Voice in Tukang Besi and the Austronesian focus system

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1 Introduction

Tukang Besi is an Austronesian language based on the islands known as the *Kepulauan Tukang Besi* found off Southeast Sulawesi, in central Indonesia. In addition to this location there are also numerous trading communities (numbering in some cases above 10,000 people, such as in south-west Buru, southern Taliabu, and Fakfak in western Irian Jaya) scattered across eastern Indonesia (Donohue 1995, 1997). Tukang Besi is almost certainly a Sulawesi-area 'Western Malayo-Polynesian' language, but is difficult to subgroup with any confidence as a member of any of the recognised subgroups of the area. Due to its geographical position it is also the 'end of the line' as far as the western Malayo-Polynesian languages go to the south-east, before the Central Malayo-Polynesian languages begin.

Tukang Besi has two basic voices, and a full set of pronominal agreement markers on the verb: (obligatory) prefixes are used to mark the [S,A] of the clause, and also indicate the realis or irrealis state of the activity; enclitics are optionally used to mark an [O].[1] The presence or absence of the [O] enclitics controls the voice system, as independently witnessed by the nominal case marking, which distinguishes *na* 'nominative' (in the manner of Bell 1976, Kroeger 1993), *te* 'core' (but not nominative), *i* 'oblique' and *nu* 'genitive' (this last case may appear NP-internally only, and is not used to case-mark an argument in a main clause, as is found in many western Austronesian languages). These case-markers are used on all nominals, including pronouns: apart from the affixed forms, there is no difference in

1 I shall use [S,A] and [O] following Dixon (1994), etc., to refer to the syntactic roles of the core arguments of a clause in an atheoretical manner; for definitions, see Andrews (1985:68). For what some people call 'grammatical subject' I shall use the term 'pivot', after Heath (1975), Foley and Van Valin (1984) and Dixon (1994).

The following abbreviations have been used; in the case of portmanteau morphemes, the individual components of the glosses have been separated out in the following list: 1,2,3 first, second, third person; ALL allative; CLASS classifier; COM comitative; CORE non-nominative; I irrealis; KP case phrase; NL nominaliser; NOM nominative; OBL oblique; OBJ object; OCC occupational; OP object prefix; REC reciprocal; PA paucal; PASS passive; PF 'perfective'; PL plural; POSS possessive; R realis; REC reciprocal; SI subject infix; SG singular; TOP topic.

Fay Wouk and Malcolm Ross, eds, *The history and typology of western Austronesian voice systems*, 81-99.
Canberra: Pacific Linguistics, 2002.

pronoun sets. The nominative argument is also marked with *te* when preverbal, this word order being due to pragmatic focus (see §6).

Voice selection is controlled by factors of discourse continuity and prominence, with the most prominent argument being cast as the nominative one in a series of clauses, and subject to extensive zero anaphora. Some other constructions that refer to the nominative or non-nominative status of an argument include floating quantifiers, internal relative clauses and possessor ascension, all of which require nominative status.

The older PAn voice morphology is largely preserved in Tukang Besi, with both *-[um]-* and *i-/ni-* appearing in some subordinate clauses headed by an [S,A] or [O] (respectively), and *-[um]-* also appears as a pragmatic focus construction in main clauses. The locative * *-an* is preserved in the locative nominalising suffix *-'a* 'place of...', which is taking on more general nominalising properties, a property also found for *i-*. The function of this morphology in syntactic voice alternations has been taken over by the pronominal indexing system, as described earlier, and a series of passive(-like) verbal prefixes, *to-* 'passive', *te-* 'accidental passive' and *mo-* 'anticausative'.[2] The last of these, *mo-*, is identical in form to the fossilised verb marker which appears on many (but not all) adjectives (not verbs). Adjectives are also commonly marked with two other variants of the *mo-* marker: *me-*, which is also the productive frequentive prefix, and *ma-*, which has no further uses, and is the most infrequent of the three. All of these morphemes occur in the same position – following the [S,A] prefix and preceding the verb and any derivational morphology.

2 Basic verbal morphology

Verbs in Tukang Besi are indexed to indicate the person and number of their [S,A] and [O]. There are two sets of [S,A] prefixes, depending on the mood (realis or irrealis) of the verb, and one set of [O] enclitics. The forms of these pronominal agreement markers (and the other sets, the free pronouns and the possessive enclitics) are given in Table 1:[3]

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2 An anticausative is a morpheme that removes the cause of a resultant state: 'She boiled the water', compared to 'The water boils(-anticausative)'. Compare the Tukang Besi sentences:

No-rede na uwe.	and	*No-mo-hengolo na uwe.*
3R-boil NOM water		3R-ANTICAUS-boil NOM water
'The water is boiling.'		'The water has been boiled.'

in which the choice of verbs is interesting – with *rede* being an intransitive verb, and *hengolo* a transitive one. The second sentence contains an anticausative, and implies the prior existence of an agent.

3 The phonemes found in Tukang Besi are the following: *p t k ʔ ɓ ɗ ʤ g β s h m n ŋ mp nt ns ŋk mb nd nʤ ŋg r l i ɛ a o ɯ*. The following orthographic conventions are followed: *ʔ, '; ɓ, b; ɗ, d; β, w; ŋ, ng; ʤ, j; ɻ, l; ɛ, e; ɯ, u*. See Donohue (1994) for details. A surface phonemic transcription has been used, with phonemes that are underlyingly present (as determined through paradigmatic alternations), but not surfacing in a particular sentence, shown in brackets ( ).

Table 1: Tukang Besi pronominal forms

	[S,A]		Free	Possessive	[O]
	Irrealis	Realis	forms		
1SG	*ku-*	*ku-*	*iaku*	*=su*	*=aku*
2SG	*ko-*	*'u-/nu-*	*iko'o*	*='u*	*=ko*
3SG	*na-/a-*	*no-/o-*	*ia*	*=no*	*='e*
1PA	*ka-*	*ko-*	*ikami*	*=mami*	*=kami*
1PL	*ta-*	*to-*	*ikita*	*=nto*	*=kita*
2PL	*ki-*	*i-*	*ikomiu*	*=miu*	*=komiu*
3PL	*na-/a-*	*no-/o-*	*amai*	*=no*	*='e*

The [S,A] prefixes are used with all transitive and intransitive [S,A]s, regardless of the semantic roles of the arguments concerned. The [O] enclitics are similarly used for all primary [O]s of the verb, though there is a (semi-)archaic set of dative [O] enclitics that are occasionally encountered.[4] Comparison with the free forms reveals that the [O] clitics are only minimally different from the free pronominal forms, and so probably represent a relatively recent development.[5] The alternations for the 2SG realis and the third person [S,A] forms is insignificant, with no meaning or dialectal differences ascribable to them. The only difference that can be teased out is one of speech tempo, with the *'u-*, *o-* and *a-* forms tending to be used in faster speech, though this is not a hard and fast rule. Examples of the use of some of these affixes are given in (1)–(7) (only the realis set of [S,A] prefixes are illustrated to save space):

(1) *Ku-gonti te kau.*
1SG-chop CORE wood
'I chopped the wood.'

(2) *Ku-tinti=mo kua ito.*
1SG-run=PF ALL there:higher
'I ran away to the mountains.'

(3) *Ku-mohoo.*
1SG-sick
'I'm sick.'

(4) *"O-ha'a 'u-doito, La Kape'ingkape'i?"*
3R-why 2SG.R-cry La Fool
'Why are you crying, Fool?'

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4 These have the forms (presented in the same order as the table above) *=naku*, *=nso*, *=ne*, *=nsami*, *=nggita* and *=ngkomiu*; there is no 3PL dative [O] enclitic.

5 The use of *s*, rather than *k*, in the 1SG.POSS form is unusual, and reflects the partial adoption of a **k > s* sound change that is prevalent in Southeast Sulawesi, but (apart from in this one morpheme) is not found in Tukang Besi.

(5) *No-topa=aku ka'ano no-pa-muru.*
3R-slap=1SG.OBJ because 3R-OCC-bald
'She slapped me because she was angry.'[6]

(6) *No-wila lego-lego.*
3R-go arms.swinging
'He was walking, swinging his arms.'

(7) *No-buti='e.*
3R-fall=3OBJ
'He dropped them.'

As (1)–(7) show, there are no complications with the verbal indexing system found in Tukang Besi: all [S,A]s are prefixed, and [O] agreement is done by optional enclitics. There are no obvious morphological traces of split-intransitivity, ergativity, hierarchical systems or other exotica: it exhibits a simple nominative-accusative alignment.[7]

3 Basic clause order and case marking

The basic verbal clause in Tukang Besi is verb-initial, and, due to extensive head-marking, core arguments are optional if the identity of their referents has already been established, the information about their syntactic functions being carried by verb agreement. A nominal [O] of a transitive clause usually appears immediately following the verb, and the [S,A] follows this, but the order of these two constituents is not fixed. The basic clause can be modelled as follows:

Transitive:	s-V-o	*na* O	*te* A
Intransitive:	s-V	*na* S	

This is, on first inspection, an ergative-absolutive case marking system: an intransitive [S] or an [O] is marked with *na*, a transitive [A] is marked with *te*. Arguments against this analysis will be presented shortly. Sentences (8) and (9) illustrate these patterns:

Transitive:

(8) *No-'ita='e na kene=no te ana.*
3R-see=3OBJ NOM friend=3POSS CORE child
'The child saw its friend.'

Intransitive:

(9) *No-tinti na ana.*
3R-run NOM child
'The child ran off.'

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6 When the stative verb *muru* 'bald' occurs with the occupational prefix ('one who habitually Vs'), it has the meaning 'angry', as in the example here.

7 There are in fact some exceptions to this, found in some serialised motion verbs (see Donohue 1998 for details), but these are not part of the basic alignment system. The syntactic correlates of split intransitivity are described in Donohue (1996a).

As illustrated above, NPs referring to a core argument are obligatorily preceded by a case marker, either *te* or *na*. If the argument is known, given information, and pragmatically prominent, it may be assigned nominative case, and is marked with the nominative case marker *na* (with variant *a*) (glossed as 'NOM'). Only one argument per clause may be nominative; other core arguments, not selected as filling the nominative position in the clause, are marked with the general non-nominative core case marker *te* (with variants *'e* and *e*) ('CORE').[8] The unit that is made up of the case marker and the NP is referred to as the case phrase (KP) (see Lamontagne and Travis 1987 for discussion of this unit).

4 Transitive verbs without [O] enclitics

Constituent order and nominal marking strategy differ when a transitive verb appears without an [O] enclitic. When the enclitic is not used, the [S,A] prefixing on the verb does not change, but the basic constituent order of the arguments is [VO] A and, importantly, the use of the case markers is reversed in comparison with a clause with [O] enclitics. This is shown schematically as follows:

Normal transitive:	s-V-o	*na* O	*te* A
no [O] indexing:	s-V	*te* O	*na* A

In these transitive clauses without [O] enclitics, the marking at the KP level has changed, but the verbal indexing of the [A] argument has remained consistent with example (1). That is: the [A] argument is still prefixed onto the verb, but is no longer marked at the nominal level by the general core case marker *te*, but rather by the nominative case marker *na*. Comparing this transitive case-marking system with the intransitive system, we would now want to consider it to be nominative-accusative. Examples (10) and (11) contrast [O] agreement and non-agreement constructions:

Transitive verb with [O] enclitics:

(10)a. *No-kiki'i=ko (na iko'o) te beka.*
3R-bite=2SG.OBJ NOM you CORE cat
'The cat bit you.'

b. * *No-kiki'i=ko te iko'o na beka.*
3R-bite=2SG.OBJ CORE you NOM cat
'The cat bit you.'

Transitive verb without [O] enclitics:

(11)a. *No-kiki'i te iko'o na beka.*
3R-bite CORE you NOM cat
'The cat bit you.'

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8 The term 'core' does not reflect all the functions of *te*. It is also used when any core argument is fronted (either clause-internally or topicalised), so it is perhaps better to call it the 'other' case marker; core argument other than the nominative, argument other than the post verbal ones. This makes a terrible label, however, is not very serious-sounding and is impossible to abbreviate.

b. **No-kiki'i* *te* *beka* *na* *iko'o*
3R-bite CORE cat NOM you
'The cat bit you.'

In both (10a) and (11a) the agent *beka* is indexed on the verb by the third person realis [S,A] prefix *no-*, and additionally in (10) the second person singular [O] is indexed by means of the second person singular [O] enclitic *=ko*. When this enclitic is not used, as in (11), the agent *beka* must be marked by the nominative case marker *na*, and *iko'o* by the non-nominative case marker *te*. This variation in the presence or absence of [O] enclitics is the only way that the case assigned to nominals may be changed; note the ungrammatical (10b) and (11b). Clearly, the presence or absence of [O] agreement on a verb functions as a form of voice system. The analysis adopted here is that it is a Philippine-style voice system,[9] with a small number of voice categories (two); various arguments that this is the most expedient analysis are given elsewhere in this paper, and in more detail in Donohue (1995). The choice of the voice used is dependent on the pragmatic status of the arguments in a clause, and their saliency in discourse, and also has interpretative consequences: clauses with [O] enclitics are more likely to encode a highly individuated [O], or a more highly affected one, in a perfective or punctiliar time setting.

5 Markedness and the type of voice system

Although the transitive verbs we have seen can appear either with or without [O] enclitics, there is evidence that the encliticised (i.e. morphologically more complex) versions are in some sense the 'basic' ones: they appear more frequently in texts (approximately 70% of transitive verbs in texts use [O] enclitics); they are the citation forms of most transitive verbs; and not only may all transitive verbs appear with [O] enclitics, there are some that cannot appear without them, such as the verb *molinga* 'remember'. The limited data available to me on child language acquisition suggests that children learning Tukang Besi acquire a command of the [O] enclitics earlier than they do of the [S,A] prefixes; children often substitute the near-frozen 'adjectival' prefix *mo-* in the place of [S,A] prefixes until they are about 5 or 6 years old, but seem to be able to manipulate the [O] suffixes on their verbs much earlier, indicating that [O] indexing is learnt earlier than is [S,A] indexing.

If we were to consider the forms in (10) as basic, and conclude that the language has an ergative-absolutive case marking paradigm, then logically the sentences in (11) are antipassive derivations of them. There are several problems with this analysis: the [A] in the 'antipassive' construction in (11) is still a core argument, and does not undergo demotion of any sort, a process taken to be normal treatment of *by*-phrases in passive and antipassive

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9 By which I refer to the voice system that is found in the majority of the Austronesian languages of Taiwan, the Philippines, Madagascar and large parts of western Indonesia, characterised by a case marking system that monitors the degree of pragmatic salience of an argument rather than its syntactic role. The symmetrical nature of the voices in this sort of system (none of the basic voices being unambiguously derived from the other) is the other main characteristic of this style of voice system.

constructions (Baker 1988:9; Dixon 1994:146, amongst others).[10] Secondly, there is no derivational morphology involved in the derivation of the 'antipassive', rather the derivation is carried out by DROPPING verbal morphology. This is a surprising artefact of the analysis, more so given that Tukang Besi DOES have a morphological passive construction, one that (like all other reported examples of passives and antipassives) involves additional morphological material, in the form of a verbal prefix, not a suffix. That the antipassive construction would be so different, by both language-internal and cross-linguistic evidence, seems remarkable. An even more compelling reason to not regard this as an antipassive form emerges when we examine external relative clauses, later on.

Alternatively, the sentences in (11) can be considered basic, and those in (10) can be thought of as 'passive'-like derivations of them. This would be consistent with the relative amount of morphology found on the verbs. We are then faced, however, with a peculiar passive morpheme that varies for person and number of its derived [S] (we'd presume), and in which the [S,A] prefixes of the verb do not agree with the (derived) [S]. Again, typologically very odd, and even less plausible when we remember that there are other, unambiguous passive morphemes in the language, including the prefix *to-*. Compare (10) and (11) above with (12), found with a *to-* passive form, in which no *by*-phrase may be mentioned, and the single argument[11] of the verb may be indexed on the verb by means of [S,A] prefixes:[12]

(12) *'U-to-kiki'i na iko'o.*
2SG.R-PASS-bite NOM you
'You were bitten.'

In (12) the patient nominal takes the nominative case marker just like the patient of an [O] encliticised verb form such as (10), but unlike that sentence, the patient of the passive verb in (12) is the [S], not [O], and is indexed by the prefixed set of pronominal affixes, as is an argument of an intransitive verb. Thus, while treating the patient of the verb alike, as far as its nominative marking goes, the indexing strategy on the verb is quite different. Notice also that in (10) the agent of the verb is present in the [S,A] prefixes on the verb; in (12) the agent may not be expressed in any way whatsoever.

These arguments show that the case marking and pronominal indexing system of Tukang Besi is best thought of as not representing either an ergative case-marking system with an antipassive, nor an accusative case-marking system with a passive. It is, however, similar to what appears to be found in Kapampangan, a well-described Philippine language (Mirikitani 1972 and others), and (perhaps) Jarawara, an Amazonian language. Although

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10 Foley and Van Valin (1984:176-81) argue that there is a Jacaltec antipassive construction found in relative clauses that treats the [O] as a core argument, and that Sama also has a non-backgrounding antipassive construction. The analysis of Sama seems to me to be flawed, appearing to force the language into either an accusative or an ergative mould.

11 Again, a slight oversimplification: if the [A] of the unpassivised sentence is an instrument, then it may be overtly present in the passive sentence; similarly, a ditransitive verb, or one with applicative morphology, allows more than one argument in its passive sentence forms.

12 Though a third person prefix may always be substituted: *Notokiki'i na iko'o* is also grammatical as an alternative, even though the verb shows no agreement with the 'derived-[S]'. This form shows that the apparent [S] of a passive construction is not in fact eligible for the grammatical salience that is attributable to other arguments of intransitive verbs. The passive construction here is, in Foley and Van Valin's terms, a *demoting passive* that does not create a new pivot.

an 'ergative' analysis of Philippine-type languages (including Kapampangan; see Mithun 1994) does become fashionable every so often, I do not find this a convincing analysis for many reasons (see Donohue 1998 for a summary). Regardless of the 'rightness' of this analysis for the better-known Philippine-type languages, the Tukang Besi data is even less amenable to an ergative analysis. For these reasons I have chosen to analyse the voice alternation as being the result of a Philippine-style 'focus' system (further arguments that the ergative analysis is inappropriate for Tukang Besi can be found in Donohue 1995:160-66). In Tukang Besi the diachronic drift towards head-marking pronominal indexing, found throughout southeast Sulawesi and the islands to the south of that region, has proceeded to quite an extent,[13] but at the same time the overt Philippine-style case system has been preserved, and its pronominal verbal cues have been reinterpreted as being those involving the presence versus absence of the [O] enclitics. This is strikingly similar to one recent analysis of voice systems in other, 'mainstream' Philippine languages as involving incorporated pronominal elements (see Sells 1995).

6 Variation in case marking: preverbal position

The basic order of constituents presented in §3 and §4 can be, and often is, modified through the appearance of an argument before the verb. There are two strategies by which a nominal can appear in a pre-verbal position: either fronting one of the core arguments to a position within the clause, which serves as a 'focussing' strategy, or fronting to a position outside the clause, topicalising the nominal. Only clause-internal fronting is discussed in detail in this article; what is here referred to as the "pre-verbal position" is very similar to the position that Durie (1987) called the CORE TOPIC. This term is not appropriate for Tukang Besi, however, since non-core time expressions may also occur in this position.

The topicalisation that can occur in Tukang Besi also creates a preverbal argument, but unlike the preverbal and clause internal position that is described here, the topic position is demonstrably outside the clause. Moreover, the topic is not restricted to being a particular argument: any argument, core or oblique, may appear in the topic position; and if non-core, it will retain its original case marker or preposition. Further discussion of the treatment of two pragmatically-determined preverbal positions (in Mayan languages) can be found in Aissen (1992).

Within the clause, the only argument nominals that may be fronted are those bearing the nominative pivot properties. The nominal is placed in a pre-verbal position, yet still within the clause, and the case marker of the nominal is not the nominative *na*, but rather the more general *te*. Thus we can say that arguments with nominative case are marked either by the case marker *na*, or by preverbal position (and the general case marker *te*). The pronominal marking on the verb is unaffected by this process. The constituent order and case marker use found in clauses with a preverbal argument can be summarised as follows:

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13 Though this tendency towards head-marking has been carried even further in some of the Munic languages in the region, which allow more than one [O] agreement marker on the verb in trivalent clauses: see, for example, Muna (van den Berg 1989).

Transitive:	*te* O	s-V-o	*te* A
Intransitive:	*te* S	s-V	
Transitive, no [O] marking	*te* A	s-V	*te* O

Variations of sentences (8) and (9) showing fronting are presented below as (13) and (14), and a version of (8) without [O] agreement as (15):

(13) *Te kene=no no-'ita='e te ana iso.*
CORE friend=3POSS 3R-see=3OBJ CORE child yon
'That child saw its friend.'

(14) *Te ana iso no-tinti.*
CORE child yon 3R-run
'That child is running.'

(15) *Te ana iso no-'ita te kene=no.*
CORE child yon 3R-see CORE friend=3POSS
'That child saw its friend.'

Note the difference between (13) and (15), in which the change in grammatical relations is signalled only by constituent order and the presence versus absence of the [O] clitic on the verb.

7 A short note on voice selection and word order

As has been mentioned in §3–5, one argument in a clause is selected, based on its pragmatic prominence, and assigned nominative case. This choice is motivated by the exigencies of discourse, since the nominative argument is the preferred controller and target of zero anaphora across coordinate clause boundaries. Since the nominative argument usually represents relatively older, known and more 'given' information, with newer participants appearing as non-nominative arguments, arguments are usually nominatively marked only after being introduced as a non-nominative argument.

This pattern is illustrated in (16) taken from the beginning of a story, in which there can be no assumed knowledge about the identity and relative prominence of the participants. The protagonist *Wa Sabusaburengki* is introduced as the object of an existential clause, and in the next clause becomes the predicate of an identificational clause, and then the nominative [A] of the transitive clause headed by *asumumbele.* Following the introduction of a new argument as the [O], *Wa Sabusaburengki* loses nominative status (but remains an [A]); the new character introduced as an [O] in the preceding clause, the chicken (*kadola*) becomes the new nominative argument and retains this status for the rest of the passage:

(16) *Sapaira sapaira ana, ane kene wowine*$_i$ *sa-mia, te ngaa=no*$_i$
once.upon.a.time exist and woman 1-CLASS CORE name=3POSS

te Wa Sabusaburengki.
CORE Wa Sabusaburengki

Te Wa Sabusaburengki ana$_i$ *a*$_i$*-s[um]umbele te kadola*$_j$.
CORE Wa Sabusaburengki this 3I-decapitate.SI CORE chicken

La'a=mo *na*$_i$*-s[um]umbele-'e*$_j$ *na* *kadola* *iso*$_j$, *no*$_j$*-pogau-mo*
just=PF 3I-decapitate.SI=3OBJ NOM chicken yon 3R-say=PF

na *kadola* *iso*$_j$ *kua...*
NOM chicken yon :
'Once upon a lady$_i$, and her name$_i$ was Wa Sabusaburengki. Wa Sabusaburengki$_i$ was going to cut off a chicken$_j$'s head. Just as she$_i$ was about to cut off its$_j$ head, that chicken$_j$ said "……".' (WaSab: 1-3)

A short example from the middle of a text illustrates the mechanisms by which an argument is re-introduced as the main player in a text:

(17) *Ara* *ku*$_i$*-[m]o-busu* *na*$_j$*-t[um]alo=aku*$_i$, *kene* *te* *ia*$_j$
if 1SG-REC.SI-forward.fist 3I-win.SI=1SG.OBJ and CORE 3SG

no$_j$*-pande* *di* *lola-'a,* *jari* *labi* *ku*$_i$*-akala-'e*$_j$.
3R-clever OBL fly-NL so better 1SG-trick=3OBJ
'If I$_i$ want to fight he$_j$'ll beat me$_i$, and he$_j$'s good at flying, so it'd be better if I$_i$ tricked him$_j$.' (RA: 24)

In these four clauses, 'I' begins as the nominative argument in an [S] role (with no [O] in the clause, the single argument must be the one with nominative case) in the conditional clause. The next clause sees a different argument ('he') introduced in [A] role, and 'I' continuing in an [O] role, still the nominative argument. The third clause uses fronting to highlight the change of grammatical relations; in this clause, the 'he' argument is continued, but placed preverbally as the single argument of an intransitive verb, making it necessarily nominative (although the overt marking is not nominative, because of its position). The final clause follows the same pattern as was seen in the second clause, the [S] argument now becoming an [O] but remaining nominative, and a new argument being (re-)introduced as an [A]. Notice also that in four clauses containing two transitive and two intransitive verbs, only once is a core argument expressed with a nominal as well as the pronominal affixes, and that occurred when there was a change in the identity of the nominative argument in the second clause. Since the referential information about the participants is already clear from the context of story, only the role information present on the verbs is needed, combined with occasional pragmatic marking of the nominals, to monitor which participant is being referred to at any time.

As would be expected, given the lack of previous information, the proportion of core nominals per clause is higher in the introductory fragment in (16), which serves to lexically expand the role information carried on the verbs. Of the five clauses in (16), two are transitive verbal clauses and one an intransitive verbal clause; these three clauses display a total of four KPs. The extract from the middle of a text presented in (17) has three clauses, and only one KP. This clearly reflects a preference for more fully (lexically) specified arguments at the beginning of a text than at some point in the middle (see work by Du Bois, e.g. 1987, on preferred argument structure for a discussion of the relevance of these facts to morphosyntax).

8 Evidence for the pivot status of the nominative argument: floated quantifiers

In Tukang Besi, *saba'ane* 'all' and some other quantifying expressions may occur in the NP or 'float' to a position outside the NP, and appear immediately pre- or post-verbally. In all cases that a quantifier appears outside an NP, it is launched by the NOMINATIVE argument of the clause, regardless of the syntactic or thematic role borne by that NP. Some examples are presented below. In the following example, the quantifier appears in its normal NP-internal position:

Launched by a nominative [A]:

(18) *No-lemba te kaluku* [KP *na amai* [QUANT *saba'ane*]]
3R-carry CORE coconut NOM 3PL all
'All of them carried coconuts.'
* 'They carried all of the coconuts.'

Alternative orders show the quantifier in either immediately preverbal, or immediately post-verbal, positions. In both cases the interpretation is unambiguously the same as the clause in (18).

Floated:

(19) *Nolemba* [QUANT *saba'ane*] *te kaluku* [KP *na amai*]

(20) [QUANT *Saba'ane*] *nolemba te kaluku* [KP *na amai*]

When the verb is found with [O] agreement, the [O] nominal is now the nominative one. An example of a non-floated quantifier appearing in the [O] NP is given below:

Launched by a nominative [O]:

(21) *No-lemba='e* [KP *na kaluku* [QUANT *saba'ane*]] *te amai.*
3R-carry=3OBJ NOM coconut all CORE 3PL
'They carried all of the coconuts.'
* 'All of them carried coconuts.'

As with the examples in (19)–(20), it is possible for the quantifier to float away from this position; examples of pre- and post-verbal quantifiers, still with the same reference as in (21), are given below.

Floated:

(22) *Nolemba'e* [QUANT *saba'ane*] [KP *na kaluku*] *te amai.*

(23) [QUANT *Saba'ane*] *nolemba'e* [KP *na kaluku*] *te amai.*

Finally, (24)–(26) show the use of a quantifier, floated and unfloated, with an intransitive verb. In these cases the reference is still unambiguous. Adding an oblique phrase such as *kua wunuano* 'to their house' to any of the sentences cannot force a possible 'They went home to all of their houses' reading, regardless of the position of the quantifier.[14]

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14 The only way to get this reading with a floated quantifier is for the goal to be coded as a nominative applied [O]:

No-mbule=api'=e=mo saba'ane na amai kua wunua=no
3R-return=APPL=3OBJ=PF all NOM 3PL ALL house=3POSS
'They returned to all of their houses.'

Launched by a nominative [S]:

(24) *No-mbule=mo* [KP*na amai* [QUANT*saba'ane*]]
3R-return=PF NOM 3PL all
'They all went home.'

Floated:

(25) *Nombulemo* [*saba'ane*]QUANT [KP*na amai*]

(26) [QUANT*Saba'ane*] *nombulemo* [KP*na amai*]

In all the above sentences, regardless of the syntactic role borne by the quantified nominal, it is the nominative argument that is quantified by the floated quantifier *saba'ane*. Furthermore, this quantifier, when floated, may not refer to the non-nominative argument in a sentence. It is also worth noting that the ability to launch a quantifier is not dependant on the morphological case displayed. Recall from §6 that a preverbal argument appears with the *te* case-marker, but it is still able to launch a floated quantifier. Compare (19) with (27), which does not have an overt nominative case marker since it is preverbal, but has the same restrictions on interpretation,

(27) [KP*Te amai*] *nolemba* [QUANT*saba'ane*] *te* *kaluku.*
CORE 3PL 3R-carry all CORE coconut
'All of them fetched coconuts.'

Other grammatical constructions that single out the (syntactically) nominative argument as the preferred pivot include conjunction reduction, internal relative clauses, external possession (Donohue 1999b) and temporal clauses. These all select an argument that must be nominative, and so provide evidence that the system of verbal marking and case alternations presented in §2–4 is indeed a voice system, with syntactic (and not just pragmatic) effects.

9 Relics of old focus morphology: external relative clauses and nominalisations

Despite the fact that the voice system in Tukang Besi makes no reference to the reconstructable Austronesian voice affixes, several of these affixes are reflected in Tukang Besi, in the form of the affixes *-[um]-*, *(n)i-* and *-'a*. The use of these affixes is described in the following sections, according to function.

9.1 External relative clauses

Tukang Besi uses the 'subject infix' (SI) infix *-[um]-* to mark a relative clause with an [S,A] as its head, and the object prefix (OP) *i-* to show that the head of the relative clause is an [O] (the [O] prefix surfaces as *di-* (in younger speakers, probably through the influence of Malay), and *ni-* or *i-*, idiolectally and dialectally). These two affixes clearly reflect the Austronesian actor voice and object voice affixes (terminology following Kroeger 1993), **-um-* and **-in-*, and are still functioning in roles easily relatable to these original meanings, though they are not found in main clauses. Indeed, they are not voice markers in the subordinate clauses; the alternation between the presence and absence of [O] marking on transitive verbs is found in relative clauses constructed with *-[um]-* as well as in main clauses (see example (37)).

Examples of these different relative clauses can be seen in (28)–(36) (more details on interesting aspects of relative clauses in Tukang Besi can be found in Donohue (1996b)). The first two examples simply illustrate the case marking patterns for the arguments of transitive verbs in main clauses.

Main clauses:

(28) *No-balu te pandola na wowine.*
3R-buy CORE eggplant NOM woman
'The woman bought an eggplant.'

(29) *No-balu='e na pandola te wowine.*
3R-buy=3OBJ NOM eggplant CORE woman
'The woman bought the eggplant.'

Relative clauses based on the sentences in (28) and (29) are given below. The basic use of the subject relative clause and object relative clause are given in (30) and (31), while (32) and (33) show that the different morphological markers may not be freely interchanged.

Relative clauses:

(30) *Te ia iso te wowine* [$_{RC}$*b[um]alu te pandola*]
CORE s/he yon CORE woman buy.SI CORE eggplant
'That's the woman who bought the eggplant.'

(31) *Te iso te pandola* [$_{RC}$*i-bal(u) u wowine*]
CORE yon CORE eggplant OP-buy GEN woman
'That's the eggplant that was bought by the woman.'

(32) **Te iso te pandola* [$_{RC}$*b[um]alu te wowine*]
CORE yon CORE eggplant buy.SI CORE woman
(Good for: 'That's the eggplant that bought the woman.')

(33) **Te ia iso te wowine* [$_{RC}$*i-bal(u) u pandola*]
CORE s/he yon CORE woman OP-buy GEN eggplant
(Good for: 'That's that woman who was bought by the eggplant.')

With intransitive verbs the only possible choice of relative clause is the subject relative clause; attempts to use the object prefix are not grammatical with intransitive verbs.

Intransitive clauses:

(34) *No-kengku na uwe iso.*
3R-cold NOM water yon
'That water is cold.'

(35) *Te iso te uwe* [$_{RC}$*k[um]engku*]
CORE yon CORE water cold.SI
'That's the cold water.'

(36) **Te iso te uwe* [$_{RC}$*i-kengku*]
CORE yon CORE water OP-cold

Note that it is NOT simply the nominative argument of the relative clause that is the pivot for this construction. If there are [O] enclitics on the verb of the relative clause, then the [O] in the relative clause will receive nominative marking, just as in a main clause:

(37) *Ku-'ita te kalambe* [$_{RC}$*k[um]ele='e na kaujawa*]
1SG-see CORE girl carry.by.strap.SI=3OBJ NOM cassava
'I can see the girl who's carrying the cassava.'

This fact is one of the strong arguments against considering the system of voice alternations presented in §3 and §4 as displaying either passive or antipassive characteristics – the choice of voice forms has no effect on the status of the argument, as [A] or [O], for the purposes of this construction. Other constructions that make explicit reference to the [S,A] vs [O] grouping of syntactic roles (the same split found in the verbal agreement) are control in complement clauses, [O] incorporation, and case marker adoption.

9.2 Nominaliser *-'a*

There are rather few affixes in Tukang Besi that can be used to derive nominals from otherwise verbal roots. There are, however, three strategies which are used commonly for the derivation of nominals, though they are not exclusively derivational constructions. One is the use of relative clauses without a head in the N position, as seen in (38), illustrating both a subject relative clause and an object relative clause:

(38)a. *te* [$_{RC}$ *t[um]inti*]
CORE run.SI
'the running (person)'

b. *te* [$_{RC}$ *mbeaka i-'ita*]
CORE not OP-see
'the spirit'[15]

Another strategy that exists is for a precategorial root to simply be used in either a verbal or a nominal syntactic position, with no derivational morphology required. This pattern of alternations without any derivational morphology is seen in (39) and (40).

	Nominal/Referential		Verbal/Predicative
(39)a.	*te bose*	b.	*No-bose.*
	CORE paddle		3R-paddle
	'the paddle'		'S/he is paddling.'
(40)a.	*te tomba*	b.	*No-tomba=mo.*
	CORE mud		3R-mud=PF
	'the mud'		'It's become muddy (already).'

Finally, the suffix *-'a* serves to derive a nominal concept from an explicitly (lexically specified as such) verbal concept. When applied to verbal roots, the result is usually an abstract noun, referring to the action of the verb. With 'verbal' concepts that are based on roots which are more precategorial in nature, the derived nominal often refers to the place in which the action is conducted, though it can also refer to the conduct of the action itself. Here we see the connection with the Austronesian morpheme *-an*, which serves as a dative voice

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15 The position of *mbeaka* 'not' is not unusual in (38b), and is found in headed relative clauses as well (e.g. *Te mia mbeaka i'ita* 'the person who was not seen').

marker in most more northerly Philippine-type languages. An example of each of these cases is seen is (41) and (42):

(41)a. *No-wila.*
3R-go
'They are going.'

b. *te wila-'a=no*
CORE go-NL=3POSS
'their going'
* 'the place that they go (to)'

(42)a. *No-manga.*
3R-eat
'They are eating.'

b. *te manga-'a=no*
CORE eat-NL=3POSS
'their eating'
'the place that they eat (at)'

With some verbs, the difference between these two senses (abstract nominalisation and locative nominalisation) has developed into a morphological distinction – the (rarely attested, and lexically determined) allomorphs *-ra* and *-ma* appear to have more specific semantic domains than does the more general *-'a*. Compare (43b) and (43c) with (44b) and (44c):

(43)a. *No-kede.*
3R-sit
'They are sitting.'

b. *te kede-'a=no*
CORE sit-NL=3POSS
'their sitting'
* 'the place that they are sitting'

c. *te kede-ma=no*
CORE sit-NL=3POSS
'the place that they are sitting'
* 'their sitting'

(44)a. *no-'ita.*
3R-see
'they are looking'

b. *te 'ita-'a=no*
CORE see-NL=3POSS
'(the fact of) their looking'
* 'the way that they look'
* 'the place that they look'

c. *te 'ita-ra=no*
CORE see-NL=3POSS
'the way that they look'
* 'their looking'
* 'the place that they look'

Although the evidence in (43)–(44) suggests that several suffixes are developing, they are not yet productive enough to require special treatment. The suffix *-ma* has been observed on only one word, *kede* 'sit', and the *-ra* suffix on only two, *'ita* 'see' and *namisi* 'feel, taste' (with the irregularity that *namisi* + *-ra* yields not **namisira* but *namira*). A more regular (but still not completely predictable) alternation is the dissimilation that *-'a* displays when following a

syllable with a glottal stop, appearing as *-ka*. This is not wholly regular, however, with some lexical items retaining the glottal stop in the nominalising suffix. For example, compare the forms in (45) and (46), in which the first consistently appears with [ka] as the form of the nominalising suffix, and the second always appears with [ʔa]:

(45) *te motindo'u-ka='u di uwe*
CORE thirsty-NL=2SG.POSS OBL water
'your thirst for water'

(46) *te helo'a-'a=(')u nu bae*
CORE eat-NL=2SG.POSS GEN rice
'your cooking of rice'

As explained, the function of *-'a* and its alternants is to derive unambiguously nominal words from either precategorial or verbal bases. It may not appear with an unambiguously nominal base:

(47) * *te komba-'a*
CORE moon-NL
'the mooniness' (?)

Once derived, the nominal displays all the properties associated with an N, and is otherwise unexceptional. It will be noted in the examples above that the [S,A] of the verb may be present in the derived nominal, expressed by a possessive enclitic. It may also be expressed by a genitive NP, rather than just its pronoun:

(48) *te wila-'(a) u amai La Tonggi*
CORE go-NL GEN 3PL La Tonggi
'the going of La Tonggi and his group'

If the verb is transitive, then the [O] may appear as a genitive phrase. The normal interpretation is that the first genitive phrase refers to the [S,A] of the equivalent verbal expression, though this restriction is not an absolute one in nominalisations (object relative clauses are stricter in their requirement that the first genitive phrase refers to the *by*-phrase, and also more likely to include more than one genitively indexed argument):

(49) *te 'ita-'(a) u Wa Ode Kiradati*
CORE go-NL GEN Wa Ode Kiradati
'the seeing of Wa Ode Kiradati'

A: the act of seeing that Wa Ode Kiradati carried out, resulting in her seeing someone/something else

B: the act of seeing that was carried out by someone/something, which resulted in Wa Ode Kiradati being seen.

With (most) ditransitive verbs, or verbs with applicative or other valency increasing morphology, all the core arguments may be present in this manner.[16] An example of several genitive phrases on one nominalisation can be seen in (50):

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16 Though more than one or two are unlikely to occur in natural speech, since the lack of strict rules on the position of postverbal arguments in different syntactic roles makes it difficult to interpret these sentences (such as the ambiguity of (49), in which *Wa Ode Kiradati* is not unambiguously identified as either the see-er or the seen).

(50) *'E, te pa-manga-'a=((')u) u Aswi nu ik(a) atu,*
huh TOP CAUS-eat-NL=2SG.POSS GEN Aswin GEN fish that
no-marasai na 'ita-ra-no la i.'
3R-difficult NOM see-NL=3POSS ILL.FORCE FAMILIAR
'Hey, the way you fed the fish to Aswin, it didn't look easy.'

Conceivably the nominalisation in (50) could be interpreted as 'Your feeding of Aswin to the fish', but this is pragmatically rather unlikely. With ditransitive verbs, whether of the ⟨[Agent], [Dative], [Theme]⟩ type or the ⟨[Agent], [Instrument], [Theme/Patient]⟩ type, all arguments may appear in the nominalisation with genitive case marking, though the instrument is unlikely to appear without the theme/patient appearing as well:

(51) *No-'ita te tompa-'a=n(o) u Aswi nu watu.*
3R-see CORE throw-NL=3POSS GEN Aswin GEN stone
'They saw her throwing the rock at Aswin.'

(52) *# No-'ita te tompa-'a=n(o) u watu.*
3R-see CORE throw-NL=3POSS GEN stone
'They saw her throwing the rock.'[17]

(53) *No-'ita te tompa-'a=n(o) u Aswi.*
3R-see CORE throw-NL=3POSS GEN Aswin
'They saw her throwing at Aswin.'

(54) *No-mele=ako te hu'u-'a=n(o) u ama=no nu doe.*
3R-happy-APPL CORE give-NL=3POSS GEN father=3POSS GEN money
'He's happy because of their giving his father some money.'

Nominalisations of this sort are clearly not restricted to being [S,A]s or [O]s, and are simply nominalisations of the verbal forms, preserving the argument structure of the verbal clause, as would be expected (see, for example, Hale & Keyser 1993).

10 Conclusions

The data above has shown that in Tukang Besi there is a clearly Philippine-type voice system, with the type of syntactic correlates reported for most Philippine-type languages (floated quantifiers (§8), conjunction reduction (mentioned in passing in §7; see also Donohue 1999a). In this respect, then, we have the same functional oppositions operating in Tukang Besi as in more 'typical' western Austronesian languages.

At the same time the superficial typology of the language is quite different from the more well described Philippine-type languages, with agreement on the verb and many indications that the language's typology has shifted to a more head-marking model. The lack of nominal-deriving morphology, and the proliferation of verbal morphology, supports this claim.

The complete loss of the classic Austronesian voice morphology in main clauses, and the loss of the use of that morphology in any position as a functioning voice system, has led to radical restructuring of the morphological appearance of Tukang Besi, with the addition of

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17 More likely to be interpreted as 'They saw her throwing (something) at the rock.'

agreement markers to take on the role of monitors of pragmatic importance. The preservation of these old voice markers as markers of subordinate clauses only makes an interesting comment on the paths of grammaticalisation, with (presumably earlier) main clause morphology becoming restricted to subordinate clauses (a reversal of the usual trend observed in other languages in which subordinate clause morphology comes to be used in main clauses). In addition to being a reversal of the usually-observed trends cross-linguistically, it also goes against some proposed paths of grammaticalisation for earlier forms of Austronesian itself, with some writers claiming that the Austronesian main clause morphology arose from a grammaticalisation of earlier subordinate clause morphology.

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