before leave.for
ka sano], sŋpʊr
to there, Singapore
'She made a passport in Batam, before she went there, Singapore.'

b. [sasuda lapan blas hari dikʊrʊŋ dalam-tu],
after eight teen day PASS-cage inside-DEM.DIST
baru diamᵇɪʔ
just PASS-take
'After you put it in the cage for eighteen days, you take it out.'
[Lit. 'After eighteen days being put in it, it is taken.']

c. jadi dioʔ-ko tadi nanam pisanŋ
become 3-DEM.PROX earlier ACT-plant banana
sʊbʊr ɲla [sampe-la babua]
fertile indeed until-EMPH INTR-fruit
'He grew bananas, they're so fertile until they bore fruit.'

d. [munsila dioʔ ʊmʊr limo blas], dioʔ numpaŋ
until 3 age five teen 3 ACT-get.help
di ruma aku (TR, E)
LOC house 1SG
'He stayed in my house until he was fifteen.'

e. [waktu lagi kcil dulu], tukaŋ bntɪ
time PROG small before can EPIT
mᵇuat pukat dewеʔ
ACT-make dragnet alone
'When I was still young I could make a dragnet by myself.'

f. [pas pisaŋ tadi la babua],
exact banana earlier PFCT INTR-fruit
baɲʲɪr-pʊn tibo
flood-PART arrive
'At the same time when the bananas bore fruit, the flood came.'

g. kalu miʔ-tu rimau di bapıkır
if sort-DEM.DIST tiger earlier INTR-think
"[sjaʔ makan kancıl-ko], aku daʔ dapat rzki."
since eat mouse.deer-DEM.PROX 1SG NEG get fortune
'Then the tiger thought of it, "Since I ate the mouse deer, I couldn't get any food."'

h. [abıs sm^{b}ayaŋ bʊhʊr], jam satu braŋkat, ataw jam duo
finish pray midday hour one leave.for or hour two
'After performing a midday prayer, we left, it's around one or two o'clock.'

i. [saabıs ditampi klagi], baru kito jmur
finish PASS-winnow later new 1 sunbathe
'After winnowing [it], we dry [it] under the sun.'

1.1.4.3.2. Adverbial Clauses Denoting Manner

Subordinate clauses of manner are employed to indicate the means by which or the manner in which an action is done. Clauses of manner are marked by *dŋan* 'by' or *dŋan caro* 'by way', as exemplified in brackets below.

(535) a. malıŋ-tu masʊʔ ruma kami [dŋan caro
ACT-steal-DEM.DIST go.in house 1 with way
mcai kaco jn^{d}elo (TR, E)
ACT-broken-APPL glass window
'The thief went into our house by breaking the glass window.'

b. dŋan nem^{b}aʔi kaki-e, plisi baasıl
with ACT-shoot-APPL foot-3 police INTR-product
naŋkap malıŋ-tu (TR, E)
ACT-catch thief-DEM.DIST
'By shooting his leg, the police successfully caught the thief.'

1.1.4.3.3. Adverbial Clauses Denoting Purpose

A subordinate clause of purpose demonstrates the purpose of the action/event of the main clause. The subordinators that may be used to express the clauses of purpose are *supayo* and *bia?*. Examples are presented in brackets below.

(536) a. naŋ pen^{d}eʔ-tu n^{d}aʔ disam^{b}ʊŋ [supayo paɲ^{j}aŋ]
REL short-DEM.DIST will PASS-continue so.that long
'Short things should be joined so that they are long.'

b. a, pgi kau am^{b}ɪʔ saŋkar balɪwɪs-tu,
EXCL go 2SG take cage wild.duck-DEM.DIST
[biaʔ cece neŋoʔ]
so.that older.sister ACT-look
'Go and take the cage of *baliwis* so that she can see it.'

1.1.4.3.4. Adverbial Clauses Denoting Reason/Cause

A subordinate clause of reason/cause expresses the reason/cause for the action/event in the main clause. A subordinate clause of reason is the opposite of a subordinate clause of result. Subordinate clauses of reason are marked by *karno* 'because', *sbap* 'cause', *barʊbʊŋ* 'because'. Examples of clauses of reason/cause are presented in brackets in the following sentences.

(537) a. dibagi-e tubo [karno aɲ^{j}ɪŋ-tu
PASS-give-3 k.o.poison because dog-DEM.DIST
tarlalu ŋrti], kan?
too ACT-meaning Q
'He poisoned the dog because it was too clever, you know.'

b. ayu daʔ datаŋ [sbap anaʔ-e sakɪt] (TR, E)
Ayu NEG come cause child-3 sick
'Ayu did not come because his son was sick.'

c. [barʊbʊŋ kami-ko dapat musiba],
because 1-DEM.PROX get disaster
kami blʊm biso m^{b}ayar utaŋ (TR, E)
1 not.yet can ACT-pay debt
'Because we are unfortunate, we cannot pay our debts.'

1.1.4.3.5. Adverbial Clauses Denoting Result/Consequence

A subordinate clause of result/consequence indicates the result/consequence of the action done in the main clause. Subordinators like *muŋko/maŋko, mako, makoɲo,* and *sahiŋ^{g}o* can be employed to mark subordinate

clauses of result/consequence. The clause in brackets in each sentence below is an example of a subordinate clause of result/consequence.

(538) a. aku ditampar-e [muŋko aku daʔ nᵈaʔ ka situ] (TR, E)
1SG PASS-slap-3 so.that 1SG NEG want to there
'He slapped me, that's why I don't go there.'

b. [mako daʔ dataŋ], dioʔ la jro
so.that NEG come 3 PFCT daunted
'He is already daunted and thus he does not come.'

c. tu dioʔ-la nʊntʊt [mako-ɲo masʊʔ pɲʲaro]
DEM-DIST 3-EMPH ACT-demand so.that-3 go.in prison
'She sued him so that he was put into a jail.'

d. dioʔ mara-mara trʊs [sahiŋᵍo aku
3 RED-angry continue so.that 1SG
malas nᵈaʔ dataŋ] (TR, E)
lazy want come
'He is angry all the time, so that I'm reluctant to come.'

1.1.4.3.6. Adverbial Clauses Denoting Condition

A subordinate clause of condition indicates that the action/event/state of the main clause occurs because of the occurrence of the action/event of the subordinate clause. The markers of clauses of condition include *kalu, asal~asaʔ, asalkan, anᵈaikato, seanᵈayɲo,* and *sakiroɲo*. Examples in square brackets follow.

(539) a. [kalu waktu-ɲo masɪ paɲʲaŋ], biso pake pantʊn
if time-3 still long can use pantun
'If the time is still long, we can recite pantun.'

b. [asal kito tkʊn], kito pasti baasɪl (TR, E)
as.long.as 1 serious 1 certain INTR-product
'As long as we're serious, we will be successful.'

c. [asaʔ aeʔ la naeʔ-tu],
as.long.as water PFCT go.up-DEM.DIST
ka ulu-la masaŋ
to upper.course-EMPH ACT-set
'When the water rises, we go to the upper stream to set [it] up.'

d. [asalkan dioʔ nᵈaʔ balajar], pasti lʊlʊs(TR, E)
as.long.as-APPL 3 want INTR-teach certain pass
'As long as he studies, he will pass.'

e. [anᵈaykato kau daʔ dataŋ], aku nᵈaʔ ka tmpat kau (TR, E)
if 2SG NEG come 1SG want to place 2SG
'If you do not come, I will go to your place.'

f. [saanᵈayɲo kau daʔ dataŋ], aku nᵈaʔ ka tmpat kau (TR, E)
if 2SG NEG come 1SG want to place 2SG
'If you do not come, I will go to your place.'

g. sakiro-ɲo kau daʔ krjo, tʊlʊŋ aku (TR, E)
one-about-3 2SG NEG work help 1SG
'If you don't go to work, help me.'

1.1.4.3.7. Adverbial Clauses Denoting Concession

Clauses of concession are often called concessive clauses and they indicate that the action/state expressed in the main clause happens despite what is stated in the subordinate clause (Sneddon, 1996:345). Subordinators for clauses of concession include *mskipʊn, biaʔpʊn, walaupʊn, suɾᵍupʊn, sakalipʊn.* Examples are presented in brackets in the following sentences.

(540) a. [mskipʊn padeʔ], dioʔ daʔ somᵇoŋ (TR, E)
although clever 3 NEG proud
'Although he is smart, he is not arrogant.'

b. daʔ tɪʔ ɲla, "[biaʔ-pʊn laʊʔ samᵇal],
NEG not.exist indeed so.that-PART side.dish chili.sauce
makan enaʔ trʊs," kato de-e
eat nice continue word 3-3
'Nothing, she said, "Even if there were only chili sauce, she would enjoy eating."'
[Lit. 'Nothing, "Even there were only chili sauce, she would enjoy eating" were her words.']

c. [walau-pʊn dioʔ sakɪt], ttap krjo (TR, E)
although-PART 3 sick constant work
'Although he is sick, he still works.'

d. “ko ha, [suŋ^{g}u-pʊn ana? kau sabaŋna?-ko]
this EXCL although-PART child 2SG one-a.lot-DEM.PROX
palɪse-tu da?do milu,” te de-e,
may.not.happen-3-DEM.DIST NEG.exist follow word 3-3
“... narkoba oraŋ-ko,” te-e
drug person-DEM.PROX word-3
‘”Well, although you have many children, thank God none of them use drugs,” they said.’
[Lit. ‘”Well, although you have that many children, none of them follow these people taking drugs” were their words.’]

e. [sakali-pʊn kayo], dio? da? som^{b}oŋ (TR, E)
one-time-PART rich 3 NEG proud
‘Although he is rich, he is not arrogant.’

1.1.4.3.8. Adverbial Clauses Denoting Likeness

A subordinate clause of likeness is a clause for indicating that the action shown in the main clause is done in a way like what is stated in the subordinate clause. The subordinators of clauses of likeness include *saakan-akan* and *saola-ola* which are translated as ‘as if’.

(541) a. kau marai aku trʊs [saakan-akan kau bnci](TR, E)
2SG angry-APPL 1SG continue as.if 2SG hate
‘You scold me all the time as if you hate [me].’

b. dio? m^{b}li mʊbɪl baru trʊs
3 ACT-buy car new continue
[saola-ola kabaŋna?an duwɪt] (TR, E)
as.if ABST-a.lot-CIRC money
‘He keeps on buying a new car as if he has too much money.’

1.1.4.3.9. Adverbial Clauses Denoting Contrast

A subordinate clause of contrast is a clause which contrasts the information/fact conveyed in the main clause. The conjunctions include *daripado* and *mlaɱkan*. Examples are shown in brackets below.

(542) a. [dari.pado dioʔ babuat zina], kito ʊrʊs be
from.than 3 INTR-make fornication 1 manage just
'Well, it's better for us to take care of them before they engage in illicit sex.'
[Lit. 'Well, it's better for us to take care of their marriage rather than [to see them] commit illicit sex.']

b. dioʔ daʔ mʊkʊl aku, [mlaɪnkan ɲlamati aku](TR, E)
3 NEG ACT-hit 1SG instead ACT-safe-APPL 1SG
'He did not hit me, but he saved me.'

1.1.4.4. Subordinate Clauses without Subordinators

Adverb clauses can be linked to the main clause without any subordinators. The relationship between the clauses are understood from the context. Examples of adverbial clauses without subordinators are shown below.

(543) a. neŋoʔ oraʔ batino, dikjar-e
ACT-look person female PASS-chase-3
'When they saw females, they would chase them.'

b. jadi, dioʔ balɪʔ ka siko, dioʔ m^{b}awaʔ balɪʔ
become 3 return to here 3 ACT-bring return
'So, when he comes back, he will bring it back here.'

c. palaʔ pniŋ, kno pilek
head dizzy undergo influence
'My head is dizzy because I caught a cold.'

As shown in (543), no overt subordinator is present to link one clause with the other. Yet, the relationship between the two clauses can be understood from the context.

1.2. Structural Properties

The description of structural features in Jambi Malay is divided into two subsections: internal structure of the clause and the structural properties of the phrase.

1.2.1. Internal Structure of the Clause

The description of the internal structure of the clause is provided in section 1.1.2.

1.2.2. Structural Properties of the Phrase

The discussion of structural properties of the phrase includes adjective phrases (section 1.2.2.1), adverbial phrases (section 1.2.2.2), prepositional phrases (section 1.2.2.3), and noun phrases (section 1.2.2.4).[119] For each phrase type, I shall provide the operational definition, the arguments, possible modifiers, and the word order of the modifiers relative to the head and other modifiers. Moreover, a theoretical discussion of the structure of the noun phrase is presented in section 1.2.2.5.

1.2.2.1. The Adjective Phrase

1.2.2.1.1. Operational Definition for the Adjective Phrase

An adjective phrase is a word or a sequence of words that is headed by an adjective.[120] Examples follow.

(544) a. [[enaʔ] nian] isi-e
delicious very contents-3
'The contents were very delicious.'

b. bada minum-tu [agaʔ [bsaʔ]]
container drink-DEM.DIST rather big
'The drink containers are rather big.'

[119] Verbal phrases are discussed in the morphology chapter under verbal morphology in section 2.1.3 and thus are not discussed in this section.

[120] Note that the adjective is not the only noun modifier. See section 1.2.2.4.2.

1.2.2.1.2. Arguments Taken by Adjectives

No adjective takes an obligatory internal argument. Some adjectives may optionally take an oblique argument, as illustrated below.

(545) a. “aku, na, [snaŋ [dŋan kau]],” te-e
1SG TRU-Mariana glad with 2SG word-3
‘They said, “Mariana, I like you.”’
[Lit. ‘”Mariana, I’m happy with you” were their words.’]

b. paman kau [mara [dŋan aku]]
uncle 2SG angry with 1SG
‘Your uncle was angry with me.’

c. anaʔ aku [takut [samo anjiŋ]] (JC, E)
child 1SG afraid with dog
‘My child is afraid of dogs.’

d. [jaʊ [dari siko]]?
far from here
‘Is it far from here?’

In (545)a, the oblique *dŋan kau* ‘with you’ modifies the adjective *snaŋ* ‘glad’. In (545)b, the PP *dŋan aku* ‘with me’ modifies the head adjective *mara* ‘angry’. The obliques *samo anjiŋ* ‘with dog’ in (545)c and *dari siko* ‘from here’ in (545)d modify the adjective *takut* ‘afraid’ and *jaʊ* ‘far’, respectively.

In non-verbal clauses, the adjective phrase may also function as the predicate of the clause and this type of clause is referred to as an adjective clause (cf. section 1.1.2.1.1.2). In section 2.1.4.1 predicative adjectives and attributive adjectives are presented. In such clauses, the adjective phrase takes one external argument, as shown in square brackets in the following examples:

(546) a. [tali-ɲo] alʊs
rope-3 small
‘The rope is thin.’

b. mara nian [guru-e]
angry very teacher-3
'Her teachers were very angry.'

The NP *tali-ɲo* 'the rope' in (546)a and the NP *guru-e* 'her teachers' in (546)b are the external arguments of the predicates *alʊs* 'thin' and *mara nian* 'very angry', respectively.

1.2.2.1.3. Adverbial Modification of Adjectives

An adjective may be modified by a number of modifying adverbs. These adverbs demonstrate the amount or the intensity of the quality indicated by the adjective. Modifying adverbs for adjectives include those shown in (547) and some examples with these adverbs are presented in (548).

(547)
a. klewat 'too'
b. amat 'too, very'
c. cʊkʊp 'enough'
d. agaʔ 'rather'
e. srbo 'completely'
f. makın 'more'
g. nian 'very'
h. ɲla 'indeed'
i. bnar 'really'
j. btʊl 'really'
k. bukan main 'really'[Lit. 'not play']
l. dikit/sadikit 'a little'
m. macam-ko 'like this'
n. macam-tu 'like that'

(548) a. waʔ asan-tu [klewat [lokeʔ]] (TR, E)
uncle Hasan-DEM.DIST too stingy
'Uncle Hasan is too stingy.'

b. ʊ, [makın [lamo]] [makın [kciʔ]]
uh-huh more long.time more small
'I see, the longer the smaller.'

c. pɪlɪ yaŋ bulat, yaŋ [agaʔ [kciʔ]] tlor-tu
select REL round REL about small egg-DEM.DIST
'[We should] choose round and rather small eggs.'

d. tali-ko la [cʊkʊp [paɲʲaŋ]] (TR, E)
rope-DEM.PROX PFCT enough long
'This rope is long enough.'

e. [[bsaʔ] [nian] ruma-e, waʔ ciʔ
big very house-3 aunt.or.uncle TRU-small
'Her house is very big, Auntie.'

f. kami-ko kaluargo [[bsaʔ] ɲla]
1-DEM.PROX family big indeed
'We're really a big family.'

g. sagalo [[sʊlɪt] bnar]-la kami siko-ko
one-all difficult right-EMPH 1 here-DEM.PROX
'Everything is difficult here.'

h. [[lamo] btʊl] la, yo? (MD, N)
long.time right PFCT yes
'It was a long time back, right?'

i. palɪŋ-palɪŋ kalu kami-tu tam^{b}a tri,
RED-most if 1-DEM.DIST add k.o.anchovy
biaʔ [[enaʔ] dikit], kan?
so.that nice a.little Q
'I just add tiny fish to make it a bit more delicious.'

j. manusio [[rakʊs] amat], galo ado diam^{b}ɪʔ
human greedy too all exist PASS-take
'Human beings are so greedy, everything that exists is taken.'

k. bukan main rame dataŋ
not play crowded come
'So many [people] came.'

It should be pointed out that in Jambi Malay, especially in the Rural dialects, there exists a group of adverbs which mean 'very' and each of them can only be used to modify a specific adjective. Borrowing the term proposed by Uri Tadmor, I

shall refer to these kinds of modifying adverbs as 'dedicated adverbs'.[121] Examples follow.

(549) a. kato awaʔ, "awaʔ, awaʔ la tbal mapal"
word 1/2/3 1/2/3 1/2/3 PFCT thick very
'I said, "You were already very fat".'
[Lit. 'My words were "You were already very thick."']

b. masam ckɪŋ
sour very
'[It's] very sour.'

The adverb *mapal* 'very' in (549)a can only be used to modify the adjective *tbal* 'thick' and the adverb *ckɪŋ* 'very' in (549)b can only be used to modify the adjective *masam* 'sour' and *kʊrʊs* 'skinny'. Thus, phrases like **tbal ckɪŋ* 'thick very' and **masam mapal* 'sour very', for examples, are not acceptable. The list of dedicated adverbs is provided in section 2.1.4.3.

1.2.2.1.4. Word Order in the Adjective Phrase

Some modifying adverbs precede the adjective they modify, including *klewat* 'too', *cʊkʊp* 'enough', *agaʔ* 'rather', *srbo* 'completely', and *makm* 'more' (I label these adverbs as Adverb-1). Some other modifying adverbs follow the adjective they modify. These include *nian* 'very', *ɲla* 'indeed', *amat* 'too', *bnar* 'really', *btʊl* 'really', *dikit* 'a little', *macam-ko* 'like this', *macam-tu* 'like that' (I label these adverbs as Adverb-2). Examples are provided in (548) above. Note that dedicated adverbs always appear after the adjective.

It is possible for an adjective to be modified by more than one adverb, especially for emphatic reasons. When two modifying adverbs are present, the order of

[121] (P.c). Uri Tadmor points out that similar kinds of adverbs are also observed in other Malayic languages, such as those spoken in West Borneo.

the elements in the adjective clause depends on which adverbs are present. If one of the modifying adverbs is of the Adverb-1 type and the other is of the Adverb-2 type, the word order is shown in (550), as exemplified in (551).

(550) Adverb-1 > Adjective > Adverb-2

(551)

bada	makan-tu	[agaʔ	bsaʔ	dikit]
container	eat-DEM.DIST	somewhat	big	a.little

'The food containers are rather big.'

In addition, when both modifying adverbs are from the group that follows the adjective (Adverb-2), one of them must be *ɲla* 'indeed'. The word order schema is shown in (552), with examples shown in (553). This combination is also quite common.

(552) Adjective > other adverbs that follow the adjective > *ɲla*

(553) a.

bsaʔ,	bsaʔ	bnar	ɲla	waʔ	ciʔ
big	big	right	indeed	uncle.or.aunt	TRU-small

'It's big, it is really very big, Auntie.'

b.

ruma	bʊrʊʔ,	bʊrʊʔ	bnar	ɲla
house	ugly	ugly	right	indeed

'It was an ugly house, it was really very ugly.'

c.

taraso	manis	mlgi	ɲla
PFCT-PASS-feel	sweet	very	indeed

'It really tastes very sweet.'

To conclude, an adjective phrase is a word or a sequence of words that is headed by an adjective. Adjectives do not take obligatory internal arguments, but an adjective may optionally take an oblique argument. In the adjective clause, the adjective takes one external argument. Adjectives can be modified by intensifying adverbials. Some adverbs appear before the adjectives and some adverbs appear after the adjectives.

1.2.2.2. The Adverbial Phrase

1.2.2.2.1. Operational Definition for the Adverbial Phrase

The adverbial phrase can be defined as a word or a sequence of words that can modify an adjective or another adverbial.

1.2.2.2.2. Arguments of Adverbial Phrases

Adverbial phrases do not take any arguments.

1.2.2.2.3. Adverbial Modification of Adverbs

Similar to the adjective phrase, the adverbial phrase can be modified by modifying adverbs. The modifying adverbs used for modifying adjectives presented in (section 1.2.2.1.3) can be employed to modify adverbs, as exemplified below.

(554) a. eko [agaʔ [srɪŋ]] dataŋ kamari (TR, E)
Eko rather often come here
'Eko comes here quite often.'

b. dikto?-e paku-tu [[kuat-kuat] ɲla] (TR, E)
PASS-knock-3 nail-DEM.DIST RED-strong indeed
'He knocked the nail very strongly.'

In (554) a, the adverbial *agaʔ* 'rather' modifies the head *srɪŋ* 'very', and in (554)b, the adverbial *ɲla* 'indeed' modifies the head *kuat-kuat* 'strongly'.

1.2.2.2.4. Word Order in the Adverbial Phrase

The order of the modifying adverb relative to the adverb is similar to the order of the modifying adverb relative to the adjective discussed in section 1.2.2.1.4.

To conclude, an adverbial phrase is a word or a group of words that can be used to modify another adverbial, a verb, or an adjective. The adverbials that can be

used to modify adjectives (discussed in section 1.2.2.1.3) can also be used to modify another adverbial.

1.2.2.3. The Prepositional Phrase

1.2.2.3.1. The Operational Definition and Arguments of the Prepositional Phrase

A prepositional phrase is defined as a sequence of a preposition and a noun phrase in which the preposition is the head. This indicates that the noun phrase following the preposition is the argument complement of the preposition. Examples follow.

(555) a. awaʔ mgaŋ tip [$_{PP}$ di [$_{NP}$ pon^{d}oʔ]]
1/2/3 ACT-hold tape LOC hut
'We use a tape in the hut.'
[Lit. 'We hold a tape in the hut.']

b. waktu pgi [$_{PP}$ ka [$_{NP}$muaro.jam^{b}i]], kau ŋapo daʔdo pgi?
time go to Muaro Jambi 2SG why NEG.exist go
'When [we] went to Muaro Jambi, why didn't you go?'

In (555)a, the locative preposition *di* is the head of the prepositional phrase and the NP *pon^{d}oʔ* 'hut' is the complement of the preposition. Likewise, in (555)b, the preposition *ka* 'to' is the head of the prepositional phrase and the NP *muaro.jambi* 'Muaro Jambi' that follows it is the complement of the head.

In the non-verbal clause, the prepositional phrase takes one external argument, as exemplified below.

(556) a. ruma awaʔ di darat
house 1/2/3 LOC land
'My house is away from the river.'
[Lit. 'My house is inland.']

b. dioʔ dari bulian
3 from Bulian
'He is from Bulian.'

The NP *ruma awaʔ* 'my house' in (556)a and the NP *dioʔ* '3' (556)b are the external arguments of the prepositional phrases *di darat* 'in inland' and *dari bulian* 'from Bulian', respectively.

In cases in which the complement of the preposition *di* is a noun, such as *balakaŋ* 'back' or *dalam* 'inside', it can be deleted, as shown below (cf. sections 1.1.4.2.2.4.4 and 2.1.5.1.2).

(557) ruma-e-tu balakaŋ toko kami
house-3-DEM.DIST back shop 1
'His house was (in) the back of our shop.'

In (557) the preposition *di* is omitted and if it is present, it does not change the meaning or the grammaticality of the sentence.

1.2.2.3.2. Modification of Prepositional Phrases

No other word classes, except for nouns can be used to modify a preposition.

1.2.2.3.3. Word Order in Prepositional Phrases

The complement in the prepositional phrase appears after the prepositional head, as exemplified in (555), repeated in (558) below.

(558) a. awaʔ mgaŋ tip [$_{PP}$ di [$_{NP}$ pon^{d}oʔ]]
1/2/3 ACT-hold tape LOC hut
'We use a tape in the hut.'
[Lit. 'We hold a tape in the hut.']

b. waktu pgi [$_{PP}$ ka [$_{NP}$ muaro.jam^{b}i]],
time go to Muaro Jambi
kau ŋapo daʔdo pgi?
2SG why NEG.exist go
'When [we] went to Muaro Jambi, why didn't you go?'

1.2.2.3.4. An Issue Regarding the Prepositional Phrase

The preposition in the prepositional phrase cannot be stranded. When the prepositional phrase is fronted, the entire prepositional phrase must be fronted, as illustrated in (559) below (see also section 1.3.2.2.1.4).

(559) a. [di taɲ^{j}ʊŋ raden-la]$_{i}$ kami tiŋ^{g}al t$_{i}$ kini-ko (TR, E)
LOC Tanjung Raden-EMPH 1 stay moment-DEM.PROX
'We live in Tanjung Raden now.'

b. *[taɲ^{j}ʊŋ raden-la]$_{i}$ kami tiŋ^{g}al di t$_{i}$ kini-ko (TR, E)
Tanjung Raden-EMPH 1 stay LOC moment-DEM.PROX
'We live in Tanjung Raden now.'

To conclude, a prepositional phrase is a sequence of a preposition followed by a noun phrase and the preposition is the head. In some cases, the prepositional head can be omitted. Finally, prepositions in prepositional phrases cannot be stranded.

1.2.2.4. The Noun Phrase

1.2.2.4.1. Operational Definition for the Noun Phrase

A noun phrase is a single word or a group of words that is headed by a nominal head and optionally modified by one or more modifiers. Different types of nouns are discussed in section 2.1.1.2. In a clause, the noun phrase fills the subject, direct object, indirect object, and complement of prepositional phrase positions (cf. section 2.1.1.1). Some examples are presented in square brackets below.

(560) ha, situ-la [batrʊŋ] giʔ-tu mlpas [tlor]
EXCL there-EMPH k.o.fish later-DEM.DIST ACT-free egg
'*Baterung* will lay eggs there then.'

(561) [bada nasi idaŋan-tu] kʊmpʊl-la situ
container cooked.rice big.round.tray- DEM.DIST collect-EMPH there
'Gather the colanders there!'

(562) bagɪ-la [ayam] [makan], edaʔ?
give-EMPH chicken eat Q
'So, I gave the chickens food.'

(563) [awaʔ] mgaŋ [tip] di [pon^{d}oʔ]
1/2/3 ACT-hold tape LOC hut
'We use a tape in the hut.'
[Lit. 'We hold a tape in the hut.']

The NPs *batrʊŋ* 'kind of fish' in (560), *bada nasi idaŋan-tu* 'colanders' in (561), and *awaʔ* 'we' in (563) fill the subject position of the sentence they belong to. The NPs *tlor* 'egg' in (560), *makan* 'eat' which is translated as 'food' in (562) and *tip* 'tape' in (563) fill the direct object position of the clause, whereas the NP *ayam* 'chicken' in (562) fills the indirect position in the clause. The NP *pon^{d}oʔ* 'hut in (563) is the complement of the locative preposition *di*.

1.2.2.4.2. Modifiers in Noun Phrases

A number of modifiers can be used to modify a noun, such as simple adjectives, clauses, nouns, possessives, demonstratives, quantifiers (including the sequence of a numeral followed by a classifier) and prepositional phrases. I shall present each of them separately in the following subsections.

1.2.2.4.2.1. Simple Adjective Modification of Noun Phrases

Simple adjectives can be used to modify a noun and they follow the head noun, as shown in (564) below.

(564) a. ado-tu man, [$_{NP}$ buda? [$_{AP}$ kci?]] nʊkʊn
exist-DEM.DIST TRU-uncle kid small ACT-magician
'There's a small kid who does magic.'

b. ha, lari ka [$_{NP}$ tana [$_{AP}$ tiŋ^{g}i]] eda??
EXCL run to soil high Q
'So, we moved to high land, you know.'

In (564)a and (564)b, the adjectives *kci?* 'small' and *tiŋ^{g}i* 'high' modify the heads *buda?* 'kid' and *tana* 'soil', respectively, and the adjective appears after the head noun.

In addition, *yaŋ* 'REL' can be present between the head noun and the simple adjective. In such a case, the adjective becomes part of the relative clause, introduced by *yaŋ* 'REL', that modifies the head noun (see also section 1.2.2.4.2.2). Examples follow.

(565) a. msjɪt [yaŋ bsa?]
mosque REL big
'a mosque which is big'

b. ruma [yaŋ tuo] mura (TR, E)
house REL old-DEM.DIST cheap
'Houses which are old are cheap.'

In (565)a, the adjective *bsa?* 'big' is part of the relative clause and the entire relative clause modifies the head noun *msjɪt* 'mosque'. Likewise, the adjective *tuo* 'old' in (565)b is in the relative clause which modifies the head noun *ruma* 'house.

It should be noted that adjectives that are modified by an adverb to show degree or intensification are not readily placed right after the head noun, as speakers claim that constructions such as those in (566) are rare. They claim that the sequence of an adjective followed by a degree modifier is fully acceptable only if the adjective appears in a relative clause (shown in (567)).

(566) a. ??buda? kci? nian-tu pade? (TR, E)
kid small very-DEM.DIST clever
'The very little kid is clever.'

b. ??ruma agaʔ tuo-tu puŋo kami (TR, E)
house rather old-DEM.DIST have 1
'The rather old house belongs to us.'

(567) a. buda? yaŋ kci? nian-tu pade? (TR, E)
kid REL small very-DEM.DIST clever
'The kid who is very little is clever.'

b. ruma yaŋ agaʔ tuo-tu puŋo kami (TR, E)
house REL rather old-DEM.DIST have 1
'The house which is rather old belongs to us.'

1.2.2.4.2.2. Relative Clause Modification of Noun Phrases

A clause that modifies a noun phrase is introduced by the complementizer *yaŋ/naŋ*. This modifying clause comes after the head noun. A clause which modifies a noun is known as the relative clause structure, and is discussed in detail in section 1.1.4.2. Examples of a noun modified by a relative clause are presented in (568) below.

(568) a. [$_{NP}$ bʊrʊŋ [$_{RC}$ yaŋ dicari-tu] namo-e bʊrʊŋ roaʔroaʔ
bird REL PASS-seek-DEM.DIST name-3 bird k.o.bird
'The name of the birds that we're looking for is *roaqroaq*.'

b. ha yo-la, dataŋ-tu nʊm^{b}ʊr
EXCL yes-EMPH come-DEM.DIST ACT-hit
[$_{NP}$ jariŋ [$_{RC}$ yaŋ kito bntaŋ tadi-ko]
net REL 1 spread.over earlier-DEM.PROX
'Aha, then it comes and hits the nets that we set earlier.'

In (568)a, the modifying clause *yaŋ dicari-tu* 'that we are looking for' modifies the head noun *bʊrʊŋ* 'bird' and in (568)b, the modifying clause *yaŋ kito bntaŋ tadi-ko* 'that we set earlier' modifies the head noun *jariŋ* 'net'.

The relative clause often appears without the head noun present and is referred to as the headless relative clause. The headless relative clause is discussed in section 1.1.4.2.2.6 and two examples are presented below.

(569) a. [$_{NP}$ Ø [$_{RC}$ yaŋ jantan-tu]] dijual
REL male-DEM.DIST PASS-sell
'The males ones are sold.'

b. [$_{NP}$ Ø [$_{RC}$ yaŋ di tbo sano]] anaʔ yaŋ tuo sakali
REL LOC Tebo there child REL old very
'The one who is in Tebo is the eldest child.'

1.2.2.4.2.3. Noun Modification of Noun Phrases

A noun is often used to modify another noun. The modifying noun specifies the type or function of the head noun. Like simple adjectives and the modifying clause in the relative clause, a modifying noun also appears after the head noun, as shown in the following examples.

(570) a. [$_{NP}$ biji [$_{NP}$ salasɪ]]-tu boɲʲor
kernel basil-DEM.DIST oval
'The kernel of basil is oval.'

b. dkat[$_{NP}$ bataŋ [$_{NP}$ kmaŋ]]-tu ha
near tree k.o.fruit-DEM.DIST EXCL
'It was near a *kemang* tree.'

In (570), *salasi* 'basil' and *kmaŋ* 'k.o.fruit' modify the head noun *biji* 'kernel' and *bataŋ* 'tree', respectively.

In addition, if the second noun is a proper name, it denotes the possessor of the noun head, as shown below (see section 1.2.2.4.2.4).

(571) a. laki rosima
husband Rosima
'Rosima's husband'

b. bapaʔ abaŋ leman
father brother Leman
'Brother Leman's father'

1.2.2.4.2.4. Possessive Modification of Noun Phrases

In a noun phrase that contains a possessor, the possessor can be a noun phrase, as shown previously in section 1.2.2.4.2.3. In addition, the possessor can also be a possessive pronoun. Possessive pronouns in Jambi Malay have the same form as regular pronouns (section 2.1.2.4), including enclitic pronouns (section 2.1.2.1.9), and they appear to the right of the head noun they modify, as illustrated in the following examples.

(572) a. “baɲaʔ [$_{NP}$ ayam [$_{Poss}$kau]], lʊr?” kate-e
a.lot chicken 2SG TRU-sibling word-3
‘”Do you have many chickens?” he asked.’
[Lit. ‘”Are your chickens many?” were his words.’]

b. [$_{NP}$ bini [$_{Poss}$ dioʔ]]-ko oraŋ kampʊŋ-ko go-la
wife 3-DEM.PROX person village-DEM.PROX also-EMPH
‘His wife is also from this village.’

c. budaʔ pɲiŋat, hamani [$_{NP}$ namo-[$_{Poss}$e]]
kid Penyingat Hamani name-3
‘[He’s] from Penyingat and his name is Hamani.’

In section 1.2.2.4.2.1, it was shown that an adjective modified by an adverb denoting degree, such as *nian* ‘very’ does not commonly occur right after the head noun. Instead, they usually occur in a relative clause. If a possessor is present in the noun phrase, an adjective which is modified by such an adverb is totally barred from occurring between the head noun and the possessor, as illustrated below.

(573) *buku kciʔ nian budi koyaʔ (TR, E)
book small very Budi torn
‘Budi’s very small book was torn.’

The sentence in (573) can be made grammatical by having *kciʔ nian* ‘very small’ in a relative clause, where the relative clause appears after the possessor, as shown below.

(574) buku budi yaŋ kciʔ nian koyaʔ (TR, E)
book Budi REL small very torn
'Budi's very small book was torn.'

In Standard Indonesian, as pointed out by Sneddon (1996), the enclitic –*nya,* may appear between the head noun and the possessor. In such a case, Sneddon points out that the enclitic –*nya* functions as a linker and its presence is optional.[122] As pointed out in section 2.1.2.1.9.1, in the naturalistic data of Tanjung Raden and Mudung Darat, there is only one utterance in which *-ɲo* is found to appear between a head noun and a possessor (575). In elicitation, some speakers rejected such a structure and some accepted it.

(575) tmpat ruma-ɲo oraŋ plem^{b}aŋ situ
place house-3 person Palembang there
'someone from Palembang's house'

1.2.2.4.2.5. Demonstrative Modification of Noun Phrases

An NP can also be modified by a demonstrative. There are three forms of demonstratives in Jambi Malay, namely *tu* 'that', (*i*)*ko* 'this', *ni* '. *Ni* 'this' is only employed in the City dialect and *ko* 'this' is used in Tanjung Raden, Mudung Darat and other dialects spoken in the *Seberang*. The demonstrative always follows the head noun. Examples follow.

(576) a. siapo [$_{NP}$budaʔ-[$_{Dem}$ko]]?
who kid-DEM.PROX
'Who's this kid?'

b. knal galo eko dŋan budaʔ mudo [$_{NP}$dʊsʊn-[$_{Dem}$ ko]]
know all Eko with kid young village-DEM.PROX
'Eko knows all of the young kids in this village.'

[122] Perangin-angin (2006) refers to this linker as a possessive marker.

c. tukaŋ pgaŋ duwɪt di [$_{NP}$ ruma [$_{NP}$ sakola-[$_{Dem}$tu]]]
AGT hold money LOC house school-DEM.DIST
'She was a treasure at school [in her class].'
[Lit. 'She was the one who held the money at school.']

d. [$_{NP}$ budaʔ-[$_{Dem}$ ni]] memaŋ lahir di jambi (JC, N)
kid-DEM.PROX indeed born LOC Jambi
'This kid was indeed born in Jambi.'

1.2.2.4.2.6. Quantifier Modification of Noun Phrases

I assume that quantifier modification of noun phrases includes non-numeral quantifiers and numeral quantifiers. A description of numerals/quantifiers is provided in section 2.1.6.

In what follows, I first describe non-numeral quantifier modification of noun phrases and then numeral quantifier modification of noun phrases.

1.2.2.4.2.6.1. Non-numeral Quantifier Modification of Noun Phrases

Non-numeral quantifiers in Jambi Malay include *gagalo/salʊrʊ* 'all', *dikit ~ sadikit* 'a little/a few', *baŋaʔ* 'a lot', and *babarapo* 'some', *tiap/ttiap* 'every/each'. Non-numeral quantifiers appear before the head noun. Examples follow.

(577) a. [[ttiap] kampʊŋ] ado sjara
PARTRED-every village exist history
'Every village has its history.'

b. aku [[babarapo] ari]-ko dmam
1SG some day-DEM.PROX fever
'I got a fever a few days ago.'

c. budi la m^{b}aŋun [[baŋaʔ] ruma] (TR, E)
Budi PFCT ACT-build a.lot house
'Budi has built a lot of houses.'

d. alhasɪl-e [[salʊrʊ] binataŋ] kʊmpʊl-la
finally-3 all animal collect-EMPH
dalam lbʊŋ-ko tadi
inside hole-DEM.PROX earlier
'In the end, all animals gathered in the hole.'

e. [[tiap] dahan]-tu no bateret bua-e-ko
every branch-DEM.DIST TRU-female INTR-row fruit-3-DEM.PROX
'Rows of fruits were at each branch.'

1.2.2.4.2.6.2. Numeral Quantifier Modification of Noun Phrases

Unlike non-numeral quantifiers, sequences of a numeral followed by a classifier can appear before and after the head noun (see also section 2.1.1.3 and section 1.2.2.4.3), as illustrated in the following examples.

(578) a. awaʔ, [cucu awaʔ [duo ekoʔ]] bawa bataŋ tuo-la
1/2/3 grandchild 1/2/3 two CLF under tree old-EMPH
'[The placenta of] my two grand children was buried under the old pillar.'
[Lit. 'My two grandchildren were under the old pillar.']

b. parida ŋoyaʔ [krtas [limo lmᵇar]][123] (TR, E)
Parida ACT -tear paper five piece
'Parida tore up five pieces of paper.'

c. mamat hoho bntar- ko ɲual
Muhammad Hoho moment-DEM.PROX ACT-sell
[[duo bʊtɪr] ayam]
two grain chicken
'Muhammad Hoho sold two chickens a few days ago.'

d. siti ŋamᵇɪʔi [[duo glas] aeʔ]
Siti ACT-take-APPL two glass water
ʊntʊʔ kawan-e (TR, E)
for friend-3
'Siti took two glasses of water for her friends.'

[123] See section 2.1.1.3 in which I also explain that nouns such as *lmᵇar* 'piece' and *bʊtɪr* 'grain' function as classifiers.

The sequence of a number followed by a classifier *duo ekoʔ* 'two+CLF' in (578)a and *limo lm^{b}ar* 'five+piece' in (578)b appears after the noun phrases *cucu awaʔ* 'my grandchild' and *krtas* 'paper', respectively. Meanwhile, the sequence of a number followed by a classifier *duo bʊtɪr* 'two+grain' in (578)c and *duo glass* 'two+glass' in (578)d appears before the head noun, *ayam* 'chicken' and *aeʔ* 'water', respectively.

As pointed out in 2.1.1.3, the numeral can appear by itself (without a classifier) to modify the NP when no individuation is needed, as shown in (579). However, the classifier cannot appear by itself (exemplified in (580)). Furthermore, in clear contexts, the head noun can be omitted, as illustrated in (581).

(579) The Classifier is Optional

en^{d}ang	baru	ŋ^{g}oreŋ	tigo	(bʊtɪr)	*tlor*
Endang	just	ACT-fry	three	grain	egg

'Endang just bought three eggs.' (TR, E)

(580) The Classifier cannot Appear by Itself

parida	ŋoyaʔ	krtas	*(limo)	lm^{b}ar
Parida	ACT-tear	paper	five	piece

'Parida tore up five pieces of paper.' (TR, E)

(581) The Head Noun can be Omitted in Clear Contexts

a.

dioʔ	ɲual	sakali	ɲual	dioʔ	sampe
3	ACT-sell	one-time	ACT-sell	3	reach
duo	pʊlʊ	limo	kɪlʊ		
two	ten	five	kilogram		

'Once he sells [them], he can sell up to twenty five kilograms.'

b.

ha,	la-la	ilaŋ	sekoʔ	tiŋ^{g}al	sekoʔ,	
EXCL	PFCT-EMPH	disappear	one	stay	one	
tigo	ekoʔ	cuma	bajual			
three	CLF	only	INTR-sell			

'We lost one, one left and we only sold three.'

1.2.2.4.2.7. Prepositional Phrase Modification of Noun Phrases

A prepositional phrase can also be utilized to modify a noun phrase and it appears to the right of the noun phrase, as illustrated in (582).

(582) a. [$_{NP}$ hadia [$_{PP}$ dari trona]]
gift from Trona
'a gift from Trona'

b. [$_{NP}$ ruma [$_{PP}$ di darat-]]ko kɲoʔ ruma-ko
house LOC land-DEM.PROX not house-DEM.PROX
'The inland house is not this house.'

In (582)a, the PP *dari trona* 'from Trona' modifies the head noun *hadia* 'gift' and in (582)b, the PP *di darat* 'on the land' modifies the head noun *ruma* 'house'. In both examples, the PP appears to the right of the head noun.

1.2.2.4.3. Word Order in Noun Phrases

1.2.2.4.3.1. Word Order in the Noun Phrase when One Modifier is Present

When one modifier occurs with the head noun, the modifier must appear after the head noun, except in the case of the non-numeral quantifier. The non-numeral quantifier always appears before the head noun, whereas the sequence of numeral and classifier may appear before or after the head noun. Examples follow.

(583) a. N Adj
cantɪŋ bsaʔ
can big
'big cans'

b. *adj N
*bsaʔ cantɪŋ (TR, E)
big can
'big cans'

(584) a. N RC

setan yaŋ di dalam badan kito
devil REL LOC inside body 1
'the devil that is in our body'

b. *RC N (TR, E)

*yaŋ di dalam badan kito setan
REL LOC inside body 1 devil
'the devil that is in our body'

(585) a. N_1 N_2

mʊsɪm batrʊŋ
season k.o.fish
'*baterung* season'

b. *N_2 N_1 (TR, E)

*batrʊŋ mʊsɪm
k.o.fish season
'*baterung* season'

(586) a. N Possessor

umo brahɪm gadʊgadʊ
paddy TRU-Ibrahim Gado-gado
'Ibrahim Gado-gado's paddy field'

b. *Possessor N

*brahɪm gadʊgadʊ umo (TR, E)
TRU-Ibrahim Gado-gado paddy
'Ibrahim Gado-gado's paddy field'

(587) a. N Dem

prau-tu
canoe-DEM.DIST
'the canoe'

b. *Dem N

*tu-prau (TR, E)
DEM.DIST-canoe
'the canoe'

(588) a. N Adverbial

hadia dari trona
gift from Trona
'a present from Trona'

b. *Adverbial N

*dari trona hadia (TR, E)
from Trona gift
'a present from Trona'

(589) a. $_{\text{non-num}}$Q N

dikit budaʔ
a.little kid
'a few kids'

b. *N $_{\text{non-num}}$Q

*budaʔ dikit (TR, E)
kid a.little
'a few kids'

(590) a. N Num CLF

padi duo taŋke
rice.plant two stalk
'two stalks of rice'

b. Num CLF N

duo taŋke padi
two stalk rice.plant
'two stalks of rice'

In the data in (583) to (588), all the noun modifiers must appear to the right of the head noun. In addition, the non-numeral quantifier must appear before the head noun (589) and the numeral quantifiers (number + classifier) may appear before and after the head noun (590).

1.2.2.4.3.2. Word Order in the Noun Phrase when Two or More Modifiers are Present

In this section, I describe the word order in the noun phrase when two or more modifiers are present. However, describing all possible combinations would take up a considerable amount of space. Therefore, I first show the word order of the noun phrase when an adjective and another modifier is present. Then, I point out crucial ordering patterns within the DP when two or more modifiers are present.

If the noun phrase is comprised of a head noun, an adjective, and a relative clause, the adjective must precede the relative clause, and the sequence of the adjective followed by the relative clause follows the head noun, as illustrated in (591). The example in (592) indicates that the reverse ordering of the adjective and the relative clause forms an unacceptable structure.

(591) N Adj RC

ruma gdaŋ yaŋ di pɪŋ^{g}ɪr jalan (TR, E)
house big REL LOC side street
'a big house which is at the side of the street'

(592) *N RC Adj

*ruma yaŋ di pɪŋ^{g}ɪr jalan gdaŋ (TR, E)
house REL LOC side street big
'a big house which is at the side of the street'

If the noun phrase contains a head noun, an adjective, and a possessor, the adjective also comes before the possessor, as shown below.

(593) N Adj Poss

motor baru eko (TR, E)
motorcycle new Eko
'Eko's new motorcycle'

(594) *N Poss Adj (TR, E)

*motor eko baru
motorcycle Eko new
'Eko's new motorcycle'

In (593), the NP consists of the head noun followed by an adjective and a relative clause, and this ordering is acceptable. In contrast, in (594), the head noun is still in the rightmost position, but the order of the relative clause and the adjective is reversed. This results in an ungrammatical word order.

If the noun phrase consists of a head noun, an adjective, and a demonstrative, the adjective precedes the demonstrative. In (595) below, the noun is followed by the adjective and the possessor appears after the adjective. In (596), the possessor appears before the adjective and thus the ordering is ungrammatical.

(595) N Adj Dem

ruma gdaŋ-tu (TR, E)
house big-DEM.DIST
'the big house'

(596) *N Dem Adj

*ruma-tu gdaŋ (TR, E)
house-DEM.DIST big
'the big house'

If the noun phrase consists of a head noun, an adjective, and a prepositional phrase (PP), the word order is as in (597) and the word order in (598) is not allowed.

(597) N Adj PP

batino elo? dari kampʊŋ kami (TR, E)
female beautiful from village 1
'beautiful girls from our village'

(598) *N PP Adj

*batino dari kampʊŋ kami elo? (TR, E)
female from village 1 beautiful
'beautiful girls from our village'

If the noun phrase consists of a head noun, an adjective, and a non-numeral quantifier, the non-numeral quantifier appears first and it is followed by the head noun and the adjective, as exemplified below.

(599) $_{\text{non-num}}$Q N Adj

baŋaʔ	ruma	gdaŋ	(TR, E)
a.lot	house	big	

'a lot of big houses'

(600) *N Adj $_{\text{non-num}}$ Q

*ruma	gdaŋ	baŋaʔ	(TR, E)
house	big	a.lot	

'a lot of big houses'

If the noun phrase contains a head noun, an adjective, and a numeral quantifier (a numeral and a classifier), the word order is shown in (601) and (602). The numeral and the classifier must be adjacent and thus, the word order in (603), for example, is ungrammatical. This suggests that the numeral and classifier form a unit that can precede or follow the head noun.

(601) Num CLF N adj

tigo	ekoʔ	bʊrʊŋ	kciʔ	(TR, E)
three	CLF	bird	small	

'three small birds'

(602) N adj Num CLF

bʊrʊŋ	kciʔ	tigo	ekoʔ	(TR, E)
bird	small	three	CLF	

'three small birds'

(603) *Num N CLF adj

*tigo	bʊrʊŋ	ekoʔ	kciʔ	(TR, E)
three	bird	CLF	small	

'three small birds'

If the noun phrase is comprised of a head noun, an adjective, and a noun modifier, the noun modifier precedes the adjective, as illustrated below.

(604) N_1 N_2 Adj

pisaŋ lılın mnta (TR, E)
banana k.o.banana raw
'raw *lilin* banana'

(605) *N_1 Adj N_2

*pisang mnta lılın (TR, E)
banana raw k.o.banana
'raw *lilin* banana'

In sum, the head noun in the noun phrase appears before other modifiers, except for quantifiers. The non-numeral quantifier must appear before the head noun, whereas the numeral quantifier can appear before or after the head noun. Moreover, when the head noun is modified by two modifiers and one of the modifiers is an adjective, the other modifier usually appear after the adjective. However, if the other modifier is a noun, the noun modifier must precede the adjective. In addition, the non-numeral quantifier which must appear before the head noun and the numeral quantifier can appear before the head noun or after the adjective.

Crucial orderings within the noun phrase in Jambi Malay can be summarized as follows. First, if present, the modifying noun must appear immediately after the head noun (an example is shown in (604)). Second, if a possessor is present, it should appear after the modifying noun and the adjective and other modifying elements should appear after the possessor. Third, if a demonstrative is present, it must always occur in the rightmost position. The possible word orderings within the noun phrase if all modifiers are present are shown in (606).

(606) a. $_{\text{non-num}}$Quantifier N N_{mod} Adj Poss Adverbial RC Dem
b. N N_{mod} Adj Poss Adverbial RC Q_{num}(Num+Classifier) Dem
c. Q_{num}(Num+Classifier) N N_{mod} Adj Poss Adverbial RC Dem

(607) a. ggalo pisaŋ lılın mnta jalıl dari kbon
all banana k.o.banana raw Jalil from garden
yaŋ dimakan siti-tu-la (TR, E)
REL PASS-eat Siti-DEM.DIST-EMPH
'all the raw Jalil's *lilin* bananas from the garden that have been eaten by Siti'

b. pisaŋ lılın mnta jalıl dari kbon (TR, E)
banana k.o.banana raw Jalil from garden
yaŋ dimakan siti duo ekoʔ-tu-la
REL PASS-eat Siti two CLF-DEM.DIST-EMPH
'those two raw Jalil's *lilin* bananas from the garden that have been eaten by Siti'

c. duo ekoʔ pisaŋ lılın mnta jalıl dari kbon
two CLF banana k.o.banana raw Jalil from garden
yaŋ dimakan siti-tu-la (TR, E)
REL PASS-eat Siti-DEM.DIST-EMPH
'those two raw Jalil's *lilin* bananas from the garden that have been eaten by Siti'

It should also be pointed out that the order of the prepositional phrase and the relative clause can be reversed, as exemplified below.

(608) a. budaʔ yaŋ padeʔ nian dari taɲʲʊŋ.raden-tu
kid REL clever very from Tanjung Raden-DEM.DIST
baru pgi (TR, E)
just go
'The very clever kid from Tanjung Raden has just left.'

b. budaʔ dari taɲʲʊŋ.raden yaŋ padeʔ nian-tu
kid from Tanjung Raden REL clever very-DEM.DIST
baru pgi (TR, E)
just go
'The kid from Tanjung Raden that is very clever has just left.'

There is a very subtle difference in the sentences in (608). The context for (608)a is that there was a group of kids who are very smart and one of them who is from Tanjung Raden has just left. In (608)b, there was a group of kids who are from Tanjung Raden and the very smart one has left.

1.2.2.5. The Syntax of Jambi Malay Noun Phrases

In this section, I present the syntax of the noun phrase in Jambi Malay. The noun phrase will be described as a DP (determiner phrase). Various studies have been conducted across languages to account for the DP structures in different languages (among others: Abney, 1987; Cinque, 2000; Simpson, 2005; Davies and Dresser, 2005; Dresser, 2006). In order to show the DP structure in Jambi Malay, I shall first review two previous works on related languages: Davies and Dresser (2005) and Dresser (2006), who bases his analysis on Cinque (2000). These are presented in 1.2.2.5.1. In 1.2.2.5.2, I evaluate the mechanism adopted in previous work to determine if it is able to account for the data in Jambi Malay.

1.2.2.5.1. Previous Studies of DP Structures

1.2.2.5.1.1. Davies and Dresser's Analysis of the DP Structure in Javanese and Madurese

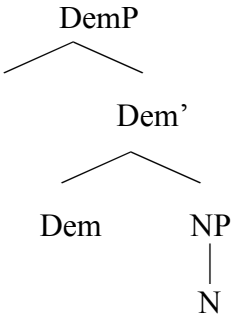
Davies and Dresser (2005) proposed a head movement analysis for the structure of DPs in Javanese and Madurese. Davies and Dresser show that the head noun in the majority of DPs in Javanese and Madurese appears at the left edge of the DP. Only quantifiers and numbers can precede the head noun.

Due to the distribution of the head noun relative to other elements in the DP, Davies and Dresser suggest that the head noun is in a high position within the DP at Spell-out. In line with the DP structures proposed by Ritter (1991), Longobardi (1994), Bernstein (1997), and others, Davies and Dresser propose a head movement analysis to account for the DP in Javanese and Madurese. According to Davies and Dresser, modifiers are in the specifiers of functional projections in the DP and the head noun moves in order to check the agreement feature. The feature checking is

obtained via the movement of the head noun to another head position if the feature is strong or via Agree if the feature is weak. Following Kayne's (1994) LCA, Davies and Dresser also suggest that specifiers of projections aer left-branching.

Davies and Dresser further propose that demonstratives in Javanese and Madurese are merged in their own functional projection, DemP, as illustrated below.

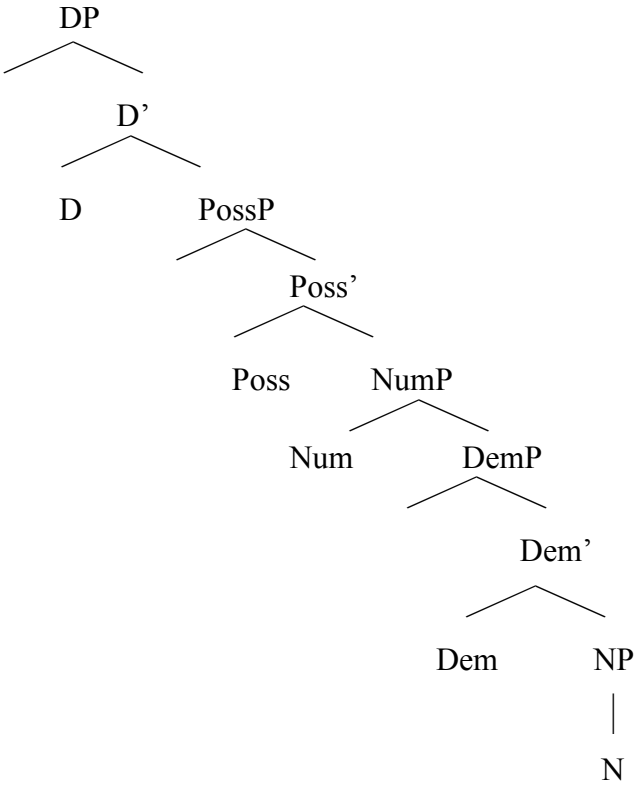
(609)



Furthermore, Davies and Dresser propose that DemP is dominated by the number phrase (NumP), which indicates the number feature. The NumP is dominated by a possessor phrase (PossP), which functions as a linker of the noun and the possessor.

Finally, the DP is merged at the top of the DP. At this projection, the noun definiteness features are checked and the Javanese definite clitic *'(n)é'* is generated. Thus, the DP structure of Javanese and Madurese can be illustrated as follows:

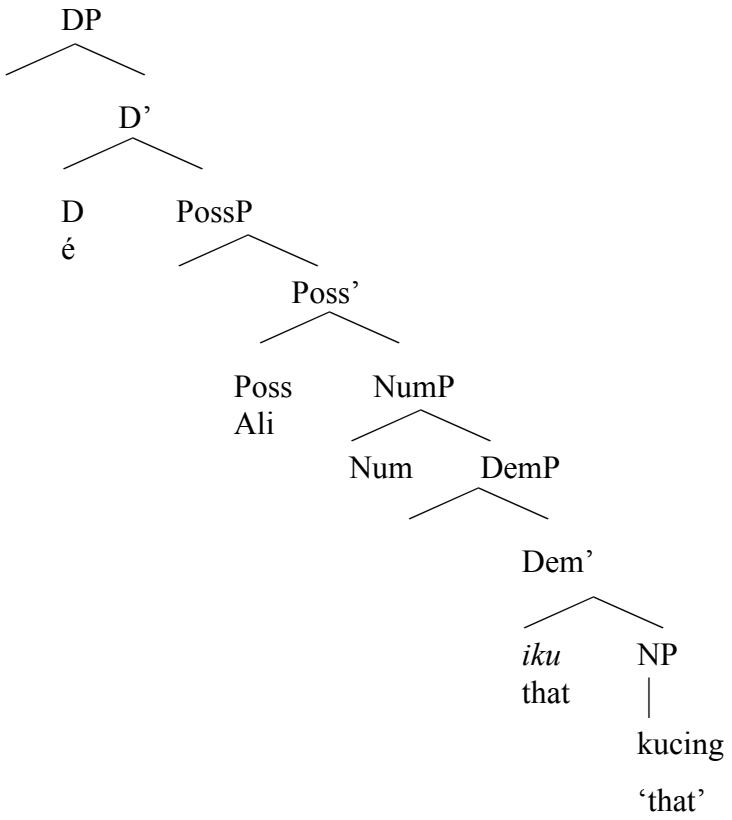
(610)



Using the structure in (610), Davies and Dresser attempt to account for the data in Javanese and Madurese. The Javanese DP shown in (611) (Davies and Dresser (2005:63), for example, is supposed to have the underlying structure shown in (612) below.

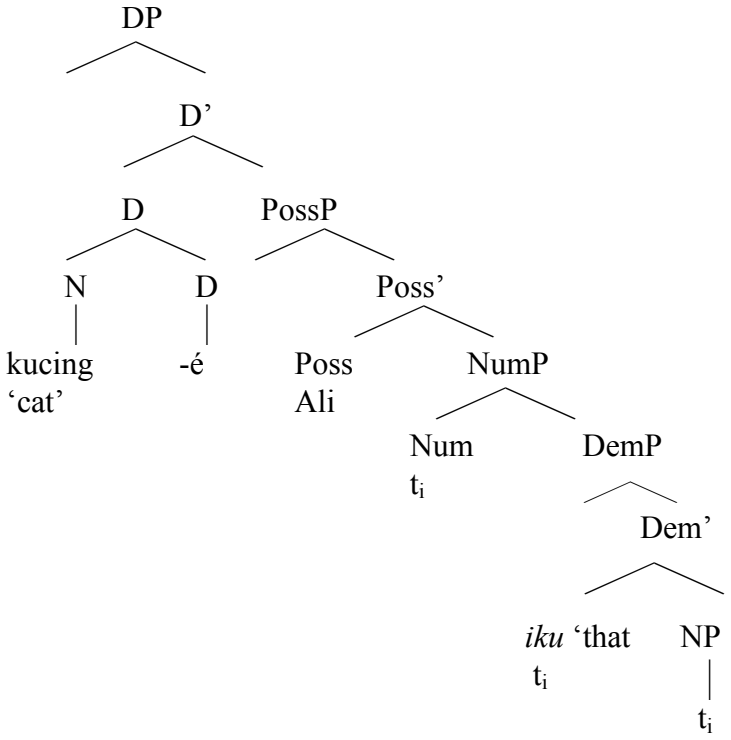
(611) Hasan tuku kucing-é Ali iku
H buy cat-DEF Ali that
'Hasan bought that cat of Ali's.'

(612)



In order to derive the DP *kucingé Ali iku* ‘that cat of Ali’s’, the strong feature in D attracts the head N all the way up in the tree to check the feature before spell out, as shown below.

(613)



Furthermore, based on the movement shown in (613), Davies' and Dresser's mechanism predicts acceptable and unacceptable word order in Javanese and Madurese. Because the head noun is in the D position and the possessor occupies the specifier right below it, it is predicted that no elements can intervene between them. This prediction is also borne out for the PP modifiers, numerals, relative clauses, and demonstratives. Some examples are shown in (614) to (616) (taken from Davies and Dresser, 2005:67-68).

(614) a. Murid-é Siti saka Kamal maca buku.
student-DEF S from K AV.read book
'Siti's student from Kamal read a book.'

b. *Murid saka Kamal-é Siti maca buku.
student from K-DEF S AV.read book

(615) a. Murid-é Siti sing pinter maca buku.
student-DEF S REL smart AV.read book
'Siti's student who is smart read a book.'

b. *Murid sing pinter-é Siti maca buku.
student REL smart-DEF S AV.read book

(616) *Hasan tuku kucisng iku-né Ali.
H buy cat that-DEF Ali
'Hasan bought that cat of Ali's.'

However, Davies and Dresser's analysis is not without problems. As previously shown, the strong feature in D attracts the head noun. In addition, the (b) sentence in (614) and (615) and the sentence in (616) show that no other modifiers can intervene between the head noun and the possessor. In the following example [taken from Davies and Dresser, (2005:64)], the adjective appears before the head noun and the possessor, and thus, it is predicted to be ungrammatical. However, the sentence is grammatical.

(617) Murid pinter-é Siti maca buku
student smart-DEF Siti AV.read book
'Siti's smart student read a book.'

Another problem is that the only adjectives which can intervene between the head noun and the possessor are simple adjectives. Adjectives which are modified by some degree element such as 'very' or 'too' cannot intervene between the head and the possessor, as shown below [Davies and Dresser (2005:68)].

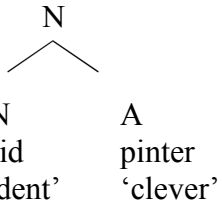
(618) a. siti ng-rasakké kopi-é Hasan sing pahit banget
Siti AV-taste coffee-DEF H REL bitter very
'Siti tasted Hasan's very bitter coffee.'

b. *siti ng-rasakké kopi pahit banget-é Hasan
Siti AV-taste coffee bitter very -DEF H
'Siti tasted Hasan's very bitter coffee.'

To account for the facts in (617) and (618), Davies and Dresser suggest that in Javanese and Madurese some adjectives adjoin directly to the head noun and derive a new noun head (illustrated in (619)). This proposal is similar to that of

Stowell (1981), Sadler and Arnold (1994), and Baker (2003), who have suggested that prenominal adjectives and postnominal adjectives are different in that postnominal adjectives are full phrasal constituents because phrasal modifiers can be used in the postnominal position, but not in the prenominal position.

(619)



The N-A adjunction analysis is supported by additional data from definite markers in both Javanese and Madurese. In these languages, when the noun appears without an adjective, the definite marker appears right after the noun, which suggests that the definite marker adjoins to the right edge of the noun. In addition, if an adjective is also present, the definite marker adjoins to the right edge of the adjective, as shown below (taken from Davies and Dresser, 2005:68).

(620) Atin tuku [sepedah biru tuwa-né Bambang].
Atin buy bike blue old-DEF B
'Atin bought Bambang's old blue bike.'

The data in (620) can easily be accounted for if one adopts the N-A adjunction analysis. The definite marker simply adjoins to the right edge of the complex N head.

Davies and Dresser also provide some data from reduplication to support the N-A adjunction analysis. However, I shall not provide a review here since it will not be relevant to the analysis of Jambi Malay.

Davies and Dresser notice that the head movement analysis encounters a problem with respect to other word ordering possibilities, as shown in the following examples [taken from Davies and Dresser, (2005:69-70)].

(621) a. murid sing pinter iku
student REL smart that
'that smart student'

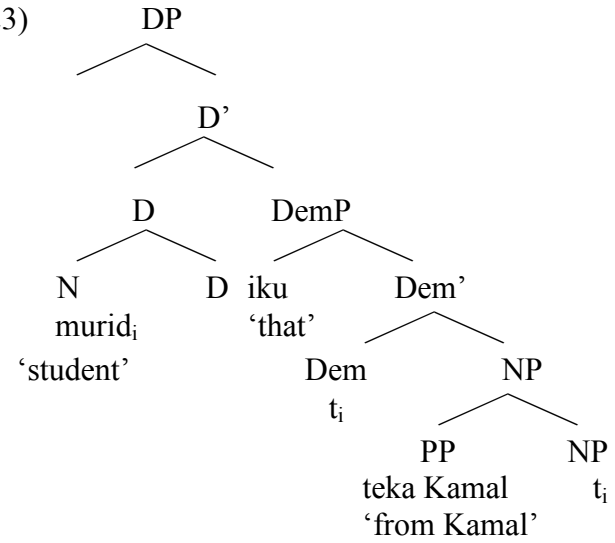
b. murid iku sing pinter
student that REL smart
'that smart student'

(622) a. murid teka Kamal iku
student from K that
'that student from Kamal'

b. murid iku teka Kamal
student that from K
'that student from Kamal'

The above analysis is able to account for the (b) sentences in (621) and (622) easily. In (623) below, the structure for (622)b is derived.

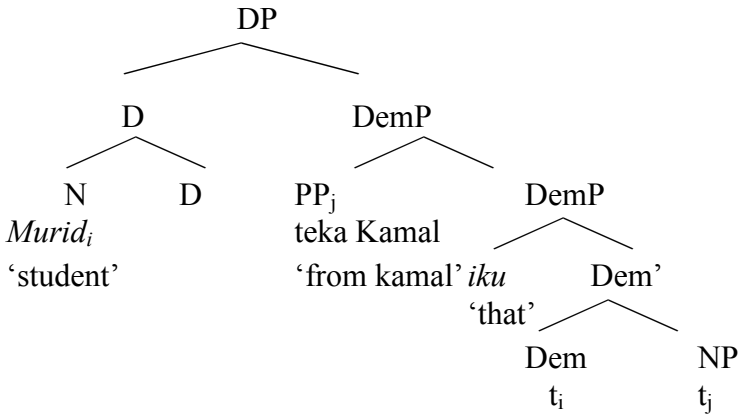
(623)



The movement of the head *murid* 'student' easily derives the word order in (622)b. However, the word order in (622)a is difficult to derive. From the structure in (623), it is unclear to which position the PP *teka Kamal* 'from Kamal' should move in order to derive the word order in (622)a.

To resolve the problem, Davies and Dresser (2005:71) propose that there is a kind of remnant movement of the NP to adjoin to the DemP, as shown in (624) below. [124]

(624)



However, Davies and Dresser further point out that two objections can be raised to argue against the remnant movement analysis. First, this movement is not motivated. Second, the word order of [N Modifier Dem] sounds more natural to the native speakers of Javanese and Madurese. Therefore, there is no reason for suggesting such a movement to derive a more natural ordering.

To conclude, Davies and Dresser (2005) propose the head movement analysis which claims that the head noun is in a high position within the DP at spell-out. The modifiers are in the specifiers of functional projections in the DP. The head noun needs to move in order to check agreement features. The agreement features are checked either by moving the head noun to another head position or via Agree. Furthermore, Davies and Dresser propose the need of N-A adjunction for explaining why modifiers other than adjectives cannot appear before the possessor in a DP. The

[124] Although Davies and Dresser claim that the NP adjoins to the DemP, I think what they meant by this is any kind of modifier that modifies the head noun.

head movement analysis appears to be able to account for most data from Javanese and Madurese. Some problems arise, as the head movement analysis needs to account for the fact that demonstratives can appear in the rightmost position in a DP. Although Davies and Dresser suggest some kind of remnant movement to resolve the problem, they also point out that this remnant movement analysis is not sufficiently motivated.

1.2.2.5.1.2. Dresser's Analysis of the DP Structure in Indonesian and Javanese

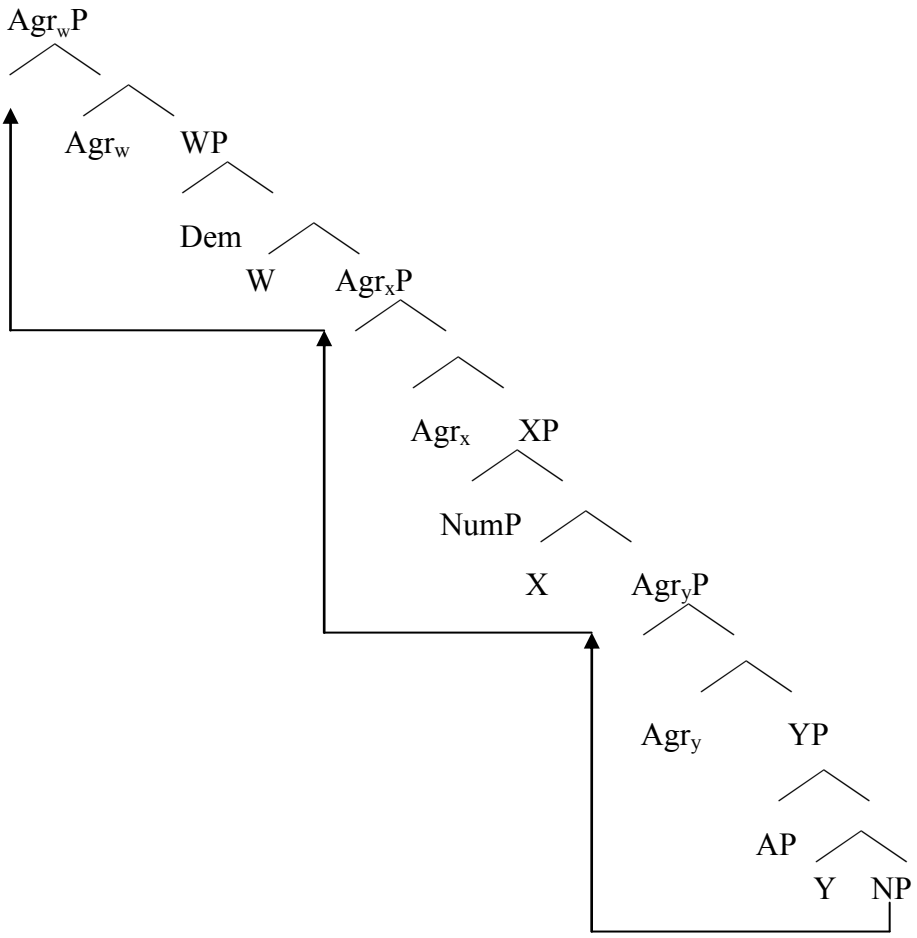
Adopting Cinque's phrasal movement analysis (2005), Dresser (2006) attempts to account for the DP structure in Javanese and Indonesian.

Cinque (2005) proposes a phrasal movement analysis for DPs which is meant to handle all DPs. Cinque's analysis accounts for attested and unattested patterns in terms of ordering of the elements within noun phrases. Similarly to Davies and Dresser (2005), Cinque assumes Kayne's (1994) Antisymmetry Theory and proposes a universal merge order of the modifiers of the DP.

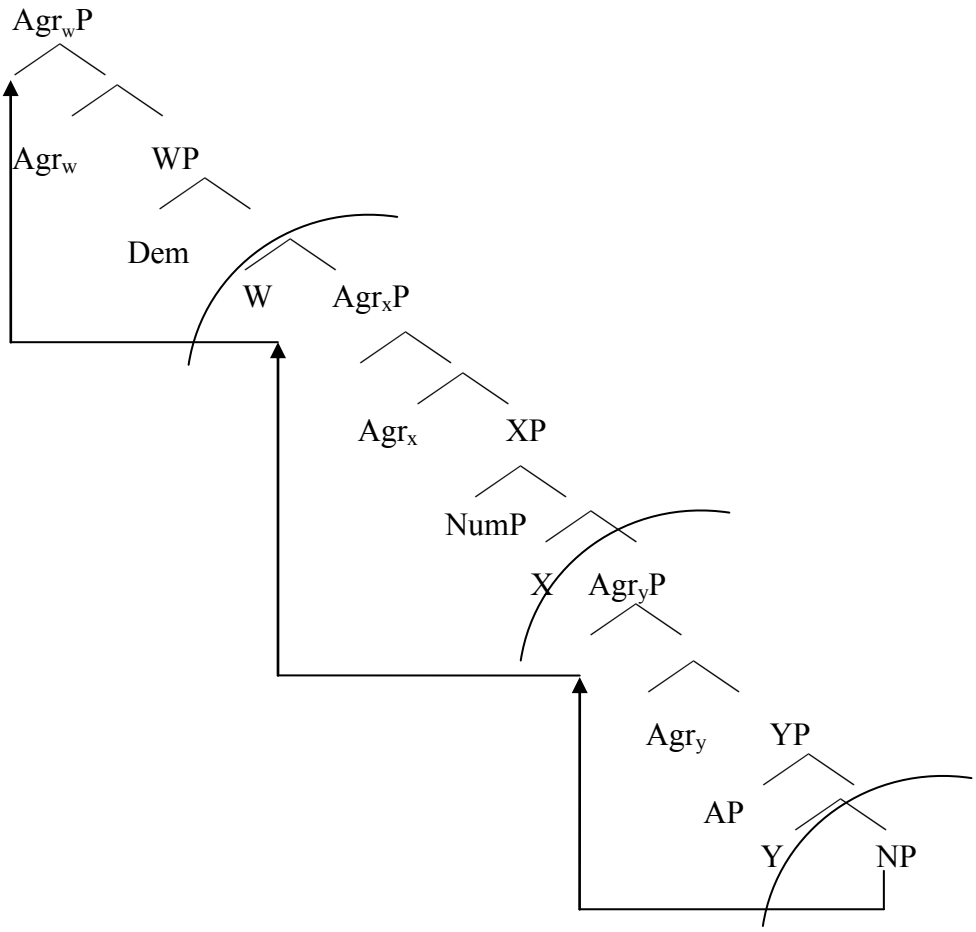
Cinque's main goal is to have an analysis that incorporates Greenberg's generalization universal 20 (1963). According to universal 20, demonstrative, number and adjective appear only in that order when pre-nominal, and either in that order or in the reverse order post-nominally. Because the pre-nominal modifiers have no variation, Cinque proposes that this is the merge order of the constituents, (Dem Num AP NP) and if there is no movement involved, this order will appear in the surface representation. In addition, Cinque proposes that post-nominal orders are derived via two strategies of the raised NP. First, the NP raises alone, from Spec to Spec of the agreement projections found above each of the functional projections hosting Adjectives, Numerals, and Demonstratives (for the ordering of N Dem Num A) (shown in (624)). Second, the NP raises by moving successively to each such Spec

and pied pipes the category that dominates it, in a “roll-up” fashion that reverses the order of the modifiers, to give N A Num Dem (shown in (626)).

(625)



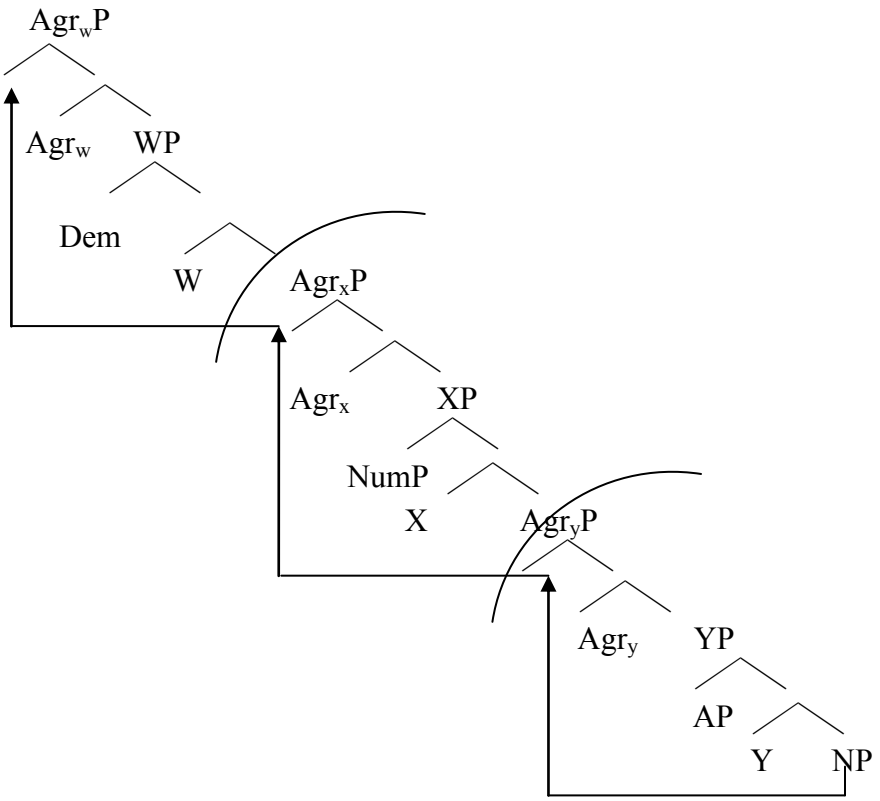
(626)



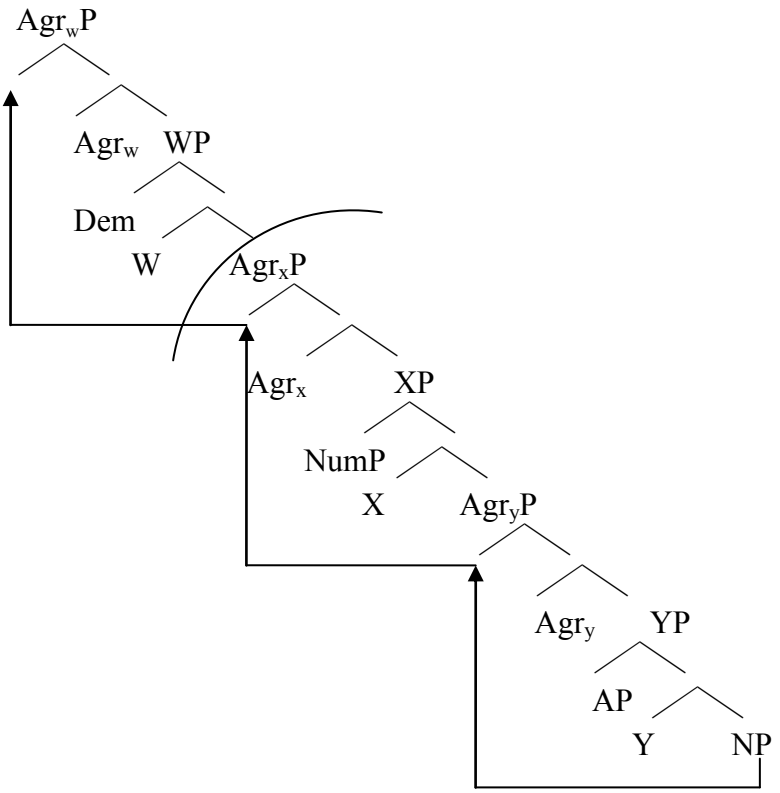
As pointed out by Dresser (2006), Cinque's analysis works to derive the word orders in Javanese and Indonesian. The "roll-up" process in which the NP always moves and pied-pipes the dominating AgrP with it derives the word order in (627)a. Meanwhile, to derive the order in (627)b, the "roll-up" process in the NP moves and pied-pipes the dominating AgrP right until the Agr below Num. As soon as the AgrP obtains the nominal features, the entire constituent moves to the spec of Agr dominating Dem to license the demonstrative. The illustrations are shown in (628) and (629), respectively.

(627) a. N A Num Dem
b. Num N A Dem

(628)



(629)



Moreover, Cinque adds more modifiers to his structure, as shown below.

(630) [Q_{univ}… [Dem…. [Num_{ord}…. [RC… [Num_{car}… [CL… [A… NP]]]]]]]

As pointed out by Dresser (2006), no position for possessors is suggested by Cinque. Dresser points out that possessors could Merge in a second specifier of the NP and that the NP below it is subject to movement. In languages where modifiers appear between the possessor and the noun, such as English, a movement of the possessor to the specifier of DP is involved (also see Abney, 1987). However, Dresser further points out that in the case of possessive clitics in languages such as Bulgarian the clitic seems to occupy a fixed position in the head of the phrase.

(631) a. xubava-ta mu kniga
good-the he.DAT book
'his good book'

b. [$_{DP}$ xubava [$_{D}$ –ta [$_{PossP}$ t_i [$_{Poss}$ mu [$_{NP}$ t_i [$_{NP}$ kniga]]]]]]

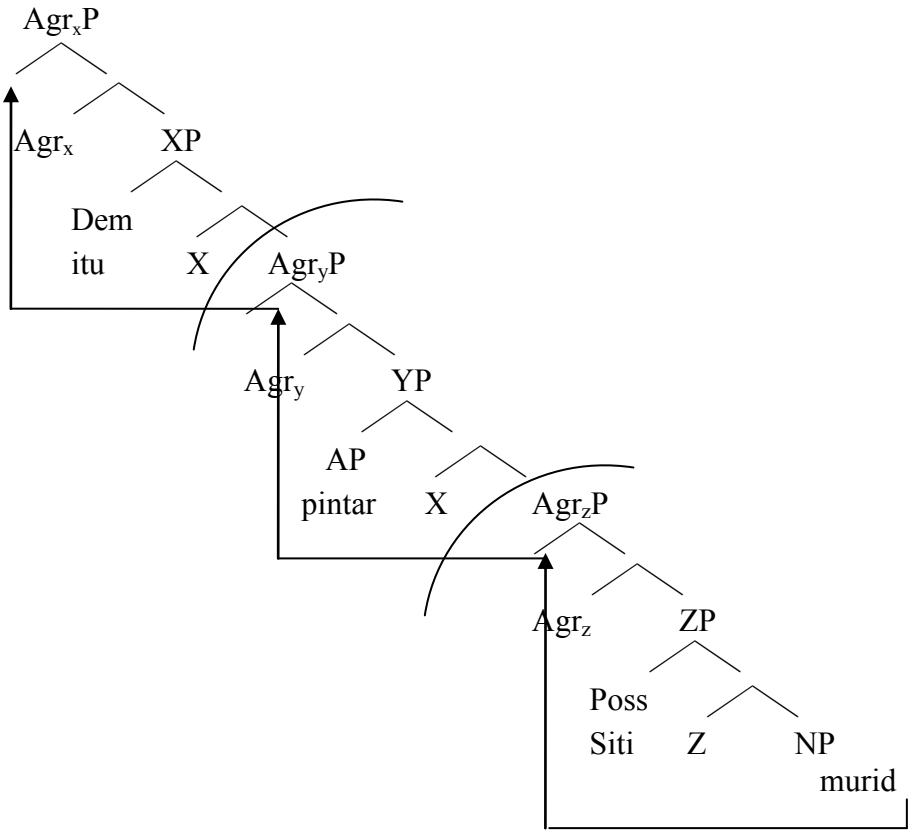
In addition, Dresser points out that Javanese and Indonesian agreement clitics always attach to the noun when the possessor is a pronominal. Thus, he suggests that there is an agreement relationship between the noun and a *pro* possessor which is achieved by means of an AgrP. Dresser proposes that Poss is internal to the NP and must move to the specifier of the functional projection immediately dominating the NP. The DP structure is underlyingly as follows.

(632) [Dem…. [RC… [Num_{car}… [CL… [AP… [Poss… NP]]]]]]]

Dresser further provides an illustration of how the Indonesian DP example shown in (633) is derived using (634).

(633) [Murid pintar Siti itu] membaca bukumu
student smart S that AV.read book-2poss
'that smart student of Siti's read your book.'

(634)



As shown in (634), the NP first moves through the AgrP that dominates the Possessor and then it continues to move to the AgrP dominating the AP without pied-piping. At this point, the entire AgrP shares the nominal features with the NP and then it moves into the specifier of the AgrP dominating the demonstrative.

However, Dresser (2006) points out that Cinque's analysis encounters two problems. First, Cinque's analysis is problematic for Javanese and Indonesian (and presumably also Madurese), as discussed in Davies and Dresser (2005), because it cannot explain why the definite clitics –(*n)é* (Javanese) and *–nya* (Indonesian) have to appear at the right edge of the noun adjective clusters. Second, Cinque's analysis cannot directly explain why pre-possessor adjectives cannot be modified. Dresser proposes that N-A adjunction is still needed for phrasal movement analysis and that N-A adjunction does not contradict that analysis.

1.2.2.5.2. The Structure of Jambi Malay DPs

In this section, I examine how each of the above proposals accounts for the data in Jambi Malay and discuss which proposal provides a better account. I shall first provide a short review of how similar and different Jambi Malay is as compared to other languages that are analysed using the above approaches.

Jambi Malay is similar to Indonesian, Javanese, and Madurese in that number (and classifier) can both precede and follow the head noun, as shown in the following examples.

(635) Jambi Malay

a. Mamat hoho bntar-ko ɲʲual
Muhammad Hoho moment-DEM.PROX ACT-sell
[duo bʊtɪr ayam]
two grain chicken
'Muhammad Hoho sold two chickens a few days ago.'

b. awaʔ, [cucu awaʔ duo ekoʔ] bawa bataŋ tuo-la
1/2/3 grandchild 1/2/3 two CLF under tree old-EMPH
'[The placentas of] my two grand children were buried next to an old pillar.'
[Lit. 'My two grandchildren were under an old pillar.']

(636) Indonesian

a. Dia mengisap [dua bungkus rokok].(Sneddon 1996:138)
3 MENG-smoke two pack cigarette
'He smoked two packets of cigarettes.'

b. Dia datang membawa [susu dua gelas]. (Sneddon 1996:140)
3 come MENG-bring milk two glass
'She came with two glasses of milk.'

(637) Javanese (Davies and Dresser, 2005:58)
Hasan tuku [sepuloh kucing/ kucing sepuloh]
H buy 10 cat cat 10
'Hasan bought ten cats.'

(638) Madurese (Davies and Dresser, 2005:58)
Hasan ngerem paket ka [tello' kanca/ kanca tello']
H AV.send package to 3 friend friend 3
'Hasan sent a package to three friends.'

In the sentences in (635)a and (636)a, number and classifier precede the head noun in Jambi Malay and Indonesian, whereas in (635)b and (636)b number and classifier follow the head noun. Likewise, the data in (637) and (638) show that number and classifier can both follow and precede the head noun in Javanese and Madurese, respectively.

Furthermore, Jambi Malay is also similar to Indonesian in that if a demonstrative is present, the demonstrative always appears in the rightmost position, as shown below.

(639) a. [bʊrʊŋ kciʔ-kciʔ tigo ekoʔ-tu]
bird RED-small three CLF-DEM.DIST
ditem^{b}aʔ buat pam^{b}ʊrʊ di (TR, E)
PASS-shoot by AGT-hunt earlier
'Those three small birds were shot by the hunter.'

b. *[bʊrʊŋ kciʔ-kciʔ-tu tigo ekoʔ] ditem^{b}aʔ
bird RED-small-DEM.DIST three CLF PASS-shoot
buat pam^{b}ʊrʊ di (TR, E)
by AGT-hunt earlier
'Those three small birds were shot by the hunter.'

c. *[tu bʊrʊŋ kciʔ-kciʔ tigo ekoʔ]
DEM.DIST bird RED-small three CLF
ditem^{b}aʔ buat pam^{b}ʊrʊ di (TR, E)
PASS-shoot by AGT-hunt earlier
'Those three small birds were shot by the hunter.'

As shown in (639)a, the demonstrative appears in the rightmost position and this derives a grammatical word order. In (639)b, the demonstrative appears before the numeral and classifier and this derives an unacceptable ordering. Similarly, (639)c shows that when the demonstrative appears in the leftmost position, the ordering is ungrammatical.

Unlike in Jambi Malay and Indonesian, the demonstratives in Madurese and Javanese do not have to be present in the rightmost position, as exemplified below.

(640) Javanese (Davies and Dresser 2005:64)
Hasan tuku [kucing sing soklat itu/ kucing iku sing coklat].
H buy cat REL brown that cat that REL brown
'Hasan bought that brown cat.'

(641) Madurese (Davies and Dresser 2005:64)
Murid yang pintar sekali itu/
student REL smart very that
Murid itu yang pintar sekali] membaca bukumu.'
student that REL smart very AV-read book.2POSS
'That very smart student read your book.'

As in Javanese and Madurese (Davies and Dresser, 2005), adjectives that are modified by some degree element such as 'very' or 'too' in Jambi Malay cannot occur in pre-possessor position. When the adjective is modified, the modified adjective has to appear in a relative clause. Examples follow.

(642) Jambi Malay

a. *[buku kciʔ nian budi] koyaʔ (TR, E)
book small very Budi torn
'Budi's very small book was torn.'

b. [buku budi yaŋ kciʔ] nian koyaʔ (TR, E)
book Budi REL small verytorn
'Budi's book that is very small was torn.'

(643) Javanese (Davies and Dresser 2005:67)

a. *Siti ng-rasakké [kopi pahit banget-é Hasan].
Siti AV-taste coffee bitter very-DEF H
'Siti tasted Hasan's very bitter coffee.'

b. Siti ng-rasakké [kopi-né Hasan sing pahit banget].
Siti AV-taste coffee-DEF H REL bitter very
'Siti tasted Hasan's very bitter coffee.'

(644) Madurese (Davies and Dresser 2005:68)

a. *Sengko' ng-enom [kopi manes gellu-na Siti].
I AV-drink coffee sweet too-DEF S
'I drank Siti's too sweet coffee.'

b. Sengko' ng-enom [kopi-na Siti se manes gellu].
I av-drink coffee-DEF S REL sweet too
'I drank Siti's too sweet coffee.'

As pointed out in previous sections, in Jambi Malay, if a possessor is present in a DP, it must appear after an adjective and a modifying noun. Other modifying elements, such as relative clauses, demonstratives, numbers, or prepositional phrases have to appear after the possessor. This pattern is also present in Javanese and Madurese data. Examples from Jambi Malay and Javanese are presented below.

(645) Jambi Malay

a. [bini datʊʔ yaŋ di mʊdʊŋ] sakɪt (TR, E)
wife grandfather REL LOC Mudung sick
'Grandfather's wife who is in Mudung is sick.'

b. *[bini yaŋ di mʊdʊŋ datʊʔ] sakɪt (TR, E)
wife REL LOC Mudung grandfather sick
'Grandfather's wife who is in Mudung is sick.'

(646) Javanese (Davies and Dresser, 2005:67)

a. [Murid-é Siti saka Kamal] maca buku.
student-DEF S from K AV.read book
'Siti's student from Kamal read a book.'

b. *[Murid saka Kamal-é Siti] maca buku.
student from K-DEF S AV.read book

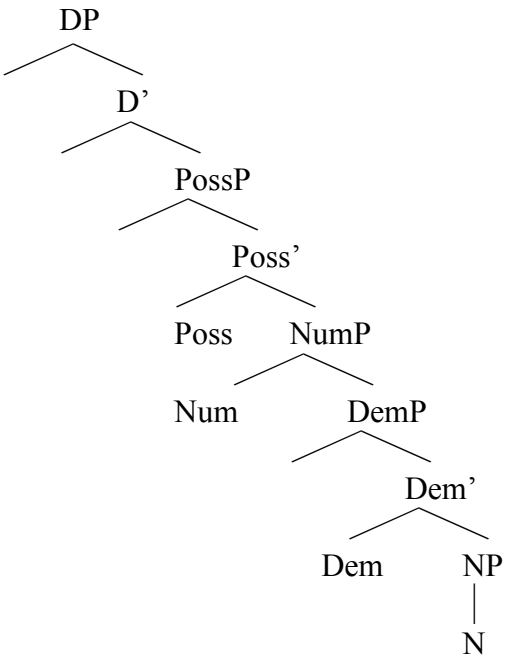
To conclude, the DPs in Jambi Malay display some similar and different patterns as compared to Javanese, Madurese, and Indonesian. In all four languages, number (and classifier) can both precede and follow the head noun. Jambi Malay and Indonesian are similar in that the demonstrative always appears in the rightmost position, whereas in Javanese and Madurese, the demonstrative can appear in the rightmost position as well as after the head noun. In Jambi Malay, as well as in Javanese and Madurese, adjectives modified by some degree element cannot appear before a possessor, but simple adjectives can. Finally, only an adjective or a modifying noun which functions like an adjective can appear before a possessor. Other modifying elements within DPs, such as relative clauses, numbers, and PP modifiers have to appear after the possessor.

1.2.2.5.2.1. Head Movement Analysis to Account for DPs in Jambi Malay

In this section, I shall apply the head movement analysis to account for the structure of DPs in Jambi Malay and show that this analysis is not adequate. The head

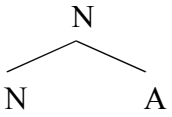
movement analysis proposes that the basic structure of DPs is the one shown in (610), repeated in (647) below.

(647)

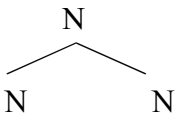


Furthermore, the head movement analysis proposes N-A adjunction to account for the fact that modifiers other than adjectives and modifying nouns cannot appear before the possessor. In (648)a, I present the structure of N-A adjunction. (648)b shows N-N adjunction, with only a slight modification of (648)a, used for describing a noun modified by a modifying noun.

(648) a.



b.

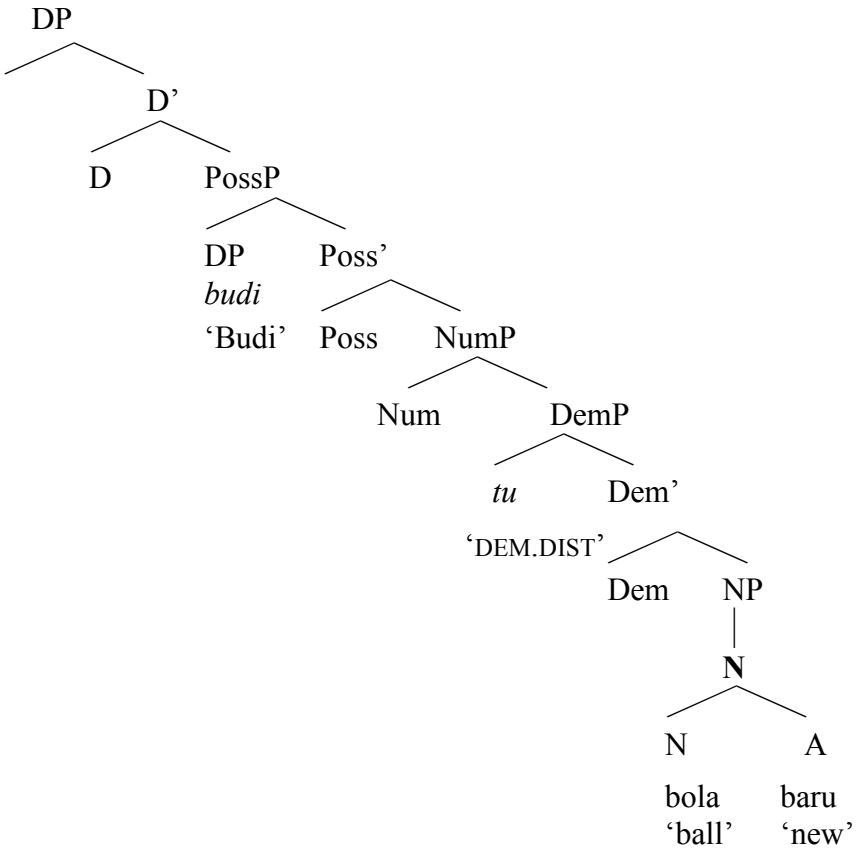


Thus, to account for NPs such as those in (649), one can simply apply the tree in (647) and (648).

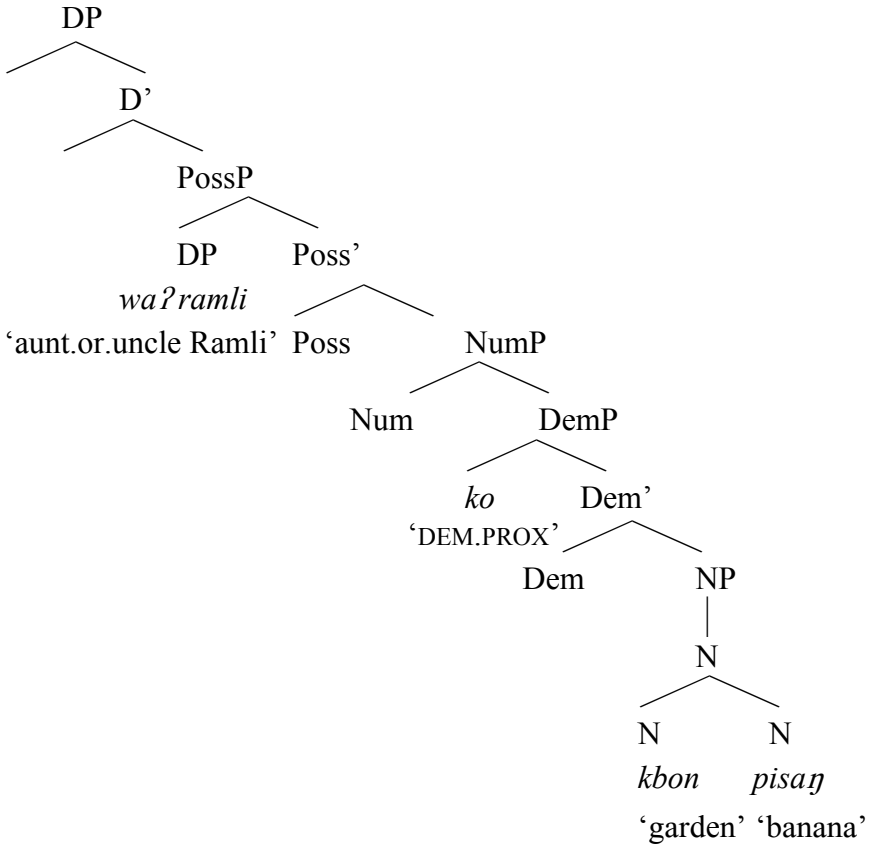
(649) a. edi ɲepaʔ [bola baru budi-tu] (TR, E)
Edi ACT-kick ball new Budi-DEM.DIST
'Edi kicked Budi's new ball.'

b. maʔ baru mᵇli [kbon pisaŋ
mother new ACT-buy garden banana
waʔ ramli-ko] (TR, E)
aunt.or.uncle Ramli-DEM.PROX
'Mother has just bought Uncle Ramli's banana garden.'

(650) a.

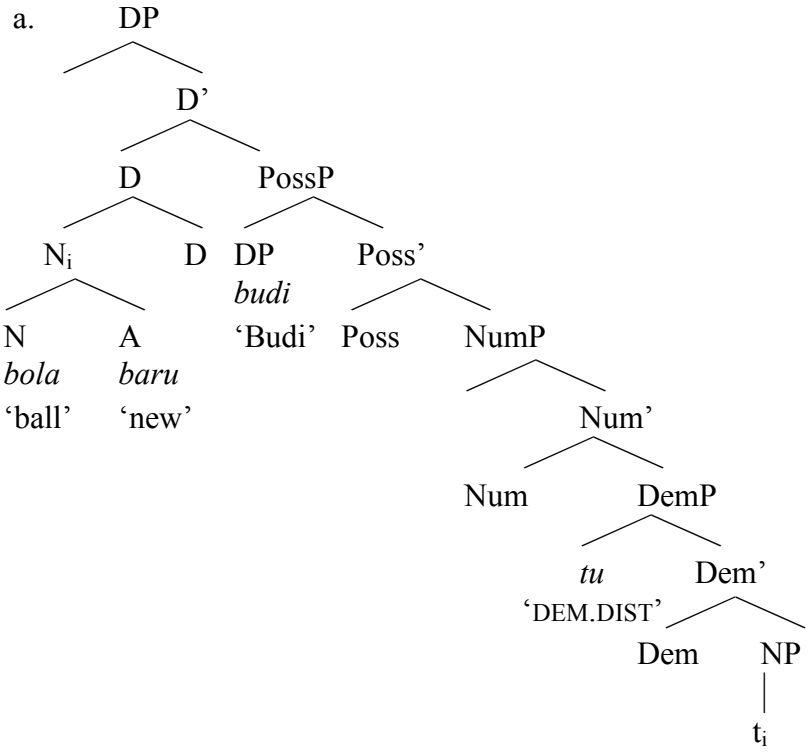


b.

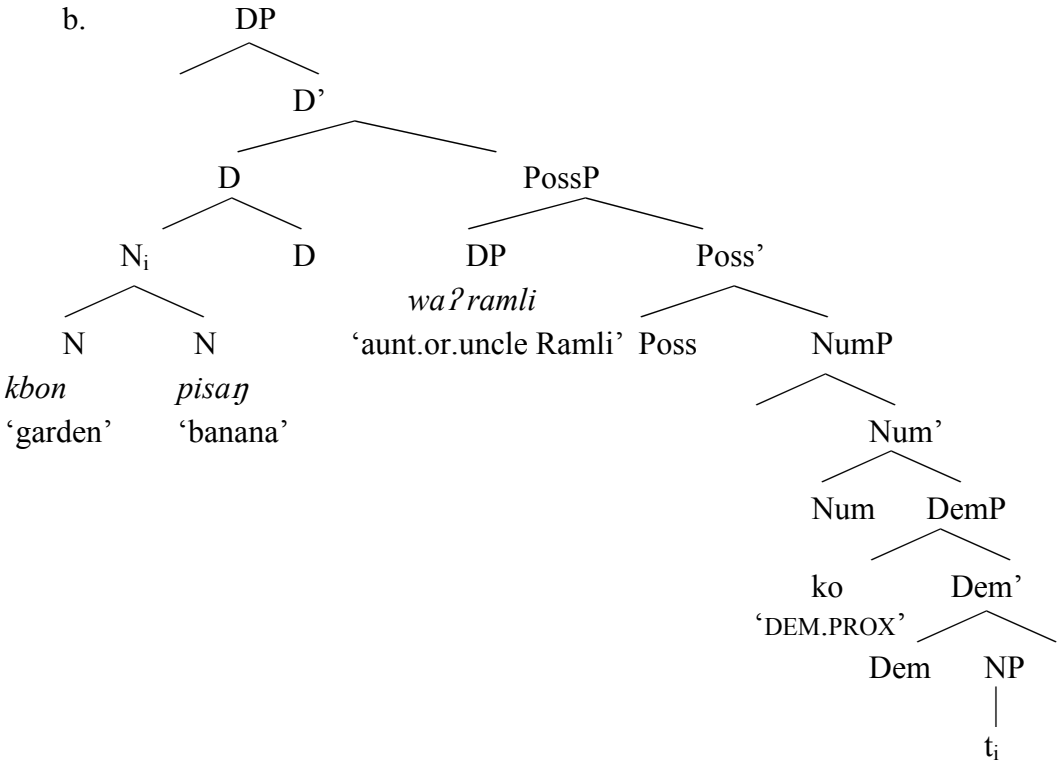


To derive (649)a and (649)b, a strong feature in D attracts the complex N to the specifier of the DP, as illustrated below in (651)a and (651)b, respectively.

(651) a.


DP
D'
D
PossP
N$_i$
D
DP
Poss'
budi
N
A
'Budi'
Poss
NumP
bola
baru
'ball'
'new'
Num'
Num
DemP
tu
Dem'
'DEM.DIST'
Dem
NP
t$_i$

b.


DP
D'
D
PossP
N$_i$
D
DP
Poss'
wa?ramli
N
N
'aunt.or.uncle Ramli'
Poss
NumP
kbon
pisaŋ
'garden'
'banana'
Num'
Num
DemP
ko
Dem'
'DEM.PROX'
Dem
NP
t$_i$

The structures in (651) show that the head movement analysis can account for the DPs that contain [N Adj Poss Dem] in Jambi Malay.

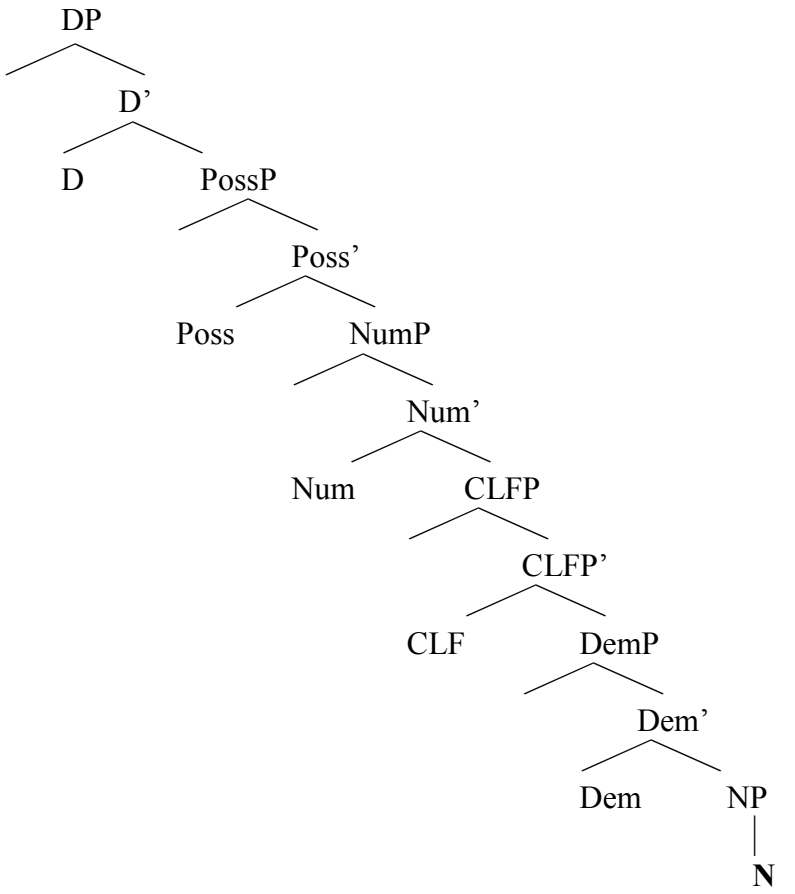
Next, let us examine how the head movement analysis accounts for DPs in which a numeral and a classifier are present. In (652)a, the numeral and the classifier precede the head noun, whereas in (652)b, the numeral and the classifier follow the head noun.

(652) a. budi ɲepak [duo eko? bola eko-tu] (TR, E)
Budi ACT-kick two CLF ball Eko-DEM.DIST
'Budi kicked two red balls of Eko's.'

b. budi ɲepak [bola eko duo eko?-tu] (TR, E)
Budi ACT-kick ball Eko two CLF-DEM.DIST
'Budi kicked two red balls of Eko's.'

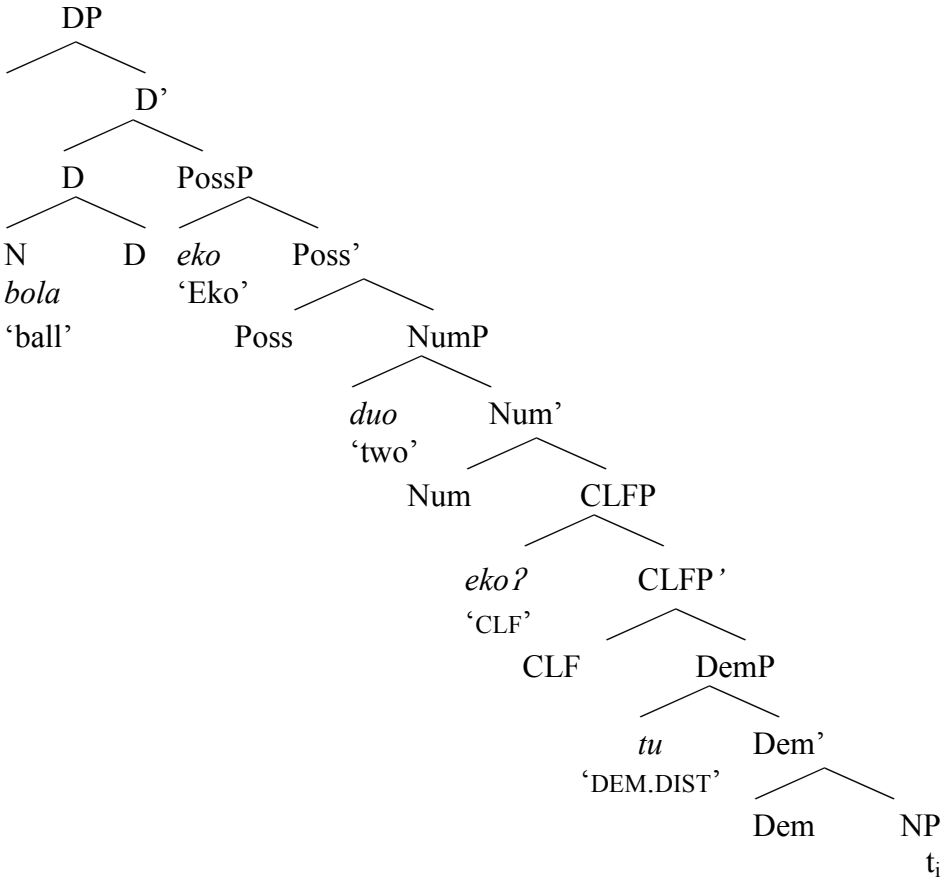
One problem is that Davies and Dresser (2005) do not mention a projection for Classifier Phrase (CLFP) in which individuation can be encoded. This is understandable because there are no classifiers in Javanese and Madurese and thus, Javanese and Madurese do not need a projection for classifiers. This issue can simply be resolved by adding a CLFP projection between the NumP and the DemP to the structure in (647), as shown in (653) below.

(653)



Using the structure in (653), the NP in (652)b can straightfowardly be derived, as shown in (654) below.

(654)



As shown in (654), the head noun *bola* 'ball' moves and adjoins to the D head and the movement derives the NP in (652)b *bola eko duo eko?-tu* 'the two balls of Eko's' [N Poss Num CLF Dem].

Another problem arises as one tries to derive the word order of the DP in (652)a, i.e. [Num CLF N Poss Dem]. Dresser (2006) proposes that the NumP (presumably together with the CLFP) optionally moves to some specifier position higher than DP, like QP. Dresser (2006) further points out that the movement is motivated by some interpretational difference between the two positions of Num+CLF. This argumentation can be applied to Jambi Malay as the [N Num CLF] word order sounds more natural to the speakers than [Num CLF N]. Thus, it can be claimed that [Num CLF N] moves in order to emphasize the number of the head noun.

However, the movement of NumP+CLFP to the quantifier position raises the question of why the DemP does not move together with the NumP and CLFP.

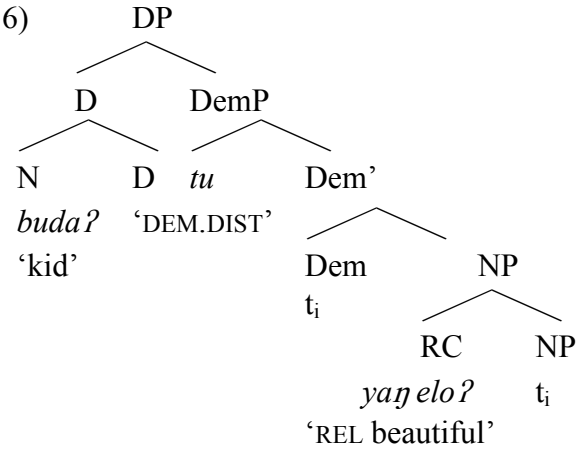
A bigger problem with the head movement analysis comes from the fact that demonstratives always appear in the rightmost position. In Jambi Malay, the word order in (655)a is acceptable, but the word order in (655)b is unacceptable.

(655) a. buda? yaŋ elo?-tu (TR, E)
kid REL beautiful-DEM.DIST
'the kid that is beautiful'

b. *buda?-tu yaŋ elo? (TR, E)
kid-DEM.DIST REL beautiful
'the kid that is beautiful'

Instead of deriving the word order in (655)a, the head movement analysis derives the word order in (656)b, which is not acceptable in Jambi Malay, as shown in (656) below.

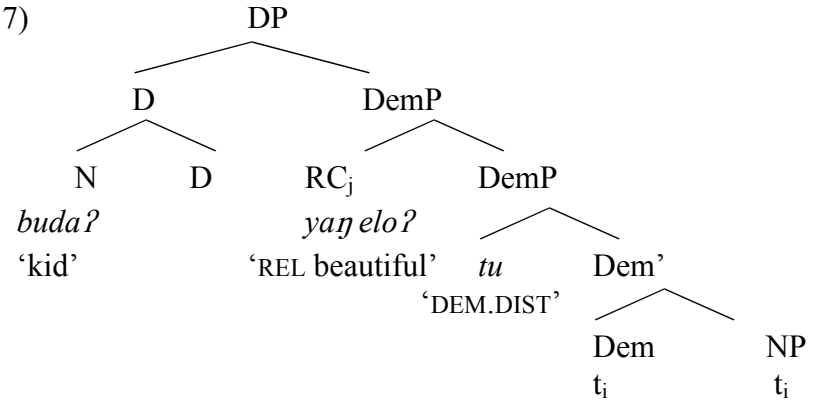
(656)



As shown in (656), the head movement analysis fails to derive the correct word order in Jambi Malay DPs with respect to the position of the demonstrative.

Davies and Dresser (2005) propose that in order to derive the word order in (655)a, some kind of remnant movement of the NP to adjoin to the DemP should be involved, as shown in the following structure.

(657)



However, Davies and Dresser (2005) themselves point out that two objections might be raised to the remnant movement analysis. First, this movement is not motivated. Second, the word order of [N Modifier Dem] sounds more natural to the native speakers of Javanese and Madurese. Therefore, there is no reason for suggesting such a movement to derive a more natural ordering. Similarly, for Jambi Malay, there is no adequate motivation for proposing a remnant movement to derive the only possible word order. In addition, the movement of the head noun (without the remnant movement) to the highest position derives an unacceptable order in the DP (see example (655)b).

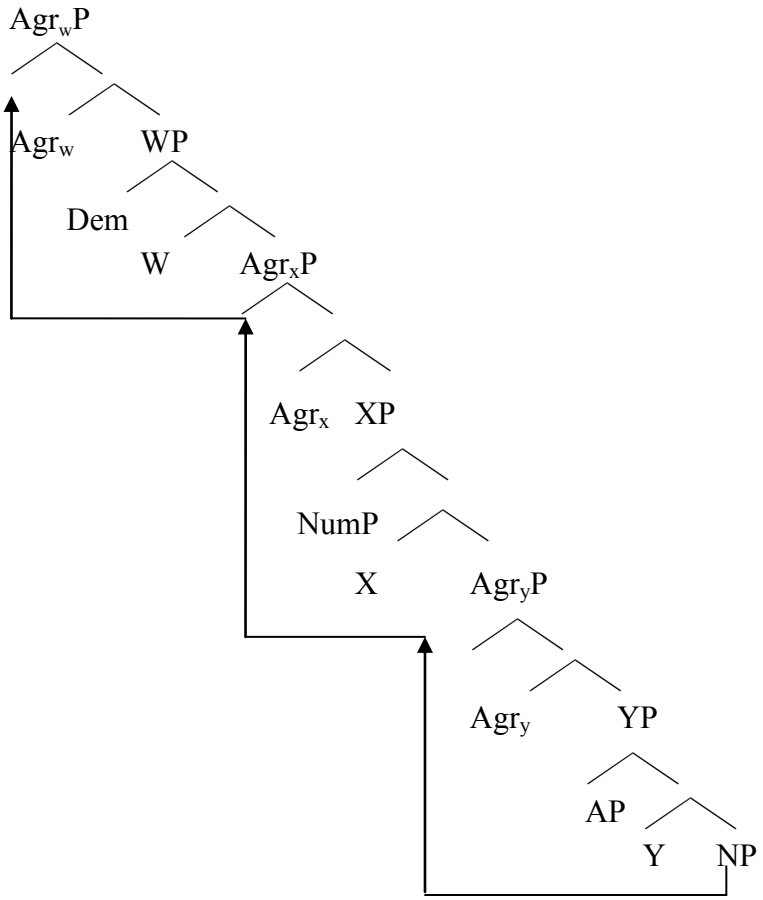
To conclude, the head movement analysis successfully accounts for the fact that modifiers other than adjectives and modifying nouns cannot appear before the possessor. However, the head movement analysis encounters a problem as it has to account for DPs which contain a number and a classifier. Furthermore, this analysis fails to account for the fact that the demonstrative needs to be in the rightmost position of the DP.

1.2.2.5.2.2. The Phrasal Movement Analysis

In this section, I shall use the phrasal movement analysis to account for the structure of DPs in Jambi Malay and I shall show that this analysis is better as than the head movement analysis.

According to the phrasal movement analysis, the basic structure of DP is shown in (624), repeated in (658). Furthermore, Cinque (2005) proposes that in order to derive different word orders in the world's languages, the NP needs to raise. The NP may raise alone, from Spec to Spec of the agreement projections found above the functional projections hosting different elements, or the NP can move successively to each Spec and pied pipe with the category that dominates it in a "roll-up" fashion.

(658)



Cinque (2005) also suggests that his analysis can account for the data including other modifiers, as shown in (630), repeated in (659) below.

(659) [Q_{univ}… [Dem…. [Num_{ord}…. [RC… [Num_{car}… [CL… [A…NP]]]]]]]

Now, let us examine how the phrasal movement analysis accounts for the DPs in Jambi Malay.

I shall begin with DPs which contain a head noun, an adjective, a number, a classifier and a demonstrative, as exemplified below.

(660) a. bola mera duo ekoʔ-tu (TR, E)
ball red two CLF-DEM.DIST
'the two red balls'

b. duo ekoʔ bola mera-tu (TR, E)
two CLF ball red-DEM.DIST
'the two red balls'

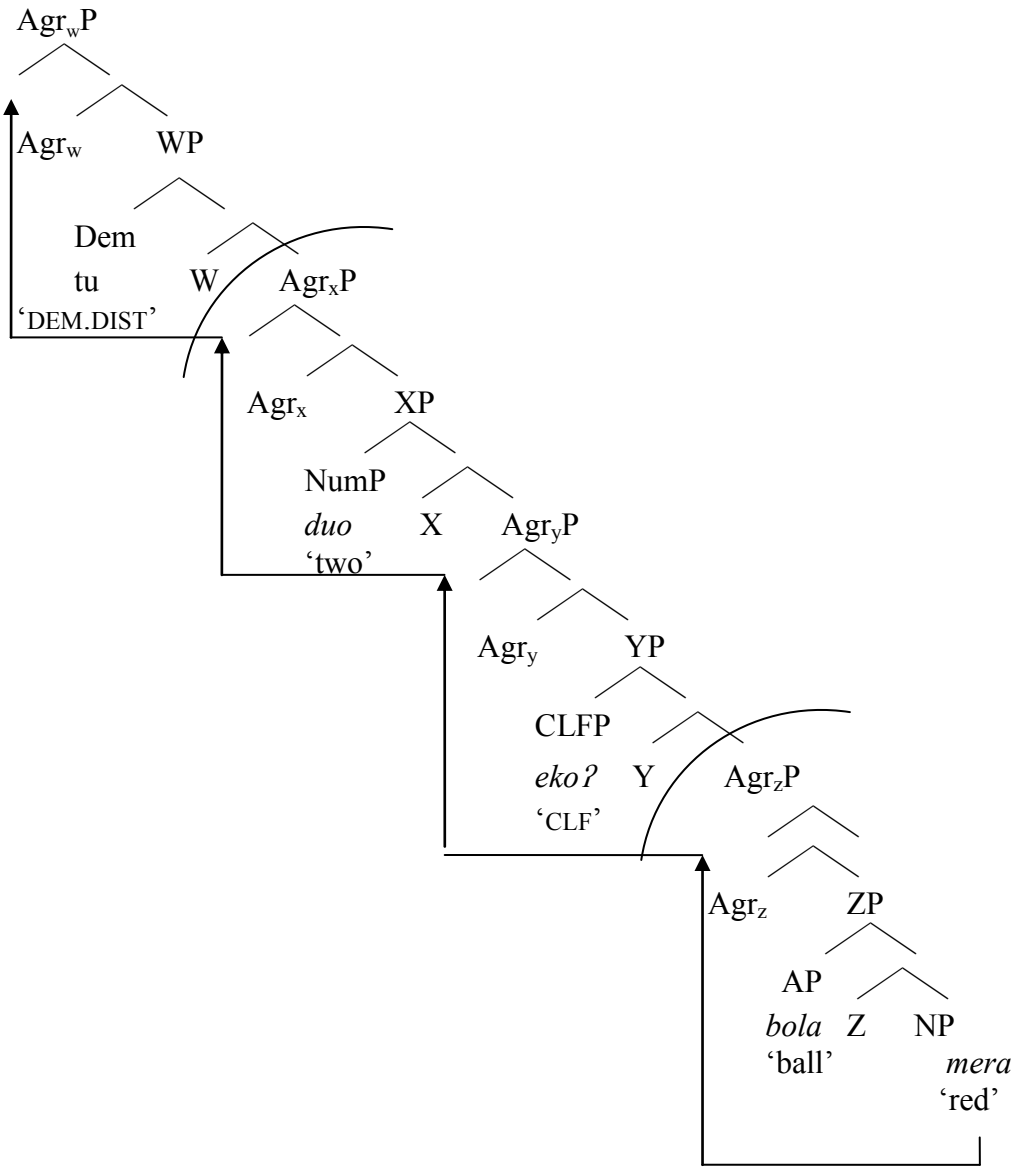
Before discussing how the head movement analysis accounts for the data in (660), I shall first raise the issue of the status of numbers and classifiers in Jambi Malay. In (659), I believe that Cinque (2005) assumes that numbers and classifiers should be positioned in different projections. Likewise, Simpson (2005), supported by Muromatsu (1998), Cheng and Sybesma (1999), among others, proposes that number and classifier are two different functional heads. In contrast, Gil (1994) claims that number and classifier form a single unit phonologically. Yanti (2007) also claims that the number and classifier in the Tanjung Raden dialect should be treated as a single head.

I do not have strong evidence to decide which analysis is better with respect to the status of number and classifier in the world languages. In fact, I do not see a need for unifying the status of number and classifier across languages. In other words, it can be the case that in some languages number and classifier are generated in

two different projections, while in other languages number and classifier are in a single projection. However, I shall not discuss this issue in this dissertation. I shall show that different views on the status of number and classifier only bring about slight differences in the processes of deriving the right DP word order, such as that in (660).

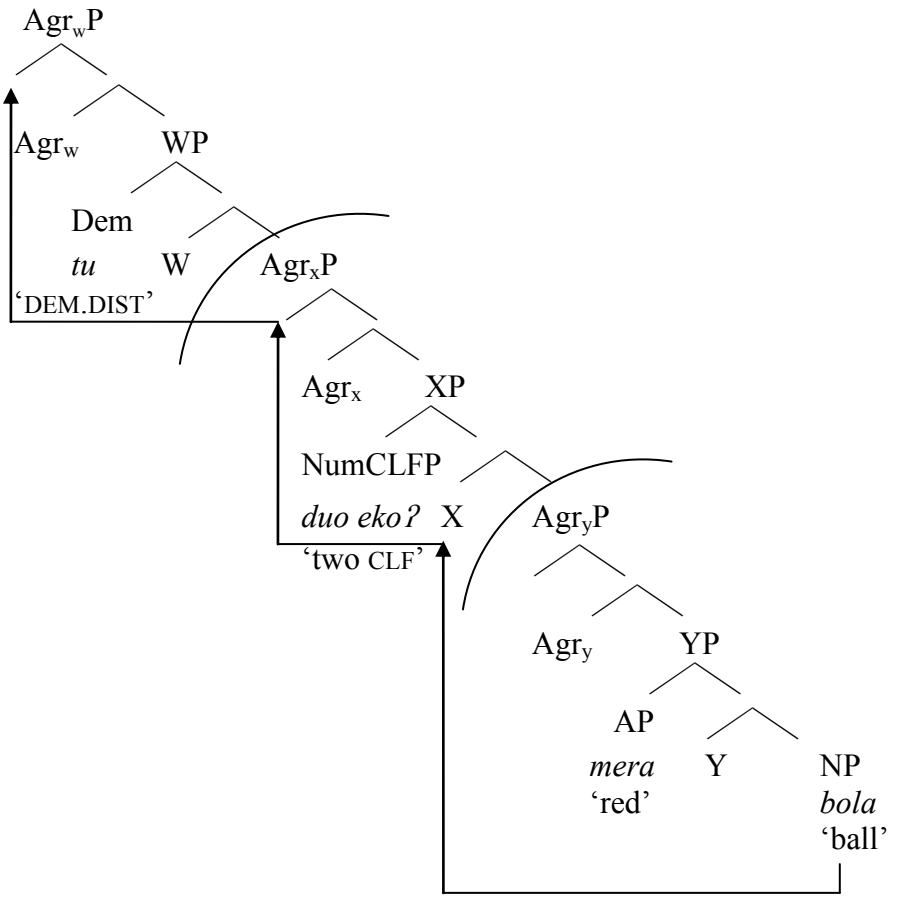
If we treat number and classifier as two different heads, the word order in (660)a can be derived using the following steps. First, the NP moves to the spec of Agr dominating it and then it pied pipes the AP, and it moves further up to the spec of Agr dominating CLFP. Then, the NP and the AP move further up to the spec of Agr that dominates NumP without pied-piping the CLF. Finally, the entire spec of AgrP moves to the spec of Agr that dominates the DemP. All of these processes are shown in (661).

(661)



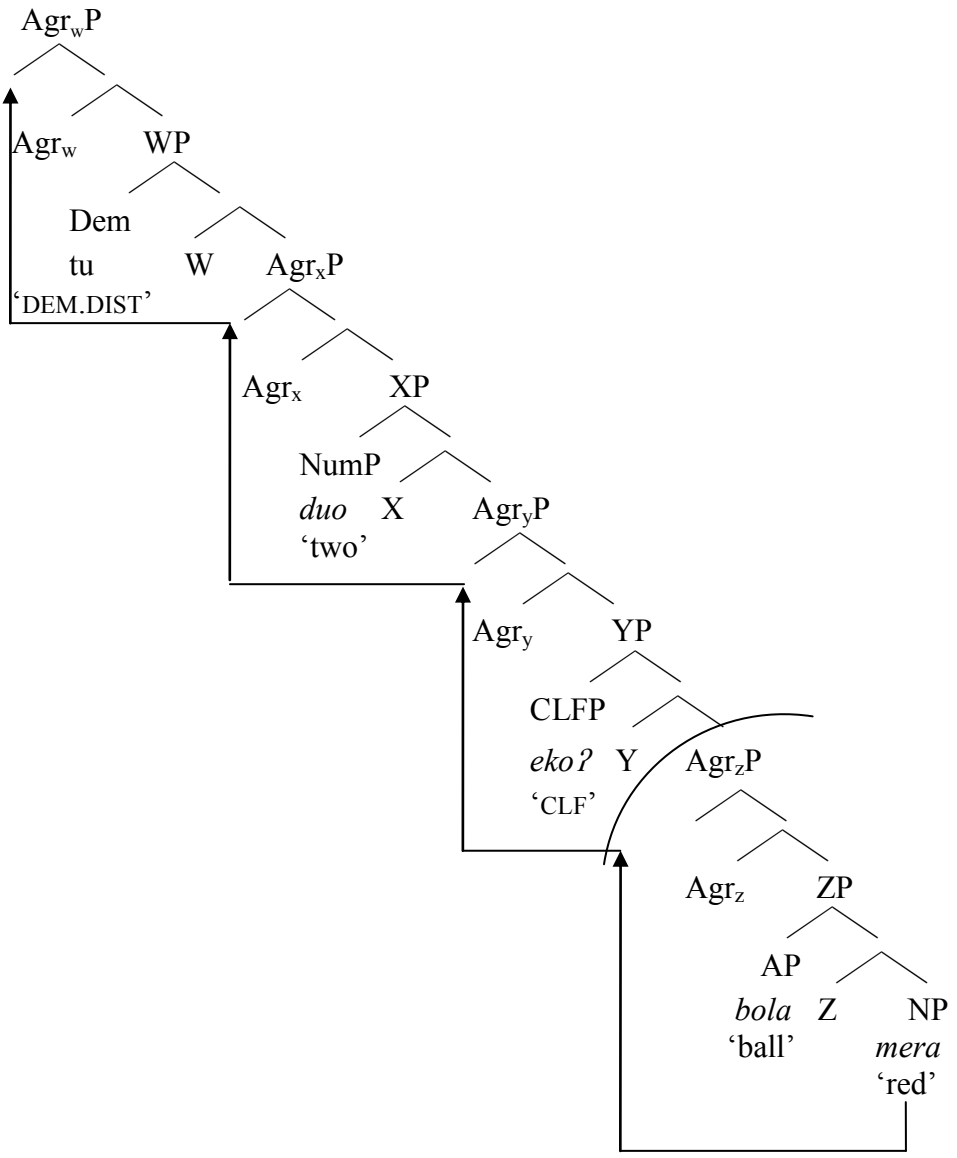
By contrast, if we treat the number and classifier as a single head, the word order in (660)a can be derived using the following mechanism. The NP always moves and it always pied-pipes the dominating Agr with it, as shown in (662).

(662)



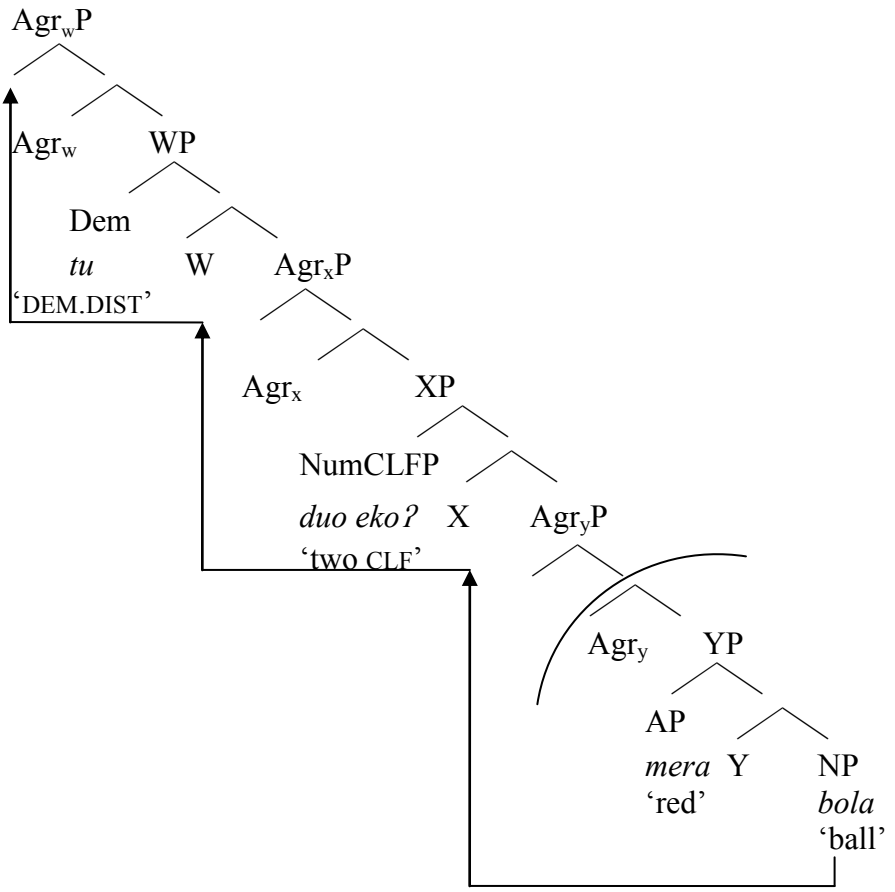
Next, I show how the phrasal movement analysis derives the word order in (660)b. I first show how the phrasal movement analysis accounts for (660)b if number and classifier are treated as two different projections. In order to derive (660)b, the NP first moves and pied-pipes the AP. Then, the NP moves to the AgrP dominating the CLFP and continues moving to the spec of AgrP without pied-piping. Then, the entire AgrP dominating NumP moves to the spec of AgrP that dominates the demonstrative in order to license the demonstrative. These processes are shown in (663) below.

(663)



Likewise, if we treat number and classifier as a single head, a similar process to that shown in (661) can be used except that there is no movement to the spec of Agr that dominates CLF. Instead, the NP moves and pied-pipes the AP and then moves to the spec of AgrP dominating NumCLFP. The illustration is shown below.

(664)



I have shown that, regardless of the status of number and classifier, the phrasal movement analysis is able to account for DPs which contain a head, an adjective, a number, a classifier, and a demonstrative.

Next, let us examine how the phrasal movement analysis accounts for DPs which have a possessor present, as in (665) below.

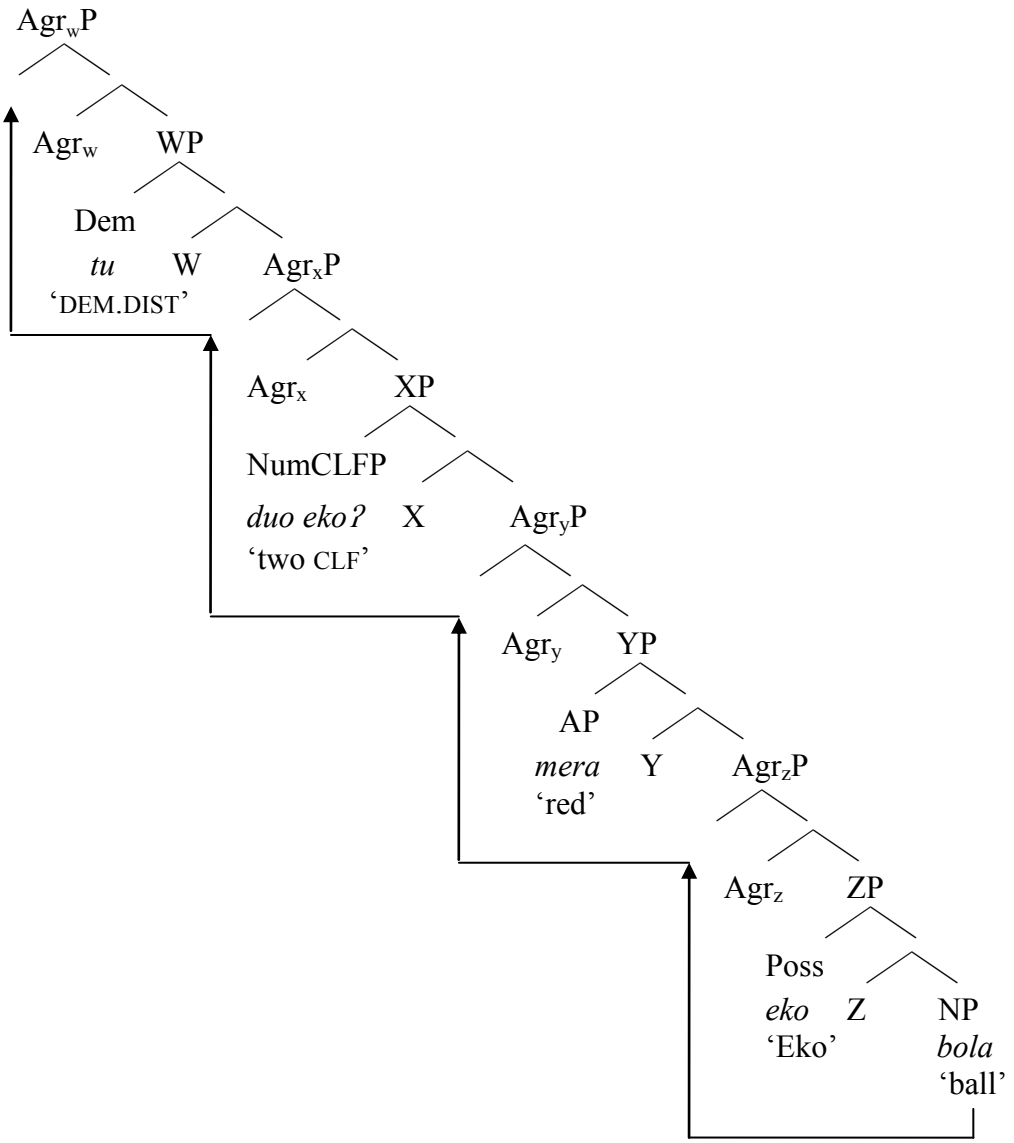
(665) a. budi ɲepak duo ekoʔ bola mera eko-tu (TR, E)
Budi ACT-kick two CLF ball red Eko-DEM.DIST
'Budi kicked two red balls of Eko's.'

b. budi ɲepak bola mera eko duo ekoʔ-tu (TR, E)
Budi ACT-kick ball red Eko two CLF-DEM.DIST
'Budi kicked two red balls of Eko's.'

As mentioned in section 1.2.2.5.1.2, Dresser (2006) proposes that the possessor is internal to the NP and must move to the specifier of the functional projection immediately dominating the NP. Another possible position for the possessor is the specifier higher than the adjective phrase. I shall show that both hypotheses work to explain the data and in fact, I shall later show that the issue does not lie with the position of the possessor, but with the position of the adjective, and that possessors should be generated between NumCLF and NP.

Let us now evaluate how each hypothesis derives the word order of the DPs in (665). In (666) below, I provide the tree in which the possessor is internal to the NP. The reader is reminded that I assume number and classifier as a single projection.

(666)

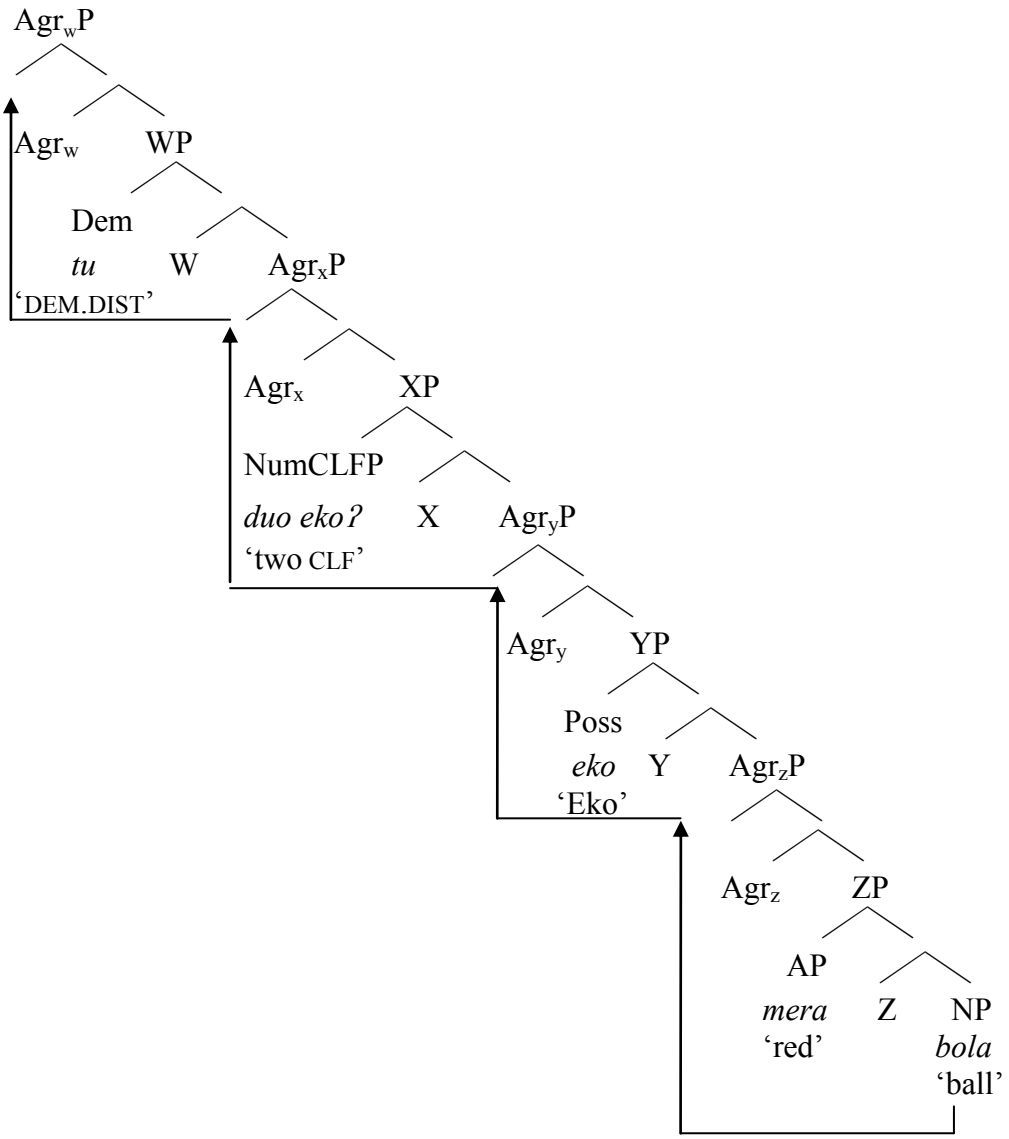


In order to derive the word order in (665)a [Num CLF N Adj Poss Dem], the NP first moves to the specifier of Agr that dominates it and then it moves further up to the specifier of Agr dominating the AP without pied-piping. As soon as the AgrP dominating NumCLFP acquires its nominal features, the entire NumCLFP moves up to the specifier of Agr that dominates the demonstrative to license the Dem. In addition, to derive the word order in (665)b [N Adj Poss Num CLF Dem], the NP also first moves to the specifier of Agr that dominates it and moves further up to the

specifier of Agr dominating the AP without pied-piping. Then, the NP moves to the specifier dominating the CLFP with pied-piping before further moving to the specifier of DemP.

In (667), I provide a tree structure in which the possessor is external to the NP.

(667)



In order to derive the word order in (665)a [Num CLF N Adj Poss Dem], the NP moves to the spec of Agr dominating it and then it pied-pipes the adjective phrase and moves further up to the spec of Agr dominating Poss. As the AgrP dominating NumCLF gains its nominal features, the entire AgrP moves to license the Dem. Furthermore, to derive the word order in (665)b, [N Adj Poss Num CLF Dem], the NP moves to the spec of Agr dominating it and then it pied-pipes the AP and moves further up to the spec of Agr dominating Poss. Then, it pied-pipes the Poss and moves to the spec of Agr that dominates the NumCLF. Finally, without pied-piping the NumCLF, the AgrP moves to the Dem to license it.

It has been shown that whether the possessor is generated internal to the NP or external to the NP, the phrasal movement analysis can straightforwardly account for the two word orders of the DP that are available in Jambi Malay, as exemplified in (665).

To conclude, the phrasal movement analysis can account for most data in Jambi Malay (as well as Indonesian and Javanese) (cf. Dresser, 2006), including the data that contain numbers and classifiers and the fact that the demonstrative needs to be in the rightmost position in DPs.

However, it should be pointed out that this analysis cannot explain why adjectives that appear before the possessor cannot be modified by some degree adverb like *nian* 'very' or *aga?* 'rather'. In addition, the phrasal movement analysis also fails to explain why only adjectives and modifying nouns can appear before the possessors. As noted by Dresser (2005) for Indonesian and Javanese, we can also propose that N-A adjunction is needed in phrasal movement analysis, and the N-A adjunction analysis does not conflict with the phrasal movement analysis.

To conclude section 1.2.2.5.2, the phrasal movement analysis is superior to the head movement analysis in accounting for the data in Jambi Malay.

1.3. Coordination

This description of coordination focuses on the means of coordinating clauses and structures smaller than the clause.

This section is organized as follows. Section 1.3.1 presents clausal coordination. Section 1.3.2 describes coordination of units smaller than the clause. Section 1.3.3 discusses coordination without coordinators. Sections 1.3.4, 1.3.5, and 1.3.6 present coordinating more than two structures, omission under identity, and the structure of coordinated structures, respectively.

1.3.1. Clausal Coordination

These are major clause coordination types observed in Jambi Malay: *and* coordination, *but* coordination, and *or* coordination.

1.3.1.1. *And* Coordination

It is difficult to decide whether or not Jambi Malay exhibits a coordinator for *and* coordination of two full clauses.

The most probable candidate for an *and* clause coordination marker is *jugo* ‘also’. However, I claim that *jugo* ‘also’ is not a clause coordinator like other coordinators discussed later in this section. The other clause coordinators are placed right after the first clause and before the clause that comes second, whereas *jugo* ‘also’ is more freely distributed and may be located either before the second clause, before the verb of the second clause or at the end of the second clause, as shown in the

following examples. Thus, I argue that *jugo* appears to be an adverbial which can be translated as English 'too'/'also', rather than a coordinator.

(668) a. ayu la tamat sakola, abaŋ-e
Ayu PFCT finish school older.brother-3
jugo la tamat (TR, E)
also PFCT finish
'Ayu has finished her school and her older brother has also finished.'

b. ayu la tamat sakola, abaŋ-e
Ayu PFCT finish school older.brother-3
la tamat jugo (TR, E)
PFCT finish also
'Ayu has finished her school and her older brother has also finished.'

c. ayu la tamat sakola, jugo abaŋ-e
Ayu PFCT finish school also older.brother-3
la tamat (TR, E)
PFCT finish
'Ayu has finished her school and her older brother has also finished.'

(669) a. ari n^{d}aʔ pgi ka plem^{b}aŋ,
Ari want go to Palembang,
ida jugo n^{d}aʔ pgi ka sano (TR, E)
Ida also want go to there
'Ari will go to Palembang and Ida will also go there.'

b. ari n^{d}aʔ pgi ka plem^{b}aŋ,
Ari want go to Palembang,
ida n^{d}aʔ pgi ka sano jugo (TR, E)
Ida want go to there also
'Ari will go to Palembang and Ida will also go there.'

c. ari n^{d}aʔ pgi ka plem^{b}aŋ,
Ari want go to Palembang,
jugo ida n^{d}aʔ pgi ka sano (TR, E)
also Ida want go to there
'Ari will go to Palembang and Ida will also go there.'

In (668)a and (669)a, *jugo* ‘also’ appears before the verb of the second clause. [125] In (668)b and (669)b, *jugo* ‘also’ appears in the clause-final position of the second clause, whereas in (668)c and (669)c, *jugo* ‘also’ is positioned between the first clause and the second clause.

In *and* coordination of two full clauses, speakers do not use any coordinators. Instead, they use a short pause between the two clauses (see section 1.3.3 for the discussion of coordination without coordinators). In the naturalistic data, no utterances in which an *and* coordinator (*samo* ‘with’ or *dŋan* ‘with’) is used to link two full clauses were found.[126] In elicitation, native speakers claimed that sentences with two full clauses and linked by either *samo* or *dŋan*, as exemplified in (670) sounded artificial and were never used in Jambi Malay.

(670) *maʔ sdaŋ masaʔ di dapʊr samo
mother PROG cook LOC kitchen with
bapaʔ sdaŋ m^{b}aco koran (TR, E)
father PROG ACT-read newspaper
‘Mother is cooking in the kitchen and father is reading the newspaper.’

When the coordinated clauses have one or more similar constituents, the constituents of the second clause can be omitted (see section 1.3.5 for a detailed discussion of omission under identity). The coordinators that are employed to link the first clause and the second clause are *samo* ‘with’ and *dŋan* ‘with’, as illustrated in the following examples.

(671) [$_{S}$ [$_{S1}$ eko lagi man$^{d}_{i}$] [$_{CONJ}$ samo [$_{S2}$ Ø (lagi) goso ʔ gigi]]](TR, E)
Eko PROG bathe with PROG rub tooth
‘Eko is taking a bath and brushing his teeth.

[125] Note that the VP of the second clause may be omitted. See section 1.3.5.

[126] *Samo* also means ‘same’in Jambi Malay.

(672) [$_S$ [$_{S1}$ edi biso m^{b}aɪʔi ruma-e] [$_{CONJ}$ samo
Edi can ACT-good-APPL house-3 with
[$_{S2}$ Ø (biso) m^{b}li motor baru]]] (TR, E)
can ACT-buy motorcycle new
'Edi could renovate his house and buy a new motorcycle.'

The sentences in (671) and (672) have two clauses. The element marked by Ø is the subject pronoun which is omitted under identity.

1.3.1.2. *But* Coordination

But coordination is characterized by the use of *tapi* 'but', or *cuma(n)*'but', as demonstrated in the following examples.

(673) *tapi* 'but'

a. edi blʊm man^{d}i, tapi dioʔ la makan (TR, E)
Edi not.yet bathe but 3 PFCT eat
'Edi has not taken a bath, but he has eaten.'

b. la ado baʊʔ apo tape-tu kan,
PFCT exist smell what k.o.food-DEM.DIST Q
tapi blʊm manis
but not.yet sweet
'The smell of the fermented food has come up you know, but it is not sweet yet.'

(674) *cuma(n)* 'but'

a. prna ha, ku-koncaŋ, cuma daʔ pulaʔ kuat
ever EXCL 1SG-shake only NEG PART strong
macam ŋoncaŋ bsi
sort ACT-shake iron
'You know, I once shook them, but it was not as strong as we shake iron.'

b. bibi-ko no mcŋ-ko awaʔ-ko
aunt-DEM.PROX TRU-female like-DEM.PROX 1/2/3-DEM.PROX
sakola, cuma klas duo ɪsdɪ
school but grade two elementary.school
'You know Honey, I went to school, but only until grade two of elementary school.'

1.3.1.3. *Or* Coordination

Or coordination is marked by either *ataw* 'or' or *apo* 'or', as demonstrated in the following examples.

(675) *ataw* 'or'

mᵇan	bawaʔ	ka	bawa	ataw	diajaʔ
carry.child	bring	to	under	or	PASS-ask
bajajan	ka toko-tu				
INTR-snack	to shop-DEM.DIST				

'Carry her downstairs or accompany her to buy snacks at that shop.'

(676) *apo* 'or'

kalu	dioʔ	sakɪt-tu,	disʊntɪk
top	3	sick-DEM.DIST	PASS-injection
apo	dibagi	ubat	
or	PASS-give	medicine	

'If they're sick, you should give them a shot or some medicine.'

Although both *ataw* 'or' and *apo* 'or' can be used as coordinators for alternative coordination, there is a slight difference between them. *Ataw* 'or' is used for making a statement. When asking questions or when a speaker is uncertain about what he or she is talking about, he/she tends to use *apo* 'or', as illustrated in the following examples.

(677)

pasrta-ɲo	kalu	daʔ	sala	limo	pʊlʊ	nam
participant-3	TOP	NEG	wrong	five	ten	six

pasrta	apo	limo	pʊlʊ	lapan	pasrta
participant	or	five	ten	eight	participant

'If I'm not mistaken, there were fifty six or fifty eight participants.'

(678)

tigo	botol	apo	mpat	botol	gaʔ-e,	cuko-e
three	bottle	or	four	bottle	about-3	vinegar-3

'The vinegar is about three or four bottles.'

(679)

dʊlʊr	bini-e	apo	dʊlʊr	jaŋciʔ-e?	
sibling	wife-3	or	sibling	Jangcik-3	

'[Is she] his wife's sister or Jangcik's sister?'

In (677), the speaker was not sure about the number of participants who joined the singing competition he joined. In (678), the speaker was not sure the amount of vinegar one needs in order to preserve fish. In (679) the speaker asked the interlocutor whether someone is Jangcik's sister or his wife's sister.

Note that *apo* 'or' is also used to formulate alternative yes-no questions as described in section 1.1.3.2.1.1.4. Examples are provided below.

(680) a. biso diubati, apo daʔ-tu?
can PASS-medicine-APPL or NEG-DEM.DIST
'Can it be cured or not?'

b. eko n^{d}aʔ baraŋkat, apo lʊmʔ
Eko want INTR-leave or not.yet
'Will Eko leave soon?'

1.3.2. Coordination of Units Smaller than the Clause

Coordination in Jambi Malay is not only limited to clauses. Smaller syntactic units may also be coordinated. Coordination of units smaller than the clause includes NP coordination, PP coordination, and VP coordination.

1.3.2.1. NP Coordination

NP coordination includes both *and* coordination and *or* coordination. *But* coordination is not observed. The coordinators used in *and* NP coordination and *or* NP coordination are the same as those used in clause coordination, i.e. *samo* 'with' and *dŋan* 'with' for *and* coordination and *ataw* 'or' or *apo* 'or' for *or* coordination. As in sentence coordination, *apo* 'or' is usually, but not always used in asking questions rather than making statements.

Examples of NP coordination in different sentence positions are exemplified in the following examples.[127]

(681) *samo* 'with'

a. Coordinate Subjects

[$_{Subj\text{-}NP}$ [$_{NP}$ hamdan [$_{CONJ}$ samo [$_{NP}$ edi]]] [$_{VP}$ la datanŋ]](TR, E)
Hamdan with Edi PFCT come
'Hamdan and Edi have come.'

b. Coordinate Objects

ado m^{b}agɪ, [$_{VP}$ m^{b}agɪ [$_{IObj\text{-}NP}$ mus]
exist ACT-give ACT-give Mustakim
[$_{DOobj\text{-}NP}$ [$_{NP}$ sajada] [$_{CONJ}$ samo [$_{NP}$ kopia]]]
prayer.rug with k.o.rimless.cap
'[She] once gave Mustakim a prayer rug and a rimless cap.'

c. Coordinate PP Complements

tiap ari maʔ [$_{PP}$ ka[$_{NP}$ [$_{NP}$ pasar]
every day mother to market
[$_{CONJ}$ samo [$_{NP}$ umo]]]] (TR, E)
with paddy
'Mother goes to the market and the paddy field everyday.'

(682) *dŋan* 'with'

a. Coordinate Subjects

[$_{Subj\text{-}NP}$ [$_{NP}$ ali] [$_{CONJ}$ dŋan [$_{NP}$ budi]]] mʊkʊl jalɪl (TR, E)
Ali with Budi ACT-hit jalil
'Ali and Budi hit Jalil.'

b. Coordinate Objects

brahɪm m^{b}awaʔ [$_{Obj\text{-}NP}$ [$_{NP}$ ikan] [$_{CONJ}$ dŋan [$_{NP}$ bayam]]]
Ibrahim ACT-bring fish with spinach
ka siko (TR, E)
to here
'Ibrahim brought fish and spinach to here.'

[127] I only draw relevant structures.

c. Coordinate PP Complements

ŋato ka maʔel [$_{PP}$ dpan [$_{NP}$ [$_{NP}$ paʔ niŋ
ACT-word to TRU-Ismail front TRU-father TRU-yellow
rozi] [$_{CONJ}$ dŋan [$_{NP}$ bi neng-tu]]]]
Rozi with TRU-aunt Ningsih-DEM.DIST
'I told Ismail in front of Uncle Rozi and Aunt Ningsih.'

(683) *ataw* 'or'

a. Coordinate Subjects

aku raso [$_{Subj\text{-}NP}$ [$_{NP}$ mariana [$_{CONJ}$ ataw [$_{NP}$ mariani]]]
1SG feel Mariaan or Mariani
la m^{b}awaʔ-e (TR, E)
PFCT ACT-bring-3
'I think either Mariana or Mariani has brought it.'

b. Coordinate Objects

kalu batmu dioʔ, m^{b}agɪ be dioʔ
TOP INTR-meet 3, ACT-give just 3
[$_{Subj\text{-}NP}$ [$_{NP}$ duwɪt] [$_{CONJ}$ ataw [$_{NP}$ rokoʔ]]] (TR, E)
money or cigarette
'If you meet him, just give him money or cigarettes.'

c. Coordinate PP Complements

aku-tu lupo aku mlpaʔi pancɪŋ-tu
1SG-DEM.DIST forget 1SG ACT-put-APPL fishing.rod-DEM.DIST
[$_{PP}$ di kamar] [$_{CONJ}$ataw [$_{PP}$ dapʊr]]] (TR, E)
LOC room or kitchen
'I don't remember whether I put the fishing rod in the bedroom or in the kitchen.'

(684) *apo* 'or'

a. Coordinate Subjects

[$_{Subj\text{-}NP}$ [$_{NP}$ jalɪl] [$_{CONJ}$ apo [$_{NP}$ brahɪm]]] blʊm
Jalil or Ibrahim not.yet
masaŋ tarʊp? (TR, E)
ACT-set.up awning
'Is it Jalil or Ibrahim that has not set up the awning?'

b. Coordinate Objects

maʔ	la	m^{b}li	[$_{\text{Obj-NP}}$ [$_{\text{NP}}$ baju]]	
mother	PFCT	ACT-buy	garment	
[$_{\text{CONJ}}$	apo [$_{\text{NP}}$	topi]]]	ʊntʊʔ	bima? (TR, E)
	or	hat	for	Bima

'Has mom bought a shirt or a hat for Bima?'

c. Coordinate PP Complements

kamu	[$_{\text{PP}}$	di	[$_{\text{NP}}$ [$_{\text{NP}}$ laʊt]	[$_{\text{CONJ}}$apo	[$_{\text{NP}}$ darat?]]]]	(TR, E)
2		LOC	sea	or	land	

'Do you live close to the river or in the inland?'
[Lit. 'Are you on the river or in the inland?']

1.3.2.2. PP Coordination

Prepositional phrases can also be conjoined using *samo* 'with', *dŋan* 'with', *ataw* 'or', and *apo* 'or', as shown in the following examples.

(685) *samo* 'with'

aaŋ	mlpaʔi	bua.pci-tu		
Aang	ACT-put-APPL	marble-DEM.DIST		
[$_{\text{PP}}$ [$_{\text{PP}}$	di meja]	[$_{\text{CONJ}}$ samo	[$_{\text{PP}}$dalam krdʊs-tu]]]	(TR, E)
	LOC table	with	inside box-DEM.DIST	

'Aang put the marbles on the table and inside the box.'

(686) *dŋan* 'with'

oraŋ	zaman	bŋen	ɲimpan	duwɪt	[$_{\text{PP}}$ [$_{\text{PP}}$	bawa	
person	period	before	ACT-keep	money		under	
tmpat	tɪdʊr]	[$_{\text{CONJ}}$dŋan	[$_{\text{PP}}$	dalam	lmari]]]]		(TR, E)
place	sleep	with		inside	wardrobe		

'People in the old times keep their money under the bed and inside the wardrobe.'

(687) ataw 'or'

tʊtʊs	[$_{\text{PP}}$ [$_{\text{PP}}$ ka	smen]	[$_{\text{CONJ}}$	ataw	[$_{\text{PP}}$ ka	kayu]]]
pound	to	cement		or	to	wood

'[I] threw it to cement or to wood.'

(688) *apo* ‘or’

eko [$_{PP}$ [$_{PP}$ di emper] [$_{CONJ}$ apo [$_{PP}$ dalam kamar]]]? (TR, E)
Eko LOC porch or inside room
‘Is Eko on the porch or in the room?’

1.3.2.3. VP Coordination[128]

VP coordination can also be distinguished into three types: *and* coordination, *but* coordination, as well as *or* coordination. The coordinators used are also the same: *samo* ‘with’ and *dŋan* ‘with’ for *and* coordination, *tapi* ‘but’ and *cuman* ‘or’ for *but* coordination, and *ataw* ‘or’ and *apo* ‘or’ for *or* coordination. Examples follow.

(689) *And* Coordination

a. siti [$_{VP}$ [$_{VP}$ mintaʔ nasi] [$_{CONJ}$samo
Siti ACT-ask.for cooked.rice with
[$_{VP}$ ŋam^{b}ɪʔ pɪrɪŋ-e]]] tadi (TR, E)
ACT-take plate-3 earlier
‘Siti asked for some rice and took her plates.’

b. tiap ari dioʔ [$_{VP}$ [$_{VP}$ naŋkʊl]
every day 3 ACT-k.o.large.net
[$_{CONJ}$ dŋan [$_{VP}$ nan^{d}ʊr]]] (TR, E)
with ACT-plant.rice
‘He catches fish and plants rice every day.’

(690) *But* Coordination

a. taupik [$_{PredP}$ padeʔ, [$_{CONJ}$ tapi [$_{PredP}$ malas]]]
Taufik clever but lazy
‘Taufik is clever, but he is lazy.’

b. asan la [$_{VP}$ [$_{VP}$ dataŋ, [$_{CONJ}$ tapi [$_{VP}$ pgi lagi]]]] (TR, E)
Hasan PFCT come but go more
‘Hasan had come, but he left again.’

---

[128] My description of VP coordination covers predicate coordination in general.

(691) *Or* Coordination

kalu ari miŋ^{g}u, dioʔ [$_{VP}$ [$_{VP}$ ɲ^{j}arıŋ balıwıs
if day Sunday 3 ACT-net k.o.bird
[$_{CONJ}$ ataw [$_{VP}$ naŋkʊl]]]] (TR, E)
or ACT-k.o.large.net
'He goes catching wild ducks or go catching fish on Sundays.'

To conclude section 1.3.2, coordination in Jambi Malay covers clause coordination and elements smaller than the clause coordination. The clause coordination can be distinguished into three types, namely *and* coordination, *but* coordination and *or* coordination. Each coordination type employs different coordinators to link the first and the second clause. The coordinators for *and* coordination are *samo* 'with' and *dŋan* 'with'. The coordinators for *but* coordination are *tapi* 'but' and *cuma(n)* 'but'. The coordinators for *or* coordination are *ataw* 'or' and *apo* 'or'. Coordination of elements smaller than the clause covers NP coordination, PP coordination, and VP coordination. The coordinators employed are the same as those for clause coordination.

1.3.3. Coordination without Coordinators

Coordination may appear without coordinators. In fact, native speakers prefer to say coordinated sentences with no coordinators, particularly for clauses.[129, 130] The coordinated structures are simply placed one after the other. The relationship

[129] There is a short pause between one coordinated structure and another coordinated structure instead of a coordinator. Pauses are marked by a comma in this dissertation.

[130] In our naturalistic database, many coordinated structures appear without a coordinator. The most supportive evidence is from elicitation. When I provided a sentence with a conjunction in Indonesian and the informants were asked to translate the sentence into Jambi Malay, they almost always gave a sentence without a coordinator. In addition, sometimes they also used two sentences.

between the coordinated structures is understood from the context. Some examples are shown below.

(692) a. eko baru pgi, budi baru dataŋ (TR, E)
Eko just go Budi just come
'Eko has just left and Budi has just come.'

b. mᵇli cabe, bawaŋ
ACT-buy chili onion
'She bought chili and onion.'

c. baŋun la niŋᵍi.ari, krjo daʔdo nᵈaʔ,
rise PFCT day.time work NEG.exist want
makan kuraŋ enaʔ
eat less nice
'I got up late, didn't feel like working, and couldn't taste the food well.'

(693) a. bntar-ko la suda barkam, taapʊs
moment-DEM.PROX PFCT finish INTR-record PFCT.PASS-erase
'I've just recorded it, but it was erased (accidentally).'

b. kɲoʔ lolo, bnᵈo-tu malas
not stupid thing-DEM.DIST lazy
'He isn't stupid, but lazy.'

(694) ado dapat duo, tigo ekoʔ
exist get two three class
'He got two or three.'

The sentences in (692) are examples of *and* coordination, the sentences in (693) are examples of *but* coordination, and the sentence in (694) is an example of *or* coordination.

1.3.4. Coordinating More than Two Structures

More than two structures may be coordinated in Jambi Malay. There are no restrictions on the number of structures that can be coordinated.[131]

[131] While there is no syntactic limit to coordination, processing restraints prevent people from coordinating excessively.

(695) tukar dŋan ubi, ubi jalar, ubi kayu,
change with tuber tuber creep tuber wood
timun, kacaŋ, katol
cucumber nut k.o.squash
'[They are] bartered for tubers, cassavas, sweet potatoes, cucumbers, beans, and a kind of squash.'

(696) aaŋ pgi mancɪŋ, ʊpɪʔ ka sakola, budi balaɲʲo
aang go ACT-fishing.rod Upik to school, Budi shop
di pasar (TR, E)
LOC market
'Aang went fishing, Upik went to school, and Budi went shopping at the market.'

In (695), six objects of the preposition (*ubi, ubi jalar, ubi kayu, timun, kacaŋ,* and *katol*) *dŋan* 'with' are being conjoined and in (696), three clauses are being conjoined.

If a conjunction is used, the conjunction is placed before the last coordinated element, as exemplified in (697).

(697) kau biso mᵇawaʔ kʊɪ, minum, ataw laʊʔ (TR, E)
2SG can ACT-bring cake drink or side.dishes
'You can bring cakes, beverages, or side dishes.'

For the purpose of emphasis, a conjunction can be placed before every coordinated structure, except for the first mentioned one, as demonstrated in the following examples.

(698) edi bole dataŋ jam limo, apo jam nam,
Edi may come hour five or hour six,
apo jam tʊjʊ (TR, E)
or hour seven
'Edi may come at five, six, or seven o'clock.'

(699) malam tadi eko dapat ikan spat, samo ikan batrʊŋ,
night earlier Eko get fish k.o.fish with fish k.o.fish
samo ikan laɪs (TR, E)
with fish k.o.fish
'Eko got *spat*, *batrung*, and *lais* fish last night.'

1.3.5. Omission under Identity

All clause constituents can be omitted under identity in coordination.

(700) Omission of Subject

eko	man^{d}i	samo	goso$\textsf{ʔ}$	gigi	(TR, E)
Eko	bathe	with	rub	tooth	

'Eko is taking a bath and brushing his teeth.'

(701) Omission of Direct Object

aku	la	m^{b}li	dŋan	makan	nasi-tu	(TR, E)
1SG	PFCT	ACT-buy	with	eat	cook.rice-DEM.DIST	

'I have bought and eaten the rice.'

(702) Omission of Verb

ira	la	m^{b}li	calano	paɲ^{j}aŋ	samo
Ira	PFCT	ACT-buy	pants	long	with

baju	ʊntʊ$\textsf{ʔ}$	ana$\textsf{ʔ}$-e	(TR, E)
garment	for	child-3	

'Ira has bought pants and a shirt for her child.'

(703) Omission of Adverbials

jalɪl	n^{d}a$\textsf{ʔ}$	masʊ$\textsf{ʔ}$,	tapi	brahɪm	da$\textsf{ʔ}$ n^{d}a$\textsf{ʔ}$	masʊ$\textsf{ʔ}$
Jalil	want	go.in	but	Brahim	NEG want	go.in

ka	ruma	hamdan	(TR, E)
to	house	Hamdan	

'Jalil wants to go into [Hamdan's house], but Brahim does not want to go into Hamdan's house.'

As shown in (700), (701), (702), and (703), the omission of an element is possible in coordinated structure.

In addition, Jambi Malay also exhibits omission of VP. The deleted VP can be substituted by the adverb *jugo* 'also'. Consider the following examples.

(704) a.

jalɪl	tibo	malam	tadi	(TR, E)
Jalil	arrive	night	earlier	

'Jalil arrived last night.'

b.

ida	tibo	malam	tadi	(TR, E)
Ida	arrive	night	earlier	

'Ida arrived last night.'

c. jalɪl tibo malam tadi, ida tibo malam tadi (TR, E)
Jalil arrive night earlier Ida arrive night earlier
Jalil arrived last night and Ida arrive last night.'

d. jalɪl tibo malam tadi, ida jugo (TR, E)
Jalil arrive night earlier Ida also
'Jalil arrived last night and Ida did too.'

Sentence (704)c is the coordinated sentence of the sentences in (704)a and (704)b. The VP of the second clause can be deleted and replaced by *jugo* 'also', as shown in (704)d.

1.3.6. The Structure of Coordinated Structures

In discussing the structure of coordinated structure, I describe the structure of full clause coordination and structures smaller than the clause.

1.3.6.1. Full Clause Coordination

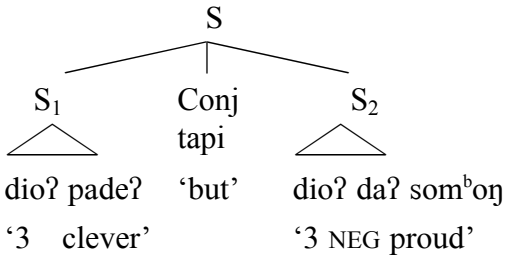
The structure of the full clause coordination can simply be formulated as a sentence followed by a coordinator and followed by another sentence. Consider the following example.

(705) dioʔ padeʔ, tapi dioʔ daʔ som^{b}oŋ (TR, E)
3 clever but 3 NEG proud
'He is smart, but he is not arrogant.'

The structure of the above sentence can simply be illustrated in (706) below.[132]

[132] For simplicity reason, I only draw relevant projections and in the trees, I use conj (conjunction) to refer to coordinator.

(706)



In (706), the clause *dioʔpadeʔ* ‘he is smart’ and the clause *dioʔdaʔsombonŋ* ‘he is not arrogant’ are coordinated using the conjunction *tapi* ‘but’.

1.3.6.2. The Structure of Coordination of Elements Smaller than the Clause

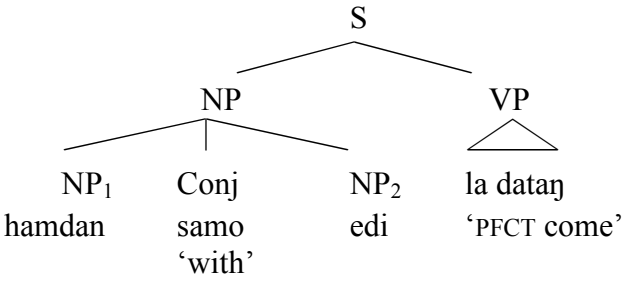
As previously described, structures smaller than the clause are of several types: coordination of NP, coordination of PP, and coordination of VP.

1.3.6.2.1. NP Coordination

The example in (681)a, repeated below in (707)a, is an example of subject NP coordination. The structure can be illustrated in (707)b.

(707) a. hamdan samo edi la dataŋ (TR, E)
Hamdan with Edi PFCT come
‘Hamdan and Edi have come.’

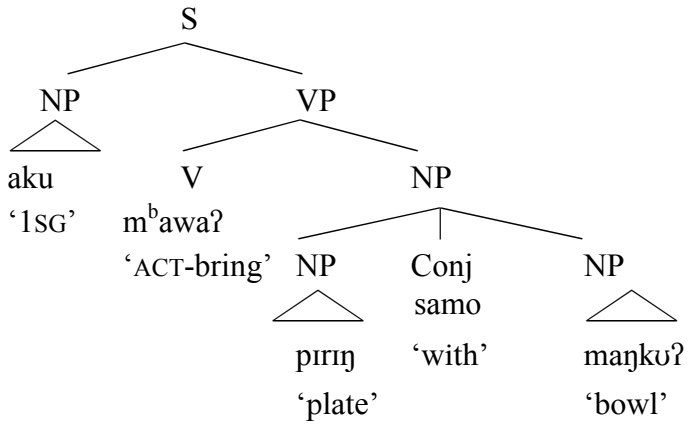
b.



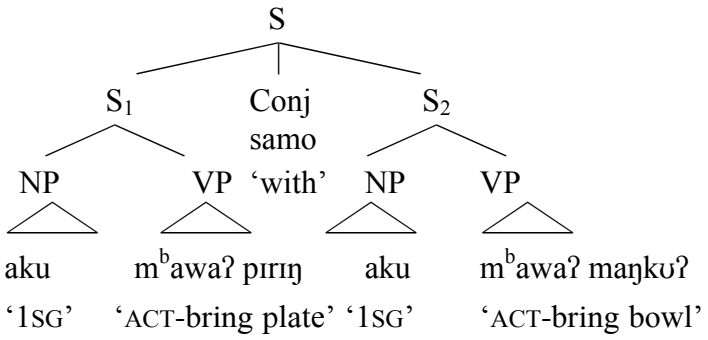
NP coordination in object position could either be analyzed as NP coordination or clause coordination where the subject and verb are elided. Thus, the sentence in (708)a may have the structure as illustrated in (708)b as well as in (708)c.

(708) a. aku mᵇawaʔ pɪrɪŋ samo maŋkʊʔ (TR, E)
1SG ACT-bring plate with bowl
'I will bring plates and bowls.'

b.



c.



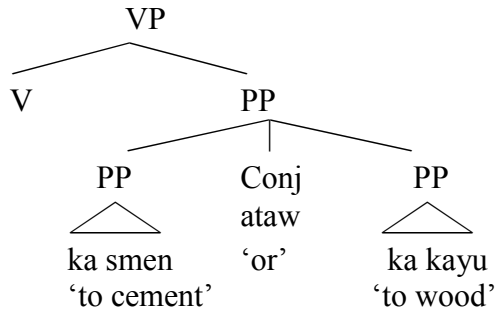
The structure in (708)b shows that the sentence in (708)a is an object NP coordination, whereas the structure in (708)c demonstrates that (708)a could also be an instance of clause coordination. In order to get the sentence in (708)a, the subject NP and the verb of the second clause undergo deletion under identity and the sentence becomes *aku mᵇawaʔ pɪrɪŋ samo maŋkʊʔ*.

1.3.6.2.2. PP Coordination

PP coordination , exemplified in (687) and repeated below in (709)a can be illustrated using the structure in (709)b.

(709) a. tʊtʊs [$_{PP}$ [$_{PP}$ ka smen] [$_{CONJ}$ ataw [$_{PP}$ ka kayu]]]
pound to cement or to wood
'I threw it to cement or to wood.'

b.



As in NP coordination, PP coordination can also be analyzed as clause coordination in which the identical elements of the second clause undergo deletion. The process is similar to the process in deriving sentence (708)a above.

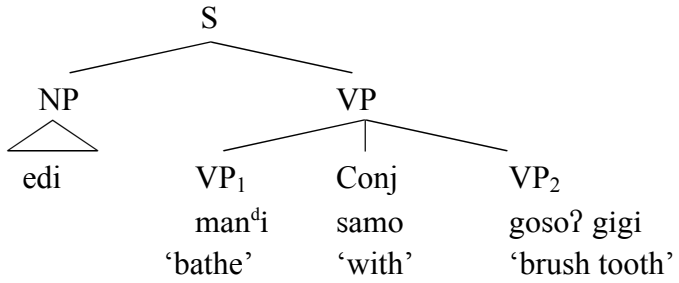
1.3.6.2.3. VP Coordination

VP coordination can also be analyzed as either coordination of VPs and coordination of clauses. Consider the sentence in (710) below.

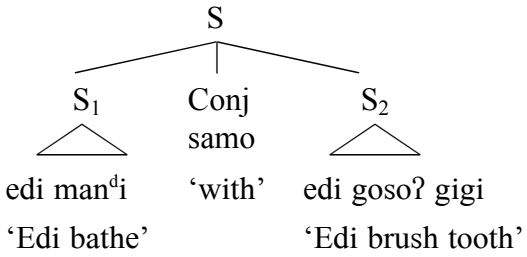
(710) edi man^{d}i samo goso$\glottalstop$ gigi (TR, E)
Edi bathe with brush tooth
'Edi is taking a bath and brushing his teeth.'

If sentence (710) is analyzed as VP coordination, the structure can be shown in (711) below. In contrast, if (710) is analyzed as clause coordination, the structure can be shown in (712) below.

(711)



(712)



As shown in (711), the sentence consists of the subject NP *edi* ‘Edi’ followed by coordinated VPs *mandi* ‘bath’ and *gosoʔ gigi* ‘brush tooth’. In (712), the underlying coordinated structure is *edi mandi samo edi gosoʔ gigi* ‘Edi is taking a bath and Edi is brushing his teeth’. The subject of S_2, *edi* ‘Edi’, is omitted because the subject is the same as the subject of S_1. As the result, sentence (710) is derived.

To conclude, in section 1.3.6, I have presented the structure of coordinated structures in Jambi Malay. I have also shown that coordination of elements smaller than a clause can be analyzed as coordination of the relevant element as well as clause coordination followed by deletion. I do not have any evidence that one analysis is better than the other one.

1.4. Negation

Negation in Jambi Malay can be expressed using the following negative markers: *daʔ/idaʔ* ‘NEG’, *daʔdo* ‘not.exist’, *daʔtɪʔ ~ daʔktɪʔ* ‘(not) not.exist’, *blʊm/lʊm* ‘not yet’, *jaŋan* ‘don’t’, *kɲoʔ/ɲoʔ* ‘not’, and *bukan* ‘not’.[133] An example of each is presented below.

(713) a. kulo daʔ bawaʔ pulaʔ buku-ɲo
1SG NEG bring PART book-3
‘I didn’t bring the book.’

[133] *Daʔ* is a short form of *idaʔ*, historically from *tidak*. No difference is observed between *daʔ* and *idaʔ* and thus I only use *daʔ* hereafter.

b. oraŋ-tu daʔdo masaŋ luka gi
person-DEM.DIST NEG.exist ACT-set fish.trap more
'The man didn't set a fish trap anymore.'

c. awaʔ daʔtɪʔ duwɪt
1/2/3 NEG.exist money
'We don't have any money.'

d. bn^{d}o-tu blʊm caer
thing-DEM.DIST not.yet diluted
'It hadn't melted yet.'

e. jaŋan dipʊkʊl budaʔ-tu!
do.not PASS-hit kid-DEM.DIST
'Don't beat the child!'

f. bn^{d}o kɲoʔ ikan krɪŋ
thing not fish dry
'He is not a salted fish.'
[Lit. 'The thing is not a salted fish.']

g. karʊŋ guni bŋen bukan karʊŋ-karʊŋ pʊtɪ kini
sack gunny before not RED-sack white now
'Gunny sacks in the past weren't like today's white sacks.'

Daʔdo is originally from *daʔ* 'NEG'and *ado* 'exist' and has been lexicalized in the system. Likewise, *daʔtɪʔ~ daʔktɪʔ* is from *daʔ* 'NEG' and *ktɪʔ* 'not.exist'. The description of *ado* is provided in section 1.1.3.5.2. *Blʊm/lʊm* is a combination of a negation makrer (*daʔ*) and a perfective marker *la* which means not yet (see also section 2.1.3.3.7). *Jaŋan* is mainly used as a negative marker in imperatives (see section 1.1.3.4.2). However, it is sometimes also used in declarative sentences in purpose clauses, as exemplified below.

(714) a. …asaʔ ɲamʊʔ-tu jaŋan ŋ^{g}ɪgɪt awaʔ be-la
as.long.as mosquito-DEM.DIST do.not ACT-bite 1/2/3 just-EMPH
'…as long as the mosquitos do not bite us.'

b. supayo jaŋan dimakan mʊsʊ-ɲo, saprti bʊrʊŋ
so.that do.not PASS-eat enemy-3 like bird
'So that their enemies such as birds do not eat them.'

The negative markers focused in this section are *da?*, *kɲo?~ɲo?* and *bukan*.

This section is organized as follows. Section 1.4.1, I present sentential negation which is further divided into five smaller sections: nominal sentence negation, non-nominal sentence negation, discussion of nominal vs. non-nominal negation, using double negative markers, and post verbal negation in Mudung Darat.[134] Section 1.4.2 describes constituent negation. Section 1.4.3 presents negation in coordinated structures and section 1.4.4 presents negation in complex sentences.

1.4.1. Sentence Negation

The sentential negation in all three dialects covered in this dissertation can be expressed by using *da?* 'NEG', *kɲo?/ɲo?* 'not' and *bukan* 'not'. While there is no syntactic difference is observed between *kɲo?~ɲo?* and *bukan,* there are dialectal differences between them. *Kɲo?~ɲo?* is native to the Rural Jambi dialects, whereas *bukan* 'not' is mainly used in the City dialect. Although *bukan* 'not' is found in the naturalistic data, speakers of the Rural Jambi dialects claimed that *bukan* 'not' is *Bahasa Indonesia*, referring to the Standard Indonesian. These contrastive facts can be explained if *bukan* 'not' that appears in the naturalistic data is understood as a result of borrowing.

Kɲo?~ɲo? and *bukan* negate nominal clauses, whereas *da?* negates non-nominal clauses, as discussed in section 1.4.1.1 and section 1.4.1.2, respectively.

[134] The description of different word classes is provided in section 1.16.

1.4.1.1. Nominal Sentence Negation

Nominal sentences are negated using *kɲoʔ/ɲoʔ* 'not' and *bukan* 'not'. The negation appears before the predicate. Examples follow.

(715) a. *kɲoʔ/ɲoʔ* 'not'

kɲoʔ ikan mera
not fish red
'It was not a red fish.'

b. tana-tu kɲoʔ tana dioʔ, tana asuai laʊt-tu
soil-DEM.DIST not soil 3, soil Asuai Laut-DEM.DIST
'The land isn't his land, but Asuai Laut's.'

c. anaʔ dioʔ-tu kɲoʔ anaʔ dioʔ nian,
child 3-DEM.DIST not child 3 very
anaʔ amᵇɪʔan
child take-NMLZ
'His child is not his own, but an adopted one.'

d. *bukan* 'not'

dioʔ, dioʔ-tu bukan iŋonan
3 3-DEM.DIST not breed-NMLZ
'They are, they are not for breeding.'

Daʔ 'NEG' cannot be used to negate nominal sentences, as the following the following examples are ungrammatical.

(716) a. *iko daʔ anaʔ aku (TR, E)
DEM.PROX NEG child 1SG
'This is not my child.'

b. *iko daʔ motor eko (TR, E)
DEM.PROX NEG motorcycle Eko
'This is not Eko's motorcycle.'

1.4.1.2. Non-nominal Negation

Non-nominal sentences which include verbal clauses, adjectival clauses, and prepositional clauses, are negated using *daʔ* 'NEG'. As in nominal clauses, the

negative marker in non-nominal clauses appears before the predicate, as exemplified in the following examples.

(717) Verbal Predicate

a. aku lamo bnar-la daʔ batmu dioʔ
1SG long.time right-EMPH NEG INTR-meet 3
'It's been so long that I haven't met him.'

b. ŋapo daʔ dimakanʔ
why NEG PASS-eat
'Why weren't they eaten?'

c. muŋko waʔ ciʔ kau
that's.why aunt.or.uncle TRU-small 2SG
daʔ masaŋ situ lagi
NEG ACT-set there more
'That's why your uncle does not set [it] there anymore.'

(718) Adjectival Predicate

a. daʔ eloʔ kawa-tu
NEG beautiful big.frying.pan-DEM.DIST
'The frying pan is not good.'

b. kini-ko, ka pasar daʔ paya gi
now-DEM.PROX to market NEG difficult more
'Nowadays, to go to the market is not difficult anymore.'

c. badan-e daʔ bsaʔ (TR, E)
body3 NEG big
'He is not big.'

(719) Prepositional Predicate

a. daʔ ka umoʔ
NEG to paddy
'Don't you engage in farming?'
[Lit. 'You don't go to the paddy?']

b. adɪʔ aku daʔ di sakola kini-ko (TR, E)
younger.sibling 1SG NEG LOC school now-DEM.PROX
'My younger brother is not at school at the moment.'

If a modal auxiliary or an aspect marker is present, the negative marker precedes the modal or the aspect marker, as exemplified below.

(720) Negation + Auxiliary/Aspect marker + Verbal Predicate

a. “ika daʔ biso bamasaʔ,” kato dioʔ-e
Ika NEG can INTR-cook word 3-3
‘”I cannot cook,” she said.’
[‘”Ika cannot cook” were her words.’]

b. bini-e-tu maʔlʊm-la daʔ biso ditiŋ^{g}ali
wife-3-DEM.DIST understand-EMPH NEG can PASS-stay-APPL
‘His wife, you know, he can’t leave her alone.’

c. jadi-tu muko kito-ko
become-DEM.DIST that’s.why 1-DEM.PROX
daʔ bole makan aŋin-aŋinan
NEG may eat RED-wind-NMLZ
‘That’s why we may not eat flatulent food.’

d. joʔ, aku daʔ prna-gi ɲ^{j}arıŋ kini-tu
friend 1SG NEG ever-more ACT-net now-DEM.DIST
‘Well, I don’t set a net anymore now.’

(721) Negation + Auxiliary/Aspect marker + Adjectival Predicate

a. iko, jaŋan mera, dpan daʔ bole mera
DEM.PROX don’t read front NEG may red
‘This, don’t use the red one, the front one can’t be red.’

b. km^{b}aŋ-ko daʔ biso bsaʔ (TR, E)
flower-DEM.PROX NEG can big
‘This flower can’t be big.’

(722) Negation + Auxiliary/Aspect marker + Prepositional Predicate

a. daʔ-tu, dioʔ-ko daʔ bole ka sano
NEG-DEM.DIST 3-DEM.PROX NEG may to there
‘Otherwise, he may not go there.’

b. daʔ bole di tŋa payo
NEG may LOC middle marsh
‘We may not be in the middle of the marsh.’

As shown in the examples in (720) through (722), the negative marker precedes the auxiliary/aspect marker and the auxiliary/aspect marker precedes the predicate.

In Mudung Darat, however, the negative marker may appear in other positions. The relevant discussion is provided in section 1.4.1.5 (see also section 1.1.2.3.1.1).

On initial observation, in addition to *daʔ* 'NEG', non-nominal sentences appear to be able to be negated by *kɲoʔ/ɲoʔ* 'not' and *bukan* 'not', as illustrated in the example in (723) through (725). These sentences have contrastive meaning. In section 1.4.1.3, I show that *kɲoʔ/ɲoʔ* and *bukan* which appear to negate non-nominal sentences in (723) through (725) are in fact nominal sentence negative markers.

(723) *Kɲoʔ/bukan* + Verbal Predicate

a. copet, kɲoʔ mrampok
pickpocket not ACT-rob
'It was pick-pocketing, not robbing.'
[the speaker was talking about an incident in which a pickpocket stole money from someone and got caught, but she initially used the term *mrampok* 'rob' to refer to *copet* 'pickpocket']

b. siti kɲoʔ m^{b}aco buku ɲoʔ di kamar (TR, E)
Siti not ACT-read book not LOC room
'Siti is not reading a book in her bedroom.'

c. dioʔ-tu bukan dataŋ malam tadi (JC, C)
3-DEM.DIST not come night earlier
'He did not come last night.'

(724) *Kɲoʔ/bukan* + Adjectival Predicate

a. kɲoʔ lolo, bn^{d}o-tu malas
not stupid, thing-DEM.DIST lazy
'He isn't stupid, but lazy.'

b. warno buku-ɲo bukan mera, tapi ijo (JC, E)
color book-3 not red but green
'The color of the book is not red, but it's green.'

(725) *Kɲoʔ/bukan* + Adverbial Predicates

a. bnᵈo-e-tu kɲoʔ di kota-e
thing-DEM.DIST not LOC city-3
'The thing is not in the city.'

b. aku bukan dari Jakarta (JC, E)
1SG not from Jakarta
'I'm not from Jakarta.'

1.4.1.3. Discussion of Nominal vs. Non-nominal Sentence Negation

Different negative markers that can be used to negate different clause types described in section 1.4.1.1 and section 1.4.1.2 above can be summarized in the following table.

Table 1.3 Negative Marker for Different Clause Types

	Verbal Predicate	Nominal Predicate	Adjective Predicate	Adverbial Predicate
daʔ	√	*	√	√
kɲoʔ/ɲoʔ	√	√	√	√
Bukan	√	√	√	√

The above table shows that *daʔ* 'NEG' can be used to negate all kinds of predicates, except for nominal predicates. *Kɲoʔ/ɲoʔ* and *bukan* can be used to negate all kinds of predicates. In other words, *daʔ* 'NEG' is a non-nominal predicate marker, whereas *kɲoʔ~ɲoʔ* is a negative marker for all predicate types.

In what follows, I shall show that *kɲoʔ~ɲoʔ* and *bukan* are different from *daʔ* 'NEG' and I assume that *kɲoʔ~ɲoʔ/bukan* is the nominal negative marker, whereas *daʔ* 'NEG' is non-nominal negative marker. There are three arguments that can be used to support the claim that *kɲoʔ~ɲoʔ* is different from *daʔ*.

The first argument emerges from semantic facts. When *kɲoʔ~ɲoʔ/bukan* is used to negate a verbal predicate, it implies contrastive meaning. Consider the following examples.

(726) a. maʔ kɲoʔ tɪdʊr (TR, E)
mother not sleep
'Mother is not sleeping.'

b. eka bukan bli buku di toko-tu (JC, E)
Eka not buy book LOC store-DEM.DIST
'Eka did not buy a book at the store.'

In (726)a, the sentence implies that mother is doing something else (maybe reading a book) in contrast to sleeping. Likewise, in (726)b, the sentence implies that Eka bought something else, not a book or that Eka met someone in the store, rather than bought a book.

In contrast, if *daʔ* is employed instead of *kɲoʔ/bukan* in the sentences in (726), the contrastive meaning does not occur.

(727) a. maʔ daʔ tɪdʊr (TR, E)
mother NEG sleep
'Mother is not sleeping.'

b. eka daʔ bli buku di toko-tu (TR, E)
Eka NEG buy book LOC store-DEM.DIST
'Eka did not buy a book at the store.'

The sentences in (727) are simply statements that do not have contrastive reading as those in (726).

If *daʔ* and *kɲoʔ/bukan* were the same, it would be expected that the sentences in (727) have the same contrastive implication as those in (726). Since the same contrastive implication was not observed, I conclude that *daʔ* and *kɲoʔ/bukan* are different.

The second argument comes from syntactic facts. If *daʔ* and *kɲoʔ/bukan* were the same, it would be expected that both have the same syntactic pattern. In fact, they do not have the same syntactic behavior. *Kɲoʔ/bukan* can move to sentence initial position (examples in (728)) and functions like an adverbial, whereas *daʔ* cannot (examples in (729)).

(728) a. kɲoʔ maʔ n^{d}aʔ tɪdʊr,
not mother want sleep
maʔ n^{d}aʔ nonton tipi (TR, E)
mother want ACT-watch television
'It is not that mother wants to sleep, but she wants to watch television.'

b. bukan eka la makan, dioʔ puaso (JC, E)
not Eka PFCT eat, 3 fast
'It is not that Eka has eaten, she is fasting.'

(729) a. *daʔ maʔ n^{d}aʔ tɪdʊr, maʔ n^{d}aʔ
NEG mother want sleep mother want
nonton tipi (TR, E)
ACT-watch television
'It is not that mother wants to sleep, but she wants to watch television.'

b. *daʔ eka la makan, dioʔ puaso (JC, E)
NEG Eka PFCT eat, 3 fast
'It is not that Eka has eaten, she is fasting.'

The grammaticality of (728) and the ungrammaticality of (729) indicate that *daʔ* does not have the same syntactic behavior as *kɲoʔ/bukan*.

The third evidence is also related to the syntactic distribution of the negative marker. *Kɲoʔ/bukan* can be followed by another negative marker, such as *blʊm/lʊm*, whereas *daʔ* cannot. This, again, indicates that *kɲoʔ/bukan* is different from *daʔ*. Examples follow.

(730) dioʔ kɲoʔ blʊm biso baco buku (TR, E)
3 not not.yet can read book
'It is not that he hasn't been able to read a book.'

(731) *dioʔ daʔ blʊm biso baco buku (TR, E)
3 NEG not.yet can read book
'It is not that he hasn't been able to read a book.'

In (730), *kɲoʔ* can be followed by *blʊm*, but in (731) *daʔ* cannot be followed by *blʊm*. If *daʔ* and *kɲoʔ/bukan* were the same, sentence (731) and sentence (730) would be expected to have the same grammaticality. However, these facts provide counter-evidence to the claim that *daʔ* and *kɲoʔ/bukan* are the same.

The examples in (732) and (733) are naturalistic examples in which *kɲoʔ* is negated by another negative marker.

(732) kɲoʔ daʔ iŋat dŋan doso, memaŋ daʔ knal
not NEG remember with sin indeed NEG know
'It is not that they forgot about sins, but they indeed did not know about [them].'

(733) "kalu aku-ko kɲoʔ daʔdo n^{d}aʔ masaŋ-e, "te-e
TOP 1SG-DEM.PROX not not.exist want ACT-set-3 word-3
'He said, "As for me, it is not that I don't want to set it up."'
[Lit. '"As for me, it is not that I don't want to set it up" were his words.']

To conclude, I have provided three arguments to support the claim that *daʔ* is not the same as *kɲoʔ/ɲoʔ/bukan.* First, *kɲoʔ/ɲoʔ/bukan* implies contrastive meaning, whereas *daʔ* does not. Second, *kɲoʔ/ɲoʔ/bukan* can be moved to sentence initial position, but *daʔ* cannot. Third, *kɲoʔ/bukan* can be followed by another negative marker, but *daʔ* cannot.

Since *daʔ* 'NEG' cannot be used to negate nominal clauses, I claim that *daʔ* 'NEG' is a non-nominal negative marker, whereas *kɲoʔ~ɲoʔ/bukan* is a nominal negative marker. This claim seems to be contradictory to the above description. I showed earlier that both *daʔ* and *kɲoʔ/bukan* can be employed to negate all kinds of predicate types. One possible answer to this question is that what the negation negates is apparently not the predicate as it appears on the surface. In the cases where

ɲoʔ/bukan negates a non-nominal predicate (examples in (723), (724), (725)) it may be that *kɲoʔ/bukan* negate the fact provided by the predicate (either the action, the object of the verb, the location or the characteristics), rather than the predicate itself. In other words, when *kɲoʔ/bukan* negates a non-nominal predicate, it negates the proposition. This claim is supported by the fact that when *kɲoʔ/bukan* negates non-nominal predicates, the contrastive meaning emerges.

1.4.1.4. Using Double Negative Markers

In this section, I shall discuss two types of double negation: double negation for emphatic reasons and double negation for negating negatives.

1.4.1.4.1. Double Negative Markers for Emphasis

When expressing negation, the speakers of Jambi Malay often use two identical negative markers. 'Identical' does not necessarily mean that the forms must be identical. The negative marker that appears second can be a reduced form of the one that appears first. For example, if the first negative marker is *kɲoʔ,* the second negative marker is *ɲoʔ,* a short form of the first form, as shown below.

(734) iyo, kasʊs-tu kɲoʔ kasʊs malɪŋ ɲoʔ
yes case-DEM.DIST not case ACT-steal not
'Right, that case is not a stealing case.'

However, double negation is not possible using *bukan,* as shown below.

(735) *abaŋ edi bukan guru kan[135] (JC, E)
older.brother Edi not teacher not
'Edi's older brother is not a teacher.'

[135] This sentence is grammatical if there is a slight pause before *kan* and in that case *kan* functions like a tag question. The sentence can then be translated as 'Edi's older brother is not a teacher, is he?'.

The negative marker that appears second is used for emphatic reasons and the position of the second negative marker may vary, depending on which element is being emphasized.

First, the second negative marker usually appears after the predicate or after the direct object (if not omitted) of a transitive verb. Examples follow.

(736) a. daʔ pake tas daʔ
NEG use bag NEG
'We did not use bags.'

b. cuma, masaʔ bibi-ko daʔ pake miwon daʔ gi
only cook aunt-DEM.PROX NEG use Miwon NEG more
'However, I don't use *Miwon* when I cook.'

c. ɲoʔ mol kapʊʔ ɲoʔ
not mall Kapuk not
'[It is] not Kapuk Mall.'

d. lʊm ŋun^{d}aŋ lʊm
not.yet ACT-invite not.yet
'[She] hasn't invited [us] yet.'

e. 'kalu di jawo, ko daʔdo mahal daʔ'
if LOC Java DEM.DIST not.exist expensive NEG
'If it is in Java, this is not expensive.'

Second, if an auxiliary is present and the speaker intends to emphasize the auxiliary, the second negative marker appears after the auxiliary, as exemplified below.

(737) a. muko abang kau-tu
that's.why older.brother 2SG-DEM.DIST
daʔ prna daʔ mara dŋan aku
NEG ever NEG angry with 1SG
'That's why your brother never scolds me.'

b. budi daʔ biso daʔ m^{b}uat kʊɪ (TR, E)
Budi NEG can NEG ACT-make cake
'Budi cannot make a cake.'

c. kito daʔ bole daʔ ŋamᵇɪʔ baraŋ oraŋ (TR, E)
1 NEG may NEG ACT-take thing person
'We may not take someone's belongings.'

In (737)a, the speaker emphasizes that the interlocutor's brother never scolds him and thus the second negative marker *daʔ* appears after *prna* 'ever'. Similarly, in (737)b, the speaker intends to emphasize the fact that Budi does not have the ability to make a cake and thus the second negative marker appears after the auxiliary *biso* 'can'. Likewise, in (737)c, the second *daʔ* appears after the auxiliary *bole* 'may' to emphasize the fact that the subject is not allowed to do what is expressed by the verb.

1.4.1.4.2. Double Negation for Negating Negatives

Jambi Malay may employ double negation for negating negatives which means that the sentence has a positive meaning. It is mentioned in section 1.4.1.3 that *kɲoʔ/ɲoʔ/bukan* 'not' can be followed by another negative marker. In fact, a *kɲoʔ/ɲoʔ/bukan* 'not' that is followed by another negative marker forms a double negation for negating a negative. Examples follow.

(738) kɲoʔ daʔ iŋat dŋan doso, memaŋ daʔ knal
not NEG remember with sin indeed NEG know
'It is not that they forgot about sins, but they indeed did not know about [them].'

(739) "kalu aku-ko kɲoʔ daʔdo nᵈaʔ masaŋ-e, "te-e
TOP 1SG-DEM.PROX not not.exist want ACT-set-3 word-3
'He said, "As for me, it is not that I don't want to set it up."'
[Lit. '"As for me, it is not that I don't want to set it up" were his words.']

(740) aku-tu bukan-ɲo apo,
1SG-DEM.DIST not-3 what
kɲoʔ-ɲo aku-tu daʔ nᵈaʔ krjo
not-3 1SG-DEM.DIST NEG want work
'I'm not err… It is not that I don't want to work.'

Unlike in double negation for emphatic reasons, the first negative marker for negating negative should be *kɲoʔ/ɲoʔ/bukan*.

In sum, in section 1.4.2, I have presented two types of double negation in Jambi Malay. The first type of double negation is used for emphatic reasons and the second type of double negation is used for negating negatives.

1.4.1.5. Post Verbal Negation

Mudung Darat is known, even by speakers from different areas, for using the clause final position for the negative marker. Examples (741) through (745) below are taken from Mudung Darat naturalistic recordings.

(741) "oaŋ sano anu oaŋ batino-e (MD, N)
person there whachamacallit person female-3
bagawe daʔ, " kato dioʔ
INTR-work NEG word 3
"People there, err… females don't work," he said.'
[Lit. '"The people there, err… females here do not work" were his words.']

(742) ai oaŋ bŋen sakola daʔ, daʔ bole ka lua (MD, N)
EXCL person before school NEG NEG may to out
'Old people didn't go to school, we might not go out.'

(743) "aku kuraŋ duwɪt daʔ," to-ku (MD, N)
1SG less money NEG word-1SG
"I don't lack money," I said.'
[Lit. '"I do not lack of money" were my words.']

(744) aku kno tampa daʔ, kno pcʊtkato-ku di (MD, N)
1SG undergo slap NEG undergo lash word-1SG earlier
'I wasn't slapped, I was lashed as I said before.'

(745) make aŋin daʔ make bintaŋ daʔ, make aeʔ (MD, N)
ACT-use wind NEG ACT-use star NEG ACT-use water
'We don't use wind, we don't use stars, we use water.'

As shown in (741) through (745), the negative marker *daʔ* is in post verbal position. Let us further examine the following examples.

(746) a. da awaʔ bŋen oaŋ bŋen puŋo daʔ calano
finish 1/2/3 before person before possess NEG pants
caʔ-ko-ko, daʔ tɪʔ (MD, N)
like-DEM.PROX-DEM.PROX NEG not.exist
'I was, old people didn't have underwear like this, nothing.'

b. daʔ bole mintaʔ duwɪt to-ku-di,
NEG may ask.for money word-1SG-earlier
dioʔ mncari daʔ
3 ACT-seek NEG
'He may not ask for money from his children as I said before, he doesn't have a job.'

In (746)a, the negative marker *daʔ* appears between the verb *puŋo* 'have' and the complement *calano* 'pants'. In the first clause of sentence (746)b, *daʔ* appears before the modal auxiliary *bole* 'may' and the verb *mintaʔ* 'ask for', whereas in the second clause *daʔ* appears after the verb *mncari* 'look for'.

To conclude, the Mudung Darat dialect is different from the other two dialects of Jambi in that the negative marker normally appears post-verbally rather than pre-verbally. However, pre-verbal position is not impossible for the negative marker in Mudung Darat. Furthermore, the negative marker can also appear between the verb and its complement. This suggests negative marker is free in Mudung Darat. In section 1.1.2.3.1.1 I I showed that in fact both auxiliaries and negative markers are free in Mudung Darat.

1.4.2. Constituent Negation

Only *daʔ, kɲoʔ/poʔ* and *bukan* can be used to negate a constituent and the constituent has got to be an NP. In sentential negation described in section 1.4.1, the negation appears before the predicate. Constituent negation appears within a constituent. Thus, different positions of a negative marker determine the scope of the negation, as exemplified below.

(747) a. ggalo maŋkʊʔ-tu daʔ dibawaʔ bapaʔ (TR, E)
all bowl-DEM.DIST NEG PASS-bring father
'All bowls weren't brought by father.'

b. ggalo budaʔ-tu daʔ biso lari cpat (TR, E)
all kid-DEM.DIST NEG can run quick
'All of those kids cannot run fast.'

(748) a. daʔ ggalo maŋkʊʔ-tu dibawaʔ bapaʔ (TR, E)
NEG all bowl-DEM.DIST PASS-bring father
'Not all bowls were brought by father.'

b. daʔ ggalo budaʔ-tu biso lari cpat (TR, E)
NEG all kid-DEM.DIST can run quick
'Not all kids can run fast.'

Daʔ in (747) is used as a sentential negative marker and the scope of the negation is the entire sentence except for the surface subject. In (748) *daʔ* is used as a constituent negative marker in that the negative marker only takes scope over the subject NP.

1.4.3. Negation in Coordinated Structures

The negation of coordinated structures can be expressed using a negative marker before each predicate, as shown below.

(749) eko daʔ mᵇaco buku, daʔ nonton tipi
Eko NEG ACT-read book NEG ACT-watch television
tadi-tu (TR, E)
earlier-DEM.DIST
'Eko didn't read a book and didn't watch television just now.'

(750) edi daʔ mᵇaŋun ruma, daʔ ŋᵍawei umo
Edi NEG ACT-build house NEG ACT-work-APPL paddy
'Edi is not building a house and is not working in the paddy.'

If the coordinator is present, only one negation is needed to negate two *and* or *or* coordinated clauses.

(751) eko daʔ mᵇaco buku dŋan nonton tipi
Eko NEG ACT-read book with ACT-watch television
tadi-tu (TR, E)
earlier-DEM.DIST
'Eko didn't read a book and didn't watch television just now.'

(752) edi daʔ mᵇaŋun ruma apo ŋᵍawei umo (TR, E)
Edi NEG ACT-build house or ACT-work-APPL paddy
'Edi is not building a house or working in the paddy.'

In *but* coordination, however, if the negative marker appears in only one clause, the negative marker only takes scope over the clause that contains it.

(753) a. edi daʔ mᵇaŋun ruma tapi ŋᵍawei umo (TR, E)
Edi NEG ACT-build house but ACT-work-APPL paddy
'Edi doesn't build a house, but he works in the paddy.'
*Edi doesn't build a house, but he does not work in the paddy.'

b. edi daʔ mᵇaŋun ruma tapi daʔ ŋᵍawei umo (TR, E)
Edi NEG ACT-build house or NEG ACT-work-APPL paddy
'Edi doesn't build a house, but does not work in the paddy.'

1.4.4. Negation in Complex Sentences

The negative marker that negates the matrix verb can take scope over the subordinate verb, as exemplified below.

(754) a. ta macam mano-la, dioʔ daʔ nᵈaʔ
not.know sort which-EMPH 3 NEG want
makan kaŋkʊŋ
eat k.o.vegetable
'I don't know how, he doesn't want to eat water convolvulus.'

b. cuma kito-ko daʔ tau mrawat-e
only 1-DEM.PROX NEG know ACT-take.care-3
'However, we don't know how to take care of them.'

In contrast, the negative marker that negates the subordinate clause cannot take scope over the main verb, as indicated below.

(755) a. dioʔ tau aku daʔ puŋo
3 know 1SG NEG possess
'They know I didn't have [it].'

b. aku raso tʊm dio-tu apo…
1SG feel TRU-Kaltum 3-DEM.DIST what
daʔdo nole gi, daʔ tʊmʔ
not.exist ACT-look more NEG TRU-Kaltum
'Well, I think she err… she didn't look at you, right?'

Sentence (755)a cannot be interpreted as the subject of the matrix clause lacks the knowledge of what is stated in the subordinate clause. Likewise, sentence (755)b does not have the interpretation that the subject of the main clause is not thinking about the fact stated in the subordinate clause.

To sum up, the negative markers discussed in this section are *daʔ* 'NEG', *blʊm/lʊm* 'not yet', *kɲoʔ/ɲoʔ* 'not' and *bukan* 'not'. In addition, I assume that *kɲoʔ/ɲoʔ* and *bukan* are nominal negative markers, but *daʔ* 'NEG' is not a nominal negative marker. Moreover, double negative markers are used for emphatic purposes and for negating negation. Furthermore, the negative marker is pre-verbal in Jambi Malay. However, in Mudung Darat the negative marker may appear in post-verbal position or even between the verb and its complement, which suggests that the position of the negative marker in this dialect appears to be very free. In addition, the only constituent that can be negated is the noun phrase. Finally, negation also occurs in coordinated and complex structures.

1.5. Anaphora

Anaphors are defined as expressions that have antecedents. Anaphors are distinguished into two types: free anaphora and bound anaphora. Free anaphora covers

pronouns, whereas bound anaphora covers reflexives and reciprocals.[136] In generative linguistics, when linguists refer to anaphora, they refer to bound anaphora: reflexives and reciprocals. In this section, I shall discuss anaphora in a broader sense, in that I cover both free and bound anaphora. It should be pointed out that the anaphors discussed in this section cover only anaphoric phenomena which are not the result of a syntactic process. Thus, zero and pronominal anaphors which are the result of movement or deletion of a noun phrase out of particular syntactic slots are excluded in this section.

The anaphoric system in the Rural Jambi Malay dialects differs significantly from that in the City dialect. In the following description, I shall note any differences found between the Tanjung Raden and Mudung Darat dialects on the one hand and the City dialect on the other hand.

This section is organized as follows. In section 1.5.1, I present the means of expressing anaphora and in section 1.5.2, I describe anaphora in different syntactic environments.

1.5.1. Means of Expressing Anaphora

In Jambi Malay, anaphors can be expressed by means of phonologically null pronouns, ordinary personal pronouns as well as clitic pronouns, personal pronouns with or without an emphatic or intensifier marker for expressing reflexivity, as well as other means.

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[136] According to traditional binding theory, a reflexive must have a local antecedent (Principle A) and a pronoun must not have a local antecedent (Principle B).

1.5.1.1. Phonologically Null Pronouns[137]

The employment of phonologically null pronouns is a very common way to express anaphoric relations in Jambi Malay.

In the following examples, some anaphoric references are not expressed by overt referents (the antecedent is italicized) and they are indicated by Ø.

(756) a…, macam ibuʔ-tu ado jugo
EXCL sort madam-DEM.DIST exist also
batrnaʔ *ɪtɪʔ*, cuman di sawa, di umo tmpat-ɲo;
INTR-livestock duck but LOC paddy LOC paddy place-3
yaŋ batino mpat pʊlʊ limo, yaŋ jantan-ɲo sakitar
REL female four teen five REL male-3 one-about
sapʊlʊ ekoʔ; Ø kini di umo
one-ten CLF now LOC paddy
'Well… I also raise ducks, but the place of [the raising] is in the paddy field; forty five are female and ten are male; [They/The ducks] are now in the paddy field.'

(757) ARNTJR: kato bibi-tu $n^{d}aʔ$ $miɲ^{j}am$ *kaset* kan,
word aunt-DEM.DIST want ACT-borrow cassette Q
kaset rukiyah-tu-ha
cassette Ar-Ruqyah-DEM.DIST-EXCL
'That auntie said that she wanted to borrow a cassette, the Ar-Ruqyah cassette.'
[referring to the interlocutor's sister who wanted to borrow the speaker's cassette]

SALTJR: ado kau $m^{b}awaʔ$ Ø?
exist 2SG ACT-bring
'Do you bring [it]?'
[referring to the cassette]

ARNTJR: $ŋ^{g}ɪ$
yes
'Yes.'

[137] I refer to this phenomenon as NP ellipsis in section 1.15.1.

(758) ‘aku jam lapan giʔ balıʔ-la, ’te-*e*;
1SG hour eight later return-EMPH word-3
iyo-la, jam lapanØ balıʔ, aku tuŋ^{g}uØ-la tadi kan;
yes-EMPH hour eight return 1SG wait-EMPH earlier Q
Ø m^{b}awaʔ cewеʔ Ø pulaʔ ka siko; *cewеʔ-e* eloʔ
ACT-bring female PART to here female-3 beautiful
jugo; kate-e Ø masɪ sakola, masɪ sakola esema
also word-3 still school still school senior.high.school
‘He said, “I will return at eight”; Well, he would return at eight, so I waited for [him]; [He] brought [his] girlfriend here; His girlfriend is pretty nice-looking; She/He said that [she] was still in school, [she] was still in high school.’

(759) oraŋ bakbon, *awaʔ*-ko-di kapeŋen go;
person INTR-garden 1/2/3-DEM.PROX-earlier want also
ha, Ø pgi-la ɲm^{b}raŋ pake prau; Ø nbas,
EXCL go-EMPH ACT-across use canoe ACT-cut.down
nanam ubi.kayu, nanam ubi.jalar
ACT-plant cassava ACT-plant sweet.potato
‘People gardened and I would like to; So, [I] crossed using a canoe; [I] cut down [shrubs], grew cassavas, and grew sweet potatoes.’

1.5.1.2. Ordinary Personal Pronouns and Clitic Pronouns

Ordinary free personal pronouns discussed in section 2.1.2.1.1 and clitic pronouns discussed in section 2.1.2.1.9 can be used to refer to both human and non-human entities. The naturalistic extracts in (760) and (761) and the utterance in (762) contain anaphors which are expressed using free personal pronouns and clitic pronouns. The free personal pronouns and the clitic pronouns are in square brackets and if the referent is present, it is italicized.

(760) aku n^{d}aʔ baŋaʔ naŋo tntaŋ paŋalaman-paŋalaman
1SG want a.lot ACT-ask about RED-experience
sapupu *aku* kan; nasrʊl namo-[e]; [dioʔ]-ko srbo biso
cousin 1SG Q Nasrul name-3 3-DEM.PROX all can
gawe-tu; gawe apo-pʊn [dioʔ] n^{d}aʔ kan;
work-DEM.DIST work what-PART 3 want Q
basɪŋ-e-la pokoʔ-e; baumo, batani, ɲari ikan,
just.any-3-EMPH main-3 INTR-paddy INTR-farm ACT-seek fish
sagalo macam-e n^{d}aʔ [dioʔ]-ko; daʔ pulaʔ mɪlɪ daʔ;
one-all sort-3 want 3-DEM.PROX NEG PART ACT-choose NEG
[dioʔ]-ko la puŋo anaʔ la; duo anaʔ-[e];
3-DEM.PROX PFCT possess child PFCT two child-3
sekoʔ namo-e pipin, sekoʔ namo-e raʊp, raʊp;
one name-3 Pipin one name-3 Rauf Rauf
namo bini-[e] epi kan; bini [dioʔ]-ko oraŋ
name wife-3 Epi Q wife 3-DEM.PROX person
kampʊŋ-ko go-la;
village-DEM.PROX also-EMPH
'I am going to ask about my cousin's experiences; His name is Nasrul; He is willing to do any kind of work; any kind [of work]; farming, fishing, and all kinds of work; He is not picky; He has got children; He has two children; One is named Pipin and the other one is named Rauf; His wife's name is Epi; His wife is also someone from this village.'

(761) “macam iko,” kato dioʔ; “aku-ko la
sort DEM.PROX word 3 1SG-DEM.PROX PFCT
lamo nian mliharo *pisaŋ*,” kato dioʔ,
long.time very ACT-keep banana word 3
“karno kito-ko mʊsɪm panas-ko kalaparan,
because 1-DEM.PROX season hot-DEM.PROX ABST-hungry-CIRC
aku nᵈaʔ ŋajaʔ kau barʊnᵈɪŋ; karno aku-ko
1SG want ACT-invite 2SG INTR-discuss because 1SG-DEM.PROX
daʔ biso maɲʲat-[ɲo], aku sʊrʊ kau maɲʲat;
NEG can ACT-climb-3 1SG ask 2SG ACT-climb
kalagi pisaŋ-tu kito bagi duo,
later banana-DEM.DIST 1 divide two
kau saparo, aku saparo”
2SG one-half 1SG one-half
‘”Like this, “he said; “I’ve been growing a banana [tree] for a long time”, said he; “Because we are starving in this dry season, I want to discuss with you; Since I cannot climb it, I am asking you to climb it; We will share the bananas, half for you and half for me.”’
[talking about what a turtle said to a monkey in a parable the speaker was telling]

(762) yo-la, oraŋ ruma sayo-ko mᵇlo-[ɲo]
yes-EMPH person house 1SG-DEM.PROX ACT-keep-3
kini-ko di umo
now-DEM.PROX LOC paddy
‘Well, my husband is taking care of them in the paddy.’
[referring to ducks that the speaker and her husband were raising]

As discussed in section 1.5.1.3 and section 1.6, pronouns in the Rural Jambi dialects can be used as reflexive pronouns.

1.5.1.3. Reflexive Pronouns

In the Rural Jambi dialects, no dedicated reflexive pronoun in terms of the Government and Binding theory was found. Reflexivity in the Rural Jambi dialects can be expressed using different means. An ordinary personal pronoun, for example, with or without an emphatic marker following it, can be used to express reflexivity, as

exemplified in (763). A detailed description of different means of expressing reflexivity in the Rural Jambi dialects is provided in section 1.6.1.

(763) a. budaʔ-tu ɲʊbɪt dioʔ-la (TR, E)
kid-DEM.DIST ACT-pinch 3-EMPH
'The kid pinched himself.'

b. dioʔ neŋoʔ dioʔ di kaco (TR, E)
3 ACT-look 3 LOC mirror
'He saw himself in the mirror.'

In contrast, the City dialect exhibits dedicated reflexive forms. A pronoun followed by *dewe?* 'alone' can be used to express reflexivity (see (764)a) and *diri* 'self' followed by *-ɲo* '3' and *dewe?* 'alone' (see (764)b) are the reflexive pronouns. Further description of reflexivity and means of expressing reflexivity in the City dialect is provided in section 1.6.1.

(764) a. mamaʔ nik cinto dioʔ dewеʔ (JC, E)
mother Nick love 3 alone
'Nick's mother loves herself.'

b. mamaʔ nik cinto diri-ɲo dewеʔ (JC, E)
mother Nick love self-3 alone
'Nick's mother loves herself.'

1.5.1.4. Other Means of Expressing Anaphoric Expression

In addition to the third person pronoun *dio?*, singular and plural third persons can be referred to using *budaʔ-tu* and *oraŋ-tu* which literally mean 'that/those kid(s)' and 'that/those person(s)'.[138] These anaphoric expressions can only be used for humans. Examples follow.

[138] In section 2.1.2.1, however, I claim that *oraŋ-tu* and *budaʔ-tu* are regular noun phrases which are used as pronouns.

(765) di siko naŋ ado duo-tu-la, raden dŋan
LOC here REL exist two-DEM.DIST-EMPH Raden with
kmas-la; teŋoʔ sipat kmas;
Kemas-EMPH look character Kemas
kalu dianiŋ oraŋ-tu mara, edaʔ?
if PASS-listen person-DEM.DIST angry Q
'There are only two here, Raden and Kemas; Mind the Kemas' attitude; if they hear this, they will be angry, right?'
[the speaker was talking about a negative side of people whose name is *Kemas* in the village and she said that these people would be angry if they heard what she was talking about.]

(766) ŋajaʔ budaʔ-ko, rom^{b}oŋ-rom^{b}oŋ debi kan,
ACT-invite kid-DEM.PROX RED-group Debi Q
ŋajaʔ-ŋajaʔ rom^{b}oŋan debi, peri, edi;
RED-ACT-invite group-NMLZ Debi, Peri Edi
budaʔ-tu pʊn daʔ tɪʔ gawe kan,
kid-DEM.DIST PART NEG exist work Q
peŋen jugo kan n^{d}aʔ n^{d}ayʊŋ-tu kan
want also Q want ACT-row-DEM.DIST Q
'[I invited them, the group of Debi's, [I] invited the group of Debi, Peri, and Edi.' They had nothing to do, so they also wanted to row, you know.'

The demonstrative pronouns *iko* ~ *ko* 'this' (in the Rural dialects) and ni 'this' (in the City dialect), and *tu* 'that' (in both the Rural Jambi and City dialects) can be used in positions where an anaphoric expression is used. Examples are shown in (767) and (768) below.

(767) a… n^{d}aʔ pisaŋ, makan-la, sayaŋ; iko-ko aku
EXCL want banana eat-EMPH love DEM.PROX-DEM.PROX 1SG
m^{b}li di sano-tu-la, ce
ACT-buy LOC there-DEM.DIST-EMPH TRU-sister
'[If you] want some bananas, eat them, Honey; I bought them there.'

(768) ʊntʊŋ-la pulaʔ manantu-ko ado; nʊlʊŋ
profit-EMPH PART child.in.law-DEM.PROX exist ACT-help
bamasaʔ, batanaʔ a mᵇuaʔ-mᵇuat gaŋan;
INTR-cook INTR-cook.rice EXCL RED-ACT-make k.o.curry
ha, tu bibi krjo pagi-ko tadi
EXCL DEM.DIST aunt work morning-DEM.PROX earlier
'Luckily I have a daughter in law; She helped me cook, cook rice and side dishes; Those are what I did this morning.'

As shown in the above examples, demonstrative pronouns have contextual functions which are like anaphora.

It should be pointed out that although *budaʔ-tu, oraŋ-tu* and demonstrative pronouns have contextual functions which are like anaphora, they do not show syntactic patterns like ordinary anaphoric expressions. Thus, they are not discussed in section 1.6.3, where a more detailed discussion of the anaphoric system of Jambi Malay is provided.

1.5.2. Anaphora in Different Syntactic Environments

1.5.2.1. Within a Clause

Since the Rural Jambi dialects allows pronouns to express reflexivity (see section 1.6), it allows pronouns and its antecedent to appear in the same clause. Although pronouns may appear in the same clause as the antecedent, the non-reflexive meaning is still the first reading (Cole et al., in prep.). In the following examples, the first/preferred reading is italicized.

(769) a. dio cinto dio (MD, E)
3 love 3
'He loves himself/*him*.'

b. yanti neŋoʔ dio di tipi (MD/TR, E)
Yanti ACT-see 3 LOC television
'Yanti saw herself on TV.'/*'Yanti saw him on TV*.'

Furthermore, if the intended meaning is reflexive, the pronoun cannot precede the antecedent in Jambi Malay, as illustrated below.

(770) dioʔ neŋoʔ yanti di tipi (JC, E)
3 ACT-see Yanti LOC television
'He saw Yanti on TV.'
*'Yanti saw herself on TV.'

By contrast, in the City dialect, pronouns that appear clause internally only allow the non-reflexive meaning, as exemplified below.

(771) edi cinto dioʔ (JC, E)
Edi love 3
'Edi loves him.'
*'Edi loves himself.'

1.5.2.2. In Coordinate Structure

Anaphoric relationships between coordinate structures are considered to be relationships between two different clauses. The description of coordination is presented in section 1.3.

1.5.2.3. In Subordinate Clauses

In complex structures, deletion, ordinary pronouns and clitic pronouns are possible. Examples are shown below.

(772) a. aku suru kau maɲʲat bataŋ-ko
1SG ask 2SG ACT-climb tree-DEM.PROX
karno aku daʔ biso maɲʲat Ø (TR, E)
because 1SG NEG can ACT-climb
'I'm asking you to climb this tree because I can't climb [it].'

b. *upɪʔ* mᵇawaʔ pamakanan saban
Upik ACT-bring ABST-eat-CIRC every
[dioʔ] dataŋ ka ruma kami (TR, E)
3 come to house 1
'Upik brings food whenever she comes to our house.'

c. maʔ n^{d}aʔ m^{b}li anaʔ ayam-tu
mother want ACT-buy child chicken-DEM.DIST
asal bapaʔ n^{d}aʔ m^{b}lo-[e] (TR, E)
as.long.as father want ACT-keep-3
'Mother is willing to buy the chicks as long as father is willing to raise them.'

Within complex sentences, when the main clause precedes the subordinate clause, the antecedent and the anaphor can be either in the main clause, or in the subordinate clause, as shown below.

(773) a. Antecedent-anaphor

maʔ n^{d}aʔ m^{b}li anaʔ ayam-tu$_{i}$
mother want ACT-buy kid chicken-DEM.DIST
asal bapaʔ n^{d}aʔ m^{b}lo-e$_{i}$ (TR, E)
as.long.as father want ACT-keep-3
'Mother is willing to buy the chicks$_{i}$ as long as father is willing to raise them$_{i}$.'

b. Anaphor-antecedent

maʔ n^{d}aʔ m^{b}li-e$_{i}$
mother want ACT-buy-3
asal bapaʔ n^{d}aʔ m^{b}lo anaʔ ayam-tu$_{i}$ (TR, E)
as.long.as father want ACT-keep kid chicken-DEM.DIST
'Mother is willing to buy them$_{i}$ as long as father is willing to raise the chicks$_{i}$.'

Similarly, in sentences in which the subordinate clause precedes the main clause, both the antecedent-anaphor and anaphor-antecedent orders are possible, as shown in the following examples.

(774) a. Antecedent-anaphor

asal bapaʔ n^{d}aʔ m^{b}lo anaʔ ayam-tu$_{i}$,
as.long.as father want ACT-keep kid chicken-DEM.DIST
maʔ n^{d}aʔ m^{b}li-e$_{i}$ (TR, E)
mother want ACT-buy-3
'As long as father is willing to raise the chicks$_{i}$, mother is willing to buy them$_{i}$.'

b. Anaphor-antecedent

asal bapaʔ n^{d}aʔ m^{b}lo-e_i,
as.long.as father want ACT-keep-3
maʔ n^{d}aʔ m^{b}li anaʔ ayam-tu_i (TR, E)
mother want ACT-buy kid chicken-DEM.DIST
'As long as father is willing to raise them$_i$, mother is willing to buy the chicks$_i$.'

To conclude, it has been shown that the main means of expressing anaphoric relationships in Jambi Malay are deletion, ordinary pronouns, and clitic pronouns. Although all dialects discussed in this dissertation make use of these three main ways of expressing anaphoric relationships, the Rural Jambi dialects are different from the City dialect in that in the Rural Jambi dialects pronouns can be used to express reflexivity. Since the Rural Jambi dialects allow pronouns to express reflexivity, a pronoun may co-occur with its antecedent within a clause. In complex sentences, the antecedent and the anaphor can be in the main clause or the subordinate clause regardless of whether or not the main clause precedes or follows the subordinate clause.

In addition to the three main ways of expressing an anaphoric relationship, Jambi Malay also makes use of other means to express anaphoric relationships: full NPs *budaʔ-tu* and *oraŋ-tu* which literally mean 'that/those kid(s)' and 'that/those person(s)', respectively, and the demonstratives *tu* 'that'*, ko* 'this'*, ni* 'this'.

1.6. Reflexives

As mentioned in section 1.5, no special forms are used to distinguish reflexives from ordinary personal pronouns in the Rural Jambi dialects. In other words, pronouns can be used to express pronouns as well as reflexive pronouns. In the City dialect, however, ordinary pronouns cannot be used as reflexive pronouns. In

addition to pronouns, there are other means of expressing reflexivity in Jambi Malay. In section 1.6.1, I describe the different means of expressing reflexivity. In section 1.6.2, I show lexicalized reflexive forms. In section 1.6.3, I provide a discussion of the scope of reflexivity and conclude the anaphoric system of Jambi Malay.

1.6.1. Means of Expressing Reflexivity

In section 1.6.1.1 through section 1.6.1.5 below, I present different means of expressing reflexivity in Jambi Malay (cf. Cole et al., in prep.).

1.6.1.1. Ordinary Personal Pronouns

As previously pointed out, ordinary personal pronouns can only be used to express reflexivity in the Rural Jambi dialects, but not in the City dialect. The example in (769) is repeated in (775) below.

(775) a. dio cinto dio (MD, E)
3 love 3
'He loves himself/*him*.'

b. yanti neŋoʔ dio di tipi (MD/TR, E)
Yanti ACT-see 3 LOC television
'Yanti saw herself on TV.'/*Yanti saw him on TV*.'

In the City dialect, the only acceptable translations for (775)a and (775)b are 'He loves him' and 'Yanti saw him on TV', respectively.

1.6.1.2. Ordinary Personal Pronouns Followed by the Emphatic Marker *–La*

A sequence of an ordinary personal pronoun followed by the emphatic marker *–la* is another way of expressing reflexivity the Rural Jambi dialects, as exemplified in (776).

(776) a. budaʔ-tu ɲʊbɪt dioʔ-la (TR, E)
kid-DEM.DIST ACT-pinch 3-EMPH
'The kid pinched himself.'

b. peter cinto dioʔ-la (TR, E)
Peter love 3-EMPH
'Peter loves himself.'

1.6.1.3. Ordinary Personal Pronouns Followed by *Dewe?*

In all dialects of Jambi Malay discussed in this dissertation, a personal pronoun followed by *dewe?* (Lit. 'alone') is utilized as a means of expressing reflexivity, as shown in the following examples.

(777) Arna cinto dŋan dioʔ dewеʔ
Arna love with 3 alone
'Arna loves herself.'

The sequence of a pronoun followed by *dewe?* 'alone' can optionally be followed by the emphatic marker *–la*, as the following example shows.

(778) kami nʊlʊŋ kami dewеʔ-la
1 ACT-help 1 alone-EMPH
'I help myself.'/ 'We help ourselves.'

1.6.1.4. *Diri* 'Self' Followed by Ordinary Personal Pronouns and Optional *Dewe?*

The sequence of *diri* 'self' followed by an ordinary personal pronoun and optional *dewe?* is used to express reflexivity in the Rural Jambi dialects. In the City dialect most speakers judged expressions such as *diri dio? dewe?* and *diri aku dewe?* to sound weird. The following examples are taken from both naturalistic and elicited data in the Rural Jambi dialects.

(779) a. aku mrkam-la diri aku dewеʔ
1SG ACT-record-EMPH self 1SG alone
'So, I recorded myself.'
[Eko (one of our assistants from Tanjung Raden) was telling how he took the Hi-MD recorder to the kitchen to complete the recording of a story, after he forgot to do his work earlier]

b. eko nampar diri dioʔ dewеʔ (MD, E)
Eko ACT-slap self 3 alone
'Eko slapped himself.'

c. arna ɲrai diri dioʔ ka plisi (TR, E)
Arna ACT-surrender-APPL self 3 to police
'Arna surrendered herself to the police.'

1.6.1.5. *Diri-ɲo* Optionally Followed by *Dewe?*

Another form that can be used to express reflexivity in Jambi Malay is *diri-ɲo* which is optionally followed by *dewe?* 'alone'.[139] Examples follow.

(780) a. edi-tu mɪkɪr diri-ɲo (dewеʔ)
Edi-DEM.DIST ACT-think self-3 alone
'Edi cares about himself.'

b. yanti m^{b}likan album poto ʊntʊʔ diri-ɲo dewеʔ
Yanti ACT-buy-APPL album photo for self-3 alone
'Yanti bought a photo album for herself.'

Note that some speakers of the City dialect claimed that *diri-ɲo* followed by *dewe?* is not a native form in Jambi Malay. Instead, they claimed that *diri-ɲo dewe?* is a form which is adopted from the Indonesian *dirinya sendiri* 'himself/herself'.

1.6.2. Lexicalized Reflexive Forms

In Standard Indonesian and Riau Indonesian, the use of *diri* without a pronominal form is only found in inherently reflexive predicates. Likewise, Jambi Malay also does not make use of *diri* productively. In fact, *diri* is only used with some verbs which appear to be lexicalized forms, as exemplified in the following examples.

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[139] For some speakers of the Rural Jambi Malay *-ɲo* may function like a pronoun. Further discussion is provided in 2.1.2.1.2.

(781) ha, tu dapat bibi crito-e-tu,
EXCL DEM.DIST get aunt story-3-DEM.DIST
ŋ^{g}antʊŋ diri
ACT-hang self
'I got info that he hung himself.'

(782) m^{b}unu diri dewe?
ACT-kill self alone
'[They] are killing themselves.'

(783) ŋʊn^{d}ʊrkan diri
ACT-withdraw-APPL self
'Retire.'

(784) kalu dio? da? nahan diri, (TR, E)
TOP 3 NEG ACT-withstand self
biso mati malɪŋ-tu
can dead thief-DEM.DIST
'If they had not controlled themselves, the thief would have died.'
[context given in the elicitation: a thief was tortured by a group of people after he got caught]

The use of *diri* is only restricted to these verbs. *Diri* alone is not used with other verbs.

1.6.3. Scope of Reflexivity and Anaphoric System in Jambi Malay

As means of expressing reflexivity, all anaphoric forms discussed in section 1.6.1 appear in the same clause with their antecedents. However, these forms may also have long distance antecedents. In this section, I shall review the discussion provided on each anaphoric form presented above, discuss its scope and show how its distribution fits into the binding theory. Furthermore, I shall show that the anaphoric system of the Rural Jambi dialects differs from that of the City dialect.

1.6.3.1. Pronouns

As previously discussed, pronouns cannot be used as reflexive pronouns in the City dialect. In other words, pronouns cannot have a local antecedent in the City

dialect. This indicates that pronouns in the City dialect are as described by Principle B of the Binding theory: pronouns must not have a local antecedent. The example in (771) is repeated in (785) below.

(785) edi cinto dioʔ (JC, E)
Edi love 3
'Edi loves him.'
*'Edi loves himself.'

In (785), *dioʔ* can only refer to someone other than the subject *edi* 'Edi'.

In the Rural Jambi Malay dialects, however, pronouns may have a local antecedent which suggests that pronouns in these dialects are not pronouns as defined by Principle B of the binding theory. Thus, the pronoun in the sentences in (769), repeated in (786) below, may have a reflexive reading in addition to the non-reflexive reading. [The preferred interpretation is italicized.]

(786) a. dio cinto dio (MD, E)
3 love 3
'He loves *him/*himself.'

b. yanti neŋoʔ dio di tipi (MD/TR, E)
Yanti ACT-see 3 LOC television
'*Yanti saw him on TV*.'/'Yanti saw herself on TV.'

Despite the fact that the first interpretation of the antecedent of the pronoun *dioʔ* '3' in (786)a and (786)b is someone other than the subject of the clause, the reflexive reading is indeed possible.

To conclude, so-called pronouns in the City dialect pattern like pronouns as defined by Principle B of the binding theory, whereas in the Rural Jambi dialects, these forms are underspecified because they can have both local and long-distance antecedents.

1.6.3.2. Pronoun + Emphatic Marker *–La*[140]

The sequence of a pronoun followed by the emphatic marker *–la* in the Rural Jambi dialects may also have both local and non-local antecedents. However, a difference is noted between a pronoun which appears alone and a pronoun which is followed by the emphatic marker *–la.* If the pronoun appears alone, the preferred interpretation is non-local, whereas when it co-occurs with the emphatic marker *–la,* the preferred interpretation is local. Examples follow.

(787) a. budaʔ-tu ɲʊbɪt dioʔ-la (TR, E)
kid-DEM.DIST ACT-pinch 3-EMPH
'The kid pinched *himself*/him.'

b. budaʔ-tu ɲʊbɪt dioʔ (TR, E)
kid-DEM.DIST ACT-pinch 3
'The kid pinched *him*/himself.'

In (787), the emphatic marker *–la* follows the third person pronoun *dioʔ* and the preferred interpretation is the reflexive reading. Otherwise, the non-reflexive reading is preferred.

Although *–la* triggers a stronger local antecedent interpretation, long distance and discourse antecedents are not impossible, as shown below.

(788) yanti pɪkɪr arna cinto dioʔ-la (TR/MD, E)
Yanti think Arna love 3-EMPH
'Yanti thinks Arna loves *herself/Yanti*/him.'

Furthermore, if the emphatic marker *–la* is absent, the reflexive reading is still available despite the fact that the first interpretation would be *yanti* 'Yanti' or a discourse antecedent, shown below.

[140] The discussion on the emphasis is provided in section 1.11.

(789) yanti pɪkɪr arna cinto dio (TR/MD, E)
Yanti think Arna love 3
'Yanti thinks Arna loves herself/Yanti/him.'

It has so far been shown that a pronoun followed by *–la* can be used for local, long distance and discourse reference. Moreover, a pronoun + *-la* can also be used regardless of whether or not the antecedent c-commands the anaphoric form, as shown in (790) below.

(790) mamaʔ nik cinto anaʔ-e laki-e, jugo dŋan dio-la(TR, E)
mother Nick love child-3 male-3 also with 3-EMPH
'Nick's mother loves her child, her husband and also herself/him.'

The antecedent for *dioʔ-la* in (790) can be the c-commanding nominal *mamaʔ nik* 'Nick's mother' as well as the non-c-commanding possessor *nik* 'Nick'.

To conclude, a pronoun followed by the emphatic marker *–la* is vague with respect to its referential possibilities, as it can be used for local and long distance as well as discourse co-reference, depending on the context in which it is used. Furthermore, a c-commanding antecedent is not a prerequisite to a pronoun + *-la.* In short, a pronoun followed by the emphatic marker *–la* is not an exclusive form for a pronoun, a reflexive pronoun, or even the long distance reflexive.

1.6.3.3. Pronoun + Intensifier *Deweʔ*

Like the emphatic marker *–la,* the intensifier *deweʔ* following the pronoun makes the local antecedent interpretation stronger than the mere pronoun, as shown below.

(791) maʔ sʊpɪʔ nampar dioʔ deweʔ (TR, E)
mother Supik ACT-slap 3 alone
'Supik's mother slapped *herself/(*only) her.'

In (791), the interpretation of *dio?dewe?* can be 'herself' as well as 'her' and the first reading is 'herself'. This indicates that *dewe?* is just like *–la* in that both make the reflexive interpretation stronger.

Again, like *–la, dewe?* triggers a stronger local antecedent interpretation, but long distance and discourse interpretations are also possible, as illustrated below.

(792) yanti pıkır arna cinto dio dewe? (TR, E)
Yanti think Arna love 3 alone
'Yanti thinks Arna loves *herself/Yanti*/him.'

Moreover, if *dewe?* is not present in the above sentence, the reflexive reading is still available, although the first interpretation would be *yanti* or a discourse antecedent, as illustrated below.

(793) yanti pıkır arna cinto dio
Yanti think Arna love 3
'Yanti thinks Arna loves Arna/*Yanti/him*.'

In addition, as *dio?dewe?* does not require a c-commanding antecedent, it does not display the property of a typical 'long distance reflexive'.

(794) yanti bacakap samo arna tntaŋ dio dewe?
Yanti INTR-talk withA rna about 3 alone
'Yanti talked to Arna about Arna/Yanti/him.'

In (794), *dio?dewe?* can refer to both the object of the preposition *samo* 'with' and to the c-commanding subject (*yanti* 'Yanti').

Finally, like *–la,* a pronoun + *dewe?* does not require a c-commanding antecedent, as shown below.

(795) mama? nik cinto ana?-e laki-e, jugo dŋan dio-la
mother Nick love child-3 male-3 also with 3-EMPH
'Nick's mother loves her child, her husband and also herself/him.'

In (795), the antecedent for the anaphoric form can be the c-commanding nominal (*mamaʔ nik* 'Nick's mother) as well as the non-c-commanding possessor (*nik* 'Nick') (Cole et al., in prep.:9).

To conclude, a pronoun followed by *dewe?* is also an underspecified anaphoric form as it can be used for local, long distance and discourse co-reference. The only difference between the two is that a pronoun + *-la* is only used in the Rural Jambi dialects, whereas a pronoun + *dewe?* is used in all three dialects covered in this dissertation. Cole et al. (in prep.) point out that the emphatic marker *–la* is purely an emphatic or focal marker and does not carry an interpretation as 'only' or 'alone'. It is true that in most cases, *-la* functions as an emphatic marker, but in certain contexts, *-la* may be translated as 'only'. Some naturalistic and elicited data are shown below. Note that in the elicitation, the speakers usually needed an extra context, such as pointings to get the 'only' meaning. (see section 2.1.8.1.1 for the discussion of *–la*).

(796) a. ʊsna ŋᵍbʊk dioʔ-la
Usna ACT-hit 3-EMPH
'Usna hit herself/only him.'

b. rti kau duo-la di sano
meaning 2SG two-EMPH LOC there
'So, only two of you were there.'

c. dioʔ ŋʊrʊsi kaluargo dioʔ-la kan
3 ACT-manage-APPL family 3-EMPH Q
'He just takes care of his own family.'

1.6.3.4. *Diri* + Pronoun + Optional Intensifier *Dewe?*

Diri + pronoun which is optionally followed by *dewe?* can also be used as either a pronoun or a reflexive. The examples in (797) indicate the use of *diri* + pronoun + optional *dewe?* as pronouns, whereas in (798) they are used as reflexives (Cole et al., in prep.:13-14).

(797) a. apo yaŋ tajadi bakal di diri kito,
what REL PFCT.PAST-become future LOC self 1
kito trimo
1 accept
'Whatever happens to us, we accept it.'

b. hm ujian diri awaʔ
uh-huh test-NMLZ self 1/2/3
'Yeah, it's a test for us.'

c. la ɲlamati diri awaʔ
PFCT ACT-safe-APPL self 1/2/3
'He saved me.'

(798) a. cuman awaʔ jago diri awaʔ, jaŋan
only 1/2/3 keep self 1/2/3 do.not
sampe… anu
reach whachamacallit
'But you have to take care of yourselves, don't make whachamacallit.'

b. rsɪ trʊs diri awaʔ
clean continue self 1/2/3
'We keep ourselves clean.'

c. aku mrkam-la diri aku deweʔ
1SG ACT-record-EMPH self 1SG alone
'So I recorded myself.'

d. edi nʊlʊŋ diri dioʔ deweʔ-la
Edi ACT-help self 3 alone-EMPH
'Edi helps himself.'

To conclude, *diri* + pronoun and an optional *dewe?* is also vague with respect to its referential possibilities. In other words, it is not a true pronoun and it is not a true reflexive, either.

1.6.3.5. *Diri* +*-ɲo* + Optional Intensifier *Dewe?*

As shown in section 1.6.1.5, *diriɲo* which is optionally followed by *dewe?* can be used to express reflexivity in the Rural Jambi dialects. However, again, *diriɲo* can also be used as a pronoun, as illustrated below.

(799) yanti mᵇlikan album poto ʊntʊʔ diri-ɲo (TR, E)
yanti ACT-buy-APPL album photo for self-3
'Yanti bougth a photo album for him/herself.'

In the City dialect, however, *diri* + *-ɲo* + *dewe?* appears to be the only reflexive form, as indicated in (800) below.

(800) edi raso amik cinto diri-ɲo dewe? (JC, E)
Edi feel Amik love self-3 alone
'Edi thinks Amik loves herself/*Edi/*her.'

To conclude section 1.6.3, the Rural Jambi dialects do not display a true form of reflexive in terms of the Government and Binding theory, whereas the City dialect exhibits one, despite the fact that some speakers claim that this form is a loan form from the Indonesian *dirinya sendiri.* Table 1.4 and Table 1.5 below summarize the anaphoric system of the Rural Jambi Malay dialects and the City dialect, respectively.

Table 1.4 The Anaphoric System of the Rural Jambi Malay Dialect[141]

Pseudo-reflexive[142]	*dioʔ* *dioʔ-la* *dioʔ deweʔ* *diri dioʔ (deweʔ)* *diri-ɲo (deweʔ)*

Table 1.5 The Anaphoric System of the City dialect

Pronoun	*Dio*
True reflexive	*dioʔ deweʔ (diri-ɲo deweʔ)*
Pseudo-reflexive	*dioʔ deweʔ*

1.7. Reciprocals

Reciprocals are expressed using the circumfix *ba-an* and the reduplicated form of a verb followed by the suffix *–an*. Note that when the circumfix *ba-an* is used, the base to which the circumfix attaches may be a root verb or a reduplicated form.

(801) Reciprocal using the circumfix *ba-an* + root verb

a. bakapaʔan apo n^{d}aʔ babunuan
RECP-axe-CIRC or want RECP-kill-CIRC
'[They either] slaughtered each other or wanted to kill each other.'

b. siti dŋan ʊpɪʔ baplʊʔan (TR, E)
Siti with Upik RECP-hug-CIRC
'Siti and Upik are hugging each other.'

[141] First presented in Cole et al. (in prep.)

[142] It is called pseudo reflexive because it is not exclusively used as a reflexive.

(802) Reciprocal using the circumfix *ba-an* + reduplicated verb

a. bntar la rɪbʊt, batataŋanan, bapʊkʊl-pʊkʊlan
moment PFCT noisy RECP-PARTRED-hand-CIRC RECP-red-hit-CIRC
'They often quarrel and hit each other.'

b. budi dŋan eko batiɲʲu-tiɲʲuan (TR, E)
Budi with Eko RECP-RED-fist-CIRC
'Budi and Eko are hitting each other.'

(803) Reciprocal using a reduplicated form + suffix *–an*

a. paŋaru-tu main ajaʔ-ajaʔan-tu-la
influence-DEM.DIST play RED-invite-NMLZ-DEM.DIST-EMPH
'The influence was…. They invited each other.'

b. siti dŋan ʊpɪʔplʊʔ-plʊʔan (TR, E)
Siti with Upik RED-hug-NMLZ
'Siti and Upik are hugging each other.

1.8. Comparison

Different kinds of comparison in Jambi Malay are expressed using adjectives. The detailed description is provided in section 2.1.4.2.

1.9. Equatives

Equatives are considered as one of the comparison types in Jambi Malay and the description is presented in section 2.1.4.2.1.

1.10. Possession

Possession in Jambi Malay can be expressed in a noun phrase and in a clause. In the noun phrase, the possessor simply appears after the head noun. The possessor can be a noun phrase (shown in (804)) (see also 1.2.2.4.2.3) or a possessive pronoun, as exemplified in (805). See section 1.2.2.4.2.4 for the description of possessive modification in the noun phrase.

(804) a. anaʔ baŋ latip
child TRU-brother Latif
'Latif's child.'

b. laki rosima
husband Rosima
'Rosima's husband'

(805) a. ruma-e
house-3
'his house'

b. umo dioʔ
paddy 3
'his paddy'

In a clause, the possession is indicated by the use of the possessive verbs: *ado* 'exist' and *puŋo* 'have'.

As discussed in section 1.1.3.5.2, *ado* 'exist' can be used to mean 'to have' or 'to own'. Examples follow.

(806) a. dioʔ ado anaʔ go
3 exist child also
'They also have children.'

b. kulo waʔ ciʔ ado niat
1SG aunt.or.uncle TRU-small exist intention
n^{d}aʔ ŋiŋon ayam-ko
want ACT-breed chicken-DEM.PROX
'I have a desire to raise chickens.'

Similarly to *ado* 'exist', the verb *puŋo* 'possess' is used to express possession, as exemplified below.

(807) a. dioʔ-ko la puŋo anaʔ-la
3-DEM.PROX PFCT have child-EMPH
'He has got children.'

b. ay, bapɪkɪr pulaʔ awaʔ puŋo laki,
EXCL INTR-think PART 1/2/3 possess husband
awaʔ lagi mudo
1/2/3 PROG young
'Well, I was thinking that I already had a husband and I was still young.'

To conclude, *puŋo* and *ado* can both be used to express possession in Jambi Malay. However, unlike *ado*, *puŋo* does not have functions other than expressing possession.

1.11. Emphasis

Various means of expressing emphasis can be used in Jambi Malay. These include emphatic markers, cleft structure, and topic-comment structures.

The distinction between sentence emphasis and constituent emphasis is often difficult to make. In many cases, whether the entire sentence or a particular constituent is emphasized is a matter of context rather than linguistic form. This section is divided into two subsections. In section 1.11.1, I present sentence emphasis and in section1.11.2, I present constituent emphasis.

1.11.1. Sentence Emphasis

Sentence emphasis can be conveyed using the emphatic marker *kan* and emphatic marker *–la.*

1.11.1.1. Emphatic Marker *Kan*

The morpheme *kan* has two grammatical functions, namely question marker and emphatic marker. Without a clear context, it is often difficult to decide whether *kan* functions as an emphatic marker or a question marker. When it functions as a yes-no question marker, it normally occurs after the main statement and thus it

looks like a tag question (cf. section 1.1.3.2.1.1.2 and section 1.1.3.2.1.1.3). When it functions as an emphatic marker, it usually appears before the subject or after the subject of the clause. When *kan* is used as an emphatic marker, it emphasizes the fact given in the statement. Moreover, *kan* is not contrastive. Examples follow.

(808) ARNTJR : oraŋ-tu mᵇli ka bibi obat-tu?
person-DEM.DIST ACT-buy to aunt medicine-DEM.DIST
'Did they buy the medicine from you?'
MARTJR : idaʔ, aku kan katuo pos kabı
NEG 1SG EMPH chief post K.B
'No, You know I was the chief of the Family Planning program.'

(809) kalu karajınan tadi kami-ko
TOP handicraft earlier 1-DEM.PROX
misal-e apo-ko ı… mrenᵈa;
example-3 what-DEM.PROX FILL ACT-crochet
bŋen-ko kan mᵇuat bnaŋ wol
before-DEM.PROX EMPH ACT-make thread wool
'Our handicraft is, for example, crochet. We used to make crochet from wool.'
[Lit. 'Our handicraft is err... for example, err… crochet. We used to make wool.'

(810) ɲai ciʔ Halima, bole katokan, ması
grandmother TRU-small Halimah may word-APPL still
hʊbʊŋan kaluargo-la; kan dioʔ-tu oraŋ taɲʲʊŋ pasır
relate-NMLZ family-EMPH EMPH 3-DEM.DIST person Tanjung Pasir
'I can say that Grandma Halimah is still my relative. She is from Tanjung Pasir.'

In (808), MARTJR answers ARNTJR's question, which is about whether or not the people in the village bought the birth control pills from MARTJR. In addition to answering 'no', MARTJR emphasizes the fact that she was the chief of the family planning program; and thus she handled the distribution of the pills. In (809), the speaker first mentioned that crochet is one of the handicrafts made in the village and

then she emphasized that in fact they used to make crochet from wool. In (810), the speaker wanted to convey that Grandma Halimah was indeed one of her relatives because she is from Tanjung Pasir. Apparently, many of the speakers' relatives live in Tanjung Pasir.

1.11.1.2. Emphatic Marker *–La*

When the entire clause is emphasized, the emphatic marker *–la* mainly appears on the verb of the sentence. Consider the following examples.

(811) a. aku ŋam^{b}ɪʔ-la ssudu di sano
1SG ACT-take-EMPH k.o.plant LOC there
'Then, I took *ssudu* there.'

b. nuŋ^{g}u-la kkiro satŋa jaman
ACT-wait-EMPH PARTRED-about one-middle hour-NMLZ
ruma oraŋ-tu
house person-DEM.DIST
'So, we waited for about half an hour at the man's house.'

c. bapaʔ kau ŋam^{b}ɪʔ-la piso
father 2SG ACT-take-EMPH knife
'Then, your father took a knife.'

Without the emphatic marker *–la,* the sentences in (811) are neutral declarative sentences. The emphatic marker in those sentences functions as an emphatic marker on the information given in the sentences. Verbs containing the emphatic marker *–la* normally indicate a conclusion to what has been talked about or the result of something that was mentioned before. Therefore, when the sentence is translated, it frequently begins with the phrase, 'So…' or 'Then…'.

In section 1.4.1.4.1, I discuss double negative marker for emphasis.

1.11.2. Constituent Emphasis

In discussing constituent emphasis, I focus on NP emphasis. In section 1.11.2.1 through section 1.11.2.3, I present means of expressing NP emphasis: the emphatic marker *–la,* cleft structure, and topic-comments.

1.11.2.1. Emphatic Marker *–La*

The emphatic marker *–la* attaches to the emphasized NP. Examples follow.

(812) kalʊ ko bima almubarak; lʊm ado man^{d}i;
TOP DEM.PROX Bima Almubarak not.yet exist bathe
ko aku-la man^{d}i-e-ko
DEM.PROX 1SG-EMPH bathe-3-DEM.PROX
'This is Bima Almubarak; He hasn't taken a bath; I'm the one who bathes him.'

(813) dioʔ tadi di balakaŋ ruma-la
3 earlier LOC back house-EMPH
'They are just at the back of this house.'

In (812), the speaker emphasized that she was the one who bathes her grandson. In (813), the speaker intended to emphasize that the ducks were just at the back of her house.

In addition to giving an emphatic sense, the emphatic marker *–la* that follows an NP also adds the meaning of *only*. Often times, be ~ bae appears before *–la* to intensify the "only" meaning. Examples follow.

(814) sabʊtɪr-tu-la batino-e
one-grain -DEM.DIST-EMPH female-3
'That is the only female one.'

(815) dioʔ ŋʊrʊsi kaluargo dioʔ-la, kan
3 ACT-manage-APPL family 3-EMPH Q
'He just takes care of his own family, you know.'

(816) e, kɲoʔ hobi minum kopi, minuman aku ɲla;
EXCL not like drink coffee drink-NMLZ 1SG indeed
kopi be-la minuman aku
coffee just-EMPH drink-NMLZ 1SG
'It is not that drinking coffee is my hobby, it is indeed my drink; I only drink coffee.'

(817) apo aku tɪtɪp di kau be-la?
or 1SG entrust LOC 2SG just-EMPH
'Or… can I just entrust it to you?'

As pointed out in sections 1.5.1.3 and 1.6.1.2, the emphatic marker *–la* which attaches to a pronoun may be used to express reflexivity.

1.11.2.2. Cleft Structure

Another means of formulating NP emphasis is by using the cleft structure. The cleft structure is formulated using a headless relative clause and the emphatic marker *–la*. The basic formula for such as a structure is shown in (818) and some examples are presented in (819).

(818) NP-*la* Headless RC or Headless RC NP-*la*

(819) a. yaŋ baru dibagɪ-e ko-la
REL just PASS-give-3 DEM.PROX-EMPH
'This is what has been given to us.'

b. aeʔ te tu-la yaŋ ado-e
water tea DEM.DIST-EMPH REL exist-3
'It is tea that we have.'

c. naŋ bapantaŋ-ko kami-ko-la
REL INTR-forbidden-DEM.PROX 1-DEM.PROX-EMPH
'It is us who avoid certain foods.'

d. rti duwɪt-tu-la naŋ kau kʊmpʊli
meaning money-DEM.DIST-EMPH REL 2SG collect-APPL
'It means it is the money that you save.'

e. iyo-la, aku-la yaŋ ŋaja?-ŋaja? buda?-ko, kan?
yes-EMPH 1SG-EMPH REL RED-ACT-invite kid-DEM.PROX Q
'It was me who invited the boys, you know.'

Note that the presence of the emphatic marker *–la* is not obligatory, as the following sentences show.

(820) a. oraŋ cino yaŋ srıŋ m^{b}uat cam-tu
person China REL often ACT-make like.that
'It is the Chinese people who often make it.'

b. jadi, aku yaŋ mgaŋ uba?ubat-tu
become 1SG REL ACT-hold RED-medicine-DEM.DIST
'So, it was me who handled the medicines.'

c. yo, kawan nabi tadi, yaŋ ɲom^{b}oŋ
yes friend prophet earlier REL ACT-lie
'Right, it was the prophet's friend who lied.'

The structure of cleft sentences discussed in this section corresponds to the structure of headless relative clauses in questions discussed in section 1.1.3.2.2.2.4.

1.11.2.3. Topic-comments

Topic-comment structure is also one way of expressing NP emphasis. A full discussion is provided in section 1.12.

1.12. Topic

Sneddon (1996) points out that the topic-comment clause is one of the derived clauses found in Indonesian (see also Dardjowidjojo, 1967:126-130). The purpose of the topic-comment clauses is to emphasize a particular noun phrase.

Like Indonesian, Jambi Malay exhibits topic-comment clauses. This type of clause is also intended to emphasize a certain noun phrase. The process of formulating topic-comment clauses in Jambi Malay is as follows. First, the noun

phrase that is being emphasized is extracted out of its position and becomes a topic. Second, the position from which the noun phrase is taken is filled by the third person enclitic pronoun *–e* or *-ɲo* (object position), or the third person pronoun *dio?* (subject position). Examples follow.

(821) a. raden alas-tu, namo-e raden aptʊlrahman
Raden Alas-DEM.DIST name-3 Raden Abdulrahman
'As for Raden Alas, his name is Raden Abdulrahman.'

b. bini-e, siapo namo-e?
wife-3 who name-3
'His wife, what is her name?'

In (821)a, the noun phrase *raden alas-tu* 'Raden Alas' is the topic of the clause and the clause following it *namo-e* raden aptʊlrahman 'his name is Abdulrrahman' is the comment to the topic. Likewise, in (821)b, *bini-e* 'his wife' is the topic of the clause and the clause *siapo namo-e* 'what is her name' that follows it is the comment.

Jambi Malay exhibits three types of topic-comment clauses: possessor topic-comment clauses, object topic-comment clauses, and the subject topic-comment clauses.[143]

1.12.1. Possessor Topic-comment Clauses

The possessor topic-comment clause is derived from a clause whose subject noun phrase is a possessor. The possessor is placed before the clause and it becomes the topic. Examples follow.

[143] Sneddon (1996) points out that Indonesian has possessor topic-comment clauses and object topic-comment clauses.

(822) a. Main Clause

namo raden alas-tu raden aptʊlrahman
name Raden Alas-DEM.DIST Raden Abdulrrahman
'Raden Alas's name is Raden Abdulrrahman.'

b. Topic-Comment Clause

raden alas-tu, namo-3 raden aptʊlrahman
Raden Alas-DEM.DIST name-3 Raden Abdulrrahman
'As for Raden Alas, his name is Raden Abdulrrahman.'

(823) a. Main Clause

asal buda?-tu kaka? klas di dio?-tu (TR, E)
origin kid-DEM.DISTolder.sibling grade LOC 3-DEM.DIST
'The boy was originally her senior.'

b. Topic-Comment Clause

buda?-tu, asal-e kaka? klas di dio?-tu
kid-DEM.DIST origin-3 older.sibling grade LOC 3-DEM.DIST
'As for the boy, he was originally her senior.'

The possessor topic-comment clause is often introduced by a topic marker *kalu/kalaw*, as exemplified below.

(824) a. kalu idaŋan-tu, namo-e talam
TOP big.round.tray-DEM.DIST name-3 tray
'The big round tray is called *talam*.'

b. kalaw baŋ edi, ruma-ɲo di sini jugo (JC, E)
TOP TRU-brother Edi walk-3 LOC here also
'As for Edi, his house is also here.'

1.12.2. Object Topic-comment Clause

The object topic-comment clause is derived from an active transitive clause. The object of the basic clause is extracted to a topic position and its position is filled by the enclitic *–e/-ɲo.* The (a) sentence in the following examples is the basic clause and the (b) sentence is the topic-comment clause derived from them.

(825) a. awaʔ sopan ŋadap oraŋ tuo-tu (TR, E)
1/2/3 polite ACT-face person old-DEM.DIST
'We are polite in dealing with the elderly.'

b. oraŋ tuo-tu, awaʔ sopan ŋadap-e
person old-DEM.DIST 1/2/3 polite ACT-face-3
'As for the elderly, we need to be polite in dealing with them.'

(826) a. dulu oraŋ taɲʲʊŋ raden go
before person Tanjung Raden also
mᵇawaʔ mʊbɪl dioʔ (TR, E)
ACT-bring car 3
'A Tanjung Raden man was his driver.'
[Lit. 'Someone who is also from Tanjung Raden drove his car']

b. dulu mʊbɪl dioʔ, oraŋ taɲʲʊŋ.raden go
before car 3 person Tanjung.Raden also
mᵇawaʔ-e
ACT-bring-3
'As for his driver, it was someone who is also from Tanjung Raden.'
[Lit. 'As for his car, someone who is also from Tanjung Raden drove it.']

Similar to the topic in possessor topic-comment clauses, the topic in object topic-comment clauses can be introduced by the topic marker *kalu/kalaw*, as exemplified below.

(827) a. kalu kulkas, paya dioʔ mᵇawaʔ-e
TOP refrigerator difficult 3 ACT-bring-3
'As for a refrigerator, it is difficult for him to carry it.'

b. kalaw ikan, biaʔ aku be ɲari-ɲo (JC,E)
TOP fish so.that 1SG just ACT-seek-3
'As for fish, let me find them.'

It should be pointed out that the NPs *oraŋ tuo-tu* 'the elderly' in (825)b, *mʊbɪl dioʔ* 'his car' in (826)b, *kulkas* 'refrigerator' in (827)a, and *ikan* 'fish' in (827)b are not direct objects which are extracted out of active transitive verbs. Instead they are the topic NPs. The direct object of the active transitive verb is the enclitic *–e* in (825)b, (826)b, and (827)a, and the enclitic *-ɲo* in (827)b.

1.12.3. Subject Topic-comment Clauses

To formulate the subject topic-comment clause, the subject of the clause is extracted to the topic position, but unlike the previously discussed topic-comment types, the position of the subject in the clause is filled by the third person pronoun *dioʔ*. Examples follow.

(828) a. bibi kau-ko daʔ tuka
aunt 2SG-DEM.PROX NEG can
mlatɪʔi oraŋ (TR, E)
ACT-tempt-APPL person
'Your aunt cannot tempt people.'

b. bibi kau-ko, dioʔ daʔ tukaŋ mlatɪʔi oraŋ
aunt 2SG-DEM.PROX 3 NEG can ACT-tempt-APPL person
'As for your aunt, she cannot tempt people.'

(829) a. ha, ɲʲadi kancɪl-ko nakal (TR, E)
EXCL so mouse.deer-DEM.PROX naughty
'This mouse deer, he was tricky.'

b. ha, ɲʲadi kancɪl-ko, dioʔ-ko nakal
EXCL so mouse.deer-DEM.PROX 3-DEM.PROX naughty
'Well, as for this mouse deer, he was tricky.'

Like the other two types of topic-comment clauses, the subject topic-comment clause can also be introduced by the topic marker *kalu/kalaw*, as exemplified below.

(830) kalu jaŋciʔ, dioʔ biaso masaŋ pukat malam-malam
TOP Jangcik 3 usual ACT-set dragnet RED-night
'As for Jangcik, he usually set up a dragnet at night.'

To conclude, Jambi Malay shows three different types of topic-comment clauses: possessor topic-comment clauses, object topic-comment clauses, and subject topic-comment clauses. These three types of topic-comment clauses are similar in two ways. First, the noun phrase that is being emphasized is in topic position, whereas the

position from which the topic is taken from is filled by the third person pronoun (enclitic pronouns *–e/-ɲo* for the first two types and the pronoun *dio?* for the last type). Second, the topic of the topic-comment clauses can be introduced using the topic marker *kalu/kalaw*.

(831) bʊrʊŋ yaŋ dicari-tu, namo-e bʊrʊŋ roaʔroaʔ
bird REL PASS-seek-DEM.DIST name-3 bird k.o.bird
'The name of the bird that we are looking for is *roaqroaq*.'

In (831), the relative clause *bʊrʊŋ yaŋ dicari-tu* 'the bird that we're looking for' is the topic of the clause and the clause following it *namo-e bʊrʊŋ roaʔroaʔ* 'its name is *roaqroaq*' is the comment to the topic. A detailed discussion of the relative clause is provided in section 1.1.4.2.

1.13. Heavy NP Shift[144]

It is unclear whether or not Jambi Malay exhibits heavy NP shift. However, it is somewhat clearer that complex noun phrases and other heavy elements can move to the right within a main clause.

(832) a. kami biaso m^{b}li $Ø_i$ di toko ali
1 usual ACT-buy LOC shop Ali
bras dari luar jam^{b}i$_i$ (TR, E)
uncooked.rice from outside Jambi
'We usually buy at Ali's store, the rice from outside Jambi.'

b. edi minum $Ø_i$ saban pagi kopi
Edi drink every morning coffee
yaŋ dibuat maʔ-e$_i$ (TR, E)
REL PASS-make mother-3
'Edi drinks every morning, the coffee that his mother prepares.'

[144] In the Lingua questionnaire, the term 'heavy shift' is used.

However, movement to the right in main clause is not limited to complex noun phrase. A simple noun phrase can also move to the right, as shown below.

(833) a. kami biaso m^{b}li Ø$_{i}$ di toko ali bras$_{i}$ (TR, E)
1 usual ACT-buy LOC shop Ali uncooked.rice
'We usually buy rice from Ali's store.'

b. edi minum saban Ø$_{i}$ pagi kopi$_{i}$ (TR, E)
Edi drink every morning coffee
'Edi drinks coffee every morning.'

It should be pointed out that some speakers noted that the sentences in (832) would sound more natural if the object NP appeared right after the verb (its base generated position) or if a determiner such as *tu* 'DEM.DIST' or *ko* 'DEM.PROX' was present after *bras* 'uncooked rice' or *kopi* 'coffee'. However, the important point is that the sentences in (833) are acceptable. This suggests that sentences in (833) are not necessarily examples of heavy NP shift because non-heavy NP can also move rightward. The issue is one of definiteness rather than the weight of the NP.

The question that then arises is what kind of movement is involved in the examples in (832) and (833) (see section 1.14 for discussion).

1.14. Other Movement Processes

The only other movement process that I am aware of and which has not been mentioned in previous sections is the type of rightward movement pointed out in section 1.13. As discussed in section 1.1.2.2.1.1, the canonical word order of the matrix clause in Jambi Malay is SVO. If an adjunct is present, the adjunct appears after the direct object, sentence initially, or even between the subject and the verb. In addition, VOS word order is also possible in Jambi Malay. Regardless of the underlying word order and the movement involved in SVO and VOS word orders, the direct object appears after the verb. Surprisingly, the direct object can also appear not

adjacent to the verb that governs it, as in the examples in (833), repeated in (834) below.

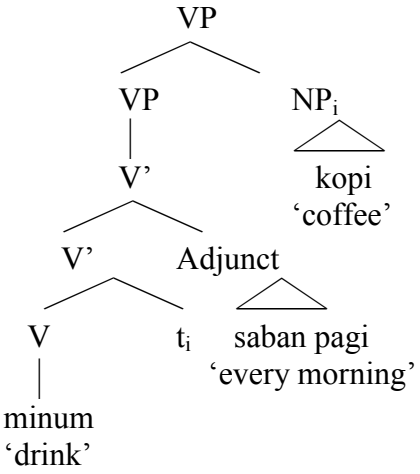
(834) a. kami biaso m^{b}li t_i di toko ali bras$_i$ (TR, E)
1 usual ACT-buy LOC shop Ali uncooked.rice
'We usually buy rice from Ali's store.'

b. edi minum saban t_i pagi kopi$_i$ (TR, E)
Edi drink every morning coffee
'Edi drinks coffee every morning.'

The question that arises with regard to the examples in (832) and (833)/ (834) is what kind of movement is involved in such a structure. In (832) and (834), the moved element is an NP and it leaves a trace. Thus, we may claim the structure in (832) and (834) involves argument movement (A-movement). However, this claim is problematic because the position which the NP moves to is not an argument position since it is not a position for a subject or an object. Thus, the movement involved in (832) and (834) cannot be categorized as A-movement.

An alternative would be to propose that the moved NP undergoes another kind of movement. Despite the fact that it is also unclear why the NP moves to the final position, we might assume that the NP moves and adjoins with the VP, as illustrated below (the illustration for (834)b).

(835)



However, this analysis is also subject to questions as seen in the behavior of negation. Assuming that (835) is the right structure for (834)b, if a negative marker is present, the meaning of the underlying structure and the meaning of the derived structure should be identical. However, the facts show otherwise, as shown below.

(836) a. edi da? minum kopi saban pagi (TR, E)
Edi NEG drink coffee every morning
'Edi doesn't drink coffee every morning.'

b. edi da? minum saban pagi kopi (TR, E)
Edi NEG drink every morning coffee
'Edi doesn't every morning drink coffee.

In (836)a, the negative marker negates the verbal phrase which means that every morning the subject does not drink coffee. In contrast, in (836)b, the negative marker negates the adjunct, which means that the subject drinks coffee, but he does not drink it every morning. A negative marker is projected in NegP which is higher than the VP. Thus, it is unclear why the different word order between the sentence in (836)a and the one in (836)b results in different negation scope. Therefore, the movement of the direct NP as proposed in (835) is unlikely to be the right analysis for the data provided in (832) and (833) (repeated in (834)).

It is unclear what kind of movement is involved in sentences like (832) and (833). I label the movement demonstrated in examples (832) and (833) as rightward movement. For speakers who only accepted the heavy NP or the NP that is followed by a determiner, the reason for the rightward movement is not the weight of the NP, but rather the definiteness of the NP.

1.15. Other Minor Sentence Types

I should note here that although the title of this section is minor sentence types, it does not mean that the sentence types are minor in the sense that there are less frequently used. The sentence types discussed in this section are sentence types which are not covered in section 1.1.3.

1.15.1. Ellipsis

An elliptical sentence is a sentence from which a constituent/element is omitted. The omission is possible if the constituent/element has occurred previously or is understood from the context.

Ellipsis includes NP ellipsis, predicate ellipsis, and ellipsis in responses.

NP ellipsis includes subject ellipsis and object ellipsis. NP ellipsis is referred to NP omission/pro-drop (cf. section 1.1.1.2.2.1 and section 1.5.1.1). Examples of NP ellipsis are shown below.

(837) Subject Ellipsis

sayo	balıʔ;	Ø	balıʔ	di	ŋarʊŋarʊŋ;
1SG	return		return	earlier	PARTRED-ACT-cross
Ø	balari		$n^{d}aʔ$	ŋam^{b}ıʔ	sarampaŋ
	INTR-run		want	ACT-take	spear

'I went home; [I] went home by walking in water; [I] ran to take a spear.'

(838) Object Ellipsis

a,	pgi	kau	am^{b}ɪʔ	saŋkar	balɪwɪs-tu,
EXCL	go	2SG	take	cage	wild.duck-DEM.DIST
bia?	cece		neŋoʔ Ø		
so.that	older.sister		ACT-look		

'Go and get the *beliwis* cage so that she can see [it].'

NP ellipsis can occur in coordinate structures too, as shown below.

(839)

la	ado	baʊʔ	apo	tape-tu	kan,
PFCT	exist	smell	what	k.o.food-DEM.DIST	Q
tapi Ø	blʊm	manis			
but	not.yet	sweet			

'The smell of the *tape* has come up, you know, but [it] is not sweet yet.'

The omitted NP does not have to be the one that appears in the first clause, as shown below.

(840)

karno Ø litaʔ,	kami	dʊdʊʔ	dulu	sabntar	
because tired	1	sit	before	one-moment	

'Because we were tired, we sat down for a while'

Predicate ellipsis occurs frequently, but not necessarily in coordinate structures. The action or state that has been mentioned needs not be repeated in the following clause. The following clause only contains the subject and other words that have not been mentioned in previous clause or contrast with what has been said. Examples follow.

(841)

dioʔ	padeʔ	go	niʊp	tkʊt,	
3	clever	also	ACT-blow	k.o.small.birdtrap	
sʊrʊ-la	dioʔ Ø,	tu			
ask-EMPH	3	DEM-DIST			

'He is also good at blowing the birdtrap, so I asked him [to blow it], that's it.'

(842)

budaʔ-tu	la	biso	jalan,		
kid-DEM.DIST	PFCT	can	walk		
tapi	budaʔ-ko	blʊm	Ø		(TR, E)
but	this-DEM.DIST	blʊm			

'That kid has been able to walk, but this one hasn't yet.'

Ellipsis in responses is termed as fragment sentences and is discussed in section 1.15.2.

1.15.2. Fragment Sentences

A fragment sentence is a term introduced by Dardjowidjojo (1967). Dardjowidjojo (1967:162) states that "a fragment sentence is dependent in the sense that it provides a response to a stimulus sentence given previously."

Fragment sentences are also frequently observed in Jambi Malay, particularly in dialogues. As noted by Dardjowidjojo, the fragment sentence responds to a given stimulus sentence. The stimulus is frequently, but not necessarily, in the form of a question. The following examples are examples of stimulus and fragment sentences. The (a) sentence is the stimulus and the (b) sentence is the fragment sentence. In (843) to (847), the stimulus is in the form of a yes-no question. In (848), the stimulus is a *wh*-question. In (849), the stimulus is a statement and in (850) the stimulus is an imperative.

(843) a. EKOTJR : enaʔ-la mᵇawaʔ duwɪt lbɪ, edaʔ,
nice-EMPH ACT-bring money more Q
tʊʔ?
TRU-grandfather
'It would be better to bring more money, right?'

b. DATTJR : ay, iyo
EXCL right
'Yes, of course.'

(844) a. MARTJR : daʔ masʊʔ giʔ
NEG go.in more
'Don't you want to come in?'

b. MURTJR : daʔ
NEG
'No.'

(845) a. EKOTJR : bʊrʊŋ pinto baŋaʔ tŋa-tu, daʔ?
bird k.o.bird a.lot middle-DEM.DIST NEG
'There are many *pinto* birds in the middle, right?

b. NASTJR : daʔ go
NEG also
'Not really.'

(846) a. MARTJR : tau daʔ kiro di uri dioʔ baraŋkat?
know NEG think LOC Uri 3 leave.for
'Do you think Uri knows that Eko left?'

b. ARNTJR : nta
not.know
'I don't know.'

(847) a. HMDTJR : pulaw btʊŋ-tu ado somel, kan?
island Betung-DEM.DIST exist factory Q
'There is a plywood in Betung island, isn't there?'

b. UMRTJR : ado
exist
'Yes.'

(848) a. SALTJR : siapo kawan-e di ruma?
who friend-3 LOC house
'Who stays with her at home?'

b. ARNTJR : ana, reza
Ana Reza
'Ana and Reza.'

(849) a. TUMTJR : ha, kalu ɪdʊp dioʔ
EXCL top alive 3
enaʔ nian, pɪʔ
nice very TRU-Supik
ŋaniŋ-e dioʔ badoŋeŋ
ACT-listen-3 3 INTR-legend
'Well, if he were alive, it would be great to hear him telling stories.'

b. ARNTJR : ŋ^{g}ɪ
yes
'Right.'

(850) a. SELTJR : ʊ, maʔ, jaŋan sʊrʊ
EXCL mother don't ask
bawaʔ naeʔ, maʔ!
bring go.up mother
'Mom, don't let it go upstairs!
b. RHMTJR : daʔ, daʔ
NEG NEG
'No, no, I won't.'

As shown above, the answer to yes-no question stimuli can simply be *iyo* 'yes' (843) *daʔ* 'no' ((844) and (845)), or *nta* 'don't know' (846). In addition, other responses such as *ado* 'exist' (847) are also possible for yes-no question stimuli. The response to the *wh*-question can be simply the information being questioned (shown in (848)). In (849), the fragment sentence provided to the statement given by the interlocutor is *ŋᵍɪ* 'yes'. In (850), the fragment sentence provided as an answer to the stimulus is *daʔ, daʔ* 'no, no, I won't'. Based on the fragments provided for different stimuli above, it is shown that there is no one-to-one correspondence between the stimulus type and the answer. Answers to different questions are discussed in section 1.1.3.3.

1.16. Word Classes

In section 1.1.2, I showed that based on the predicate type, clauses in Jambi Malay can be distinguished into two classes: verbal clauses and non-verbal clauses. I also showed that non-verbal clauses are further divided into three types: nominal clauses, adjectival clauses and prepositional clauses. However, it is not easy to decide into which word class a lexical item should be classified; in particular it is difficult to distinguish these three word classes: noun, verb, and adjective. As mentioned in section 1.1.2, non-verbal clauses in Jambi Malay do not obligatorily require the presence of a copula. Thus, on the surface, both verbal and non-verbal clauses look very similar, as exemplified in (851) through (853).

(851) Verbal Clauses

[$_{Subj}$ bola-tu [$_{Pred}$ jatʊ]] (TR, E)
ball-3 fall
'The ball fell.'

(852) Nominal Clauses

[$_{Sub}$ namo-3 [$_{Pred}$ wulan]]
name-3 Wulan
'Her name is Wulan.'

(853) Adjectival Clauses

[$_{Sub}$ budaʔ-tu [$_{Pred}$ malas]] (TR, E)
kid-DEM.DIST lazy
'The kid is lazy.'

The sentences in (851) through (853) appear to have to the same structure in that each of them consists of a subject NP and a predicate. There is no overt morphological marking to distinguish the verbal predicate in (851), the nominal predicate in (852), and the adjectival predicate in (853). The question is how one knows that the predicate in (851) through (853) belongs to which word class.

In what follows, I shall describe nouns, adjectives, and verbs and show that they are distinguishable. In addition to these three word classes, I shall describe pronouns, adverbs, prepositions, and numerals, quantifiers, and interrogative words. In the first three subsections, I shall also present some tests that can be employed to distinguish nouns, verbs, and adjectives.

1.16.1. Nouns

A noun is a word which has a referent of a person, a thing, an animal, or an abstract entity, as shown below. The description of the structural properties of the noun phrase is provided in section 1.2.2.4 and different types of nouns are presented in section 2.1.1.2.

(854) a. *buda?* ‘kid’
b. *kampʊŋ* ‘village’
c. *kʊcɪŋ* ‘cat’
d. *ari* ‘day’

There are some tests that can be used to indicate that nouns are different from verbs and adjectives, namely the negation test, the demonstrative test, the subcategorization test, and the numeral test.

The negation test shows that nouns can only be negated by *ŋkɲo?* ‘not’ and *bukan* ‘not’ (see also section 1.4.1.1). Nouns cannot be negated by *da?*. Examples follow.

(855) a. bn^{d}o ŋkɲoʔ ikan krɪŋ
thing not fish dry
‘She is not a dried fish.’

b. dioʔ ŋkɲoʔ adɪʔ aku (TR, E)
3 NEG younger.sibling 1SG
‘She is not my younger sister.’

c. Budi bukan guru (JC, E)
Budi not teacher
‘Budi is not a teacher.’

(856) a. *bn^{d}o daʔ ikan krɪŋ (TR, E)
thing NEG fish dry
‘She is not a dried fish.’

b. *dioʔ daʔ adɪʔ aku (TR, E)
3 NEG younger.sibling 1SG
‘She is not my younger sister.’

c. *budi daʔ guru (TR, E)
Budi NEG teacher
‘Budi is not a teacher.’

In (855)a, *ŋkɲo?* negates the nominal predicate *ikan krɪŋ* ‘dried fish’. However, in (856)a, the same nominal predicate is negated by *da?* and the sentence is ungrammatical. Similarly, while *ŋkɲo?* in (855)b negates the nomimal predicate *adɪ?*

aku ‘my sister’, *daʔ* negates the same nominal predicate in (856)b. Negating the nominal predicate in (856)b results in an ungrammatical sentence. In (855)c, the nominal predicate *guru* ‘teacher’ is negated by *bukan* and the sentence is grammatical. In constrast, when the same predicate is negated by *daʔ* as shown in (856)c, the sentence is ungrammatical. If nouns were indistinguishable from verbs or adjectives, it would be expected that nouns could be negated using any negation and thus, the sentences in (856) would have been grammatical. However, the fact indicates that nouns are different from verbs and adjectives.

The second test is the demonstrative test. The demonstratives *ko, ni* ‘this’, and *tu* ‘that’ can only be used with nouns, as exemplified below.

(857) a. umo-tu
paddy-DEM.DIST
‘that paddy’

b. padi-ko
rice.plant-DEM.PROX
‘this rice’

(858) a. *jatʊ-tu
fall-DEM.DIST

b. *cantɪʔ-ko
beautiful-DEM.PROX

The data in (857) show that *tu* ‘that’ and *ko* ‘this’ can occur with a noun, whereas those in (858) show that they cannot occur with a verb or an adjective.

The third test is the subcategorization test. The verb *cari* ‘seek’ subcategorizes for an NP. The formula in (859) can be used as a frame for testing whether or not an element is nominal. If an element can fill the complement position of the verb *ɲari* ‘look for’ in (859), the element is a noun. A verb or an adjective cannot be used to fill that position.

(859) aku ɲari ___
1 ACT-seek
'I'm looking for___'

In (860) below, the complement of the verb *ɲari* 'look for' is filled by different word classes.

(860) a. aku ɲari pancɪŋ (TR, E)
1SG ACT-seek fishing.rod
'I'm looking for a fishing rod.'

b. *aku ɲari lompat (TR, E)
1SG ACT-seek jump
'I'm looking for the jumper.'

c. *aku ɲari paɲʲaŋ (TR, E)
1SG ACT-seek long
'I'm looking for the long one.'

In (860)a, the word *pancɪŋ* 'fishing rod' is allowed to fill the position after the verb *ɲari*. This is an indication that *pancɪŋ* is a noun. In contrast, when a verb such as *lompat,* as in (860)b, or an adjective such as *paɲʲaŋ*, as in (860)c, appears as the complement of the verb *ɲari*, the sentences are ungrammatical. This suggests that nouns are different from adjectives and verbs.

The fourth test to set nouns apart from verbs and adjectives is the numeral test. Only nouns can be modified by a numeral and classifier or a measurement. Only nouns can be followed by numeral and a classifier or a measurement, as in (861) below. Note that the classifier is optional (see section 2.1.1.3).

(861) a. duo (ekoʔ) buku
two CLF book
'two books'

b. limo kilʊ bras
five kilogram uncooked.rice
'five kilograms of uncooked rice'

Modifying a verb or an adjective using a numeral and a classifier or a measurement results in ungrammatical structures, as shown below.

(862) a. *duo (ekoʔ) tarıʔ
two CLF pull
'two pulls'

b. *tigo kilʊ kciʔ
three kilogram small
'three kilograms of smallness'

To conclude, nouns are distinguisable from adjectives and verbs using four tests: the negation test, the demonstrative test, the subcategorization test, and the numeral test.

1.16.2. Verbs

Verbs and adjectives are more difficult to distinguish. Some tests can be used to distinguish verbs and adjectives from nouns, as presented in section 1.16.1 above; however, these tests cannot distinguish verbs from adjectives. However, two possible tests can separate verbs from adjectives, namely the prefix *ta-* test and exclamation test. The exclamation test is presented in section 1.16.2.

In what follows, I shall first show that although the negation test can distinguish verbs and adjectives on the one hand and nouns on the other hand, it cannot distinguish adjectives drom verbs. Then, I shall present how the prefix *ta-* test distinguishes verbs and adjectives.

In section 1.16.1, I have shown that nouns can only be negated using *kɲoʔ/bukan*. In contrast, the negative marker, *daʔ* can only negate a verbal or an adjectival predicate, as shown below.

(863) a. kau daʔ neŋoʔ pisaŋ kayaʔ-tu, biji-e
2SG NEG ACT-look banana k.o.banana-DEM.DIST kernel-3
'You never see seeds of *kayak* banana.'

b. daʔ elоʔ kawa-tu
NEG beautiful big.frying.pan-DEM.DIST
'The frying pan is not good.'

(864) *dioʔ daʔ plisi (TR, E)
3 NEG police
'He is not a police officer.'

The examples in (863) show that the negative marker *daʔ* can negate a verbal predicate or an adjectival predicate. However, (864) shows that *daʔ* cannot negate a nominal predicate. Although negation test can separate verbs and adjectives from nouns, it cannot distinguish verbs and adjectives.

In section 2.1.3.1.2.2, I present that the prefix *ta-* attaches to verbs in order to derive *ta-* verbs and these verbs fit into one of these categories: stative, accidental, and abilitative. Verbs that are prefixed by *ta-* may have accidental meaning. However, adjectives that are prefixed by *ta-* do not have accidental meaning. In addition, nouns can never be prefixed by *ta-*. Examples follow.

(865) a. buku-e tabawaʔ dioʔ (TR, E)
book-3 PFCT.PASS-bring 3
'The book was (accidentally) brought by him.'

b. budi tajatʊ di jalan (TR, E)
Budi PFCT.PASS-bring LOC walk
'Budi (accidentally) fell down on the street.'

(866) *dioʔ anaʔ tabsaʔ (TR, E)
3 child PFCT.PASS-bring
'He is (accidentally) big.'

(867) *dioʔ tabudaʔ kciʔ (TR, E)
3 PFCT.PASS-kid small
'He is (accidentally) a small kid.'

To conclude, verbs are often undistinguishable from adjectives, as shown by the negation test. However, the accidental *ta-* prefix test can separate verbs from

adjectives as well as nouns. In section 1.16.3, I show that the exclamation test also can separate adjectives from verbs and nouns.

1.16.3. Adjectives

An adjective is a word which describes a noun. The description of the adjective phrase is provided in section 1.2.2.1 and the different types of adjectives are presented in section 2.1.4.

In section 1.16.1, I showed how nouns can be distinguished from verbs and adjectives. In section 1.16.2, I showed that verbs can also be distinguished from adjectives and nouns by using the *ta-* prefix test.

In this section, I shall show that adjectives can be separated from verbs and nouns using the exclamation test. One of the functions of *–e* described in section 2.1.2.1.9.1 is as an exclamative marker. This exclamative function only emerges if the enclitic *–e* attaches to an adjective. Examples follow.

(868) a. tiŋᵍi-e oraŋ-ko! (TR, E)
tall-3 person-DEM.PROX
'How tall this person is!'

b. bsaʔ-e ruma dioʔ-tu! (TR, E)
big-3 house 3-DEM.DIST
'How big his house is!'

c. ʊ, maʔe jaʊ-e!
EXCL EXCL far-3
'Oh, how far it is!'

(869) a. *ruma-e !
house-3

b. *lari-e!
lari-3

In the examples in (868) *–e* attaches to an adjective to form exclamatory expressions. In (869)a, the enclitic *–e* attaches to a noun and the exclamatory reading is not present. Likewise, in (869)b, the enclitic *–e* attaches to a verb and the exclamatory reading is absent.

It should be noted that there are some fixed exclamations that seem to have enclitic *–e* attached to it, such as *maʔ*-e, *ndʊʔ-e*, and *ya alla-e* which are used to express surprise. The base it attaches to is a noun. However, even if these expressions were indeed formed via cliticization, they are fixed expressions synchronically and thus are different from those in (868).

Another way of forming exclamative expressions is to use *bukan main* which literally means 'not play', but is used to mean 'really'.

(870) a. bukan main rame (ruma-ko)! (TR, E)
not play crowded house-DEM.PROX
'How crowded this house is!'

b. bukan main dgɪl (adɪʔ-e)! (TR, E)
not play naughty younger.sibling-3
'How naughty his brother is!"

(871) a. *bukan main jatʊ (hargo-e)!
not play fall price-3

b. *bukan main umo-ko! (TR, E)
not play paddy-DEM.PROX

As shown in (870), when *bukan main* is followed by an adjective, the sentence is grammatical. By contrast, when *bukan main* is followed by a verb, as in (871)a, or a noun as in (871)b, the sentence is ungrammatical. This indicates that adjectives can be distinguished from verbs and nouns.

1.16.4. Pronouns

Personal pronouns form a closed class. The description of pronouns is provided in section 2.1.2.

1.16.5. Prepositions

Prepositions form a closed class. Three basic prepositions are: locative *di,* source *dari,* and directional *ka.* The full description of prepositions is presented in section 2.1.5.

1.16.6. Numeral, Quantifier, and Interrogative Word

Numerals do not form a separate word class. Rather, they function like nouns (cf. section 1.1.2.1.1.1). Quantifiers do not form a separate word class either. Interrogative words and interrogative sentences are presented in section 1.1.3.2.2.

Chapter 2

THE MORPHOLOGY OF JAMBI MALAY

The morphology of Jambi Malay, like the syntax of Jambi Malay, has not yet been adequately described in previous work. To date, one of the few book chapters that can be found discussing the morphology of Jambi Malay is in Husin et al. (1985). However, in Husin et al.'s work, Jambi Malay morphology is described as very similar to Indonesian. They list, for example, the prefix meN- as one of the prefixes of Jambi Malay. When a word such as *baco* 'read' is prefixed by this suffix, it surfaces as *membaco* or *maco* (Husin et al.,1985:43). In fact, based on my expertise, *membaco* is never used in Jambi Malay. In addition, Gani et al. (2000) also include a chapter on the morphology of Jambi Malay. Although the data provided in Gani et al. (2000) are more accurate than those in Husin et al. (1985), some of the affixes presented in Gani et al. also look very similar to Indonesian.

In this chapter, I describe the morphology of Jambi Malay. It should be remembered that this dissertation covers three dialects of Jambi Malay, namely the Tanjung Raden dialect, the Mudung Darat dialect, and the Jambi City dialect.[1] However, the focus of this dissertation is the Tanjung Raden dialect and unless otherwise noted, all examples provided are taken from naturalistic recordings of conversations and narratives by speakers of this dialect.

[1] As a reminder, I refer to the Tanjung Raden and Mudung Darat dialects as the Rural Jambi dialects and the Jambi City dialect as the City dialect.

Before presenting the morphology of Jambi Malay, I shall first present the definitions of some technical terms relevant to my discussion of morphology: morpheme, free morpheme, bound morpheme, base, root, word, affixes, clitics, derivational affixes and inflectional affixes.

A morpheme is the smallest linguistic unit that has meaning. Morphemes are of two types, namely free morphemes and bound morphemes. Free morphemes are morphemes whose occurrence does not depend on that of other morphemes. In other words, free morphemes can occur by themselves. In contrast, bound morphemes are morphemes whose occurrence depends on other morphemes. Thus, bound morphemes cannot stand alone. The morpheme to which a bound morpheme attaches is called the base. Roots are generally free morphemes (see section 3.2). Affixes and clitics are bound morphemes.[2] A word consists of at least one free morpheme. In addition to one free morpheme, a word may have one or more bound morphemes.

Regarding affixes, there are two types of affixes: inflectional affixes and derivational affixes. Jambi Malay does not have many inflectional affixes. The nasal prefix *ŋ-* and the passive prefix *di-* can be claimed to be inflectional affixes. However, it is difficult to decide whether an affix is an inflectional affix or a derivational affix. The active prefix *ŋ-* and the passive prefix *di-*, for example, appear to pattern like inflectional affixes in that they do not change the part of speech and the meaning of the base they attach to when they attach to verbs. In addition, these affixes are present for syntactic reason. However, when they attach to a non-verbal base, they newly formed word becomes a verb and thus, they pattern like derivational affixes. I shall return to this issue later in section 2.2.1.6.

[2] Affixation vs. cliticization is discussed in section 3.4.7.

This chapter is divided into two major sections: structural aspects of different word classes (section 2.1) and derivational morphology (section 2.2).

2.1. Structural Aspects of Different Word Classes[3]

This section is divided into eight subsections: nouns, pronouns, verbal morphology, adjectives, prepositions, numerals/quantifiers, adjuncts, and clitics. Each of the subsections is further divided into smaller sections.

2.1.1. Nouns

Section 1.16 introduces the operational definition of nouns and further discusses how nouns can be distinguished from other word classes. In addition, the noun phrase is discussed in section 1.2.2.4. This section only describes the means of marking the syntactic functions of nouns, different types of nouns, and classifiers.

2.1.1.1. The Means of Marking the Syntactic Functions of Nouns

In Jambi Malay, nouns are not marked by inflection. There is no other overt marking for different syntactic functions of nouns. Nouns occupy various positions in different types of sentences (active transitive sentences, intransitive sentences, passives, object voice, non-verbal sentences): subject, direct object, indirect object and complement of a preposition. Examples of nouns occupying different sentence positions are shown in square brackets in the the following sentences.

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[3] In the Lingua Questionnaire, the two main sections are inflection and derivational morphology. However, I decided to change the name of the first section as the description presented here deals more with the structural aspects of different word classes rather than of inflection. It is also essential to highlight that the discussion provided in section 2.1 is mostly syntax-semantics related. However, the discussion in section 2.2 focuses on word formation processes regarding the derivation of different parts of speech in Jambi Malay.

(1) Subject of an Active Transitive Sentence

[oraŋ	tuo]	ɲamᵇʊt	paŋanten-ko	tadi,
person	old	ACT-welcome	bride.or.bridegroom-DEM.PROX	earlier

paŋanten jantan
bride.or.bridegroom male
'The parents welcome the bridegroom.'

(2) Subject of an Intransitive Sentence

[yayaŋ] naŋis
Yayang ACT-cry
'Yayang is crying.'

(3) Subject of a Passive Sentence

[maʔ] dijmpʊt oraŋ
mother PASS-pick.up person
'Mother was picked up by someone.'

(4) Subject of an Object Voice Sentence

[bʊlʊ-tu]	lagi	maʔ	aku krat	(TR, E)
bamboo-DEM.DIST	PROG	mother	1SG cut	

'The bamboo is being cut by my mother.'

(5) Subject of a Non-verbal Sentence

[tali-ɲo] alʊs
rope-3 small
'The rope is thin.'

(6) Direct Object of a Sentence

aku masaŋ [tmᵇilar]
1SG ACT-set k.o.fish.trap
'I set a fish trap.'

(7) NP Indirect Object of a Sentence

bagɪ-la [ayam] makan, edaʔ
give-EMPH chicken eat Q
'I fed my chickens, you know.'

(8) Complement of a Prepositional Phrase/Complement of an Oblique

awaʔ mgaŋ tip di [pon^{d}oʔ]
1/2/3 ACT-hold tape LOC hut
'We use a tape in the hut.'
[Lit. 'We hold a tape in the hut.']

As shown in (1) through (8), none of the noun phrases in different sentence positions is marked by any sort of inflection/marking.

2.1.1.2. Different Types of Nouns

In this section, I only focus on the different types of nouns. The operational definition of noun is provided in section 1.16.1 and the description of the noun phrase is presented in section 1.2.2.4.

2.1.1.2.1. Common Nouns vs. Proper Nouns

Nouns can be distinguished into two types: common nouns and proper nouns. A common noun refers to a person, a thing, and an idea or a concept (see the examples in (9)). A proper noun refers to a specific name of a person, a thing, a place, an institution, or a country (exemplified in (10)). A proper noun has a fixed referent. A proper noun is often preceded by a title or a label, as shown in (11).

(9) Common Nouns

a.	pukat	'dragnet'
b.	dano	'lake'
c.	oraŋ	'person'
d.	crito	'story'
e.	kaɪdʊpan	'life'

(10) Proper Nouns

a.	parida	'Faridah; personal female name'
b.	pan	'PAN; a political party'
c.	taɲ^{j}ʊŋ raden	'Tanjung Raden; a village name'
d.	jam^{b}i	'Jambi; a city name'
e.	en^{d}onesya	'Indonesia; a country name'

(11) Proper Nouns with Titles/Labels

a.	aji sani	'Hajj Sani'
b.	prasiden sukarno	'President Soekarno'
c.	baŋ syari?ah.mandiri	'Syari'ah Mandiri Bank'
d.	wa? saman	'Uncle Saman'
e.	baŋ latɪp	'Brother (older) Latip'
f.	pasar anso duo	'Angso Duo Market'
g.	kota jam^{b}i	'Jambi City'

A discussion of noun modifiers is provided in section 1.2.2.4.2.

2.1.1.2.2. Count Nouns and Mass Nouns

Common nouns can further be distinguished into two types: count nouns and mass nouns. Count nouns are nouns that can be counted. Count nouns can be preceded or followed by a numeral and a classifier, as shown in (12) or by a numeral alone (cf. section 1.2.2.4.2). A numeral without a classifier that precedes a noun indicates the number of the noun, as exemplified in (13). A numeral without a classifier that follows a noun mostly occurs with proper names (shown in (14)a, or in listing (14)b). In addition, count nouns can be reduplicated to demonstrate that there are two or more than two entities denoted by the noun being reduplicated (see also section 2.2.2.1.1 in which reduplication of nouns is described). Examples follow.

(12) a. N Numeral Classifier

ayam tigo bʊtɪr
chicken three grain
'three chickens'

b. Numeral Classifier N

tigo eko? tam^{b}ilar
three CLF k.o.fishing.trap
'three fishing traps'

(13) Numeral N

duo ari
two day
'two days'

(14) a. N Number (in Proper Name)

anso duwo
goose two
'Angso Duo; a market name'

b. N Number (in Listing)

pɪrɪŋ,	iyo	pɪrɪŋ	laʊʔ	saratʊs	limo	pʊlʊ,	
plate	yes	plate	side.dish	one-hundred	five	ten	
pɪrɪŋ	acar	saratʊs	limo	pʊlʊ			
plate	pickles	one-hundred	five	teen			

'plates, right, one hundred and fify plates for side dishes, one hundred and fifty plates for pickles'
[Lit. 'plates, right, one hundred and fifty side dish plates, one hundred and fifty pickle plates']

(15) Reduplication of N

buda?-buda?-ko
RED-kid-DEM.PROX
'these kids'

Mass nouns can never be reduplicated. In addition, mass nouns are not usually modified by a number or a sortal classifier. Instead, mass nouns are modified by certain measures or amounts (see section 2.1.1.3). Examples follow.

(16) a.

karʊŋ	guni	bŋen	gdaŋ,	sapʊlʊ	kaleŋ	padi	isi-e
sack	guny	old	big	one-ten	can	rice.plant	contents-3

'In the past, the gunny sack was big. It could take ten cans of rice.'
[Lit. The gunny sack was big in the past. The content was as much as ten cans of rice.']

b.

tigo	caŋkɪr	kopi-ko	masɪ	aŋat	(TR, E)
three	glass	coffee-DEM.PROX	still	hot	

'These three cups of coffee are still hot.'

2.1.1.3. Classifiers

Jambi Malay is not a classifier language. Classifier languages, such as Thai and Chinese, exhibit fully grammatical classifiers and in these languages the presence of classifiers is obligatory. In Jambi Malay, classifiers are not obligatory and there is only one dedicated classifier, i.e. *ekoʔ*. *Ekoʔ* is originally from *ekor* which literally means 'tail' and has been lexicalized as a classifier used for both living non-human creatures and most non-living things. In some cases, *ekoʔ* is also used for humans, but only for counting kids/children. Other classifiers are nouns. Nouns which are commonly used as classifiers are *oraŋ* and *bʊtɪr*, which literally means 'person' and 'grain', respectively. As a classifier, *oraŋ* is only used for humans. As a classifier, *bʊtɪr* is used for non-living things, animals, and, as a joke, it is often used for humans/kids. The non-living things that are referred to using *bʊtɪr* are normally those that have a round shape. By contrast, for non-living things that do not have round shapes, the dedicated classifier *ekoʔ* is used, as exemplified below.

(17) a. duo ekoʔ sanapaŋ (TR, E)
two CLF rifle
'two rifles'

b. tigo ekoʔ glaŋ (TR, E)
three CLF bracelet
'three bracelets'

If classifiers are present, they always follow a numeral and the sequence of a numeral and a classifier may follow as well as precede the head noun (see also section 1.2.2.4.3 in which I discuss word order in noun phrases), as shown in the following examples.

(18) *ekoʔ*

a. aku mᵇawaʔ nanas sapʊlʊ ekoʔ
1SG ACT-bring pineapple one-ten CLF
'I brought ten pineapples.'

b. ha, tigo ekoʔ tamᵇilar
EXCL three CLF k.o.fish.trap
'Aha, three fish traps.'

c. yo-la, ibuʔ tadi puŋo katʊrʊnan pulaʔ,
yes-EMPH madam earlier have PASS-go.down-CIRC PART
sapʊlʊ ekoʔ anaʔ
one-ten CLF child
'Well, I have ten children.'
[Lit. 'Well, I have offsprings, ten children.']

(19) *oraŋ*

duo oraŋ budaʔ-tu la pgi (TR, E)
two person kid-DEM.DIST PFCT go
'The two kids have gone.'

(20) *bʊtɪr*

a. ayam tigo bʊtɪr
chicken three grain
'three chickens'

b. mamat hoho bntar-ko ɲʲual duo bʊtɪr ayam
Muhammad Hoho moment-DEM.PROX ACT-sell two grain chicken
'Muhammad Hoho sold two chickens recently.'

c. isi-la duo bʊtɪr kacaŋ.blitaŋ-tu…
contents-EMPH two grain k.o.juicy.tuber-DEM.DIST
'Then we put two seeds of the juicy fruit [into holes].'

In (18)a and (20)a, the sequence of a numeral followed by a classifier follows the head noun, whereas in (18)b, (18)c, (19), (20)b, and (20)c, the sequence of a numeral followed by a classifier precedes the head noun.

The numeral that precedes the classifier simply shows the number of the nouns. If the noun is one/singular, speakers of Jambi Malay employ the prefix *sa-* (*se-*) 'one' before the classifier.[4] If the classifier *ekoʔ* and *oraŋ* are preceded by *sa-* 'one', the surface forms are *sekoʔ* and *soraŋ,* respectively, as exemplified in (21) below.

[4] *Sa-* is used in the Rural dialects and *se-* is used in the City dialect.

Note that *seko?* has been lexicalized to mean 'one' and can be used in counting (see section 2.1.6.1).

(21) a. kalʊ bakawan, saoraŋ nugal,
[kalʊ bəkawan soʀaŋ nugal
TOP INTR-friend one-person ACT-dibble
saoraŋ ɲmekan
soʀaŋ ɲəmme:ka:n]
one-person ACT-seedling-APPL
'If we are with a friend, one (of us) makes holes, and the other plants the seeds.'
[Lit. 'If we have a friend, one makes holes, and the other plants seeds.']

b. tu dalam seko? lmari-tu barapo kpɪŋ?
[tu dalam seko? ləmaʀi-tu bʀapo kəpɪŋ]
DEM.DIST inside one wardrobe-DEM.DIST how.much chip
'How many pieces are there in one cupboard?'

The list in (22) shows other nouns which are used as classifiers in Jambi Malay. Note that the dedicated classifier *eko?* can be used for the nouns mentioned in (22).

(22) taŋke 'stalk; used with flowers, rice plants'
hle 'sheet; used with soft flat things such as leaves, pants, cloth, sarong, shirts'
kpɪŋ 'chip; used with hard flat things such as board'
lm^{b}ar 'sheet; used with flat things such as paper, leaves, cloth'
lmpɪr 'sheet; used with paper'
bataŋ 'tree; used with cylindrical objects such as trees, cigarettes, chalk'

In addition to the above classifiers, Jambi Malay also has also units of measurements which are used to indicate the amount of count nouns as well as mass nouns. I shall refer to these units of measurement as measurement classifiers, and to the classifiers presented earlier as sortal classifiers. Some measurement classifiers are provided in (23). Examples are given in (24).

(23) pɪkʊl ‘a unit of weight, equal to 100 kilograms’
mato ‘a unit of weight, equal to 100 grams’
suku ‘a unit of weight for jewelry, equal to 6.7 grams’
gantaŋ ‘a unit of volume, equal to 4 kilograms’
cupaʔ ‘a unit of volume, equal to ¼ gantaŋ’
kilʊ ‘kilogram’
krat ‘Lit.piece; used for cake, wood, day’
ɪrɪs ‘Lit.slice; used for cake’
tan^{d}an ‘bunch; used for bananas’
potoŋ ‘piece; used for shirts, cakes’

(24) a. dioʔ ɲʲual, sakali ɲʲual dioʔ sampe
3 ACT-sell one-time ACT-sell 3 reach
duo pʊlʊ limo kɪlʊ
two ten five kilogram
‘Once he sells them, he can sell up to twenty-five kilograms.’

b. pari-tu duo pɪkʊl satŋa
stingray-DEM.DIST two unit.of.weight one-middle
‘The stingray was two hundred and fifty kilograms.’

c. tajual kalʊŋ sasuku
PFCT.PASS-sell necklace one-unit.of.weight
‘A one-*suku* necklace was sold.’

2.1.2. Pronouns

In the syntax chapter, I showed that Jambi Malay does not exhibit dedicated pronouns or reflexives/reciprocal forms in terms of the Government and Binding theory (see section 1.5 to section 1.7). What I mean by pronouns is best understood as expressions that have antecedents. In other words, the definition of pronouns in Jambi Malay is not similar to that in English, in that pronouns in Jambi Malay do not obey the Binding Principles of the Government and Binding Theory. See the discussion on anaphora in section 1.5 and section 1.6.

The description of pronouns in this section includes different types of pronouns. I discuss the ways in which the various types of pronouns are different from

each other, as well as how each pronoun is used. The description of pronouns is divided into eight parts: personal pronouns, reflexive pronouns, reciprocal pronouns, possessive pronouns, demonstrative pronouns, interrogative pronouns, number pronouns, and locative pronouns. The syntactic discussion of anaphora, reflexivity, and reciprocals is provided in section 1.5, section 1.6, and section 1.7, respectively.

2.1.2.1. Personal Pronouns

The personal pronoun paradigm in Jambi Malay is schematized in the following table.

Table 2.1 Personal Pronouns in Jambi Malay[5]

	1st person		2nd person		1st and 2nd person	3rd person	
	Singular	Plural	Singular	Plural		Singular	Plural
TR	aku sayo kami kulo awaʔ kito -ku ku-	kito awaʔ kami	kau kamu awaʔ kau-	kamu awaʔ	kito	dioʔ (-)ɲo -e awaʔ	dioʔ (-)ɲo -e awaʔ
MD	aku kami sayo awaʔ kito -ku ku-	kito awaʔ kami	kau kamu awaʔ kau-	kamu awaʔ	kito	dioʔ -e -ɲo awaʔ	dioʔ -e -ɲo awaʔ (budaʔ-tu) (oraŋ-tu)
JC	aku sayo kami kito ku-	kito	kau kau-	kamu	kito	dioʔ -ɲo	dioʔ oraŋ -ɲo

The first person singular *kulo* is an honorific pronoun (cf. 2.1.2.1.7). Speakers of Jambi Malay seldom use the third person pronoun *dioʔ* for non-human or inanimate entities. They prefer to use full noun forms. The third person plural forms budaʔ-*tu* 'those kids' or *oraŋ-tu* 'those people' are only used with humans. However, I do not claim that *budaʔ-tu* and *oraŋ-tu* are actual pronouns. They are simply regular NPs which are used as third person plural pronouns.

[5] Items preceded by a dash (-) are enclitics and items followed by a dash (-) are proclitics. The rest are full pronouns.

In what follows, I present a more detailed discussion of the pronouns shown in table 2.1. The following description of personal pronouns covers free pronouns, person distinctions, singular and plural pronouns, associating pronouns and numbers in noun phrases, using kinship terms as pronouns, using proper names as first person and second person pronouns, honorific pronouns, indefinite pronouns, and clitic pronouns.

2.1.2.1.1. Free Pronouns

Free pronouns in Jambi Malay pattern almost like full nouns in that they may occur in all syntactic positions that nouns occupy: subjects of different types of sentences (e.g. subject of transitive sentences, subject of intransitive sentences, subject of passives, subject of object voice constructions, subject of non-verbal sentences), direct object, NP indirect object, and complement of a prepositional phrase. Examples are shown in square brackets below.

(25) Subject of Transitive Sentence

[aku]	mᵇawaʔ	nanas	sapʊlʊ	ekoʔ
1SG	ACT-bring	pineapple	one-ten	CLF

'I brought ten pineapples.'

(26) Subject of Intransitive Sentence

kalu	[sayo]	tiŋᵍal,	[dioʔ]	pgi
if	1SG	stay	3	go

'If I stay, they go.'

(27) Subject of Passive

"[kau]	dipaŋᵍɪl	kapalo	sakola,	ko,"	te-e
2SG	PASS-call	head	school	TRU-Eko	word-3

'"The principal wants to meet you, Eko," he said.'
[Lit. '"You were called by the principal, Eko" were his words.']

(28) Subject of Object Voice

[dioʔ]	la	aku	jmpʊt	(TR, E)
3	PFCT	1SG	pick.up	

'He has been picked up by me.'

(29) Subject of Non-verbal Sentence

[awaʔ]	lolo	ɲla
1/2/3	stupid	indeed

'I did really badly.'
[Lit. 'I was really dumb.']

(30) Direct Object of a Sentence

dioʔ	dapat	nʊlʊŋ	[kito]
3	get	ACT-help	1

'She can help us.'

(31) NP Indirect Object

eloʔ-la	mᵇagɪ	[dioʔ]	duwɪt	gampʊŋ	saribu
beautiful-EMPH	ACT-give	3	money	only	one-thousand
rupia					
rupiah					

'It would be good if we gave them money, about a thousand rupiah.'

(32) Complement of a Prepositional Phrase

yo,	dikit-dikit-tu	naŋ	dapat	di	[awaʔ]
yes	RED-a.little-DEM.DIST	REL	get	LOC	1/2/3
bibi-tu	bibi tʊɲʰʊʔi-la				
aunt-DEM.DIST	aunt show-APPL-EMPH				

'Yeah, I taught them the things I knew.'
[Lit. 'Well, I showed them little things that I got.']

In imperative sentences, pronouns may be employed although they are often omitted.

(33)

ha,	[kau]	cubo	minum-ko!
EXCL	2SG	try	drink-DEM.PROX

'Well, you try to take this!'

(34)

pgi-la	[kau]	dulu,	kami	ɲʊsʊl	kdian
go-EMPH	2SG	before	1	ACT-follow	later

'You just go first! We will follow you later.'

(35) pasaŋ calano!
set pants
'Put on your shorts!'

(36) ha, tarɪʔ be tikar!
EXCL pull just mat
'Just drag the mat!'

The imperative sentences in (33) and (34) contain a second person pronoun, whereas in (35) and (36), the pronoun is omitted (see section 1.1.3.4 in which I discuss imperatives).

As discussed in section 1.1.2.2.2, in clear contexts, arguments, including pronouns, can be dropped, as exemplified below. Thus, Jambi Malay can be categorized as a pro-drop language.

(37) a. Subject Drop
Ø ŋam^{b}ɪʔ-la akar ka darat-tu
ACT-take-EMPH root to land-DEM.DIST
'[We] took the root to the land area.'

b. Object Drop
aku n^{d}aʔ nanam Ø bla darat-ko
1SG want ACT-plant side land-DEM.PROX
'I'll plant [them] at the land side.'

2.1.2.1.2. Person Distinction in Pronouns

The person distinctions made by pronouns are first, second, and third person, and the combined first and second person. The first person pronouns are *aku, sayo*, *kami,* and *kulo*. There are also two first person clitic pronouns: *–ku* or *ku-* (see section 2.1.2.1.9.2). *Sayo is* a first person singular pronoun that denotes more respect. *Kami*, when used as a singular pronoun also denotes respect. *Kulo* is an honorific form which is only used in the higher speech level (*baso kulo ŋ^{g}ɪ*), employed by a younger speaker when talking to someone older or of a higher social status. *Aku* is used among

peers or when an older speaker or someone with a higher social status talks to a younger speaker or someone who has a lower social status.

The second person pronouns are *kau* and *kamu*. As a full pronoun, *kau* is pronounced as two syllables [kawu]. As a clitic, *kau* is pronounced as a single syllable [kaw].

The third person pronouns are *dio?* and *ɲo*. Some speakers of the Tanjung Raden dialect claim that *ɲo* is only used in the Mudung Darat dialect and the dialect spoken in Jambi Kecil as well as in the area in the upper stream of the river. However, naturalistic data indicate that *ɲo* is also used in the Tanjung Raden dialect, especially by the older generation. Examples follow.

(38) a. ɲo kagi batmu-tu
3 later INTR-meet-DEM.DIST
'She would meet them.'

b. ɲo daʔ n^{d}aʔ m^{b}uat ruma
3 NEG want ACT-make house
'He didn't want to build a house.'

c. ha, mulaʔ ɲo basrʊ-tu
EXCL begin 3 INTR-call-DEM.DIST
'Then, they began to call.'

In table 2.1, I labeled *ɲo* as a full pronoun as well as a clitic pronoun. This is a very interesting fact. In (38), *ɲo* occupies the subject position of the clause, which suggests that *ɲo* is a full pronoun, rather than a clitic pronoun. Additional evidence is that when the speakers pronounced *ɲo* in the examples in (38), *ɲo* was not pronounced as a unit with the following word. The subject pronoun *ɲo* in (38) can be said in isolation in that a short pause can be present between *ɲo* and the word following it. This suggests that phonologically *ɲo* is independent, unlike a clitic. However, in direct

object position, for example, *ɲo* is a clitic rather than a full pronoun. Likewise, in passives, post-verbal *-ɲo* is a third person clitic pronoun. Examples follow.

(39) a. hm, dioʔ ŋawani-ɲo
uh-huh 3 ACT-friend-APPL-3
'So, she accompanied her.'

b. a, dibagɪ-ɲo kuɪ
EXCL PASS-give-3 cake
'[We] will be given cake by them.'

One reason for claiming that *ɲo* in (39) is a clitic pronoun is that it is pronounced as a unit with the word that precedes it in that there is no pause in between the word that precedes *ɲo* and *ɲo*.

A stronger argument is that no element can appear between the verb and *ɲo* in (39). If *ɲo* were a full pronoun, like *dioʔ,* it should be possible for the discourse particle *pulaʔ* to appear between the verb and *ɲo* (see section 2.1.8.2.2 in which I present *pulaʔ*). In (40)a below, *pulaʔ* appears between the verb and the object full pronoun *dioʔ* and the sentence is grammatical. In contrast, in (40)b, *pulaʔ* appears between the verb and *-ɲo,* and the sentence is ungrammatical. This indicates that *-ɲo* is not a full pronoun in (40)b.

(40) a. edi marai pulaʔ dio tadi (TR, E)
Edi angry-APPL PART 3 earlier
'Edi also scolded her before.'

b. *dioʔ ŋawani pulaʔ-ɲo (TR, E)
3 ACT-friend PART-3
'He also accompanied him.'

While *kami* can only be used as a first person pronoun, *kito* can be used as a first person plural pronoun as well as a combined first and second person pronoun.

(41) a. “kami oraŋ taɲʲʊŋ pasır,” kate de-e
1 person Tanjung Raden word 3-3
‘”I’m from Tanjung Pasir,” he said.’
[Lit. ‘”I’m Tanjung Raden person” were his words.’]

b. kiro-kiro kami-tu mintaʔ tımpʊ duo bulan
RED-about 1-DEM.DIST ACT-ask.for time two month
‘We ask for two months of time.’

(42) a. baarti-e-tu nᵈaʔ mintaʔ bahaso [kito]-ko
INTR-meaning-3-DEM.DIST want ACT-ask.for language 1-DEM.PROX
‘It means [you’re] asking for our language.’

b. cuma [kito]-ko daʔ tau mrawat-e
only 1-DEM.PROX NEG know ACT-take.care-3
‘However, we don’t know how to take care of it.’

In (41)a, *kami* is used as a first person singular pronoun, whereas in (41)b, *kami* is used as a first person plural pronoun. In (42)a, *kito* is used as a first person plural pronoun, whereas in (42)b, *kito* is used as a combined first and second person plural pronoun.

In addition, *kito* may serve as a first person singular pronoun. When the speakers were asked about who the pronoun *kito* referred to, they said that *kito* referred to many people, including the interlocutor. In other words, the speakers of Jambi Malay would say that *kito* is a combined first and second person pronoun. However, when the speakers were given a context in which only the first person singular could be used as the referent for *kito,* they accepted the use of *kito* in that context. The data are also supported by an example taken from naturalistic data, as shown in (43) below.[6]

[6] In the recording in which this utterance is found, the speaker was recording himself, talking about himself.

(43) oraŋ tuo kito-ko daʔdo pulaʔ toke
person old 1-DEM.PROX NEG.exist PART business.owner
'My parents are not business owners.'

Furthermore, an impersonal use of *kito* is also found. This occurs especially when someone is giving instructions or making general statements. In such cases, *kito* does not refer to anyone in particular, it is simply like 'one' in English. Examples follow.

(44) a. "yo, rʊkʊn iman-tu edaʔ patamo kito pcayo
yes principle faith-DEM.DIST Q first 1 believe
dŋan alla," kato bibi edaʔ
with Allah word aunt NEG
'"Well, the first Faith principle, you know is that one believes in Allah," I said.'
[Lit. '"Well, the first Faith principle, you know, is that one believes in Allah" were Auntie's words.']

b. kalu kito baprau, paŋayʊ disiapi, panim^{b}o
if 1 INTR-canoe INTR-row PASS-ready-APPL INTR-draw.water
'If we go by boat we prepare an oar and a dipper.'

Finally, the pronoun *awaʔ* is a pronoun that can be used to refer to the first person, the second person, and the third person, regardless of the number. In other words, *awaʔ* is like a generalized pronoun. Examples follow.

(45) a. …supayo ɲamʊʔ jaŋan ŋ^{g}ɪgɪt awaʔ
so.that mosquito do.not ACT-bite 1/2/3
'…So that mosquitoes will not bite us.'

b. awaʔ la jaraŋ gawe-tu
1/2/3 PFCT seldom work-DEM.DIST
'I already seldom do that.'

c. awaʔ daʔdo ŋam^{b}ɪʔ-e daʔ
1/2/3 NEG.exist ACT-take-3 NEG
'You didn't take it.'

d. puɲo datʊʔ awaʔ dulu yaŋ dijual
possess grandfather 1/2/3 before REL PASS-sell
'They sold their grandfather's.'
[Lit. 'It was their grandfather's that was sold.']

2.1.2.1.3. Singular and Plural Pronouns

In addition to the person distinction, pronouns in Jambi Malay also demonstrate a number distinction between singular and plural. Some pronouns are only for singular referents and other pronouns may be used for both singular and plural referents. However, no pronouns are exclusively used for plural referents. *Budaʔ-tu* and *oraŋ-tu* may be treated as pronouns which are only for plural referents. However, I do not claim that both items are pronouns because they are simply regular nouns. I suggest that they are regular nouns which are used as pronouns (as mentioned in section 2.1.2.1).

Pronouns that are solely for singular referents are *aku, sayo, kulo,* and *kau.* Pronouns that may have both singular and plural referents are *awaʔ, kami, kamu, kito, dioʔ,* and *ɲo*.

The first person singular pronoun *aku* and the second person singular pronoun *kau* are forms which are mostly used when among peers. These forms are also used by elder speakers or speakers of higher social status when talking to someone younger or of a lower social status. The first person singular pronoun *sayo* is widely considered a more polite form. It is usually used by a younger speaker addressing someone who is older or who has a higher social status. In addition, it is also used in formal situations. Some speakers of the Tanjung Raden dialect insisted that *sayo* is not native to Tanjung Raden, but originates from other neighboring villages. However, in the naturalistic data more than a hundred occurrences were found. If *sayo* is indeed not native to Tanjung Raden, the occurrences in the

naturalistic data indicate it has been borrowed into the language. *Kami* and *awaʔ*, which are used as first person singular pronouns, are also considered more polite than *aku. Kulo* is an honorific first person singular pronoun only found in the higher speech level in Tanjung Raden and some other neighboring villages (see section 0.2). It is also used by a speaker of a younger age when talking to someone who is older. The naturalistic examples in (46) below illustrate the use of these pronouns.

(46) a. "kami oraŋ taɲʲʊŋ.pasɪr," kate de-e
1 person Tanjung. Pasir word 3-3
'"I'm from Tanjung Pasir," he said.'
[Lit. '"I'm a Tanjung Pasir person" were his words.']

b. kalu sayo tiŋᵍal dioʔ pgi
if 1SG stay 3 go
'If I stay, they go.'

c. kami daʔdo balɪʔ daʔ
1 NEG.exist return NEG
'I didn't go home.'

d. awaʔ muko pgi daʔdo nᵈaʔ bakanti
1/2/3 that's.why go NEG.exist want INTR-friend
'That's why I don't like to go [fishing] with friends.'

e. la suda aku piɲʲam tadi
PFCT finish 1SG borrow earlier
'I have borrowed them.'

2.1.2.1.4. Associating Pronouns and Numbers in Noun Phrases

Pronouns can be associated with numerals in noun phrases. Such an association indicates that the number of referents represented by the pronoun equals the numeral following the pronouns. Examples follow.

(47) a. kalu [kito batigo-tu] enaʔ
if 1 INTR-three-DEM.DIST nice
'It would be nice if it was the three of us.'

b. yo, saola-ola [kito-tu baduo-ko]
yes one-RED-as.if 1-DEM.DIST INTR-two-DEM.PROX
bacakap-la ceʔceʔnon-e-tu
INTR-say-EMPH PARTRED-pretend-3-DEM.DIST
'Let's pretend that the two of us are talking.'

c. kami bəlimo la prna kə sano (JC, E)
1 INTR-five PFCT ever to there
'Five of us have been there.'

2.1.2.1.5. Using Kinship Terms as Pronouns

Kinship terms are often used when one refers to himself/herself or to his/her interlocutor, especially when there is a social (age and family status) difference between the speaker and the interlocutor. If the speaker is older than the interlocutor, the speaker may refer to himself/herself by using a kinship term. If the speaker is younger than the interlocutor or has lower family status, the speaker refers to the interlocutor by using a kinship term. Similarly, a younger person may call himself/herself using a kinship term and an older person or a person who has a higher family status may call the interlocutor using a kinship term. Some examples of how a kinship term can substitute for a first person and second person pronoun are shown in square brackets in the following examples.

(48) a. ai, [bibi-ko] masaʔ basɪŋ-la
EXCL aunt-DEM.PROX cook just.any-EMPH
'Well, I cook whatever I want to cook.'
[Lit. 'Well, Auntie cook anything.']

b. maʔ kau baŋaʔ ɪtɪʔ-ɲo, ha [waʔ cɪʔ]
mother 2SG a.lot duck-3 EXCL aunt.or.uncle TRU-small
ɪtɪʔ lapan ekoʔ
duck eight CLF
'Your mother has a lot of ducks and I have eight ducks.'
[Lit. 'Your mother's ducks are many, well, Auntie's ducks are eight.']

c. ŋapo [bibi] nᵈaʔ bariŋon ɪtɪʔ ayam?
why aunt want INTR-breed duck chicken
'Why did you want to raise poultry?'

d. tu lʊm ado [mᵇoʔ] puŋo anaʔ
DEM.DIST not.yet exist older.sister have child
'That was when I didn't have any children yet.'

When talking to someone of Chinese descent, Jambi Malay speakers employ Chinese kinship terms as pronouns substitutes, such as *cece* 'older sister', *acek/cek* 'younger uncle', *apeʔ/apɛʔ* 'older uncle', *koko*/*ko* 'older brother', *ama* 'grandmother', *akoŋ* 'grandfather', as shown in the following examples.[7] However, Chinese people never employ these kinship terms when they refer to themselves.

(49) a. jadi, [cece] baraŋkat-tu kapan kiro?
become older.sister leave.for-DEM.DIST when about
'So, when will you leave approximately?'

b. [acek] la naʔ baleʔ? (JC, E)
uncle PFCT want return
'Do you already want to go home?'

2.1.2.1.6. Using Proper Names as First Person and Second Person Pronouns

In other Malay varieties and in Javanese, it is common for a speaker to refer to himself/herself and his/her interlocutor by their proper names. Thus, instead of using a first person pronoun, for example, a speaker of these languages uses his/her own personal name. Likewise, instead of using a second person pronoun they employ the interlocutor's name. The same phenomenon is also observed in Jambi Malay, as exemplified below.

[7] These Chinese kinship terms are from the Hokkian and Teo Cheow dialects of Chinese, two of the Chinese varieties spoken in Jambi.

(50) a. “ika daʔ biso bamasaʔ,” kato dioʔ-e
Ika NEG can INTR-cook word 3-3
‘”I cannot cook,” she said.’
[‘”Ika cannot cook” were her words.’]

b. bapaʔ ɪit blʊm ɲʲmpʊt, yoʔ
father Iit not.yet ACT-pick.up yes
‘Your father hasn’t picked you up, right?’
[Lit. ‘Iit’s father hasn’t picked [Iit] up, right?’]

In addition, when talking to people of Chinese descent, usually at the market, people use Chinese titles as second person pronoun substitutes: *toke* ‘boss’ and *ɲoɲa* ‘madam’.

(51) a. toke-ni loke? nian (JC, N)[8]
business.owner-DEM.PROX stingy very
‘You’re very stingy.’

b. ɲoɲa bale? jam brapo? (JC, E)
madam return hour how.much
‘What time are you coming back?’

Chinese people never refer to themselves using these titles. Instead they usually employ a personal free pronoun such as *aku* ‘1SG’.

2.1.2.1.7. Honorific Pronouns

The first person singular pronoun *kulo* is a pronoun which is only used in the higher speech level in Tanjung Raden and a few other neighboring villages (see section 0.2 for the discussion of speech levels). Examples follow.

(52) a. kulo palɪŋ jaʊ baraŋkat ka tuŋkal
1SG most far leave.for to Tungkal
‘The farthest place I went to is Tungkal.’

[8] I remember hearing this sentence from a buyer at my uncle’s shop. The buyer was bargaining the price of a necklace and my uncle only gave her a small discount and she complained that my uncle was stingy.

b. kulo niki takʊt go-la, awaʔ ruma tpi bataŋari
1SG this afraid also-EMPH 1/2/3 house side Batanghari
'I'm also worried because my house is at the edge of the Batanghari [river].'

Also see section 2.1.2.1.3 in which I describe how different pronouns are employed when politeness is a factor. Furthermore, in section 2.1.2.1.5, I show that in order to show respect, the speakers also make use of kinship terms instead of pronouns to refer to someone older or of a higher status.

2.1.2.1.8. Indefinite Pronouns

Reduplicated forms of some interrogative pronouns are utilized as indefinite pronouns. These include: *apa-apo* 'whatever/anything', *siapo-siapo* 'whoever/anyone', *kapan-kapan* 'anytime', *di/ka/dari mano-mano* 'at/to/from anywhere'. There are no reduplicated forms of *barapo* 'how much' and *ŋapo* 'why'. Examples of reduplicated interrogative pronouns used as indefinite pronouns are shown in (53) to (56) below.

(53) daʔdo bataŋo [apo-apo] daʔ
NEG.exist INTR-ask RED-what NEG
'She won't ask you anything.'

(54) aku daʔ knal [siapo-siapo] di situ (JC, E)
1SG NEG know RED-who LOC there
'I didn't know anyone there.'

(55) [kapan-kapan] dioʔ dataŋ, pasti aku mᵇagɪ
RED-when 3 come certain 1SG ACT-give
dioʔ dʊwɪt (TR, E)
3 money
'Whenever he comes, I give him money.'

(56) bibi-tu daʔdo ŋamᵇɪʔ [di mano-mano] daʔ
aunt-DEM.DIST NEG.exist ACT-take LOC RED-which NEG
'I didn't take [it] from anywhere.'

Moreover, a combination of a reduplicated form of an interrogative pronoun and *be ~ bae* 'just' can also be used as an indefinite pronoun, as shown below.

(57) suda-tu [siapo-siapo be] yaŋ diajaʔ-tu?
finish-DEM.DIST [RED-who just REL PASS-invite-DEM.DIST
'Then, who did he invite?'

Another way of referring to a person or a thing that is not identified yet is by using the word *oraŋ* 'person' or *bn^{d}o* 'thing', as exemplified in (58) and (59) below.

(58) aku tadi batmu [oraŋ] di pasar (TR, E)
1SG earlier INTR-meet person LOC market
'I met someone at the market.'

(59) aku tadi batmu [bn^{d}o] di jalan (TR, E)
1SG earlier INTR-meet thing LOC street
'I saw something in the street earlier.'

In addition, speakers of Jambi Malay also use the existential verb *ado* in order to translate the English indefinite pronouns 'someone/anyone' and 'something/anything'. The verb *ado* is followed by *oraŋ* 'person' to mean 'someone' and is followed by *bn^{d}o* 'thing' to mean 'something', as illustrated below. Further discussion of the *ado* verb is provided in section 1.1.3.5.2.

(60) [ado oraŋ] tibo, daʔ?
exist person arrive NEG
'Is anyone coming?'

(61) memaŋ bŋen-ko [ado bn^{d}o] mlintaŋ situ-tu
indeed old-DEM.PROX exist thing ACT-lie.athwart there-DEM.DIST
'In the past, something lay athwart there.'

Furthermore, Jambi Malay exhibits other indefinite pronouns. These indefinite pronouns consist of a question phrase followed by the word *be ~ bae* 'just'.

The list of these indefinite pronouns is presented in (62) and some examples are given in (63) to (67).

(62) siapo/sapo be ‘anyone’
apo be ‘anything’
kapan be ‘anytime’
di/ka/dari mano be ‘(at/to/from) anywhere’
macam manobe ‘whatever way’
barapo be ‘any amount’
mano be ‘any’

(63) [siapo be] bole masʊʔ ka siko (TR, E)
who just may enter to here
‘Anyone may enter.’

(64) [apo be] nᵈaʔ dibli-e (TR, E)
what just want PASS-buy-3
‘They liked to buy anything.’

(65) [kapan be] kau nᵈaʔ dataŋ, dataŋ-la (TR, E)
when just 2SG want come come-EMPH
‘Whenever you want to come, just come.’

(66) yo, di mano be samo bae
yes LOC which just same just
‘Well, it is just the same anywhere.’

(67) bibi tahan [macam mano be-la] kalu
aunt stand sort which just-EMPH if
dioʔ ŋadu misal-e
3 ACT-report example-3
‘I could stand no matter how he complained, for example.’

The indefinite pronouns *siapo be* and *apo be* in (63) are different from those presented earlier, which are formed by reduplicating the *wh*-word, e.g. *siapo-siapo* and *apo-apo,* in that *siapo be* and *apo be* cannot be used as a complement of a verb in a negative declarative sentence. Examples follow.

(68) a. dioʔ daʔ neŋoʔ siapo-siapo (TR, E)
3 NEG ACT-see RED-who
‘He did not see anyone.’

b. *dioʔ daʔ neŋoʔ siapo be[9] (TR, E)
3 NEG ACT-see who just
'He did not see anyone.'

Finally, indefinite pronouns can also be expressed by using the clitic *pʊn* at the end of a *wh*-pronoun, except for *ŋapo* 'why'. The adding of *pʊn* adds the meaning of indefiniteness to the *wh*-phrase. Examples follow.

(69) a, ɲadi kini [siapo-pʊn] m^{b}uat ruma bntʊʔ
EXCL ACT-become now who-PUN ACT-make house shape
gam^{b}ar anso duo
picture swan two
'So, everybody now builds a house with two swan shapes.'

(70) masaʔ [apo-pʊn] daʔ n^{d}aʔ
cook what-PUN NEG want
'Whatever you cook them with, he doesn't like it.'

(71) [kapan-pʊn] kau pgi, aku ɪkʊt (TR, E)
when-PUN 2SG go 1SG follow
'Whenever you go, I will go with you.'

(72) [barapo-pʊn] jumla-e, aku trimo (TR, E)
how.much- PUN amount-3 1SG accept
'Whatever the amount is, I will accept it.'

(73) [di mano-pʊn] gna-e, aku dataŋ (TR, E)
LOC which-PUN place-3 1SG come
'Wherever it is, I will go.'

(74) [macam mano-pʊn] bntʊʔ-e, aku bli (TR, E)
sort which-PUN shape-3 1SG buy
'Whatever the shape is, I will buy it.'

(75) *[ŋapo-pʊn] dioʔ naŋis, aku daʔ mau tau (TR, E)
why-PUN 3 ACT-cry 1SG NEG want know
'For whatever reason he cried, I don't know.'

[9] This sentence is grammatical as a *wh*-question.

It should be pointed out, however, that some speakers rejected the indefinite pronoun constructions in (69) to (74). For them, the sentences in (69) to (74) sounded Indonesian. However, sentences (69) and (70) are naturalistic data and this indicates that they exist in the language. Some other speakers clearly accepted those sentences and did not seem to be doubtful about the existence of such structures. Some speakers said that *-pʊn* is the *kren* 'modern' language, meaning that it is a form that is newer the the language. These different judgments from the speakers suggest that the presence of indefinite pronouns with *pʊn* is due to interference with Indonesian.

2.1.2.1.9. Clitic Pronouns

As shown in table 2.1, Jambi Malay exhibits clitic pronouns in addition to full pronouns. The most productive clitic pronouns are the third person enclitic pronouns *-ɲo* and *–e.* In section 2.1.2.1.2, I have shown that *ɲo* may also be a full pronoun. In section 2.1.2.1.9.1 below, I only describe *-ɲo* as an enclitic and the enclitic *–e*.

As already pointed out in section 2.1.2.1.2, Jambi Malay also exhibits the proclitic pronoun *ku-* (first person singular), enclictic pronoun *–ku* (first person singular) and the proclitic pronoun *kau* (second person singular). The proclitic *ku-* and the enclitic *–ku* are discussed in section 2.1.2.1.9.2 and the proclitic *kau-* is presented in section 2.1.2.1.9.3.

2.1.2.1.9.1. The Enclitic *–e* and *-ɲo*

The City dialect only employs the enclitic *-ɲo,* whereas the Tanjung Raden and Mudung Darat dialects use both *–e* and *-ɲo.* Some speakers of the Tanjung Raden dialect claimed that *-ɲo* is not native to Tanjung Raden while other speakers insisted that both *-ɲo* and *–e* are used in Tanjung Raden. In the naturalistic data, more

than one thousand records containing *-ɲo* and more than four thousand records containing *-e* were found. I would claim that *–e* is the traditional form while *-ɲo* is a newer form in the Tanjung Raden and Mudung Darat system, borrowed from the City dialect. The enclitic *–e* is also a form found in Javanese. However, according to Uri Tadmor (p.c.), the enclitic *–e* is likely native to Malay since this enclitic is also found in Minangkabau, a language spoken in West Sumatra, which has had little influence from Javanese, and also in West Borneo. However, this enclitic may have been reinforced in the Rural Jambi Malay dialects from Javanese.

The enclitic *–e* and *-ɲo* have several functions. First, when *–e* and *-ɲo* attach to an NP, they function as possessive pronouns, as exemplified in (76) below.

(76) *–e* and *-ɲo* as a Possessive Pronoun

a. iduŋ-e sarupo maʔ-e
nose-3 one-appearance mother-3
'His nose is like his mother's.'

b. bini-ɲo oraŋ jam^{b}i cuma?
wife-3 person Jambi only
'Does his wife only have Jambi blood?'
[Lit. 'Is his wife only a Jambi person?']

Second, when *–e* and *-ɲo* follow an NP, they also function as definite markers, as exemplified below.

(77) *–e* and *-ɲo* as a Definite Marker

a. la sabsaʔ-ko batu-e
PFCT one-big-DEM.PROX stone-3
'The stone was already as big as this.'

b. bıbıt-ɲo duo blas kaleŋ
seed-3 two teen can
'The seeds are twelve cans.'

Second, when *–e* and *-ɲo* attach to an active verb, they function as direct object pronouns, as demonstrated below.

(78) *–e* and *-ɲo* as a Direct Object Pronoun

a. ha, tu anaʔ awaʔ mᵇuat-e, tu ha
EXCL DEM.DIST child 1/2/3 ACT-make-3 DEM.DIST EXCL
'Well, that one, my son made it.'

b. oraŋ-ko nᵈaʔ ŋᵍawei-ɲo kagi-ko
person-DEM.PROX want ACT-work-APPL-3 later-DEM.PROX
'We will cook them soon.'

Third, when *–e* and *-ɲo* attach to passive verbs, they function as agent pronouns, as shown below.

(79) *–e* and *-ɲo* as an Agent Pronoun

a. daʔ, kalu bayam dimakan-e
NEG if spinach PASS-eat-3
'No, he eats spinach.'
[Lit. 'No, if it is spinach, he eats it.']

b. duwɪt ditiŋᵍal-e galo, kan
money PASS-stay-3 all Q
'He left all the money, you know.'

The fourth function of *–e* and *-ɲo* is as an adverbial-like marker. Examples follow.

(80) a. iyo-la, maŋko-ɲo enaʔ ɲʲaɪt
yes-EMPH so.that-3 nice ACT-sew
'Right, that's why it's better to sew.'

b. saŋko oraŋ aku-ko saidaʔ-idaʔ-e no,
think person 1SG-DEM.PROX one-RED-NEG-3 TRU-female
tamat esteem
finish S.T.M
'People think that I at least graduated from a technical high school.'

The fifth function of *–e* and *-ɲo* is as nominalizer. In section 1.1.4.1.2, I have discussed that nominalized clauses can be formed by adding the suffixes *–e* and *-ɲo*. Examples follow. See section 1.1.4.1.2 for the discussion of nominalized clauses.

(81) a. dioʔ minta enaʔ-ɲo be (JC, E)
3 ask.for nice-3 just
'He just asks for the fun thing.'

b. balıʔ-e ka broni
return-3 to Broni
'[I] went home to Broni.'
[Lit. 'The return is to Broni.']

In (81)a, the base to which *-ɲo* attaches to is an adjective and the in (81)b, the base to which *–e* attaches to is a verb. After encliticization, the adjective and the verb function like a nominal. In (81)a, *enaʔ-ɲo* functions as the complement of the verb *mintaʔ* and in (81)b, *balıʔ-e* functions as the subject of the clause.

The sixth function of *–e* and *-ɲo* is unclear. It has some definite marker properties, but it follows a pronoun which is already definite, and without the enclitic the sentence is still grammatical. Examples follow.

(82) a. jadi kayu dioʔ-ɲo
become wood 3-3
'So, they become wood?'

b. ŋucap trimo kası baɲaʔ dioʔ-e
ACT-utter accept love a.lot 3-3
'He thanked me a lot.'

Finally, the last function of the enclitic *–e* is as an exclamation marker. This function is not attested for the enclitic *-ɲo*. An example is provided below.

(83) "… ya alla maʔ, tiŋ^{g}i-e, " kato aku
EXCL Allah mother high-3 word 1SG
'"Oh, my God! How high!" I said.'
'"Oh, my God! How how!" were my words.'

2.1.2.1.9.2. The Proclitic *ku-* and The Enclitic *-ku*

The proclitic *ku-* and the enclitic *–ku* are derived from the full first person singular pronoun *aku.* The proclitic *ku-* is used as an agent pronoun and the enclitic *–ku* is used as a possessive pronoun. Examples are shown below.

(84) The First Person Proclitic *Ku-*

a. kau kutiɲʲu giʔ kau, macam-macam dŋan aku
1SG 1SG-fist later 2SG RED-sort with 1SG
'You'll be punched by me if you give me trouble.'

b. bataŋ sasudu-tu nᵈaʔ kutanam
tree k.o.plant-DEM.DIST want 1SG-plant
'I wanted to plant a *sasudu* tree.'

(85) The First Person Enclitic *-Ku*

a. daʔ nᵈaʔ tɪdʊr mato-ku
NEG want sleep eye-1SG
'I can't sleep.'

b. "kau iŋat daʔ?" kato-ku
2SG remember NEG word-1SG
'"Do you remember?" I asked.'
'"Do you remember?" were my words.'

As an agent pronoun proclitic *ku-* appears in object voice constructions. However, the full pronoun *aku* can also appear in the object voice (see section 1.1.1.1.3 in which I present the object voice).

2.1.2.1.9.3. The Proclitic *Kau-*

The second person proclitic *kau-* is pronounced in one syllable [kaw] and it functions as an agentive proclitic, as shown below.

(86) baraŋ-tu la kaubalɪʔi, lʊmʔ (TR, E)
thing-DEM.DIST PFCT 2SG-return-APPL not.yet
'The thing, have you returned it?'

Similar to the proclitic *ku-*, the proclitic *kau-* also appears in object voice (see section 1.1.1.1.3).

The clitic pronouns found in Jambi Malay can be summarized in the following table.

Table 2.2 Clitics Pronouns in Jambi Malay

	Proclitic	Enclitic
First person	*ku-*	*-ku*
Second person	*kau-*	-
Third person	-	*-ɲo, -e*

2.1.2.2. Reflexive pronouns

Reflexivity can be expressed by a combination of *diri* 'self' and the reflexive marker *dewe?* 'alone', or a combination of *diri* 'self' following by a pronoun and the reflexive marker *dewe?* 'alone', as demonstrated below.

(87) a. dioʔ-tu mɪkɪr diri dewe?
3-DEM.DIST ACT-think self alone
'He cares about himself.' (TR, E)

b. aku mrkam-la diri aku dewe?
1SG ACT-record-EMPH self 1SG alone
'So, I recorded myself.'

In addition, a free pronoun followed by the emphatic marker *la* also expresses reflexivity.

(88) yanti neŋoʔ dioʔ-la di tipi
Yanti ACT-look 3-EMPH LOC television
'Yanti saw herself on television.' (TR, E)

Finally, as pointed out in section 2.2.1.2.1.2.1, the prefix *ba-* can also be used to express reflexivity, as shown below.

(89) dioʔ la bacʊkʊr
3 PFCT INTR-shave
'He has shaved himself.' (TR, E)

For a more detailed discussion on reflexivity, see section 1.6.

2.1.2.3. Reciprocal pronouns

Jambi Malay does not possess a special set of pronouns devoted to express reciprocality. Three strategies can be employed in order to express reciprocal meanings in Jambi Malay: (i) using the prefix *ba-*, (ii) using the combination of the prefix *ba-* and the suffix *-an*, and (iii) using reduplicated forms plus *–an*. Examples follow.

(90) a. *Ba-* + Base

buda?-buda?-tu batiŋʲu (TR, E)
RED-kid-DEM.DIST INTR-fist
'Those kids are hitting each other.'

b. *Ba-* + Base *-An*

bakapa?an apo nᵈa? babunuan?
INTR-axe-NMLZ what want INTR-kill-NMLZ
'Did they slaughter or did they want to kill each other?'

c. Reduplication + *-An*

budi dŋan eko tiŋʲu-tiŋʲuan (TR, E)
Budi with Eko RED-fist-NMLZ
'Budi and Eko are hitting each other.'

The full discussion on reciprocals is provided in 1.7.

2.1.2.4. Possessive pronouns

All free pronouns presented in section 2.1.2.1 can be used as possessive pronouns. In addition, the enclitics *–e* and *-ŋo* can also be employed as possessive pronouns. The possessive pronoun follows the possessed NP. Examples follow. In (91) through (96), the full pronouns are used as possessive pronouns, whereas in (97) and (98), the enclitics *-ŋo* and *–e* are used as possessive pronouns.

(91) pagi tadi [bapa? aku] balɪ?
morning earlier father 1SG return
'My father came home this morning.'

(92) tapi apo bole buat-la [nasɪp awaʔ] daʔ?
but what may make-EMPH fate 1/2/3 NEG
'But, what can we do, it's our fate, right?'

(93) memaŋ-tu ɲla [makanan dioʔ]
indeed-DEM.DIST indeed eat-NMLZ 3
'That's indeed its food.'

(94) kawɪn dŋan [waʔ ciʔ jantan kau]-ko
get.married with uncle.or.aunt TRU-small male 2SG-DEM.PROX
'[I] got married to your uncle.'

(95) balɪʔ ka jam^{b}i-tula [ɪdʊp kami] agaʔ apo
return to Jambi-DEM.DIST-EMPH alive 1 about what
dikit kan, lumayan, kan?
a.little Q okay Q
'Our life turned better since we returned to Jambi.'

(96) '[suaro sayo]-ko goŋ^{g}oʔ, paʔ, " kato aku
sound 1SG-DEM.PROX false TRU-father word 1SG
'I said, "My voice is false, Mr."'
[Lit. '"My voice is false, Mr." were my words.']

(97) a, oraŋ medan bini-ɲo
EXCL person Medan wife-3
'His wife is from Medan.'

(98) badan-e bsaʔ bnar-la
body-3 big right-EMPH
'Her body is very big.'

Furthermore, like free pronouns, kinship terms can also be used as possessive pronouns, as shown in the following examples.

(99) anaʔ [paman bibi] sekoʔ
child uncle aunt one
'One was my uncle's son.'

(100) waʔ cɪʔ, kulo pake [rokoʔ waʔ
aunt.or.uncle TRU-small 1SG use cigarette aunt.or.uncle
cɪʔ], ŋ^{g}ɪʔ
TRU-small yes
'Uncle, I take your cigarette, okay?'

2.1.2.5. Demonstrative Pronouns

Jambi Malay uses the same forms for demonstrative pronouns and demonstrative adjectives (cf. section 2.1.4.1). Demonstrative pronouns occur alone (as a subject or a direct object), whereas demonstrative adjectives follow a noun (also see section 1.2.2.4.2.5). In the city dialect, the forms are *ini ~ ni* 'this' and *tu* 'that'. In the Tanjung Raden and Mudung Darat dialects, the forms include *iko~ko* 'this' and *tu* 'that'. The Tanjung Raden dialect also exhibits the honorific demonstrative pronouns *niki* 'this' and *niku* 'that'. Examples follow.

(101) a. tu crito aku dewe?-la
DEM.DIST story 1SG alone-EMPH
'That's my own story.'

b. ko tadi ʊntʊ? apo?
DEM.PROX earlier for what
'What was this for?'

c. ni ruma siapo? (JC, E)
DEM.PROX house who
'Whose house is this?'

(102) a. bibi gala? go ŋırım niku, da??
aunt often also ACT-send DEM.DIST NEG
'You also often send it, don't you?'

b. kulo baru-la minum niki
1SG just-EMPH drink DEM.PROX
'I've just started drinking this.'

Note that speakers of Jambi Malay often use seemingly double demonstrative pronouns, as illustrated in the following examples.

(103) a. aku puŋo iko-ko
1SG possess DEM.PROX-DEM.PROX
'This is mine!'

b. kan ena? tu-tu, garıŋ
EMPH delicious DEM.DIST-DEM.DIST crisp
'They are delicious; they're crispy.'

Uri Tadmor (p.c.) proposes an analysis for a similar phenomenon found in Jakarta Indonesian. According to Uri Tadmor, *ini* 'this' and *itu* 'that' in Jakarta Indonesian are different from *nih* 'this' and *tuh* 'that' based on three important criteria: phonological, morphosyntactic, and semantic.

Phonologically, *nih* and *tuh* in Jakarta Indonesian always appear with a final /h/, whereas *ini* and *itu* do not have a final /h/.

Morphosyntactically, *nih* and *tuh* may appear right after *ini* and *itu,* respectively, as shown in (104) below.

(104) a. Ini nih, barangnya!
this this thing-3
'Here is the thing!'

b. Itu tuh, orangnya!
that that person-3
'That is the man!'

In addition, *nih* and *tuh* can be separated from *ini* and *itu,* as exemplified below.

(105) a. Ini barangnya, nih!
this thing-3 this
'Here is the thing!'

b. Itu orangnya, tuh!
that person-3 that
'That's the man!'

Uri Tadmor further points out that *ini* and *itu* are spatial deictics, whereas *nih* and *tuh* are situational.

In Jambi Malay, the same facts as those found in Jakarta Indonesian were observed. First, when the seemingly double demonstratives occur, the demonstrative that occurs second usually gets final [h] phonetically, as shown in the following example.

(106) iko-ko ʊntʊʔ tugas sakola
[ʔiko-koh ʊntʊʔ tugas səkola]
DEM.DIST-DEM.DIST for duty school
'This is for a school assignment.'

As in Jakarta Indonesian, the two demonstratives are separable, as shown in the following naturalistic data.

(107) a. ko rʊkʊn limo pakaro-ko
DEM.PROX principle five matter-DEM.DIST
'These are the five principles.'

b. ko parkakas apo pulaʔ-ko?
DEM.PROX tool what PART-DEM.PROX
'What kinds of tools are these?'

c. tu baso kulo ŋ^{g}ɪ-tu
DEM.DIST language 1SG yes-DEM.DIST
'That's the *kulo ŋ^{g}ɪ* language.'

To give a stronger argument, *ko* and *tu* in (103)a and (103)b are also separable, as shown below.

(108) a. iko aku puŋo-ko! (TR, E)
DEM.PROX 1SG possess-DEM.PROX
'This is mine!'

b. tu kan enaʔ tu, garɪŋ (TR, E)
DEM.DIST EMPH delicious DEM.DIST crispy
'That's delicious! It's crispy.'

2.1.2.6. Interrogative Pronouns and Other Question Words

Interrogative pronouns are forms that are used for asking questions. The complete list is provided in section 1.1.3.2.1. See section 2.1.2.1.8 for interrogative pronouns used as indefinite pronouns.

2.1.2.7. Number Pronouns

Number pronouns can be formed using some strategies. The first strategy is to add the enclitic *–e* or *-ɲo* to a collective number which is formed by *ka-* prefixing, as shown in the following examples.

(109) a. batino kaduo-e
female NUM-two-3
'Both are females.'

b. katigo-ɲo la dataŋ (TR, E)
NUM-three-3 PFCT come
'All three have arrived.'

The second strategy to form a number pronoun is to reduplicate (either fully or partially) the number. The reduplication is followed by the enclitic *–e* or *-ɲo* and optionally preceded by the prefix *ka-*. Examples follow.

(110) a. cuman karnokan abaŋ aku-kan,
but because-EMPH older.brother 1SG-EMPH
kaduduo-e milu go
NUM-PARTRED-two-3 follow also
'However, it was because both of my brothers also joined it.'

b. katigo-tigo-e mulaʔi kasar (TR, E)
NUM-RED-three-3 begin-APPL rude
'All three started to be rude.'

c. aku la bawaʔ limo-limo-ɲo (JC, E)
1SG PFCT bring RED-five-3
'I have brought all five.'

When number pronouns like those in (109) and (110) are used in negative sentences, the number pronouns can be translated as 'neither of them, none of them', as shown in (111) below.

(111) a. edi daʔ batmu kaduo-e (TR, E)
Edi NEG INTR-meet NUM-two-3
'Edi met neither of them.'

b. kalimo-limo-e buda? kɲo? taɲʲʊŋ raden (TR, E)
NUM-RED-five-3 kid not Tanjung Raden
'None of them is from Tanjung Raden.'

c. tigo-tigo-e da? biso dataŋ lagi (TR, E)
RED-three-3 NEG can come more
'None of the three can come again.'

Furthermore, the indefinite number *galo*/*galo-galo* 'all' followed by the enclitic *–e* or *-ɲo* may occur as a pronoun, as exemplified below. Note that the suffix is not obligatory. Examples follow.

(112) a. kalu dirnᵈam tʊmᵇʊ-la galo-e
if PASS-soak grow-EMPH all-3
'If we soak them, all of them will grow.'

b. galo-galo-ɲo biso manjat pohon (JC, E)
RED-all-3 can ACT-climb tree
'All of them can climb a tree.

c. aku suda ŋamᵇɪ? galo (JC, E)
1SG PFCT ACT-take all
'I have taken all of them.'

To conclude, number pronouns are generally formed with the enclitic *–e/-ɲo* attached to the number. I claim that the number is not a pronoun by itself, but the enclitic is a pronoun which expresses the definiteness of the number. The number is the modifier. Thus, the sequence of a numeral (regardless of how it is formed) and the enclitic *–e/-ɲo* discussed in this section forms the so-called number pronouns.

2.1.2.8. Locative Pronouns

Locative pronouns in Jambi Malay include *siko* 'here' (near the speaker), *sini* (near the speaker), *situ* 'there' (not far off), and *sano* 'there' (far off). Note that *sini* is new and only used in the City dialect. Examples follow.

(113) a. jadi dio? balɪ? ka siko dio? mᵇawa? balɪ?
become 3 return to here 3 ACT-bring return
'So, when he comes back, he will bring it here.'

b. iyo, dioʔ naʔ mᵇawaʔ dari sano bɪbɪt-e
yes 3 want ACT-bring from there seed-3
'She wanted to bring the seeds here.'

c. ado somel di situ, kanʔ
exist factory LOC there Q
'There's a factory there, right?'

The difference between *situ* (not far off) and *sano* (far off) is also reported by Sneddon (1996:189). Some younger speakers of Jambi Malay did not seem to be aware of the difference between *situ* and *sano.* However, speakers from the older generation still have an intuition about the difference. For these speakers, *sano* is used for a location which is far off, whereas *situ* indicates a closer location.

2.1.3. Verbal Morphology

This description of verbal morphology is divided into five sections: voice, tense, aspect, modals, and finite vs. non-finite verb forms.

2.1.3.1. Voice

The main discussion of the voice system of Jambi is provided in section 1.1.1. In this section, I provide a description of potential passive constructions.

2.1.3.1.1. Other Types of Passives

In addition to the main voice types discussed in section 1.1.1 (active voice, passive voice, and object voice), Jambi Malay demonstrates other types of passives: *kno* passive, *ta*-passive, and *ka-an* passive. In what follows, I describe each of these passive types.

2.1.3.1.1.1. *Kno* Passives[10]

The *kno* passive in Jambi Malay is generally followed by a verb and the verb that follows *kno* must be in bare form, as illustrated in the following examples.[11]

(114) *Kno* Followed by Bare Verb → Grammatical

a. suda kno pɪcɪt, la kam^{b}ʊ pulaʔ
finish KNO press PFCT flare.up PART
'After it was pressed, it flared up.'

b. mati kno tem^{b}aʔ
dead KNO shoot
'[He] died being shot.'

(115) *Kno* Followed by Nasal Verb → Ungrammatical

a. *bʊrʊŋ-tu kno nem^{b}aʔ (TR, E)
bird-DEM.DIST KNO ACT-shoot
'The bird got shot.'

b. *dio jatʊ, kno ɲ^{j}olaʔ (TR, E)
3 fall KNO ACT-pull
'She fell after she got pulled.'

In addition to a verb, *kno* can also be followed by an NP, as shown below.

(116) a. palaʔ pniŋ kno pilek
head dizzy KNO influenza
'My head is dizzy because I caught a cold.'

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[10] This type of passive corresponds to the *kena* passive in other Malay varieties. Sneddon (1996, 2006) does not mention *kena* passives for Standard Indonesian and Jakarta Indonesian, respectively. However, some studies point out the existence of this type of passive (among others Sie, 1988; Koh, 1990; Cumming, 1991). Furthermore, Chung (2005) claims that *kena* is a third type of passive in Malay.

[11] The same pattern is observed in the *kena* passive in Malaysian Malay discussed in Chung (2005).

b. aku-tu samᵇɪl pulaʔ ado kno bɪrɪŋ-ko
1-SG-DEM.DIST while PART exist KNO rash-DEM.PROX
bagaʊt
INTR-scratch
'I'm scratching while [talking] because I've got this rash.'

c. dioʔ kno madu-tu masaʔ, tloʔ-tu
3 KNO honey-DEM.DIST cook egg-DEM.DIST
'Honey makes the egg cooked.'
[Lit. 'An egg, when it is with honey, it is cooked.']

While the nasal prefix is obligatorily absent in *kno* passives, the suffix *–i* can be present for the *kno* passive, as exemplified below.

(117) aŋat kʊpɪŋ kno ttai (MD, N)
hot ear KNO scold-APPL
'My ears will be red if I get scolded.'

In elicitation, most speakers of the City dialect rejected the *kno* passive followed by an *–i* suffixed verb. However, speakers of the Tanjung Raden dialect did not reject such a structure. Although some speakers said that *kno* followed by a bare verb (without the *–i* suffix) sounded more natural, they clearly accepted *kno* followed by an *–i* suffixed verb. Examples follow.

(118) a. siti kno gbʊk paman-e (TR, E)
Siti KNO hit uncle-3
'Siti was hit by her uncle.'

b. siti kno gbʊki paman-e (TR, E)
Siti KNO hit-APPL uncle-3
Siti was hit by her uncle.'

(119) a. siti kno bawaʔ kuɪ buat maʔ-e (TR, E)
Siti KNO bring cake by mother-3
'Siti was brought cakes by her mother.'

b. siti kno bawaʔi kuɪ buat maʔ-e (TR, E)
Siti KNO bring-APPL cake by mother-3
'Siti was brought cakes by her mother.'

(120) a. gigi aku kno cabʊt (TR, E)
tooth 1SG KNO yank.out
'My tooth was yanked out.'

b. gigi aku kno cabʊti (TR, E)
tooth 1SG KNO yank.out
'My tooth was yanked out.'

Some speakers pointed out that the suffix *–i* in (118)b indicates that the action of hitting was done repeatedly. This is not surprising as the suffix *-i* adds repetitive meaning to the verb it attaches to (see section 2.2.1.2.2.2.1). In sentence (119)b, the benefactive meaning remains while the sentence still has passive interpretation.

Note also that although speakers of the City dialect did not accept sentences like those in (118)b, (119)b and (120)b, they accepted the following sentences.

(121) a. aku kno loloi buda?-tu (TR, E)
1SG KNO stupid-APPL kid-DEM.DIST
'I was cheated by the kid.'

b. edi kno marai ma?-e (TR, E)
Edi KNO angry-APPL mother-3
'Edi was scolded by his mother.'

If we carefully examine the suffix *–i* in (121), it becomes apparent that it is not a benefactive suffix. Instead, it is an applicative suffix which increases the valency of the verb (see section 2.2.21.2.2.2.3). A full discussion of the suffix *–i* is presented in section 2.2.1.2.2.

Chung (2005) points out that *kena* in Malaysian Malay is usually in complementary distribution with the suffix *–kan.* If *kena* and the suffix *–kan* co-occur, the sentence will be ungrammatical or lose its passive meaning, as shown in (122) below (Chung, 2005:197-198).

(122) a. *Dia kena tipu-kan oleh pe-muda itu
3s.nom KENA cheat-KAN by PE-being.young that

b. Mama kena beli-kan semua sama
Mama KENA buy-KAN all same
'Mama must buy all the same (things for the twins).'

As shown in (122)a, the sentence is ungrammatical and in (122)b, the sentence seems to lose its passive meaning as *kena* and the suffix *–kan* co-occur. However, the fact is that *kena* in Malaysian Malay, in addition to being a passive marker, is also a modal auxiliary meaning 'must'. In other words, the fact that (122)b does not have passive meaning is not caused by the presence of the suffix *–kan*, but it is because *kena* in (122)b is an auxiliary, not a passive marker.

Unlike in Malaysian Malay, *kno* in Jambi Malay does not have the meaning of 'must'. *Kno* in Jambi Malay is merely a verb that indicates passive meaning.

(123) a. *maʔ kno blii galo (TR, E)
mother KNO buy-APPL all
'Mother must buy [something] for all.'

b. *maʔ kno blikan galo (TR, E)
mother KNO buy-APPL all
'Mother must buy [something] for all.'

I have shown that *kno* indicates passive meaning. It is important to compare the *kno* passive and the *di-* passive. The *kno* passive shares the properties in (124) with the *di-* passive (see also section 1.1.1.1.2 in which the decription of passives is presented). Examples are shown in (125).

(124) a. The structure is patient verb agent.
b. The verb used is in bare form.
c. The presence of the agent is optional.

(125) a. buda?-tu kno tampar (ma?-e) (TR, E)
kid-DEM.DIST KNO slap mother-3
'The kid was hit by his mother.'

b. buda?-tu ditampar (ma?-e) (TR, E)
kid-DEM.DIST PASS-slap mother-3
'The kid was hit by his mother.'

Despite the similarities, there is also at least one difference between the *kno* passive and the *di*-passive. *Kno* passives generally indicate adverse meaning in that the action done to the patient is not desirable. This was pointed out by Koh (1990:167) for the *kena* passive, as she discussed that the *kena* passive "generally implies adversity, that is, the patient is adversely affected in some way by the action of the verb, or at least that the effect of the action or event of the verb phrase is undesirable with respect to the Undergoer-subject." The *di*-passive does not exhibit this property. The consequence of this difference is that in the naturalistic data *di*-passives are more frequently used than the *kno* passive. In the Tanjung Raden naturalistic data, about 2000 records were found to have the *di*- passive and fewer than 200 records were found to have the *kno* structure. In Mudung Darat, about 200 records contain the *di*- passive and fewer than 60 records contain *kno*.

It should, however, be remembered that although *kno* passives seem to suggest adverse meaning, a change appears to be taking place in the language. A few naturalistic examples suggest that *kno* passives may be used for non-adversative structures, as exemplified below.

(126) a. kno ujan-tu ɲadi ŋaŋkat rʊmpʊt tadi
KNOrain-DEM.DIST ACT-become ACT-lift grass earlier
'The grass became fertile as it was showered by rain.'

b. kno puji-puji bukan main lagi kasnaŋ
KNO RED-praise not play more glad
ati-e-tu aku-tu
liver-3-DEM.DIST 1SG-DEM.DIST
'I was so happy that I got the praise.'

More convincing proof comes from elicited data, as the following sentences are grammatical.

(127) a. ali kno bagɪ duwɪt (TR, E)
Ali KNO give money
'Ali was given money.'

b. aku kno masaʔi pin^{d}aŋ buat maʔ aku (TR, E)
1sg KNO cook-APPL k.o.soup by mother 1SG
'I was cooked *pindang* soup by my mother.'

To conclude, the *kno* passive in Jambi Malay is a type of passive. *Kno* is generally followed by a verb and sometimes by a noun phrase. In addition, when followed by a verb, the verb must be in bare form. Furthermore, *kno* passives, similarly to *kena* passives in Indonesian, generally imply adversity. However, the *kno* passive is starting to lose its restriction with respect to the adversative meaning.

2.1.3.1.1.2. *Ta-* Passives

The *ta-* passive is formed using the prefix *ta-*. The prefix *ta-* generally attaches to a verb; some cases in which *ta-* attaches to an adjective were also observed.[12] Examples follow.

[12] *Ta-* attaching to an adjective indicates superlative meaning, which is discussed in section 2.1.4.2.3. Note that speakers of Jambi Malay mainly employ *palɪŋ* 'most 'for superlative(see section 2.1.4.2.3). In this section, I only focus on *ta-* which attaches to verbs and forms *ta-* verbs.

(128) a. sayo aŋkat-la rʊmpʊt-ko tasaʊʔ
1SG lift-EMPH grass-DEM.PROX PFCT.PASS-take
ka badan dioʔ-tu
to body 3-DEM.DIST
'When I picked up the grass, I touched its body incidently.'

b. jadi ikan-tu masʊʔ-la, takʊrʊŋ
become fish-DEM.DIST go.in-EMPH PFCT.PASS-cage
dalam-tu
inside-DEM.DIST
'So, when the fish come in, they are trapped in it.'

(129) buayo tabsaʔ
crocodile PFCT.PASS-big
'the biggest crocodile'

Ta- in Jambi Malay indicates perfective passive aspect in that the action has been done or the event has occurred, as shown in (130).[13] Thus, if a progressive marker is present, for example, the sentences are not acceptable (131).

(130) a. pabrek-e tacabʊt buat aŋin-ko tadi
factory-3 PFCT.PASS-yank.out by wind-DEM.PROX earlier
'His factory was destroyed by the wind.'
[Lit. 'His factory was yanked out by the wind.']

[13] Sie (1988) treats *ter-* passive in Indonesian as the perfective passive aspect. Consider the following example taken from Sie (1988:45) [glossing is retained].

Pintu kamar itu terbuka lebar-lebar
door room that be opened wide wide
(The door of the room had been left wide open)
'The door of the room was wide open.'

Terbuka 'be open(ed)' in the above example shows that the opening of the door has been completed and thus meets the description of the perfective passive aspect.

b. tajual kalʊŋ sasuku
PFCT.PASS-yank.out necklace one-unit.of.weight
A one-*suku* necklace was sold.'

(131) a. *ruma-e sdaŋ tabli (TR, E)
house-3 PROG PFCT.PASS-buy
'His house is being bought.'

b. *kalʊŋ-tu lagi tajual siti (TR, E)
necklace-DEM.DIST PROG PFCT.PASS-sell Siti
'The necklace is being sold by Siti.'

Note that *ta*-verbs can be categorized as passives since the patient/theme surfaces as the subject of the sentence, just like for the *di*-passives (discussed in section 1.1.1.1.2) and *kno* passives (discussed in section 2.1.3.1.1.1). In (130)a above, for example, the subject *pabrek-e* 'the factory' is the patient and grammatical subject of the sentence.

Sneddon (1996:112) points out that most *ter*- verbs in Indonesian fit one of three categories: stative, accidental, and abilitative, as exemplified below in (132)a, (132)b, and (132)c, respectively (Sneddon, 1996: 112-117).

(132) a. Stative
Koran siapa yang terletak di atas meja?
newspaper who REL TER-put LOC up table
'Whose newspaper is (located) on the table?' (p.112)

b. Accidental
Tasnya tertinggal di perpustakaan.
bag-3 TER-stay LOC library
'His bag was left (accidentally) in the library.' (p.113-114)

c. Abilitative
Masalah itu belum terselesaikan olehkami.
matter that not.yet TER-finish-KAN by 1PL
'We haven't been able to settle that matter.' (p.117)

As in Standard Indonesian, *ta*- verbs in Jambi Malay also fit into one of the three categories described by Sneddon: stative, accidental, and abilitative. Stative

verbs refer to a state of affairs. In such a construction, the action is not important; what is important is the state that emerges after an action. Accidental verbs indicate that the actions are unpredicted, uncontrolled, unexpected, unintended, or involuntary. Abilitative verbs demonstrate that the agent has the ability to do the action. Examples of each are presented in (133), (134), and (135), respectively.

(133) Stative

a. saŋkar-tu a… tabuat dari bʊlʊ
cage-DEM.DIST FILL PFCT.PASS-make from bamboo
'The cage, umm… it's made of bamboo.'

b. jarɪŋ la tapasaŋ
net PFCT PFCT.PASS-set
'The net has been set.'

c. iyo, di atas kʊbʊr-tu-la takapɪʔ-e
yes LOC up grave-DEM.DIST-EMPH PFCT.PASS-lie.down-3
'Well, he lies down on the grave.'

(134) Accidental

a. a… tu, dulu mati tatem^{b}aʔ waktu-tu
FILL DEM.DIST before dead PFCT.PASS-shoot time-DEM.DIST
'[He] died because he was accidentally shot.'

b. kalu tajʊŋkɪl aku tadi nta nianraso-e
if PFCT.PASS-fall.down 1SG earlier not.know veryfeel-3
'I didn't know how I would have felt if I had fallen down.'

(135) Abilitative

a. e, kkiro naŋ tajaŋkau-la, naŋ
EXCL PARTRED-about REL PFCT.PASS-reach-EMPH REL
tabli sasue dŋan duɪt tadi
PFCT.PASS-buy appropriate with money earlier
'Well, things that are affordable, things that can be bought in accordance with the money.'

b. … tabli-la motor mega.pro, edaʔ
PFCT.PASS-buy-EMPH motorcycle Mega Pro Q
'… he could buy a motorcycle.'

c. daʔ tablo lagi
NEG PFCT.PASS-keep more
'She couldn't take care of you anymore.'

If we replace the *ta-* prefix in (133) to (135) with the canonical passive prefix *di-*, the verbs lose the three meanings described above. Instead, they show that the action is done deliberately/intentionally by an unexpressed actor. One example of each is presented in (136) below.

(136) a. saŋkar-tu dibuat dari bʊlʊ (TR, E)
cage-DEM.DIST PASS-make dari bamboo
'The cage was made of bamboo [by someone].'

b. dioʔ mati ditem^{b}aʔ waktu-tu (TR, E)
3 dead PASS-shoot time-DEM.DIST
'He was shot [by someone] at that time.'

c. kau daʔ diblo lagi (TR, E)
2 NEG PASS-keep more
'You weren't taken care of anymore [by someone].'

In addition, there are some lexicalized *ta*-words. These include *talalu* 'too', *talam^{b}at* 'late', *tamasʊʔ* 'including', *taahɪr* 'last'. Examples in sentences are shown in (137). [14,15]

(137) Lexicalized *Ta-* Words

a. daʔ talalu brat krjo-e kan kalu ɲ^{j}aɪt
NEG too heavy work-3 Q if ACT-sew
'To sew is not something too hard to do, you know.'

b. tu tamasʊʔ baso daera nian-tu
DEM.DIST include language area very-DEM.DIST
'That is the very local language.'

[14] Sneddon (1996:119) points out similar items in Indonesian such as *terlalu 'too', terlambat* 'late', *terhadap* 'toward' *terutama* 'especially', and *termasuk* 'including'.

[15] Also note that *talalu* is a borrowed form from Indonesian.

To conclude, *ta-* verbs are perfective passive verbs with a stative, accidental, or abilitative meaning.

2.1.3.1.2.3. *Ka-an* Passives

The *ka-an* circumfix in Jambi Malay can be employed to derive different word classes, namely nouns (see section 2.2.1.1.4), adjectives (section 2.2.3.4), and verbs. Note that in the naturalistic data very few occurrences of *ka-an* verbs are found. More occurrences of the circumfix *ka-an* are found for deriving nouns and adjectives. However, *ka-an* verbs are part of Jambi Malay. To form *ka-an* verbs, the circumfix *ka-an* generally attaches to a verb. In addition, *ka-an* sometimes also attaches to an adjective or a noun to form a verb. Examples follow.

(138) a. radiu daʔ kadŋaran
radio NEG PASS-listen-CIRC
'The radio wasn't heard.'

b. teŋoʔ klam, rame-la binataŋ-ko katakʊtan
look dark crowded-EMPH animal-DEM.PROX PASS-afraid-CIRC
'Learning that it was dark, the animals were scared.'

c. dioʔ kaujanan waktu balıʔ malam tadi (TR, E)
3 PASS-rain-CIRC time return night earlier
'He was caught by the rain when he returned last night.'

In (138)a, *ka-an* attaches to the verb *dŋar* 'listen'; in (138)b, *ka-an* attaches to the adjective *takʊt* 'afraid'; and in (138)c, *ka-an* attaches to the noun *ujan* 'rain'. All of the *ka-an* words in (138) are verbs.

Dardjowidjojo (1978) claims that *ke-an* verbs in Indonesian indicate an adversative interpretation. Hidajat (2007) argues that the adversative interpretation of *ke-an* verbs is not triggered by the structure of *ke-an,* but is determined by the context in which they appear. Compare (139)a and (139)b below (Hidajat, 2007).

(139) a. Amat kemarin beli rumah. Sekarang rumah itu
Amat yesterday ϕ-buy house now house that
kebakaran
KA-burn-AN
'Amat bought a house yesterday. Now, the house is on fire.'

b. Joni sangat senang waktu rumahnya kebakaran, karena
Joni very glad when house-3 KE-burn-AN because
dia dapat uang asuransi
3 get money insurance
'Joni was very happy when his house was on fire as he would get some money from the insurance.'

Hidajat claims that in (139)a it is true that *kebakaran* has adverse effects on *Amat.* In (139)b, however, *kebakaran*, which should give an adversative interpretation to *Joni* apparently has a benefactive interpretation.

The same argument holds for *ka-an* verbs in Jambi Malay. It should be noted that in most cases in which *ka-an* verbs appear, they have an adversative interpretation, as exemplified in (140). However, cases where *ka-an* verbs have a non-adversative interpretation are also possible, as shown in (141).

(140) a. yaŋ kailaŋan motor mlapor ka polisi(TR, E)
REL PASS-disappear-CIRC motorcycle ACT-report to police
'The one who lost his motorcycle reported it to the police.'

b. mʊŋkɪn ibuʔ di ɲbʊt ado yaŋ katiŋᵍalan
perhaps mother earlier ACT-mention exist REL PASS-stay-CIRC
'Maybe, I didn't say it when I mentioned them.'

(141) a. la suda ɲai kami niŋᵍal, kami
PFCT finish grandmother 1 die 1
kabagian cɪncɪn (TR, E)
PASS-divide-CIRC ring
'After our grandmother died, we were given a ring.'

b. kami snaŋ ɲla karno kadataŋan dʊlʊr
1 glad indeed because PASS-come-CIRC sibling
dari jaʊ (TR, E)
from far
'We are very happy because of our relatives from far.'

Note that the passive interpretation of *ka-an* verbs is similar to that of *di-* passives, *kno* passives, and *ta-* passives, in that the patient/theme is in the surface subject position (cf. section 2.1.3.1.1.1 and section 2.1.3.1.1.2). Thus, *ka-an* verbs may be interpreted as a type of passive. *Ka-an* passives and *kno* passives are similar in that they tend to suggest adversativity. However, cases with a non-adversative use of *ka-an* passives (and *kno* passives) are also found.

2.1.3.1.2. Means of Decreasing the Valence of a Verb

Some affixes may be used to decrease the valence of verbs. These include the prefixes *di-*, *ba-, ta-,* and the circumfix *ka-an*.

2.1.3.1.2.1. The Prefix *Di-*

As previously mentioned, *di-* is a passive prefix (see also section 1.1.1.1.2). *Di-* can be viewed as one of the affixes that decrease the valence of a verb. When *di-* attaches to a transitive verb, the verb only requires one argument. A transitive verb like *jmpʊt* 'pick up', for example, only requires one argument, when *di-* attaches to it.

(142) maʔ dijmpʊt oraŋ
mother PASS-pick.up person
'Mother was picked up by someone.'

In (142) *dijmpʊt* only takes one obligatory argument, namely the theme *maʔ* 'mother'. Note that the agent *oraŋ* 'someone' is optional and it is an adjunct rather than an argument (see section 1.1.1.1.2).

2.1.3.1.2.2. The Prefix *Ba-*

Ba- is another prefix that decreases the valence of a verb and the discussion of *ba-* as a prefix that decreases the valence of verb is provided in section 2.2.2.1.2.2.

2.1.3.1.3.3. The Prefix *Ta-*

Similarly to *di-* and *ba-*, the prefix *ta-* decreases the valence of a verb. When a transitive verb is prefixed by *ta-,* for example, the verb only needs one argument. Consider the following sentences.

(143) aku ŋam^{b}ɪʔ buku-ko (TR, E)
1SG ACT-take book-DEM.PROX
'I took this book.'

(144) ay, ko-ko buku adɪʔ kau,
EXCL DEM.PROX-DEM.PROX book younger.sibling 2SG
tadi taam^{b}ɪʔ di aku-ko tadi
earlier PFCT.PASS-take by 1SG-DEM.PROX earlier
'Hey, this is your younger brother's book, I accidentally took it.'

As shown in (143), the transitive verb *am^{b}ɪʔ* 'take' takes the nasal prefix and it has two arguments: the subject *aku* 'I' and the object *buku-ko* 'this book'. In (144), the verb *am^{b}ɪʔ* 'take' takes *ta-* and the *ta-* verb only requires one argument *buku adɪʔ kau* 'your younger brother's book'.

2.1.3.1.2.4. The Circumfix *Ka-an*

The circumfix *ka-an* also reduces the valence of a verb. The verb *bakar'*burn', for example, is a transitive verb. If this verb takes the cicumfix *ka-an,* it only requires one argument, as exemplified in (145). If an extra argument is present, the sentence is ungrammatical, as shown in (146). A more detailed description of *ka-an* passives is provided in section 2.1.3.2.2.3.

(145) ruma-e kabakaran (TR, E)
house-3 PASS-burn-CIRC
'His house caught fire.'

(146) *ruma-e kabakaran jalıl (TR, E)
house-3 PASS-burn-CIRC Jalil
'*His house caught fire Jalil.'

2.1.3.1.3. Means of Increasing the Valence of a Verb

Two suffixes, i.e. *–i* and *–kan* are employed to increase the valence of verbs. See section 2.2.2.2 and section 2.2.2.3 for the detailed discussion of the suffix *–i* and the suffix *–kan,* respectively.

2.1.3.2. Tense

In many languages, such as English and French, the time of an action that occurs in relation to the present or in relation to another event is marked by special tense or aspect markers. However, none of the Malay varieties that are familiar to me (Standard Indonesian, Jakarta Indonesian, Riau Indonesian, Palembang Malay, Kuching Malay, Kuala Lumpur Malay) obligatorily specify the time of the action that occurs in relation to the present or in relation to some other event, either by using different verb forms or by using aspect markers (discussed in section 2.1.3.3). In Standard Indonesian, for example, the sentence below may be employed to express events that happen in the past or future, depending upon the context.

(147) Ayah saya datang.
Father 1SG come
My father came.'/'My father is coming.'

If a time signal, such as *kemarin* 'yesterday' or *besok* 'tomorrow is present, the tense becomes clear. Examples follow.

(148) a. Ayah saya datang kemarin
father 1SG come yesterday
'My father came yesterday.'

b. Ayah saya datang setiap hari
father 1SG come every day
'My father comes every day.'

In (148)a, the presence of the time signal *kemarin* 'yesterday' clearly marks that the action indicated in the sentence occurred in the past. Similarly, the time signal *setiap hari* 'every day' in (148)b indicates the regular occurrence of the action.

Jambi Malay has similar properties. The time when an action occurs in relation to the present or in relation to some other event is indicated by using different time signals (see also section 1.1.4.1.4). These time signals include among others:

(149)

soretu	'yesterday'
bŋen	'old time'
dulu	'before/old time'
ɪsʊʔ	'later'
ɪsʊʔ pagi	'tomorrow'
tadi	'earlier/just now'
luso	'the day after tomorrow'
kini	'now'
səkaraŋ	'now'(only in the city)
malam tadi	'last night'

Examples are shown in (150).

(150) a. jadi balɪʔ-la budaʔ tadi-ko
become return-EMPH kid earlier-DEM.PROX
'So, the boys went home.'

b. biaʔ-la ɪsʊʔ.pagi pulaʔ sam^{b}ʊŋ rkaman-ko
so.that-EMPH tomorrow PART continue record-NMLZ-DEM.PROX
'That's okay, I will continue the recording tomorrow.'

c. ha trʊŋ ado,
EXCL aubergine exist
soretu makan sayʊr.asam trʊŋ
yesterday eat sour.vegetable.soup aubergine
'Yeah, I ate eggplants, I ate eggplant sour soup yesterday.'

Without changing the verb forms, if the time signals of the sentences in (150) above are altered, the sentences will have a different time reference. Sentence (150)a, for example, will have future time if *kagɪʔ* 'later' is used instead of *tadi-ko*, as shown below.

(151) jadi balɪʔ-la budaʔ kagɪʔ (TR, E)
become return-EMPH kid later
'So, the boy will go home later.'

To conclude, tense in Jambi Malay is not marked by different verb forms, but by different time signals.

2.1.3.3. Aspect

Aspect markers in Jambi Malay are also similar to those in Standard Indonesian in that they do not appear in different verb forms like in English. Aspect markers in Jambi Malay generally precede the predicate to indicate the time when an action/event/state occurs. In the Mudung Darat dialect, however, negation and auxiliaries, including aspect markers may follow the verb (see section 1.1.2.3.1.1.). Aspect markers and their glosses are presented in (152) below.

(152)

lagi	'PROG'
sdaŋ	'PROG'
masɪ	'still'
la	'PFCT'
baru	'just'
prna	'ever'
sampʊn	'PFCT'
blʊm/lʊm	'not.yet'
$n^{d}aʔ$	literally means 'want' used as a future marker

A short description of each is presented below.

2.1.3.3.1. *Lagi* and *Sdaŋ*

Lagi and *sdaŋ* are used to indicate that an action or an event is in progress.

(153) a. lagi ɲʲraŋ aeʔ kate-e
PROG ACT-put.on.fire water word-3
'He said that he was boiling water.'

b. sdaŋ dikʊkʊs kini-tu
PROG PASS-steam now-DEM.DIST
'It's being steamed now.'

c. kini sdaŋ nue nian di sano
now PROG ACT-reaping.knife very LOC there
'They indeed are harvesting there now.'

2.1.3.3.2. *Masɪ*

Masɪ is used to indicate that an action or an event started in the past and is still occurring.

(154) a. kini-ko masɪ krjo
now-DEM.PROX still work
'She is still working now.'

b. rgo papan masɪ lapan ribu
price board still eight thousand
'The price of wood was still eight thousand.'

2.1.3.3.3. *La*

There are two types of *la* in Jambi Malay. The first *la* is the perfective marker discussed in this section. The second *la* is a clitic which serves as an emphatic marker discussed in section 2.1.8.1.1.

As a perfective marker, *la* denotes an action or an event that has occurred, or a state that has been achieved. *La* can be used for both recent events and events in the far past.

(155) a. ruma-ko la dirʊbʊ
house-DEM.PROX PFCT PASS-demolish
'This house has been renovated.'
[Lit. 'This house has been demolished.']

b. jarɪŋ la tapasaŋ
net PFCT PFCT.PASS-set
'The net has been set up.'

c. ʊntʊŋ-la dioʔ la nijaʔ tana suci
profit-EMPH 3 PFCT ACT-step.on soil holy
'Fortunately she has gone to the holy land.'

Note that when *la* occurs with non-verbal predicates, it is often translated as 'already'.

(156) a. umur la suda mpat pʊlʊ nam taʊn
age PFCT finish four teen six year
'I'm already forty six years old.'

b. la sabsaʔ-bsaʔ-ko
PFCT one-RED-big-DEM.PROX
'It's already as big as this.'

c. kaduo oraŋ tuo awaʔ la tuo
NUM-two person old 1/2/3 PFCT old
'My parents are already old.'

Note that to give more emphasis that an event has occurred or an action has been done, *suda* 'finish' may be used between *la* and the predicate, as illustrated in (157). In such cases, the speakers emphasize the fact that the action has been accomplished or the event has occurred.

(157) a. disaŋko oraŋ dioʔ [la suda] mati
PASS-think person 3 PFCT finish dead
'People thought that he had died.'

b. glas-glas [la suda] bakʊmpʊli
RED-glass PFCT finish INTR-collect-APPL
'We have collected the glasses.'

In addition, *la* is also often followed by *prna* ‘ever’ before the predicate (see section 2.1.3.3.5).

2.1.3.3.4. *Baru*

Baru illustrates that an action/an event has just occurred. Examples follow.

(158) a. baru balajar niʊp tkʊt
just begin-APPL ACT-blow k.o.small.bird.trap
‘He has just learned how to blow a small bird trap.’

b. ko-la aku baru nᵈŋar glar kalipan-tu
this-EMPH 1SG just ACT-listen title Kalipan-DEM.DIST
‘This is the first time I’ve heard of a title called *Kalipan*.’

2.1.3.3.5. *Prna*

Prna indicates an action or an event that has occurred in the far past.

(159) a. kalu dulu prna aku dapat smilan ekoʔ
if before ever 1SG get nine CLF
‘I once got nine.’

b. “aku-ko prna ŋojek dŋan kau-ko,”
1SG-DEM.PROX ever ACT-motor.taxi with2SG-DEM.PROX
kato-ku
word-1SG
‘”I said, “You once gave me a motor ride.’
[Lit. ‘”I once got a motor ride from you,” were my words.’]

Prna is often preceded by *la* to indicate that the action/event has occurred, as illustrated in (160) below.

(160) a. tu la prna galo aku pgaŋ-tu
DEM.DIST PFCT ever all 1SG hold-DEM.DIST
‘I have played all of them.’

b. la prna dittaʔ oraŋ tali-e
PFCT ever PASS-cut person rope-3
‘Someone once cut the rope.’

2.1.3.3.6. *Sampʊn*

Sampʊn is an honorific perfective marker, only found in Tanjung Raden and some neighboring villages (see section 0.2 for the discussion of speech levels). An example is shown below.

(161) ʊ, ɲai, ɲai… ɲai tadi
EXCL grandmother grandmother grandmother earlier
sampʊn pgi ɲalawat?
PFCT go visit
'Grandmother, have you visited the home of the people who are suffering the death of a family member?'

2.1.3.3.7. *Blʊm/lʊm*[16]

Blʊm/lʊm is an aspect marker which contains negation, meaning 'not yet'. *Blʊm/lʊm* is used to express an action/an event that has not occurred, as the following example shows.

(162) kau lʊm ɲɪcɪp
2SG not.yet ACT-taste
'You haven't tasted them.'

2.1.3.3.8. *N^{d}a?*

N^{d}a? literally means 'want' and is used to mark an action or an event that will occur in the future.

(163) a. ha, tan^{d}o dio? n^{d}a? datanŋ
EXCL sign 3 want come
'Well, that's a sign that she will come.'

b. n^{d}a? m^{b}agɪ ka siapo?
want ACT-give to who
'Whom will [we] give [it] to?'

---

[16] *lʊm* is considered native to Jambi Malay.

2.1.3.4. Modals

Jambi Malay also exhibits modal auxiliaries which include:

(164) a. biso ‘can, be able’
b. tlap ‘can, be able’
c. bole ‘may, have permission’
d. harʊs ‘must’
e. tukaŋ ‘can’ (only in Tanjung Raden and Mudung Darat)

A modal appears before a verb in a declarative sentence and if negation is present, the negation precedes the modal. Examples follow.

(165) a. ʊ, dioʔ-tu biso ŋamᵇɪʔ ikan-tu
uh-huh 3-DEM.DIST can ACT-take fish-DEM.DIST
‘I see, so he could catch the fish.’

b. iko jaŋan mera, dpan daʔ bole mera
this do.not red front NEG may red
‘This, don’t use the red one, we should not use the red one at the front.’

c. datʊʔ kau daʔ tlap makan baŋaʔ daʔ
grandfather 2SG NEG can eat a.lot NEG
‘Your grandfather cannot eat it much.’

d. ɲadi patua oraŋ tuo bŋen-tu harʊs-la
ACT-become proverb person old before-DEM.DIST must-EMPH
kito amᵇɪʔ
1 take
‘So, we have to follow old people’s proverbs.’

e. waktu lagi kcil dulu, tukaŋ bntɪ
time more small before can EPIT
mᵇuat pukat dewеʔ
ACT-make dragnet alone
‘When I was young, I could make a dragnet myself.’

As shown in (165)a, the modal *biso* appears before the verb. In (165)b and (165)b, the negation *daʔ* precedes the modal *bole* and *tlap*, respectively, and the modal is followed by the verb. In (165)d and (165)e, the modal appears before the verb and the subject intervenes between the modal and the verb. The structure in (165)d and (165)e differ

in that the speaker emphasizes the necessity of taking in (165)d and the capability in (165)e.

In addition, if an aspect marker is present, it appears before the modal, as exemplified below.

(166) la bole kito nanᵈʊr
PFCT may 1 ACT-plant.rice
'We may already plant the rice.'

Note that in addition to being a modal, *tukaŋ* in Jambi Malay also has the meaning of someone who is doing something. It is often very difficult to decide if *tukaŋ* refers to a person or a modal auxiliary, as exemplified in (167).

(167) a. mᵇoʔ aku tukaŋ buat di ruma
older.sister 1SG AGT make LOC home
'My older sister is the one who made it at home.'

b. awaʔ tukaŋ bawaʔ
1/2/3 AGT bring
'I was the one who brought it.'

Sentence (167)b is the continuation of sentence(167)a. The speaker was saying that her sister was the one who made a kind of cake at home and the speaker was the one who brought it and sold it to people. Without such a context, it would be unclear that (167)b refers to a person and could be interpreted as a modal auxiliary and thus, sentence (167)b can be translated as 'I could bring it'.

In addition to the context, one test can be employed to distinguish the non-auxiliary *tukaŋ* from the auxiliary *tukaŋ*. The modal auxiliary *tukaŋ* cannot be negated using *kɲoʔ*, but using *daʔ* 'NEG'. Examples follow.

(168) aku daʔ tukaŋ masaŋ tarʊp-ko (TR, E)
1SG NEG can ACT-set awning-DEM.PROX
'I cannot set this awning.'

If *tukaŋ* in (168) were a non-auxiliary, the negator would be the nominal negator *kɲoʔ* 'not'. Furthermore, if *daʔ* in (168) is replaced by *kɲoʔ,* the meaning of the sentence will be different.

(169) aku ɲoʔ tukaŋ masaŋ tarɵp-ko (TR, E)
1SG NEG can ACT-set awning-DEM.PROX
'I'm not the person who set this awning.'
*'I cannot set this awning.'

The discussion of negation is provided in 1.4.

2.1.3.5. Finite vs. Non-finite Verbs

As Jambi Malay lacks overt syntactic/morphological tense markers, this language does not demonstrate a distinction between finite and non-finite verb forms. Despite the lack of finite and non-finite verb forms in the language, there is finite and non-finite clause distinction See section 1.1.4.1.4 for the discussion.

2.1.4. Adjectives

An adjective is a word which describes a noun. An adjective describes a noun in terms of its shape, size, color, condition, or other characteristics. Examples of adjectives are shown below.[17]

(170) a. Adjectives Describing the Shape/Size of Nouns

bulat	'round'
bsaʔ	'big'
tɪpɪs	'thin'
tbal	'thick'

[17] The discussion of the adjective phrase is provided in section 1.2.2.1 and the discussion of how an adjective can be distinguished from a verb is provided in section 1.16.

b. Adjectives Describing the Colors of Nouns

biru	‘blue’
ijo	‘green’
mera	‘red’

c. Adjectives Describing the Condition/Other Characteristics of Nouns

eloʔ	‘good’
brsɪ	‘clean’
rusaʔ	‘broken’
snaŋ	‘happy’

A noun can be described using two adjectives. In such cases, the adjectives are usually translated using a coordinator ‘and’, as shown below.

(171) a. neŋoʔ api-e-tu ŋri, bsaʔ tiŋ^{g}i
ACT-look fire-3-DEM.DIST afraid big high
‘To see the fire was scary, it was big and high.’

b. tiŋ^{g}i, kʊrʊs tiŋ^{g}i
high thin high
‘He is tall, he is thin and tall.’

c. bsaʔ paɲ^{j}aŋ
big long
‘[It was] big and long.’

In addition, an adjective can be formed using compounding, as exemplified in (172) below. The description of compounds is presented in section 2.2.3.

(172) a. biru mudo ‘light blue’
b. mera tuo ‘dark blue’

2.1.4.1. Predicative vs. Attributive Adjectives

Jambi Malay does not distinguish between the forms for predicative adjectives and those for attributive adjectives. In other words, an adjective may appear as a predicative as well as an attributive modifier of nouns. A predicative adjective occurs as the predicate in adjective clauses (see section 1.1.2.1.1.2). An attributive

adjective serves as a phrasal modifier in noun phrases (see also section 1.2.2.4.2.1). Examples follow.

(173) Predicative Adjectives

a. [$_{IP}$ [$_{NP}$ daʊn pacar] [$_{PRED}$ eloʔ]] kato oraŋ
leaf k.o.plant beautiful word person
'People say that *pacar* leaves are good.'

b. [$_{IP}$ [$_{NP}$ badan-e] [$_{PRED}$ bsaʔ] bnar-la]
body-3 big right-EMPH
'Her body is really big.'

(174) Attributive Adjectives

a. teŋoʔ pake [$_{NP}$ baju [$_{ATTR}$ ijo]]
look use garment green
'I saw them wearing green clothes.'

b. kalu [$_{NP}$ caŋkır [$_{ATTR}$ bsaʔ]-tu] namo-e apoʔ
if glass big-DEM.DIST name-3 what
'What do we call the big glass?'

In (173), the adjectives *eloʔ* 'beautiful' and *bsaʔ* 'big' are predicative adjectives, whereas in (174), the adjectives *ijo* 'green' and *bsaʔ* 'big' are employed as attributive adjectives. The adjective *bsaʔ* 'big' has the same form both when it functions as a predicative adjective (173)b and as an attributive adjective (174)b. Furthermore, in terms of the surface position, both predicative and attributive adjectives appear to the right of the noun. This raises a problem as to how to distinguish a predicative adjective from an attributive adjective.

However, two tests can be employed to determine whether an adjective is predicative or attributive. First, if an adjective functions as a predicative adjective, the word order between the adjective and the noun it modifies can be reversed. This is not surprising as predicates in Jambi Malay can be fronted (cf. section 1.1.2.1.3). By contrast, if an adjective functions as an attributive adjective, the word order of the

adjective and the noun cannot be reversed. The word order of the noun and the adjective in (173)a, for example, can be reversed, whereas the word order of the noun and the adjective in (174)a cannot be reversed, as shown below.

(175) a. elo? dauŋ pacar(-tu) (TR, E)
beautiful leaf k.o.leaf-DEM.DIST
'*Pacar* leaves are good.'

b. *aku teŋo? dio? pake ijo baju (TR, E)
1SG look 3 use green garment
'I saw them wearing green clothes.'

Note that the AP-NP in (175)a is a clause and it involves predicate fronting (see sections 1.1.2.1.3 and 1.1.2.2.2.2) and AP-NP in (175)b is a phrase and it does not involve predicate fronting.

The second test to check whether an adjective is predicative or attributive is through position of demonstratives *-tu* 'DEM.DIST' and *-ko/-ni* 'DEM.PROX'. If a demonstrative appears after the head noun, the adjective is usually predicative, whereas if a demonstrative appears to the right of the adjective, the adjective is usually attributive. Examples follow.

(176) a. Noun Demonstrative Adjective → Predicative
bujaŋ-tu tiŋ^{g}i (TR, E)
bachelor-DEM.DIST high
'The young man is tall.'

b. Noun Adjective Demonstrative → Attributive
bujaŋ tiŋ^{g}i-tu baɪ? (TR, E)
bachelor high-DEM.DIST good
'The tall young man is nice.'

To conclude, Jambi Malay does not exhibit different forms for distinguishing between predicative adjectives from attributive adjectives. However, two tests which are related to word order can be employed to determine whether an

adjective functions predicatively or attributively: the ordering test and the demonstrative test.

2.1.4.2. Different Kinds of Comparison

Jambi Malay exhibit three kinds of comparison, namely equality, comparative, and superlative.

2.1.4.2.1. Equality

To express that two things have the same property, one of the following formulas can be empoloyed.

(177) a. A *sa-* + $X_{adjective}$ B ‘A is as X as B’
b. A *samo* + $X_{adjective}$ *dŋan* B ‘A is as X as B’
c. A *dŋan/samo* B *samo* + $X_{adjective}$ ‘A and B are of the same X’

Examples are provided below.

(178) a. A *sa-* + $X_{adjective}$ B

palampʊŋ-ɲo-tu sabsaʔ iko
INSTR-float-3-DEM.DIST one-big DEM.DIST
‘The float is as big as this.’

b. A *samo* + $X_{adjective}$ *dŋan* B

Ø samo tuo dŋan zamroni
same old with Zamroni
‘[He] is as old as Zamroni.’

c A *dŋan* B *samo* + $X_{adjective}$

edi dŋan adɪʔ-e samo bsaʔ (TR, E)
Edi with younger.sibling-3 same big
‘Edi is as big as his younger brother.’

Note also that sometimes X in the formula in (177)a can be a reduplicated form of an adjective, as illustrated in (179) below.

(179) la sabsaʔ-bsaʔ-ko
PFCT one-RED-big-DEM.DIST
‘It’s already as big as this.’

2.1.4.2.2. Comparative

Comparative adjectives can be expressed using the following formula.

(180) *kuraŋ /lbɪ* $[X]_{adjective}$ *dari* 'less/more X than'

Examples are shown below.

(181) a. muŋko bibi-ko niŋᵍi ari,
so.that aunt-DEM.PROX ACT-high day
badan-tu kuraŋ enaʔ
body-DEM.DIST less nice
'I got up late because I didn't feel well.'

b. kini-tu kuraŋ sjʊʔ dari jaman aku kciʔ(TR, E)
moment-DEM.DIST less cold from period 1SG small
'It is less cold now than when I was a kid.'

(182) a. kampʊŋ-ko lbɪ rame dari kampʊŋ-tu (TR, E)
village-DEM.PROX more crowed from village-DEM.DIST
'This village is more crowded than that village.'

b. tuhan naŋ lbɪ padeʔ
God REL more clever
'God is the one who is cleverer.'

2.1.4.2.3. Superlative

The superlative in Jambi Malay is expressed using an adjective which is modified by the adverb *palɪŋ* 'most'. The formula is shown in (183) and examples are provided in (184).

(183) *palɪŋ* + $X_{adjective}$ 'the most X'

(184) a. kato paman kau tana kito-ko palɪŋ sʊbʊr
word uncle 2SG soil 1-DEM.PROX most fertile
'Your uncle said that our land was the most fertile.'

b. dioʔ-ko yaŋ palɪŋ tuo, tʊm
3-DEM.PROX REL most old TRU-Kaltum
'She is the eldest, Kaltum.'

Note that some speakers suggested that the prefix *ta-* followed by an adjective can be used to express superlativity. However, other speakers rejected these forms. Some speakers said that this is possible but it is rare. In the naturalistic data, only one example of *ta-* followed by an adjective is found, as shown below.

(185) buayo tabsaʔ
crocodile TA-big
'the biggest crocodile'

This fact suggests that *ta-* followed by an adjective is not the natural way of expressing the superlative in Jambi Malay. *Ta-* forms for superlatives might have been a loan form into the language from the Indonesian *ter-*.

2.1.4.3. Various Degrees of Quality

Different degrees of quality can be expressed using modifying adverbs and a circumfix. The main modifying adverbs that can be employed are shown in (186).

(186) klewat 'too'
amat 'too, very'
nian 'too, very'
(bnar) ŋla 'indeed'
agaʔ 'rather'
cʊkʊp 'enough'

(187) a. waʔ asan-tu klewat lokeʔ (JC, E)
uncle.or.aunt Hasan-DEM.DIST too stingy
'Uncle Hasan is too stingy.'

b. dioʔ lagi sehat nian bi do-tu
3 PROG healthy very TRU-aunt TRU-young-DEM.DIST
'She was really in good condition.'

c. dioʔ-ko la padeʔ ŋla , tʊm
3-DEM.PROX PFCT clever indeed TRU-Kaltum
'She has been really clever, Kartum.'

d. sagalo sʊlɪt bnar-la kami siko-ko
one-all difficult right-EMPH 1 here-DEM.PROX
'All is difficult here.'

e. bada minum-tu agaʔ bsaʔ
container drink-DEM.DIST about big
'The drink containers are rather big.'

It should be pointed out that in Jambi Malay, especially in Tanjung Raden and Mudung Darat, there exists a group of adverbs that mean 'very' and each of them can only modify a particular adjective. Uri Tadmor (p.c.) refers to such adverbials as dedicated adverbs. The list of dedicated adverbs is provided in (188) and examples are provided in (189).

(188)
ckɪŋ	'very; for sour taste and body shape'
lgam	'very; for black'
muam	'very; for black'
malpaʔ	'very; for white'
ŋaltɪʔ	'very; for *panas* hot'
pŋaʔ	'very; for *hɪrʊʔ* noisy'
malgi	'very; for *manis* sweet'
gbek	'very; for basa wet'
radaŋ	'very; for *panas* hot'
maranaŋ	'very; for red'
mapal	'very; thick'

(189) a. kato awaʔ, "awaʔ, awaʔ la tbal mapal"
word 1/2/3 1/2/3 1/2/3 PFCT thick very
'I said, "You have already been very fat".'

b. masam ckɪŋ
sour very
'It's very sour.'

Furthermore, the affixation of the *ka-an* circumfix to an adjective may form an adjective which denotes a degree of super abundance and is translated into 'too' in English, as exemplified below.

(190) a. naŋ sari-tu kapen^{d}eʔan
REL one-day-DEM.DIST ABST-short-CIRC
'The previous one was too short.'

b. "la kagdaŋan," kato dioʔ-e
PFCT ABST-big-CIRC word 3-3
'"[It was] too big," he said.'
[Lit. '"[It was] too big" were his words.']

2.1.5. Prepositions

A sequence of a preposition followed by a noun phrase/pronoun forms a prepositional phrase (discussed in section 1.2.2.3). Examples follow.

(191) a. awaʔ mgaŋ tip di pon^{d}oʔ
1/2/3 ACT-hold tape LOC hut
'We hold a tape in a hut.'

b. kito dari dioʔ ttap balɪʔ ka dio
1 from 3 permanent return to 3
'We are from Him and we will return to Him.'

2.1.5.1. Simple Prepositions and Compound Prepositions

Sneddon (1996) points out that some prepositions in Indonesian are simple and others are compound prepositions. Jambi Malay appears to also have both simple and compound prepositions. However, I shall later claim that the so-called compound prepositions are not in fact compound prepositions.

2.1.5.1.1. Simple Prepositions

A simple preposition consists of a single item. Single prepositions are of two types, namely locative prepositions and other prepositions. Three basic locative prepositions are *di, ka,* and *dari.* The preposition *di* which is translated into English as 'in, on, at' indicates that the action/event occurs in the place shown by the noun that follows the preposition. The preposition *ka* 'to' indicates the movement of the action

towards the place shown by the noun. The preposition *dari* ‘from’ demonstrates the movement of the action away from the place indicated by the noun.

These three locative prepositions can be combined with locative pronouns (described in section 2.1.5.1.2) and the combination indicates the position in relation to the speaker. The locative pronouns include *siko* ‘here’ (near speaker), *situ* ‘there’, and *sano* ‘there’. Examples follow.

(192) a. jadi dioʔ balɪʔ ka siko dioʔ mᵇawaʔ balɪʔ
become 3 return to here 3 ACT-bring return
‘So, when he comes back, he will bring it here.’

b. iyo, dioʔ naʔ mᵇawaʔ dari sano bɪbɪt-e
yes 3 want ACT-bring from there seed-3
‘She wanted to bring the seeds here.’

c. ado somel di situ, kanʔ
exist factory LOC there Q
``There’s a factory there, right?

When a locative preposition combines with the question word *mano* ‘where’ it forms a *wh*-question word (see section 1.1.3.2.1 for the discussion of *wh*-questions).

Other prepositions are non-locative prepositions. These include those listed in (193) below. Examples are provided in (194).

(193)
ʊntʊʔ	‘for’
dŋan	‘with’
samo	‘with’
buat	‘by’
sampe	‘until’
macam	‘like’
tntaŋ	‘about’
pake	‘with’

(194) a. la, samᵇal masaʔ-tu ʊntʊʔ kami
PFCT chili.sauce cook-DEM.DIST for 1
'Well, the cooked chili sauce is for me.'

b. poleti-la badan-ko tadi-ko dŋan autan
smear-APPL-EMPH body-DEM.PROX earlier-DEM.PROX with Autan
'We smeared Autan on our body.'

c. tʊjʊ pʊlʊ dimakan buat aɲʲɪŋ aku
seven ten PASS-eat by dog 1SG
'My dog ate seventy.'

2.1.5.1.2. Compound Prepositions

The locative prepositions discussed in section 2.1.5.1.1 above often combine with a set of locative prepositions which also indicate location in relation to the noun that follows them. I shall refer to this sort of combination as compound prepositions. The locative prepositions which usually come after the three main locative prepositions include:

(195)
atas	'top, above'
dpan	'front'
adap	'front'
(sa)bla	'side'
tpi	'edge'
bawa	'under'
dalam	'inside'
balakaŋ	'back'
sbraŋ	'across'
luar	'outside'
pɪŋᵍɪr	'edge'

Some examples are shown in (196).

(196) a. rupo-e di dalam lmari-tu
appearance-3 LOC inside wardrobe-DEM.DIST
ado ɲimpan asam cuko daʔ
exist ACT-keep acid vinegar NEG
'Apparently, there was vinegar in the cupboard.'

b. ha, di adap oraŋ tuo-tu awaʔ
EXCL LOC face person old-DEM.DIST 1/2/3
tʊn^{d}ʊʔ dikit
bow a.little
'We should bow when we face old men.'

c. niʊp tkʊt-tu di
ACT-blow k.o.small.birdtrap-DEM.DIST LOC
bawa jarɪŋ-tu, kan
under net-DEM.DIST Q
pas ɲan dʊdʊʔ-dʊdʊʔ di atas jaram^{b}a-tu
exact very RED-sit LOC up bridge-DEM.DIST
'We blew the trap under the net and we sat exactly on the bridge.'

However, if we carefully analyze the items provided in (195), they appear to be glossed as nouns. Thus, the compound prepositional phrases presented in (196) can be analyzed as a preposition followed by a noun phrase and the noun phrase has the structure of a noun followed by another noun. Therefore, the structure for the prepositional phrases in (196) can be illustrated below.

(197) a. [$_{PP}$ di [$_{DP}$ [$_{NP}$ dalam][$_{NP}$ lemari]]]
LOC inside wardrobe
'in the inside of the cupboard'

b. [$_{PP}$ di [$_{DP}$ [$_{NP}$ adap] [$_{NP}$ oraŋ tuo]]]
LOC face person old
'in front of old men.'

c. [$_{PP}$ di [$_{DP}$ [$_{NP}$ bawa] [$_{NP}$ jarɪŋ-tu]]]
LOC under net-DEM.DIST
'below the net'

The analysis claiming that compound prepositional phrases are simply a prepositional phrase followed by a complex NP also has more advantages if we consider the facts from the relativization of the object of a preposition presented in section 1.1.4.2.2.4.4.

2.1.6. Numerals/Quantifiers

In this section, I shall present cardinal numbers, ordinal numbers, fractions, and quantifiers.

2.1.6.1. Cardinal Numbers

Cardinal numbers are *seko?* 'one', *duo* 'two', *tigo* 'three', *mpat* 'four', *limo*, *nam*, *tʊjʊ*, *lapan*, and *samilan* 'nine' and group cardinal numbers are *pʊlʊ* 'tens', *blas* 'teens', *ratʊs* 'hundreds', *ribu* 'thousands', and *juta* 'millions'.

Cardinal numbers have several functions. First, they can be used to indicate the number of things they modify, as exemplified in (198) below.

(198) a. duo ari
two day
'two days'

b. tigo oraŋ
three person
'three persons'

Second, cardinal numbers can be employed to indicate the time, age, date, and year.

(199) Cardinal Numbers Indicating Time

suda-tu	ari	saptu	jam	smilan	aku	ka	sano
finish-DEM.DIST	day	Saturday	hour	nine	1SG	to	there

'After that, I went there on Saturday at nine.'

(200) Cardinal Numbers Indicating Age

umur	mpat	blas	taʊn
age	four	teen	year

'[I was] fourteen years old.'

(201) Cardinal Numbers Indicating Date

tu	pas	taŋ^{g}al	tʊjʊ	blas-tu,	kan?
DEM.DIST	exact	date	seven	teen-DEM.DIST	Q

'It is exactly on August seventeen, right?'

(202) Cardinal Numbers Indicating the Year

kito	mardeka	di	taʊn	mpat	pʊlʊ	limo,	eda??
1	independent	LOC	year	four	ten	five	Q

'We got our independence in [nineteen] forty five, right?'

Cardinal numbers indicating time must follow the head noun. If cardinal numbers indicating time precede the head noun, the meaning will be the number of hours, not the time, as exemplified below.

(203)

pajalanan	kiro-kiro	tigo	jam
ABST-walk-CIRC	RED-about	three	hour

'The trip was about three hours.'

Likewise, cardinal numbers indicating age must follow the head noun (example (200)). The reversed order results in the cardinal number indicating the year (see example (202)).

In addition, cardinal numbers are also used after the word *numur* 'number' to indicate the number in a series or the size of the objects.

(204) a.

mato-e	numur	tuju
eye-3	number	seven

'The point is number seven.'

b.

taɲʲʊŋ	raden-ni-la,	ɪrtɪ	satu
Tanjung	Raden-DEM.PROX-EMPH	neighborhood.association	one

'in Tanjung Raden, neighborhood association one.'

Finally, cardinal numbers are also used in counting, for instance *seko?* 'one, *duo* 'two, *tigo* 'three', *mpat* 'four', etc.

2.1.6.2. Ordinal Numbers

Ordinal numbers are formed by attaching the prefix *ka-* to the number and are used to indicate the order of the noun being modified. Ordinal numbers always

follow the noun. Note that the head noun can be omitted if it can be understood from the context.

(205) a. kalo bini kaduo-tu? (MD, E)
TOP wife NUM-two-DEM.DIST
'How about your second wife?'

b. ha, kampat zakat ataw pitra
EXCL NUM-four tithe or holy
'The fourth one is to pay Zakat.'

2.1.6.3. Fractions

The most commonly used fractions are shown in (206) below.

(206) a. sapampat/saparapat[18] one-fourth 'a quarter'
b. satŋa one-middle 'half'
c. tigo pampat /tigo parapat three-fourth 'three fourth'

Fractions can be combined with cardinal numbers to indicate the number, as exemplified below.

(207) a. cʊkʊp pulaʔ duo taʊn satŋa, ado-la sekoʔ lagi
enough PART two year one-middle exist-EMPH one more
'After two years and a half, I gave birth to another child.'
[Lit. 'After two years and a half, there was another one.']

b. pari-tu duo pɪkʊl satŋa
stingray-DEM.DIST two unit.of.weight one-middle
'The stingray weighed two hundred and fifty kilograms.'
['The stingray weighed two and a half *pɪkʊl*.']

[18] *parapat* is an idiosyncratic form. S*apampat/saparapat* is formed by the prefix *sa-* followed by the prefix *pa-* and the number *mpat* 'four'. However, most speakers are no longer aware of this and treat *sapampat* as a single morpheme meaning 'a quarter' and this item is usually pronounced as [sapṛmpat], [səpṛampat] [sapṛmpaⁿt], [səprampaⁿt].

To indicate time, the head noun precedes the cardinal number and if a fraction is present, the fraction follows the cardinal number.

(208) “baraŋkat dari ruma jam satŋa tʊjʊ, “ kato-e
leave.for from house hour one-middle seven word-3
‘”I left my house at half past six,” he said.’
[Lit. ‘”I left home at half past six” were his words.’]

2.1.6.4. Quantifiers

Quantifiers include:

(209) a. galo (galo-galo/gagalo) ‘all’
b. salʊrʊ ‘all’
c. baŋaʔ ‘a lot’
d. tiap-tiap ‘RED-every’
e. babarapo ‘some’

Examples are shown below.

(210) a. tiap-tiap bucu polet mera
RED-every corner smear read
‘They marked every corner with red color.’

b. budaʔ kan sakola galo
kid EMPH school all
‘All children go to school.’

c. ta macam mano zaman bŋen-ko kitoko
not.know sort which period old-DEM.PROX 1-DEM.PROX
kato oraŋ tuo dulu-tu kancıl,
word person old before-DEM.DIST mouse.deer
salʊrʊ binataŋ-ko bacakap
all animal-DEM.PROX INTR-say
‘I don’t know how, we… old people say that mice, deer and all animals talked in the past.’

d. babarapo buku koyaʔ (TR, E)
some book torn
‘Some books are torn.’

e. ha, baʔsu-tu baŋaʔ miwon-e
EXCL meatball-DEM.DIST a.lot Miwon-3
'We, meatballs contain a lot of 'Miwon' (additional flavor).'

2.1.7. Adjuncts

An adjunct or a sentential adverbial is a component of a clause which provides information about various things such as place, time, frequency, and manner. Examples follow.

(211) Adverb of place

a. nkʊt bʊrʊŋ [di kumpe-kan]
ACT-k.o.small.bird.trap bird LOC Kumpe-EMPH
'[We] trapped small birds in Kumpe.'

b. aku ŋamᵇɪʔ-la ssudu [di sano]
1SG ACT-take-EMPH k.o.plant LOC there
'Then, I took a kind of plant there.'

(212) Adverb of time

a. ditaŋkap buat buser [soretu]
PASS-catch by police.officer yesterday
'They were arrested by a police officer yesterday.'

b. ha, [soretu] bibi lapor-la ka dioʔ
EXCL yesterday aunt report-EMPH to 3
baso ɪtɪʔ-tu la mati
REL duck-DEM.DIST PFCT dead
'Well, I told him that the ducks had died that afternoon.'

(213) Adverb of frequency

dioʔ [srɪŋ] ŋaŋkat oraŋ-tu
3 often ACT-lift person-DEM.DIST
'He likes to wheedle others.'

(214) Adverb of manner

a. ha, tu harʊs kito blo [eloʔ-eloʔ]
EXCL DEM.DIST must 1 keep RED-beautiful
'We must take care of her well.'

b. bʊŋkʊs-la [laʔlam^{b}at], edaʔ
pack-EMPH PARTRED-slow Q
'I wrapped it slowly, you know.'

The position of an adjunct in a clause is relatively free in that it may appear in clause initial position ((212)b), in the middle of a clause ((213)), or clause final position (shown in (211), (212)a, (214)).

2.1.8. Clitics

Malay in general does not exhibit as rich a clitic system as those in Romance languages like Italian and Romanian. Jambi Malay only has a limited number of clitics. Clitics in this language include clitic pronouns, demonstrative pronouns, emphatic clitics and some other clitic particles (discourse particles). Clitic pronouns which cover the first person singular proclitic *ku-* and the first person singular enclitic *-ku* (section 2.1.2.1.9.2) and third person clitics *–e* and *-ɲo* are discussed in section 2.1.2.1.9.1. Demonstrative clitic pronouns which include *ko/ni* 'this' and *tu* 'that' are discussed in section 2.1.2.5.

In what follows, I shall describe emphatic clitics and other clitic particles (discourse particles).

2.1.8.1. Emphatic Clitics

Emphatic clitics cover *la* and *kan.*

2.1.8.1.1. Emphatic *-La*

There are two types of *la* in Jambi Malay, namely the perfective marker *-la* (see section 2.1.3.3.3) and the emphatic enclitic *-la.* The emphatic enclitic *–la* may attach to different elements of a sentence. Examples follow.

(215) a. sapupu-la kau ŋan dioʔ
one-cousin-EMPH 2SG with 3
'So, you're his cousin.'
[context: The speaker was explaining that the interlocutor's father and the interlocutor's uncle are siblings. Therefore, the son of the interlocutor's uncle is the interlocutor's cousin.]

b. ɲʲʊlʊ di dano-la
ACT-hunt LOC lake-EMPH
'They looked for fish in the lake.'
[context: The speaker was asked about the location where the speaker's brother and his friend looked for fish the previous night. The speaker would like to say that 'of course, they looked for fish in the lake, not any other places.']

c. diamᵇɪʔ-la yaŋ tuo sakali
PASS-take-EMPH REL old very
'So, he chose the eldest one.'
[context: the speaker was telling a story. There was a young man who was asked to choose one of the king's daughters.]

d. dioʔ tukaŋ-la masaʔ dewеʔ (MD, N)
3 can-EMPH cook alone
'She can cook by herself.'
[context: talking about a girl who lived in a boarding house. The speaker wanted to emphasize that the girl has the ability to cook.]

The complete discussion on emphasis is provided in section 1.11.

Note that *–la* which attaches to a third person pronoun in object position triggers reflexive meaning, as exemplified in (216) below. The discussion of means of expressing reflexivity is provided in section 1.6.1.

(216) Yanti neŋoʔ dioʔ-la di tipi (TR, E/MD, E)
Yanti ACT-look 3-EMPH LOC television
'Yanti saw herself on TV.'

2.1.8.1.2. Emphatic –*Kan*

Sneddon (2006:120) categorizes *kan* in Jakarta Indonesian as a discourse particle which is used to request agreement/verification from the interlocutor, share knowledge, and create an atmosphere of social solidarity and intimacy.

Similarly to Jakarta Indonesian, *kan* in Jambi Malay can also be used in *yes-no* questions (see section 1.1.3.2.1). In addition, *kan* may also be used as an emphatic marker in that the speaker emphasizes the statement/act or the person he/she wants to emphasize. Like *la, kan* follows different elements of a sentence, as illustrated below.

(217) a. jadi, kan paŋanten batino-tu la
so EMPH PA-marry female-DEM.DIST PFCT
nuŋ^{g}u di dalam
ACT-guard LOC inside
'So, the bride has been waiting inside.'

b. urat sarap kan n^{d}aʔ dioprasi
tendon nerve EMPH want PASS-operation
'The nerve had to be operated on.'

c. tapi jaman dulu kan duwɪt-tu
but period before EMPH money-DEM.DIST
baarti nian
INTR-meaning very
but the money was very valuable.

The full description of *kan* as an emphatic marker is provided in section 1.11.1.1.

2.1.8.2. Discourse Particles

2.1.8.2.1. *Pʊn*

One other clitic particle is *pʊn.* Note that *pʊn* can follow a question phrase (see section 2.1.2.1.8). *Pʊn* can be translated as *even,* as exemplified below.

(218) a. oraŋ di pasar-pʊn daʔ dapat bensɪn (TR, E)
person LOC marker-PUN NEG get gasoline
'Even people in the market did not get gasoline.'
[Context provided: it was difficult to get gasoline. People at the market were supposed to get gasoline more easily than people in the villages.]

b. sam^{b}al calʊʔ-pʊn enaʔ
chili.sauce k.o.condiment-PUN nice
'Even *calʊʔ* chili sauce is delicious.'
[context: the speaker was telling the interlocutor that she is not picky in eating. Everything is good for her.]

2.1.8.2.2. *Pulaʔ*

Pulaʔ is a discourse particle. *Pulaʔ* is used to express something that is not expected, as illustrated below.

(219) a. suda magɪ ayam makan, ado pulaʔ kawan dataŋ
finish ACT-give chicken eat exist PART friend come
'After I finished feeding the chickens, a friend of mine came.'
[context: the speaker was talking about his activity. He was telling that he fed his chickens and after he finished feeding them, one of his friends surprisingly showed up.]

b. ŋapo pulaʔ diʊsɪr
why PART PASS-chase.away
'Why should I ask him to leave?'
[context: the speaker's son asked his father to ask his father's friend to leave and the speaker questioned his son about why he should ask his friend to leave.]

In addition, *pulaʔ* can be translated as 'also' or 'again'.

(220) a. nʊlɪs di sɪtu pulaʔ
ACT-write LOC there PART
'We wrote on it again.'
[context: the speaker was telling that when she was young they used a stone to write on and then they deleted the writing using water so that they could write on it again.]

b. awaʔ nᵈaʔ ka umo pulaʔ (MD, N)
1/2/3 want to paddy PART
'I also need to go to the rice field.'
[context: the speaker was telling that someone was planning to hold a ritual ceremony. She pointed out that she did not go to tap the sap because she needed to help the preparation for the ceremony. In addition, she needed to go to the rice field.'

2.2. Derivational Morphology

Word formation processes in Jambi Malay include affixation, reduplication, and compounding. In addition to these three word formation processes, an additional word formation process is also found, i.e. truncation. Truncation does not form a new word class and is simply a phonological process in which a syllable is truncated from a word. The description is provided in the phonology chapter (section 3.4.5). Affixation is of three types: prefixation, suffixation, and circumfixation.

This section is divided into three sub-sections: deriving different parts of speech, reduplication, and compounds.

2.2.1. Deriving Different Parts of Speech

In this section, the following sections are included: deriving nouns, deriving verbs, deriving adjectives, deriving adverbs, and deriving numbers. In addition, the issue of inflectional vs. derivational affixes is also discussed.

2.2.1.1. Deriving Nouns

Nouns can be derived using different derivational affixes. These include the prefix *paŋ-*, the prefix *pa-,* the suffix *–an,* the circumfix *ka-an,* the circumfix *paŋ-an,* and the circumfix *pa-an*.[19]

[19] The corresponding affixes in the city dialect are *pəŋ, pə-, -an, kə-an, pəŋ-an,* and *pə-an,* respectively. In terms of the functions, no significant differences were observed

2.2.1.1.1. The Prefix *paŋ-*

The prefix *paŋ-* is mainly employed for deriving nouns. In addition, it can also be used to derive adjectives (see section 2.2.1.3.1). In this section, I only discuss the type of *paŋ-* that derives nouns. First, I show the allomorphs of *paŋ-*. Second, I describe the type of base that can be prefixed by *paŋ-*. Third, I discuss the meanings resulting from *paŋ-* prefixation.

2.2.1.1.1.1. Allomorphs of *Paŋ-*

The allomporhs of *paŋ-* include /*paŋ*/, /*pan*/, /*pam*/, /*paɲ*/, /*paŋ*/, /*pam*^{b}/, /*pan*^{d}/, /*paɲ*^{j}/ *paŋ*^{g}/, and /*pa*/. What determines which allomorph surfaces is the initial segment of the base that *paŋ-* attaches to. The following table displays the different allomoporhs of *paŋ-*.

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between the Jambi city dialect on the one hand, and Tanjung Raden or Mudung Darat on the other hand.

Table 2.3 The Allomorphs of *Paŋ-*

The initial segment of the base	The allormph form of *paŋ-*
/p/	/*pam*/
/t/	/*pan*/
/c/	/*paɲ*/
/s/	/*paɲ*/
/k/	/*paŋ*/
/b/	*pam*^{b}
/d/	*pan*^{d}
/j/	*paɲ*^{j}
/g/	*paŋ*^{g}
/m/, /n/, /ɲ/, /ŋ/, /l/, /r/, /y/, /w/	*Pa*

(221) *Paŋ-* + Vowel-initial Base

paŋ- +	/iŋat/	'remember'	→	/paŋiŋat/	'a reminder; 'someone who remembers well'
paŋ- +	/ʊkʊr/	'measure'	→	/paŋʊkʊr/	'a tool for measuring'
paŋ- +	/ɪkʊt/	'follow'	→	/paŋɪkʊt/	'someone who likes to imitate'

(222) *Paŋ-* + Voiceless Obstruent-initial Base

paŋ- +	/tim^{b}o/	'dipper'	→	/panim^{b}o/	'a tool for dipping water, dipper'
paŋ- +	/pʊkʊl/	'hit'	→	/pamʊkʊl/	'a tool for hitting'
paŋ- +	/sapu/	'broom'	→	/paɲapu/	'a tool for sweeping, broom'
paŋ- +	/kbat/	'tie'	→	/paŋbat/	'something for tying'
paŋ- +	/cʊcʊʔ/	'stab'	→	/paɲʊcʊʔ/	'something used for stabbing/making a hole'

(223) *Paŋ-* + Voiced Obstruent-initial Base

paŋ- +	/bʊŋkʊs/	'wrap'	→	/pam^{b}ʊŋkʊs/	'wrapper'
paŋ- +	/dmpʊl/	'caulking'	→	/pan^{d}mpʊl/	'caulking'
paŋ- +	/jago/	'keep'	→	/paɲ^{j}ago/	'a guard'
paŋ- +	/goreŋ/	'fry'	→	/paŋ^{g}oreŋ/	'spatula'

(224) *Paŋ-* + Nasal/Liquid/Glide

paŋ- + /makan/	'eat'	→	/pamakan/	'eater'
paŋ- + /lʊrʊs/	'straight'	→	/palʊrʊs/	'ruler; a problem solver'
paŋ- + /rkam/	'record'	→	/parkam/	'recorder'
paŋ- + /warno/	'color'	→	/pawarno/	'dye'

2.2.1.1.1.2. The Base that *Paŋ-* Attaches to

In order to derive nouns, prefix *paŋ-* mainly attaches to verbs, but in some cases, it also attaches to nouns and adjectives. Note that when *paŋ-* attaches to a noun, it is not a derivational affix since the derived word is also a noun.

(225) *Paŋ-* + Verbs

a.	/*paŋ-* + bʊŋkʊs 'wrap'/	→	/pam^{b}ʊŋkʊs/	'wrapper'
b.	/*paŋ-* + pʊkʊl 'hit'/	→	/pamʊkʊl/	'a tool for hitting'
c.	/*paŋ-*+ jago 'keep'/	→	/paɲ^{j}ago/	'a guard'

(226) *Paŋ-* + Nouns

a.	/*paŋ-*+ sapu 'broom'/	→	/paŋapu/	'a tool for sweeping, broom'
b.	/*paŋ-*+ tim^{b}o 'dipper'/	→	/panim^{b}o/	'a tool for dipping water, dipper'

(227) *Paŋ-* + Adjectives

a.	/*paŋ-* + jahat 'bad'/	→	/paɲ^{j}ahat/	'criminal'
b.	/*paŋ-* + mudo 'young'/	→	/pamudo/	'youth'

2.2.1.1.1.3. The Meanings of *Paŋ-*

When *paŋ-* attaches to verbs and nouns, the derived nouns generally indicate the instrument/tool by which the action expressed in the base is performed or carried out, as exemplified below.[20]

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[20] In the elicitation, some speakers said that the *paŋ* nouns in (228) can also be used to indicate the person who performs the action indicated in the root. However, some

(228) a. ko, kro-ko tadi rame-la
DEM.PROX monkey-DEM.PROX earlier crowded-EMPH
mgaŋ [pamʊkʊl]
ACT-hold INSTR-hit
'So, the monkeys held a stick.'

b. daʔ, [parn^{d}am]-ko tadi
NEG INSTR-soak-DEM.PROX earlier
'No, I mean [the water] we used for soaking.'

c. a, [panam^{b}at]-e-tu akar
EXCL INSTR-tie-3-DEM.DIST root
'Well, the rope was made of root.'
[Lit. 'The tool that we make for tying is root.']

d. ado-la tadi-ko cucu naŋ sekoʔ
exist-EMPH earlier-DEM.PROX grandchild REL one
diam^{b}ɪʔ-e [paŋapu]
PASS-take-3 INSTR-broom
'One of my grandsons took a broom.'

In a few cases, *paŋ-* that attaches to verbs and nouns forms nouns which indicate the person who performs or who likes to perform the action expressed in the base, as exemplified below. The derived nouns are shown in square brackets.

(229) a. awaʔ-ko banso [pamakan] ŋla
1/2/3-DEM.PROX COMP INSTR-eat indeed
'I like eating so much.'
[Lit. I'm really an eater]

b. ikan tapa [panuŋ^{g}u] dkat jaram^{b}a kato bibi-tu
fish k.o.fish INSTR-guard near bridge word aunt-DEM.DIST
'She said, "the *tapa* fish which is the guard near the bridge."'
[Lit. '"the *tapa* fish, the guard close to the bridge" were Auntie's words.']

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speakers consistently rejected that possibility and preferred to use *tukaŋ* followed by the verb in order to refer to the person performing the action. The speakers in the first group might have been influenced by Indonesian.

c. [pamalɪŋ] daʔ ktɪʔ
INSTR-steal NEG exist
'There were no thieves.'

If *paŋ-* attaches to an adjective, it adds the meaning that the person or the thing can be associated with the base, as shown in square brackets below.

(230) a. kini-ko baŋaʔ [paɲʲahat] (TR, E)
now-DEM.PROX a.lot INSTR-bad
'There are a lot of criminals nowadays.'

b. kini mano ado lagi [pamudo] salaɪn
now which exist more INSTR-young one-other
awaʔ, kan?
1/2/3 Q
'Now, there are no young men except us, right?'

Moreover, *paŋ-* that attaches to some adjectives derives nouns which are more appropriate to be interpreted as adjectives (see section 2.2.1.3.1).

To conclude, *paŋ-* exhibits ten allomorphs: /*paŋ*/, /*pan*/, /*pam*/, /*paɲ*/, /*paŋ*/, /*pamᵇ*/, /*panᵈ*/, /*paɲʲ*/ *paŋᵍ*/, and /*pa*/. The prefix *paŋ-* may attach to verbs, nouns, as well as adjectives. The derived words are generally nouns. *Paŋ-* that attaches to verbs and nouns mainly derives nouns which indicate the tool by which the action indicated in the base is performed. In addition, a few *paŋ-* nouns denote the actor/agent of the action indicated by the base. Finally, *paŋ-* that attaches to adjectives indicates that the person or the thing shows some sort of association with the base.

2.2.1.1.2. The Prefix *Pa-*

The prefix *pa-* is a loan affix from the Indonesian prefix *pe-* and it always surfaces as *pa-*. It is mostly employed in words borrowed from Indonesian. *Pa-* generally derives a noun which indicates a person who performs an action.

(231) a. ttiap [pagawe] karaton-tu oraŋ raden galo
PARTRED-every AGT-work palace-DEM.DIST person prince all
'All employees in the palace are princes.'

b. aku dŋan [patugas] krjo samo
1SG with AGT-duty work same
'I cooperated with the officials.'

c. sekoʔ-tu daʔ, [padagaŋ] be-la (MD, N)
one-DEM.DIST NEG AGT-trade just-EMPH
'The other one is not, he is a trader.'

2.2.1.1.3. The Suffix *–An*

The suffix *–an* in Jambi Malay may be used to derive nouns as well as adjectives (see section 2.2.1.3.3). In addition, the suffix *–an* also derives verbs (see section 2.2.1.2.4). With respect to its shape, the suffix *–an* always surfaces as *–an.* In what follows, I focus on the suffix *–an* that derives nouns. First, I describe the base that *–an* attaches to. Second, I present the meanings of the nouns derived from *–an* suffixation.

2.2.1.1.3.1. The Base that *–An* Attaches to

The suffix *–an* mainly attaches to verbs to derive nouns, both concrete (more productive) and abstract. A limited number of *–an* nouns are derived from *–an* suffixation to nouns and adjectives. In addition, the suffix *-an* also attaches to reduplicated forms of nouns and verbs. Examples are presented below.

(232) Verb + *-an*

/kʊbʊr	'bury'	+ *-an*	→	/kʊbʊran/	'grave'
/gantʊŋ/	'hang'	+ *-an*	→	/gantʊŋan/	'hanger'

(233) Noun + *-an*

jalan	'street'	+ *-an*	→	/jalanan/	'street'
watas	'limit'	+ *-an*	→	/watasan/	'border'

(234) Reduplication of Nouns + *-an*

kacaŋ-kacaŋ ‘RED-bean’ + *-an*	→	/kacaŋ-kacaŋan/	‘different kinds of beans’
sasayʊr ‘PARTRED-vegetable + *-an*	→	/sasayʊran/	‘different kinds of vegetables’
ʊkɪr-ʊkɪr ‘RED-carve’ + *-an*	→	/ʊkɪr-ʊkɪran/	‘carvings’

(235) Adjective + *-an*

kotor	‘dirty’ + *-an*	→	/kotoran/	‘dirt’
manis	‘sweet’ + *-an*	→	/manisan/	‘sweets’

2.2.1.1.3.2. The Meanings of *–An*

In many cases in which the suffix *–an* attaches to a verb, the derived noun is the object or the product of the action performed by the base, as illustrated below.

(236) a. bibi-ko tadi teŋoʔ [basʊan] talamᵇʊn,
aunt-DEM.PROX earlier look wash-NMLZ a.lot
kakaɪn baju-ko sakali bagajalʊt
PARTRED-cloth garment-DEM.PROX one-very in.piles
‘I saw there were a lot of dirty clothes.’
[Lit. I had a lot of things to wash, there were a lot of clothes.]

b. daʔ tɪʔ lagi [tarɪʔan]
NEG exist more pull-NMLZ
‘So, there were no more passengers.’
[narɪʔ ‘to pull’ in Jambi Malay is also used to mean ‘to give a ride’, by public car drivers, a boat owner]

c. lumayan, rapi [buatan]-e, make [ʊkɪr-ʊkɪran]
moderate tidy make-NMLZ-3 ACT-use RED-carve-NMLZ
‘It’s good enough, he made it neatly, with carvings.’

d. kopi be-la [minuman] aku
coffee just-EMPH drink-NMLZ 1SG
‘Coffee is my drink.’

In addition, some nouns which are derived from *–an* serve as modifiers to another noun.[21, 22] Examples follow.

[21] Some of these nouns may occur by themselves and have the same meaning.

(237) a. duren tm^{b}ago, [duren [pɪlɪan]]
durian chopper durian select-NMLZ
'They are copper durians, prime durians.'

b. tu anaʔ dioʔ-tu kɲoʔ anaʔ dioʔ nian,
DEM.DIST child 3-DEM.DIST not child 3 very
[anaʔ [am^{b}ɪʔan]]
child take-NMLZ
'His child is not his own, but an adopted child.'

In (237)a, the *–an* noun *pɪlɪan* modifies the head noun *duren* and in (237)b, the *–an* noun *am^{b}ɪʔan* modifies the head noun *anaʔ*.

In some *-an* nouns, the suffix *–an* indicates the instrument/tool with which an action is carried out or the location where the action takes place.

(238) a. tukaŋ sayʊr-tu mlpaʔi sayʊr-e
AGT vegetable-DEM.DIST ACT-put vegetable-3
di atas [tim^{b}aŋan] (TR, E)
LOC up weigh-NMLZ
'The vegetable sellers put the vegetables on a scale.'

b. [salʊran] aeʔ-tu buntu (TR, E)
channel-NMLZ water-DEM.DIST blocked
'The water channel was blocked.'

Nouns which are formed by *–an* suffixation to reduplicated forms indicate different varieties of the base (shown in (239)) and something which resembles or imitates what the base specifies (exemplified in (240)).

(239) a. lauʔ-e harʊs [sayʊr-sayʊran] (MD, N)
side.dish-3 must RED-vegetable-NMLZ
'The side dish must be vegetables.'

b. lumayan, rapi buatan-e, make [ʊkɪr-ʊkɪran]
moderate tidy make-NMLZ-3 ACT-use RED-carve-NMLZ
'It's good enough, he made it neatly, with carvings.'

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[22] In section 1.2.2.4.2.3, I describe noun modification of noun phrases.

(240) a. daʔdo main [sʊrʊʔ-sʊrʊʔan]
NEG.exist play RED-hide-NMLZ
'They didn't play hide and seek.'

b. tu-la [knaŋ-knaŋan] dŋan amin
that-EMPH RED-remember-NMLZ with Amin
'That's a memento from Amin.'

c. bibi-ko ado [anaʔ-anaʔan] kciʔ dulu
aunt-DEM.PROX exist RED-child-NMLZ small before
'I had a doll when I was young.'

Finally, when it attaches to an adjective, the suffix *–an* indicates that the derived noun has the characteristic shown by the base.

(241) a. dari [kotoran] (TR, E)
from dirty-NMLZ
'It's from waste.'

b. crme-tu kami buat [manisan] (TR, E)
k.o.fruit-DEM.DIST 1 make sweet-NMLZ
'We made candies of the *cermai.*'

To conclude, to derive nouns, the suffix *–an* mainly attaches to verbs. Some *–an* nouns are also derived from nouns and adjectives. The suffix *–an* can also derive nouns when it attaches to reduplicated forms of nouns and verbs.[23] The nouns derived via *–an* suffixation mainly indicate the object or the product of the action carried out by the base. Minor meanings of *–an* nouns include tools by which an action is done, the location where the action takes place, and objects/entities which have the characteristics of the base, are varieties of the base and diminutives (resemblance).

[23] When it attaches to reduplicated forms, *-an* can also derive verbs, as discussed in section 1.7 and section 2.2.1.2.4.

2.2.1.1.4. The Circumfix *Ka-an*

The circumfix *ka-an* does not only derive nouns, but also verbs (see section 2.1.3.1.2.4) and adjectives (see section 2.2.1.3.4). In this section, I only discuss *ka-an* nouns.

The circumfix *ka-an* is a loan affix from the Indonesian *ke-an* circumfix (Sneddon, 1996) which is utilized to derive abstract nouns.With respect to its phonological shape, the circumfix *ka-an* does not have alternating allomorphs. Some examples of *ka-an* nouns are presented below.

(242) a. tʊrʊn kagi niɲʰau kan mano [katrampilan]-ɲo
go.down later ACT-observe EMPH which ABST-skillful-CIRC-3
'She would survey and ask about the handcrafts.'

b. [kajʊjʊran] naŋ pntɪŋ-tu edaʔ bntɪʔ
ABST-honest-CIRC REL important-DEM.DIST Q EPIT
'The important thing is honesty, right?'

c. [kapuɲoan] dioʔ kan, iŋonan dioʔ
ABST-possess-CIRC 3 EMPH breed-NMLZ 3
'It's his property, his pet.'

The circumfix *ka-an* is not as productive as the suffix *-an*. This is not surprising as *ka-an* only derives abstract nouns, whereas *–an* forms both concrete and abstract nouns. In addition, in many cases speakers of Jambi Malay avoid using abstract nouns if there are other strategies to express a similar idea. The sentences in (243), for examples, are judged to be more common/natural than those in (244).

(243) a. kau lahɪr taʊn barapo? (TR, E)
2SG born year how.much
'When were you born?'

b. kau lahɪr taʊn nam lapan, kan? (TR, E)
2SG born year six eight Q
'You were born in sixty eight, weren't you?'

(244) a. kau kalahıran taʊn barapo? (TR, E)
2SG ABST-born-CIRC year how.much
'When were you born?'

b. kau kalahıran taʊn nam lapan, kan? (TR, E)
2SG ABST-born-CIRC year six eight Q
'You were born in sixty eight, weren't you?'

2.2.1.1.4.1. The Base that *Ka-an* Attaches to

The circumfix *ka-an* generally attaches to adjectives to derive *ka-an* nouns. In addition, *ka-an* may also attach to nouns, and intransitive verbs. Examples follow.

(245) *Ka-an* + Adjective

/*ka-an* + crdıʔ/	ABST-clever-CIRC	→	/kacrdıʔan/	'shrewdness'
/*ka-an* + biaso/	ABST-usual-CIRC	→	/kabiasoan/	'habit'

(246) *Ka-an* + Intransitive Verb

/*ka-an* + jadi/	ABST-become-CIRC	→	/kajadian/	'event'
/*ka-an* + ıdʊp/	ABST-live-CIRC	→	/kaıdʊpan/	'life'

(247) *Ka-an* + Noun

/*ka-an* + ʊntʊŋ/	ABST-profit-CIRC	→	/kaʊntʊŋan/	'advantage'

2.2.1.1.4.2. The Meaning of *Ka-an*

The meaning of the noun derived by *ka-an* affixation can be predicted from the meaning of the base, i.e. the abstract concept related to the base (see examples in (245), (246), and (247).

2.2.1.1.5. The Circumfix *Paŋ-an*

The allomorphs of *paŋ-an* are /*paŋ-an*/, /*pam-an*/, /pan-an/, /paɲ-an/, /*pam*^{b}*-an*/, /*pan*^{d}*-an*/, /*paɲ*^{j}*-an*/, /*paŋ*^{g}*-an*/, and /*pa-an*/. The environments for each allomorph are the same as those for the prefix *paŋ-* (see section 2.2.1.1.1.1).

2.2.1.1.5.1. The Base that *Paŋ-an* Attaches to

The circumfix *paŋ-an* generally attaches to verbs. A few *paŋ-an* nouns have nominal bases. Examples follow.

(248) *Paŋ-an* + Verbs

a.	/*paŋ-an* + bagɪ	'divide'/	→	/pam^{b}agɪan/	'distribution; gift'
b	/*paŋ-an* + pgi	'go'/	→	/pamgian/	'trip'
c.	/*paŋ-an* + makan	'eat'/	→	/pamakanan/	'food'

(249) *Paŋ-an* + Nouns

a.	/*paŋ-an* + watas	'limit'/	→	/pawatasan/	'border'
b.	/ *paŋ-an* + ruma	'house'/	→	/parumaan/	'housing'

2.2.1.1.5.2. The Meaning of *Paŋ-an*

The *paŋ-an* nouns are abstract nouns with a few exceptions of concrete nouns. Examples are shown below.

(250) a. apo lagi kalu [paɲ^{j}ualan] ligat, da??
what more if ABST-sell-CIRC deft NEG
'Especially if the selling is good, right?'

b. ha yo, jaʊ [pamgian] kami-ko, pajalanan
EXCL yes far ABST-go-CIRC 1-DEM.PROX ABST-street-CIRC
tigo jaman
three hour-NMLZ
'Well, our trip is long, the trip is about three hours.'

c. bŋen baŋna? go [pamakanan]
earlier a.lot also ABST-eat-CIRC
'There were so many kinds of food in the past.'

d. ayam, m^{b}li ayam kcil, [pamainan]
chicken ACT-buy chicken small ABST-play-CIRC
aku di umo, eda?
1SG LOC paddy Q
'I bought chicks and they became my pets in the paddy field, you know.'

To conclude, *paŋ-an* is a loan circumfix from Indonesian which derives abstract nouns and in a few cases concrete nouns. The allmorphs of *paŋ-an* are /*paŋ-an*/, /*pam-an*/, /*pan-an*/, /*paɲ-an*/, /*pam^{b}-an*/, /*pan^{d}-an*/, /*paɲ^{j}-an*/, /*paŋ^{g}-an*/, and /*pa-an*/. This circumfix generally attaches to verbs; however, there is also a reduced number of *paŋ-an* nouns with nominal bases.

2.2.1.1.6. The Circumfix *Pa-an*

This circumfix is not as productive as *paŋ-an*. Examples follow.

(251)	a.	kʊmpʊl	'gather'	→	/pakʊmpʊlan/	'association
					/paŋʊmpʊlan/	'collecting'
	b.	gaʊl	'asssociate'	→	/pagaʊlan/	'social interaction'
	c.	jalan	'walk'	→	/pajalanan/	'journey'

2.2.1.2. Deriving Verbs

Verbs in Jambi Malay can be derived using several affixes: the prefix *ba-,* the suffix *–i,* the suffix *–kan,* the suffix *–an,* and the circumfix *ka-an.*[24]

2.2.1.2.1. The Prefix *Ba-*

The prefix *ba-* attaches to different bases: nouns, verbs, and numbers.[25] When the prefix *ba-* attaches to nouns and verbs, the newly formed words are generally verbs. Some *ba-* + noun constructions also form adjuncts (see section 2.2.1.4.4). When the prefix *ba-* attaches to numbers, numbers are formed (see section 2.2.1.5.3). In what follows, I only describe the meanings of the *ba-* prefix when it attaches to verbs and nouns that form verbs.

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[24] The corresponding prefix of *ba-* and the circumfix *ka-an* in the city dialect are *bə-* and *kə-an,* respectively.

[25] The corresponding prefix in the city dialect is *bə-*.

2.2.1.2.1.1. *Ba-* + Noun

2.2.1.2.1.1.1. Semantic Meanings of *Ba-* + Noun

In this section, I first show all the seemingly different meanings of *ba-* when it attaches to a noun and then I show that a unified semantic analysis can be used for some of these meanings.

2.2.1.2.1.1.1.1. Different Meanings of *Ba-* + Noun

The most common meaning that the prefix *ba-* contributes to the noun that it attaches to is to have what is specified in the base, as exemplified below.

(252) baŋaʔ dioʔ-tu [badʊlʊr], bapaʔ kau-tu,
a.lot 3-DEM.DIST INTR-brother.or.sister father 2SG-DEM.DIST
tapi mati
but dead
'Your father had many sisters and brothers, they have passed away.'

(253) ha nam pʊlʊ mnit, sajam [baarti] la
EXCL six ten minute one-hour INTR-meaning PFCT
'Well, it's sixty minutes, it means it has been one hour.'

(254) ramᵇʊt paɲʲaŋ, [babulu]
hair long INTR-body.hair
'Her hair is long and she has body hair.'

(255) apo, kalu pas aeʔ naeʔ waʔ ciʔ
what if exact water go.up aunt.or.uncle TRU-small
[baduwɪt] dioʔ-tu[26]
INTR-money 3-DEM.DIST
'Well, when the water rises, he has a lot of money.'

The second meaning of *ba-* + noun is 'to produce the noun', as exemplified in (256) to (259) below.

[26] Note that *baduwɪt* also means 'rich' in an idiomatic expression.

(256) [bakariŋat]
INTR-sweat
'I sweated.'
[1. saying that after he took some medicine, he sweated and felt better. 2. People believe that sweating is a sign that your body is getting better from sickness.]

(257) pas pisaŋ tadi la [babua], baɲʲır-pʊn tibo
exact banana earlier PFCT INTR-fruit flood-PART arrive
'Precisely when the bananas bore fruit, the flood came.'

(258) gadʊ-la rimau, apo bnᵈo-e nan [babuŋi]-ko
busy-EMPH tiger what thing-3 REL INTR-sound-DEM.PROX
'They wondered what sound it was.'

(259) baru[batlor] dikit
new INTR-egg a.little
'[They]'ve just laid a few eggs.'

The third meaning of *ba-* when it is a prefix to a noun is 'to go by/operate/ride/run by the noun', as shown in the following examples.

(260) jam aku nᵈaʔ [basapeda], sapeda
hour 1SG want INTR-bicycle bicycle
'Whenever I wanted to ride a bike, I went.'

(261) sapʊlʊ jam [bamʊbɪl]
one-ten hour INTR-car
'It takes ten hours by car.'

(262) aku kalu[bamotor]-tu tɪ, maco solawat
1SG if INTR-motorcycle-DEM.DIST TRU-white ACT-read shalawat
'When I ride a motorcycle, I read *shalawat*.'

(263) kalukito [baparau], paŋayʊ disiapi, panimᵇo
if 1 INTR-canoe INSTR-row PASS-prepare-APPL INSTR-draw.water
'If we go [fishing] by boat, we prepare an oar and a dipper.'

(264) a suda-tu mᵇuat umo nur penᵈeʔ,
EXCL finish-DEM.DIST ACT-make paddy Nurjanah short
ado naŋ [batoko] pake msɪn kalapo
exist REL INTR-shop use machine coconut
'I work at Nurjana the Shorty's paddy, she's the one who has a shop where there's a coconut machine.

The fourth meaning that the prefix *ba-* may contribute when it attaches to a noun is 'to put on/wear' the object expressed by the noun, as exemplified below.

(265) ŋapo daʔ [bacalano]?
why NEG INTR-pants
'Why don't you wear pants?'

(266) daʔdo prna [babaju]
NEG.exist ever INTR-garment
'They never wore clothes.'

(267) dioʔ bajalan [bakancʊt]
3 INTR-walk INTR-underwear
'When they walked, they wore underwear.'

The fifth meaning of the prefix *ba-* is to have the relationship expressed by the noun it attaches to. Some examples are shown in square brackets below.

(268) dioʔ [bakawan] dŋan blanᵈo di
3 INTR-friend with Dutch earlier
datʊʔ sam aku-tu
grandfather Samsul 1SG-DEM.DIST
'My grandpa, Samsul, became a friend of Dutch.'

(269) waʔ nuar itu-tu
uncle.or.aunt TRU-Anwar DEM.DIST-DEM.DIST
waʔ nuar;
uncle.or.aunt TRU-Anwar
waʔ nuar dŋan bapaʔ kulo[badʊlʊr]
uncle.or.aunt TRU-answer with father 1SG INTR-sibling
'Uncle Anwar... Uncle Anwar and my father are siblings.'

The sixth meaning of *ba-* when it is prefixed to a noun is 'to give or to commit what is mentioned in the base', as demonstrated in (270) to (272).

(270) dioʔ [bapsan], "kalu ado oŋkos niŋ, kalu
3 INTR-message if exist fee TRU-yellow TOP
nᵈaʔ mmain, lagi ado kami di sano-la"…
want PARTRED-play PROG exist 1 LOC there-EMPH
'She said, "If you have money and want to have fun, [do so while] I'm still there."'

(271) kalu baŋaʔ [baamal] baŋaʔ-la apo-e kato dioʔ ha
if a.lot INTR-deed a.lot-EMPH what-3 word 3 EXCL
'He said if we did many good deeds, we would get many whachamacallit.'

(272) nabʊ gamalan [badoso] (MD, N)
ACT-hit gong-NMLZ INTR-sin
'If you play the gongs, you commit a sin.'

The seventh meaning of *ba-* when it attaches to a noun is 'to work or engage in the base', as shown in the following examples.

(273) oraŋ siko-ko baŋaʔ-la [baumo]
person here-DEM.PROX a.lot-EMPH INTR-paddy
'Most people here work in rice fields.'

(274) oraŋ [bakbon], awaʔ-ko di kapeŋen go
person INTR-garden, 1/2/3-DEM.PROX earlier want also
'People gardened, and I would also like to.'

(275) baŋaʔ [batani], baŋaʔ [baikan]
a.lot INTR-farm a.lot INTR-fish
'Most of them are farmers and fishermen.'

The eighth meaning of *ba-* when it attaches to a noun is 'to get/earn the object expressed by the noun', as demonstrated below.

(276) dioʔ samo dŋan-ko ha, dioʔ la [bagaji]
3 same with-DEM.PROX EXCL 3 PFCT INTR-wage
'She is the same as this, she is an employee.'

The ninth meaning of the prefix *ba-* is 'to show indefinite number of the base'. This meaning only emerges when *ba-* attaches to a reduplicated form of a noun and the meaning itself may come from the reduplicated form.[27] Examples follow.

(277) ikan di laʊt [baduri-duri]
fish LOC sea INTR-RED-thorn
'Sea fish have thorns.'

[27] See section 2.2.2 for a discussion of reduplication.

(278) [bamacam-macam]-la
INTR-RED-sort-EMPH
'They vary.'

(279) kalu watasan kato oraŋ sataʊn duo taʊn
if limit-NMLZ word person one-year two year
enaʔ pɪʔ, ko [bataʊn-taʊn] macam ko-la
nice TRU-Supik DEM.DIST INTR-RED-year sort this-EMPH
'Like people say... if it's only for one or two years, it's not a problem, but this has been several years.'

2.2.1.2.1.1.1.2. Semantic Meanings of *Ba-* + Noun

In this section, I show show a unified semantic analysis for some of the meanings of the prefix *ba-* described in section 2.2.1.2.2.1.1.1.

I repeat examples (252), (259), (267), (270), (276), and (277) in (280) and (285), respectively below.

(280) baŋaʔ dioʔtu [badʊlʊr], bapaʔ kau-tu, tapi mati
a.lot3-DEM.DIST INTR-sibling father 2SG-DEM.DIST but dead
'Your father had many sisters and brothers, they have passed away.'

(281) baru [batlor] dikit
new INTR-egg a.little
'[They]'ve just laid a few eggs.'

(282) dioʔ bajalan [bakancʊt]
3 INTR-walk INTR-underwear
'When they walked, they wore underwear.'

(283) dioʔ [bapsan], "kalu ado oŋkos niŋ, kalu
3 INTR-message if exist fee TRU-yellow TOP
n^{d}aʔ mmain, lagi ado kami di sano-la"
want PARTRED-play PROG exist 1 LOC there-EMPH
'She said, "If you have money and want to have fun, [do so while] I'm still there."'
[Lit. 'She had a message, "If you have money and want to have fun, [do so while] I'm still there."']

(284) dioʔ samo dŋan-ko ha, dioʔ la [bagaji]
3 same with-DEM.PROX EXCL 3 PFCT INTR-wage
'She is the same as this, she is an employee.'
[Lit. 'She is the same as this, she has a salary.']

(285) ikan di laʊt [baduri-duri]
fish LOC sea INTR-RED-thorn
'Sea fish have thorns.'

The base of *badʊlʊr* 'INTR-sibling' in (280), *dʊlʊr,* is a noun that heads an NP and fills the position of subject, object, or complement of the prepositional phrase in a sentence (the noun phrase is discussed in section 1.2.2.4). With the prefix *ba-,* the sequence of *ba-* + *dʊlʊr* forms a verb which functions as the verbal predicate of a verbal sentence and the meaning that *ba-* contributes is 'to have'.

Similarly, the base of *batlor* 'INTR-egg' in (281), *tlor* 'egg', is also a noun. Adding the prefix *ba-* to the base forms a verb, *batlor*, which means to produce an egg or eggs. However, the underlying meaning that *ba-* contributes to *batlor* is not very different from the meaning that *ba-* contributes to *badʊlʊr*. The fact that the chickens in (281) *batlor* 'lay eggs' implies that the chickens "have" eggs to produce/lay.

Following the same logic, *kancʊt* 'underwear' in (282) is also a noun and by adding *ba-*, a verb which means to put on/wear the underwear is derived. The abstract meaning of *bakancʊt* is also to "have" underwear. Because the subject of the sentence had *kancʊt*, then they could wear it.

In line with (280) to (282), *bapsan* in (283) is also a verb derived from a noun, *psan* 'message'. It is plausible to assume that the subject of the sentence *dioʔ* '3' gave a message is because she had a message to give.

The verb *bagaji* 'to earn a salary' in (284) is a derived verb from the noun, *gaji* 'wage'. *Bagaji* in (284) can also be interpreted as 'to have a salary'.

Finally, the verb *baduri-duri* in (285) is also derived from a noun, a reduplicated form of the noun *duri-duri.* As I pointed out in the previous section, the indefinite number shown in the verb *baduri-duri* does not come from the prefix *ba-*. Instead, the indefinite number is the meaning provided by the reduplicated form of the noun *duri* 'thorn' (see section 2.2.2.1.1). Therefore, *baduri-duri* also means to 'have' an indefinite number of thorns.

To conclude, I have shown that it is possible to simplify the semantic scope of the prefix *ba-* (when it attaches to nouns), by combining some of its various meanings into a generic one.

Thus, nine seemingly unconnected meanings of the prefix *ba-* described in the previous section can be unified into 3 meanings: to have the object/entity denoted by the base, to go by/operate object/entity denoted by the base, and to have a relationship as mentioned in the base.

2.2.1.2.1.1.2. Syntactic Functions of *Ba-* + Noun

When the prefix *ba-* attaches to a noun, the derived verb is an intransitive verb, that is, the verb only requires one argument, as shown in the following examples.

(286) pɪkɪr ati aku kalu aku talaʔi bn^{d}o-ko
think liver 1SG if 1SG let-APPL thing-DEM.PROX
daʔdo [barisi]
NEG.exist INTR-contents
'I thought that if I let it be, it will not have contents.'

(287) suda-tu snaŋ pulaʔ kito [bagawe]
finish-DEM.DIST glad PART 1 INTR-work
'Then, we can do our work.'

The fact that the *ba-* + noun sequence derives an intransitive verb is not surprising because the verb contains a noun which is implicitly the object of the verb and thus does not need an additional complement. Although *ba-* + noun verbs only

require one argument, sometimes a complement may be present. This complement is usually for giving more specific information about the noun, as shown below.

(288) a. kami bakbon pisang kini-ko (TR, E)
1 INTR-garden banana now-DEM.PROX
'We are planting bananas at this moment.'

b. priyʊʔ-tu baisi aeʔ ujan (TR, E)
cooking.pot-DEM.DIST INTR-contents water rain
'The pot contains rain water.'

The NP *pisaŋ* 'banana' in (288)a specifies what kind of gardening the subject of the sentence involves and the NP *aeʔ ujan* 'rain water' in (288)b specifies the content of the cooking pot.

2.2.1.2.1.2. *Ba-* + Verb

2.2.1.2.1.2.1. Semantic Meaning of *Ba-* + Verb

The semantic meaning that *ba-* adds when it attaches to a verb is sometimes very vague. In some cases *ba-* is needed for a verb to be well-formed, as shown in (289) to (292) below.

(289) [balari] n^{d}aʔ ŋam^{b}ɪʔ srampaŋ
INTR-run want ACT-take spear
'[I] ran to take a spear.'

(290) nan srɪŋ aku [batmu], kalapo-tu manis
REL often 1SG INTR-meet coconut-DEM.DIST sweet
ijo kʊlɪt-e
green skin-3
'The coconuts that I find most frequently are the one whose peel is green.'

(291) 'kulo paman n^{d}aʔ [bataŋo] dikit tntaŋ-ko'
1SG uncle want INTR-ask a.little about-DEM.PROX
'I want to ask you about this, uncle.'

(292) jam pat [bagraʔ] dari ruma ka luar-tu
hour four INTR-move from house to out-DEM.DIST
'He leaves home at four.'

Without *ba-*, sentences (293) to (296) are less preferred and sometimes judged to be ungrammatical by the speakers, as shown below.

(293) #eko [lari] n^{d}aʔ ŋam^{b}ɪʔ sarampaŋ (TR, E)
Eko run want ACT-take spear
'Eko ran to take a spear.'

(294) *nan srɪŋ aku [tmu] klapo-tu manis ijo
REL often 1SG meet coconut-DEM.DIST sweet green
kʊlɪt-e (TR, E)
skin-3
'The coconuts that I find most frequently are the ones whose peel is green.'

(295) #kulo paman n^{d}aʔ [taŋo] dikit tntaŋ-ko (TR, E)
1SG uncle want ask a.little about-DEM.PROX
'I want to ask you about this, uncle.'

(296) *jam mpat dioʔ [graʔ] dari ruma kaluar (TR, E)
hour four 3 move from house to.out
'He leaves home at four.'

It is not so clear why the presence of *ba-* in (293) to (296) is preferred/required. The most likely explanation is that, from a semantic perspective, sentences like (289), (291) and (292) emphasize the process, while without *ba-* does, the meaning of the verbs is focused on the state/action. Consider the following sentences.

(297) jpaŋ masʊʔ blan^{d}o [lari]
Japan go.in Netherlands run
'When the Japanese entered [Indonesia], the Dutch ran away.'

(298) na, kalu daʔ ŋrti bibi [taŋo] ka siapo?
EXCL if NEG ACT-meaning aun task to who
'Well, when you didn't understand, whom did you ask?'

In (297) and (298) above, the sentences focus on the action of running and asking, not on the process of running or asking.

Furthermore, if the prefix *ba-* attaches to certain verbs, these verbs acquire reflexive meaning, as exemplified below.

(299) a. dioʔ la bacʊkʊr (TR, E)
3 PFCT INTR-shave
'He has shaved himself.'

b. jaŋan bakaco be kau-tu! (TR, E)
don't INTR-glass just 2SG-DEM.DIST
'Don't just look at yourself [in the mirror]!'

In addition, if the prefix *ba-* attaches to certain verbs and is followed by the suffix *-an*, it may trigger a reciprocal meaning.

(300) a. budaʔ-budaʔ-tu [batiɲʲu(an)][28] (TR, E)
RED-kid-DEM.DIST INTR-fist-NMLZ
'Those kids are hitting each other.'

b. ʊsɪn dŋan ija [baciʊman] (TR, E)
Husin with Ija INTR-kiss-NMLZ
'Husin and Ija are kissing each other.'

2.2.1.2.1.2.2. The Syntactic Function of *Ba-* + Verb

When the prefix *ba-* attaches to a transitive verb, it reduces the valence of the verb and turns it into an intransitive verb. Consider the following active transitive sentences.

(301) a. aku la suda masaŋ tarʊp-tu (TR, E)
1SG PFCT finish ACT-set awning-DEM.DIST
'I have set up the awning.'

[28] *Batiɲʲu* 'fight' is the *ba-*+verb which inherently implies reciprocal meaning without the suffix *–an*.

b. bujaŋ la nanam jagʊŋ-tu (TR, E)
Bujang PFCT ACT-plant corn- DEM.DIST
'Bujang has planted the corn.'

In (301)a, the active transitive verb *masaŋ* 'set' has two arguments which are assigned to *aku* 'I' and *tarʊp-tu* 'the awning'. Likewise, the verb *nanam* 'plant' in (301)b also takes two arguments;these are assigned to *bujaŋ* 'Bujang' and *jagʊŋ-tu* 'the corn'.[29]

However, if the nasal prefix is substituted by the *ba-* prefix, the verbs can only bear one argument, as illustrated below.

(302) a. *aku la suda bapasaŋ tarʊp-tu (TR, E)
1SG PFCT finish INTR-set awning-DEM.DIST
'I have set up the awning.'

b. *bujaŋ la batanam jagʊŋ-tu (TR, E)
Bujang PFCT INTR-plant corn- DEM.DIST
'Bujang has planted the corn.'

In (302)a and(302)b, the *ba-* verb takes two arguments and the sentences are ungrammatical.

By contrast, if the verb only takes one obligatory argument, as shown in (303), the sentences are grammatical.

(303) a. tarʊp-tu la suda bapasaŋ (buat aku)(TR, E)
awning-DEM.DIST PFCT finish INTR-set by 1SG
'The awning has been set (by me).'

b. jagʊŋ-tu la batanam (buat bujaŋ) (TR, E)
corn-DEM.DIST PFCT INTR-plant by Bujang
'The corn has been planted (by Bujang).'

The underlying direct object in (303)a *tarʊp-tu* 'the awning'and the one in (303)b, *jagʊŋ-tu* 'the corn' surface as the subject of the sentence and their presence is obligatory. The prepositional phrase *buat aku* 'by me' in (303)a and *buat bujaŋ* 'by

[29] This is despite the fact that Jambi Malay is a pro-drop language, that is,any of the arguments may be dropped in clear contexts.

Bujang' is optional. This suggests that when the prefix *ba-* attaches to a transitive verb, it reduces the valence of the verb. In other words, the prefix *ba-* turns a transitive verb into an intransitive verb, more specifically an unaccusative.

More naturalistic data that contain intransitive *ba-* verbs are shown below.

(304) a. bon [batam^{b}a]
bill INTR-add
'[My] debt increases.'

b. memaŋ iyo, aŋin di siko ku-teŋoʔ
indeed yes wind LOC here 1SG-look
ya rabi maʔ [bagʊlʊŋ], yo?
EXCL EXCL mother INTR-roll yes
'Here, I saw the wind blew strongly indeed, oh my! It twisted, right?'

c. apobilo suda kncɪŋ, [bagantʊŋ] di kayu
when finish urine INTR-hang LOC wood
'When he finished peeing he couldn't stand well.'

d. iyo... la [bapiŋʰam] maŋkʊʔ-e
yes PFCT INTR-borrow bowl-3
'Well, we have borrowed the bowls.'

2.2.1.2.1.3. An Issue with Respect to *Ba-*

Sometimes the prefix *ba-* is interchangeable with the nasal prefix *ŋ-*. Some examples are presented below.

(305) 'awaʔ [batɪtɪp]-la duwɪt dŋan kau,' to dioʔ-e
1/2/3 INTR-entrust-EMPH money with 2SG word 3-3
'I'll entrust my money to you,' she said.'

(306) kau [babuaŋ] daʔ aeʔ maoŋ-eʔ
2SG INTR-throw.away NEG water bad.smell-3
'Did you throw the smelly water away?'

If the nasal prefix *ŋ-*, is substituted for *ba-*, the sentences are still grammatical, as shown in the following elicited data, with no difference in meaning.

(307) awaʔ nɪtɪp-la duwɪt dŋan kau (TR, E)
1/2/3 ACT-entrust-EMPH money with 2SG
'I entrusted my money to you.'

(308) kau mᵇuaŋ daʔ aeʔ maoŋ-eʔ (TR, E)
2SG ACT-throw.away NEG water bad.smell-3
'Did you throw the smelly water away?'

One possible account for the fact that the prefix *ba-* and the nasal prefix *ŋ-* are interchangeable is that both of them express processes. For sentences in which the speakers emphasize the process, *ba-* and *ŋ-* are interchangeable.

To conclude, I have shown that the prefix *ba-* may attach to nouns and verbs to form intransitive verbs. The meaning that *ba-* adds to the verb it attaches to is unclear. However, the meanings that *ba-* triggers when it attaches to nouns include to have/own the object/entity denoted by the noun specified in the base, to go by or to operate the base, and to have a type of relationship as mentioned in the base.

2.2.1.2.2. The Suffix *–I*

In Jambi Malay the suffix *–i* always surfaces as *–i.* First, I shall present the bases that the suffix *–i* may attach to. Second, I shall describe the functions of *–i.*

2.2.1.2.2.1. The Bases that *–i* Attaches to

The suffix *–i* attaches to nouns, verbs, and adjectives, as illustrated below.

(309) Noun + *-i*

bumᵇu	'spice' + *-i*	→	bumᵇui	'to add spice into something'
garam	'salt' + *-i*	→	ŋᵍarami	'to add salt into something'

(310) Verb + *–i*

nʊtʊp	'ACT-close' + *-i*	→	nʊtʊpi	'to make something close'
mᵇawaʔ	'ACT-bring' + *-i*	→	mᵇawaʔi	'to bring something for someone'

(311) Adjectives + *–i*

takʊt	'afraid'	+ *-i*	→	nakʊti	'to make someone afraid'
brsɪ	'clean'	+ *-i*	→	mrsɪi	'to make something clean'

2.2.1.2.2.2. The Functions of *–i*

The suffix *–i* has five functions, namely repetitive *–i,* causative *–i,* benefactive *–i,* object marker *–i,* and locative *–i*, which are discussed in the following subsections.

2.2.1.2.2.2.1. Repetitive *–i*

Transitive verbs which are suffixed by *–i* indicate that the action is done repetitively, as opposed to transitive verbs which are not suffixed by *–i.* Examples follow.

(312) a. plisi nemᵇaʔ paɲʲahat-tu (TR, E)
police ACT-shoot INSTR-bad-DEM.DIST
'The police shot the criminal.'

b. plisi nemᵇaʔi paɲʲahat-tu (TR, E)
police ACT-shoot-APPL INSTR-bad-DEM.DIST
'The police shot the criminal repeatedly.'

(313) a. bujaŋ ɲiʊm anaʔ-e (TR, E)
Bujang ACT-kiss child-3
'Bujang kissed his child.'

b. bujaŋ ɲiʊmi anaʔ-e (TR, E)
Bujang ACT-kiss-APPL child-3
Bujang kissed his child repeatedly.'

As shown in (312)a and (313)a, when the verb appears without the suffix *–I,*the meaning of the sentence does not indicate that the action is repetitive. By contrast, the verb in (312)b and (313)b is suffixed by *–i* and the presence of this suffix adds the meaning that the action shown by the verb is done repeatedly.

2.2.1.2.2.2.2. Causative *–i*

Causative usage generally emerges when the suffix *–i* attaches to intransitive predicates which include adjectives and intransitive verbs. Consider the following examples.

(314) a. hargo miɲaʔ naeʔ (TR, E)
price oil go.up
'The oil price rises.'

b. pamarinta naeʔi hargo miɲaʔ (TR, E)
government go.up-APPL price oil
'The government raises the oil price.'

(315) a. pɪrɪŋ-ko pca (TR, E)
plate-DEM.PROX broken
'This plate broke.'

b. dani mcai pɪrɪŋ-ko (TR, E)
Dani ACT-broken-APPL plate-DEM.PROX
'Dani broke this plate.'

(316) a. bua maŋ^{g}o-tu jatʊ (TR, E)
fruit mango-DEM.DIST fall
'The mangoes fell.'

b. budi ɲ^{j}atʊi bua maŋ^{g}o-tu (TR, E)
Budi ACT-fall-APPL fruit mango-DEM.DIST
'Budi made the mangoes fall.'

The suffix *–i* in the (b) sentences in (314) to (316) is associated with causative meaning. The causative *-i* changes the argument structure by adding a causer argument in the higher argument of the verb + *-i*.

The suffix *–i* triggers causative meaning when it attaches to intransitive verbs, but not when it attaches to monotransitive verbs. Instead, in the latter case it adds benefactive meaning, as discussed in the the following section.

2.2.1.2.2.2.3. Applicative *–i*

When *–i* suffixation occurs with monotransitive predicates, the suffix increases the valence of the verb and thus, it functions as an applicative suffix. In such cases, *-i* has a benefactive interpretation rather than a causative interpretation.

(317) a. bujaŋ mᵇawaʔ kmᵇaŋ ʊntʊʔ siti (TR, E)
Bujang ACT-bring flower for Siti
'Bujang brought flowers for Siti.'

b. bujaŋ mᵇawaʔi siti kmᵇaŋ (TR, E)
Bujang ACT-bring-APPL Siti flower
'Bujang brought flowers for Siti.'
*'Bujang made Siti bring flowers.'

(318) a. bapaʔ masaŋ pukat ʊntʊʔ budi (TR, E)
father ACT-set dragnet for Budi
Father set a dragnet for Budi.'

b. bapaʔ masaŋi budi pukat (TR, E)
father ACT-set-APPL Budi dragnet
'Father set a dragnet for Budi.'
*Father made Budi set the dragnet.'

In (317)a and (318)a the verb is not suffixed by *–i* and the beneficiary is expressed in a prepositional phrase. The prepositional phrase is not obligatory and thus is not an argument, but an adjunct. In contrast, in (317)b and (318)b, the verb is suffixed by *–i* and the beneficiary does not appear in an optional prepositional phrase, but as an argument.

In a pro-drop language (see section 1.1.1.2.2.1), arguments can be omitted in clear contexts. Thus, the beneficiary argument can also be omitted. However, when the beneficiary in (317)b and (318)b is omitted, the interpretation of the sentence can only be that the action is performed for the purpose of giving benefit to some unnamed person (examples in (319)). This interpretation does not emerge if the *–i* suffix is not present (examples in (320)).

(319) a. bujaŋ mᵇawaʔi kmᵇaŋ (TR, E)
Bujang ACT-bring-APPL flower
'Bujang brought flowers for someone.'

b. bapaʔ masaŋi pukat (TR, E)
father ACT-set-APPL dragnet
'Father set a dragnet for someone.'

(320) a. bujaŋ mᵇawaʔ kmᵇaŋ (TR, E)
Bujang ACT-bring flower
'Bujang brought flowers.'

b. bapaʔ masaŋ pukat (TR, E)
father ACT-set dragnet
'Father set a dragnet.'

To conclude, the suffix *–i* increases the valence of the verb when it attaches to monotransitive verbs, and it adds benefactive interpretation.

2.2.1.2.2.2.4. Object Marker *-i*

In addition to repetitive, causative, and benefactive meanings, the suffix *–i* is also employed to mark the occurrence of an object, as exemplified below.

(321) a. dioʔ nᵈaʔ nmui cewеʔ-e
3 want ACT-meet-APPL female-3
'He wanted to meet his girlfriend.'

b. *dioʔ nᵈaʔ nmu cewеʔ-e (TR, E)
3 want ACT-meet female-3
'He wanted to meet his girlfriend.'

(322) a. aku ɲʊrʊʔi krbʊʔ-tu dalam smaʔ (TR, E)
1SG ACT-hide-APPL container-DEM.DIST inside bushes
'I hid the container in the bushes.'

b. *aku ɲʊrʊʔ krbʊʔ-tu dalam smaʔ (TR, E)
1SG ACT-hide container-DEM.DIST inside bushes
'I hid the container in the bushes.'

(323) a. aku nᵈaʔ ɲlamati ayam-ko (TR, E)
1SG want ACT-safe-APPL chicken-DEM.PROX
'I want to save these chickens.'

b. *aku $n^{d}aʔ$ ɲalamat ayam-ko (TR, E)
1SG want ACT-safe chicken-DEM.PROX
'I want to save these chickens.'

In (321) through (323), the ungrammaticality of the (b) sentences is due to the lack of the suffix *–i* on the verb. This fact may appear to license a nominal direct object. This is further supported by the following sentences.

(324) a. aku sdaŋ mɪkɪri abaŋ aku (TR, E)
1SG PROG ACT-think-APPL older.brother 1SG
'I'm thinking about my older brother.'

b. *aku sdaŋ mɪkɪr abaŋ aku (TR, E)
1SG PROG ACT-think older.brother 1SG
'I'm thinking about my older brother.'

(325) a. aku pɪkɪr [maʔ la masaʔ] (TR, E)
1SG think mother PFCT cook
'I thought mother had cooked.'

b. *aku pɪkɪri [maʔ la masaʔ] (TR, E)
1SG think-APPL mother PFCT cook
'I thought mother had cooked.'

The verb *pɪkɪr* 'think' may subcategorize for an NP complement as well as a clausal complement. Although the suffix *–i* in (324) is not obligatory to mark the NP complement of the verb *pɪkɪr* 'think', the occurrence of *–i* is clearly banned when *pɪkɪr* 'think' is followed by a clausal complement in (325)b. This suggests that *–i* marks the NP complement, but not a clausal complement.

2.2.1.2.2.2.5. Locative *–i*

Locative *–i* occurs if the presence of the suffix *–i* on a verb removes the necessity for a preposition that indicates the location. Consider the following examples.

(326) a. sʊpɪʔ dʊdʊʔ di atas meja-ko (TR, E)
Supik sit LOC up table-DEM.PROX
'Supik sat on this table.'

b. *sʊpɪʔ nᵈʊdʊʔi di atas meja-ko (TR, E)
Supik ACT-sit-APPL LOC up table-DEM.PROX
'Supik sat on this table.'

c. sʊpɪʔ nᵈʊdʊʔi meja-ko (TR, E)
Supik ACT-sit-APPL table-DEM.PROX
'Supik sat on this table.'

(327) a. sujeŋ sdaŋ tʊrʊn dari bʊkɪt-tu (TR, E)
Sujeng PROG go.down from hill-DEM.DIST
'Sujeng is going down the hill.'

b. *sujeŋ sdaŋ nʊrʊni dari bʊkɪt-tu (TR, E)
Sujeng PROG ACT-go.down-APPL from hill-DEM.DIST
'Sujeng is going down the hill.'

c. sujeŋ sdaŋ nʊrʊni bʊkɪt-tu (TR, E)
Sujeng PROG ACT-go.down-APPL hill-DEM.DIST
'Sujeng is going down the hill.'

In (326)a and (327)a, the verb is not suffixed by *–i* and is followed by a prepositional phrase that indicates a location to/from where the action is directed. The (b) sentences in (326) and (327) are only different from the (a) sentences in whether or not the suffix *–i* is present. The verb in the (b) sentences bears the suffix *–i* and the sentences are ungrammatical. In contrast, the (c) sentences are grammatical although the verb is also suffixed by *–i.* The difference between the (b) sentence and the (c) sentence is that in (c), the preposition is not present. Thus, we can conclude that the suffix *–i* functions as a locative marker as its presence takes the role of the preposition.[30, 31]

To conclude, I have presented the five usages of the suffix *–i* in Jambi Malay, namely, repetitive marker, causative, applicative, object marker, and locative

[30] I am thankful to Lanny Hidajat who told me about her discussion with Minjeong Son about locative *–i* in Standard Indonesian.

[31] See Son (2006) and Son and Cole (2008) for a discussion of the suffix *–kan* in Indonesian.

marker. Some of the functions of the suffix *–i* are similar to the functions of the suffix *-kan ~ -an* discussed in section 2.2.1.2.3 below.

2.2.1.2.3. The Suffix *–Kan ~ -An*

Verbs with both the suffix *–kan* and the suffix *–an* were found in the naturalistic data from Tanjung Raden and Mudung Darat.[32] The *–kan ~ -an* alternation cannot be predicted morphologically because neither's occurrence can be predicted. One possible explanation for this alternation is historical. The older form is *–an* and the newer form is *–kan*, which entered the system under the influence of Indonesian. Some speakers in Tanjung Raden agreed with this claim, as they reported that *–an* was the form that they would employ in many cases in which *–kan* is used. These speakers generally did not reject forms with *–kan,* except that they claimed some sentences in which *–kan* is used sounded Indonesian.[33] Another possible explanation for this alternation is that –some speakers preferred to employ the vowel-initial suffix and would use *–an* instead of *-kan.* This is supported as there were speakers who rejected that such an alternation existed in the system. However, there is not enough evidence to determine which explanation is the correct one.

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[32] Note that the suffix *–an* which alternates with *–kan* should be distinguished from the suffix*–an* which is discussed in section 2.2.1.2.4, section 2.2.1.3, section 2.2.1.3.3, and section 2.2.1.4.2.

[33] Some speakers pointed out that *–kan* forms were more common in other Seberang villages, such as Kampoeng Tengah and Ulu Gedong. This was attested as I tried to elicit some sentences with the suffix *–kan* from an informant from Kampoeng Tengah. The informant did not seem to think that *–kan* in those sentences sounded more Indonesian. However, when I asked whether in those sentences *–i* or *–kan* was more common, he said that those with *–i* were more common, but those with *–kan* weren't so rare.

Since the *–kan ~ -an* alternation is not observed in Jambi city, I employ *–kan* for the purpose of describing the suffix.

2.2.1.2.3.1. The Bases that *–Kan ~ -An* Attaches to

The suffix *–kan ~ -an* mainly attaches to verbs. In addition, in some cases *–kan* also attaches to adjectives and nouns. Examples follow. I shall only use *–kan* hereafter.

(328) Verb + *-Kan*

masʊʔ	'go.in'	+ *-kan*	→ masʊʔkan	'to put something into something'
raso	'feel'	+ *-kan*	→ rasokan	'to feel something'
bli	'buy'	+ *-kan*	→ blikan	'to buy something for someone'

(329) Adjective + *-Kan*

brsɪ	'clean'	+ *-kan*	→ brsɪkan	'to clean something'

(330) Noun + *-Kan*

kato	'word'	+ *-kan*	→ katokan	'to say something'

2.2.1.2.3.2. The Functions of *–Kan*

The suffix *–kan* has three functions, namely causative (section 2.2.1.2.3.2.1), applicative (section 2.2.1.2.3.2.2), and object marker (section 2.2.1.2.3.2.3).

2.2.1.2.3.2.1. Causative *–Kan*

Like the suffix *–i,* the suffix *–kan* triggers a causative meaning when it attaches to intransitive verbs, as illustrated in the following examples.

(331) a. meja-e la suda brsɪ (TR, E)
table-3 PFCT finish clean
'The table is already clean.'

b. sʊpɪʔ la suda mrsɪkan meja-e (TR, E)
Supik PFCT finish ACT-clean-APPL table-3
'Supik has cleaned the table.'

(332) a. hargo miɲaʔ naeʔ (TR, E)
price oil go.up
'The oil price rises.'

b. pamarinta naeʔkan hargo miɲaʔ (TR, E)
government go.up-APPL price oil
'The government raises the oil price.'

The examples in (331) and (332) show that *–kan* adds causative meaning to the sentence. Furthermore, *-kan* also modifies the argument structure of the predicate. In the (a) sentences in which *–kan* is not present, the predicate only takes one argument, whereas in the (b) sentences in which *–kan* is present, the predicate takes two arguments and the new argument is the one who causes the action.

2.2.1.2.3.2.2. Applicative *–Kan*

Similarly to the suffix *–i,* when the suffix *–kan* attaches to mono-transitive verbs it adds a new argument to the verb which bears a benefactive interpretation. Examples are shown below.

(333) a. maʔ maco crit ʊntʊʔ sʊpɪʔ (TR, E)
mother ACT-read story for Supik
'Mother read a story for Supik.'

b. maʔ macokan sʊpɪʔ crito (TR, E)
mother ACT-read-APPL Supik story
'Mother read a story for Supik.'

(334) a. bapaʔ masaŋ pukat ʊntʊʔ budi (TR, E)
father ACT-set dragnet for Budi
'Father set a dragnet for Budi.'

b. bapaʔ masaŋkan budi pukat (TR, E)
father ACT-set-APPL Budi dragnet
'Father set a dragnet for Budi.'

The beneficiary in (333)a and (334)a appears in the adjunct *ʊntʊʔ* 'for' phrase and this adjunct phrase is optional. In (333)b and (334)b, however, the beneficiary appears in an argument position and thus its presence is obligatory.

As a pro-drop language, Jambi Malay allows omission of the beneficiary. However, the omission of the beneficiary argument still implies that there is an unknown/unnamed individual who takes the benefit of the action.

(335) a. maʔ macokan crito (TR, E)
mother ACT-read-APPL story
'Mother read a story for someone.'

b. bapaʔ masaŋkan pukat (TR, E)
father ACT-set-APPL dragnet
'Father set a dragnet for someone.'

(336) a. maʔ maco crito (TR, E)
mother ACT-read story
'Mother read a story.'

b. bapaʔ masaŋ pukat (TR, E)
father ACT-set dragnet
'Father set a dragnet.'

2.2.1.2.3.2.3. Object Marker *–Kan*

Finally, like the suffix *–i, -kan* in Jambi Malay may also function to license the nominal object, as illustrated below.

(337) a. kito masʊʔkan kuli
1 enter-APPL laborer
'We hired workers.'
[Lit. 'We put some workers in]

b. *kito masʊʔ kuli (TR, E)
1 enter laborer
'We hired workers.'

In sum, in Jambi Malay the suffix *–kan* exhibits three functions, namely causative, applicative and object marker. These three functions are the same functions

demonstrated by the suffix *–i.* Although *–kan* and *–i* seem to have similar functions, these two suffixes are not exactly the same. The first difference between the suffix *–kan* and the suffix *–i* is that the suffix *–i* can be used to express a repetitive action, while *–kan* is not associated with this meaning, as shown below.

(338) a. plisi nemᵇaʔi paɲʲahat-tu (TR, E)
police ACT-shoot-APPL INSTR-bad-DEM.DIST
'The police shot the criminal repeatedly.'

b. *plisi nemᵇaʔkan paɲʲahat-tu (TR, E)
police ACT-shoot-APPL INSTR-bad-DEM.DIST
'The police shot the criminal repeatedly.'

(339) a. abaŋ dioʔ ŋᵍbʊʔi aku (TR, E)
older.brother 3 ACT-hit-APPL 1SG
'His brother hit me repeatedly.'

b. *abaŋ dioʔ ŋᵍbʊʔkan aku (TR, E)
older.brother 3 ACT-hit-APPL 1SG
'His brother hit me repeatedly.'

As shown in (338)a and (339)a, the verb is suffixed by *–i* and the resulting interpretation is that the action is done repetitively. In (338)b and (339)b, the suffix *–i* is substituted by *–kan* and the repetitive interpretation disappears.

The second difference between the suffix *–i* and the suffix *–kan* is that the suffix *–i* demonstrates locative meaning, but the suffix *–kan* does not, as shown below.

(340) a. sʊpɪʔ nᵈʊdʊʔi meja-ko (TR, E)
Supik ACT-sit-APPL table-DEM.PROX
'Supik sat on this table.'

b. *sʊpɪʔ nᵈʊdʊʔkan meja-ko (TR, E)
Supik ACT-sit-APPL table-DEM.PROX
'Supik sat on this table.'

As shown in (340), the verb in the (a) sentence bears the suffix *–i,* whereas the verb in the (b) sentence bears the suffix *–kan*. The verb in both sentences is followed by the

location *meja-ko* 'this table'. However, sentence (340)b is ungrammatical. This suggests that *–kan* cannot be used as a locative marker.

To conclude, the suffix *–i* and the suffix *–kan* are similar in some of the functions they can have, namely causative, benefactive, and object marker. However, these two suffixes are also different in that the suffix *–i* also functions as a repetitive marker and locative marker, whereas the suffix *–kan* does not.

2.2.1.2.4. The Suffix *–An*

A small number of verbs are formed using the suffix *–an.* These verbs can also be interpreted as nouns, depending on the context in which they are employed. Examples follow.

(341) a. a, ʊpɪʔ, ko tadi la gajian la
EXCL Upik DEM.PROX earlier PFCT wage-NMLZ-EMPH
.'Well, Upik has got her salary.'

b. jualan sayʊran
sell-NMLZ vegetable-NMLZ
'[She] sells vegetables.'

The verbs in (341) can sometimes be interpreted as nouns, depending on the contexts in which they are employed, as shown below.

(342) gajian-tu la batrimo
wage-NMLZ-DEM.DIST PFCT INTR-accept
'I've got the salary.'

In (342), *gajian* appears as the subject of the clause which indicates that it is a noun phrase.

In addition, when the suffix *–an* attaches to a reduplicated verb, the newly formed word can have reciprocal meaning, as illustrated below (also see section 1.7).

(343) siti dŋan ʊpɪʔ plʊʔ-plʊʔan (TR, E)
Siti with Eko RED-hug-NMLZ
'Siti and Upik are hugging each other.'

2.2.1.3. Deriving Adjectives

Adjectives can be derived using the prefix *paŋ-,* the prefix *sa-,* the suffix –*an,* and the circumfix *ka-an.*

2.2.1.3.1. The Prefix *Paŋ-*

When the prefix *paŋ-* attaches to adjectives, the derived forms can be interpreted as nouns (see section 2.2.1.1.1.3). However, these derived forms pattern like adjectives. Consider the following examples.

(344) a. sala awaʔ deweʔ baso oraŋ pamalas
wrong 1/2/3 alone COMP person INSTR-lazy
kato-ku-tu
word-1SG-DEM.DIST
'As I said, it is my own fault, I'm a lazy person.'

b. bibi-ko memaŋ baso panakʊt ɲla kato-ku
aunt-DEM.PROX indeed COMP INSTR-afraid indeed word-1SG
'I know that I'm a fearful person.'

c. lah, budaʔ iko pamara nian
EXCL kid this INSTR-angry very
'Hey boy, you're really a hot head.'

Although the *paŋ-* + adjective forms in (344) are translated as nouns, they pattern more like adjectives. First, *paŋ-* + adjective forms can be modified using modifying adverbs (cf. section 1.2.2.1.3), such as *agaʔ* 'rather', *nian* 'very', and *palɪŋ* 'most', as illustrated below.

(345) a. oraŋ-tu agaʔ pamalas (TR, E)
person-DEM.DIST rather INSTR-lazy
'That person is a bit lazy.'

b. sʊpɪʔ palɪŋ pamalu di kaluargo kami (TR, E)
Supik most INSTR-shy LOC family 1
'Supik is the shiest person in our family.'

c. aku-ko palupo nian (TR, E)
1SG-DEM.DIST INSTR-forget very
'I'm such a forgetful person.'

Second, in coordinated structures (cf. section 1.3), *paŋ-* + adjective forms are coordinated with adjectives, as shown below.

(346) a. laki-e kayo, cuma pamara (TR, E)
husband-3 rich but INSTR-angry
'Her husband is rich, but he is a hot head.'

b. dioʔ-tu sabar, pamalu, baɪʔ (TR, E)
3-DEM.DIST patient INSTR-shy patient
'She is patient, shy, and a nice person.'

2.2.1.3.2. The Prefix *Sa-*

The prefix *sa-* attaches to nouns and adjectives to form adjectives which mean 'having the same property of the base or being in the same condition as the base (cf. section 2.1.4.2.1 in which I show that *sa-* followed by an adjective and the preposition *dŋan* 'with' form a comparison expressing equality), as exemplified below.

(347) ɪdʊŋ-e sarupo maʔ-e
nose-3 one-appearance mother-3
'His nose is like his mother's.'

(348) ciʔ lija-tu dŋan bapaʔ kau dʊlʊr
TRU-small TRU-Khalija-DEM.DIST with father 2SG sibling
sabapaʔ, kalu n^{d}aʔ paham
one-father if want understand
'Aunt Khalija and your father are siblings by virtue of having the same father, if you want to know.'

(349) yaŋ sakampʊŋ ŋan dioʔ di siko dulu... knal daʔ
REL one-village with 3 LOC here before know NEG
waʔ leoʔ?
uncle.or.aunt Leok
'the one who's from the same village with him here was.... do you know Uncle Leok?'

2.2.1.3.3. The Suffix *–An*

When the suffix *–an* attaches to units of measurement, such as units for weight, distance, and time, it forms adjectives which indicate that something happens or is done once in the measure indicated by the base.

(350) a. jadi, gaji kau-tu main bulanan
become salary 2SG-DEM.DIST play month-NMLZ
apo main miŋ^{g}uan
what play week-NMLZ
'So, is your salary monthly or weekly?'

b. main bulanan, ataw harian biso jugo-la
play month-NMLZ or day-NMLZ can also-EMPH
'It's monthly, or it could also be daily.'

c. di pasar, oraŋ jual bras karʊŋan,
LOC market person sell uncooked.rice sack-NMLZ
ŋoʔ kilʊan (TR, E)?
NEG kilogram-NMLZ
'At the market, people sell uncooked rice by sacks, not by the kilogram.'

Furthermore, a unit of measurement followed by *–an* and preceded by a numeral indicates that the amount, weight, time, or distance is more or less like the one indicated by the numeral.

(351) a. nuŋ^{g}u-la kikiro satŋa jaman
wait-EMPH PARTRED-about one-middle hour-NMLZ
ruma oraŋ-tu
house person-DEM.DIST
'We waited for about half an hour at the man's house.'

b. saidaʔ-idaʔ tigo kilʊan-la
one-RED-NEG three kilogram-NMLZ-EMPH
'I guess it's about three kilograms.'

2.2.1.3.4. The Circumfix *Ka-an*

The affixation of *ka-an* to some adjectives may form an adjective which means 'too', as illustrated below.

(352) a. 'la kagdaŋan," kato dioʔ-e
PFCT ABST-big-CIRC word 3-3
'"It's too big," he said.'

b. naŋ sari-tu kapen^{d}eʔan
REL before ABST-short-CIRC
'The previous one is too short.'

Moreover, *ka-an* may also attach to *baɲaʔ* 'a lot', *lbɪ* 'more, *dikit* 'a little' which can mean 'too much' or 'too little', respectively, as exemplified below.

(353) a. jaŋan kabaɲaʔan nasi gi takɲa!
do.not ABST-a.lot-CIRC cooked.rice later PASS.PFCT-ignore
'Don't [cook] too much rice, or it will be thrown away!'

b. bawlu kajʊt kadikitan tlor
k.o.spongecake soggy ABST-a.little-CIRC egg
'this cake is bad because it doesn't have enough eggs.'

c. kalbɪan minum mŋkudu-tu-la-tu
ABST-more-CIRC drink morinda-DEM.DIST-EMPH-DEM.DIST
'It's because of too much consuming the morinda.'

Furthermore, *ka-an* also attaches to some reduplicated nouns and adjectives and triggers the meaning of 'having a certain degree of the characteristics shown by the base'.

(354) a. cuman dioʔ pʊtɪ, eh kapʊtɪ-pʊtɪan
but 3 white CORR ABST-RED-white-CIRC
isi-e-tu
content-3-DEM.DIST EXCL
'But it is white, no, the root is whitish.'

b. tu taahır-ko tadi ɲo-ko la
DEM.DIST PASS.PFCT-final-DEM.PROX earlier 3-DEM.PROX PFCT
kaenaʔ-enaʔan makan tlor di umo hano, bawaʔ
ABST-RED-nice-circ eat egg LOC paddy there bring
balıʔ
return
'So the last, it enjoyed eating eggs at the paddy field, then I brought it home.'

c. dioʔ jantan, cuma model-e kabatino-batinoan (TR, E)
3 male but model-3 ABST-RED-female-CIRC
'He is a boy, but his style is girlish.'

2.2.1.4. Deriving Adverbs/Adjuncts

2.2.1.4.1. The Circumfix *Sa-ɲo/Sa-e*[34]

Sa-ɲo/sa-e attaches to reduplicated adjective bases to indicate that the derived adverb means 'as [base] as possible'.

(355) a. pıkır-la, [sakuat-kuat-e] ɲunat-e daʔdo
think-EMPH one-RED-strong-3 ACT-circumcise-3 NEG.exist
n^{d}aʔ bnar ɲla
want right indeed
'Just imagine, they circumcised him as hard as possible, they couldn't do it.'

b. susui-la anaʔ kito-ko… [sakɲaŋ-kɲaŋ-ɲo]
milk-APPL-EMPH child 1-DEM.PROX one-RED-sated-3
.'We should suckle our child as fully as possible.'

In addition, in some cases, the base to which *sa-ɲo/sa-e* attaches appears without reduplication, as exemplified below.

(356) a. pokoʔ dilayani səpənu-ɲo (JC, N)
main PASS-serve-APPL one-full-3
'The point was they treated him very well.'

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[34] See section 2.1.2.1.9.1 for the discussion of *–e* and *-ɲo*.

b. sakitar umur padi-tu tadi
one-about age rice.plant-DEM.DIST earlier
satŋa bulan sacpat-ɲo, salam^{b}at-ɲo sabulan,
one-middle month one-quick-3 one-slow-3 one-month
kito cabʊt-la pulaʔ padi-tu tadi
1 yank.out-EMPH PART rice.plant-DEM.DIST earlier
'When the rice plants are about half a month old at the earliest, one month old at the latest, we yank them.'

Furthermore, *sa-ɲo/sa-e* may attach to non-adjective forms (both reduplicated and non-reduplicated), as shown below.

(357) a. saidaʔ-e tigo pʊlʊ limo sekoʔ-e
one-NEG-3 three ten five one-3
'One is at least thirty five.'
[1. =One is at least thirty five thousand.']

b. a, tu-la gawe saari-ari-e
EXCL DEM.DIST-EMPH work one-RED-day-3
'That's my daily activity.'

c. saŋko oraŋ aku-ko saidaʔ-idaʔ-e no,
think person 1SG-DEM.PROX one-RED-NEG-3 TRU-female
tamat steem
finish S.T.M
'People think that at least I graduated from technical high school.'

Finally, *sa-ɲo/sa-e* also forms sentential adjuncts, such as *saharʊs-ɲo-/e* 'should', *sabnar-ɲo-/e* 'actually'.

(358) a. saharʊs-ɲo oraŋ iko-la yaŋ
one-must-3 person DEM.PROX-EMPH REL
ditan^{d}ɪŋ edaʔ, pɪʔ?
PASS-compete Q TRU-Supik
'The participants in the competition should be these people, right?'

b. aku-ko sabnar-e kuat nian di bidaŋ music
1SG-DEM.PROX one-right-3 strong very LOC field music
'I'm actually very keen on music.'

2.2.1.4.2. The Suffix *–An*

A few adverbs are formed by adding the suffix *–an* to reduplicated forms of nouns, verbs, and adjectives. Examples follow.

(359) a. awaʔ mᵇuat be mati-matian
1/2/3 ACT-make just RED-dead-NMLZ
'I've been working on it so hard.'

b. paŋanten-la bsaʔ-bsaʔan di situ
bride.or.bridegroom-EMPH RED-big-NMLZ LOC there
'They held a big wedding party there.'

c. itu-tu nasɪp-nasɪpan
DEM.DIST-DEM.DIST RED-fate-NMLZ
'It depends on our luck.'

d. kalu kau mintaʔ duwɪt trʊs-trʊsan,
if 1SG ask.for money RED-continue-NMLZ
abɪs-la duwɪt kami (TR, E)
finish-EMPH money 1
'If you ask for money continuously, we will run out of money.'

e. dioʔ bagawe-tu aŋin-aŋinan (TR, E)
3 INTR-work-DEM.DIST RED-wind-NMLZ TOP
'They work capriciously.'

2.2.1.4.3. Prefix *Sa-* + Base + Suffix *-An*

If a combination of the prefix *sa-* and the suffix *-an* attaches to nouns that indicate a period of time, it derives adverbs which denote duration, as exemplified below.

(360) a. kato ɲaiʔ makan daʔ saharian-tu (MD, N)
word grandmother eat NEG one-day-NMLZ-DEM.DIST
'The grandmother said that she did not eat all day long.'

b. aku daʔ biso tɪdʊʔ samalaman karno
1SG NEG can sleep one-night-NMLZ because
baŋaʔ ɲamʊʔ (TR, E)
a.lot mosquito
'I couldn't sleep all night long because there were so many mosquitoes.'

2.2.1.4.4. The Prefix *Ba-*

In addition, reduplicated forms of nouns denoting periods of time and distance can be prefixed by *ba-* in order to form adverbs of duration, as shown below.

(361) a. kami la bagawe-ko [bajam-jam] (TR, E)
1 PFCT INTR-work-DEM.PROX INTR-RED-hour
'We've been working on this for hours.'

b. maʔ-tu la pgi bamiŋᵍu-miŋᵍu (TR, E)
mother-DEM.DIST PFCT go INTR-week
'Mother has been gone for weeks.'

2.2.1.5. Deriving Numbers

Numbers can be derived using the prefix *sa-,* the prefix *ka-,* the prefix *ba-,* and the suffix *–e* or *-ɲo*.[35]

2.2.1.5.1. The Prefix *Sa-*

The prefix *sa-* has several functions. First, it replaces the full number *satu* 'one' before a classifier (see section 2.1.1.3). Second, it can be used to form fractions (see also section 2.1.6.3). Finally, it also occurs with group numbers to form cardinals.

Examples are shown below.

(362) *Sa-* as 'One'
a. *sabataŋ* 'one bar'
b. *sapotoŋ* 'one piece'

(363) *Sa-* in Fractions
a. sapampat 'quarter'
b. satŋa 'half'

(364) *Sa* in Group Numbers
a. sapʊlʊ 'ten'
b. saribu 'one thousand'

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[35] The corresponding prefixes *sa-, ka-,* and *ba-* in the city dialect are sə, kə, and bə.

2.2.1.5.2. The Prefix *Ka-*

The prefix *ka-* attaches to cardinal numbers to form ordinal numbers (see also section 2.1.6.2), as shown below.

(365) a. kaduo ‘second’
b. katigo ‘third’

As for ‘first’, Jambi Malay speakers employ the special form *patamo* rather than *kasatu.*

In addition, *ka-* that attaches to numbers may also form collective numbers.

(366) a. katigo oraŋ-tu la pgi soretu (TR, E)
NUM-three person-DEM.DIST PFCT go yestesday
‘The three men had left yesterday.’

b. kalu dioʔ dataŋ, dioʔ mᵇawaʔ kuɪ ʊntʊʔ
if 3 come 3 ACT-bring cake for
kalimo anaʔ kami (TR, E)
NUM-five child 1
‘If he comes, he brings cakes for five.’

When it attaches to the question word *barapo* ‘how much’, *ka-* forms an interrogative ordinal number (cf. section 2.1.6.2).

2.2.1.5.3. The Prefix *Ba-*

The prefix *ba-* attaches to cardinal numbers to form numbers denoting a group (also see section 2.1.6.1). Examples follow.

(367) a. batigo ‘all three, three together’
b. bampat ‘all four, four together’
c. balimo ‘all five, five together’

(368) a. ʊwɪt miʔ-ko ha, [batigo] [bampat]
pry like-DEM.PROX EXCL INTR-three INTR-four
kami ŋʊwit-e
1 ACT-pry-3
‘We pried like this, three or four of us pried him.’

b. braŋkat kami [baampat]-tu tadi crito-e
leave.for 1 INTR-four-DEM.DIST earlier story-3
ka batam
to Batam
'Then, we, in a group of four, left for Batam.'

c. dioʔ ka umo [baduo], yo?
3 to paddy INTR-two yes
'They both go to the field, right?'

Furthermore, *ba-* may attach to reduplicated forms of numbers to indicate an action in a number of groups of [base] at a time.

(369) a. baduo-duo 'two at a time, two by two'
b. batigo-tigo 'three at a time, three by three'

In addition, *ba-* attaches to reduplicated forms of group numbers to also form indefinite multiples of the base.

(370) a. baribu-ribu 'thousands'
b. bajuta-juta 'millions'

Lastly, when it attaches to reduplicated nouns that refer to containers and measurements, *ba-* forms quantifiers meaning 'in numbers of [base].

(371) a. bakarʊŋ-karʊŋ 'sackfuls'
b. bakilo-kilo 'kilos and kilos'
c. bameter-meter 'meters and meters'

2.2.1.5.4. The Enclitic *–e* or *-ɲo*

The suffix *–e* or *-ɲo* attaches to reduplicated forms of numbers which are or are not prefixed by the prefix *ka-* to indicate collective numbers. In addition, *–e* or *-ɲo* may attach to a non-reduplicated form of a number which is prefixed by *ka-* for denoting a collective number.

(372) a. kaduo-duo-e 'NUM-RED-two-3' 'both of them'
b. kalimo-limo-ɲo 'NUM-RED-five-3' 'all five'

(373) a. tigo-tigo-e ‘RED-three-3’ ‘all three’
b. mpat-mpat-ɲo ‘RED-four-3’ ‘all three’

(374) a. kaduo-e ‘NUM-two-3’ ‘both of them’
b. katigo-ɲo ‘NUM-three-3’ ‘all three’

2.2.1.6. Inflectional Affixes vs. Derivational Affixes

As mentioned in the introduction to this chapter, it is often difficult to decide whether an affix is an inflectional affix or a derivational affix. Some affixes in Jambi Malay pattern like inflectional affixes in one way, but like derivational affixes in other ways. This is also true with respect to the nasal prefix *ŋ-* and the passive prefix *di-* despite the previously mentioned fact that the nasal prefix *ŋ-* and the passive prefix *di-* can be considered to be inflectional affixes. When attached to a noun, for example, these prefixes form a verb and thus can be classified as derivational affixes because they alter the word class of the base, as shown in (375). However, when they attach to a verb, they do not change the part of speech of the base, as shown in (376) and thus pattern like inflectional affixes. Examples follow.

(375) a. The Nasal Prefix *ŋ-* + Noun
/ŋ- + tugal ‘hole’/ → /nugal/ ‘to make holes’
/ŋ- + sabɪt ‘sickle’/ → /ɲabɪt/ ‘to cut using a sickle’

b. The Passive Prefix *di-* + Noun
/di- + tugal ‘hole’/ → /ditugal/ ‘be made a hole on’
/di- + sabɪt ‘sickle’/ → /disabɪt/ ‘be cut using a sickle’

(376) a. The Nasal Prefix *ŋ-* + Verb
/ŋ- + amᵇɪʔ ‘take’/ → /ŋamᵇɪʔ/ ‘to take’
/ŋ- + pasaŋ/ ‘install/ → /masaŋ/ ‘to set up’

b. The Passive Prefix *di-* + Verb

/di- + amᵇɪʔ 'take'/ → /diamᵇɪʔ/ 'be taken'

/di- + pasaŋ/ 'install'/ → /dipasaŋ/ 'be set up'

Although the above data seem to support the claim that the nasal prefix *ŋ-* and the passive prefix *di-* can be either derivational or inflectional affixes, the following pieces of evidence show that these affixes behave more like inflectional affixes rather than derivational affixes.

The first piece of evidence comes from the fact that the nasal prefix *ŋ-* and the passive prefix *di-* do not change the meaning of the base, as shown in the above examples.

The second piece of evidence comes from the fact that these two prefixes are syntactically motivated, i.e. the nasal prefix is for marking the active voice and the prefix *di-* is for marking the passive voice.

In addition to what has been shown, there is another criterion which makes the issue of inflectional versus derivational affixes more complicated, i.e. obligatoriness. I showed in section 1.1.1.1.1 that the nasal prefix *ŋ-* is optional in active verbs. This suggests that it patterns like a derivational affix. However, the passive prefix *di-* is obligatory, which suggests that it is an inflectional affix.

I have shown that although the nasal prefix *ŋ-* and the passive prefix *di-* are considered to be inflectional affixes, there are some cases in which they pattern like derivational affixes.

I shall now provide an example of an affix which is considered to be a derivational affix, i.e. the applicative suffix *-i* (see section 2.2.1.2.2). As shown in section 2.2.1.2.2, the suffix *–i* can attach to nouns, verbs, and adjectives. One might

claim that it is an inflectional affix because it attaches to a verb and the verb that is suffixed by *–i* does not change its grammatical category.

However, there are more and stronger pieces of evidence to claim that the suffix *–i* is a derivational affix. The first piece of evidence is that it changes the part of speech of the noun or adjective it attaches to, as shown below.

(377) /garam 'salt' + -i/ → garami 'to add salt into something'
/brsɪ 'clean' + -i/ → brsɪi 'to make something clean'

The second piece of evidence for claiming that the suffix *–i* is a derivational affix comes from the fact that this suffix changes the valence of the verb it attaches to. If it attaches to a monotransitive verb, for example, it increases its valence, as shown below.

(378) a. bapaʔ mᵇawaʔ palu (TR, E)
father ACT-bring hammer
'Father brought a hammer.'

b. bapaʔ mᵇawaʔi maʔ palu (TR, E)
father ACT-bring-APPL mother hammer
'Father brought mother a hammer.'

As shown in (378)a, the verb *mᵇawaʔ* 'bring' only has one internal argument, the theme *palu* 'hammer'. In (378)b, the verb has two internal arguments, the benefactive *maʔ* 'mother' and the theme *palu* 'hammer'. If *maʔ* 'mother' is not present, the interpretation of the sentence can only be that an action is done for the purpose of giving benefit to an unnamed person (see section 2.2.1.2.2.2.3).

The third piece of evidence is that its presence is obligatory. The sentence in (378)b, for example, is ungrammatical if the suffix is not present.

In sum, although it seems that it is difficult to distinguish inflectional affixes from derivational affixes, it is still possible to identify derivational-like or inflectional-like behavior with respect to these items.

2.2.2. Reduplication

Reduplication is another word formation process in Jambi Malay. In reduplication, a lexical item or a part of a lexical item is repeated and this repetition results in a semantic change in the lexical item.

In what follows, I first describe the reduplication of different word classes and the meanings triggered by it. Then, I present different reduplication types found in Jambi Malay, particularly in Tanjung Raden.

2.2.2.1. What can Reduplicate and What does it Mean?

Nouns, pronouns, verbs, adjectives, and numerals may all undergo reduplication.

2.2.2.1.1. Nouns

The main function of noun reduplication is to indicate that the reduplicated noun is more than one. Uri Tadmor (p.c.) points out a myth present in many studies of Malay, which is that people claim that reduplication of nouns indicates plurality. He argues that reduplicated nouns do not occur in conjunction with a numeral, as the example (379) is not acceptable. Thus, reduplication of nouns does not indicate plurality.

(379) *mpat ruma-ruma (TR, E)
four RED-house
'four houses'

However, if the numeral is omitted (380)a or if the noun is not reduplicated (380)b, the forms are acceptable.

(380) a. mpat ruma
four house
'four houses'

b. ruma-ruma
RED-house
'houses'

Judging from the fact that (379) is ungrammatical, while (380)a and (380)b are grammatical, we might claim that reduplication of nouns occurs when the exact number of the noun is not indicated or unknown. In other words, reduplication of nouns occurs when the speaker refers to a group of nouns whose number is unknown/unspecified. Examples follow.

(381) a. la huda, neŋoʔ pukat-pukat tadi
PFCT finish ACT-see RED-dragnet earlier
'After that, we checked our nets.'

b. ka mano pgi kamᵇɪŋ-kamᵇɪŋ tadi-tuʔ
to which go RED-goat earlier-DEM.DIST
'Where did the goats go?'

When a noun is modified by another noun, the reduplication only applies to the head noun.

(382) a. alat-alat pancɪŋ aku-ko…
RED-tool fishing.rod 1SG-DEM.PROX
'My fishing tools…'

b. suŋe-suŋe awaʔ saŋᵍʊp dioʔ mᵇli-e
RED-river 1/2/3 can 3 ACT-buy-3
'He could even buy our rivers.'

Reduplication of certain nouns may add a different meaning which is related to the meaning of the base.

(383) gulo ‘sugar’ → gulo-gulo ‘sweets’
mato ‘eye → mato-mato ‘spy’

Some names of plants, animals, food types, and instruments look like reduplication because there is repetition of some form. However, they are not examples of reduplication because the repeated form cannot stand on its own. Examples follow.

(384) a. gawargawar ‘warning sign’ *gawar
b. roaʔroaʔ ‘a kind of bird’ *roaʔ
c. paruparu ‘lungs’ *paru
d. gunoguno ‘bewitch’ *guno
e. gadʊgadʊ ‘mixed vegetable dish’ *gadʊ

2.2.2.1.2. Pronouns

Not all personal pronouns can be reduplicated. Personal pronouns that can be reduplicated are: *kami* ‘1’, *kito* ‘1’, *aku* ‘1SG’, *awaʔ* ‘1/2/3’, *dioʔ* ‘3’, *kamu* ‘2’. The reduplication is for emphatic reasons and thus, emphatic *la* often follows it. Examples follow.

(385) a. ‘cari oraŋ awaʔ be-la rʊl,
seek person 1/2/3 just-EMPH TRU-Fahrul
oraŋ [kito-kito] jam^{b}i-ko-la!’
person RED-1 Jambi-DEM.PROX-EMPH
‘Just find a woman from our area, from Jambi!’

b. ustat-kan daʔ muŋkɪn deweʔan kan,
teacher-EMPH NEG perhaps alone-NMLZ Q
jadi [kami-kami]-la yaŋ m^{b}acoi-ɲo
become RED-1-EMPH REL ACT-read-APPL-3
‘It was impossible for the teacher to do it by himself,
so we helped him recite the verses.’

c. kamu-kamu-la yaŋ am^{b}ɪʔ-e (TR, E)
RED-2-EMPH REL take-3
‘You are the ones who take it.’

d. aku-aku trʊs yaŋ disʊrʊ-e (TR, E)
RED-1SG continue REL PASS-ask-3
'He always asks me (to do something).'

Furthermore, reduplication of interrogative pronouns (*wh*-pronouns) forms an indefinite pronoun, as exemplified below (see section 2.1.2.1.8 for more discussion of indefinite pronouns).

(386) a. daʔdo bataŋo apo-apo daʔ
NEG.exist INTR-ask RED-what NEG
'She won't ask you anything.'

b. suda-tu siapo-siapo be yaŋ diajaʔ-tu?
finish-DEM.DIST RED-who just REL PASS-invite-DEM.DIST
'Then, who did he invite?'

2.2.2.1.3. Verbs

Reduplication of verbs may denote an action which is carried out repeatedly or which is done over a period of time.

(387) a. biso-la m^bantu-m^bantu oraŋ tuo, daʔ?
can-EMPH RED-ACT-help person old NEG
'They can help our parents, right?'

b. ka luar nʊlʊŋi oraŋ ɲiap makan
to out ACT-help-APPL person ACT-prepare eat
ɲedoʔ-ɲedoʔ laʊʔ-e
RED-ACT-take side.dish-3
'She would get out to help us prepare food.'

c. moŋkaŋ-moŋkaŋ ruma-tu, kanʔ
RED-ACT-throw.away house-DEM.DIST Q
'They threw at the houses [with something].'

In addition, reduplicated forms of verbs may also convey the meaning of an action done in a causal or leisurely way.

(388) a. niʊp tkʊt-tu di bawa jarɪŋ-tu
ACT-blow k.o.small.birdtrap-DEM.DIST LOC under net-DEMD.DIST
kan, pas ɲan dʊdʊʔ-dʊdʊʔ di atas jaramᵇa-tu
Q exact very RED-sit LOC up bridge-DEM.DIST
'We blew the trap under the net; we sat exactly on the bridge.'

b. tu crito aku dewe?-la kan ŋisi-ŋisi waktu malam-ko
DEM.DIST story 1SG alone-EMPH Q RED-ACT-content time night-DEM.PROX
'That's my own story to spend time tonight,... then I have no job.'

2.2.2.1.4. Adjectives

Reduplication of adjectives occurs when the noun they modify is plural. The reduplication of adjectives is employed for the purpose of indicating that each noun has the characteristic indicated by the adjective. Examples follow.

(389) a. cuman iyo baju naŋ pakam-pakam be-tu
but yes cloth REL RED-good just-DEM.DIST
'But, those were only good clothes.'

b. kayu-tu beŋko?-beŋko?
wood-DEM.DIST RED-curved
'The wood was curved.'

c. ikan-ɲo memaŋ bsa?-bsa?
fish-3 indeed RED-big
'The fish are big.'

Moreover, reduplication of adjectives may form adverbs, as illustrated below.

(390) a. yaŋ pntɪŋ-e basʊ rsɪ-rsɪ
REL important-3 wash RED-clean
'The important thing is we need to wash it clean.'

b. ha, tu harʊs kito blo elo?-elo?
EXCL DEM.DIST must 1 keep RED-beautiful
'We should take care of them carefully.'

2.2.2.1.5. Numerals

Reduplication of numbers also forms adverbs which mean 'in a group of that indicated by the base', as exemplified below (see section 2.1.6 for more discussion of numerals).

(391) kami masʊʔ duo-duo (TR, E)
1 go.in RED-two
'We went in two at a time.'

2.2.2.2. Reduplication Types in Jambi Malay[36]

Previous studies on Malay/Indonesian languages have shown that on the general level, reduplication is of two types: full reduplication and partial reduplication (Sneddon, 1996; Gil 2005; Uri Tadmor (p.c.)).

Sneddon (1996:16-22) discusses that Standard Indonesian exhibits three types of reduplication, as shown below.[37]

(392) Full Reduplication

a.	pohon	'tree'	pohon-pohon	'trees'
b.	tinggi	'tall'	tinggi-tinggi	'very tall'

(393) Partial Reduplication

a.	tangga	'ladder'	tetangga	'neighbor'
b.	jaka	'bachelor'	jejaka	'bachelor'

(394) Imitative Reduplication

a.	sayur	'vegetable'	sayur-mayur	'vegetables'
b.	warna	'color'	warna-warni	'all kinds of colors'

Jambi Malay also demonstrates the three reduplication types observed in Standard Indonesian. In contrast to SI, partial reduplication is still very productive in Jambi Malay, particularly in Tanjung Raden. Examples follow.

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[36] The reduplication types of Jambi Malay, particularly of the Tanjung Raden dialect was first presented in Yanti and Raimy (in prep.).

[37] Sneddon points out that partial and imitative reduplication are not very productive.

(395) Full Reduplication in Tanjung Raden

a.	saŋko	'think'	saŋko-saŋko	'think'
b.	pukat	'dragnet	pukat-pukat	'dragnets'

(396) Partial Reduplication in Tanjung Raden

a.	kawan	'friend'	ka-kawan	'friends'
b.	main	'play'	ma-main	'play around/play about'

(397) Imitative reduplication in Tanjung Raden

a.	laʊʔ	'side dish'	laʊʔ-paʊʔ	'side dishes'
b.	asal	'origin'	asal-ʊsʊl	'origin'

In Tanjung Raden, full reduplication and partial reduplication can be distinguished into nine types. In what follows, I shall describe each of the nine reduplication types as well as imitative reduplication.

2.2.2.2.1. Full Reduplication

Full reduplication occurs when the reduplicant copies all elements of the base. This reduplication type may apply to any base. Examples are shown below.

(398)

a.	alat	'tool'	→ alat-alat	'tools'
b.	jaram^{b}a	'bridge'	→ jaram^{b}a-jaram^{b}a	'bridges'
c.	pakam	'good'	→ pakam-pakam	'good/very good'
d.	alʊs	'small'	→ alʊs-alʊs	'small/very small'
e.	anaʔ	'child'	→anaʔ-anaʔ	'children'
f.	saŋko	'think'	→ saŋko-saŋko	'think'
g.	mahal	'expensive	→ mahal-mahal	'expensive/very expensive'

2.2.2.2.2. Full Reduplication with no Final Consonant

This type of reduplication occurs when the reduplicant copies all elements of the base, except for the last element. This only applies to consonant-final bases.

(399) a. sopan ‘polite’ → sopa-sopan ‘very polite’
b. dikit ‘a little’ → diki-dikit ‘little by little’
c. gamal ‘gong’ → gama-gamal ‘gongs’
d. sekoʔ ‘one’ → seko-sekoʔ ‘one by one’
e. cakap ‘say’ → caka-cakap ‘chitchat’

The reader is reminded that reduplication of non consonant-final base may also be analyzed as reduplication without a final consonant (Yanti and Raimy, in prep.), as shown below.

(400) a. buku ‘book’ → buku-buku ‘books’
b. tali ‘rope’ → tali-tali ‘ropes’
c. umo ‘paddy’ → umo-umo ‘paddies’
d. rame ‘crowded’ → rame-rame ‘very crowded/crowds’

2.2.2.2.3. Full Reduplication with a Glottal Stop

This type of reduplication occurs when the reduplicant copies all elements of the base, except the final consonant, and the final consonant is substituted by the glottal stop [ʔ]. This reduplication type is only found with consonant-final bases when the final consonant has the feature [-continuant, -sonorant] (shown in (401)).

(401) a. ɪkʊt ‘follow’ → ɪkʊʔ-ɪkʊt ‘imitate’
b. dikit ‘a little’ → dikiʔ-dikit ‘little by little’
c. rampok ‘rob’ → rampoʔ-rampok ‘rob’

Full reduplication with a glottal stop cannot apply to vowel-final bases or bases whose final consonant does not have the feature [-continuant, - sonorant], as illustrated below.

(402) a. rame ‘crowded’ *rameʔ-rame
b. mɪrɪŋ ‘sideways’ *mɪrɪʔ-mɪrɪŋ
c. mahal ‘expensive’ *mahaʔ-mahal

2.2.2.2.4. CV Reduplication

CV reduplication occurs when a reduplicant is the copy of the first CV sequence of the base. This reduplication type may apply to all bases.

(403)	a.	dulu	'before'	du-dulu	'a long time ago'
	b.	kiro	'about'	ki-kiro	'average'
	c.	budaʔ	'kid'	bu-budaʔ	'kids'
	d.	lebar	'wide'	le-lebar	'wide/very wide'
	e.	makan	'eat'	ma-makan	'eat/have a party'

Based on the data in (403), one might argue that the reduplicant is the copy of the first syllable. However, that is not supported, as the reduplicant never copies the coda of the first syllable, as shown below.

(404)	a.	jantan	'male'	ja-jantan	'male(s)'	*jan-jantan
	b.	teŋkat	'level'	te-teŋkat	'levels'	*teŋ-teŋkat
	c.	rampok	'rob'	ra-rampok	'rob'	*ram-rampok

2.2.2.2.5. CVʔ Reduplication

CV[ʔ] reduplication occurs when the reduplicant comprises the first consonant vowel sequence of the base and is followed by a glottal stop. Like full reduplication with a glottal stop, this reduplication type can only apply to bases whose final consonant has [-continuant, -sonorant] features, as exemplified below.[38]

(405)	a.	lasaʔ	'restless'	laʔ-lasaʔ	'very restless'
	b.	buat	'make'	buʔ-buat	'make something up'
	c.	teŋoʔ	'look'	teʔ-teŋoʔ	'look/observe/look around'
	d.	pagi	'morning	*paʔ-pagi	
	e.	kawan	'friend'	*kaʔ-kawan	
	f.	lebar	'wide'	*leʔ-lebar	
	g.	kʊmpʊl	'gather	*kʊʔ-kʊmpʊl	

[38] One exception was found: *soal* 'matter' → soʔ-soal'matters'

In addition to these two reduplication types, four other replication types are attested: C[a] reduplication, C[ə] reduplication, C[aʔ] reduplication, and C[əʔ] reduplication.

2.2.2.2.6. C[a] Reduplication

In C[a] reduplication the reduplicant consists of the first consonant of the base followed by the vowel [a]. This reduplication type may apply to any bases.

(406)	a.	kiro	'about'	ka-kiro	'average'
	b.	buat	'make'	ba-buat	'make'
	c.	rugaw	'tangle'	ra-rugaw	'tangle'
	d.	potoŋ	'cut'	pa-potoŋ	'cut repeatedly'
	e.	makan	'eat'	ma-makan	'eat'

2.2.2.2.7. C[ə] Reduplication

C[ə] reduplication takes place when the first consonant of the base is followed by a schwa to form the reduplicant. This reduplication pattern can apply to any consonant-initial bases, as shown below.

(407)	a.	sopan	'polite'	sə-sopan	'(more) polite'
	b.	kitar	'about'	kə-kitar	'about'
	c.	sʊbʊr	'fertile'	sə-sʊbʊr	'fertile/very polite'
	d.	pasat	'pay attention'	pə-pasat	'pay attention'
	e.	enaʔ	'delicious'	*ə-enaʔ	
	f.	ambal	'carpet'	*ə-ambal	

In (407)a-d, the bases are consonant-initial and thus C[ə] reduplication may apply, whereas in (407)e-f, the bases are vowel-initial and thus this reduplication type is barred.

2.2.2.2.8. C[aʔ] Reduplication

C[aʔ] reduplication occurs when thereduplicant consists of the first consonant of the base followed by the vowel [a] and the glottal stop [ʔ]. This reduplication type only applies to consonant-final bases when the consonant has the features [-continuant, -sonorant].

(408)	a.	pijat	'massage'	paʔ-pijat	'give massage repeatedly'
	b.	lasaʔ	'restless'	laʔ-lasaʔ	'very restless'
	c.	teŋoʔ	'look'	taʔ-teŋoʔ	'look/observe/look around'
	d.	rame	'crowded'	*raʔ-rame'	
	e.	kʊmpʊl	'gather'	*kʊʔ-kʊmpʊl	
	f.	potoŋ	'cut'	*paʔ-potoŋ	

2.2.2.2.9. C[əʔ] Reduplication

C[əʔ] reduplication occurs when the reduplicant copies the first consonant of the base and this consonant is followed by the sequence of schwa [ə] and a glottal stop [ʔ]. Examples are shown below.

(409)	a.	kilat	'shining'	kəʔ-kilat	'very shining'
	b.	sɪbʊʔ	'busy'	səʔ-sɪbʊʔ	'very busy'
	c.	kəciʔ	'small'	kəʔ-kəciʔ	'very small'

It should be pointed out that if a word can undergo CV[ʔ] replication, it can also undergo C[aʔ] and C[əʔ] reduplication. However, two exceptions were found, as shown below.

(410)	a.	boŋkot	'root'	boʔ-boŋkot	*baʔ-boŋkot	*bəʔ-boŋkot
	b.	teŋkat	'level'	teʔ-teŋkat	*taʔ-teŋkat	*təʔ-teŋkat

2.2.2.2.10. Imitative Reduplication

Imitative reduplication is a reduplication type in which the reduplicated item is not identical but very similar to the base. In some cases of imitative reduplication, only the consonants undergo an alternation, as exemplified below.

(411) a. nasi, [laʊʔ-paʊʔ]-e di dalam
cooked.rice side.dish-3 LOC inside
bada-bada-tu gi
RED-container-DEM.DIST later
'Rice and the side dishes are on the containers.'

b. ha kancɪl-ko tadi di atas gunuŋ
EXCL mouse.deer-DEM.PROX earlier LOC up mountain
nŋar-la dioʔ [hɪrʊʔ-pɪkʊʔ]-e
ACT-listen-EMPH 3 hurly.burly-3
'Well, the mouse deer heard the hurly burly from the mountain.'

In some other imitative reduplication examples, only the vowels undergo an alternation, as shown below.

(412) a. asal-ʊsʊl 'origin'
b. graʔ-grɪʔ 'movement'
c. bolaʔ-balɪʔ 'back and forth'

Finally, in a few other reduplicated forms both vowels and consonants undergo changes. These forms may be considered compounds (see section 2.2.3).

(413) a. lɲaʔ-lɲet 'flattened'
b. lma-lm^{b}ʊt 'gentle, graceful'

To conclude, I have shown that Jambi Malay exhibits ten reduplication types, namely full reduplication, full reduplication without the final consonant, full reduplication with a glottal stop, CV reduplication, C[a] reduplication, C[ə] reduplication, CV[ʔ] reduplication, C[aʔ] reduplication, C[əʔ] reduplication, and imitative reduplication.

However, if we consider the vowel reduction rule in which the vowel /a/ turns into schwa discussed in section 3.1.3.2.3, we can reduce the number of reduplication types described above. We can analyze C[a] reduplication and C[ə] reduplication as one reduplication type, i because of the application of the vowel reduction rule. In addition, we can also analyze C[əʔ] reduplication as derived from C[aʔ] which undergoes the vowel reduction rule. As a result, there are only 8 types of reduplication.

Yanti and Raimy (in prep.) provide a formal account for the first nine reduplication types using Precedence Based Theory. In addition, Yanti and Raimy point out that some of the reduplication types are simply innovations in the language.[39]

2.2.3. Compounds

Compounds are complex words which are formed by putting together two or more simple words. In Jambi Malay compounds comprise two words. Compounds are generally nouns. However, some compounds are verbs and adjectives. In addition, some compounds may be used as both nouns and verbs. Examples follow.

(414) Compound Nouns

a. mato pancɪŋ ‘the hook of a fishing rod’

b. pisaŋ rajo ‘a kind of banana’

(415) Compound Verbs

a. tarɪʔ napas ‘breathe/sigh’

b. lpas taŋan ‘give up’

[39] The reader is referred to Yanti and Raimy (in prep.) for a detailed discussion.

(416) Compound Adjectives

a. snaŋ ati ‘happy’

b. sakıt ati ‘angry; insulted’

(417) Compounds Used as Both Nouns and Adjectives

a. makan siaŋ ‘lunch; have lunch’

b. makan pagi ‘breakfast; have breakfast’

c. makan malam ‘dinner; have dinner’

In what follows, I shall describe all possible combinations of different word classes that may form compounds.

2.2.3.1. Noun + Noun

A compound of a noun followed by a noun forms another noun.

(418) a. paɲʲaŋ sampe [mato kaki]?
long reach eye leg
‘Does it reach her ankle?’

b. kulo maco yasın make [kaco mato]
1SG ACT-read Yasin ACT-use glass eye
‘I wear glasses when I read Yasin.’

c. di [ruma sakola] daʔ ktıʔ
LOC house school NEG exist
‘He wasn’t at school.’

d. kapalaʔ batu ‘stubborn’

e. kapalaʔ udaŋ ‘stupid’

In addition, some compounds are comprised of two juxtaposed nouns, as illustrated below.

(419) a. laki bini ‘married couple; husband and wife’

b. sanaʔ sodara ‘relatives’

c. anaʔ pinaʔ ‘descents’

d. kaki taŋan ‘trusted person’

2.2.3.2. Noun + Adjective

A compound formed of a noun and an adjective also forms a noun.

(420) a. awaʔ make [taŋan paɲʲaŋ] galo
1/2/3/ ACT-use hand long all
'We all wore long sleeves.'

b. niŋᵍal be di [ruma sakɪt]
die just LOC house sick
'She died at the hospital.'

2.2.3.3. Verb + Noun

A compound that is comprised of a verb and a noun may generate a noun as well as a verb, as illustrated below.

(421) a. [ikat piŋᵍaŋ]-ko mera… (MD, N)
tie waist-DEM.PROX red
'This belt was red'

b. aku [makan ati] salamo bauma taŋᵍo
1SG eat liver one-long.time INTR-house ladder
dŋan dioʔ-tu (TR, E)
with 3-DEM.DIST
'I've suffered since I got married to him.'

2.2.3.4. Adjective + Noun

A compound may also be formed by combining an adjective and a noun. The derived compound is an adjective.

(422) a. dioʔ [sakɪt ati]
3 sick liver
'He was angry.'

b. a, kalu la suda-tu [snaŋ ati]
EXCL if PFCT finish-DEM.DIST glad liver
'We will be glad if it's done.'

c. bsaʔ kapalaʔ 'proud'

d. kras kapalaʔ 'stubborn'

e. tiŋ^{gi}i ati 'arrogant'

f. tiŋ^{g}i ari 'noon'

g. lma lm^{b}ʊt 'gentle'

h. crdɪʔ pande 'smart and intelligent'

2.2.3.5. Verb + Adjective

A compounds formed of a verb followed by an adjective are shown below.

(423) krjo kras 'hard work'

2.2.3.6. Verb +Verb

Compounds may also be made up of a verb followed by another verb. The two verbs generally have contrasting meanings.

(424) a. jatʊ baŋun 'fall and rise'
b. tarɪʔ ʊlʊr 'pull and push'
c. bolaʔ balɪʔ 'back and forth'
d. naeʔ tʊrʊn 'go up and go down'

2.2.3.7. Other Compounds

Other compounds are fixed compounds, usually borrowed from Indonesian.

(425) a. suŋi sŋap ‘very quiet’
b. lma lm^{b}ʊt ‘gentle’
c. glap gulita ‘very dark’

To conclude this chapter, Jambi Malay exhibits three processes for deriving different parts of speech, namely affixation, reduplication, and compounding. Affixation includes prefixation, suffixation, and circumfixation. I have shown that certain affixes may be employed to derive different parts of speech. The circumfix *ka-an,* for example, can be employed to derive verbs as well as adjectives. Some of the affixes in Jambi Malay, such as the prefix *pa-,* the circumfix *ka-an,* and the suffix–*kan,* are affixes borrowed from Indonesian.

Furthermore, the reduplication types observed in Jambi Malay exemplify reduplication types found in other Malay varieties, such as Standard Indonesian and Riau Indonesian. These include full reduplication, partial reduplication, and imitative reduplication. In Tanjung Raden, in particular, full reduplication and partial reduplication can be divided into eight different types and some of these types are simply innovations the language (see Yanti and Raimy, in prep.).

Finally, compounding also plays a role as a word formation process in Jambi Malay. Compounding of different word classes may form a new word.

Chapter 3

THE PHONOLOGY OF JAMBI MALAY[1]

The phonology of Jambi Malay, especially that of the three dialects covered in this dissertation, has not been adequately described in the literature. Husin et al. (1985), for instance, contains a chapter on the phonology of Jambi Malay which is neither accurate nor adequate. Husin et al. claim that the data were gathered from speakers of Jambi Malay who live in the city of Jambi, the Batanghari district (an area upstream from the city), the Tanjung Jabung district (located on the coast), and the Sarolangun, Bangko, and Bungo Tebo districts (areas further upstream on the Batanghari). However, the description of the phonology of Jambi Malay provided is more consistent with the phonology of the City dialect and less so with other dialects from the upstream or coastal areas. The description appears to indicate that the authors were not aware of the fact that there are differences between different dialects of Jambi Malay. Furthermore, other than providing a list of phonemes of the language, nothing was discussed with respect to other phonological issues, such as phonotactics, syllable structures, etc.

Likewise, Gani et al. (2000) have a chapter discussing the phonology of Jambi Malay which lacks in adequacy and accuracy. The chapter does not describe any differences between dialects spoken in different areas of Jambi. In addition, the

[1] Special thanks are addressed to Uri Tadmor, Timothy McKinnon, and Karthik Durvasula who have been willing to spend much of their time in discussing issues with respect to the phonology of Jambi Malay.

phonological inventory presented reflects the City dialect more than other dialects, despite the writers' claim that the informants for the study were from Muaro Jambi, an area around one of the dialectal locations covered in this dissertation (Mudung Darat). Furthermore, similar to the work of Husin et al. (1985), the phonology chapter provided in this grammar does not discuss any phonological information/issues other than offering the phonemic inventory of the language.

Anderbeck (2003) was the first to note phonological differences among the dialects of Jambi Malay. Anderbeck surveys sixteen areas and identifies differences between Jambi Malay dialects spoken in the downstream area and the upstream area on the Batanghari. However, as pointed out by Anderbeck, the main purpose of his study was not to provide a synchronic description of the language.

Finding that there was no adequate description of the phonology of Jambi Malay or of the differences and similarities among Jambi Malay dialects, I was motivated to conduct an in-depth study of the phonology of Jambi Malay. The dialect focused on in this study is the Tanjung Raden dialect (one of the *Seberang* dialects – dialects spoken in the area across the river from the city of Jambi). In addition, the Mudung Darat dialect and the City dialect are also studied and compared.

The dialects spoken in Jambi City and Tanjung Raden (in addition to other dialects spoken in *Seberang*) are categorized as dialects of the downstream area of Batanghari river (see also Anderbeck, 2003). The Mudung Darat dialect is spoken in an area which is further upstream, but it is only a few kilometers away from Tanjung Raden. As a reminder to the reader, I refer to Tanjung Raden and Mudung Darat jointly as Rural Jambi dialects and the City dialect as Jambi City dialect. In addition, I refer to all three dialects as Jambi Malay.

This chapter is organized as follows. Section 3.1 presents the phonological units of the language. Section 3.2 describes the phonotactics of the language. Section 3.3 introduces the suprasegmentals of the language. Section 3.4 displays the morphophonological processes of the language, and section 3.5 provides a short overview of the stress patterns and intonation of the language.[2] Each section is further divided into subsections.

3.1 Phonological Units

All sounds in Jambi Malay are produced with egressive airstream.

3.1.1. The Distinctive Segments of the Language[3]

Tanjung Raden (TR) and Mudung Darat (MD) share the same phonemic inventory, whereas the phonemic inventory of Jambi City (JC) is, to some extent, different from that of TR and MD. Although TR and MD share the same phonemic inventory, some phonemes have distinct distributions or phonetic realizations.

The next-subsections are organized as follows. In section 3.1.2, I document the consonant inventory of Jambi Malay and present allophonic variations of some consonants as well as other phenomena related to consonants. In section 3.1.3,

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[2] In the Lingua questionnaire (Comrie and Smith, 1977), the phonology chapter is divided into five main sections: phonological units (segmental), phonotactics, suprasegmentals, morpho-phonology (segmental), and morpho-phonology (suprasegmental). Since the issue on suprasegmental mopho-phonology is mainly concerned with phrasal stress and intonation, I substitute the section on suprasegmental morpho-phonology with stress and intonation.

[3] The first presentation of the phonemic inventory of traditional Jambi Malay, covering the Tanjung Raden and Mudung Darat dialects, is found in Tadmor and Yanti (2005).

I describe the phonemic vowel inventory of Jambi Malay and the allophonic variations that concern vowels.

Except where explicitly stated, the following description holds true for all three dialects: Tanjung Raden (TR), Mudung Darat (MD), and Jambi City (JC). I shall interchangeably employ both abbreviations and full names for the dialect names.

Phonetic realizations are presented in standard square brackets.

3.1.2. Consonants

Tanjung Raden and Mudung Darat each exhibit twenty three distinctive consonants in their native inventory and one loan consonant, whereas the City dialect contains nineteen consonants in its native inventory and one loan consonant. All consonants in Jambi Malay fall into one of five manners of articulation: plosive, fricative, nasal, liquid, and glide.

3.1.2.1. List of Consonants

3.1.2.1.1. Plosives

Four pairs of plosives (bilabial, dental-alveolar, alveo-palatal and velar) and a glottal stop are observed in all three dialects of Jambi Malay covered in this dissertation. Note that I shall use the term ‘stops’ interchangeably with ‘plosives’. Voiceless plosives are found word-initially, word-medially, as well as word-finally, whereas voiced plosives only appear word-initially and word-medially.[4] Examples follow.

[4] It is more crucial to describe a segment with respect to its position within a syllable. Thus, what is important here is that voiced consonants do not appear in coda position, as discussed in sections 3.2.1.2.1 and 3.2.1.6. However, since the purpose of this section is to present different segments in the language, I only describe possible positions of the segments within a word.

3.1.2.1.1.1. Bilabials

Bilabial stops in Jambi Malay include /p/ and /b/, as exemplified below.

(1) a. /p/

/pasat/	'clear'
/apʊs/	'erase'
/sarap/	'garbage'

b. /b/

/bakar/	'burn'
/labu/	'pumpkin'

3.1.2.1.1.2. Dental-alveolars

Dental-alveolar stops consist of /t/ and /d/. There is a slight difference between /t/ and /d/ with respect to their place of articulation. /t/ is pronounced with the tip of the tongue touching the back of the front teeth and a part of the tongue blade touching the alveolar ridge, whereas /d/ is produced with the tongue tip slightly more posterior than for /t/; the tongue tip touches the area of the alveolar ridge just behind the front teeth.

(2) a. /t/

/tibo/	'arrive'
/antaʔ/	'delay'
/ribʊt/	'noisy'

b. /d/

/dalam/	'deep, inside'
/cedoʔ/	'scoop'

3.1.2.1.1.3. Palatals

Palatal stops include /c/ and /j/. The phonetic symbol for voiced palatal stop is /ɟ/; however, in this dissertation I employ the symbol /j/ to represent the voiced palatal stop. Unlike other voiceless stops, the voiceless palatal /c/ does not

appear word-finally. In section 3.2.1.2.1 later, I show that palatals are barred from word-final position.[5] Thus, both voiceless and voiced palatals /c/ and /j/ only appear in word-initial and word medial-position.

(3) a. /c/

/cari/	'look for'
/acar/	'pickles'

b. /j//

/jari/	'finger'
/rajo/	'king'

3.1.2.1.1.4. Velars

Velar plosives consist of /k/ and /g/, as shown in the following examples.

(4) a. /k/

/kadaŋ/	'sometimes'
/pukat/	'dragnet'
/belok/	'to turn'

b. /g/

/gawe/	'work'
/bagɪ/	'to give'

3.1.2.1.1.5. Glottal

The glottal stop has a different status in different Malay dialects. In many dialects of Malay (Standard Malay, Selangor, among others) the voiceless velar stop /k/ is realized as a glottal stop word-finally (Omar, 1977/1991:8-9). In addition, the glottal stop in Kuala Lumpur Malay is an allophone of /k/ in coda position (Al-attas et al., 2006). However, Omar (1977/1991:8-9) points out that in Serawak Malay, [k] does

[5] Thanks to Uri Tadmor for pointing this out.

not alternate with [ʔ] word-finally. Furthermore, Grijns (1991:16) lists /k/ and /ʔ/ as two distinct phonemes in Jakarta Malay.

As for Jambi Malay, in many cases, the sound corresponding to final /k/ in other Malay dialects (such as Standard Indonesian (SI) and Jakarta Indonesian (JI)), is realized as a glottal stop. Some examples are given in (5) below.

(5)	**SI or JI**	**Jambi Malay**	**Gloss**
a.	[anak]	[anaʔ]	'child'
b.	[baɲak]	[baɲaʔ]	'a lot'
c.	[beŋkok]	[beŋkoʔ]	'bend'
d.	[kotak]	[kotaʔ]	'box'
e.	[miɲak]	[miɲaʔ]	'oil'
f.	[baik]	[baeʔ]	'good'
g.	[titik]	[tɪtɪʔ]	'drop, full stop'

The glottal stop is mostly found in word-final position. One hypothesis to explain this distribution is that /ʔ/ is an allophonic variant of /k/ word-finally. However, in TR and MD, the glottal stop is a separate phoneme because it contrasts with [ᵑk], an allophone of /k/, word-finally, as exemplified in (6). The allophonic variations of voiceless stops are presented in section 3.1.2.2.1.

(6)				
a.	/bak/	[baᵑk] / [bak˺]	'water reservoir'
b.	/sepak/	[sepaᵑk] / [sepak˺]	'kick'
c.	/cocok/	[cocoᵑk] / [cocok˺]	'suitable'
d.	/ketek/	[keteᵑk] / [ketek˺]	'boat'
e.	/musik/	[musiᵑk] / [musik˺]	'music'

In addition, the following minimal and near-minimal pairs strongly suggest that /ʔ/ is a distinctive phoneme in the Rural Jambi dialects.

(7)				
a.	/ketek/	[keteᵑk] / [ketek˺]	'boat'
b.	/keteʔ/	[keteʔ]	'armpit'

(8) a. /sorok/ [soʀoᵑk] / [soʀokˀ] ‘drawer’
b. /sosoʔ/ [sosoʔ] ‘change’

Some /k/-final words in the Rural dialects are /ʔ/-final in the City dialect. Examples follow.

(9) Rural Jambi Dialects	Jambi City	Gloss
/sepak/	/sepaʔ/	‘kick’
/cocok/	/cocoʔ/	‘suitable’
/kolak/	/kolaʔ/	‘k.o.food’
/adʊk/	/aduʔ/	‘stir’
/bak/	/baʔ/	‘water reservoir’

However, the City dialect exhibits many /k/-final words as well, especially among loan words, as shown in (10) below.

(10) a. /ojek/ ‘motor taxi’
b. /musik/ ‘music’
c. /plastik/ ‘plastics’
d. /batik/ ‘batik’
e. /antik/ ‘antique’
f. /triplek/ ‘plywood’

The claim that /k/ and /ʔ/ are also two distinct phonemes in the City dialect is strenghthened by the existence of the following minimal pairs.

(11) a. /ketek/ ‘boat’ vs. /keteʔ/ ‘armpit’
b. /dek/ ‘ceiling’ vs. /deʔ/ ‘TRU-younger.sibling’

Word-medially, /ʔ/ in the Rural Jambi dialects is mostly found in words borrowed from Arabic, as shown in (12) below.

(12) a. /maʔap/ ‘apology’
b. /saʔat/ ‘time’
c. /taʔat/ ‘obey’
d. /doʔa/ ‘prayer’
e. /jumʔat/ ‘Friday’
f. /paʔso/ ‘force’
g. /maʔsʊt/ ‘intention’

The data in (12)a through (12)d might suggest that a glottal stop is inserted between two vowels; however, the following data show that the glottal stop is not always present between two vowels word-medially, which suggests that the glottal stop in (12) is present underlyingly.

(13) a.	/sroal/	[sroal]	*[sroʔal]	‘pants’
b.	/laos/	[laos]	*[laʔos]	‘galingale’
c.	/maoŋ/	[mãõŋ] / [mãõᵍŋ]	*[mõʔãŋ] / [mõʔãᵍŋ]	‘bad smell’
d.	/koaʔ/	[koaʔ]	*[koʔaʔ]	‘divide’
e.	/leaʔ/	[leaʔ]	*[leʔaʔ]	‘muddy’

Word-initial /ʔ/ is not analyzed as phonemic, as it is completely predictable. See section 3.1.2.2.5 for further discussion.

3.1.2.1.2. Fricatives

Fricatives common to all three dialects include the voiceless alveolar fricative /s/ and the glottal fricative /h/. In addition, the voiced alveolar fricative /z/ is a borrowed segment from Arabic and is described in section 3.1.2.1.6. Loan words which contain the labiodentals fricatives /f/ and /v/ undergo adaptation (see section 3.1.2.2.7). In certain cases, /z/ also undergoes adaptation (see section 3.1.2.2.7).

3.1.2.1.2.1. Alveolar

In all three dialects, /s/ is found word-initially, word-medially, and word-finally, as exemplified below.

(14) /sano/ ‘there’
/asap/ ‘smoke’
/panas/ ‘hot’

3.1.2.1.2.2. Glottal

The glottal fricative /h/ in Jambi Malay is not found word-finally. Historically /h/-final words have lost their final /h/, as shown below.

(15) Historically /h/-final	Jambi Malay[6]	‘Gloss’
/buluh/	/bulʊ/	‘bamboo’
/patah/	/pata/	‘break’
/putih/	/putɪ/	‘white’
/salah/	/sala/	‘wrong’

Glottal /h/ may appear word-initially and word-medially, as demonstrated in the following examples.

(16) /halaŋ/ ‘prevent’
/hamza/ ‘Hamza; personal name’
/poho/ ‘thigh’
/bahan/ ‘material’

It is important to point out that while the glottal fricative in word-initial position is observed in many borrowed forms, as shown in (17), many words which are /h/-initial in Standard Indonesian appear without the initial /h/, as shown in (18).

(17) /harto/ ‘wealth’
/hotel/ ‘hotel’
/hobi/ ‘hobby’
/hebat/ ‘great’
/harap/ ‘hope’

[6] In the city dialect, all mid high vowels are high vowels underlyingly.

(18) Standard Indonesian	Jambi Malay	Gloss
/hari/	/ari/	‘day’
/habis/	/abɪs/	‘finish’
/hancur/	/ancʊr/	‘shattered’
/hijau/	/ijo/	‘green’
/hangus/	/aŋus/	‘burnt’
/haus/	/aʊs/	‘thirsty’

Furthermore, although /h/ is not found word-finally, phonetic analysis shows that vowel-final words are often pronounced with a kind of breathiness, especially when the speaker emphasizes a word or when such a word appears phrase-finally or sentence-finally. However, the breathiness does not seem to be systematic. In addition, the breathiness is also often found in words which are not /h/-final historically, such as *gawe* ‘work’, *jugo* ‘also’, *ado* ‘exist’, *no* ‘TRU-female’ and *iyo* ‘yes’. This indicates that the breathiness is indeed unsystematic. Therefore, I suggest that /h/ is not phonemic word-finally.

Aside from being phonemic, [h] can also be epenthesized, as discussed in section 3.1.3.2.7.1.

3.1.2.1.3. Simple Nasals and Post-occluded Nasals

Simple nasals are found word-initially, word-medially, and word-finally, except for the palatal nasal. The palatal nasal, like palatal stops, never occurs in word-final position (see also sections 3.2.1.2.1 and 3.2.1.2.2). Post-occluded nasals are only found word-initially and word-medially, as exemplified below.

(19) Simple Nasals

a. /m/

/masʊʔ/	‘go in’
/samo/	‘same, with’
/masam/	‘sour’

b. /n/

/naeʔ/	‘go up’
/anaʔ/	‘child’
/asɪn	‘salty’

c. /ɲ/

/ɲawo/	‘soul’
/aɲut/	‘washed away’

d. /ŋ/

/ŋantʊʔ/	‘sleepy’
/aŋat/	‘hot’
/buntɪŋ/	‘pregnant’

(20) Post-occluded Nasals

a. /m^b/

/m^boʔ/	‘older sister’
/sam^{b}al/	‘chili sauce’

b. /n^d/

/n^daʔ/	‘want’
/man^{d}i/	‘bathe’

c. /$ɲ^j$/

/$ɲ^j$ʊʔ/	‘give’
/iɲ^{j}aʔ/	‘step on’

d. /$ŋ^g$/

/$ŋ^g$ɪ/	‘yes; honorific’
/miŋ^{g}u/	‘week, Sunday’

Tanjung Raden and Mudung Darat contain more distinctive nasal segments than the Jambi City dialect. The City dialect only exhibits a simple nasal series, whereas the Rural Jambi Malay dialects exhibit both simple nasals and complex (post-occluded) nasals.

Complex nasals are not new in the study of the phonology of world languages. Durie (1985) refers similar kinds of nasals, which are also attested in Acehnese, as funny nasals. In many descriptions of various Chinese dialects, such as the Zhongsan Yue dialect (Chan, 1987, 1994), post-stopped nasals have also been observed. Durvasula (2009) claims that post-stopped nasal are better analyzed as obstruent nasals.

In (21) through (24), I provide minimal pairs and near-minimal pairs of the two nasal types in TR and MD to show that they are not allophonic variations of a single phoneme.

(21) Bilabials: /m/ and /m^b/

a.	/tamat/	'finish'	/tam^{b}at/	'tie'
b.	/amal/	'deed'	/am^{b}al/	'carpet'
c.	/kmaŋ/	'a fruit name'	/km^{b}aŋ/	'flower'

(22) Dental Alveolars: /n/ and /n^d/

a.	/naʔ/	'TRU-child'	/n^{d}aʔ/	'want'
b.	/pena/	'pen'	/pen^{d}a/	'move'
c.	/rnaŋ/	'swim'	/rn^{d}aŋ/	'k.o.side.dish'

(23) Palatals: /ɲ/and /$ɲ^j$/

a.	/ɲaɲi/	'sing'	/ɲ^{j}aɲ^{j}i/	'promise'
b.	/ɲiɲaʔ/	'(sleep)soundly	/iɲ^{j}aʔ/	'step on'

(24) Velars: /ŋ/ and /$ŋ^g$/

a.	/aŋʊr/	'smelly'	/aŋ^{g}ʊr/	'grape'
b.	/siŋo/	'lion'	/siŋ^{g}o/	'so that'

With respect to post-occluded nasals in TR and MD, one might argue they constitute two segments like those in the City dialect. The data in (25) appear to be evidence for the claim that post-occluded nasals in TR/MD are simply homorganic nasal plus stop sequences in the City dialect. Thus, it may be the case that they come

from the same underlying representation and the difference between them is phonetic rather than phonemic.

(25)	**TR/MD**	**Jambi City**	**Gloss**
	/un^{d}aŋ/	/undaŋ/	‘invite’
	/tam^{b}a/	/tamba/	‘add’
	/sam^{b}al/	/sambal/	‘chili sauce’
	/baɲ^{j}ɪr/	/banjir/	‘flood’
	/miŋ^{g}u/	/miŋgu/	‘week, Sunday’

However, the data in (26) provide counter examples to the claim that post-occluded nasals are simply sequences of a nasal and a homorganic voiced stop. If the complex nasals were two segments as argued above, schwa insertion (discussed in section 3.1.3.2.4) should be allowed in the data in (26) as it is in the words in (27).

(26)	/n^{d}aʔ/	[n^{d}aʔ]	*[nədaʔ]	‘want’
	/m^{b}oʔ/	[m^{b}oʔ]	*[məboʔ]	‘older sister’
	/ŋ^{g}ɪ/	[ŋ^{g}ɪ]	*[ŋəgɪ]	‘yes’
	/ɲ^{j}ʊʔ/	[ɲ^{j}ʊʔ]	*[ɲəjʊʔ]	‘give’
(27)	/tgaʔ/	[təgaʔ]	‘stand’	
	/tlor/	[təloʀ]	‘egg’	
	/prʊt/	[pəʀʊ^{n}t]	‘stomach’	
	/pgi/	[pəgi]	‘go’	

As shown in (27), a schwa is inserted between adjacent word-initial consonants in order to break illicit consonant clusters or to fulfill the disyllabic requirement for a word (see section 3.1.3.2.4). If the post-occluded nasals in (26) were sequences of a nasal and a homorganic voiced stop, the unacceptable forms that are marked with an asterisk in (26) would have been allowed. Thus, post-occluded nasals are not likely nasal plus homorganic voiced stop sequences.

On the other hand, one could claim that the post-occluded nasals are simply sequences of a nasal and a homorganic voiced stop and argue that the environment for schwa insertion in (27) differs from that in (26). A schwa cannot be inserted in (26) because a schwa cannot be inserted between a nasal and a stop, as shown in the following data.

(28) /mpat/	[ʔm̥pa^{n}t]	*[mə.pa^{n}t]	‘four’
/mpaŋ/	[ʔm̥pa^{g}ŋ]	*[mə.pa^{g}ŋ]	‘fish pond’
/nta/	[ʔn̥ta]	*[nə.ta]	‘don’t know’

As shown in (28), schwa insertion between a nasal and a stop is not allowed. As such, there is no reason to expect that a schwa can be inserted in the data in (26) (see also section 3.1.3.2.4).

One could maintain the two-segment hypothesis by analyzing the insertion process as ordered after the coalescence of the sequence of the nasal and homorganic voiced stop (see Durvasula, 2009).

Assuming that post-occluded nasals are simply sequences of a nasal and a homorganic voiced stop, a problem with vocatives arises. When addressing someone by name or title, the speakers of Jambi Malay often use only the last syllable of the person’s name or title. Examples follow.

(29) **Names**	**Vocatives**	**Gloss**
/eko/	[ko]	‘Eko; personal name’
/uwaʔ/	[waʔ]	‘uncle’
/bujaŋ/	[jaŋ]	‘Bujang; personal name’
/ramli/	[li]	‘Ramli; personal name’
/hamdan/	[dan]	‘Hamdan; personal name’

The question that arises is what vocatives forms are employed by speakers of Rural Jambi dialects for data such as those in (30) below.[7, 8]

(30) /kam^{b}ɪŋ/ 'Goat'
/aɲ^{j}ɪŋ/ 'Dog'
/en^{d}aŋ/ 'Endang; personal name'
/pen^{d}eʔ/ 'Shorty; a label for someone who is short'

In the City dialect, in which the post-occluded nasals are sequences of a nasal followed by a voiced stop, the vocative forms of the names in (30) are as follows.

(31) /kambiŋ/ → [bɪŋ] 'Goat'
/anjiŋ/ → [jɪŋ] 'Dog'
/endaŋ/ → [daŋ] 'Endang; personal name'
/pendeʔ/ → [deʔ] 'Shorty; a label for someone who is short'

In (31), the vocative form of each word is the last syllable of the word, which comprises the voiced stop, the nucleus (vowel) and the final consonant. The nasal that precedes the voiced stop is not part of the last syllable. This indicates that the sequences of a nasal followed by a stop are two separate segments in the City dialect.

If the post-occluded nasals in Rural Jambi dialects were indeed sequences of a nasal and a homorganic voiced stop, one would predict that the vocative forms of the names in (30) would be formed in the same way as in the City dialect (see examples in (31)); however, the prediction is not borne out because the onset of the vocative forms for the names in (30) includes the nasal that appears before the voiced stop, as illustrated below.

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[7] Animal names are found in folktales.

[8] Thanks to Uri Tadmor for suggesting that I look at vocative forms.

(32) **Names**	**Vocatives**	**Gloss**
/kam^{b}ɪŋ/	[m^{b}ɪŋ]	‘Goat’
/aɲ^{j}ɪŋ/	[ɲ^{j}ɪŋ]	‘Dog’
/en^{d}aŋ/	[n^{d}aŋ]	‘Endang; personal name’
/pendeʔ/	[n^{d}eʔ]	‘Shorty; a label for someone who is short’

Again, one counter hypothesis is that the deletion of the syllable (the truncation process) might happen after the sequence of segments coalesces into one segment.[9]

To conclude, there is no clear evidence to support a mono-segmental hypothesis or cluster hypothesis with respect to post-occluded nasals in Rural Jambi Malay dialects. Native speakers’ intuitions, however, have given me strong motivation to believe that this series of complex nasals consists of single segments in Rural Jambi Malay dialects. They claimed that /m^{b}/, /n^{d}/, /ɲ^{j}/, and /ŋ^{g}/ are single sounds. It might be the case that these segments were clusters diachronically; however, the mono-segmental analysis provides a simpler account synchronically. Furthermore, as mentioned by Uri Tadmor (p.c.), cross-linguistically if a language only has one kind of initial clusters, it is normally a stop followed by a liquid or /s/ followed by a stop, and not a nasal followed by a stop.

3.1.2.1.4. Liquids

Liquids in Tanjung Raden and Mudung Darat include the lateral /l/ and velar ~ uvular /ɣ/, whereas those in the City dialect include the lateral /l/ and alveolar /r/.

[9] Thanks to Karthik Durvasula for pointing this out.

3.1.2.1.4.1. Lateral /l/

/l/ is found word-initially, medially, and finally, as exemplified in the following examples.

(33) a. Tanjung Raden and Mudung Darat

/lawaŋ/	'door'
/palaʔ/	'head'
/sam^{b}al/	'chili sauce'

b. City dialect

/lempar/	'throw'
/baleʔ/	'return'
/sambal/	'chili sauce'

3.1.2.1.4.2. Velar/Alveolar /r/

It is not easy to determine whether the /r/ in Mudung Darat is uvular or velar. It is produced slightly more back than [k] or [g], but slightly more front than uvular [ʀ]. I would suggest that it is a uvular sound impressionistically; however, more careful phonetic work needs to be done to ascertain its exact place of articulation. The only clear fact is that the sound is a non-trill sound, for which I will use the symbol [ʁ]. In Tanjung Raden, this sound is realized as trill, for which I will use the symbol [ʀ].[10] In the City dialect, the sound is realized as the trill alveolar [r].

Since it is still unclear whether this segment is velar or uvular in Mudung Darat, I assume that this segment is underlyingly a velar sound. This assumption will simplify the discussion of the place of articulation of the consonants in the Rural dialects. The IPA symbol for the velar fricative is [ɣ]. However, I employ /r/ for all phonemic transcription.

[10] I'm not using these symbols in the say the IPA symbols are used.

Like the other liquid present in the language, the phoneme /r/ may also appear word-initially, word-medially, and word-finally, as exemplified below.

(34) /rajo/ ‘king’
/paraŋ/ ‘machete’
/caŋkır/ ‘cup’

3.1.2.1.5. Glides

The IPA symbol for the palatal glide is /j/, but in this dissertation I adopt the American Phonetic Alphabet symbol for this sound, using /y/ for the palatal glide. Glides are found word-initially and word-medially, as exemplified below.[11]

Labial: /w/

(35) /waja/ ‘face’
/waʔ/ ‘uncle’
/lawaŋ/ ‘door’
/bawaŋ/ ‘onion’

Palatal: /y/

(36) /yʊʔ/ ‘come on’
/yakın/ ‘believe’
/ayam/ ‘chicken’
/layaŋ/ ‘cross’
/sayʊr/ ‘vegetables’

In section 3.1.2.2.8, I present another possible analysis with respect to glide.

[11] Word-final glides are only found in a few words and in diphthongs containing a sequence of a vowel followed by a glide, as discussed in section 3.1.3.2.9.

3.1.2.1.6. Loan Consonant

The voiced alveolar fricative /z/ has been borrowed into the language from Arabic. Thus, this phoneme is mainly found in lexical items/names borrowed from Arabic, as shown in (37).

(37) /zaman/ ‘era’
/zakat/ ‘tithe’
/azan/ ‘prayer call’
/ramzi/ ‘Ramzi; personal name’

When a word containing /z/ is borrowed into the language, it sometimes undergoes adaptation. Adaptation on loan consonants is discussed in section 3.1.2.2.7.

3.1.2.2. Allophonic Variations, Phonetic Realization, and Other Phenomena

3.1.2.2.1. Voiceless Oral Stops and Their Allophones

In a previous work with Uri Tadmor (Tadmor and Yanti, 2005), we point out that in the Rural Jambi Malay dialects (which we refer to as Traditional Jambi Malay in the paper), the voiceless stops /p/, /t/, and /k/ may be realized as prenasalized oral stops [^{m}p], [^{n}t], and [^{ŋ}k], respectively, word-finally. This rule applies to both native words and loanwords. They appear to be in free variation with unreleased [pˀ], [tˀ], and [kˀ], respectively, in that their occurrence is unpredictable.

(38)	/sarap/	[saʀa^{m}p]	or	[saʀap˺]	‘garbage’
	/sabɪt/	[sabɪ^{n}t]	or	[sabɪt˺]	‘sickle’
	/ketek/	[kete^{ŋ}k]	or	[ketek˺]	‘boat’
	/ojek/	[oje^{ŋ}k]	or	[ojek˺]	‘motor taxi’
	/musik/	[musi^{ŋ}k]	or	[musik˺]	‘music’
	/positɪp/	[positi^{m}p]	or	[positip˺]	‘positive’

In reduplicated forms, such as /sarapsarap/ and /dikitdikit/, the voiceless stop of the first element of the reduplication (the stem) does not undergo

prenasalization, thus /sarapsarap/ and /dikitdikit/ are usually pronounced as [saʀapsaʀa^{m}p] and [dikitdiki^{n}t], respectively. This happens especially in fast speech.

In addition, when words that end in a voiceless stop are cliticized with a vowel-initial clitic, the prenasalization is normally present, as illustrated in the following examples.[12]

(39)	/di- + siap + **-i**/	[disi^{y}a^{m}pʔĩ]	'PASS-ready-APPL'
	/dikit-dikit + **-**an/	[dikitdiki^{n}tʔãn]	'RED-a.little-NMLZ'
	/sbap +-e/	[səba^{m}pʔẽ]	'cause-3'
	/jawap + -an/	[jawa^{m}pʔãn]	'answer- NMLZ'

Unlike in Rural Jambi Malay dialects, prenasalization does not occur in the City dialect. In the City dialect, the voiceless oral stops /p/, /t/, and /k/ surface as unreleased stops [p$^{\neg}$], [t$^{\neg}$], and [k$^{\neg}$], respectively in both native words as well as loanwords, as shown the following examples.

(40)	/atap/	[atap$^{\neg}$]	'roof'
	/sakit/	[sakɪt$^{\neg}$]	'sick'
	/ojek/	[ojek$^{\neg}$]	'motor taxi'
	/musik/	[musɪk$^{\neg}$]	'music'
	/positip/	[positɪp$^{\neg}$]	'positive'

3.1.2.2.2. Simple Nasals and Their Allophones

Similar to the voiceless stops, each simple nasal in Rural Jambi dialects also exhibits two allophones. The simple nasals [m], [n], and [ŋ] alternate with pre-occluded nasals [^{b}m], [^{d}n], and [^{g}ŋ] phrase-finally, as shown in (41) below.

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[12] Often times the stop precedes the nasal sound when a suffix is present. It is unclear to me why this happens. Durvasula (2009) also points out that the stop precedes the nasal when a suffix attaches to a stop-final root. I shall later show in section 3.4.7 that *–e, -an,* and *–i* are clitics rather than suffixes.

(41)	/malam/	[mãlam]	or	[mãla^{b}m]	‘night’
	/lapan/	[lapan]	or	[lapa^{d}n]	‘eight’
	/batrʊŋ/	[batɾ̣ʊŋ]	or	[batɾ̣ʊ^{g}ŋ]	‘k.o.fish’

This alternation is barred if the nasal follows a nasalized vowel, as shown in (42). In Jambi Malay, vowels are nasalized when they follow a nasal (see section 3.1.3.2.5).

(42)	/minum/	[mĩnũm]	*[mĩnũ^{b}m]	‘drink’
	/taŋan/	[taŋãn]	*[taŋã^{d}n]	‘hand’
	/kuniŋ/	[kunĩŋ]	*[kunĩ^{g}ŋ]	‘yellow’

These allophonic variations, however, are not observed in the City dialect.

In addition, like the prenasalized stops, in reduplicated forms the final nasal of the first element of the reduplicated form does not undergo post-occlusion. Thus, /malam-malam/, for example, is realized as [mãlammãla^{d}m].

3.1.2.2.3. Post-occluded Nasals and Simple Nasals

Post occluded and simple nasals often appear to be in free variation, especially in quick speech, as exemplified in the following examples.

(43)	/m^{b}awaʔ/	[m^{b}awaʔ]	or	[mãwãʔ]		‘ACT-bring’ (= ’to bring’)
	/n^{d}aʔ/	[n^{d}aʔ]	or	[nãʔ]		‘want’
	/ŋ^{g}oreŋ/	[ŋ^{g}oʀe^{g}ŋ]	or	[ŋõʀe^{g}ŋ]	or	
		[ŋ^{g}oʀeŋ]	or	[ŋõʀeŋ]	or	
		[ŋoʀe^{g}ŋ]	or	[ŋoʀeŋ]		‘ACT- try’ (= ‘to fry’)
	/ɲ^{j}oget/	[ɲ^{j}oge^{n}t]	or	[ɲõge^{n}t]	or	
		[ɲ^{j}oget$^{\neg}$]	or	[ɲõget$^{\neg}$]	or	
		[ɲoget^{n}t]	or	[ɲoget^{n}t]		‘ ACT-dance’ (= ’to dance’)

There is no clear explanation why cases like those in (43) emerged. One suggestion is to check if the vowel after the nasal (which is assumed to be the post-occluded nasal) is nasalized. If the vowel is not nasalized, there is at least some

occlusion even if it is not perceptible. [13, 14] However, the data suggest that the vowel is often nasalized.[15]

In addition to the phonetic variation shown in (43), some post-occluded nasals appear to only have simple nasal surface forms, as shown in (44).

(44) a. /m^{b}li/ [məli] 'ACT-buy'(='to buy')
b. /m^{b}lo/ [məlo] 'ACT-breed'(='to raise')
c. /n^{d}ŋar/ [nəŋaʀ] 'ACT-listen' (='to listen')
d. /ŋ^{g}ali/ [ŋãli] 'ACT-dig' (='to dig')

One possible way of explaining the facts in (44)a to (44)c is that on the surface, the speakers do not like the sequence of a post-occluded nasal followed by another consonant, as illustrated below.

(45) a. *[m^{b}C]
b. *[n^{d}C]
c. *[ŋ^{g}C]

Although the constraints in (45) can account for the data in (44)a to (44)c, they fail to account for why the post-occluded nasal in (44)d surfaces as a simple nasal. This occurs because the root to which the nasal prefix attaches is not a cluster of two consonants like the cases in (44)a to (44)c. To account for (44)d, I claim that the root that the nasal prefix attaches to is *kali* 'dig'. The /k/ in *kali* coalesces with the nasal prefix and forms a homorganic nasal (cf. section 3.4.1) and thus surfaces as *ŋali.* In

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[13] Uri Tadmor (p.c).

[14] Durvasula (2009), however, claims that there is no oral release observed in the nasal segments.

[15] I shall not this discuss this issue in this dissertation and shall leave this topic for further study.

contrast, in bare form or in passive form, the root used is *gali* 'dig'. This is an example of suppletion. [16, 17]

3.1.2.2.4. Glottal Fricative Insertion

The glottal fricative /h/ is inserted to avoid vowel hiatus (see section 3.1.3.2.7.1).

3.1.2.2.5. Glottal Stop Insertion

As pointed out in section 3.1.2.1.1.5, phonemically, the glottal stop is mostly found word-finally. In addition, it is also found word-medially and only in loan words. In addition to being a distinctive phoneme, the glottal stop is also epenthesized. The glottal stop is inserted before a vowel-initial word, as exemplified below.

(46)	a.	/aku/	[ʔa.ku]	'1SG'
	b.	/ikan/	[ʔi.ka^{d}n]	'fish'
	c.	/eloʔ/	[ʔe.loʔ]	'good, beautiful'
	d.	/oroŋ/	[ʔo.ʀoŋ]	'k.o.fish'

Note that glottal stop insertion is only required when the vowel-initial word appears at the leftmost edge. Within a phrase, glottal stop insertion is not required, especially in quick speech. The figures in (48) provide the spectrogram readings of the examples in (47). [18]

(47)	a.	/baju ita/	[baju ita]	'Ita's dress'
	b.	/lidi iko/	[lidi:ko]	'this palm leaf rib'

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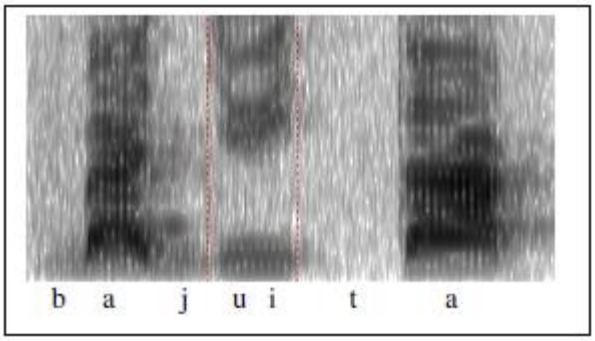
[16] This phenomenon is also observed in Minangkabau (Uri Tadmor, p.c).

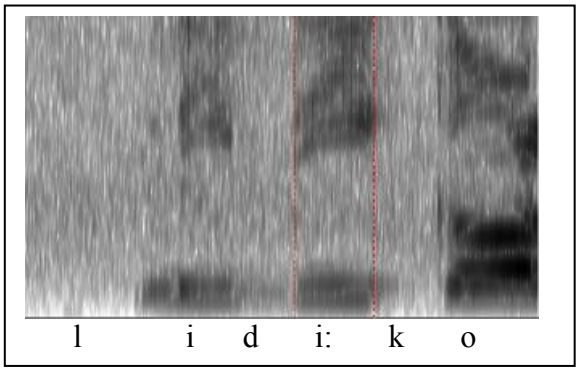
[17] Thanks to Uri Tadmor for suggesting the explanation for the data in (44).

[18] The spectrogram reading is obtained using a linguistic tool called *praat*, which can be downloaded from http://www.fon.hum.uva.nl/praat/.

(48) a. /baju ita/



b. /lidi iko/



As shown in (48), there is no indication that a glottal stop is present between the vowels /u/ and /i/ in (47)a, and in (47)b the first vowel surfaces as a long vowel [i:].

In addition, a glottal stop is also inserted before a syllabic consonant, as exemplified below. See section 3.1.2.2.9 for the discussion on syllabic consonants.

(49) /mpat/	[ʔm̩.pa^{n}t]	‘four’
/mpaŋ/	[ʔm̩.pa^{g}ŋ]	‘fish pond’
/nta/	[ʔn̩.ta]	‘don’t know’
/ŋkaʔ/	[ʔŋ̩.kaʔ]	‘k.o.cake’
/ram/	[ʔr̩am]	‘hatch’

Another environment for glottal stop insertion is between stop final words and vowel initial suffixes, as exemplified below.

(50) /siap + -i/	[siya^{m}pʔĩ]	'ready + APPL (= 'prepare')
/jawap + -e/	[jawa^{m}pʔẽ]	'answer + 3 (= 'his answer')
/sŋat + -e/	[səŋa^{n}tʔẽ]	'sting + 3 (= 'get stuck')
/masʊʔ + -i/	[masʊʔ:i]	'go in + APPL (= 'put [it] into')
/ka- + sum^{b}at + -an/	[kasum^{b}a^{n}tʔãn]	'ADV-clog-CIRC (= 'get stuck')

In (50), the suffix does not undergo resyllabification with the final segment of the root. Instead, a glottal stop is inserted.

To conclude, phonetically glottal stops are inserted before vowel-initial words at the left-most edge, before syllabic consonants, and between stop-final roots and vowel-initial suffixes.

3.1.2.2.6. Glide Insertion

Glides are inserted to avoid vowel hiatus. See section 3.1.3.2.7.2

3.1.2.2.7. Adaptation of Loan Consonants

Many forms from Arabic have been borrowed into the language, in particular religious terms. When forms containing /z/ are adopted from Arabic into the language, the sound alternates on the surface with voiced palatal /j/ in word-initial and word-medial position, as shown in (51).

(51) /zaman/	→[**z**aman]	or	[jaman]	'era'
/zikɪr/	→[zɪkɪʀ]	or	[jɪkɪʀ]	'chant'
/ramzi/	→[ʀamzi]	or	[ʀamji]	'Ramzi; personal name'
/zakat/	→[zakat$^{\neg}$]	or	[jakat$^{\neg}$]	'tithe'

In word-final position, /z/ from loanwords turns into /s/ because JM does not allow voiced obstruents word-finally, as shown in (52) below.

(52) /aziz/	→[azɪs]	or	[ajɪs]	'Aziz; personal name'

Some factors may influence the choice between allophones. One important factor is Islamic education. If the speaker is exposed to Islamic education, they tend to use [z] instead of [j] or [s]. Most speakers accept the other forms.

Not all /z/s, however, can alternate between [z] and [j]. In some words /z/ cannot surface as /j/, as indicated below.

(53) /azan/ → [azan] *[ajan] 'prayer call'
/azap/ → [azapˀ] *[ajapˀ] 'miserable'

The reason for this is probably that for Muslim religious terms they prefer to maintain the original words, although for some, the alternation between [z] and [j] has already become internalized. Others possible reasons are that these forms came into the language later and that a speaker's level of education influences their choice.

/z/ in loan words from Dutch is realized as /s/ in Jambi Malay, as shown in below.

(54) /muziek/ → [musikˀ]/[musiᵑk] 'music'

In addition to /z/, some borrowed words from Arabic, Dutch, English or other Malay varieties, such as Jakarta Indonesian or Standard Indonesian, contain either the voiceless labiodental fricative /f/ or the voiced labiodental fricative /v/. When such words are borrowed into the language, /f/ or /v/ becomes /p/ because Jambi Malay does not exhibit /f/ as a phoneme. Examples follow.

(55)

Borrowed Words	**Jambi Malay**	**Meaning**
/faham/	/paham/	'understand'
/hafal/	/hapal/	'memorize'
/maʔaf/	/maʔap/	'apology'
/nafas/	/napas/	'breath'
/frij/	/pre/	'holiday'
/survei/	/surpe/	'survey'
/tivi/	/tipi/	'television'

3.1.2.2.8. Glides

Glides are generally analyzed as phonemes in other Malay varieties, such as in Standard Indonesian (Macdonald, 1976:13), Kedah, Serawak, Kelantan and some other Malay varieties spoken in Malaysia (Omar, 1977/1991), and Jakarta Indonesian (Grijns, 1991:16). In contrast, Teoh (1994) argues that glides are underlyingly high vowels and that their occurrence is predictable. Likewise, Al-Attas et al. (2006) present the same claim for glides in Kuala Lumpur Malay.

In section 3.1.2.1.5, I stated that glides are phonemes in Jambi Malay. In this section, I discuss the issue of glides in Jambi Malay in more details. In (56) and (57) below, I repeat the data presented in section 3.1.2.1.5.

Labial: /w/

(56) /waja/ ‘face’
/waʔ/ ‘uncle’
/lawaŋ/ ‘door’
/bawaŋ/ ‘onion’

Palatal: /y/

(57) /yʊʔ/ ‘come on’
/yakɪn/ ‘believe’
/ayam/ ‘chicken’
/layaŋ/ ‘cross’
/sayʊr/ ‘vegetables’

Given the data in (56) and (57), one can simply propose that glides are underlyingly present in the phoneme inventory of Jambi Malay, as /y/ and /w/ can be contrasted using the following minimal pairs.

(58) /layaŋ/ ‘cross’ vs. /lawaŋ/ ‘door’
/bayaŋ/ ‘imagine’ vs. /bawaŋ/ ‘onion’

In addition, if the vocative form has a glide, the glide would seem to be underlyingly present.[19]

(59) /iwan/		'Iwan; personal name'
/uwaʔ/		'uncle'
/yoyoʔ/		'Yoyo; personal name'

The vocative forms for the words in (59) indeed contain the glide, as shown below.

(60) /iwan/	→	[wan]	'Iwan; personal name'
/uwaʔ/	→	[waʔ]	'uncle'
/yoyoʔ/	→	[yoʔ]	'Yoyok; personal name'

The crucial point, however, is whether or not there are minimal pairs between glides and high vowels. No minimal pairs are observed to distinguish /i/ from /y/ or /u/ from /w/. Thus, an alternative hypothesis can be proposed, claiming that the glides /y/ and /w/ are derived from the corresponding high vowels /i/ and /u/. These vowels turn into glides when an onset is needed. Likewise, in the forms in (60), the glides are derived from a high vowel because an onset is needed.

This hypothesis is also proposed by Teoh (1994) for the glides in Standard Malaysian Malay. The core argument is that a high vowel is realized as its corresponding glide when the vowel appears before another vowel and no consonant is present to fill the onset position. Similar to Teoh, Al-attas et al. (2006) posit the same account for Kuala Lumpur Malay. This hypothesis appears plausible and is able to account for most data, as the following examples show.[20]

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[19] Thanks to Uri Tadmor (p.c) for suggesting this.

[20] Tadmor (2006) makes similar claim for early Malay.

(61)	/io/	[yo]			‘yes’
	/aiam/	[a.yam]	or	[a.ya^{d}m]	‘chicken’
	/saiʊr/	[sa.yʊʀ]			‘vegetable’
	/bauang/	[ba.waŋ]	or	[ba.wa^{g}ŋ]	‘onion’
	/lauaŋ/	[la.waŋ]	or	[la.wa^{g}ŋ]	‘door’
	/uaia/	[wa.ya]			‘time’

As shown in (61), all /i/s turn into [y]s and all /u/s turn into [w]s when an onset is needed for a syllable.

In some personal names, however, /i/ and /u/ do not turn into glides, even though the environment supports the process.

(62)	/iis/	[ʔiʔis]	‘Iis; personal name’
	/uut/	[ʔuʔu^{n}t]	‘Uut; personal name’

The fact that the vowels in (62) do not surface as glides is possibly due to the fact that the two vowels are identical. In addition, -yi- and –wu- are not possible in Malay.[21] Another possible reason is that the names in (62) are borrowed forms.

To conclude, although glides in Jambi Malay can simply be considered phonemes, it is simpler and more plausible to propose that glides are derived from high vowels. Proposing glides as underlyingly vowels would eliminate glides from the phonemic inventory. Although this hypothesis is plausible, I still assume glides to be present in the consonant inventory of Jambi Malay in this dissertation.

One final issue for glides is that they can be epenthesized to resolve vowel hiatus. This is discussed in section 3.1.3.2.7.2.

[21] Thanks to Uri Tadmor for pointing this out.

3.1.2.2.9. Syllabic Consonants

Sonorants become syllabic if they appear word-initially in mono-syllabic words, as demonstrated in (63) below.

(63)	/mpat/	[ʔm̩pa^{n}t]	‘four’
	/nta/	[ʔn̩ta]	‘not know’
	/nam/	[ʔn̩na^{b}m]	‘six’
	/n^{d}aʔ/	[ʔn̩^{d}aʔ]	‘want’
	/laŋ/	[ʔl̩a^{g}ŋ]	‘eagle’
	/ram/	[ʔr̩am]	‘hatch’

3.1.2.2.10. Consonant Gemination

Consonant gemination is a phonetic process in which a consonant is pronounced with greater duration than normal. Consonants become geminated before a long vowel, as the rule below shows. As discussed in section 3.5.1, vowels get lengthened when stressed. . Examples follow.

(64) C → [geminate] V[+long]

(65)	a.	/makan/	[mãkka:n]	‘eat’
	b.	/sapu/	[sappu:]	‘broom’
	c.	/assoy/	[asso:y]	‘k.o.plastic bag’
	d.	/namo-e/	[nãmmõ:ẽ]	‘name-3’ (= ’his name’)

In (65)a to (65)c, the last vowel gets lengthened, triggering the gemination of the onset of that syllable. Similarly, in (65)d, the penultimate vowel is lengthened. As a result, the onset of that syllable is geminated.

3.1.2.3. Summary for Consonants

This section first presented a consonant inventory of Jambi Malay. The consonant inventory of the Rural Jambi dialects is somewhat different from that of the City dialect. The Rural Jambi dialects include both simple nasals and post-occluded

nasals, whereas the City dialect only has simple nasals. In addition, I have discussed that /r/ in the Rural dialects is velar fricative /ɣ/, while in the City dialect it is alveolar /r/.[22] Finally, a subtle phonetic difference is found between the two Rural dialects. The /r/ in Tanjung Raden is realized as a trill sound [ʀ], whereas in Mudung Darat as non-trill [ʁ].

The following tables summarize the consonant inventory of Jambi Malay. Segments in parentheses are loan segments.[23]

[22] I employ /r/ for both the Rural dialects and the City dialect.

[23] I list glides as underlyingly present in the phonemic inventory of Jambi Malay. In section 3.1.2.2.8, I showed that there is another possible analysis, i.e. glides are derived from high vowels.

Table 3.1 Consonant Inventory of the Rural Jambi Malay Dialects

	Labial	Dental-Alveolar	Palatal	Velar	Glottal
Stops	p, b	t, d	c, j	k, g	ʔ
Fricatives		s (z)			h
Simple Nasals	m	n	ɲ	ŋ	
Post-occluded Nasals	m^b	n^d	$ɲ^j$	$ŋ^g$	
Liquids		l		r	
Glides	w		y		

Table 3.2 Consonant Inventory of the City Dialect of Jambi Malay

	Labial	Dental-Alveolar	Palatal	Velar	Glottal
Stops	p, b	t, d	c, j	k, g	ʔ
Fricatives		s (z)			h
Simple Nasals	m	n	ɲ	ŋ	
Liquids		l, r			
Glides	w		y		

In section 3.1.2.2, I presented allophonic variations of consonants in Jambi Malay and other phonological processes related to them. Voiceless stops and simple nasals are realized differently in different dialects. In the City dialect, voiceless stops surface as unreleased stops word-finally, whereas in the Rural dialects, unreleased voiceless stops and prenasalized stops are in free variation word-finally. Simple nasals in the Rural dialects alternate with pre-occluded nasals word-finally, whereas in the City dialect this altenation is not observed. Furthermore, I have shown that glides in Jambi Malay can be analyzed as being derived from high vowels. Other phonological

processes that are observed are glottal stop insertion, glottal fricative insertion, glide insertion, adaptation of loan consonants and consonant gemination.

3.1.3. Vowels

Synchronically, the Rural dialects of Jambi Malay exhibit seven distinctive vowels (see also Tadmor and Yanti, 2005), whereas the City dialect contains six vowels.

3.1.3.1. List of Vowels

3.1.3.1.1. Front Vowels

Tanjung Raden and Mudung Darat exhibit three front vowels: the high vowel /i/, the mid-high vowel /ɪ/, and the mid vowel /e/. The City dialect only distinguishes two front vowels: the high vowel /i/ and the mid vowel /e/.[24] Minimal pairs in (66) support the claim that /i/ and /ɪ/ are two different segments in the Rural Jambi dialects.

(66)	/sapi/	'cow'	/sapɪ/	'wean'
	/bi/	'TRU-aunt'	/bɪ/	'the letter B'

Examples of the occurrence of each front vowel are provided in (67) below.

(67) a. High Vowel /i/

City dialect	**TR/MD**	**Meaning**
/ikan/	/ikan/	'fish'
/miŋaʔ/	/miŋaʔ/	'oil'
/mati/	/mati/	'dead'

[24] The mid-high vowel [ɪ] is an allophone of /i/ in the City dialect (see section 3.1.3.2.1).

b. Mid-high Vowel /ɪ/

/pilɪ/	‘choose’
/bagɪ/	‘divide, give’

c. Mid Vowel /e/

City dialect	TR/MD	Meaning
/gawe/	/gawe/	‘work’
/karet/	/karet/	‘rubber’
/ember/	/em^{b}er/	‘pail’
/meja/	/meja/	‘table’

3.1.3.1.2. Back Vowels

Like front vowels, there are three distinctive back vowels in the Rural Jambi Malay dialects: the high vowel /u/, the mid-high vowel /ʊ/ (shown in (68)) and mid vowel /o/ (shown in (69)).

(68)

/bulu/	‘body hair’	/bulʊ/	‘bamboo’
/labu/	‘pumpkin’	/labʊ/	‘dock’
/tuju/	‘place’	/tujʊ/	‘seven’

(69)

/oraŋ/	‘person’
/sore/	‘afternoon’
/crito/	‘story’

The City dialect has two back vowels: /u/ and /o/.[25] Examples follow.

(70) a. High Back Vowel /u/

/kuku/	‘nail’
/ular/	‘snake’

[25] In the City dialect, the mid-high back vowel /ʊ/ is an allophone of the high back vowel /u/. The discussion is provided in section 3.1.3.2.1.

b. Mid Back Vowel /o/

/oraŋ/	‘person’
/botak/	‘bald’
/jalo/	‘net’

3.1.3.1.3. Central Vowels

Phonemically, the central-low vowel /a/ is observed in all three dialects, as exemplified in (71) below.

(71)

/araŋ/	‘charcoal’
/am^{b}ʊŋ/	‘k.o.basket’
/tapa/	‘k.o.fish’

Note that although I claim that /a/ is a central vowel, phonetically it is closer to a back vowel.

Another possible central vowel is schwa; however, schwa is not phonemic in the Rural Jambi dialects and only possibly phonemic in Jambi Malay. The discussion of schwa is provided in section 3.1.3.2.4.

3.1.3.2. Allophonic Variations, Phonetic Realizations, and Other Phenomena

3.1.3.2.1. Vowel Lowering

Vowel lowering is a synchronic process in the City dialect. However, in the Rural dialects vowel lowering appears to be a diachronic process.

In the City dialect, the mid-high front vowel [ɪ] and the mid-high back vowel [ʊ] alternate with the high front vowel [i] and the high back vowel [u], respectively. Let us examine the data from the City dialect in (72) and (73) below.

(72) High Front Vowel [i] vs. Mid-high Front Vowel [ɪ]

a. High Front Vowel [i]

/gigi/	[gigi]	‘tooth’
/mati/	[mãti]	‘dead’
/ilaŋ/	[ilaŋ]	‘disappear’

b. Mid-high Front Vowel [ɪ]

/cantiʔ/	[cantɪʔ]	‘pretty’
/abis/	[abɪs]	‘finish’

(73) High Back Vowel [u] vs. Mid-high Back Vowel [ʊ]

a. High Back Vowel [u]

/bulu/	[bulu]	‘body hair’
/ubi kayu/	[ubi kayu]	‘cassava’
/malu/	[mãlu]	‘shy’

b. Mid-high Back Vowel [ʊ]

/kurus/	[kurʊs]	‘thin’
/lutut/	[lutʊt˺]	‘knee’
/ampun/	[ampʊn]	‘mercy’

In (72)a and (73)a, the high vowel /i/ and the high back vowel /u/ appear in open syllables and are phonetically realized as [i] and [u], respectively. In (72)b and (73)b, /i/ and /u/ appear in closed syllables and are realized as [ɪ] and [ʊ], respectively.

Based on the data in (72)b and (73)b, a vowel lowering rule can be formulated as in (74).

(74) $V[+\text{high}] \rightarrow [\text{mid-high}] \quad / __C]_{\sigma}$

In the rule in (74), a high vowel is lowered when it occurs in a closed syllable.

The rule in (74), however, does not apply to vowels that appear in closed penultimate syllables, as shown in (75).[26]

[26] Uri Tadmor points out that this fact may suggest that the syllabification is [pi.njam], [ti.ŋkat], etc. I return to this issue in section 3.2.1.3.

(75)	a.	/pinjam/	[pinjam]	*[pɪnjam]	‘borrow’
		/tiŋkat/	[tiŋkat˥]	*[tɪŋkat˥]	‘level’
	b.	/punda?/	[punda?]	*[pʊnda?]	‘shoulder’
		/tuŋkal/	[tuŋkal]	*[tʊŋkal]	‘Tungkal; an area name’

Thus, the rule in (74) must be rewritten as follows.

(76) V[+high] → [mid-high] / __C#[27]

The rule in (76) states that a high vowel turns into a mid-high vowel when it occurs in word-final position.

It is important to note that nasalized vowels are not lowered, as exemplified below.

(77)	/minum/	[mĩnũm]	*[mĩnʊ̃m]	‘drink’
	/manis/	[mãnĩs]	*[mãnĩs]	‘sweet’
	/aŋus/	[aŋũs]	*[aŋʊ̃s]	‘burnt’

In the Rural dialects, vowel lowering is a diachronic process rather than a synchronic process. If the last vowel of a historically /h/-final word is a high vowel, the vowel appears to be a mid-high vowel synchronically, as shown in the following examples.

(78)	Historically /h/-final Words	TR/MD	Gloss
a.	/pilih/	/pilɪ/	‘choose’
b.	/buluh/	/bulʊ/	‘bamboo’
c.	/musuh/	/musʊ/	‘enemy’
d.	/tujuh/	/tujʊ/	‘seven’
e.	/pulih/	/pulɪ/	‘healthy’

[27] One might question what happens when a high vowel appears in a consonant final suffix. This question is irrelevant as Jambi Malay does not exhibit any suffixes that have (C) V[+high] C structure.

As shown in (78), words which are historically /h/-final appear without the final /h/ synchronically in TR/MD. If vowel lowering in Tanjung Raden and Mudung Darat were analyzed as a synchronic phonological rule, it would be unclear why the last vowel in the words in (78) surfaces as a mid-high vowel as there is no final consonant present to trigger the lowering.

Final /h/ can alternatively be claimed to be present synchronically and to get deleted word-finally after the lowering process, as exemplified in the following examples.

(79)	UR	Lowering Rule	/h/ Deletion Rule	SR	
a.	/mudah/	-	muda	[muda]	'easy'
b.	/brsih/	bərsɪh	bərsɪ	[bərsɪ]	'clean'
c.	/musuh/	mʊsʊh	mʊsʊ	[mʊsʊ]	'enemy'

One piece of evidence to support the claim that TR/MD contain a synchronic final /h/ is that when an affix is present, /h/ shows up on the surface, as shown below.

(80)				
a.	/mudah-mudah + -an/	[mudamudahan]	'RED-easy-NMLZ'(='hopefully')
b.	/brsih + -i/	[bərsɪhi]	'clean-APPL'(='clean it')
c.	/bawah + -an/	[bawahan]	'under-NMLZ' (='subordinate')

In (80), the suffixation appears to block the deletion and thus /h/ is not deleted.

This additional hypothesis, however, is unnecessary because the presence of [h] on the surface in (80) is already accounted for by [h] insertion, as discussed in section 3.1.3.2.7.1. In addition, the glottal fricative /h/ is not always present between a historically /h/-final word and a vowel-initial suffix, as shown below.

(81)			
	/basuh + -i/	[basʊi]	'wash-APPL'(='clean it')
	/musuh + -an/	[mʊsʊwan]	'enemy-NMLZ' (='be an enemy of')

Another piece of evidence supporting the claim that vowel lowering is phonemic comes from the fact that some high vowels in final closed syllables have not undergone vowel lowering in word-final position, as indicated below.

(82) /dikit/ ‘a little’
/kciʔ/ ‘small’
/kagiʔ/ ‘later’
/sjuʔ/ ‘cool’
/jijiʔ/ ‘disgusting’

If mid-high vowels were not phonemic, the last vowel in the words in (82) would be expected to undergo vowel lowering, as shown in (83); however, the fact suggests otherwise.

(83) /sakɪt/ ‘sick’
/pucʊʔ/ ‘tip’

Finally, native speakers of these dialects, unlike speakers of the City dialect, are very aware of the difference between these vowels and consider them to be two different sounds. This supports the claim that /ɪ/ and /ʊ/ are phonemic synchronically.

Although I have claimed that /ɪ/ and /ʊ/ are phonemic synchronically, it is crucial to point out that these vowels are diachronically from either their corresponding high vowels followed by /h/ in word-final position or words which end with /e/ or /o/, as exemplified below.

(84) Historical *V[+high]h#	Synchronic Form	Meaning
/puluh/	/pulʊ/	‘ten’
/basuh/	/basʊ/	‘wash’
/pilih/	/pilɪ/	‘choose’
/putih/	/putɪ/	‘white’
/masih/	/masɪ/	‘still’

(85) Historical e#	Synchronic Form	Meaning
/lele/	/lilɪ/	‘catfish’
/kue/	/kuɪ/	‘cake’

(86) Historical o#	Synchronic Form	Meaning
/kilo/	/kilʊ/	‘kilogram’
/ayo/	/ayʊ/	‘let’s’

It is also important to point out that the diachronic lowering process in the Rural dialects is blocked if the segment preceding the vowel is a nasal, as shown below in (87). This is the same phenomenon that was found in the synchronic lowering process of the City dialect, exemplified above in (77).

(87) /kumis/	/kumis/	*/kumɪs/	‘mustache’
/minum/	/minum/	*/minʊm/	‘drink’
/manis/	/manis/	*/manɪs/	‘sweet’
/aɲut/	/aɲut/	*/aɲʊt/	‘washed away’
/aŋin/	/aŋin/	*/aŋɪn/	‘wind’
/aŋus/	/aŋus/	*/aŋʊs/	‘burnt’
/taŋis/	/taŋis/	*/taŋɪs/	‘cry’

3.1.3.2.2. Vowel Harmony

Vowel harmony is synchronic phonological phenomenon found in the Rural Jambi Malay dialects.[28] Interestingly, variations are found among dialects discussed in this dissertation and some other surrounding dialects that I happened to encounter. In Mudung Darat, most areas in Tanjung Raden (in four of the six neighborhoods within the village), and Tanjung Pasir, vowel harmony applies;

[28] The transcription of the data from the Rural dialects presented in this dissertation, except for in this chapter, indicates that the vowel harmony is present in phonemic representation. This is done for ease of exposition only.

however, in a few areas in Tanjung Raden (in two of the six neighborhoods), Ulu Gedong, Kampoeng Tengah, and the City dialect, vowel harmony is not observed.[29]

Vowel harmony applies to the two pairs of high vowels: the high front vowel /i/ and mid-high front vowel /ɪ/, and the high back vowel /u/ and mid-high back vowel /ʊ/. Vowel harmony is triggered by the rightmost vowel, and thus is called back mutation.[30]

The vowel harmony rule is shown in (88). Examples are presented in (89).

(88) V[+high] → [mid-high] / C_o__ CV[mid-high] C_0

(89)	/tukʊl/	[tʊkʊl]	'hit'
	/pilɪ/	[pɪlɪ]	'choose'
	/isʊʔ/	[ɪsʊʔ]	'tomorrow'
	/bibɪt/	[bɪbɪⁿt]	'seedling'
	/tujʊ/	[tʊjʊ]	'seven'
	/gigɪt/	[gɪgɪⁿt]	'bite'

All the lexical items in (89) have two syllables. The vowel of the first syllable is underlyingly high, and it harmonizes with the vowel of the last syllable by becoming a mid-high vowel.

In addition, as shown in (90) below, when the vowel of the second syllable is a high vowel, the vowel of the first syllable is also a high vowel.

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[29] Ulu Gedong and Kampoeng Tengah are two of Tanjung Raden neighboring villages.

[30] The existence of vowel harmony is supported by an informal experiment conducted when working with native speakers. The native speakers were asked to pronounce /gulu/, a nonsense word. They were asked to pronounce the first vowel as [ʊ] in /mʊsʊ/ 'enemy' and the second vowel as [u] in /baru/ 'new', and vice versa, with the first vowel as [u] and the second vowel as [ʊ]. They were not able to do so. They could only say either [gulu] or [gʊlʊ], but not [gʊlu] or [gulʊ].

(90)	/bucu/	[bucu]	‘corner’
	/bulu/	[bulu]	‘body hair’
	/niku/	[niku]	‘this; honorific’
	/gigi/	[gigi]	‘tooth’
	/bibi/	[bibi]	‘aunt’
	/suji/	[suji]	‘k.o. leaf’

Vowel harmony only applies morpheme internally; it does not apply across morphemes, as shown in (91).

(91)	/di- + pilɪ/	[dipɪlɪ]	*[dɪpɪlɪ]	‘be chosen’
	/di- + pikɪr/	[dipɪkɪʀ]	*[dɪpɪkɪʀ]	‘be thought’
	/di- + tumᵇʊʔ/	[ditʊmᵇʊʔ]	*[dɪtʊmᵇʊʔ]	‘be pounded’

In (91) the vowel of the *di-* prefix does not harmonize with the vowel of the root it attaches to. Thus, the rule in (88) should be revised as follows.

(92) $V[+\text{high}] \rightarrow [\text{mid-high}] \quad / \ ]_{\#} [C_o _ C_0V[\text{mid-high}] \ C_0]_{\#}$

An interesting issue with respect to harmony which involves glides is observed. Consider the following data in (93) and (94).

(93)	/buyʊt/	[bʊ.yʊⁿt]	‘great grandparent’
	/puyʊ/	[pʊ.yʊ]	‘quail’
(94)	/siʊl/	[si.yʊl]	‘whistle’
	/ciʊm/	[ci.yʊᵇm]	‘kiss’
	/pariʊʔ/	[pa.ri.yʊʔ]	‘pot’
	/duɪt/	[du.wɪⁿt]	‘money’
	/kuɪ/	[ku.wɪ]	‘cake’

We observe that in (93), vowel harmony applies underlying glides, whereas in (94), the vowel harmony rule does not apply when the glide is inserted. At this point, I do not have a good explanation for the issue.

3.1.3.2.3. Vowel Reduction

The vowel reduction rule turns /a/ into a schwa when it appears in the first syllable of a three or more syllable word. This process happens especially in quick speech. Furthermore, the schwa often further gets deleted. The rule and examples of the application of the rule are presented in (95) and (96), respectively.

(95) [a] → [ə] / [C_(C)]$_{\sigma}$ σ σ (σ) (σ)

(96)	/sapatu/	→	[səpatu]	or	[spatu]	'shoe'
	/kareta/	→	[kəʀeta]	or	[kʀeta]	'bicycle'
	/garobak/	→	[gəʀobaᵑk]	or	[gʀobaᵑk]	'cart'
	/jaramᵇa/	→	[jəʀamᵇa]	or	[jʀamᵇa]	'bridge'

3.1.3.2.4. Schwa

It is difficult to decide whether or not the schwa is phonemic in Jambi Malay. Husin et al. (1985) seem to claim that the schwa is a phoneme in Jambi Malay. Although Husin et al. do not provide clear evidence to indicate why the schwa should be considered distinctive in Jambi Malay, they list the schwa in the vowel inventory chart as a central mid vowel. In addition, Anderbeck (2003:49) claims that the schwa is phonemic. He provides the only minimal pair that distinguishes /a/ and /ə/ below.[31]

(97) /gəlaʔ/ 'laugh' vs. /galaʔ/ 'often'

Gani et al. (2000), on the other hand, do not consider schwa as a distinctive phoneme as they do not list schwa as one of the phonemic vowels. In fact, according to Gani et al. (2000:17), schwa is an allophone of /e/ which only appears word-medially.

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[31] None of my informants agreed that /gəlaʔ/ exists in their language. This form is probably from other dialects or Indonesian. I shall later show in this section that even if this form is assumed to be present in the language, this minimal pair does not provide any evidence to support that schwa is present in the language.

The fact that previous researchers have not reached an agreement in deciding the status of the schwa in Jambi Malay indicates that the status of the schwa is indeed difficult to determine.

In the Rural Jambi dialects (Tanjung Raden and Mudung Darat), I claim that the schwa is not a distinctive phoneme; rather, it is derived from two phonological processes: vowel reduction, as discussed in section 3.1.3.2.3, and insertion (discussed later in this subsection).

In what follows, I shall provide evidence to support the claim that the schwa is not phonemic in the Rural Jambi dialects.

First, the minimal pair in (97) is not clear evidence that the schwa is phonemic in the language. The schwa in *gəla?* could be present via epenthesis. I will return to this point later. The crucial point is that no minimal pair is found to distinguish a schwa and a zero phoneme.

Second, the occurrence of a schwa can be predicted. Two conditions trigger a schwa to surface. In the first condition, the schwa is a reduced form of /a/ as a result of a vowel reduction rule, as discussed in section 3.1.3.2.3. In the second condition, a schwa is inserted for one of two reasons.[32] First, a schwa is inserted in order to fulfill the disyllabic requirement for words. Examples follow.[33]

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[32] This is not a surprising argument as the same argument is also made by Durvasula et al. (2006) for Kuching Malay, and Edie et al. (2008) for Kelantanese Malay.

[33] Instead of inserting the schwa, the second initial consonant can simply become syllabic. See section 3.1.2.2.9.

(98) a. /bli/ [bə.li] ‘buy’
/bras/ [bə.ʀas] ‘uncooked rice’
/plaŋ/ [pə.la^{g}ŋ] ‘clinch’
/pras/ [pə.ʀas] ‘squeeze’
/slop/ [sə.lo^{m}p] ‘sandal’
/sra/ [sə.ʀa] ‘surrender’
/dras/ [də.ʀas] ‘quick’
/glaʔ/ [gə.laʔ] ‘laugh’
/klam/ [kə.la^{d}m] ‘dark’

In addition to fulfilling the disyllabic requirement, a schwa is also epenthesized in order to break up illicit consonant clusters, as shown in the following examples.

(99) /gbʊk/ [gəbʊ^{ŋ}k] ‘to hit’
/gdaŋ/ [gəda^{g}ŋ] ‘big’
/bdaʔ/ [bəbaʔ] ‘powder’
/bbal/ [bəbal] ‘stupid’
/dgɪl/ [dəgɪl] ‘naughty’
/tbaŋ/ [təba^{g}ŋ] ‘cut (for trees)’
/tgaʔ/ [təgaʔ] ‘to stand’

To conclude, the schwa appears to be non-distinctive in the Rural Jambi Malay dialects.

As for the City dialect, the situation is more complicated. The vowel reduction rule does not apply in the City dialect. Speakers of the City dialect do not accept the C[a] syllable in the first syllable of tri-syllablic words, as shown below.

(100) *[sapatu] [səpatu] ‘shoes’
*[garobaʔ] [gəробaʔ] ‘cart’
*[bapikɪr] [bəpikɪr] ‘to think’
*[bajalan] [bəjalan] ‘to walk’

The fact that the schwa in (100) never appears as /a/, even in slow speech, suggests that the vowel reduction rule is not available in the City dialect of Jambi Malay. One possible hypothesis is to propose that the schwa is underlyingly present in the language. The City dialect has been influenced by other Malay dialects, especially Standard Indonesian, and due to this influece, the schwa has become phonemic.

A problem for this hypothesis is that, as in Tanjung Raden and Mudung Darat, no minimal pairs were found to distinguish between the schwa and a zero phoneme in the City dialect. In this dissertation, I nonetheless treat the schwa as a phoneme in the City dialect. The reason for this claim is that the presence of a phonemic simplifies the phonological account of the dialect. First, this claim can account for why all /a/s in the first syllable of three-syllable words in the Rural dialects never appear as /a/s in the City dialect. In three-syllable words, the /a/ in the first syllable of the Rural dialects appears as /ə/ in the City dialect. A second argument is represented by the judgments provided by native speakers with respect to the number of syllables which lexical items that contain schwa have, as exemplified below.

(101)	/pəgi/	[pə.gi]	‘go’	:	two syllables
	/təlan/	[tə.lan]	‘swallow’	:	two syllables
	/bəli/	[bə.li]	‘buy’	:	two syllables
	/bəlanjo/	[bə.lan.jo]	‘shop’	:	three syllables
	/bəjalan/	[bə.ja.lan]	‘walk’	:	three syllables
	/bəlimo/	[bə.li.mõ]	‘a group of five’	:	three syllables

The first three lexical items in (101) are considered to have only one syllable, and the last three items are considered to have two syllables by speakers of the Rural dialects. In contrast, speakers of the City dialect claim that the first three

items have two syllables and the last three items have three syllables. Because of these facts, I claim that the schwa is a phoneme in the City dialect.

To conclude, the status of the schwa in Jambi Malay is complicated. In the Rural dialects, it is clear that the schwa is not phonemic; rather, it results from two phonological processes: a vowel reduction rule and a vowel insertion rule. Thus, the schwa in the Rural Jambi dialects is not phonemic. In the City dialect, it is more difficult to decide whether or not the schwa is phonemic. In this dissertation, I treat the schwa is a phoneme in the City dialect.

3.1.3.2.5. Vowel Nasalization and Nasal Spreading

Like in many other Malay varieties (among others: Indonesian, Dardjowidjojo, 1967; Ulu Muar Malay, Hendon, 1966), vowels get nasalized when preceded by a nasal, as shown in (102) below.

(102)	/namo/	[nãmõ]	‘name’
	/lamo/	[lamõ]	‘long time’
	/taŋan/	[taŋãn]	‘hand’
	/teŋoʔ/	[teŋõʔ]	‘look’

Nasal spreading is blocked by consonants, as shown in (103). The consonants /h/, /ʔ/, and glides, however, do not block nasalization, as exemplified (104).

(103)	/masʊʔ/	[mãsʊʔ]	*[mãsʊ̃ʔ]	‘go.in’
	/napas/	[nãpas]	*[nãpãs]	‘breath’
	/mato/	[mãto]	*[mãtõ]	‘eye’
	/ŋiro/	[ŋĩʀo]	*[ŋĩʀõ]	‘ACT-think’(=’to think’)
	/nila/	[nĩla]	*[nĩlã]	‘k.o.fish’

(104)	/mahal/	[mãhãl]	*[mãhal]	‘expensive’
	/mayat/	[mãyãⁿt]	*[mãyaⁿt]	‘corpse’[34]
	/mawar/	[mãwãʀ]	*[mãwaʀ]	‘rose’
	/ɲawo/	[ɲãwõ]	*[ɲãwo]	‘soul’
	/maʔap/	[mãʔãᵐp]	*[maʔaᵐp]	‘apology’

3.1.3.2.6. Nasalized Vowels and the Glottal Stop

An interesting fact to document with respect to vowel nasalization is that a vowel following an underlying oral stop gets nasalized, despite the fact that there is no nasal phoneme in the word. This happens when a stop-final root is followed by a vowel-initial suffix, as shown in the following examples.

(105)	/siap + -i/	[siyaᵐpʔĩ]	‘ready-APPL’ (= ’prepare something’)
	/dikit-dikit + -an/	[dikitdikiⁿtʔãn]	‘RED-a.little-NMLZ’ (= ’only a little’)
	/jawab + -e/	[jawaᵐpʔẽ]	‘answer-3’(= ’his answer’)

In the examples in (105), none of the vowels in the roots are nasalized; nonetheless, the final stops in the forms in (105) are prenasalized (see section 3.1.2.2.1). In section 3.1.3.2.5, it was shown that a vowel gets nasalized if it follows a nasal phoneme. Interestingly, the vowel of the suffix in (105) is nasalized even though it does not follow a nasal phoneme.

One possible account is that the nasal feature of the vowel comes from the prenasalized stop. Although the final consonant of the root is a stop, it is prenasalized and the nasal feature spreads to the vowel of the vowel-initial suffix since the glottal stop does not block nasalization. The nasal feature cannot be from the vowel before the final stop because that vowel is not nasalized.

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[34] The more traditional form for ‘corpse’ is /maŋit/.

Another possible account is that the vowel gets the nasal feature from the inserted glottal stop. It has been noted that there is a connection between the articulation of glottal stops and nasals, which is known as rhinoglottophilia (Matisoff, 1975). Because of this phenomenon, a glottal stop is perceived to have a nasal feature, and thus this feature spreads to the vowel.

In some other Malay dialects, there is a special kind of glottal stop that nasalizes the following vowel, which occurs in expressive as well as in Arabic loanwords to replace the Arabic 'ayin' (pharyngeal fricative).[35] In Jambi Malay, particularly in the Rural Jambi dialects, the glottal stop in some loan words from Arabic also triggers nasalization of the following vowel, as shown in the following examples.

(106)	/maʔap/	[mãʔãᵐp]	'apology'
	/saʔat/	[saʔãⁿt]	'time'
	/taʔat/	[taʔãⁿt]	'obedient'

However, it should be pointed out that the glottal stop does not always trigger nasalization, as shown in the following examples.

(107)	/cacaʔ + -i/	[cacaʔ:i]	'to stand something'
	/masuʔ + -i/	[masʊʔ:i]	'to put something into'

In (107), the suffix does not get nasalized even though it is followed by a glottal stop.

Because the presence of a glottal stop does not always trigger nasalization, the hypothesis that it is the nasal feature of the prenasalized stop triggering the nasal feature of the suffix is a better account.

[35] Uri Tadmor (p.c.)

3.1.3.2.7. Vowel Hiatus Resolution

The phonology of Jambi Malay appears to avoid vowel hiatus. Vowel hiatus may be resolved using two strategies: glottal fricative insertion and glide insertion.

3.1.3.2.7.1. Glottal Fricative Insertion

The glottal fricative [h] is inserted between two identical vowels. This occurs when a vowel-final root is suffixed by a vowel-initial suffix. The rule is formulated in (108), and some examples are provided in (109).

(108) $\emptyset \rightarrow [+\text{cont}, +\text{glottis}] \quad / \quad V[\alpha \text{ high}, \beta \text{ front}]_{\text{root}} __ V[\alpha \text{ high}, \beta \text{ front}]_{\text{suffix}}$

(109)

/gawe + -e/	[gawehe]	'his work'
/cabe + -e/	[cabehe]	'the chili'
/make + -e/	[mãkehe]	'wear it'
/ mati + -i/	[mãtihi]	'to switch s.t. off'
/man^{d}i + -i/	[mãn^{d}ihi]	'to bathe s.o'
/sakola + -an/	[sakolahan] or [skolahan]	'school building'
/bawa + -an/	[bawahan]	'underling'
/meja-meja + -an/	[mejamejahan]	'toy table'

Note that this rule does not apply between a vowel-final prefix and vowel-initial root, as shown below.

(110)

/ba- + arti/	[baaʀti]	*[bahaʀti]	'INTR-meaning'	(='to mean')
/ta- + aŋkat/	[taaŋka^{n}t]	*[tahaŋka^{n}t]	'PFCT.PASS-lift'	(='be lifted')
/di- + ikat/	[di:ka^{n}t]	*[dihika^{n}t]	'PASS-tie'	(='be tied')

3.1.3.2.7.2. Glide Insertion

Glide insertion is also a strategy for avoiding vowel hiatus. Phonologically, a glide is inserted between two vowels when the first vowel is a high vowel and the second is a non-front vowel. [y] is inserted between the high front vowel /i/ and a non-front vowel, whereas [w] is inserted between the high back vowel

/u/ and a non-front vowel, as exemplified in (111). Sometimes, these inserted glides are difficult to hear because they have a short duration.

(111)	/siap/	[siʸaᵐp]	‘ready’
	/dioʔ/	[diʸoʔ]	‘3rd person pronoun’
	/nian/	[niʸan]	‘very’
	/buat/	[buʷaⁿt]	‘make, by’
	/jual/	[juʷal]	‘sell’
	/tuo/	[tuʷo]	‘old’

The glide insertion rule also applies across morphemes, as the following examples suggest.

(112)	/di- + amᵇɪʔ/	[diʸamᵇɪʔ]	‘be taken’
	/di- + apʊs/	[diʸapʊs]	‘be deleted’
	/di- + ompan/	[diʸompan]	‘be attracted’
	/mati-mati + -an/	[mãtimãtiʸan]	‘very hard’
	/gaji + -an/	[gajiʸan]	‘get salary’

Note that glide insertion does not occur if the hiatus consists of a [-front] vowel following a non-front vowel, as exemplified below.

(113)	/kaɪn/	[kaɪᵈn]	*[kaʸɪᵈn]	‘cloth’
	/daʊn/	[daʊᵈn]	*[daʷʊᵈn]	‘leaf’

3.1.3.2.8. Vowel Lengthening

In Jambi Malay, vowel length is not distinctive. Vowel lengthening is a phonological process in Jambi Malay, especially in Tanjung Raden. The last vowel of a phrase usually gets lengthened. This occurs especially if the speaker emphasizes a word, as exemplified in (114) and (115) below.

(114) suda kito limᵇʊsi, kito amᵇɪʔ pulaʔ sarap-ko
[suda kito lɪmᵇʊssi: kito amᵇɪʔ pulaʔ saʀaᵐp-ko
finish 1 cover-APPL 1 take PART rubbish-DEM.PROX
tadi, limᵇʊs lagi di atas-ɲo
tadi lɪmᵇʊs lagi di ʸatas-ɲõ:]
earlier cover more LOC up-3
'After we cover them, we take the garbage and cover them again.'

(115) sakitar sasto kiro-kiro aeʔ-tu daʔdo
[səkitar səsəto kiʀo-kiʀo aeʔ-tu daʔdo
one-about one-meter RED-about water-DEM.DIST NEG.exist
dalam la bole kito nanᵈʊr
dalla:ᵇm la bole kito nanᵈʊ:ʀ]
inside PFCT may 1 ACT-plant.rice
'When the water is not so deep, about one cubit, we can already plant them in the water.'

3.1.3.2.9. Diphthongs

Husin et al. (1985) note that Jambi Malay contains three diphthongs: /ay/, /aw/, and /oy/. Likewise, Gani et al. (2000) point out that Jambi Malay has five diphthongs: /ay/, /aw/, /oy/, /uo/, and /ie/. Furthermore, Gani et al. show that /ay/ alternates with /e/ and each of them only appears in certain words; /aw/ alternates with /o/ and /u/, and each of them only occurs in certain words.

Very few diphthongs are, in fact, found in native Jambi Malay words. Some examples are given in (116).

(116) /gulay/ 'k.o. curry'
/asoy/ 'k.o. plastic bag'
/amoy/ 'unmarried woman'
/kacaw/ 'to stir, disorganized'
/oy/ 'EXCL'
/way/ 'EXCL'

The lexical items in (116) are special forms. /gulay/ alternates with /gule/, and all speakers consulted during my field work claimed that /gulay/ is the original form the Rural Jambi Malay dialects. In the City dialect, I claim that /gule/ is the native form. /asoy/ is a loan form which is used in the City dialect and is probably from Chinese. Likewise, /amoy/ is a loan from Chinese. /kacaw/ is possibly a loan form from Indonesian. /oy/ and /way/ are expressives.

Because lexical items with diphthongs are very rare, I claim that diphthongs do not exist except in expressives and loan forms. This is supported by the fact described in the following paragraph.

Most words which are historically diphthong-final are vowel-final in Jambi Malay. Words that are /ay/-final in other Malay varieties are /e/-final in Jambi Malay, and words that are /aw/-final are /o/-final in Jambi Malay. This historical process of diphthongs turning into vowels is known as monophthongization. Although previous researchers (Husin et al.,1985, and Gani et al., 2000) claim that diphthongs alternate with simple vowels, I claim that when diphthong-final forms are used by speakers, they are code-switching and using the Indonesian forms instead of the Jambi Malay forms. This claim is supported by judgments from native speakers. The native speakers that I worked with claimed that the forms with final diphthongs are Indonesian, except for the first example in (116), */gulay/* 'k.o. curry'. The examples in (117) and (118) show that /ay/-final words and /aw/-final words in Indonesian are /e/- and /o/-final, respectively, in Jambi Malay.

(117) /ay/ → /e/

Indonesian	Jambi Malay	Gloss
/sampay/	/sampe/	‘arrive’
/pantay/	/pante/	‘beach’
/santay/	/sante/	‘relaxed’
/ramay/	/rame/	‘crowded’
/suŋay/	/suŋe/	‘river’
/tupay/	/tupe/	‘squirrel’
/pətay/	/pte/	‘k.o.odor’

(118) /aw/ → /o/

Indonesian	Jambi Malay	Gloss
/pulaw/	/pulo/	‘island’
/danaw/	/dano/	‘lake’
/guraw/	/guro/	‘joke’
/pisaw/	/piso/	‘knife’
/hijaw/	/ijo/	‘green’
/kərbaw/	/krbo/	‘buffalo’

To conclude, diphthongs do not exist in Jambi Malay, except in loan words and expressives.

3.1.3.2.10. The Myth of Final /o/ in Jambi Malay

It is widely believed by speakers of other Malay dialects and by speakers of other languages in Indonesia that Jambi Malay is like Indonesian. In order to speak Jambi Malay, one simply needs to substitute all final /a/s by /o/s. It is true that Jambi Malay exhibits many /o/-final words, as exemplified in (119) below; however, many /a/-final words are also found in Jambi Malay, as shown in (120) and (121). Crucially, all /a/-final words in Jambi Malay are historically /ah/-final (exemplified in (120)) or are loanwords, as shown in (121).

(119)

Indonesian	Jambi Malay	Gloss
/apa/	/apo/	‘what’
/siapa/	/siapo/	‘who’
/mana/	/mano/	‘which’
/kita/	/kito/	‘I, we’
/saya/	/sayo/	‘I’
/sana/	/sano/	‘there’
/gila/	/gilo/	‘crazy’
/ya/	/yo/	‘yes’
/ada/	/ado/	‘exist’
/tiga/	/tigo/	‘three’
/lima/	/limo/	‘five’

(120)

Word	Gloss
/meja/	‘table’
/bola/	‘ball’
/cuma/	‘only’
/doʔa/	‘prayer’
/malaria/	‘malaria’
/juta/	‘million’
/kota/	‘city’

(121)

Word	Gloss
/tŋa/	‘middle’
/bada/	‘container’
/mera/	‘red’
/sala/	‘wrong’
/bawa/	‘underneath’
/daera/	‘area’
/mara/	‘angry’
/tana/	‘soil’
/ruma/	‘house’
/bada/	‘container’

In short, Jambi Malay is not Indonesian with /o/-final words.

3.1.3.3. Summary for Vowels

This section first presented a phonemic vowel inventory for Jambi vowels. The Rural Jambi Malay dialects distinguish seven vowel phonemes, whereas the City dialect exhibits six distinctive vowel phonemes. The Rural Jambi dialects distinguish high and mid-high vowels for front and back vowels. In contrast, in the City dialect the mid-high vowels are allophonic variations of the corresponding high vowels. In addition, the schwa in the Rural Jambi Malay dialects is not distinctive, but rather it is the result of two phonological processes: vowel reduction and vowel epenthesis. In the City dialect, the schwa seems to be phonemic. A summary of the vowel inventory of Jambi Malay is presented in the following tables.

Table 3.3 Vowel Inventory of the Rural Jambi Malay Dialects

	Front	Central	Back
High	i		u
Mid-high	ɪ		ʊ
Mid	e		o
Low		a	

Table. 3.4 Vowel Inventory of the City Dialect of Jambi Malay

	Front	Central	Back
High	i		u
Mid	e	ə	o
Low		a	

In section 3.1.3.2, I presented phonological processes and issues related to vowels in Jambi Malay. I have presented allophonic variations and other phenomena

found in Jambi Malay. The City dialect exhibits a synchronic vowel lowering process. A high vowel turns into a mid-high vowel in final closed syllables. I have also shown that the vowel lowering process in the Rural dialect is a diachronic process. In addition, the Rural dialects follow a vowel reduction rule, also called the schwa rule. In this rule, a central mid vowel turns into a schwa in the first syllable of trisyllabic and tetrasyllabic words. I have also discussed the issue of the phonemic status of the schwa. I claim that schwa is not phonemic in the Rural dialects, but I assume it to be distinctive in the City dialect. Moreover, I have also presented the issue of vowel nasalization, nasal spreading, and vowel lengthening. Besides, I have shown that vowel hiatus can be resolved using glottal fricative insertion and glide insertion. Another phenomenon is that Jambi Malay only exhibits a very limited number of words that contain diphthongs. I further claim that there was a process of monophthongization in which words which are historically diphthong-final turn into single vowel-final words. Finally, I have shown that the claim made by many people that Jambi Malay is simply a variety of Indonesian in which all /a/-final words become /o/-final is a myth because Jambi Malay exhibits many /a/-final words which are from either historically /ah/-final words or loanwords.

3.2. Phonotactics

In this section, I present a description of the phonotactics of Jambi Malay. The description is divided into three parts: syllable structure, morpheme structure, and word structure. I will be using the terms syllable, morpheme, root, and word, and for the sake of clarity, I shall first describe what is meant by each of these terms.

A syllable is a phonological unit that is headed by a vowel (nucleus), except for syllabic consonant. The vowel may stand by itself or be surrounded by consonants.

A morpheme is the smallest meaningful unit. There are two types of morphemes in Jambi Malay: bound morphemes and free morphemes (see the introduction in the morphology chapter).

A root is a meaningful unit that cannot be further analyzed. A root is also a morpheme, but in Jambi Malay roots are generally free morphemes; however, some roots rarely occur alone. Roots such as *taŋis* 'cry', *kantʊ?* 'sleepiness', and *amu?* 'anger' usually occur with a nasal prefix attached to them; thus, the examples always appear as *naŋis, ŋantʊ?,* and *ŋamu?,* respectively.[36]

A word may consist of one or more morphemes. A word consists of at least one root, and this root may have one or more additional morphemes. Compounds are complex words which are formed by putting two or more words together (see section 2.2.3).

The following examples provide a better understanding of the above definitions.

(122) a. mulʊt 'mouth'
b. mulʊt-e 'mouth-3' (= 'his/her mouth')
c. mara 'angry'
d. dimarai 'PASS-angry-APPL' (= 'be scolded')

All items in (122) are words. The root of the words *mulʊt* in (122)a and *mulʊt-e* (122)b is *mulʊt* 'mouth', and the root of the words *mara* and *dimarai* in (122)c and (122)d is

[36] Thanks to Uri Tadmor for pointing this out.

mara ‘angry’. (122)a and (122)c consist of one free morpheme each, *mulʊt* and *mara*, respectively. The word *mulʊt-e* in (122)b is comprised of one free morpheme, *mulʊt*, and one bound morpheme, i.e. the enclitic *–e* (see section 2.1.2.1.9.1). The word *dimarai* in (122)d consists of one free morpheme, *mara*, and two bound morphemes, the passive prefix *di-* (section 2.1.3.1.3.1) and the applicative suffix *–i* (section 2.2.1.2.2). Finally, with respect to syllables, the words in (122) can be broken up into *mu.lʊt* (2 syllables), *mu.lʊt.e* (3 syllables), *ma.ra* (2 syllables), and *di.ma.ra.i* (4 syllables).

Since roots in Jambi Malay are generally free morphemes, I shall focus the following discussion on syllables (section 3.2.1), morphemes (section 3.2.2), and word structure (section 3.2.3).

3.2.1. Syllable Structure

This subsection is further divided into six smaller sections: syllable types and syllabification (section 3.2.1.1), restrictions on consonants (section 3.2.1.2), restrictions on consonant clusters (section 3.2.1.3), restrictions on vowels (section 3.2.1.4), restrictions on vowel hiatus (section 3.2.1.5), and final devoicing (section 3.2.1.6).

3.2.1.1. Syllable Types and Syllabification

In this subsection, I shall first present syllable types in Jambi Malay. I shall then show the syllabification of the language.

The canonical syllable structures in Jambi Malay are V, CV, and CVC. Other syllable types are C, VC, CCV, and CCVC. VCC syllables are never found in Jambi Malay. Examples of each syllable type are presented below.

(123) CV

[ba.co]	‘read’
[gʊ.gʊʔ]	‘area’

(124) V

[u.mo]	‘paddy’
[o.ro^{g}ŋ]	‘k.o.worm’

(125) CVC

[jan.ta^{d}n]	‘male’
[pa.sa^{g}ŋ]	‘install’

(126) C (Syllabic)

[m̩.pa^{n}t]	‘four’
[n̩.ta]	‘don’t know’

(127) VC

[an.tar]	‘deliver’
[un.tal]	‘roll’

(128) CCV

[sro.al]	‘pants’
[kro]	‘monkey’

(129) CCVC

[tla^{d}n]	‘swallow’
[bras]	‘uncooked rice’

In (124), I list V as a syllable type, but phonetically, this syllable shows an onset if it appears in isolation, especially in clause initial position. In such a case, a glottal stop is inserted to fill the onset position; however, as I previously pointed out in section 3.1.2.2.5, the glottal stop is not always necessary within a phrase. (126) shows that the syllable type C always surfaces as syllabic consonant. Like the case in (124), the glottal stop can be inserted before the syllabic consonant in (126), especially if the words appear at the leftmost position.

Syllabification in Jambi Malay is achieved following the restrictions below.

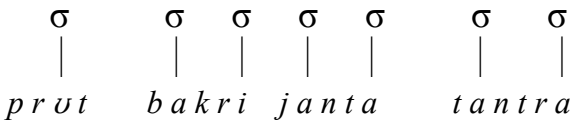
(130) a. The nucleus is a vowel, except for syllabic consonant.
b. There are no voiced codas.
c. There are no complex codas.
d. A sequence of VCV is syllabified as V.CV, not VC.V.
e. Onset clusters are possible as long as they are well-formed clusters, i.e., an obstruent followed by a liquid or a sequence of a voiceless fricative followed by a voiceless stop is possible.
f. The maximum number of consonants in a cluster is two.

The steps for syllabification can be formulated as follows.

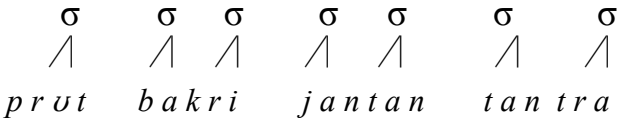
(131) Steps for Syllabification
Step 1: Project all vowels into the nucleus (N).
Step 2: Maximize the onset.[37]
Step 3: Project any remaining consonant that appears after a vowel into coda position (C).

Using the steps in the (131), I shall now show the syllabification process for the words *prʊt* 'stomach', *bakri* 'Bakri', *jantan* 'male', and *tantra* 'soldier' in (132).

(132) a. Step 1: Project N

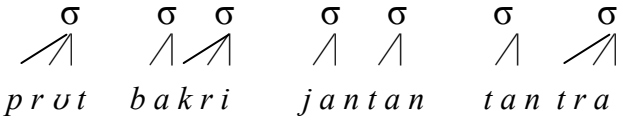


b. Step 2: Onset Maximization
Project O

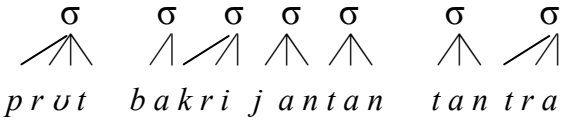


[37] In this step, the consonant that appears before each vowel is projected into the onset position. If there is another consonant appearing to the left of this consonant and they form an acceptable consonant cluster, the consonant is also projected into the onset. Otherwise, continue to the next step.

Project another O if possible



c. Step 3: Project C



3.2.1.2. Restrictions on Consonants

3.2.1.2.1. Plosives and Fricatives

All plosives and fricatives may appear in onset position. No native Jambi words were found to have a phonemic onset glottal stop. A glottal stop can be inserted in word-initial position as discussed in section 3.1.2.2.5 and mentioned in section 3.2.1.1. A phonemic glottal stop only occurs in word-medial onset position in words that are borrowed from Arabic, as shown below.[38]

(133) /ma.ʔap/ 'apology'
/sa.ʔat/ 'time'
/jum.ʔat/ 'Friday'

In contrast to the onset position, the coda position can only be filled by voiceless stops, voiceless fricatives, and glottal stops. Voiced consonants are barred from coda position. Palatal stops are barred from coda position, regardless of their voicing feature. The occurrence of plosives and fricatives in onset and coda positions is exemplified in the following examples.

[38] In section 3.1.2.1.1.5, I showed that the glottal stop in (133) is not epenthesized.

(134) [p]

a. onset

[pa.ra^{g}ŋ]	‘machete’
[ka.paʔ]	‘axe’

b. coda

[sap.tu]	‘Saturday’
[i.dʊ^{m}p]	‘alive’

(135) [b]

[ba.lɪʔ]	‘return’
[a.ba^{g}ŋ]	‘older brother’

(136) [t]

a. onset

[ta.la.jaʔ]	‘pole’
[pan.tas]	‘appropriate’

b. coda

[pit.na]	‘lie’
[pa.sa^{n}t]	‘clear’

(137) [d]

[da.gɪ^{g}ŋ]	‘meat’
[ba.da]	‘container’

(138) [c]

[ca.caʔ]	‘implant’
[a.car]	‘pickles’

(139) [j]

[jo.ge^{n}t]	‘dance’
[a.jʊ^{b}m]	‘command’

(140) [k]

a. onset

[ko.gaʔ]	‘perhaps’
[si.ko]	‘here’

b. coda

[ke.te^{ŋ}k]	‘boat’
[ko.co^{ŋ}k]	‘shake’

(141) [g]

[gu.gʊʔ]	‘area’
[pa.gi]	‘morning’

(142) [ʔ][39]

a. onset (only in loan words)

[ma.ʔap]	‘apology’
[sa.ʔa^{n}t]	‘time’

b. coda

[jaʔ.jo]	‘errand boy’
[mu.laʔ]	‘begin’

(143) [h]

[ha.ra^{m}p]	‘hope’
[ha.m^{b}o]	‘slave’

(144) [s]

a. onset

[so.ŋar]	‘boastful’
[i.sʊʔ]	‘tomorrow’

b. coda

[la.das]	‘busy’
[pan.cɪs]	‘matches’

(145) /z/ (only in loan words)

[za.man]	‘era’
[a.za^{d}n]	‘prayer call’

[39] Note that the glottal stop before the vowel in these examples is phonemic, as discussed in section 3.2.1.2.1.

3.2.1.2.2. Simple Nasals

Simple nasals, except for the palatal nasal /ɲ/, appear in both onset and coda positions. Like palatal stops, the palatal nasal /ɲ/ only appears in onset position.

(146) [m]

a. Onset

[mu.laʔ]	'begin'
[u.mo]	'paddy'

b. Coda

[lam.pa^{d}n]	'k.o.fish'
[ki.rɪ^{b}m]	'send'

(147) [n]

a. Onset

[na.eʔ]	'go.up'
[ba.ti.no]	'female'

b. Coda

[bun.ta^{g}ŋ]	'carcass'
[om.pa^{d}n]	'bait'

(148) [ɲ]

[ɲa.mʊʔ]	'mosquito'
[ɲi.ɲaʔ]	'(sleep) soundly'

(149) [ŋ]

a. Onset

[ŋa.lar]	'burst of laughter'
[ta.ŋan]	'hand'

b. Coda

[tiŋ.ka]	'behavior'
[baŋ.kʊ^{g}ŋ]	'hit'

3.2.1.2.3. Post-occluded Nasals

Unlike simple nasals, post-occluded nasals only appear in onset position.

(150) [m^b]

[$m^boʔ$]	‘older sister’
[ra.$m^bʊ^nt$]	‘hair’

(151) [n^d]

[$n^daʔ$]	‘want’
[ma.n^di]	‘bathe’

(152) [$ɲ^j$]

[$ɲ^ja.la^gŋ$]	‘approach’
[pi.$ɲ^ja^bm$]	‘borrow’

(153) [$ŋ^g$]

[$ŋ^gɪ$]	‘yes; honorific’
[se.$ŋ^gol$]	‘touch’

3.2.1.2.4. Liquids

Liquids are found in both onset and coda position.

(154) [l]

a. Onset

[li.taʔ]	‘tired’
[ga.lo]	‘all’

b. Coda

[sul.ta^{d}n]	‘Sultan; a title for Malay King’
[sa.m^bal]	‘chili sauce’

(155) [r]

a. Onset

[ro.ta^{d}n]	‘rattan’
[ja.rɪ^{n}t]	‘cloth’

b. Coda

[war.no]	‘color’
[doŋ.kor]	‘eat greedily’

To conclude, all consonants may fill the onset position of a syllable. The class of consonants which may fill the coda position of a syllable is more restricted. Post-occluded nasals, voiced consonants, and palatals never occur in the syllable coda position in Jambi Malay.

3.2.1.3. Restrictions on Consonant Clusters

Consonant clusters in Jambi Malay are barred from syllable-final position, which means that they are also barred in word-final position. Within a syllable, the maximum number of segments in a consonant cluster is two. Possible consonant clusters in Jambi Malay are sequences of an obstruent and a liquid, and sequences of a voiceless fricative and a voiceless stop. Examples of each possible sequence are demonstrated below.

(156) [pr]

[prʊⁿt]	'stomach'
[a.pri.ka]	'Africa'

(157) [pl]

[pli.si]	'police'
[kom.ploⁿt]	'group'

(158) [br]

[brat]	'heavy'
[ta.bri]	'Tabri; personal name'

(159) [bl]

[bla]	'side, half'
[blo]	'keep'

(160) [tr]

[traᵍŋ]	'bright'
[tan.tra]	'soldier'

(161) [tl]

[tla^{d}n]	‘swallow’
[tla^{m}p]	‘can’

(162) [dr]

[dras]	‘rapidly’
[ko.dra^{n}t]	‘power’

(163) [kr]

[kraʔ]	‘crust’
[ba.kri]	‘Bakri; personal name’

(164) [kl]

[kla^{b}m]	‘dark’
[klas]	‘class’

(165) [gr]

[gra^{b}m]	‘gram’
[na.gri]	‘country’

(166) [gl]

[gla^{m}p]	‘dark’
[gli]	‘ticklish’

(167) [cr]

[cre]	‘separate’
[cri.to]	‘story’

(168) [cl]

[clʊ^{m}p]	‘dip’

(169) [jr]

[jra^{g}ŋ]	‘put on fire’
[jro]	‘daunted’

(170) [jl]

[jlas]	‘clear’

(171) [sr]

[srɪⁿt]	‘difficult’
[ba.sri]	‘Basri; personal name’

(172) [sl]

[sloᵐp]	‘sandal’
[a.sli]	‘original’

(173) [sp]

[spaⁿt]	‘k.o.fish’
[spaᵍŋ]	‘k.o.tree’

(174) [st]

[stoᵐp]	‘stop’
[sto]	‘meter’

(175) [sk]

[skaʔ]	‘half’
[skaᵈm]	‘rice hull’

In addition to the above consonant clusters, Jambi Malay also exhibits sequences of a nasal and homorganic stop at syllable boundaries within a word. The nasal of a coda agrees in place of articulation with the stop of the following syllable onset, as shown below.

(176) [n.t]

[n.ta]	‘don’t know’
[pan.tʊᵈn]	‘pantun’

(177) [m.p]

[sam.pe]	‘arrive’
[m.paⁿt]	‘four’

(178) [ŋ.k]

[taŋ.kʊl]	‘k.o. large net’
[toŋ.kaⁿt]	‘stick’

Interestingly, as mentioned in the introduction, Rural Jambi Malay dialects are similar to Minangkabau because these dialects have sequences of a nasal and a homorganic fricative, as shown below.

(179)	[lan.sʊ^{g}ŋ]	'direct'
	[an.so]	'swan'
	[ban.so]	'nation'
	[un.si]	'evacuate'
	[pen.sa^{d}n]	'faint'

The nasal and homorganic fricatives sequences in (179) are nasal and heteroganic fricative sequences in the City dialect and some other Malay dialects, including Indonesian or Jakarta Indonesian.

(180)	Jambi City	Indonesian/Jakarta Indonesian	Gloss
	[laŋ.suŋ]	[laŋ.suŋ]	'direct'
	[aŋ.so]	[aŋ.sa]	'swan'
	[baŋ.so]	[baŋ.sa]	'nation'
	[uŋ.si]	[uŋ.si]	'evacuate'
	[peŋ.san]	[piŋ.san]	'faint'

In this section, I have presented syllabification and restrictions on consonant clusters in Jambi Malay. In what follows, I shall present more discussion with respect to the sequence of a nasal followed by a voiceless stop. I have previously shown that when a nasal is followed by a voiceless stop they belong to two different syllables. In other words, the sequence of a nasal followed by a voiceless stop is not a cluster. Examples follow.

(181)

[n̩.ta]	‘not know’
[m̩.pa^{n}t]	‘four’
[ŋ̩.kaʔ]	‘k.o. cake’
[sam̩.pa^{d}n]	‘boat’
[pan.tʊ^{d}n]	‘pantun’
[toŋ.ka^{n}t]	‘limp’

A piece of evidence in support of this analysis comes from one type of secret language. In this secret language, the phoneme /g/ is inserted after each vowel and /g/ is followed by a vowel. The vowel following /g/ must be the same as the vowel of the syllable /g/ follows. If there is coda in the syllable, the coda appears after insertion. Therefore, the word [ba.leʔ] ‘return’ becomes [ba.ga.le.geʔ]. When a nasal precedes a stop as in (180), the nasal is treated as a coda and thus does not form a cluster with the stop following it, as shown below.[40]

(182)

/nta/	→	[ɪ.gɪn.ta.ga]	‘not know’
/mpa^{n}t/	→	[ɪ.gɪm.pa.ga^{n}t]	‘four’
/ŋkaʔ/	→	[ɪ.gɪŋ.ka.gaʔ]	‘k.o. cake’
/sampa^{d}n/	→	[sa.gam.pa.ga^{d}n]	‘boat’
/pantʊ^{d}n/	→	[pa.gan.tʊ.gʊ^{d}n]	‘pantun’
[toŋka^{n}t]	→	[to.goŋ.ka.ga^{n}t]	‘limp’

While the sequence of a nasal followed by a voiceless stop is not treated as a cluster in (182), the sequence of an obstruent followed by a liquid is treated as a cluster in the secret language, as exemplified below.

[40] For syllabic consonant, the speakers use the mid-high vowel [ɪ] as the vowel in the language game.

(183) [kodrat] → [ko.go.dra.ga^{n}t] ‘power’
[asli] → [a.ga.sli.gi] ‘original’
[aprika] → [a.ga.pri.gi.ka.ga] ‘Afrika’
[bakri] → [ba.ga.kri.gi] ‘Bakri; personal name’

A problem for this analysis is that the sequence of an obstruent followed by a liquid in one-syllable words does not seem to be treated as a cluster, as exemplified in the following examples.

(184) /bras/ → [bɪ.gɪ.ra.gas] *[bra.gas] ‘uncooked rice’
/jlas/ → [jɪ.gɪ.la.gas] *[jla.gas] ‘clear’
/cre/ → [cɪ.gɪ.re.ge] *[cre.ge] ‘divorce’

To account for the data in (184), one can propose that the insertion rule in the language applies only after the disyllabic requirement is fulfilled.

The secret language also provides another piece of evidence in supporting the claim that the sequence of a nasal and a voiceless stop is not a cluster, while the sequence of an obstruent followed by a liquid is a cluster is. When there is a cluster of three consonants (a nasal, a voiceless stop and a liquid), the voiceless stop is treated as a cluster with the liquid, as shown in the following example.

(185) /komplot/ → [ko.gom.plo.go^{n}t] ‘group’
/kontraʔ/ → [ko.gon.tra.gaʔ] ‘contract’
/baŋkrʊt/ → [ba.gaŋ.krʊ.gʊ^{n}t] ‘bankrupt’

On the other hand, one could claim that [mp], [nt] and [ŋk] are not treated as clusters in (185) because complex codas are barred from coda position.

An alternative analysis for sequences of a nasal followed by a voiceless stop is that they are, indeed, clusters. The first argument supporting this hypothesis comes from vowel lowering. In section 3.1.3.2.1, I showed that vowel lowering before

a consonant only applies to syllable-final position. The vowel in a non-final closed syllable is not lowered, as exemplified below.

(186)	a.	/pinjam/	[pinja^{b}m]	*[pɪnja^{b}m]	‘borrow’
	b.	/pundaʔ/	[pundaʔ]	*[pʊndaʔ]	‘shoulder’
	c.	/tiŋkat/	[tiŋka^{n}t]	*[tɪŋka^{n}t]	‘level’

Based on (186), Uri Tadmor (p.c) suggests that this might be a piece of evidence that shows the syllabification is as in (187) and thus the environment does fit the environment for vowel lowering.

(187)	[pi.nja^{b}m]	‘borrow’
	[pu.ndaʔ]	‘shoulder’
	[ti.ŋka^{n}t]	‘level’

However, one can claim that vowel lowering only applies to the final syllable, as I suggest in section 3.1.3.2.1.

The second piece of evidence for claiming that the sequence of a nasal followed by a voiceless stop is a cluster comes from the schwa insertion rule. In section 3.1.3.2.4, I showed that a schwa is inserted to fulfill a disyllabic requirement for words or to break illicit consonant clusters, as shown in the following examples.

(188)	/bli/	[bə.li]	‘buy’
	/bras/	[bə.ras]	‘uncooked rice’
	/gdaŋ/	[gə.da^{g}ŋ]	‘big’
	/bbal/	[bə.bal]	‘stupid’

This schwa insertion rule does not apply between a nasal and a voiceless stop, as shown below (cf. section 3.1.2.1.3).

(189)	/nta/	[n̥ta]	*[nə.ta]	‘not know’
	/mpat/	[m̥pa^{n}t]	*[mə.pa^{n}t]	‘four’
	/ŋkaʔ/	[ŋ̊kaʔ]	*[ŋə.kaʔ]	‘k.o. cake’

The fact that schwa cannot be inserted in (189) might suggest that the nasal and the voiceless stop is a cluster; however, one can also claim that the schwa insertion rule does not apply between a nasal and a stop.

To conclude, I have shown that the sequence of a nasal followed by a voiceless stop may be analyzed using two hypotheses: a cluster hypothesis, and a non-cluster hypothesis. The cluster hypothesis is supported by the evidence shown by vowel lowering and schwa insertion. In contrast, the non-cluster hypothesis is supported by a type of secret language. I do not have a clear evidence to show that one hypothesis is better than the other; however, in this dissertation, I adopt the non-cluster hypothesis. The main reason for this option is that sonority level of a nasal sound is higher than that of a stop sound, and thus, the cluster of a nasal followed by a stop violates the sonority principle.

3.2.1.4. Restrictions on Vowels

All vowels may appear as syllable nuclei. Mid-high vowels never occur in non-final syllables in the underlying representation because mid-high vowels in that position are the result of vowel harmony (discussed in section 3.1.3.2.2). In addition, the phonemic schwa in the City dialect never occurs in final syllables or onsetless syllalbes. In the Rural dialects, schwa is not phonemic (see. section 3.1.3.2.4).

In the surface representation, all vowels may occur in any syllable type, except for schwa. Examples follow.

(190) Vowel in Initial Open Syllable

a. #V.

/i/	[i.ka^{d}n]	‘fish’
	[ɪ.dʊ^{m}p]	‘alive’
/e/	[e.loʔ]	‘good, beautiful’
/a/	[a.ya^{b}m]	‘chicken’
/u/	[u.leʔ]	‘caterpillar’
	[u.rʊ^{n}t]	‘give massage’
/o/	[o.ro^{g}ŋ]	‘k.o. worm’

b. #CV.

/i/	[pi.sa^{g}ŋ]	‘banana’	
	[si.kʊ^{n}t]	‘elbow’	
/e/	[ke.te^{ŋ}k]	‘boat’	
/a/	[pa.ra^{g}ŋ]	‘machete’	
/ə/	[bə.li]	‘buy’	(JC)
/u/	[su.su]	‘breast’	
	[bu.rʊ^{g}ŋ]	‘bird’	
/o/	[po.ho]	‘thigh’	

(191) Initial Closed Syllable

a. #VC.

/i/	[in.te]	‘spy’	
	[in.tɪ^{m}p]	‘peek’	
/e/	[en.te^{g}ŋ]	‘light’	
/a/	[aŋ.ka^{n}t]	‘lift’	
/ə/	[tə.la^{d}n]	‘swallow’	(JC)
/u/	[um.pa^{n}t]	‘curse’	
	[un.tʊʔ]	‘for’	
/o/	[om.pa^{d}n]	‘bait’	

b. #CVC.

/i/	[bin.ta^{g}ŋ]	‘star’	
	[bin.tɪʔ]	‘spot’	
/e/	[pen.sa^{d}n]	‘faint’	
/a/	[saŋ.kar]	‘cage’	
/ə/	[təm.pa^{n}t]	‘place’	(JC)
/u/	[kun.ci]	‘key’	
	[bun.tɪ^{g}ŋ]	‘pregnant’	
/o/	[boŋ.ko^{n}t]	‘root’	

c. #CCVC.[41]

/i/	[kris.te^{d}n]	‘Christian’	
/e/	[klen.cer]	‘fluent’	
/a/	[sla^{n}t]	‘Selat; an area name’	
/ə/	[brə.naŋ]	‘swim’	(JC)
/o/	[kroŋ.ko^{g}ŋ]	‘throat’	

(192) Final Open Syllable

a. .CV#

/i/	[ma.ti]	‘dead’
/ɪ/	[ba.gɪ]	‘give, divide’
/e/	[ga.we]	‘work’
/a/	[ta.na]	‘soil’
/u/	[bu.cu]	‘corner’
/ʊ/	[ja.tʊ]	‘fall’
/o/	[ga.lo]	‘all’

[41] There are not so many words that that have CCVC syllable type. Many of them are in one syllable words and thus, they can be claim to be the first as well as the last syllable (see also examples in (193)b).

(193) Final Closed Syllable

a. .CVC#

/i/	[ku.niŋ]	‘yellow’
/ɪ/	[li.cɪ^{d}n]	‘slippery’
/e/	[leŋ.ke^{n}t]	‘sticky’
/a/	[la.pa^{g}ŋ]	‘wide’
/u/	[mi.num]	‘drink’
/ʊ/	[rum.pʊ^{n}t]	‘grass’
/o/	[bo.lo^{g}ŋ]	‘have a hole’

b. .CCVC#

/ɪ/	[srɪt]	‘difficult’
/e/	[p.san.tre^{d}n]	‘Islamic school’
/a/	[tra^{g}ŋ]	‘bright’
/ʊ/	[trʊ^{g}ŋ]	‘eggplant’
/o/	[kom.plo^{n}t]	‘group’

3.2.1.5. Restrictions on Vowel Hiatus

Vowel hiatus refers to the occurrence of two adjacent vowels. Phonemically, within a morpheme, the possible vowel hiatus environments are /ai/, /aɪ/, /ia/, /au/, /aʊ/, /ae/, /ua/, /ea/, /oa/, /oa/, /aʊ/, /ii/, and /uu/. In surface representations, however, vowel hiatus is not preferred. In section 3.1.3.2.7, I have discussed strategies to avoid vowel hiatus. Examples of vowel hiatus are presented below.

(194) /ai/

/main/	[main]	‘play’
/ɲai/	[ɲai]	‘grandmother’

(195) /aɪ/

/laɪn/	[laɪ^{d}n]	‘different, other’
/jaɪt/	[jaɪt]	‘sew’

(196) /ia/

/nian/	[ni^{y}an]	‘very’
/biaʔ/	[bi^{y}aʔ]	‘so that’

(197) /au/

/kau/	[kau]	‘you’
/prau/	[prau]	‘canoe’

(198) /aʊ/

/baʊr/	[baʊr]	‘handle’
/baʊŋ/	[baʊ^{g}ŋ]	‘k.o. fish’

(199) /ae/

/aeʔ/	[aeʔ]	‘water’
/naeʔ/	[naeʔ]	‘go up’

(200) /ua/

/jual/	[ju^{w}al]	‘sell’
/bua/	[bu^{w}a]	‘fruit’

(201) /ea/

/leaʔ/	[leaʔ]	‘muddy’
/peaʔ/	[peaʔ]	‘seriously injured’

(202) /ao/

/laos/	[laos]	‘galingale’
/maoŋ/	[maoŋ]	‘bad smell’

(203) /oa/

/sroal/	[sroal]	‘pants’
/koaʔ/	[koaʔ]	‘divide’

(204) /ii/

/iit/	[ʔiʔi^{n}t]	‘Iit; personal name’

(205) /uu/

/uut/	[ʔuʔu^{n}t]	‘Uut; personal name’

3.2.1.6. Final Devoicing

Voiced consonants never occur word-finally or syllable-finally in any of the three dialects. Diachronically, there has been a final devoicing process. Three pieces of evidence show that final devoicing occurs in the language.

The first piece of evidence is that no native words with final voiced stop are observed. [42]

The second piece evidence for a final devoicing process comes from loanwords. When words that have a voiced consonant in syllable- or word- final position are borrowed into the language, the voiced consonant becomes voiceless, as indicated in (206).

(206)

/ustat/	'teacher'
/masjɪt/	'mosque'
/wahɪt/	'Wahid; personal name'
/ajɪs/	'Aziz; personal name'
/sbap/	'because'
/wajɪp/	'obligatory'
/magrɪp/	'sunset'
/saptu/	'Saturday'
/goblok/	'stupid'

The third piece of evidence comes from secret language data. In one type of secret language, a word is uttered backwards; for example, /aku/ '1SG'and /makan/ 'eat' become /uka/ and /nakam/, respectively. Voiced consonants that appear in word-initial position turn into voiceless consonants, as exemplified in the following examples.

[42] Thanks to Uri Tadmor for pointing this out to me.

(207) /dulu/ ‘before’ → /ulut/
/babi/ ‘pig’ → /ibap/
/gatal/ ‘itchy’ → /latak/

As shown in (207), the word-initial voiced consonants surface as word-final voiceless consonants in the secret language.

3.2.2. Morpheme Structure

As described in the introduction to section 3.2, a morpheme is the smallest meaningful unit. There are two types of morphemes: free morphemes and bound morphemes. A detailed discussion of these two types of morphemes is provided in the morphology chapter.

In this subsection, I shall only discuss the internal structure of free morphemes. Free morphemes in Jambi Malay can consist of one, two, or three syllables, as exemplified in (208) through (210) below.

(208) Monosyllabic Morphemes
/dek/ ‘ceiling’
/lap/ ‘rag’
/m^{b}oʔ/ ‘elder sister’

(209) Disyllabic Morphemes
/bu.lu/ ‘body hair’
/li.taʔ/ ‘tired’
/ka.tɪs/ ‘papaya’
/ja.ntan/ ‘male’

(210) Trisyllabic Morphemes
/sa.la.mat/ ‘safe’
/mu.a.ro/ ‘front’
/ga.ro.bak/ ‘cart’
/bi.a.waʔ/ ‘monitor lizard’

On the surface, monosyllabic words with initial consonant clusters are often realized as disyllabic morphemes because Jambi Malay ranks the disyllabic requirement high. In such a case, a schwa is inserted between the consonant clusters (see section 3.1.3.2.4 for discussion). Examples follow.

(211)

/tlan/	[tələn]	'swallow'
/praŋ/	[pəraŋ]	'war'
/sra/	[səra]	'surrender'

3.2.3. Word Structure and Junctures

A word may consist of as many as five morphemes, as shown in (212) to (216) below.

(212) Monomorphemic Words

/dek/	'ceiling'
/lap/	'rag'
/m^{b}oʔ/	'elder sister'
/n^{d}aʔ/	'want'

(213) Dimorphemic Words

/di- + tarɪʔ/	→	/ditarɪʔ/	'PASS-pull' (='be pulled')
/malam + -e/	→	/malam-e/	'night-3' (='the night')
/ŋ- + antar/	→	/ŋantar/	'ACT-deliver' (='to deliver')

(214) Trimorphemic Words

/di- + lpas + -i/	→	/dilpasi/	'PASS-release-APPL' ('be released')
/ŋ- + teŋoʔ + -e/	→	/neŋoʔ-e/	'ACT-look-3' ('see it')
/sa- +lŋkap + -ɲo/	→	/salŋkap-ɲo/	'one-complete-3' ('as complete as')

(215) Tetramorphemic Words

/di- + bawaʔ + -ɲo + -la/	→	/dibawaʔ-ɲo-la/
		‘PASS-bring-3-EMPH’
		(= ’be brought by him’)
/ŋ- + amᵇɪʔ + -i + -ɲo/	→	/ŋamᵇɪʔi-ɲo/
		‘ACT-take-APPL-3’
		(= ’to take it’)

(216) Pentamorphemic Words

/pa- + -ŋ + didik + -ɲo + -tu/	→	/pandidik-ɲo-tu/
		‘INTR-educate-3-DEM.DIST’
		(= ’his education’)
/di- + potoŋ-potoŋ + -e + -la/	→	/dipotoŋpotoŋ-e-la/
		‘PASS-RED-cut-3-EMPH’
		(= ’was cut repeatedly by him’)

A word may have up to seven syllables, as exemplified in (217) to (223) below.

(217) Monosyllabic Words

[dek]	‘ceiling’
[lap]	‘rag’
[m̥ᵇoʔ]	‘elder sister’

(218) Disyllabic Words

[li.taʔ]	‘tired’
[pa.raᵍŋ]	‘machete’
[di.laᵐp]	‘PASS-rag’ (= ‘be rubbed’)
[deᵑk.ʔe]	‘ceiling-3’(= the ceiling’)

(219) Trisyllabic Words

[ga.ro.baᵑk]	‘cart’
[li.mᵇʊs.si]	‘cover-APPL’ (= ’cover it’)
[ba.ma.saʔ]	‘INTR-cook’ (= ’cook’)
[di.laᵐp.ʔe]	‘PASS-rag-3’ (= ’be rubbed by him’)

(220) Tetrasyllabic Words

[pa.ja.lan.an]	'ABST-walk-CIRC' (= 'journey')
[ka.ta.kʊ^{n}t.ʔan]	'ADV-afraid-CIRC' (= 'afraid')

(221) Pentasyllabic Words

[di.ca.ri.hi.ɲo]	'PASS-seek-APPL-3' (= 'was looked for by him')
[sa.rap.sa.ra^{m}p.ʔe]	'RED-garbage-3' ('= the garbage)

(222) Hexasyllabic Words

[di.^{y}a.m^{b}ɪʔ.i-ɲo-la/	'PASS-take-3-EMPH' (= 'was taken by him')
[ga.ro.bak.ga.ro.ba^{ŋ}k/	'RED-cart' (= 'carts')

(223) Heptasyllabic Words

[ga.ro.bak.ga.ro.ba^{ŋ}k.ʔe/	'RED-cart-3 (= 'the carts')
[di.ju.^{w}al.ju. ^{w}al.i.ɲo/	'PASS-RED-sell-APPL-3' ('are sold by him')

3.3. Suprasegmentals

There is no distinctive degree of length in vowels or consonants in Jambi Malay. In section 3.1.3.2.8, I show that vowels get lengthened phrase-finally. Stress and intonation are briefly discussed in section 3.5.

3.4. Morphophonological Processes

In this section, I shall discuss morphologically conditioned phonological processes. These include nasalization, [r] insertion, [h] insertion, and [ʔ] insertion, which are discussed in section 3.4.1, section 3.4.2, section 3.4.3, and section 3.4.5, respectively. In addition, there are two other morphological processes: reduplication (section 3.4.5) and truncation (section 3.4.6). Finally, in section 3.4.7, I discuss affixation vs. cliticization.

3.4.1. Nasalization

Jambi Malay contains a nasal verbal prefix which I gloss as ACT- as it is used to mark active voice (see section 1.1.1.1.1). This nasal prefix corresponds to *meŋ-* in Standard Indonesian. As in SI, nasal prefixation causes phonological changes, as shown in what follows. I temporarily use N to indicate the nasal prefix. In (224) below, the initial segment of the stems that the nasal prefix attaches to is a vowel. For all these forms, the nasal prefix is realized as a velar nasal. The velar nasal *ŋ-* and other nasal segments are likely to be the candidates for the underlying representation of the nasal prefix.

(224)	/N + iŋon/	[ŋĩŋõ^{d}n]	'ACT-breed' (= 'to grow, to breed')
	/N + ikʊt/	[ŋĩkʊ^{n}t]	'ACT-follow' (='to follow')
	/N + aŋkʊt/	[ŋãkʊ^{n}t]	'ACT-transport' (='to transport')
	/N + untal/	[ŋũntal]	'ACT-roll' (='to roll')
	/N + ompan/	[ŋõmpa^{d}n]	'ACT-bait' (='to give a bait')
	/N + eŋkar/	[ŋẽŋkar]	'ACT-refuse' (='to deny')

If the UR of the nasal prefix is a nasal prefix other than *ŋ-*, it is unclear what the phonetic motivation for changing the nasal prefix into a velar nasal before a vowel would be, especially given the fact that the vowels do not contain appropriate place features that would cause velar place assimilation. On the other hand, if the velar nasal is the underlying morpheme of the nasal prefix, no phonetic changes occur in (224), and the problem does not arise. Therefore, I suggest that the UR of the nasal prefix is a velar nasal.

Now let us turn our attention to consonant-initial stems.

When the nasal prefix attaches to a stem that begins with a voiceless obstruent (/p/, /t/, /c/, /k/, or /s/), the nasal prefix and the initial segment of the stem coalesce and form a homorganic nasal, as demonstrated in the following examples.

(225) /ŋ- + panen/ [mãnẽn] ‘ACT -harvest’ (= ’to harvest’)
/ŋ- + tanam/ [nãnãm] ‘ACT -plant’ (=’to plant’)
/ŋ- + kumpʊl/ [ŋʊ̃mpʊ̃l] ‘ACT -gather’ (= to gather’)
/ŋ- + cobo/ [ɲõbo] ‘ACT -try’ (= ’to try’)
/ŋ- + sbʊt/ [ɲəbʊⁿt] ‘ACT-mention’ (= ’to mention’)

Note that /s/ is an alveolar sound and when an /s/-initial stem is prefixed by a nasal prefix, the nasal prefix and /s/ always coalesce and do not form a homorganic nasal /n/, but rather a palatal nasal /ɲ/. This phenomenon is very common in Malay/Indonesian. In Standard Indonesian, for example, when stems such as /sapu/ ‘broom’ and /siram/ ‘wither’ are prefixed by the nasal prefix *meng*-, the nasal prefix and /s/ form a palatal nasal and become [məɲãpu] and [məɲĩram], respectively.

When the nasal prefix attaches to a stem that begins with a voiced obstruent, the two segments in the sequence coalesce to form post-occluded nasals, as shown in the following examples.

(226) /ŋ- + buaʔ/ [mᵇuaⁿt] ‘ACT-make (= ’to make’)
/ŋ- + dukʊŋ/ [nᵈʊkʊᵍŋ] ‘ACT-support’ (= ’to support’)
/ŋ- + joget/ [ɲʲogeⁿt] ‘ACT-dance’ (= ’to dance’)
/ŋ- + goreŋ/ [ŋᵍoreᵍŋ] ‘ACT-fry’ (= ‘to fry’)

Note that in the City dialect, however, the nasal turns into a homorganic nasal with the stop. It should be pointed out that most speakers do not like nasal forms for active forms; rather, they utilize bare forms.

If the nasal prefix attaches to nasal-initial stems, the nasal prefix gets deleted, as exemplified below.

(227) /ŋ- + naeʔ/ [nãeʔ] ‘ACT-go.up’ (=’to go up’)
/ŋ- + makan/ [mãkaᵈn] ‘ACT-eat’ (=’to eat’)
/ŋ- + ɲaɲi/ [ɲãɲĩ] ‘ACT-sing’ (= to sing’)

Finally, the nasal prefix surfaces as /m̩/ or /mə/ if it attaches to stems that begin with an approximant (a liquid or glide), as shown below.

(228)	/ŋ- + lolo + -i/	[m̩loloi]	'ACT-stupid-APPL' (= 'to trick')
	/ŋ- + rkam/	[m̩rəka^{d}m]	'ACT -record' (='to record')
	/ŋ- + warıs/	[m̩warıs]	'ACT -heir' (='to inherit')
	/ŋ- + yakın + -kan/	[məyakınkan]	'ACT -believe-APPL' ('to believe')

The data in (224) to (227) appear to be nicely accounted for by the hypothesis that the UR nasal prefix is */ŋ-*, except for when it appears in front of the alveolar fricative /s/. The morpho-phonological process of nasal prefixation for the data in (224) to (227) can be formulated using the following rules.

(229) No extra rule needed for vowel initial stem

$/ŋ\text{-} +_{\#}[V\ldots] \ / \rightarrow [ŋV]$

(230) Coalescence rule 1 for voiceless obstruent initial stem

$/ŋ\text{-} +_{\#}[C_{[+obstr,-voiced],\ \alpha place}]/ \rightarrow [N_{[\alpha place]}]$

(231) Coalescence rule 2 for voiced obstruent initial stem

$/ŋ\text{-} +_{\#}[C_{[+obstr,+voiced],\ \alpha place}] \ / \rightarrow$ [post-occluded nasal$_{[\alpha place]}$]

(232) Deletion rule for nasal initial stem

$/ŋ\text{-} +_{\#}[C_{[+nasal}]/ \rightarrow C_{[+nasal]}]$

The rules shown in (229) and (232) leave the pattern in (233), which corresponds to the data in (228), unexplained.

(233) $/ŋ\text{-} +_{\#}[C_{[+approx]}]/ \rightarrow [m̩]C_{[+approx]}$ or $[mə]C_{[+approx]}$

It is not phonetically motivated for an underlying velar nasal to turn into a syllabic bilabial nasal or a nasal followed by schwa when directly preceding an approximant.

One possible analysis is that /m/ is an allomorph of /*ŋ-*/ and is only used when the stem has a [+approximant] feature.

The nasalization process described above also applies to the last segment of the *paŋ-* prefix. The only difference is that when the *paŋ-* prefix attaches to a glide/liquid-initial stem, it surfaces as *pa-* (cf. section 2.2.1.1.1).

3.4.2. [r] Insertion

[r] insertion is a morpho-phonological process in which [r] is inserted between the /a/-final prefix and a stem. It is very unclear whether or not [r] insertion is a morpho-phonological process native to Jambi Malay; however, in what follows, I shall argue that [r] insertion is not a native Jambi Malay phenomenon and that this process may exist because of code-switching. [r] insertion usually occurs between the last vowel of a vowel-final prefix: *ba-, pa-, ta-* and a vowel-initial stem. A hypothetical rule is presented in (234) and some examples are presented in (235).[43]

(234) Ø → [r]/ V]$_{\#}$ __ V

(235)	/ba- + untʊŋ/	[baʀʊntʊᵍŋ] or [bʀʊntʊᵍŋ]	'INTR-profit' (= 'lucky')
	/ba- + oba/	[baʀoba] or [bʀoba]	'INTR-change' (= 'change')
	/ta- + ahɪr/	[taʀahɪʀ] or [tʀahɪʀ]	'PFCT.PASS-end' (= 'the last')
	/ta- + atʊr/	[taʀatʊʀ] or [tʀatʊʀ]	'PFCT.PASS-arrange-NMLZ' ('= organized')

Note that there are forms in which native speakers do not allow [r] insertion in elicitation, but in naturalistic data, both forms (the forms with [r] insertion and without [r] insertion) are found. I believe that these cases are exactly the cases in which code-switching has occurred.

(236)	/ba- + isi/	[baʀisi] or [baisi]	'INTR-content' (= 'contain')
	/ba- + umo/	[baʀumo] or [baumo]	'INTR-paddy' (= 'to work on a paddy')
	/ba- + inay/	[baʀinay] or [bainay]	'INTR-henna' (= 'to date')

[43] The /a/ from the prefix is often realized as [ə] on the surface.

Finally, some forms are fixed in the language because only forms with [r] insertion are acceptable. These forms can be analyzed as loan forms from Indonesian, as shown in the following examples.

(237) /ba- + nam/ 'INTR-six' (='a group of six')
/ba- + anaʔ/ 'INTR-child' (='to bear a child')
/ba- + untʊŋ/ 'INTR-profit' (='lucky')

3.4.3. [ʔ] Insertion

Glottal stop insertion is another morpho-phonological process. A detailed discussion of glottal stop insertion is provided in section 3.1.2.2.5.

3.4.4. [h] Insertion

Glottal fricative insertion is another morpho-phonological process that is discussed in section 3.1.3.2.7.1.

3.4.5. Truncation

Truncation is a word formation process which is common in Jambi Malay. In this process, one or more syllables of a root are truncated, and usually the last syllable is retained. In some cases, however, the two last syllables are retained. In addition, in a few cases, the first consonant of a two-syllable word is taken out. In most cases words that can get truncated are function words. In addition, personal names and titles also get truncated to form vocatives.

Truncation of function words is most common and natural in quick speech. Examine the following examples.

(238) ɲadi, aku tadi ŋᵍraʔkan-ɲo
so 1SG earlier ACT-move-APPL-3
'So, I moved them.'
[='So, I was the motivator.']

(239) …, aku-di mᵇuat bada abu rokoʔ
1SG-earlier ACT-make container dust cigarette
'…, I used it as an ashtray.'

As shown in (238) and (239) above, both the full form and the truncated form appear after the first person subject pronoun *aku* and are followed by a verb. In addition, if the full form in (238) is substituted with the truncated form and the truncated form in (239) is substituted by a full form, the sentences are still grammatical, as shown in (240) and (241), respectively below.

(240) ɲadi aku-di ŋᵍraʔkan-ɲo (TR, E)
so 1SG-earlier ACT-move-APPL-3
'So, I moved them.'
[= 'So, I was the motivator.']

(241) …, aku tadi mᵇuat bada abu rokoʔ (TR, E)
1SG earlier ACT-make container dust cigarette
'…, I used it as an ashtray.'

Furthermore, the speakers claim that there is no difference in terms of the meaning between the sentences (238) and (240) and between the sentences in (239) and (241).

Although there is no difference in meaning between the full form and the truncated form, phonologically, the truncated form is pronounced as one unit with the word that precedes it, unless the following word is composed on only one syllable, in which case the truncated word will be pronounced as a single unit with the following word. This is shown in the following examples.

(242) a. aku tadi pgi ka sano (TR, E)
[ʔaku tadi pgi kə sano]
1SG earlier go to there
'I went there earlier.'

b. aku-di pgi ka sano (TR, E)
[ʔakudi pgi kə sano]
1SG-earlier go to there
'I went there earlier.'

c. aku di-ko pgi ka sano (TR, E)
[ʔaku diko pgi kə sano]
1SG earlier-DEM.PROX go to there
'I went there earlier.'

Finally, the list of full forms which usually get truncated is shown in (243), (244), and (245) below.

(243)

Full Forms	Truncated Forms	Gloss
/tadi/	[di]	earlier
/jugo/	[go]	'also'
/lagi/	[gi]	'more'
/kagiʔ/	[giʔ]	'later'
/kato/	[to]	'word'
/rupo/	[po]	'appearance'
/apo/	[po]	'what'
/dŋat/	[ŋat]	'moment'
/tigo/	[go]	'three'
/limo/	[mo]	'five'
/kŋoʔ/	[ŋoʔ]	'not'
/dŋan/	[ŋan]	'with, and'
/cuma/	[ma]	'only'
/cobo/	[bo]	'try'
/kogaʔ/	[gaʔ]	'perhaps'
/bibi/	[bi]	'aunt'
/uwaʔ/	[waʔ]	'uncle'

(244)

Full Forms	Truncated Forms	Gloss
/batino/	[tino] or [no]	female

(245)	Full Forms	Truncated Forms	Gloss
	/pagi/	[agi]	‘morning’
	/tijaʔ/	[ijaʔ]	‘step on’

3.4.6. Reduplication

A detailed discussion of reduplication is provided in the morphology chapter (see section 2.2.2).

3.4.7. Affixation vs. Cliticization[44]

I have been using the terms affix and clitic in previous chapters as well as in previous sections of this chapter to refer to different types of morphemes. Specifically, I have been referring to *–e* as a clitic and *–i* and *–an* as suffixes. Clitics and affixes are both bound morphemes, and it is sometimes difficult to decide whether an element is an affix or a clitic.

In this subsection, I shall question whether *–e, -i,* and *–an* are enclitics or suffixes. Phonologically, *–e, -i,* and *–an* pattern similarly, and thus, they are all are either suffixes or enclitics (cf. section 3.1.2.2.5). When *–e, -i,* or *–an* attaches to stop-final stem, a glottal stop is inserted, as shown in (246). The glottal stop insertion does not apply when the final consonant of the stem is not a stop, as exemplified in (247) below.

(246)	/ka- + sum^{b}at + -an/	→	[ka.su.m^{b}a^{n}t.ʔãn] *[ka.su.m^{b}a.^{n}tãn]
			‘ADV-clog-CIRC’ (= ’gets stuck’)
	/sŋat + -e/	→	[sə.ŋa^{n}t.ʔẽ] *[sə.ŋa^{n}tẽ]
			‘sting-3’ (= ’its sting’)
	/di- + idʊp + -i/	→	[di.ɪdʊ^{m}p.ʔĩ] *[di.ɪdʊ^{m}pĩ]
			‘PASS-alive-APPL’(= ’be turned on’)

[44] Thanks to Uri Tadmor for raising this issue.

(247)	/di + amᵇʊr + -i /→	[di.ʸam.mᵇʊʀ.ʀi]	*[di.ʸam.mᵇʊʀ.ʔi]	‘PASS-scatter-APPL’ (= ’be scattered’)
	/makan + -an/ →	[ma.kan.nan]	*[ma.kan.ʔan]	‘eat-NMLZ’ (= ’food’)
	/tugas + -e/ →	[tu.gas.se]	*[tu.gas.ʔe]	‘duty-3’ (= ’his duty)
	/di- + jual + -e/ →	[di.ju.ʷal.le]	*[di.ju.ʷal.ʔe]	‘PASS-sell-3’ (= ’sold by him’)

In section 3.1.2.2.5, I showed that a glottal stop is inserted at the beginning of a vowel-initial word. (245) and (246) show that a glottal stop is also inserted between a stop-final stem and a vowel-initial ‘suffix/clitic’. The facts that a glottal stop is inserted before a vowel-initial word and a vowel-initial suffix suggests that glottal stops are inserted at the word level syntactically; however, since glottal stop insertion is not necessary within a phrase (cf. section 3.1.2.2.5), we need to propose that a glottal stop is inserted at the phrase level, or at least the level beyond the word level. Since a glottal stop is inserted beyond the word level, the vowel-initial elements (i.e. *–e, -i,* or *–an*) that appear after the stem could be claimed to be clitics rather than suffixes. The reason is that clitics, unlike affixes, function above the word level syntactically.

3.5. Stress and Intonation

3.5.1. Stress

In English, stress is very important, and misplacement of stress may cause confusion. The word ‘present’, for example, refers to ‘a gift’ when the stress is placed on the first syllable, but it means ‘to give/to introduce’ when the stress falls on the second syllable.

Unlike in English, stress in Jambi Malay is not very prominent. When stress falls on a different syllable of a word, the meaning of the word is not changed. Although stress is not distinctive in Jambi Malay, stress generally falls on the final syllable, as shown in the following examples.

(248) Disyllabic Words

/malam/	[mã.ˈlaᵇm]	‘night’
/jaraŋ/	[ja.ˈraᵍŋ]	‘seldom’
/pagi/	[pa.ˈgi]	‘morning’

(249) Trisyllabic Words

/batino/	[ba.ti.ˈno]/[bti.ˈno]	‘female’
/garobaʔ/	[ga.ro.ˈbaᵑk]/[gro.ˈbaᵑk]	‘cart’
/jaramᵇa/	[ja.ra.ˈmᵇa]/ [jra.ˈmᵇa]	‘bridge’
/paŋayu/	[pa.ŋã.ˈyu]/ [pə.ŋã.ˈyu]	‘roar’

When stems are suffixed with an affix, the stress still falls on the final syllable of the root, as shown below.

(250)

/masʊʔi/	[mã.ˈsʊʔ.i]	‘to put something into’
/buku-e/	[bu.ˈku.e]	‘the book’
/dimasʊʔi/	[di.mã.ˈsʊʔ.i]	‘be put into something’
/batino-e/	[ba.ti.ˈno.e]	‘the girl’

It should be remembered that since the stress in Jambi Malay falls on the last syllable, when truncation occurs, the stressed syllable (the last syllable) always appears in the truncated forms. If the full form has two syllables, the first syllable gets deleted in the truncated form (examples (251)a - (251)c). If the full form has three syllables, either the first syllable or the first two syllables get deleted in the truncated forms ((251)d) (see also section 3.4.5 in which truncation is discussed).

(251)

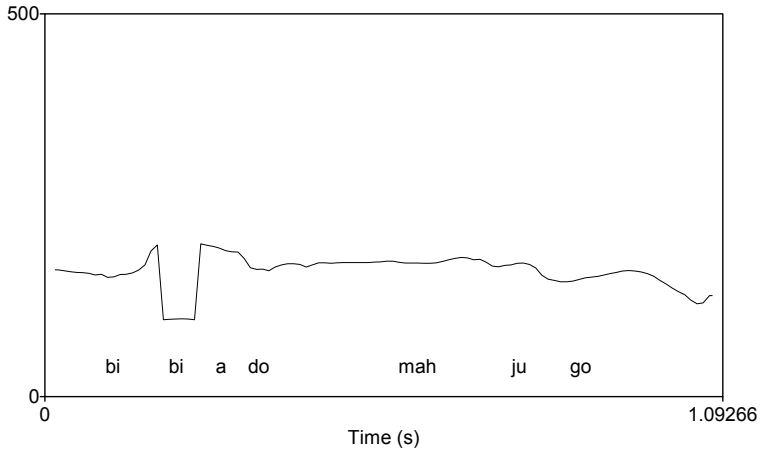
	Full Form	Truncated Form	Meaning
a.	/lagi/	/gi/	‘more’
b.	/tadi/	/di/	‘earlier’
c.	/jugo/	/go/	‘also’
d.	/batino/	/no/ or /tino/	‘female’

3.5.2. Intonation

The intonation patterns discussed in this section are based on impressionistic pitch contours. Declarative sentences employ falling intonation. The sentence in (252) is illustrated in (253).

(252) bibi ado mah jugo (TR, E)
aunt exist gastric.problem also
‘I also have gastric problems.’

(253)

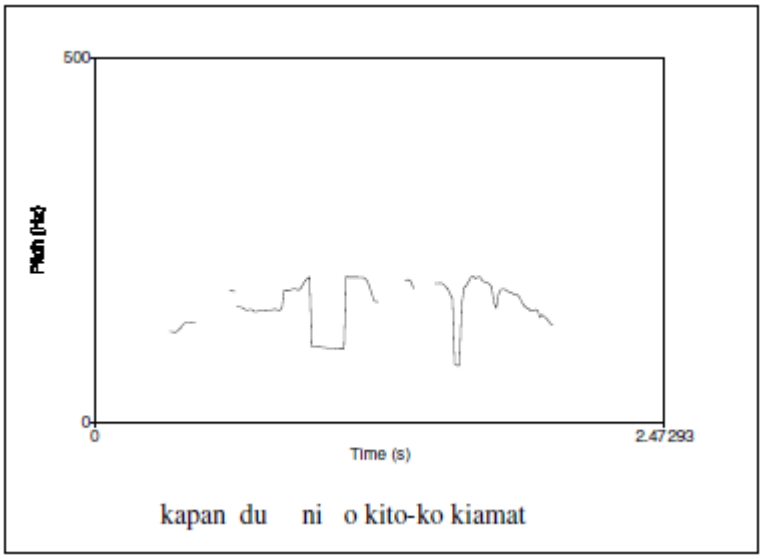


Wh-questions employ falling-intonation. The sentences in (254) are illustrated in (255).

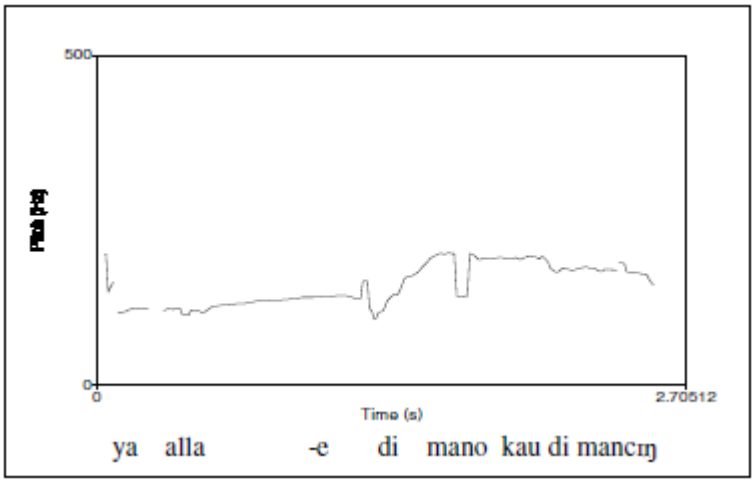
(254) a. kapan dunio kito-ko kiamat?
when world 1PL-DEM.PROX doomsday
‘When will doomsday come?’

b. ya alla, di mano kau di mancɪŋ?
yes Allah LOC which 2SG LOC ACT-fishing.rod
'My God, where did you go fishing?'

(255) a.



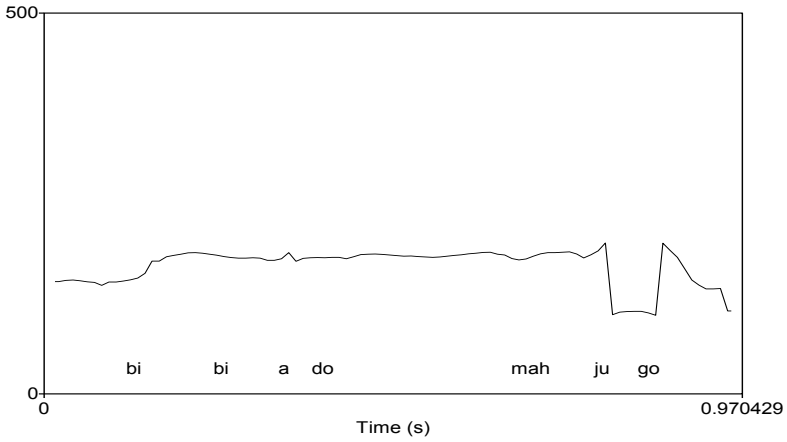
b.



The figure in (255)a illustrates the pitch contour for (254)a and the figure in (255)b pictures the pitch contour for (254)b. In both figures, the end of the question is marked with falling pitch.

In a *yes-no* question which has the structure of a declarative sentence, the rising-falling intonation is used. In such a case, the final syllable is lengthened. The rising-falling pitch applies on the last syllable. The pitch rises on the first segment of the last syllable and falls considerably on the second segment. When used as a *yes-no* question, the example in (252) will have the intonation pattern shown below.

(256)

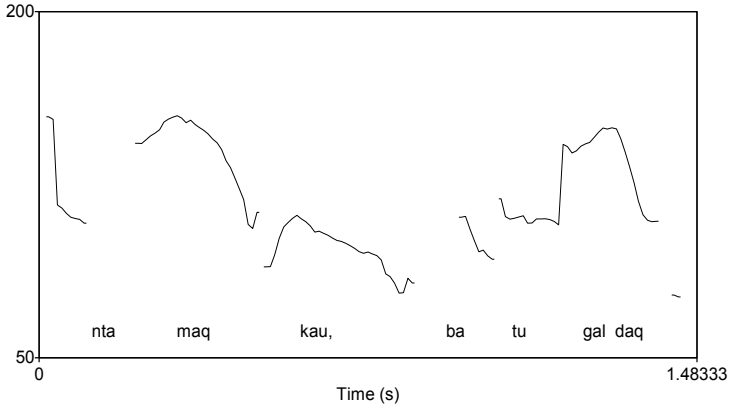


In the tag question type of *yes-no* questions, the pitch of the main clause rises on the last syllable of the main clause, and then it falls considerably on the question tag. This applies to *yes-no* questions which employ *daʔ* 'NEG' and *lʊm* 'not yet' as the tag marker. The examples in (257) can be illustrated in (258).

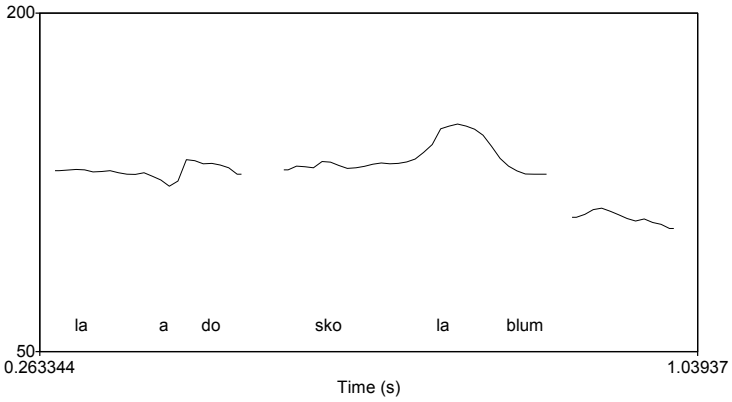
(257) a. nta maʔ kau, batugal, daʔ?
not.know mother 2SG INTR-dibble NEG
'I don't know about your mother; did she make holes?'

b. la ado skola, blʊm?
PFCT exist school not.yet
'Was there a school yet?'

(258) a.



b.



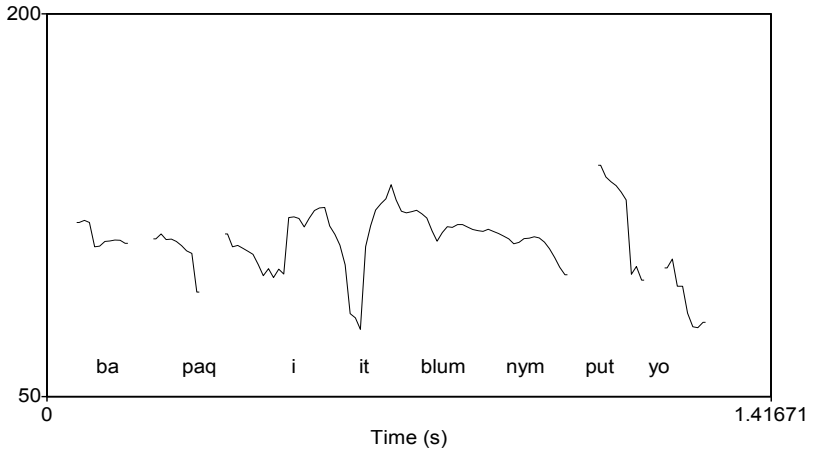
As shown in (258)a, the pitch of the last syllable of the main clause, *gal* in *batugal* 'make holes', rises and the question tag *da?* 'NEG' receives a falling pitch. Similarly, in (258)b the pitch of the last syllable of the main clause, *la* in *skola* 'school', rises considerably, and then it falls on the question tag *blʊm* 'not yet'.

If the tag employed in the yes-no question is *yo* 'yes', the tag receives falling pitch, as exemplified below.

(259) *yo*

a. bapaʔ ɪit blʊm ɲʲmpʊt, yoʔ
father Iit not.yet ACT-pick.up yes
'Your father hasn't picked you up, right?'
[Lit. Iit's father hasn't picked [Iit] up, right?']

b.

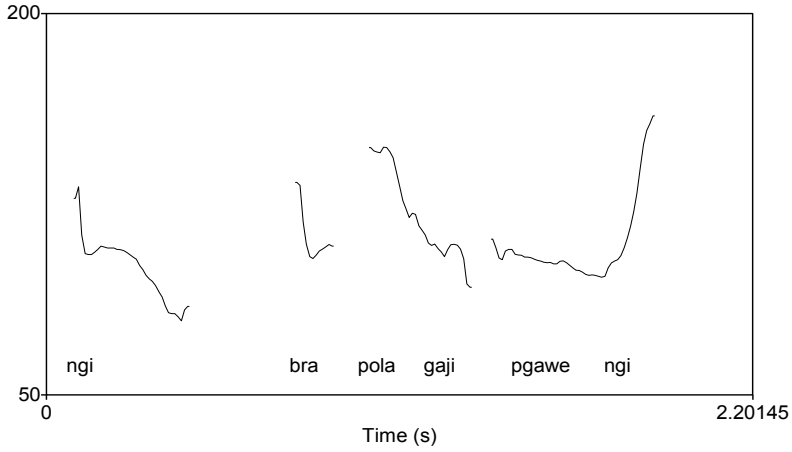


If the tag is either *ŋᵍɪ* 'yes', *kan* 'Q', or *da?* 'NEG', the rising pitch is employed, as indicated in the following examples.

(260) *ŋᵍɪ*

a. ŋᵍɪ, brapo-la gaji pgawai, ŋᵍɪ?
yes how.much-EMPH salary employee yes
'Right, how much money can an employee earn, right?'
[Lit. 'Right, how much is an employee's salary, right?']

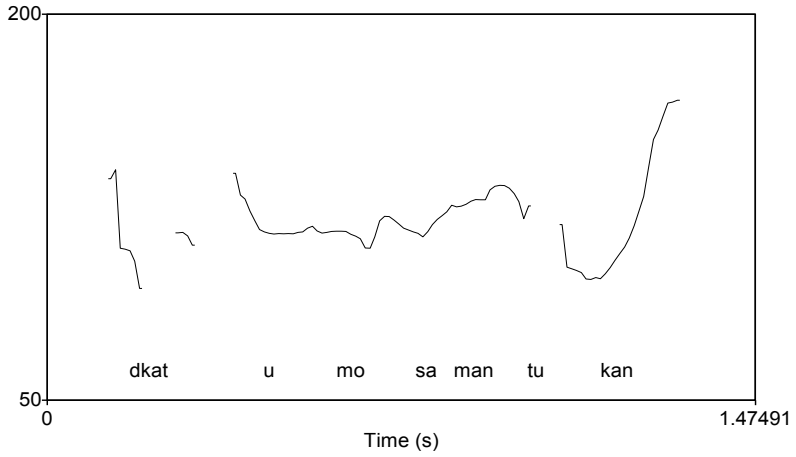
b.



(261) *kan*

a. dkat umo saman-tu, kan?
near paddy Saman-DEM.DIST Q
'It is close to Saman's paddy, isn't it?'

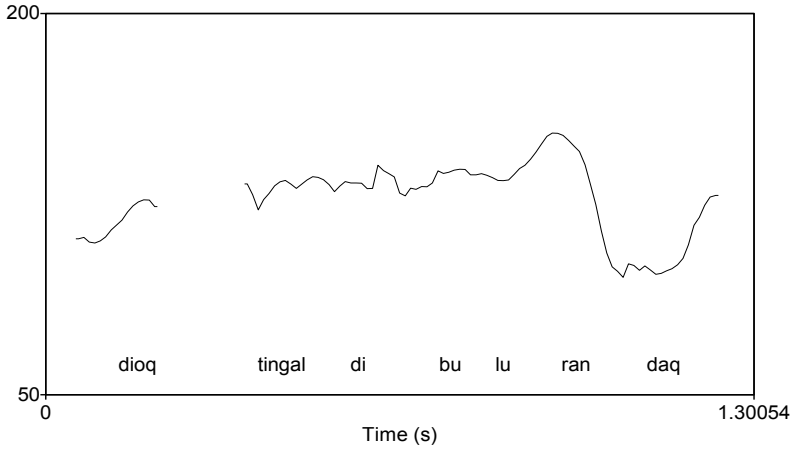
b.



(262) *daʔ*

a. dioʔ tiŋ^{g}al di bʊlʊran, daʔ?
3 stay LOC Buluran NEG
'She lives in Buluran, doesn't she?'
[referring to a friend's sister who lives in an area in Jambi called Buluran]

b.

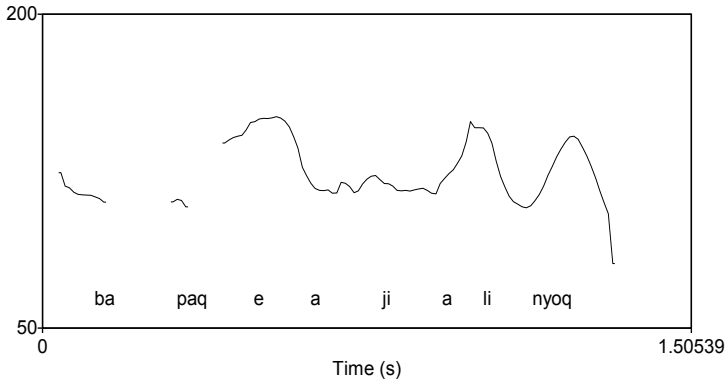


Finally, if *ɲoʔ* 'not', *yo daʔ* 'right', or *edaʔ* 'NEG' is used as the tag, the rising-falling pitch is used.

(263) *ɲoʔ*

a. bapaʔ-e aji ali, ɲoʔ?
father-3 Hajj Ali not
'Is his father Hajj Ali?'

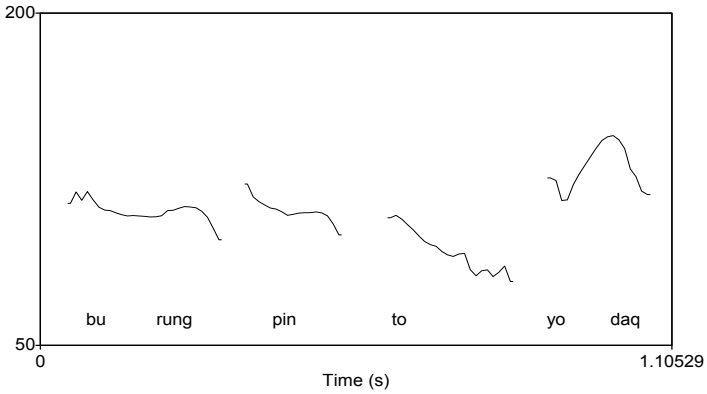
b.



(264) *yo daʔ*

a. bʊrʊŋ pinto, yo daʔ?
bird pinto yes NEG
'The birds are pinto birdas, aren't they?'

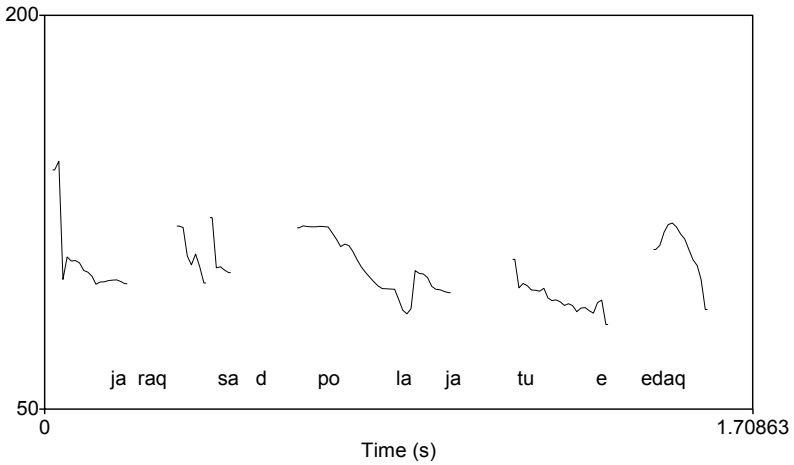
b.



(265) *edaʔ*

a. jaraʔ sadpo-la jatʊ-e, edaʔ?
distance one-cubit-EMPH fall-3 NEG
'It's about one cubit, right?'
[one cubit is two and a half meters]

b.



APPENDIX A: BASIC VOCABULARY[1]

#	TR/MD	JC	Indonesian	Gloss
001	taŋan	taŋan	taŋan	hand
002	kiri	kiri	kiri	left side
003	kanan	kanan	kanan	right side
004	kaki	kaki	kaki	leg/foot
005	bajalan; pgi	bəjalan; pəgi	bərjalan; pərgi	walk; go
006	jalan; jalanan	jalan; jalanan	jalan	road
007	tibo, dataŋ	tibo, dataŋ	dataŋ	to come
008	belok	beloʔ	belok	to turn (90 degrees)
009	putar	putar	putar	to turn (180 degrees)
010	maronoŋ	bərənaŋ	bərənaŋ	to swim
011	kotor	kotor	kotor	dirty
012	lbu; dbu	dəbu	dəbu	dust
013	kʊlɪt	kulit	kulit	skin
014	balakaŋ	puŋguŋ	puŋguŋ	back

[1] based on R. Blust's Austronesian Basic Vocabulary Database for Malay (Bahasa Indonesia) in http://language.psy.auckland.ac.nz/austronesian/language.php?id=233

015	prʊt	pərut	pərut	belly
016	tulaŋ	tulaŋ	tulaŋ	bone
017	isi prʊt; liŋkar prʊt	usus	usus	intestines
018	ati	ati	hati	liver
019	susu	susu	susu; buah dada	breast
020	bau	bahu, pundaʔ	bahu	shoulder
021	tntu; tau	tau	tau	to know
022	bapikɪr	bapikir	bərpikir	to think
023	takʊt; ŋri	takʊt	takut	to fear
024	dara	dara	dara	blood
025	kapalaʔ	palaʔ; kəpalo	kəpala	head
026	leher	leher	leher	neck
027	rambʊt	rambut	rambut	hair
028	idʊŋ	iduŋ	hiduŋ	nose
029	banapas	bənapas	bərnafas	to breathe
030	ciʊm	cium	məncium	to smell
031	mʊlʊt	mulut	mulut	mouth
032	gigi	gigi	gigi	tooth
033	lida	lida	lidah	tongue

034	glaʔ; tatawa	kətawo	tərtawa	to laugh
035	ŋalar	ŋakaʔ	məŋakak	to laugh uproariously
036	naŋis	naŋis	mənaŋis	to cry
037	muta	munta	muntah	to vomit
038	baluda	məluda	məludah	to spit
039	makan	makan	makan	to eat
040	mama; ŋuŋa	ŋuŋa	məŋuŋah	to chew
041	masaʔ	masaʔ	masak	to cook
042	batanaʔ	nanaʔ	mənanak	to cook rice
043	minum	minum	minum	to drink
044	ŋ^{g}ɪgɪt	gigit	gigit	to bite
045	sdot; isap	sədot; isap	məŋisap	to suck
046	kʊpɪŋ	kupiŋ	təliŋa	ear
047	aniŋ; dəŋar	dəŋar	dəŋar	to hear
048	mato	mato	mato	eye
049	neŋoʔ	neŋoʔ	lihat	to see
050	aŋop	ŋuap	məŋuap	to yawn

051	barɪŋ	barɪŋ	bərbariŋ	to lie down
052	tɪdʊr	tiduʔ	tidur	to sleep
053	mimpi	mimpi	mimpi	dream
054	dʊdʊʔ	duduʔ	duduk	sit
055	tgaʔ	təgaʔ	bərdiri	stand
056	oraŋ	oraŋ	oraŋ	person/human being
057	jantan	jantan, lanaŋ	laki-laki	male/man
058	batino	bətino	pərəmpuan	female/woman
059	anaʔ	anaʔ	anak	child
060	laki	laki	suami	husband
061	bini	bini	istri	wife
062	maʔ	mamaʔ	ibu	mother
063	bapaʔ	bapaʔ	bapak	father
064	ruma	ruma	rumah	house
065	atap	atap	atap	roof/thatch
066	namo	namo	nama	name
067	ŋatokan; ɲbʊt	bilaŋ	məŋatakan	say
068	tali	tali	tali	rope

069	tambat; kbat	kəbat	ikat	tie up
070	jaɪt	jait	jahit	sew
071	jarʊm	jarum	jarum	needle
072	baburu	baburu	bərburu	to hunt
073	tembaʔ	tembaʔ	mənembak	shoot
074	maroso; tuja	tuja; tikam	mənikam	stab
075	baŋkʊŋ; gbʊk; tʊkʊl	gəbuʔ	məmukul	hit; beat
076	malɪŋ	malɪŋ	məncuri	steal
077	bunu	bunu	məmbunuh	kill
078	mati	mati	mati	die, dead
079	ɪdʊp	idup	hidup	live; alive
080	gaʊt	garuʔ	garuk	scratch an itch
081	ɲakar	ɲakar	məncakar	scratch for hurting
082	krat; potoŋ	potoŋ	məmotoŋ	cut
083	ntaʔ	ntaʔ	mənətak	cut wood hack
084	kayu	kayu	kayu	wood
085	bla	bla	məmbəlah	split
086	tajam	tajam	tajam	sharp

087	tʊmpʊl	tumpul	tumpul	blunt; dull
088	bagawe	bəgawe; krjo	bəkərja	work (in fields)
089	tanam	tanam	tanam	to plant
090	milɪ	mili	məmilih	choose
091	tʊmbʊ	tumbu	tumbuh	grow
092	bɪncʊt	bəŋkaʔ	bəŋkak	swell
093	pra; pras	pəras	pəras	squeeze
094	gŋ^{g}am	gəŋgam	gəŋgam	hold (in fist)
095	ŋali	gali	məŋgali	dig up
096	m^{b}li	bəli	məmbəli	to buy
097	bukaʔ	bukaʔ	məmbuka	to open
098	tʊm^{b}ʊʔ	tumbuʔ	tumbuk	to pound
099	poŋkaŋ lotar	lempar	lempar	throw
100	campaʔ; jatʊ	jatu	jatu	fall
101	aɲ^{j}ɪŋ	anjiŋ	anjiŋ	dog
102	bʊrʊŋ	buruŋ	buruŋ	bird
103	tlor	təloʔ	tələr	egg
104	bulu	bulu	bulu	feather
105	kpaʔ	sayap; kəpaʔ	sayap	wing

106	mʊbʊŋ	tərbaŋ	tərbaŋ	to fly
107	tɪkʊs	tikus	tikus	rat
108	dagɪŋ	dagiŋ	dagiŋ	meat, flesh
109	miɲaʔ; lmaʔ	miɲaʔ; ləmaʔ	miɲak, ləmak	fat, grease
110	bʊntʊt	buntut	ekor	tail
111	ular; ulo	ular	ular	snake
112	cacɪŋ	caciŋ	caciŋ	earthworm
113	kutu	kutu	kutu	head louse
114	ɲamoʔ; ɲamuʔ	ɲamuʔ	ɲamuk	mosquito
115	labalaba	labalaba	laba-laba	spider
116	ikan	ikan	ikan	fish
117	bʊsʊʔ	busuʔ	busuk	rotten
118	dahan	dahan	cabaŋ; dahan	branch
119	daʊn	daun	daun	leaf
120	baŋkar	akar	akar	root
121	kmbaŋ	kəmbaŋ	buŋa	flower
122	bua	bua	buah	fruit
123	rʊmpʊt	rumput	rumput	grass
124	tana	tana	tana	earth, soil

125	batu	batu	batu	stone
126	buŋin; pasır	pasir	pasir	sand
127	aeʔ	aeʔ	aeʔ	water (fresh)
128	alır	ŋalır	məŋalir	to flow
129	laʊt	laut	laut	sea, salt water
130	garam	garam	garam	salt
131	dano	dano	danau	lake
132	rim^{b}o	utan	hutan	forest/woods
133	laŋit	laŋit	laŋit	sky
134	bulan	bulan	bulan	moon
135	bintaŋ	bintaŋ	bintaŋ	star
136	awan	awan	awan	cloud
137	kabʊt	kabut	kabut	fog, mist
138	ujan	ujan	ujan	rain
139	baldek; ptır	pətir	guntur	thunder
140	kilat	kilat	kilat	lightning
141	aŋin	aŋin	aŋin	wind
142	tiʊp	tiup	tiup	to blow
143	aŋat kuku; suam	aŋat	haŋat	warm

144	aŋat	panas	panas	hot
145	sjʊʔ	diŋin	diŋin	cold
146	krɪŋ	kəriŋ	kəriŋ	dry
147	basa	basa	basah	wet
148	brat	bərat	bərat	heavy
149	api	api	api	fire
150	bakar	bakar	bakar	to burn
151	asap	asap	asap	smoke
152	abu	abu	abu	ash
153	itam	itam	itam	black
154	putɪ	puti	putih	white
155	mera	mera	merah	red
156	kuniŋ	kuniŋ	kuniŋ	yellow
157	ijo	ijo	ijo	green
158	kciʔ	kəciʔ	kəcil	small
159	gdaŋ	bəsaʔ	bəsar	big
160	pen^{d}eʔ	pendeʔ	pendek	short (height)
161	paɲ^{j}aŋ	panjaŋ	panjaŋ	long (objects)
162	tɪpɪs	tipis	tipis	thin (materials)

163	tbal	təbal	təbal	thick
164	smpɪt	səmpit	səmpit	narrow
165	lapaŋ; lebar	lapaŋ; lebar	lebar	wide
166	sakɪt	sakit	sakit	sick, painful
167	malu; kamaluan	malu	malu	shy, ashamed
168	tuo	tuo	tua	old (people)
169	lamo	lamo	lama	old (for things)
170	baru	baru	baru	new
171	baɪʔ	baeʔ	baik	good
172	eloʔ	eloʔ; bagus	bagus	good
173	bʊrʊʔ; eder	buruʔ	buruk	bad
174	btʊl	bətul	bənar	correct, true
175	malam	malam	malam	night
176	ari	ari	hari	day
177	taʊn	taun	tahun	year
178	kapan; bilo	kapan; bilo	kapan	when?
179	ɲʊrʊʔ	siŋit	səmbuŋi	hide
180	maneʔ; ɲarake	manjat	məmanjat	climb
181	di	di	di	at

182	di dalam	di dalam	di dalam	in, inside
183	di atas	di atas	di atas	above
184	di bawa	di bawa	di bawah	below
185	(i)ko	(i)ni	ini	this
186	tu	itu	itu	that
187	dkat	dəkat	dəkat	near
188	sayʊp; jaʊ	jau	jauh	far
189	di mano	di mano	di mana	where
190	aku; sayo; awaʔ; kami	aku; sayo; kami	saya	I
191	kau; awaʔ	kau; awaʔ	kamu	you
192	dioʔ; awaʔ; ɲo	dio(ʔ)	dia	he/she
193	kami; kito	kami; kito	kita; kami	we
194	kamu	kamu	kalian	you (pl.)
195	dio(ʔ)	dio(ʔ)	məreka	they
196	apo	apo	apa	what
197	siapo sapo	siapo	siapa	who
198	laın	lain	lain	other
199	galo; ggalo	galo	səmua	all
200	samo; dŋan	samo; dŋan	dan	and

201	kalu	kalaw	kalau	if
202	macam mano	macam mano; caʔ mano	bagaimana	how?
203	daʔ; kɲoʔ	daʔ, bukan	tidak; bukan	no, not
204	rikɪn	reken	hituŋ	count
205	sekoʔ	sekoʔ	satu	one (for counting)
206	satu	satu	satu	one
207	duo	duo	dua	two
208	tigo	tigo	tiga	three
209	mpat	mpat	əmpat	four
210	limo	limo	lima	five
211	nam	nam	ənam	six
212	tujʊ	tuju	tujuh	seven
213	lapan	lapan	dəlapan	eight
214	sambilan	səmbilan	səmbilan	nine
215	sapulʊ	səpulu	səpuluh	ten
216	duo pulʊ	duo pulu	dua puluh	twenty

217	limo pulʊ	limo pulu	lima puluh	fifty
218	saratʊs	səratus	səratus	one hundred
219	saribu	səribu	seribu	one thousand

APPENDIX B: SAMPLE TEXTS

B.1. This sample text is part of a conversation between MARTJR (M) and ARNTJR (A), in which M was talking about many things. In this part, M was describing the ducks she raised and how they died. This conversation was recorded on March 9, 2006.

A : hm, apo kabar, bi?
FILL what news TRU-aunt
'Err… how are you, Auntie?'

M : kini-ko alhamdulilah kabar-tu
now-DEM.PROX Alhamduillah news-DEM.DIST
barʔ-la nampaʔe
good-EMPH seem
'Well, thank God, everything looks good at the moment.'

M : ha, tu
EXCL DEM.DIST
'Okay.'

M : aku kini-ko pɪkɪran xx
1SG now-DEM.PROX think-NMLZ xx
'I'm thinking about xx now.'

A : mm
uh-huh
'I see.'

M : ha susa, tntaŋ anu,
EXCL difficult about whachamacallit
apo… ado ŋiŋon ɪtɪʔ
what exist ACT-breed duck
'I'm sad, about err…, err… I raised ducks.'

A : ŋiŋon ɪtɪʔ
ACT-breed duck
'I see.'
[Lit. 'Raising ducks.']

M : iyo
yes
'Right.'

M : ha, ɪtɪʔ jawo sabaŋaʔ duo pʊlʊ tigo ekoʔ,
EXCL duck Java one-a.lot two ten three CLF
'Well, they are Javanese ducks, twenty three of them.'

M : ha tu
EXCL DEM.DIST
'That, it is.'

M : bukan main lagi, malam-malam kalu
not play more RED-night if
ŋʊrʊŋ-e-tu, ha, balemeʔi ka dŋan
ACT-cage-3-DEM.DIST EXCL INTR-base-APPL to with
jarɪt bʊrʊʔ-tu, no
cloth bad TRU-female
'Indeed, if I kept them at night, I put a bad cloth as the base.'

M : ha, balemeʔi dŋan jarɪt bʊrʊʔ
EXCL INTR-base-APPL with cloth bad
'I put a bad cloth in their coop.'
[repeating what she said previously]

M : suda-tu jaŋan dioʔ xx kno sjʊʔ, ha
finish-DEM.DIST do.not 3 xx undergo cold EXCL
'So that they do not xx because of the cold.'

M : awaʔ-ko daʔdo ɲla pake listrik,
1/2/3-DEM.PROX NEG.exist indeed use electricity
daʔ ɲla
NEG indeed
‘I don’t use electricity, indeed I don’t.’

M : karno aŋat listrik dŋan aŋt
because hot electricity with hot
jarɪt bʊrʊʔ-tu basalaan
cloth bad-DEM.DIST INTR-wrong-NMLZ
‘It is because the heat of electricity is different from the heat of a bad cloth.’

M : kalu aŋat listrik-tu tagsaʔ
if hot electricity-DEM.DIST PFCT.PASS-hurry
‘Electric heat is faster.’

M : kalu aŋat jarɪt bʊrʊʔ-tu daʔ
if hot cloth bad-DEM.DIST NEG
‘Heat from a bad cloth is not.’

M : ha, tu
EXCL DEM.DIST
‘That’s it.’

M : taatʊr aŋat-e-tu macam mano
PFCT.PASS-arrange hot-3-DEM.DIST sort which
dioʔ dirami ɪnᵈʊʔ-e, ha tu
3 PASS-hatch-APPL mother-3 EXCL DEM.DIST
‘The heat is like when they are hatched by their mother.’
[referring to duck eggs]

M : suda-tu, la cʊkʊp dioʔ-tu sabʊlan
finish-DEM.DIST PFCT enough 3-DEM.DIST one-month
umur-e, ha, baru dibagɪ nasi bacampʊr
age-3 EXCL new PASS-give cooked.rice INTR-mix
ka dŋan pʊr, makanan anaʔ ɪtɪʔ
o with k.o.pet.food eat-NMLZ child duck
kini-ko
now-DEM.PROX
'Then, after they were already a month old, I fed them rice mixed with *pʊr*, food for ducklings nowadays.'

M : ha, la tʊmᵇʊ bulu kasar, yo bibi
EXCL PFCT grow body.hair rough yes aunt
lpas-la ka bawa, biaʔ dioʔ… pɪkɪr ati…
release-EMPH to down so.that 3 think heart
bebas kan ka bawa-tu
free Q to down-DEM.DIST
'Well, after their rough feathers grew, I released them downstairs, so that they… I thought… they were free down there.'

M : rʊmpʊt ado
grass exist
'There was grass.'

M : ha, dioʔ-tu nᵈaʔ makan taʔtarʊʔan go
EXCL 3-DEM.DIST want eat just.any also
'They also wanted to eat whatever they liked.'

M : ta macam mano macam mano,
not.know sort which sort which
aeʔ-ko tadi dalam
water-DEM.PROX earlier deep
'I didn't know how… it was flooding.'

M : suko-la ati-la neŋoʔ dioʔ barnaŋ
like-EMPH liver-EMPH ACT-look 3 INTR-swim
‘I was happy to see them swim.’

M : nampaʔ ɲla sehat-e-tu
ACT-look indeed healthy-3-DEM.PROX
‘I could see they looked really healthy.’

M : la brat satŋa kɪlʊ-la sekoʔ
PFCT heavy one-middle kilogram-EMPH one
‘One was already about half a kilo.’

M : sabaɲaʔ tigo pʊlʊ ekoʔ galo-e-tu
one-a.lot three ten CLF all-3-DEM.DIST
‘Altogether there were thirty of them.’

M : suko ɲan ati neŋoʔ-e
like indeed liver ACT-look-3
‘I was really happy to see them.’

M : bulu kasar la tʊmᵇʊ
body.hair rough PFCT grow
‘Their wings had grown.’

M : jantan batino la tau
male female PFCT know
‘I could already differentiate the males from the females.’
[Lit. ‘I already knew the males and the females.’]

M : ta macam… macam mano,
not.know sort sort which
ta macam mano,
not.know sort which
ha, aeʔ-ko tadi yo sʊrʊt
EXCL water-DEM.PROX earlier yes fall.of.tide
‘I didn’t know how err… then the flood was over.’

M : jadi, kan dioʔ-tu mano baŋaʔ brudu,
become EMPH 3-DEM.DIST which a.lot tadpole
dioʔ makan brudu
3 eat tadpole
'So, they err… there were many tadpoles, they ate tadpoles.'

M : ha, tu
EXCL DEM.DIST
'That's it.'

M : suda makan brudu-tu, iyo,
finish eat tadpole-DEM.DIST yes
di bawa garaŋ-tu, salʊran
LOC under back.porch-DEM.DIST distribute-NMLZ
aeʔ-tu buntu
water-DEM.DIST blocked
'After eating tadpoles, well, under the back porch, the water channel was blocked.'

M : ɲʲadi aeʔ-tu daʔdo masʊʔ bak
so water-DEM.DIST NEG.exist go.in water.reservoir
bsaʔ ditʊtʊp buat sarap
big PASS-close by rubbish
'So, the water did not go into a big reservoir, it was blocked by the rubbish.'

M : ha, ɲadi dioʔ-ko tadi ladas-la
EXCL ACT-become 3-DEM.PROX earlier busy-EMPH
minum aeʔ-tu
drink water-DEM.DIST
'So, they drank a lot of water.'

M : aeʔ-tu-tu, yo maʔlʊm-la
water-DEM.DIST-DEM.DIST yes understand-EMPH
aeʔ dari atas-ko kan mᵇasʊ
water from up-DEM.PROX EMPH ACT-wash
pakean-tu, baeklin, rinso, sabʊn manᵈi,
clothes-DEM.DIST Bayclin Rinso soap bathe
samacam ado, ha
one-sort exist EXCL
'The water err... you know, the water was from the top [from the house] was for washing clothes, it was water that contained Rinso, Bayclin, soap, and many more.'

A : mabʊʔ rti-e, ŋᵍɪʔ
drunk meaning-3 yes
'Does it mean they were drunk?'

M : mabʊʔ, iyo
drunk yes
'Drunk, yes.'

M : ta macam.mano-macam.mano tadi-ko
not.know RED-how.which earlier-DEM.PROX
kiro-kiro saprapat jam suda dioʔ minum
RED-about one-per.fourth hour finish 3 drink
manᵈi aeʔ-tu tadi… sdaŋkan aeʔ cadaŋ
bathe water-DEM.DIST earlier while water serve
ʊntʊʔ dioʔ makan minum-tu la ado
for 3 eat drink-DEM.DIST PFCT exist
'I didn't know how, after about fifteen minutes, they drank and bathed in the water... while I had prepared water for them to eat and drink.'

M : maʔlum-la, ɪtɪʔ-ko,
understand-EMPH duck-DEM.PROX
dioʔ biaso di aeʔ
3 usual LOC water
'You know, ducks are usually in the water.'

M : ha, saprapat jam suda dioʔ minum
EXCL one-per.four hour finish 3 drink
aeʔ-tu tadi, no, ŋlpar, no
water-DEM.DIST earlier TRU-female ACT-flutter TRU-female
'Well, fifteen minutes after they drank the water, they fluttered.'

A : hmm
uh-huh
'I see.'

M : daʔ tlap ɲla disrbo apo
NEG can indeed PASS-completely what
'We could do nothing.'

M : mano dioʔ-ko tadi minum aeʔ apo-ko
which 3-DEM.PROX earlier drink water what-DEM.PROX
tadi aeʔ bʊsʊʔ
earlier water smelly
'Moreover, they drank stinky water.'

M : kan aeʔ…
EMPH water
'The water was…'
[interrupted by A]

A : palim^{b}ahan
ABST-waste-CIRC
'Garbage dump.'

M : ha, satu aeʔ palimᵇahan tadi
EXCL one water ABST-waste-CIRC earlier
‘Right, first, it was garbage dump water.’

M : naŋ kaduo baru sʊrʊt diampʊ
REL NUM-two new fall.of.tide PASS-a.lot
‘The second one was water from the rest of the flood.’

M : apo lagi
what more
‘It was even more [dangerous].’
[referring to the water from the flood.]

M : awaʔ mᵇagi makan sakɲaʔ-kɲaŋ-e nasi,
1/2/3 ACT-give eat one-RED-sated-3 cooked.rice
pʊr, ddaʔ
k.o.pet.food by-product
‘I fed them as full as possible: rice, *pur*, and by-products.’

M : daʔ tlap ɲla diubaʔ-ubati lagi
NEG can indeed PASS-PARTRED-medicine-APPL more
‘They couldn’t be cured anymore.’

M : ŋlpar sarmpaʔ mpaʔ blas ekoʔ
ACT-flutter together four teen CLF
sagdaŋ-gdaŋ btɪs
one-PARTRED-big calf
‘Fourteen of them died at once, they were as big as a calf.’

M : la tʊmᵇʊ bulu kasar
PFCT grow body.hair rough
‘Their wings had grown.’

A : mati, ŋᵍɪʔ
dead yes
'They died?'

M : mati galo-e bnar ɲla
dead all-3 right indeed
'Right, all were dead.'

B.2. This sample text is part of a conversation between MARTJR (M) and YANTJR (Y), in which M was talking about different topics. In this part, she was telling Y how to go fishing. This conversation was recorded on October 5, 2002.

M : yo, partamo kali kito kalu mancɪŋ di dano
yes first time 1 if ACT-fishing.rod LOC lake
darat-ko, yaŋ kito siapkan-tu krbʊʔ
land-DEM.PROX REL 1 prepare-APPL-DEM.DIST container
'Well, if we want to go fishing in the lake, the first thing we prepare is *kerbuq.*'

M : krbʊʔ-tu labu.kayu
container-DEM.DIST k.o.squash
'*Kerbuq* is made of a kind of squash.'
[Lit. '*Kerbuq'* is a kind of squash.']

M : labu.kayu… ado labu.kayu situ
k.o.squash exist k.o.squash there
'A kind of squash… There is a kind of squash there.'

M : ha, labu.kayu-tu-tu bada ompan,
EXCL k.o.squash-DEM.DIST-DEM.DIST container bait
'Well, that kind of squash is a container for bait.'

M : bada cacɪŋ… gilo-tu, cacɪŋ oroŋ
container worm crazy-DEM.DIST worm k.o.worm
naŋ ggdaŋ-ko-tu
REL PARTRED-big-DEM.PROX-DEM.DIST
'It is a container for mad worms, a kind of worm which is this big.'

Y : h-m
uh-huh
'I see.'

M : ha, jadi diam^{b}ɪʔ labu-tu tadi,
EXCL so PASS-take squash-DEM.DIST earlier
kito rapati-la
1 close-APPL-EMPH
'Well, we take the squash and we squeezen it.'

M : suda-tu kito buaŋ isi labu-tu
finish-DEM.DIST 1 throw.away content squash-DEM.DIST
tadi, edaʔ, dijmur
earlier Q PASS-sunbathe
'After that, we throw away the contents of the squash, okay, and dry it.'

M : sakitar samiŋ^{g}u baru kito bole m^{b}uat
one-about one-week new 1 may ACT-make
bada cacɪŋ tadi
container worm earlier
'After about a week, we may make it a worm container.'

M : kalu daʔdo krbʊʔ-tu, labu-tu
if NEG.exist container-DEM.DIST squash-DEM.DIST
tadi kan, dibuat krbʊʔ
earlier Q PASS-make container
'If there is no *krbuq,* okay, the squash is made into a *krbuq*.'

M : kalu misal-ɲo emᵇer, cacɪŋ-tu mati
if example-3 pail worm-DEM.DIST dead
'If we use a bucket, the worms will die.'

M : a… jadi krbʊʔ-tu-la buat bada
EXCL so container-DEM.DIST-EMPH for container
cacɪŋ tadi
worm earlier
'Well… so, we use *krbuq* as a worm container.'

M : krbʊʔ, paraŋ, kito siapi… saŋkiʔ, xx,
container machete 1 prepare-APPL k.o.bag xx
anu… bʊlʊ, ha, bʊlʊ, tali pancɪŋ,
whatchamacallit bamboo EXCL bamboo rope fishing.rod
dan mato pancɪŋ, batu-ɲo, palampʊŋ
and eye fishing.rod stone-3 float
'We prepare a *krbuq* and a short machete… a plastic bag, xx, whatchamacallit…. a bamboo, right, a bamboo, a fishing line, and a fishing hook, the stone, and the float.'

M : paɲʲaŋ pancɪŋ ibuʔ… sayo-tu-kan daʔdo
long fishing.rod mother 1SG-DEM.DIST.EMPH NEG.exist
pulaʔ brapo paɲʲaŋ kalu kito mancɪŋ
PART how.much long if 1 ACT-fishing.rod
aeʔ dalam
water deep
'The length of my fishing rod… is not so long if I go fishing during the rising tides.'

M : mancɪŋ aeʔ dalam laɪn baʊr-ɲo,
ACT-fishing.rod water deep other handle-3
mancɪŋ aeʔ sʊrʊt laɪn baʊr-ɲo
ACT-fishing.rod water fall.of.tide other handle-3
'Fishing during the rising tides and during the falling tides need different kinds of fishing rods.

M : kalu mancŋ aeʔ dalam,
if ACT-fishing.rod water deep
pake prau-tu, di dalam bʊmᵇʊn
use canoe-DEM.DIST LOC inside scrub
'If we go fishing during the rising tides, we use a boat, on among the underbrush.'

M : itu kalu… mancıŋ ikan batrʊŋ,
DEM.DIST if ACT-fishing.rod fish k.o.fish
ikan laıs
fish k.o.fish
'That is when we… go fishing for *baterung* and *lais.*'

M : a, itu, kalu daera kami siko, kan
EXCL DEM.DIST if area 1 here Q
di dano-tu, di bawa-bawa bʊmᵇʊn-tu
LOC lake-DEM.DIST LOC RED-under scrub-DEM.DIST
'That's the way it is in our area here, okay, in the lake, among underbrush scrubs.'

M : ha itu, batrʊŋ samo laıs tadi ikan-ɲo
EXCL DEM.DIST k.o.fish with k.o.fish earlier fish-3
'Okay, that is when the fish are *baterung* and *lais.*'

M : galaʔ go dapat ikan patın
often also get fish k.o.fish
'We also often get *patin*.'

M : ha, itu
EXCL DEM.DIST
'Well, that's it.'

M : jadi edaʔ, kito siapkan tadi alat
so NEG 1 prepare-APPL earlier tool
mancıŋ tadi
ACT-fishing.rod earlier
'So, we prepare those fishing tools.'

M : partamo krbʊʔ, yaŋ kaduo kito tadi
first container REL NUM-two 1 earlier
ŋali-la cacɪŋ di tana,
ACT-dig-EMPH worm LOC soil
ʊntʊʔ ompan-ɲo, yo daʔ?
for bait-3 yes NEG
'First is *krbuq,* and then we dig the soil for worms as bait.'

M : ha, ŋali cacɪŋ daʔdo brapo lamo-ɲo
EXCL ACT-dig worm NEG.exist how.much long.time-3
'Well, digging for worms is not very long.'

M : kiro-kiro la dapat cacɪŋ di,
RED-about PFCT get worm earlier
kito baraŋkat-la
1 leave.for-EMPH
'After we get the worms, we go.'

M : kalu kito baprau, paŋayu disiapi,
if 1 INTR-canoe, INSTR-row PASS-prepare-APPL
panim^{b}o
INSTR-dipper
'If we go on a boat, we prepare an oar and a dipper.'

M : paru-tu paɲ^{j}aŋ-ɲo tigo meter
canoe-DEM.DIST long-3 three meter
'The length of the canoe is three meters.'

M : ha, tu
EXCL DEM.DIST
'Well, that's it.'

M : ɲʲadi kito tadi kan suda xx…
so 1 earlier Q finish xx
pancɪŋ-tu tali-e sakitaran…
fishing.rod-DEM.DIST rope-3 one-about-NMLZ
sadpo lbɪ dikit-la
one-cubit more a.little-EMPH
‘So, after we xx… the fishing rod is about… one armspan and more.’

M : pake palampʊŋ
use float
‘We use a float.’

M : a, tu
EXCL DEM.DIST
‘That, it is.’

M : kito ompan-la kagi pancɪŋ-tu
1 bait-EMPH later fishing.rod-DEM.DIST
kan, dŋan cacɪŋ, cacɪŋ gilo-tu tadi
Q with worm worm crazy-DEM.DIST earlier
‘We put bait on the fishing rod, using a worm, a mad worm.’

Y : hm
uh-huh
‘Uh-huh.’

M : ha itu, kalu kito mancɪŋ batrʊŋ…
EXCL DEM.DIST if 1 ACT-fishing.rod k.o.fish
‘That is when we fish for *baterung*.’

M : teŋoʔ kalu situ misal-ɲo baɲaʔ tilap-ɲo,
look if there example-3 a.lot bubble-3
kito lansʊŋ-la mancɪŋ tadi
1 direct-EMPH ACT-fishing.rod earlier
'See if there are a lot of bubbles [produced by fish] there, we do the fishing right away.'

M : ha, kadaŋ-tu kalu ado rzki kito
EXCL sometimes-DEM.DIST if exist livelihood 1
lansʊŋ dapat-la-tu, batrʊŋ
direct get-EMPH-DEM.DIST k.o.fish
salelebar-ko
one-PARTRED-wide-DEM.DIST
'Sometimes if we are lucky, we get [something] right away, like a *baterung* which is this wide.'

M : laɪs
k.o.fish
'*Lais.*'

M : ha, itu
EXCL DEM.DIST
'That, it is.'

M : tu kalu kito mancɪŋ di dano
DEM.DIST if 1 ACT-fishing.rod LOC lake
'That's when we do fishing in a lake.'

M : ha, ɲʲadi kan kagiʔ-tu…
EXCL so EMPH later-DEM.DIST
kadaŋ-kadaŋ-tu dapat-la mpat
RED-sometimes-DEM.DIST get-EMPH four
kilu ikan-tu
kilogram fish-DEM.DIST
'Well, so later… sometimes we get four kilograms of fish.'

M : kadaŋ tigo kılʊ
sometimes three kilogram
'Sometimes three kilograms.'

M : pgi-tu jam satu-la, jam satu siaŋ
go-DEM.DIST hour one-EMPH hour one noon
'We leave at about one, about one during the day.'

M : balıʔ-ɲo jam limo sore
return-3 hour five afternoon
'We return at five in the afternoon.'

M : ha, itu kalu kito mancıŋ batrʊŋ
EXCL DEM.DIST if 1 ACT-fishing.rod k.o.fish
'That's if we go fishing for *baterung.*'

M : laın lagi dŋan mancıŋ bataŋari
other more with ACT-fishing.rod Batanghari
'It's different from fishing at Batanghari.'

M : kalu mancıŋ bataŋari, ompan-ɲo karŋᵍo
if ACT-fishing.rod Batanghari bait-3 large.red.ant
'If we go fishing at Batanghari, the bait is *kerenggo*.'

M : mncari ompan-tu agaʔ paya,
ACT-seek bait-DEM.DIST somewhat difficult
jaʊ-jaʊ ɲan
RED-far very
'To find the bait is a little difficult because it's very far.'
[referring to *kerenggo*]

Y : hm
uh-huh
'I see.'

M : a, tu
EXCL DEM.DIST
'That's it.'

M : kalu mancɪŋ bataŋari memaŋ
if ACT-fishing.rod Batanghari indeed
bsaʔ-bsaʔ ikan-ɲo
RED-big fish-3
'If we go fishing at Batanghari, the fish are really big.'

M : ha, tu
EXCL DEM.DIST
'That's it.'

M : kalu kito di darat tadi,
if 1 LOC land earlier
kalu aeʔ sʊrʊt laɪn lagi stel-ɲo
if water fall.of.tide other more set-3
'If we are in the land area, if it is during the falling tides, we need a different style.'

M : baʊr-ɲo paɲʲaŋ sampe mpat meter
handle-3 long reach four meter
'The fishing tool is long, it's about four meters.'

M : ha, itu di suŋe-suŋe, kan?
EXCL DEM.DIST LOC RED-river Q
'Well, that is in rivers, right?'

Y : h-m
uh-huh
'I see.'

M : ikan-ɲo memaŋ bsaʔ-bsaʔ
fish-3 indeed RED-big
'The fish are indeed big.'

M : ompan-ɲo cacɪŋ jugo
bait-3 worm also
'The bait is also worms.'

Y : samo, yo?
same yes
'The same, right?'

M : iyo, samo bae
yes, same just
'Yes, just the same.'

M : cacɪŋ tadi-la
worm earlier-EMPH
'The worms.'

M : pokoʔ-ɲo makanan ikan-ko
main-3 eat-NMLZ fish-DEM.PROX
memang paya lawan cacɪŋ-ko-la
indeed difficult opponent worm-DEM.PROX-EMPH
'The point is that nothing beats worms as food for fish.'

M : ompan-ompan laɪn-tu dimakan, dimakan-la,
RED-bait other-DEM.DIST PASS-eat PASS-eat-EMPH
daʔ saprti cacɪŋ
NEG like worm
'They eat other kinds of bait, but they do not eat them like they eat worms.'

M : a, itu, kan
EXCL that Q
'That it is, you know.'

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