

# John Benjamins Publishing Company



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# Covert word classes

## Seeking your own syntax in Tukang Besi

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Examining syntactic categories in Tukang Besi, an Austronesian language of Indonesia, we find that there are additions to the traditional fixed categories. In addition to the firmly definable categories of nouns and verbs, there are many lexical items that are precategorial: they may be used, without derivation, with either nominal morphosyntax or verbal morphosyntax. Additionally, there is a class of ‘adjectives’ that display odd behaviour in terms of morphological markedness reversals and functional use, and which, under closer examination, turn out to have a variable categorial status, dependent on the structural position in which they are used, obligatorily appearing as part of the head of their phrase, V in a VP and N in an NP. Morphosyntactic tests for the different claims are given and discussed.

### 1. Recognising word classes

Word classes (syntactic categories, parts of speech) are aggregate patterns of morpho-syntactic behaviours corresponding in some way to semantic prototypes (with greater or lesser amounts of overlap between categories in different languages). Implicit in our understanding of word class membership is the existence of morphosyntactically distinct patterns corresponding to (the core of) each word class.

I present data from Tukang Besi, an Austronesian language of central Indonesia, showing the existence of a covert word class, adjectives. Although the language has no distinct adjectival morphology, and although the syntactic patterns of adjectives show of a mixture of the patterns seen in other word classes, the aggregate is distinct from other major word classes.<sup>1</sup>

### 2. Recognising word classes in Tukang Besi

Tukang Besi is spoken on a chain of islands known as the *Kepulauan Tukang Besi* in

Table 1. Agreement, word order and case marking in Tukang Besi

Clause type	variant	agreement	word order	case marking		
				A	S	P
Bivalent	P indexed on V	A-V=P	V A P (~ VPA)	<i>te</i>		<i>na</i>
	P not indexed on V	A-V	V P A	<i>na</i>		<i>te</i>
Monovalent		s-V	V S		<i>na</i>	

Southeast Sulawesi, central Indonesia. In addition to this home location there are also numerous trading communities scattered across eastern Indonesia (Donohue 1999 etc.; Usmar et al 1991). Tukang Besi is a Malayo-Polynesian language in the Austronesian family, though typologically it is best characterised as a mix of northern Austronesian, (South-)Western Austronesian and Eastern Austronesian morphosyntax.

Tukang Besi is a verb-initial, subject-final Philippine-type language syntactically. Morphologically it shows obligatory agreement for the S,A by verbal prefixes, and optional (pragmatically-determined) agreement for the P by enclitic.<sup>2</sup> Nominal case marking follows a Philippine-style pattern (Schachter 1976, 1977 and many others both before and since), and I follow Bell (1976, 1983) and Kroeger (1993) in using the label NOM for 'nominative' to gloss the case that has variously been called the 'pivot', 'subject', 'focus' or 'topic' in these languages, and which in Tukang Besi is marked with *na*. The other nominal cases are the genitive *nu*, the non-nominative core case *te*, here glossed CORE, and the oblique *i / di*, the former used in future/irrealis contexts, the latter in other cases (Donohue forthcoming). The agreement and case marking systems interact as shown in Table 1. The choice between a bivalent verb with the P indexed and the same verb without such indexing corresponds to enough other syntactic changes, including the status of the subject, that it must be considered as a voice alternation (Donohue 2004b).

The alternation between nominative and non-nominative marking of different arguments is shown in (1) and (2), along with a monovalent clause in (3) (no alternation is possible in monovalent clauses, short of valency-affecting derivation). See Donohue (1999a, 2004b) for further discussion of the differences between forms such as (1) and (2).

- (1) No-kili=e=mo te ana na lante.  
3R-clean=3P=PF CORE child NOM floor  
'The child (has) cleaned the floor.'
- (2) No-kili=mo te lante na ana.  
3R-clean=PF CORE floor NOM child  
'The child cleaned (/is cleaning) (a/the/some of the) floor.'
- (3) No-wila=mo na ana.  
3R-go=PF CORE child  
'The child left.'

In the following sections we shall see that the distinction between nouns and verbs, while clearly maintained in the morphosyntactic choices of the language, is not consistently maintained in the lexicon.

### 3. Word classes: Nouns, verbs and others

Words such as *kili* 'clean' are unambiguously verbs, just as *lante* 'floor' is unambiguously a noun. The following sentences illustrate the morphosyntactic differences between the two word classes in different discourse functions. In (4) we can see that a noun can be used referentially with only the (obligatory) case marker on the NP, while a verb requires infixation with the S,A infix <um>; these strategies are not interchangeable. In (5) the use of a noun or a verb to modify a referential expression is illustrated, and again different strategies are used, nouns modifying by appearing inside genitive NPs, while verbs obligatorily employ the same infix seen earlier. In (6) we can see that when predicative a noun appears inside a NP, just as for referential uses (there are syntactic differences, which are not relevant here), but a verb employs prefixes (as described in Table 1) that mark person, number, and status (realis or irrealis).

#### (4) Referential

- |   |  |
|---|--|
| a. te    lante<br>CORE floor<br>'the floor'           | b. * te    kili<br>CORE clean<br>'the cleanliness / the clean one'       |
| c. * te    l<um>ante<br>CORE floor<SI><br>'the floor' | d. te    k<um>ili<br>CORE clean<SI><br>'the cleanliness / the clean one' |

#### (5) Attributive

- |   |   |
|---|---|
| a. te    kau    nu    lante<br>CORE wood GEN floor<br>'the wood of the floor' | b. * te    kau    nu    kili<br>CORE wood GEN clean<br>'the clean wood' |
| c. * te    kau    l<um>ante<br>CORE wood floor<SI><br>'the wood of the floor' | d. te    kau    k<um>ili<br>CORE wood clean<SI><br>'the clean floor'    |

#### (6) Predicative

- |   |   |
|---|---|
| a. te    kau    iso    te    lante<br>CORE wood yon CORE floor<br>'That wood is a floor.' | b. * te    kau    iso    te    kili<br>CORE wood yon CORE clean<br>'The wood is clean.' |
| c. * te    kau    iso    no-lante<br>CORE wood yon 3R-floor<br>'That wood is a floor.'    | d. te    kau    iso    no-kili<br>CORE wood yon 3R-clean<br>'That wood is clean.'       |

Table 2. Discourse function linked to semantic type, I

	'nominal'	'verbal'
Referential	<i>te</i> X	<i>te</i> X< <i>um</i> >
Attributive	<i>nu</i> X	X< <i>um</i> >
Predicative	<i>te</i> X	<i>no</i> -X

The morphosyntax seen in examples (4) to (6) is summarised in Table 2. Here 'X' indicates the root itself, and any obligatory morphosyntax in addition to that root that is required for that type of root to function in that discourse function is shown in italics.<sup>3</sup>

Things so far are quite clear; nouns do not display any of the morphosyntax of verbs, and are easily distinguishable from them. Most nominals such as *lante* refer unambiguously to real-world objects, and many verbs such as *kili* refer to events.

As with many Austronesian languages, the question of word class specification raises numerous problems for many lexical items. A large number of words can be described as being precategory roots, which may be used without (overt) derivation in a morphosyntactically identical fashion to members of several other, more easily specifiable, syntactic categories. This means that a description of the types and criteria for syntactic categories will necessarily fail to account for the variation found in about 60% of lexical roots. For instance, examine the root *tomba* in the following sentences. In (7a) the word appears as the single item in a noun phrase, functioning as the referential head of that phrase. In (7b) it serves as a modifier inside an NP, modifying the head *wuta* 'ground'.<sup>4</sup> In (7c) *tomba* appears with the prefixes and enclitics typical of a verbal, and not nominal, predicate.<sup>5</sup>

- (7) a. Kambea o-koruo na tomba, o-tolaki o-mai.  
 reason 3R-much NOM mud 3R-late 3R-come  
 'Because there was a lot of mud, they arrived late.'
- b. Mbeaka o-jari to-he-tade=e na wunua wo'ou=nto,  
 NEG 3R-become 3R-VRB-stand=3P NOM house new=1PL.GEN  
 te iso te wuta tomba.  
 CORE yon CORE ground mud  
 'We couldn't build our new house, it's all muddy ground there now.'
- c. Dinggawi o-wande, te sala=no o-tomba=mo.  
 yesterday 3R-rain CORE path=3GEN 3R-mud=PF  
 'It rained last night, so the roads are (= have become) all muddy.'

Clearly it is not an easy matter to assign a word class such as 'noun' or 'verb' to a lexeme like *tomba*, if word class membership depends on factors of morphosyntactic distribution and semantic type.<sup>6</sup> When referential, it behaves exactly like a noun; when predicative, it behaves exactly like a verb. This is an expected result: verbs are the prototypical predicates, and nouns the prototypical referential expressions, so the

Table 3. Discourse function linked to semantic type, II

	'nominal'	'precategorial'	'verbal'
Referential	<i>te X</i>	<i>te X</i>	<i>te X&lt;um&gt;</i>
Attributive	<i>nu X</i>	X	<i>X&lt;um&gt;</i>
Predicative	<i>te X</i>	<i>no-X</i>	<i>no-X</i>

precategorial roots are simply imitating the 'least marked' path for their realisation. They differ from both of these word classes in their ability to modify other referential expressions without any morphology whatsoever.

The existence of these precategorial roots might be seen to be a challenge to the idea, and usefulness, of word classes in *Tukang Besi*. The concept of clear and distinct word classes is independently needed to describe the direction taken by many derivational affixes; the suffix *-a* 'nominaliser' always derives a word that is in the syntactic category NOUN; similarly, the prefixes *he-* 'verbaliser', *hoN-* 'purposeful verbaliser', and *hoko-* 'factitive', amongst others, always unambiguously derive words that are VERBS.<sup>7</sup> In (8)a we can see that a nominal root, *kabali* 'machete' appears with a genitive case marker when it is attributive within an NP, a strong indicator of nominal status. This root can be derived with the *hoN-* prefix, as shown in (8b), in which case it must take verbal morphosyntax, including appearing with the typically verbal *-um-* infix when modifying a noun if it has been earlier derived as a verb with *hoN-*, as shown in (8c). It is not grammatical to use the typically nominal genitive marker, as in (8d).

- (8) a. nominal root, attributive use  
*te mata nu kabali*  
 CORE eye GEN machete  
 'the point of the machete'
- b. nominal root, verbal use derived with *hoN-*  
*No-hong-abali te pada.*  
 3R-VRBLZR<sub>1</sub>-machete CORE kunai.grass  
 'They're using machetes on the kunai grass.'
- c. nominal root, derived with *hoN-*, used attributively  
*te mia [m]ong-abali te pada*  
 CORE person VRBLZR<sub>1</sub><SI>-machete CORE kunai.grass  
 'the people using machetes on the kunai grass'
- d. \* *te mia nu hong-abali*  
 CORE person GEN VRBLZR<sub>1</sub>-machete  
 'the people using machetes'

Paradigms such as these force us to recognise that syntactic categories play a part in the organisation of the language, despite the many exceptions to their applicability as a surface descriptor. An asymmetry emerges when we consider the fact that the nominalising suffix *-a* cannot be used on lexical items already specified as nouns,

whereas, for example, *he-* may be used with items already specified as verbs. Compare (9), which shows that *-a* may, and must, be used with specified verbal roots when nominal, and (10), where we can see that a lexical item which is already specified as a noun cannot take *-a*.

- (9) a. To-soro te kolikoli='u.  
 1PL.R-push CORE canoe=2SG.GEN  
 'We pushed your canoe.'
- b. Te soro-'a=no no-ja'ò ala'a.  
 CORE push-NMLZR=3GEN 3R-bad just  
 'The pushing was pretty bad.'
- c. \* te soro=no no-ja'ò ala'a.  
 CORE push=3GEN 3R-bad just
- (10) a. No-mobai na kau.  
 3R-hard NOM wood  
 'The wood is hard.'
- b. \* te kau-'a.  
 CORE wood-NMLZR

In contrast, the verbalising *he-* is allowed with verbs as well as nouns, with a slight meaning change, as seen in (11) and (12): while *hoN-* implies a truly 'transitive' event, with high degrees of effectiveness of the action, *he-* has no such implications, and simply implies that the action was performed, without any necessary achievement reading.

- (11) a. To-hon-soro te kolikoli='u.  
 1PL.R-VRBLZR<sub>1</sub>-push CORE canoe=2SG.GEN  
 'We really shoved your canoe.'
- b. To-he-soro te kolikoli='u.  
 1PL.R-VRBLZR<sub>2</sub>-push CORE canoe=2SG.GEN  
 'We (sort of) pushed your canoe.'
- (12) a. No-hong-au='e.  
 3R-VRBLZR<sub>1</sub>-wood=3P  
 'They smashed it with wood.'
- b. No-he-kau='e.  
 3R-VRBLZR<sub>2</sub>-wood=3P  
 'They used wood on it.'

We can conclude that not only do the derivational affixes differ in the specification of the syntactic category of their output, but also in the degree of specification of the syntactic category of the input items as well. For instance, the suffix *-a* specifies a non-noun input, and a noun output. In contrast, *he-* and *hoN-* specify only a verb output, without reference to the syntactic category of the input item.

(13)  $-á$ : X[-N] +  $-á$  → X- $á$ [N]

(14)  $he-$ : X[±N, ±V] +  $he-$  →  $he$ -X[V]

Having established the need to recognise nouns, verbs, and precategorial roots, in the next section I shall discuss property concepts, which might correspond to adjectives in other languages, and show that while some are best described as being stative verbs, some of these lexemes are indeed adjectives, but, because of the lack of any dedicated morphosyntax, they are a covert word class.

#### 4. Adjectives

Examining the morphosyntactic marking of different property expressions in *Tukang Besi*, in their different discourse functions, we find that there are three classes of such expressions, based on their morphosyntactic behaviour. In (15) and the following examples representatives of each of the three groups are shown. Predicatively all three are identical, the lexeme appearing in its usual form with a subject agreement prefix, as seen in (15).<sup>8</sup> It is clear that the words under consideration are not nouns; the clauses in (15) are obviously predicate-initial, unlike nominal clauses such as (6a) (see Donohue 2006 for discussion of the reality of this difference in predicate position). On the other hand, based on (15) alone we cannot decide whether *tóóge*, *mobooha* and *lule* should be regarded as verbs, or as precategorial roots.

(15) Predicate

- a. No-*tóóge* na woleke iso.  
 3R-big NOM rat yon  
 'That rat is big.'
- b. No-*mobooha* na woleke iso.  
 3R-big NOM rat yon  
 'That rat is big.'
- c. No-*lule* na woleke iso.  
 3R-naked NOM rat yon  
 'That rat is naked/exposed.'

Attributively we see a difference firstly between the first two types of property expressions and the last, where the first two appear as bare roots, and the last requires the use of the subordinating infix *-um-*. Furthermore, the first two types do not show the patterns expected of verbs, while the last type does.

(16) Attribute in NP

- a. Te woleke *tóóge*  
 CORE rat big  
 'the big rat'
- b. Te woleke *mobooha*  
 CORE rat big



- (18) a. te ana nu mia  
 CORE child GEN person  
 'the person's child'  
 b. te ana=no  
 CORE child=3GEN  
 'her/his/their child'
- (19) ana=su 'my child'  
 ana='u 'your (SINGULAR) child'  
 ana=no 'her/his/their child'  
 ana=mami 'our (PAUCAL) child'  
 ana=nto 'our (PLURAL) child'  
 ana=miu 'your (PLURAL) child'

When a genitive enclitic appears in an NP that is also modified by an attributive verb, the order is noun-enclitic-verb, as shown in (20). Any other orders are ungrammatical, as shown in (21).<sup>10</sup>

- (20) te ana=su t<um>inti  
 CORE child=1SG.GEN run<SI>  
 'my running child'

- (21) \*te ana tuminti=su, \* te tuminti ana=su, \* te tuminti=su ana

Precategorial roots similarly must follow the genitive enclitic in the NP, though they do not take any overt morphology in this position.

- (22) a. te ana=su akala b. \* te ana akala=su  
 CORE child=1SG.GEN trick CORE child trick=1SG.GEN  
 'my tricky child'

When the modifier is a complete genitive phrase there is no unambiguous way for the genitive clitic to be added to the phrase. Both possibilities are shown in (23).

- (23) a. te kadera nu kau=su  
 CORE chair GEN WOOD=1SG.GEN  
 'my wooden chair' or 'the chair (that's made) of my wood'  
 b. te kadera=su nu kau  
 CORE chair=1SG.GEN GEN WOOD  
 'my wooden chair' or 'the wood of my chair'

Most interestingly, when the property expressions introduced in (15) are shown in complex NPs we find another pattern. The *lule*-type lexemes, predictably, behave just like the verbs in (20) and (21), following the genitive clitic and taking an overt marker of subordination. The *to'oge* and *mobo'oha* type lexemes, however, precede the clitic.

- (24) a. te ana to'oge=su                    b. \*te ana=su to'oge  
 CORE child big=1SG.GEN                CORE child=1SG.GEN big  
 'my big child'
- (25) a. te ana moboha=su                    b. \*te ana=su moboha  
 CORE child big=1SG.GEN                CORE child=1SG.GEN big  
 'my big child'
- (26) a. \*te ana l<um>ule=su                b. te ana=su l<um>ule  
 CORE child naked<SI>=1SG.GEN        CORE child=1SG.GEN naked<SI>  
 'my naked child'

There are additional differences in attributive position. Nominal, verbal and precat-  
 egorical modification allows for recursion, with multiple relative clauses or embedded  
 possession being possible in an NP, but the *to'oge/moboha*-type lexemes only allow for  
 a single instantiation within an NP without resorting to the use of a verbal modifica-  
 tion strategy. In (27) and (28) we can see that multiple modifying verbs can appear  
 with the same noun. Similarly, multiple genitive phrases can appear to allow more than  
 one noun to modify in an NP, either recursively, as in (29), or with both modifying the  
 one noun, as shown in (30) (subject to ambiguities that were seen in (23)), and mul-  
 tiple precatatorial roots may modify a single nouns. For none of these complex NPs is  
 the relative order of the modifiers important.

- (27) te ana l<um>ule t<um>inti  
 CORE child naked<SI> run<SI>  
 'the naked running child'
- (28) te ana t<um>inti l<um>ule
- (29) te kadera [nu bela [nu iai=su]]  
 CORE chair GEN spouse GEN younger.sibling=1SG.GEN  
 'my younger sister's husband's chair'
- (30) te kadera [nu kau] [nu bela=su]  
 CORE chair GEN wood GEN spouse=1SG.GEN  
 'my husband's chair' or 'the chair (that's made) of my husband's wood'
- (31) te ana akala esempee  
 CORE child trick junior.high.school  
 'the tricky junior high school child'
- (32) te ana esempee akala

When we examine the *to'oge/moboha*-type lexemes a different pattern emerges. It is  
 grammatical for a *to'oge/moboha*-type lexeme to appear in the same NP as other modi-  
 fication, as seen in (33)–(38). In all cases the *to'oge/moboha*-type lexeme must precede  
 the other modification.

- (33) te ana to'oge l<um>ule  
 CORE child big naked<SI>  
 'the big naked child'
- (34) \*te ana lumule to'oge
- (35) te ana to'oge nu tolida=su  
 CORE child big GEN cousin=1SG.GEN  
 'the big child of my cousin'
- (36) \*te ana nu tolidasu to'oge
- (37) te ana to'oge akala  
 CORE child big trick  
 'the big tricky child'
- (38) \*te ana akala to'oge

When we try to construct a phrase with two *to'oge/moboha*-type lexemes, as in (39) and (40), we find that the strategies that have been used are not adequate to produce grammatical phrases, regardless of the order of the two modifiers.

- (39) \*te ana to'oge kabongo  
 CORE child big deaf  
 'the big deaf child'
- (40) \*te ana kabongo to'oge

It is possible to rescue the grammaticality of a translation of 'the big deaf child'. The morphosyntax that allows this is shown in (41), and involves treating the second *to'oge/moboha*-type lexeme as a verb. The order of these two modifiers is now quite fixed, with the (obligatorily) infixed modifier *k<um>abongo* obligatorily appearing in the second position following the noun; effectively, the second adjective is coded in a relative clause.

- (41) te ana to'oge k<um>abongo  
 CORE child big deaf<SI>  
 'the big deaf child'
- (42) \*te ana k<um>abongo to'oge

In fact, the <um> infix can be used with any *to'oge/moboha*-type lexemes, but it has morphosyntactic and semantic consequences. Firstly, when a *to'oge/moboha*-type lexeme is affixed with <um> it can no longer appear preceding a genitive clitic, as in (43). Secondly, if the infix appears on the only *to'oge/moboha*-type lexeme in a phrase, that modifier acquires a superlative reading.

(43) *te ana=su t<um>o'oge*  
 CORE child=1SG.GEN big  
 'my biggest child'

(44) \**te ana t<um>o'oge=su*

We can summarise the behaviour of the *to'oge/moboha*-type lexemes with respect to the other word classes we have examined as shown in Table 5. Here Y indicates the head noun of an NP that is modified.

Table 5. Morphosyntactic properties examined for different word groupings

	noun	precatatorial	verb	<i>to'oge</i> etc.
Referential	<i>te X</i>	<i>te X</i>	<i>te X&lt;um&gt;</i>	<i>te X<sub>no</sub> *ma-</i>
Attributive	<i>nu X</i>	X	X<um>	X
Predicative	<i>te X</i>	<i>no-X</i>	<i>no-X</i>	<i>no-X</i>
Position in NP ~ =GEN	<i>te Y=GEN nu X</i> <i>te Y nu X=GEN</i>	<i>te Y=GEN X</i>	<i>te Y=GEN X&lt;um&gt;</i>	<i>te Y X=GEN</i>
Iterative in NP?	yes	yes	yes	no

It is clear that the *to'oge/moboha*-type lexemes show as much differentiation from the other word classes as those other word classes do within themselves. Just as is the case for precatatorial roots, much of the morphosyntax of these lexemes is calqued from that found with nouns or verbs, in the sense that there is no unique, dedicated morphology found with this word class, but that the morphosyntax of different word classes is 'borrowed' by the *to'oge/moboha*-type lexemes in different syntactic environments. At the same time there is enough internal semantic consistency (all of these lexemes are property concepts) to demand that they be treated as a separate word class: adjectives.<sup>11</sup>

Some of the criteria that we used to establish nouns and verbs do not apply to adjectives. Particularly, there are no morphological processes that derive adjectives. We have seen the use of noun-deriving and verb-deriving affixes, shown again in (45). By comparison there is no uniquely adjectival morphology.

(45)		nominal root	precatatorial root	verbal root
		<i>lante</i> 'floor'	<i>tomba</i> 'mud'	<i>pepe</i> 'slap'
	<i>he-</i> verbaliser	<i>he-lante</i> 'make / lay a floor'	<i>he-tomba</i> 'smear with mud'	* <i>he-pepe</i>
	<i>-a</i> nominaliser	* <i>lante-a</i>	<i>tomba-a</i> 'muddiness'	<i>pepe-a</i> 'slap (n.)'

We should mention the historical prefix \**ma-*, that is found on the majority of adjectives (see Donohue 2004a for a list of lexemes with and without this affix) (this is the affix that is lost when an adjective is used referentially, as seen in (17b) and Table 4). In modern *Tukang Besi* this historical prefix is all but fused to the root, and appears in a number of different, mostly fixed, shapes.

- (46) mo-boha 'large'  
 me-dampa 'short'  
 ma-‘eka 'afraid, frightened'

There is a productive modern prefix, *mo-*, the shape of which matches the most common (and most regular) reflex of *\*ma-*, and the meaning of which (anticausative, resulting state) is similar enough to the semantics of the adjectives to make us suspect that this might be an adjective-deriving affix. The use of this affix is shown in (47).

- (47) a. No-riwa=‘e na karatasi=su.  
 3R-tear=3P NOM paper=1SG.GEN  
 ‘She tore my paper.’  
 b. No-mo-riwa na karatasi=su.  
 3R-ANTICAUS-tear NOM paper=1SG.GEN  
 ‘My paper is torn.’

Forms such as (47b) do not, however, contain an adjective, as can be seen by examining *moriwa* in an NP-internal attributive use.

- (48) te karatasi=su mo-riwa  
 CORE paper=1SG.GEN ANTICAUS-tear  
 ‘my torn paper’  
 (49) te karatasi moriwa=su

Further differences between productively-derived *mo-* forms and the adjectives with a ‘fused’ *mo-* are listed in Donohue (2004a).

## 5. The position and realisation of adjectives

The data seen in the previous section support the idea that there is a special constituent, which I shall call N’ for the moment, and which maximally consists of a noun and an adjective; the adjective is in effect incorporated (see also Baker 2003) into the noun. Phonological evidence for this is present in the form of stress shifting. Stress is normally penultimate, and with an adjective (but not other modifiers) this primary stress (which is easily discernible due to a marked high, flat contour) optionally shifts to the penultimate position of the N + Adj unit. In (50a) to (50c) we see that the two words, the noun and its modifier, always form separate domains for the purposes of stress assignment. In (50d), on the other hand, both a phrasing with two prosodic domains and one with a single prosodic domain are possible. That is, the noun and adjective form a single, five-syllable stress unit.



- b. Te ia mondo te guru.  
CORE 3SG already CORE teacher  
'He's already a teacher.'
- c. Te ia ane=ho te guru.  
CORE 3SG exist=still CORE teacher  
'He's still a teacher.'
- d. Te ia no-jari guru=mo.  
CORE 3SG 3R-become teacher=PF  
'He's already become a teacher.'

- (54) a. \*Te ia te gurumo.  
b. \*Te ia te guruho.  
c. \*Te ia te gurudo.

With adjectives, the same set of clitics are used as were seen in verbs, and with the same meanings.<sup>13</sup>

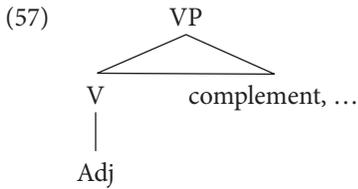
- (55) a. Te 'obu no-to'oge=mo.  
CORE dog 3R-big=PF  
'The dog is big / has become big already.'
- b. Te 'obu no-to'oge=ho.  
CORE dog 3R-big=still  
'The dog is still big.'
- c. Te 'obu no-to'oge=do.  
CORE dog 3R-big=EMPH  
'The dog is big, as it's most salient characteristic.'

Not only do adjectives take the agreement markers associated with verbs, but they also take the full range of aspectual marking, with the same set of meanings. (Neither adjectives nor verbs may appear with these clitics when they are in attributive functions inside NPs; in those cases the nominal aspect markers seen in (53) must be used.)

Another trait that predicative adjectives share with verbs, but not with nouns is the ability to take a complement.

- (56) Te ana=no [<sub>VP</sub> no-to'oge [<sub>PP</sub> ngga te anu=su]].  
CORE child=3GEN 3R-big than CORE whatsit=1SG.GEN  
'Their child is bigger than my one.'

This information, combined with the fact that attributive adjectives are also eligible for the full range of verbal relative clause marking when forced away from the head, further suggests that adjectives, when dominated by a VP, must appear as the head of that VP, either through incorporating into an existing verb, or into an empty verbal position.



When the adjective appears in a phrase headed by an N, then it must appear as (part of) the head of that phrase; this is accomplished through incorporation with the nominal head (if present), a strategy only available for one adjective. A second (or third) adjective modifying in an NP must appear in a relative clause, where it is in a VP, and so must appear as the head of that phrase, as the item that in a main clause carries the agreement morphology and any aspect marking, and when subordinate must appear with a subordinating infix <um>.

We thus have a word class which is distinct from either nouns or verbs, but which only appears with the morphosyntactic characteristics of either nouns or verbs, depending on the environment in which it is found. When in an NP, the adjective must appear as (part of) the head of the NP, either through being the only referring expression ('the big [one]', where [one] is not realised in *Tukang Besi*) and appearing in the  $N^0$  position, or through incorporating into a position very close to the noun. When predicative, the adjective must appear in a VP: the examples we have seen offer no evidence for incorporation, but it should be noted that inchoative meanings of properties can be expressed either with the perfective aspectual clitic, or with that clitic optionally attached to the adjective, which is incorporated into *jari* 'become', as in footnote 11. Both these options are seen in (58).

- (58) a. Te ana=su iso [<sub>vp</sub> no-to'oge=mo].  
 CORE child=1SG.GEN yon 3R-big=PF  
 'My child has gotten big / has grown up.'
- b. Te ana=su iso [<sub>vp</sub> no-jari-to'oge=mo].  
 CORE child=1SG.GEN yon 3R-become-big=PF  
 'My child has become big / has grown up.'

*Jari* is an otherwise normally inflecting verb in *Tukang Besi*, capable of appearing independently without an incorporated element, in (59a), or with an incorporated noun, in (59b).

- (59) a. No-jari=mo na ganda ako te karia'a.  
 3R-become=PF NOM orchestra for CORE circumcision.festival  
 'The orchestra for the circumcision festival has come together.'
- b. No-jari-raja=mo.  
 3R-become-king=PF  
 'He became king.'

The fact that an alternative to the adjective-as-verb treatment when predicative, namely the incorporation of the adjective into a normal verb, exists can be taken as evidence for a more abstract incorporation explaining the occurrences of adjectives when there is no overt verb: the adjective has incorporated into an 'empty' verb filling the V position.

## 6. Conclusions

We have seen that even in a language without dedicated adjectival morphology (such as *Tukang Besi*), we can find reasons to need to recognise the syntactic category of adjective. Adjectives lack any expressive morphosyntax of their own, and can only be expressed through the morphology, and structural positions, appropriate to nouns and verbs. With the treatment of adjectives in *Tukang Besi* we can see that there is the possibility of having an underlying syntactic category that is inexpressible at the surface, but which rides on the morphological and syntactic characteristics of other syntactic categories. In *Tukang Besi* the adjective can only appear under an N node if it is dominated by an NP, compounding with a pre-existent head noun if necessary, and under the V node if it is in a VP. There is no unique morphology for adjectives, and yet they are clearly shown to be a separate syntactic category.

## Notes

1. Some of the data found here appeared as Donohue (1999b), though the presentation has been substantially changed to reflect further investigation. The notion of 'covert' word classes is similar to Whorf's (1945) notion of the *cryptotype*.
2. The following abbreviations have been used: 1, 2, 3 stand for first, second and third person; A, S, P stand for the most agentive and most patientive arguments of a transitive verb and the single argument of an intransitive verb, respectively. The other glosses used are: ADJ, adjective; ANTI-CAUS, anticausative; CORE, core case; DEM, demonstrative; EMPH, emphatic; GEN, genitive; NEG, negator; NMLZR, nominaliser; NOM, nominative; PA, paucal; PF, perfective; PL, plural; R, realis; RC, relative clause; SG, singular; SI, S,A infix; VRBLZR<sub>1</sub>, verbaliser 1; VRBLZR<sub>2</sub>, verbaliser 2.
3. The interested reader is referred to Croft (1991), especially pages 66, 67, for further discussion of this approach to the determination of lexical categories. Here I shall simply note that a multi-dimensional approach such as this one produces a more testable and defined answer to the question of lexical category membership than does, for instance, simply examining one morphosyntactic property in one function.
4. Since the main purpose of this article is not to discuss precategoriality, but rather the 'covert' class of adjectives, I shall not discuss them beyond the next few pages. See Enfield (2006) for a careful treatment of some of the methodological issues involved in positing precategoriality.

5. Example (7c) might be taken to imply that a predicative precategorial root has an inchoative sense: ‘become X’. This is not the case, as can be judged from the two examples below. The first example is a textual extract, spoken by a woman who has been travelling disguised as a man. The second example is a typical *Tukang Besi* statement involving a predicative use of *wowine* ‘woman’; in both cases there is no inchoative sense (and little, if any, semantic difference between the two clauses; conceivably (ii) allows for a slightly more foregrounded subject than in (i), but the difference, if any, is slight).

- |   |   |
|---|---|
| (i) Bara no-dahani=aku kua ku-wowine.<br>don't 3R-know=1SG.P COMP 1SG-woman<br>'Don't let them realise that I'm a woman.' | (ii) Te iaku te wowine.<br>CORE 1SG CORE woman<br>'I am a woman.' |
|---|---|

6. Although this lexeme has a fairly real-world referential ‘feel’ to it, the same behaviour is found with other lexical items such as *ahaji* ‘Sunday’, *atiho* ‘sneeze’, *da'olaro* ‘angry’, *gau* ‘desire, wish’ and *gere* ‘fight’. It is clear that there is no one clearly defined semantic type that matches the precategorial roots, though it is true that most real-world objects are treated precategorially in *Tukang Besi*, usually with either an instrumental or inchoative sense when used with verbal morphology. Some examples are given in (i)–(iv) below.

- |  |  |
|--|--|
| (i) a. te ba'e<br>CORE fruit<br>'fruit'      | b. No-ba'e.<br>3R-fruit<br>'It's bearing fruit.' / 'It's ripened to become fruit.'                               |
| (ii) a. te ahaji<br>CORE Sunday<br>'Sunday'  | b. No-ahaji.<br>3R-Sunday<br>'It's becoming Sunday.'   |
| (iii) a. te ha'o<br>CORE hammer<br>'hammer'  | b. No-ha'o.<br>3R-hammer<br>'He/She/They are hammering (something).'   |
| (iv) a. te hoti<br>CORE food/drink<br>'meal' | b. No-hoti.<br>3R-donate.food/drink.or.clothes.to.the.poor<br>'He/She gives (food or old clothing) to the poor.' |

7. Interestingly there are more affixes that derive verbs than there are nominal-deriving affixes.

8. The two verbs glossed as ‘big’, *to'oge* and *mobo'oha*, have mainly the same semantic extensions, though *mobo'oha* is more likely to be used with the meaning ‘grand, spectacular’; both are in normal use when referring to size.

9. This provides an interesting counter to Croft’s (1991) claim that property concepts will never appear with more morphology in attributive functions than they do in referential or predicative functions. Other examples (for instance, the behaviour of adjectives in German, which require more morphological material when attributive than when predicative) also support the view that Croft’s claims are not universals, but merely tendencies across languages.

10. Any order that places the core case marker *te* anywhere but in initial position is not only ungrammatical, but uninterpretable for *Tukang Besi* speakers: \*! *anasu te tuminti*, \*! *anasu tuminti te*, etc.

11. Note that the converse of this statement is not true: not all property concepts are adjectives. For instance, while *meha* 'red', *biru* 'black', *ijo* 'green', *mokuri* 'yellow' and *mohute* 'white' are adjectives, *kakanda* 'yellow' is a verb. Similarly, while *kabongo* 'deaf' is an adjective, *kandala* 'blind' is a verb.
12. One clitic, =*mo*, may be used with some nominal predicates, but with a different, non-aspectual meaning. With nouns =*mo* serves to emphasise identity. In this function it probably represents a calque from Makasar Malay, in which *-mi* has both the perfective function and the emphatic identification function.
13. Adjectives, when used inchoatively, may also appear with *jari*, just as can nouns.
- (i) Te 'obu no-jari-to'oge=*mo*.  
 CORE dog 3R-become-big=*PF*  
 'The dog has become big.'

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