

The Verb Phrase Construction in Malay: The Minimalist Program

Kartini Abd Wahab^{1*}, Rogayah A Razak² and Fazal Mohamed Mohamed Sultan¹

¹*School of Malay Language, Literature and Culture Studies, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor, Malaysia*

²*Speech Sciences Program, School of Rehabilitational Sciences, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, 50300 Kuala Lumpur, Malaysia*

ABSTRACT

Affixes and lexical verbs in Malay occupy the same head position in the verb phrase (VP). This raises the question of how is it that these two different morphemes with different syntactic categories - one a functional head and the other a lexical head - could occupy the same head position in a verb phrase of a sentence in Malay. This article will attempt to shed some light on this question. In this article, we will analyse the verb phrase structure in Malay using the Minimalist Program Approach. Based on Larson (1988) and Chomsky (1995), we will posit the VP shell hypothesis in which the verb phrase structure in Malay has two layers of the VP: one is the VP and the other is a small *v* (little verb phrase *vP*). Based on these two layers of the verb phrase, this discussion will revolve around the notion that each of these two layers has its own head and projections in their own VP structures. The head position of the VP node is occupied by the lexical verb while the affix is based-generated at the head *v* of the *vP*, which is a functional category. We will use, as examples, Malay active and passive sentences and demonstrate how this two-layer analysis could adequately describe Malay sentences. We assume that each sentence has its own functional heads which are used to hold affixes: active or passive affixes.

Keywords: Active, functional category, little verb phrase, Malay, Minimalist Program, passive, verb phrase structure, VP shell

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E-mail addresses:

kartini@ukm.edu.my (Kartini Abd Wahab),

rogayah@ukm.edu.my (Rogayah A Razak),

fazal@ukm.edu.my (Fazal Mohamed Mohamed Sultan)

* Corresponding author

INTRODUCTION

The verb phrase (VP) is a syntactic category which function as a predicate in a sentence. In sentence (1a and 1b), the noun phrase subject *nelayan* 'fisherman' and *semua orang* 'everyone' is followed by the

predicate: *menjumpai rakit keselamatan* ‘found the life raft’ and *berdoa* ‘prayed’ respectively.

- (1) a. *Nelayan* [_{VP} *menjumpai rakit keselamatan*].
fisherman affix-find raft safety
‘The fisherman found the life raft’.
- b. *Semua orang* [_{VP} *berdoa*].
all people affix-pray
‘Everyone prayed’.

The verbs *menjumpai* ‘AFFIX-found’ and *berdoa* ‘AFFIX-pray’ are important elements in the VPs. The verb *menjumpai* ‘AFFIX-found’ is a transitive verb as it is followed by the noun phrase *rakit keselamatan* ‘life raft’. The verb *berdoa* ‘AFFIX-pray’ on the other hand is an intransitive verb as it does not have any noun phrase following it.

In Malay sentences, the VP can be preceded by the ASPECT such as *pernah* ‘have’, *sudah* ‘have’, *telah* ‘have’, *sedang* ‘in progress’; the modal auxiliary such as *akan* ‘will’, *hendak* ‘want’, *mahu* ‘want’, *ingin* ‘want’, *harus* ‘should’, *mesti* ‘must’, *dapat* ‘can’, *boleh* ‘can’; and negation such as *tidak* ‘not’ and *bukan* ‘not’. Linguists such as Nik Safiah et al. (1978) and Mashudi (1991) assumed that the auxiliaries belong to the verb phrase. However, Ramli (1995) argued that the auxiliaries do not belong to the VP node as it is a separate element from the full verbs. This is proven using the yes/no question construction i.e. *Mahukah anda minum kopi?* ‘Do you want to drink coffee?’ in which the auxiliary *mahu* ‘want’ is fronted leaving the verb *minum* ‘drink’ behind in the predicate. The separation between the auxiliary and the verb gives impetus to

the creation of an inflection (INFL) node. According to Ramli (1995), the auxiliaries and the negation are elements which occur in the position between the NP subject and the verb (V) of the VP in a sentence. For example, in sentence (2), the verbs can be preceded by the aspect *telah* ‘have’/*hendak* ‘want’ in (2a); the modal auxiliaries *mesti* ‘must’/ *harus* ‘should’ and negation *tidak* ‘not’/*belum* ‘not yet’ (2c).

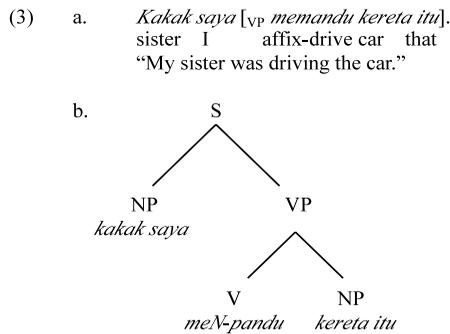
- (2) a. *Salmah telah/hendak pergi ke perpustakaan.*
Salmah have/want go to library
‘Salmah have gone /want to go to the library’.
- b. *Semua pelajar mesti/harus berusaha gigih.*
All students must/ should affix-work hard
All students must/should strive to work hard.’
- c. *Amin belum/tidak menyiapkan tugas itu.*
Amin NEG /NEG affix-complete-affix assignment the.
‘Amin has not completed/did not complete the assignment.’

The verb in the VP could be a bare verb i.e. a verb which does not have affixes on it or it could also be a derived verb i.e. a verb which has undergone affixation. In (2a) for example, the VP has a bare verb *pergi* ‘go’ without any affixation attached to it. The

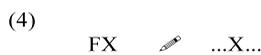
other two verbs have affixation on them for example the verb *berusaha* in (2b) has the prefix *ber-* and the verb *menyiapkan* in (2c) has the prefix *meN-*. The derived verbs in the VPs are a point of contention and will be discussed in the next section.

THE VERB PHRASE CONSTRUCTION IN MALAY

Previous discussions in Malay grammar described the affixes and the verb as sharing the same head position in the VP (for e.g. Abdul Hamid, 1992; Nik Safiah et al., 2008). In (3a) and whose structure is in (3b), the prefix *meN-* and the verb *pandu* ‘drive’ is base generated in the same head position V in the VP.

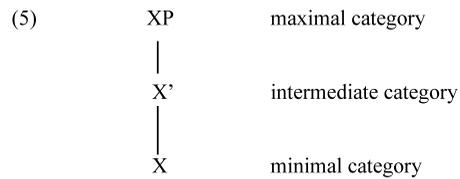


In the VP structure (3b), the prefix *meN-* and the root word *pandu* ‘drive’ are combined to form into a verb phrase which is the nucleus of the S node dominating it. One issue here is the status of the prefix *meN-*. In the Government & Binding approach (Chomsky, 1981), specifically in the X-Bar Theory, it is assumed that each phrase will have a head. This is stated in the following template:

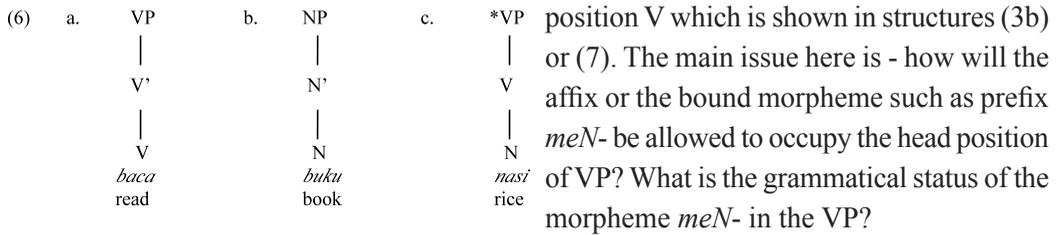


The template in (4) states that each phrase XP must contain one head (X) where X represents the same word category as the phrase dominating it. X has the value of (N, V, Adj, or Prep). All types of phrases: that is noun phrase (NP), verb phrase (VP), adjective phrase (AP) and preposition phrase (PrepP) will each have a head whose value is identical to the value of the phrase. Therefore, an NP will have an N as its head (Rogayah, 2003).

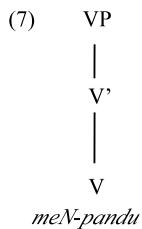
The X-bar template has a three-layered structure which consists of (i) a head category (X), (ii) the intermediate category (X’) and the maximal projection (X’’/XP) as shown in (5).



Based on the template in (5), the head X is the minimal category and can be filled by a lexical category, for example a noun and a non-lexical category such as the auxiliaries, aspects, negation etc. The X’ is an intermediate node which is used to place the adjunct while the XP node is the maximal projection node i.e. the phrasal level. Based on this X-bar system, the VP and NP will have the following structures. Structures (6a) and (6b) are grammatical whereas (6c) is not grammatical as the head of the VP is a noun which differs from the category of the maximal projection VP.



We present again (3b) the construction VP which is as follows:



Based on the X-bar representation, the prefix *meN-* is a bound morpheme. Bound morphemes are morphemes that are not able to occur on their own and need to be combined with a free morpheme (Ramli et al., 1997, p.162). The affixes as bound morphemes do not have a lexical meaning, instead they carry functional/grammatical meaning. This is distinct from the free morphemes, lexical items or content words such as verbs *pandu* 'drive', *pukul* 'hit', *baca* 'read', *jual* 'sell', etc. The affixes which are bound morphemes need to be combined with a free morpheme in order to form a derived form, e.g. *meN-* + *baca* 'read' → *membaca*; *meN-* + *pukul* 'hit' → *memukul* 'affix-hit', etc.

Even though the prefix and the verb are considered as two different morphemes, previous studies have not pointed out the differences between these two elements in the VP of sentences in Malay. In fact, both morphemes are base-generated at the

In principle, determination of a head for a phrasal construction is important because each phrasal level is the projection of the head with the same category as the phrase dominating it. Therefore, for the VP construction in (3b) or (7), the status of the *meN-* morpheme which is occupying the head position of the VP is still not clear, whether it is a type of independent head or it is a head in the VP. So far, no known study has examined this issue and thus, it is timely for this article to explicate this using the Minimalist Program.

This article will argue that affixation and the base-generated verbs are two different heads with different syntactic category. These two heads occupy different head positions in the VP. We contend that the VP in Malay has two separate layers of VP: one is the VP and the other is the small verb phrase or written as 'vP'. Based on this analysis, we will show that both phrasal nodes have its own head and projection in its own shell in the VP.

MINIMALIST PROGRAM

The Minimalist Program (MP) (Chomsky, 1995) is a major line of inquiry which has developed within the generative grammar since the Government & Binding (GB) theory (Chomsky, 1981). Chomsky presented MP as a programme and not as a theory. The

MP has a few important characteristics which differ from the previous generative grammar theory. First, the programme emphasizes on an economical description of the grammar in that it motivates the economy of its representation and derivation. An implementation of the concept of economy of representation can be seen from its representation of language. Figure (8) shows the representation of language which comprises the lexicon, the Merge operation, the Logical Form and the Phonetic Form. The Logical Form and the Phonetic Form are universal components which are found in all natural languages (Kartini, 2013, p. 40). These two levels of representations are connected to the Intentional Conceptual System; that is a system which handles the semantic interpretation of the language and the Articulatory Perception System which handles the interpretation of sounds in the language. Note that the language representation in Figure (8) does not contain the previous levels of representations in GB that is the Deep Structure and the Surface Structure. In other words, these two levels of representations which play an important role in the derivation of sentences since the Syntactic Structures model (Chomsky, 1957) are no longer posited in the program.

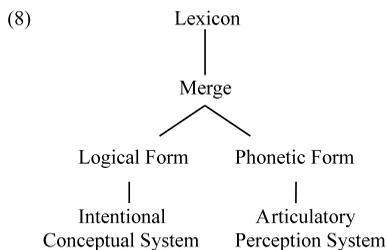


Figure.1: The Structure of Grammar

The economy of derivation is a concept which states that each derivation of a sentence must occur in the most economical frame and is syntactically motivated. In relation to this, Chomsky (1995, 2000, 2001) explained that movement is triggered by the need for an uninterpretable strong feature checking. The strong uninterpretable feature is checked or deleted so that the representation of a derivation could converge at both Logical Form and Phonetic Form. An example of the strong uninterpretable feature in Malay is the uninterpretable verbal feature [uV] and the Extended Projection Principle (EPP) feature of the NP [uN] (Note: ‘u’ represents uninterpretable). Aside from the strong uninterpretable feature, there are also the interpretable features. For example, verbs such as *beli* ‘buy’, *makan* ‘eat’ *tendang* ‘kick’ has the verb feature [iV]; nouns such as Malaysia, *universiti* ‘university’ and *buku* ‘book’ has the Noun Feature [iN]; preposition such as *dari* ‘from’ and *ke* ‘towards’ has the Preposition feature [iP], the question words such as *apa* ‘what’, *bila* ‘when’ and *siapa* ‘who’ has the feature [iWH]. The features of [iV] on verbs, the feature [iN] for nouns, the feature Preposition [iP] for preposition and the feature WH [iWH] for questions are all interpretable features. (Note: ‘i’ refers to interpretable.)

In terms of the construction of the phrase structure, the Minimalist Program introduced the notion of bare phrase structure. The bare phrase structure posits a phrase structure which is derivative and recursive. Based on this system, each

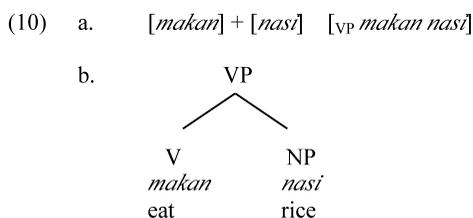
phrasal unit is built up from a step by step derivation in which the phrase unit is built based on a bottom up fashion and from right to left. The derivation will go through the Merge operation which is divided into an external merge and an internal merge. The external merge is a merging process which will build the basic structures of the phrase. This process will involve the merge of two independent lexical items which are taken from the lexical array in the lexicon to form a new phrasal unit. This process is recursively done or repeated until all lexical items in the lexical array of a sentence is fully used up in the derivation. The internal merge refers to the syntactic movements involving a merge between one syntactic element with another syntactic element to produce a newly formed structure.

In the Minimalist Program, the derivation of a sentence is based on elements which are taken from the lexical array. The lexical array is a set of lexical items which are taken from the lexicon and then used to complete the derivation of a sentence. Each sentence has its own lexical array as shown in (9) below.

- (9) a. *Mereka menjual durian di pasar malam.*
 they affix-sell duarian at market night
 "They sell durians at the night market."
 b. lexical array : [*mereka, men-, jual, durian, di, pasar, malam*]

Sentence (9a) has a lexical array as in (9b) which is an unorganised list of lexical items. This lexical array will prepare the lexical items which are words that will be used in the external merge process during the formation of the base phrase unit.

At the same time, the bare phrase structure used binary branching in the formation of the construction of the phrase. The configuration structure in Figure (10) below shows the scheme of the bare phrase structure which focuses on binary branching during the external merge process.



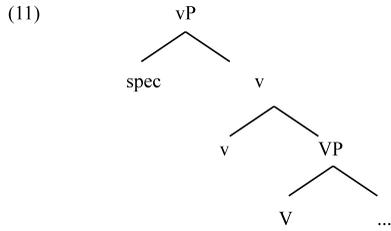
Based on the structure in (10a), two lexical items i.e. *makan* ‘eat’ and *nasi* ‘rice’ are merged through the external merge process to form the VP phrase which is headed by the verb *makan* ‘eat’. The configuration (2b) shows the merged verb *makan* ‘eat’ and the noun phrase *nasi* ‘rice’ to form the VP *makan nasi* ‘eat rice’.

We have briefly introduced the Minimalist Program. We will now proceed with the analysis of the VP construction in Malay sentences.

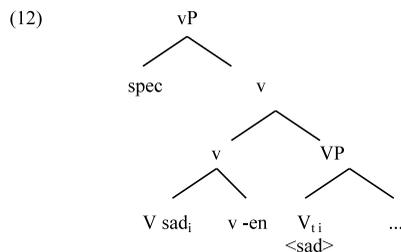
ANALYSIS OF THE VERB PHRASE STRUCTURE IN MALAY SENTENCES

As mentioned earlier, we assume that the affix and the lexical verb have two different heads. We assume that the VP construction has two layers of VP and each of these layers have their own heads and their own maximal projections. The small v analysis is adapted from Chomsky (1995) and Larson (1988) which argued for the VP shell analysis. The Minimalist Program assumes that the verb

phrase has two layers: the VP node and the vP (small vp) node as represented in the figure below.

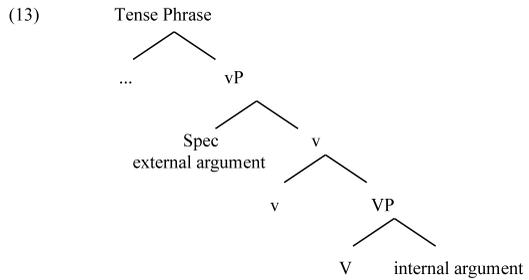


Based on the configuration in (11), the verb phrase structure consists of two types of verb phrase i.e. (i) VP which is headed by the lexical verb (V) and (ii) vP which is headed by the head v of the vP. The projection of the VP has its own specifier position and this node is adjoined to the specifier position of the highest VP node. The head of the small v is a functional category type with abstract characteristics. Radford (2004) stated that the position of the small v contains the abstract verbal suffix which is assumed to merge with the lexical verb from the VP. For example, the suffix *-en* for the word *sadden* is an abstract morpheme which is in the vP and will merge through the internal merge with the adjective *sad* at the head position of the VP and will subsequently form a causative verb *sadden* as shown in the configuration (12).



One important implication from the introduction of this VP node is that the

internal and external argument is assumed to be base-generated in the phrase structure. According to Chomsky (1995), the position of the specifier of the vP is the position where the external argument of the transitive and causative verb is placed or base-generated in the phrase structure. The internal argument, on the other hand, is base generated outside of the vP, that is in the VP where the internal argument is the complement to the lexical verb. The position of both arguments is stipulated in (13).

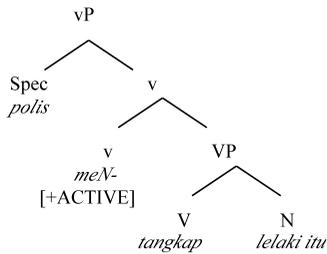


Based on the configuration in (13), the internal argument is under the VP node whereas the external argument is under the vP node. In other words, the internal argument is the argument to the lexical verb in the VP and the external argument is the argument to the small v head under the vP node.

We argued that the VP structure in Malay sentences has a two-layer verb phrase structure which is represented by the VP node and the vP node respectively. Based on this two-layer verb phrase, both phrasal nodes have its own head and maximal projections. The position of the VP node is filled by the verb as a lexical category while the bound morpheme or affixes, which are functional category elements, are

base-generated in the head position of the vP. Sentence (14a) is generated based on the lexical array (14b) while the sentence (14c) shows the VP construction having a two-layer format.

- 14) a. *Polis menangkap lelaki itu.*
 police affix-catch man that
 "The police caught the man."
 b. lexical array : [*polis, meN-, tangkap, lelaki, itu*]
 c.



The configuration in (14) shows the binary nature of the VP structure. There are two layers in the verb phrase which is represented by the VP node and the vP node. Through this two-layer VP, the affix or bound morpheme and the verb are analysed as occupying the respective head positions and have their own different projections in the sentence. The head position of the VP is occupied by the verb *tangkap* 'catch' while the head position of the vP node is occupied by the affix *meN-*. In addition, this article also claims that the bound morpheme *meN-* and the verb *tangkap* 'catch' are two different heads with different categories. The morpheme *meN-* is a functional category as it carries grammatical meaning and is a bound morpheme while the verb *tangkap* 'catch' is a lexical category unit and is a content word which carries meaning. This analysis is succinct in capturing the issue of

the overlapping structures of the affix verbs and the lexical verb which is postulated in previous pre-MP analyses. In other words, this analysis is able to explain the status of the bound morpheme as a functional head occupying the head of the vP node which differs from the status of the head of the VP node which is occupied by the bare lexical verb.

In terms of the argument structure of the verb *tangkap* 'catch', the NP *lelaki itu* 'the man' is an internal argument as it is subcategorised by the verb *tangkap* 'catch' and is assigned the theta-role of theme (14c) while the NP *polis* 'police' is the external argument which is base-generated in the specifier position of the vP and whose theta role is agent. One important characteristics of the VP in configuration (14c) is that the morpheme *meN-* is a functional head and has the feature [+/- ACTIVE]. The existence of the feature [+PASSIVE] is an inherent feature of the morpheme *meN-* which carries the active meaning or is used to generate transitive active verbs as in 14c.

At the same time, the analysis of the VP structure based on the Minimalist Program has contributed significantly to the derivation of passive sentence structures in Malay. In previous grammatical analyses, grammarians described passive sentences as having been derived from active sentences (Lufti, 1971; Abdul Hamid, 1992; Nik Safiah et al., 2008). In previous analyses, a passive sentence is derived when the passive transformation rule is applied to the active sentence at deep structure as in (15a) and resulted in a passive sentence being generated at the surface structure as in (15b).

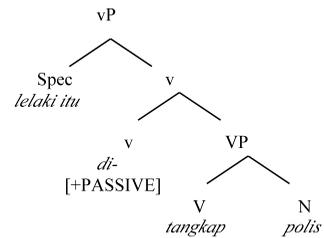
- (15) a. *Polis menangkap lelaki itu.* Deep Structure
 "Police caught the man."
 b. *Lelaki itu ditangkap (oleh) polis.* Surface Structure
 "The man was caught by the police."

However, under the Minimalist Program, there are a few issues which arise out of the passive construction formation particularly with the *di-* passives. One issue is how could the PrepP *oleh* 'by' be allowed to appear in a passive structure? In the case of the passive *di-*, the passive transformation has to produce a new node, an *oleh* 'by' PrepP node. Chomsky (1957) stated that the transformation rule behaves in an ad hoc manner and it (the transformation rule) is postulated just to cater for the passive type sentences. This has resulted in numerous transformational rules to account for the numerous sentence types. In other words, the transformation at this level is assumed to have a new node. Aside from this, the transformational rule passive was not syntactically motivated to trigger off the movement of the NP object. Mashudi (1991) was of the opinion that the passive transformation rule is too independent and is not being constrained due to the fact that this rule is able to generate any kind of structure via the application of the rule. For example, sentences which have the derived verbs with prefix *meN-* is transformed into a passive sentence by converting the prefix *meN-* to prefix *di-*.

In line with the above, we will show how the verb phrase structure based on the Minimalist Program is able to adequately explicate the formation of the passive sentence in Malay. As shown in configuration

(14c), the verb phrase structure has the VP node and the vP node. The head of the vP node is occupied by the bound morpheme *meN-* which has the feature [+ACTIVE]. Therefore, the same verb phrase structure could be applied to explain the VP structure in passive sentences. Consider sentence 16.

- (16) a. *Lelaki itu ditangkap polis.*
 man that affix-catch police
 "The man was caught by the police."
 b. lexical array : [*polis, di-, tangkap, lelaki, itu*]
 c.

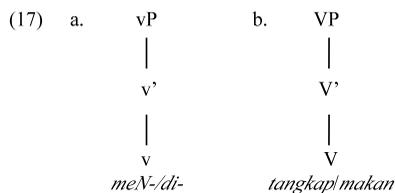


(16a) has the lexical array as in (16b). Note the different lexical array between sentence (16) and sentence (14) with the presence of the morpheme affix *di-* and the morpheme *meN-* which occupied the head position of the vP node. Based on the configuration (16b), the *di-* morpheme and the verb *tangkap* 'catch' respectively occupied different head positions: the verb *tangkap* 'catch' is at the head position of the VP i.e. the V node while morpheme *di-* occupied the head position of the v. Note that the morpheme *di-* is a functional head having the feature [+PASSIVE] as its inherent feature.

Based on this analysis, the formation of the passive sentence no longer requires the connection between sentences at deep and surface structures. This is in contrast with the previous analyses of the derivation of

passive sentences in generative grammar, particularly the Government and Binding model, in which the derivation of the passive sentence involved changes at two different levels of representation i.e. deep structure and surface structure. In our analysis, the derivation of active and passive sentences can be determined from the element which occupies the head position in the vP node. If the morpheme affix *di-* which has the feature [+PASSIVE] occupies the head v then the derivation is that of a passive sentence. Likewise, if the head position of the vP is occupied by the morpheme affix *meN-* with the [+ACTIVE] feature, then the derivation is that of an active sentence.

From the discussion above, we can summarise that the bound morpheme or affixes such as the morpheme *meN-* and *di-* are functional head categories and heads of the vP node while the lexical verbs such as *tangkap* ‘catch’ or *makan* ‘eat’ are lexical head categories which is the lexical head V of the VP. Both head category structures are represented in Figure (17).



The flexibility of the affixes in (17a) and the dichotomy between lexical and functional heads as in (17) epitomises the economy of derivation as espoused in the Minimalist Program.

CONCLUSION

This article has examined the verb phrase construction in Malay sentences based on the Minimalist Program. The argumentation has been to posit that the verb phrase construction in Malay sentences consist of two layers; one is the VP node and the other the vP node. Based on this two-layered structure VP, each verb phrase nodes has its own head and maximal projections. Both heads i.e. the bound morpheme head and the lexical verb head were identified as the functional head category and the lexical head category respectively. This line of inquiry has been applied to the Malay verb phrase data of active and passive sentences. In active sentences, the head position V of the VP structure is occupied by the bare lexical verb (without affixation) while the functional head with the feature [+ACTIVE] is in the head position of the small v node. Likewise, the verb phrase structure in passive sentences has the head position V of the VP being occupied by the lexical verb while the head position of the small v of the vP is occupied by the *di-* morpheme which has the feature [+PASSIVE]. Ultimately, it is suggested that the head of the vP has both the *meN-/di-* affixes and will trigger the derivation of relevant active or passive sentences.

In conclusion, the Minimalist Program has been instrumental in achieving the explanatory adequacy of the description of the Malay verb phrase structure. It is apparent that the Minimalist Program has the capability to be further harnessed in

the description of more complex syntactic structures in Malay, particularly the controversial ones. Equally important is that the Malay data could contribute to the cross-linguistic data of all languages in efforts to develop the universals of human language.

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