Chapter 20
Pivots and grammatical relations

20.1 Introduction: kinds of pivots

This chapter brings together the information on syntactic and morphological pivots from various parts of the preceding description, and adds additional information on phenomena not yet covered. This is done with the purpose of exemplifying the problems associated with the notion of ‘pivot’ and ‘subject’ in Tukang Besi.

I shall use ‘pivot’ in the same sense that it is used in Dixon (1979) to refer to the argument or particular grouping of arguments to which a particular syntactic or morphological operation is sensitive. These arguments in turn have usually been defined in terms of the syntactic roles that they bear (Dixon 1994: 6) calls these “semantic-syntactic primitives”). The syntactic roles relevant to the easy discussion of these processes are [S], [A] and [O]; these have been explained and defined in chapter 3. A similar use of the term ‘pivot’ is found in Van Valin (1981), and Foley and Van Valin (1984).

Given the [A], [S] and [O] syntactic roles, we may observe that different languages use different groupings of these roles in the formation of pivots for grammatical processes. Furthermore, there are two sorts of pivots. Firstly, there are GRAMMATICAL PIVOTS, those whose identity is particular to the language or grammatical process in question, such as the common [S,A] pivot in English, or the [S,O] pivot of Yup’ik, exemplified above.

On the other hand we also find SEMANTIC PIVOTS, those that are determined by the inherent semantics of the syntactic process to which they apply, such as the addressee of imperatives being restricted to Agents, regardless of the language’s pivot choice in other syntactic processes. (Dixon 1994 and elsewhere) claims that the restriction is to arguments in [S] or [A] function, and this is certainly true for many languages, but this is not the case in Tukang Besi, in which it is ungrammatical to request someone to be the subject of a passive verb, or to hear something by chance, or (pragmatically possible with a shaman) to request the sun to dry something, or the rain to fall (these meteorological requests are phrased with the natural force as the causer of a causative verb, and thus an agent). In many cases the morphological and syntactic groupings that a language distinguishes are identical, such as the consistent use in English of an [S,A] grouping in its choice of both morphological pivots (the use of nominative or oblique case on pronouns) and syntactic pivots (such as conjunction reduction exemplified in (1)).

Furthermore, morphological classification and syntactic pivots don’t have to agree; Chung noted, in her study of grammatical relations in Polynesian languages, that

The NP categories picked out by the case marking rule(s) of a language may differ from the categories to which other syntactic rules refer. (1978:99)

leading to the extra problems of classifying the morphological categories and the syntactic
categories of a language.

So far we have discussed pivots that can be defined in terms of syntactic roles - [A], [S] (with its subsets) and [O] (as defined in chapter 3, and see also Dixon 1994). There are also languages with definite, morphologically distinct, pivots that do not operate in these terms. Good examples of the latter are those languages of the Philippine-type that do not (despite more than their share of attempts to force them into either an ergative or an accusative mould. For some examples of these analyses see, amongst many others, Blake (1991), De Guzman (1988), Gerdts (1988), Guilfoyle et al (1992), Byma (1986). For a counter to these views, see Foley and Van Valin (1984), Kroeger (1993), Maclachlan (1995b)) have a fixed choice of pivot, but need to specify in each clause which argument is the pivot (for most grammatical constructions, including, for Tagalog, Quantifier Float, Relativisation, Number Agreement, Raising, Possessor Ascension, and Conjunction Reduction. See Schachter (1976, 1977) or Kroeger (1993) for exemplification of these properties) - the nominative argument, using the terminology introduced in chapter 3. (I shall not enter a discussion of the very interesting languages with inverse systems of verbal indexing, such as various Algonquian languages (see e.g. Wolfart 1973, or more recently Dahlstrom 1991) and others (Dunn 1995 MS, Donohue 1997), which also appear to display mismatches between morphological and syntactic categories, and which also display wide-reaching morphological reflections of pragmatic status). It is possible for a clause to select either [A] or [O] to be the pivot of a transitive construction, but each choice involves morphological choices as well. The choice of which argument is nominative is presumably determined by pragmatics (though how remains unclear. See Kroeger 1993 (Chapter 3) for a counter view with respect to Tagalog), and indicated by morphology on both the verb and the nominal. Different Philippine-type-languages may have anything upwards of two (e.g., Sama/Bajau) basic morphologically distinct pivot choices. As Givón (1984: 167) puts it,

...case-marking systems of various kinds may be viewed as different solutions to the same functional dilemma...With respect to subjectivization, the Philippine solution is in a way rather elegant. Nouns that are not in the pragmatic case-role of subject/topic are marked for their semantic roles, by prefixes. The subject/topic noun is marked by prefix for its pragmatic role. And the verb is marked (by various prefixes/infixes/suffixes) for the semantic role of the subject/topic.

In the rest of this chapter different constructions that are restricted to a subset of the total possible set of arguments in a clause in Tukang Besi will be examined to see which syntactic and morphological processes are relevant to which types of pivot, and which groupings of roles within those broader categories.

20.2 Pivots in Tukang Besi

The concept of the morphological and syntactic pivot in Tukang Besi requires reference to the pragmatic, syntactic and semantic role information about the argument in question. In some grammatical processes in Tukang Besi the choice and definition of the pivots is syntactically-dominated (that is, definable in terms of the [A], [S] and [O] syntactic roles). Other processes, on the other hand, are defined pragmatically (that is, for which the labels [A], [S] and [O] do not help to define the pivots that the language selects), and this
pragmatic choice is morphologically marked. Additionally, there are several constructions, both morphological and syntactic, that display restrictions based directly on the semantic roles that are borne by the arguments, regardless of the syntactic or pragmatic roles that these arguments bear.

20.3 [S,A] and [O] pivots

There are several morphological and syntactic processes in Tukang Besi that refer to the familiar grouping of [S] and [A] on the one hand, and [O] on the other. In all the cases listed in this section, either [A] and [S] behave in the same way, morphologically or syntactically, or else the process is available to an [O], but not to either [A] or [S]. The processes are discussed individually.

20.3.1 Pronominal indexing on the verb

The verb in Tukang Besi is obligatorily prefixed, and optionally (though usually) suffixed, to indicate the person and number of the core arguments in the clause (chapters 3 and 5). Regardless of the semantic role that it bears, the argument in [S,A] syntactic role is always prefixed on the verb:

Intransitive [Agent]:

(1) Ku-pajulu kua Waginopo.
    1SG-continue ALL Waginopo
    ‘I went on to Waginopo.’
    (from pa- ‘causative’ and julu ( < Malay dulu / dolo, ‘first, earlier’))

Transitive [Agent]:

(2) Ku-manga te sede koruo.
    1SG-eat CORE taro many
    ‘I ate a lot of taro.’

Intransitive [Dative]:

(3) Ku-mo’aro (te sede).
    1SG-hungry CORE taro
    ‘I am hungry (because of the lack of taro).’

Transitive [Dative]:

(4) Ku-'awa te sede koruo.
    1SG-get CORE taro many
    ‘I got a lot of taro.’

Transitive [Instrument]:

(5) No-mepa-'e na sede te wande.
    3R-soaking-3OBJ NOM taro CORE rain
    ‘The rain soaked the taro.’
Intransitive [Theme/Patient]:

(6) **Ku-pa-muru.**
1SG-OCC-bald
‘I am angry.’

(as discussed in chapter 7, with a body-part affected experiencer, the subject may alternatively be indexed by means of the possessive suffixes)

The suffixes may not be used to index this [S,A] argument, regardless of its semantic role:

(1)' * Pajulu-aku.
continue-1SG.OBJ
(2)' * Manga-aku.
eat-1SG.OBJ
(3)' * Mo'aro-aku.
hungry-1SG.OBJ
(4)' * 'Awa-aku.
get-1SG.OBJ
(5)' * Mepa-'e.
soaking-3OBJ
(6)' * Pa-muru-aku.
OCC-bald-1SG.OBJ

Similarly, the suffixes are used to index the [O] of a transitive sentence, regardless of its semantic role:

[Agent]:

(7) **No-laha-ngkene-aku te lei i kente.**
3R-search-COM-1SG.OBJ CORE sea.urchin OBL shallow.tidal.reach
‘They went searching for sea urchins with me on the tidal flats.’

[Dative]:

(8) **No-hoti-aku te sede.**
3R-donate-1SG.OBJ CORE taro
‘They donated (some taro) to me.’

[Instrument]:

(9) **No-pake-'e te kalambe.**
3R-use-3OBJ CORE young.girl
‘The young girls used them.’

[Theme/Patient]:

(10) **No-sepa-aku te amai.**
3R-kick-1SG.OBJ CORE 3PL
‘They kicked me.’

With a ditransitive verb (*hu'u ‘give’, *kahu ‘send’, *sumbanga ‘donate’), or with a verb with two objects by virtue of having causative or applicative morphology added, it is the [Dative], not the [Theme], role that is indexed by the object suffixes. It is not possible for both of the non-subject roles to be indexed (nor is this possible with a verb with two objects by virtue of having causative or applicative morphology added):

(11) **No-hu'u-kita te ia.**
3R-give-1PL.OBJ CORE 3SG
‘They gave it to us.’
One complication in this otherwise neat paradigm is that some instruments can also be indexed on the verb by these object suffixes (and, if so, exclude the patient/theme, otherwise obligatorily present, from being indexed), but only if the patient/theme is third person; the object suffixes may index thus either the instrument, in restricted circumstances, or the primary object (at all times). See chapter 4 for examples, and also section 20.11.1.

20.3.2 Object incorporation

Incorporated object nominals occur immediately following the verb root. Typically (but not always) these incorporated nominals refer to the generic object of a habitual or customary action. The object may be in any semantic role, but must be an [O]; [S] or [A] nominals may not be incorporated, regardless of their semantic roles (Chukchi is a language that allows the incorporation of unaccusative [S] roles; this is not allowed in Tukang Besi):

Incorporated [O]:

(14) No-pake-palu.
3R-use-hammer
‘S/he uses hammers.’

(15) No-sai-kuikui.
3R-make-cakes
‘S/he makes cakes.’

[S] not incorporated:

(16) a. * No-tinti-kumbou.
3R-run-goanna
‘Goannas run.’

b. * No-ja’o-kumbou.
3R-bad-goanna
‘Goannas are bad.’

Object incorporation is discussed in more detail in chapter 7.8.

20.3.3 Unspecified object deletion

A generic object of an action may be omitted from the sentence in a process known as unspecified object deletion (UOD) (also referred to as theme suppression; I shall not use this label, as the object in question is not always a [Theme]). Either [Dative], [Instrumental], [Theme] or [Patient] roles may be deleted in this manner; similar deletion
(that is, no reference by either nominal or verbal affixal means) is not possible with [S] or [A] arguments. Sentences displaying UOD are fully formed and complete sentences, and are not just restricted to certain discourse environments.

(17) **No-hoti Ø.**
3R-donate.charitably
‘S/he gives (food and clothing)(to poor people).’

(18) **No-manga Ø.**
3R-eat
‘S/he eats (cassava).’

(19) * **Nangu (di olo).**
swim OBL deep.sheltered.water
‘[ ] swims (in the sea).’

(20) * **Manga te soami.**
eat CORE cooked.grated.cassava
‘[ ] eats soami.’

20.3.4 Input to passives

There are three different passive(-like) prefixes used on verbs in main clauses in Tukang Besi (described in detail in chapter 11). The most neutral (and productive) of these is **to-**, which is used here to exemplify the properties of passive verb forms. Only transitive verbs may appear with passive morphology, and the addition of passive morphology serves to make the argument [O] into an [S]-like argument (though not identical; Almost. The resulting [S] argument is not nominative, syntactically, despite its case marking. This is unlike an underived [S], which is nominative unless it is a weather verb. See chapter 11 for details). Examples follow illustrating [Patient], [Instrument] and [Dative] objects:

(21) **Ku-to-pa-he-ta'o-mo.**
1SG-PASS-CAUS-DO-wait-PF
‘I was made to wait.’

(22) **No-to-pake-mo na poda.**
3R-PASS-use-PF NOM knife
‘The knife has been used.’

(23) **Ku-to-hoti-mo.**
1SG-PASS-donate.charitably-PF
‘I was donated to.’

The *by*-phrase in these clauses cannot be mentioned. For instance, a version of (21) with a *by*-phrase (whether marked as core or oblique) is ungrammatical:

(21)* **Ku-to-pa-he-ta'o-mo te / i kene-su.**
1SG-PASS-CAUS-DO-wait-PF CORE OBL friend-1SG.POSS
‘I was made to wait by my friend.’
An [S] argument may not be passivised, regardless of whether its verb is unergative or unaccusative:

(24) * No-to-nangu-mo.
    3R-PASS-swim-PF
    ‘It has been swum.’

(25) * No-to-mate-mo.
    3R-PASS-die-PF
    ‘It has been died.’

20.3.5 External relative clauses: subject relative clauses and object relative clauses

Tukang Besi uses the Subject infix (SI) -{um}- to mark a relative clause with the subject ([S,A]) as its head, and the Object prefix (OP) i- to show that the head of the relative clause is an object ([O]) (details in chapter 15).

Main clauses:

(26) No-balu te pandola na wowine.
    3R-buy CORE eggplant NOM woman
    ‘The woman bought an eggplant.’

(27) No-balu-‘e na pandola te wowine.
    3R-buy-3OBJ NOM eggplant CORE woman
    ‘The woman bought the eggplant.’

Relative Clauses:

(28) Te ia iso te wowine [b{um}alu te pandola]RC.
    CORE 3SG yon CORE woman buy.SI CORE eggplant
    ‘That’s the woman who bought the eggplant.’

(29) Te iso te pandola [i-bal(u) u wowine]RC.
    CORE yon CORE eggplant OP-buy GEN woman
    ‘That’s the eggplant that was bought by the woman.’

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

(31) * Te ia iso te wowine [i-bal(u) u pandola]RC.
    CORE 3SG yon CORE woman OP-buy GEN eggplant
    (Good for: ‘That’s that woman who was bought by the eggplant.’)

Intransitive clauses:

(32) No-kengku na uwe iso.
    3R-cold NOM water yon
    ‘That water is cold.’
Note that it is not simply the nominative argument that is the pivot for this construction. If there are object suffixes on the verb of the relative clause, then the object in the relative clause will receive nominative marking:

(35) **Ku-’ita te kalambe [k[um]ele-’e na kaujawa]RC.**
1SG-see CORE girl carry.by strap.SI-3OBJ NOM cassava
‘I can see the girl who’s carrying the cassava.’

20.3.6 Complements and control: deletion and coreference

Certain complement clauses in Tukang Besi impose the restriction that the argument in the main clause and that in the subordinate clause both be in either [S] or [A] syntactic role. Under these conditions the verbs *hada* ‘want, will’ and *nde’u* ‘not want, will not’ allow deletion of the subject prefix in the second element. Other verbs do not allow deletion of the prefix, but nevertheless require that the coreferential arguments are both in [S] or [A] function. The details of coreference constraints in complement structures are more fully discussed in chapter 16.

(36) **Ku-nde’u (ku)-manga te senga.**
1SG-not.want 1SG-eat CORE fried.food
‘I don’t want to eat the senga.’

(37) **Ku-hada-hesowui.**
1SG-want-wash
‘I want to wash.’

(38) **To-parahuu / -hematuu / -mulai to-he-koranga.**
1PL.R-begin 1PL.R-DO-garden
‘We began to garden.’

(39) **Ku-soba ku-bose kua ’Oroho pe’esu-su.**
1SG-try 1SG-paddle ALL ’Oroho self-1SG.POSS
‘I tried to paddle to ’Oroho on my own.’

(40) **Ku-molinga ku-ala te loka.**
1SG-forget 1SG-fetch CORE banana
‘I forgot to fetch some bananas.’

If the [A] of the main clause is coreferential with an [O] in the subordinate clause, then this [O] cannot be deleted and must necessarily be expressed by an object suffix and/or an object NP.
Other forms of complementation require [O]:[S,A] coreference, which also clearly points to the importance of the grouping of [S] and [A] roles in Equi-deletion. Another important facet of complementation, the use of the complementiser kua, is tied in to the monitoring of [S,A] coreference in the two clauses. These are all more fully described in chapter 16.

20.3.7 Article adoption

By ‘article adoption’ I refer to a process by which the nominative article of an inalienably possessed nominal in [O] function is copied onto the possessor-[A] NP. Compare the following sentences:

(43) No-elo-'e te ina iso na ana-no.
    3R-call-3OBJ CORE mother yon NOM child-3POSS
    ‘That woman called her child.’

(44) No-elo-'e na ana-no na ina iso.
    3R-call-3OBJ NOM child-3POSS CORE mother yon
    ‘That woman called her child.’

In (43) the articles used are the expected ones for a clause with object suffixes. In (44), however, we see the nominative article copied onto the subject from the object, and so specifying the object as being inalienably possessed by the subject. Sentence (44) cannot have the interpretation that the called person is someone else’s child, and not the child of the calling woman’s, whereas (43) is ambiguous as to the antecedent of the possessive suffix. Only a nominative [O] can launch a copy article in this manner. Compare the above sentences with the following pair showing attempted launching of the nominative article by a nominal in [A] function:

(45) No-po-'awa-ngkene te ina-no na kene-su.
    3R-REC-get-COM CORE mother-3POSS NOM friend-1SG.POSS
    ‘My friend met her aunt.’

(46) * No-po-'awa-ngkene na ina-no na kene-su.
    3R-REC-get-COM CORE mother-3POSS NOM friend-1SG.POSS
    ‘My friend met her aunt.’

20.4 Nominative pivots

Whether an argument is selected as being in nominative case or not is very important for Tukang Besi discourse (see, for instance, the examples in chapter 3.9), and also for
several clause-internal grammatical processes. There are two processes that are sensitive to an argument being nominative or not, and several other processes that require both nominative case and a further specification, either in terms of the semantic role borne by the argument, or the syntactic role that it plays in the clause.

20.4.1 Floating quantifiers

In Tukang Besi, *saba'ane* ‘all’ may occur in the NP (following the head), or ‘float’ to a position outside its NP, and appear as the last element of the clause, or moved to a pre- or post-verbal position. It is in all cases launched by the NOMINATIVE NP, regardless of the syntactic or semantic role borne by that NP. Some examples are presented below:

Launched by a nominative [A]:

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

Floated:

(48) \[Nolemba \ te \ kaluku \ [na \ amai]_{KP} [saba'ane]_{QUANT}.\]
(49) \[Nolemba [saba'ane]_{QUANT} \ te \ kaluku \ [na \ amai]_{KP}.\]
(50) \[[Saba'ane]_{QUANT} \ nolemba \ te \ kaluku \ [na \ amai]_{KP}.\]

Launched by a nominative [O]:

(51) \[No-lemba'-e \ [na \ kaluku]_{KP} [saba'ane]_{QUANT} \ te \ amai.\]  
3R-carry-3OBJ \ NOM \ coconut \ all \ CORE \ 3PL  
‘They carried all of the coconuts.’  
* ‘All of them carried coconuts.’

Floated:

(52) \[Nolemba'e \ [na \ kaluku]_{KP} \ te \ amai \ [saba'ane]_{QUANT}.\]
(53) \[Nolemba'e [saba'ane]_{QUANT} \ [na \ kaluku]_{KP} \ te \ amai.\]
(54) \[[Saba'ane]_{QUANT} \ nolemba'e \ [na \ kaluku]_{KP} \ te \ amai.\]

Launched by a nominative [S]:

(55) \[No-mbule-mo \ [na \ amai]_{KP} [saba'ane]_{QUANT} ]_{KP}.\]  
3R-return-PF \ NOM \ 3PL \ all  
‘They all went home.’

Floated:

(56) \[Nombulemo \ [na \ amai]_{KP} [saba'ane]_{QUANT}.\]
(57) \[Nombulemo [saba'ane]_{QUANT} \ [na \ amai]_{KP}.\]
(58) \[[Saba'ane]_{QUANT} \ nombulemo \ [na \ amai]_{KP}.\]

20.4.2 Coreferential deletion in coordinate clauses

In Tukang Besi, the nominative argument functions as the pivot in conjoined clauses, serving as the preferred controller and the preferred target of zero anaphora:
(59) \[ \text{No-kiki'i te iko'o (na 'obu)} \] kene
3R-bite CORE 2SG NOM dog and
[no-tode (na 'obu)].
3R-flee NOM dog
‘The dog bit you, and fled.’

(60) # [ No-kiki'i te iko'o na 'obu] kene ['u-tode].
3R-bite CORE 2SG NOM dog and 2SG.R-flee
‘The dog bit you, and you fled.’

(61) [ No-kiki'i te iko'o (na 'obu)] kene
3R-bite CORE 2SG NOM dog and
[ 'u-sepa-'e (na 'obu)].
2SG.R-kick-3OBJ NOM dog
‘The dog bit you, and you kicked it.’

(62) [ No-kiki'i te iko'o], [ no-kaha te anabou (na 'obu)].
3R-bite CORE 2SG 3R-chew CORE small.child NOM dog
‘The dog bit you, and chewed the small child.’

(63) [ No-kiki'i-ke na ana te 'obu-no] kene ['u-tode].
3R-bite 2SG.OBJ NOM 2SG CORE dog-3POSS and 2SG.R-flee
‘The dog bit you, and you fled.’ / ‘You were bitten by the dog, and fled.’

(64) # [ No-kiki'i-ko (na iko'o) te 'obu-no] kene [no-tode].
3R-bite 2SG.OBJ NOM 2SG CORE dog-3POSS and 3R-flee
‘The dog bit you, and fled.’ / ‘You were bitten by the dog, and it fled.’

(65) [ No-kiki'i-ke na ana te 'obu] kene [no-kaha-'e].
3R-bite 3OBJ NOM child CORE dog and 3R-chew-3OBJ
‘The dog bit the child, and chewed it.’
‘The child was bitten and chewed by the dog.’

(66) [ No-kiki'i-ko (na iko'o) te 'obu] kene
3R-bite 2SG.OBJ NOM 2SG CORE dog and
[ 'u-sepa te 'obu].
2SG.R-kick CORE dog
‘The dog bit you, and you kicked (back).’
‘You were bitten by the dog, and kicked the dog.’
20.5 Nominative pivots with [S,O] constraints

20.5.1 Internal relative clauses

In this type of relative clause, (discussed in detail in chapter 15) the restrictions on the head are that it must be both nominative and either [S] or [O] in both the main clause and the relative clause:

(67) Te wowine [ku-'ita-'e na mia]RC.
    CORE woman 1SG-see-3OBJ NOM person
    ‘The person that I see is a woman.’ (WaI:18)

(68) Te porai-su [no-makanjara na kalambensala]RC.
    CORE fiancee-1SG.POSS 3R-“disco”.dance NOM young.girl
    ‘The young woman dancing a makanjara is my fiancee.’

The following two sentences show verbal predicates in the main clause:

(69) No-wila-mo [ku-'ita-'e na mia]RC.
    3R-go-PF 1SG-see-3OBJ NOM person
    ‘The person I saw has left.’

(70) Ku-'ita-'e [no-wila na mia]RC.
    1SG-see-3OBJ 3R-go NOM person
    ‘I saw the person who left.’

20.5.2 Temporal clause

There is a morphological device used to set the time at which an event occurs, with reference to a previous one. This is comprised morphologically of the prefix sa- and a verb stem. There may be one nominal argument of the verb, and it is expressed by either possessive suffixes or a genitive phrase. If expressed by possessive suffixes, a nominative noun phrase may also be used to expand the identity of the argument. With an intransitive verb stem, the possessor corresponds to that verb’s [S]:

(71) Sa-rato-su, to-pajulu kua kampo-no.
    when-arrive-1SG.POSS 1PL.R-continue ALL village-3POSS
    ‘When I arrived, we continued on to their village.’

When this construction is used with a transitive verb used in an overtly transitive manner (that is, not displaying theme suppression, as in ‘We ate yesterday’), the verb must include a dummy applicative suffix -ako (by which I mean that it does NOT introduce any new core argument, but merely serves to make the basic object grammatical in this construction, which would appear to be inherently intransitive), and the possessively indexed nominal can only be interpreted as serving as the [O] of the sentence, never as the [A]:

(72) Sa-'ita-ako-su, no-elo-'e te kalambe.
    when-see-APPL-1SG.POSS 3R-call-3OBJ CORE young.girl
    ‘When (they) saw me the young girls called him.’
* ‘When I saw (them) the young girls called him.’

This construction is described in more detail in chapter 17.

20.6 Nominative pivot with a [theme/patient] constraint

20.6.1 External possession

The possessor of an ‘inalienably’ possessed item (body part, cosanguinal kin) may be indexed on the verb in place of the third person object suffix that would represent the body part or relative (see chapter 7). The possessed item appears in the sentence as an independent KP, and may again be treated as the object of the clause if the possessor is removed as object by some other grammatical process - see chapter 11.6 for examples. Such raising is only available for the possessor of a theme/patient object of a transitive clause or unaccusative theme/patient subject of an intransitive one, never for the [A] of a transitive one or unergative subject of an intransitive clause. Compare the following sentences, mainly repeated from Chapter 7 (idiosyncratic English translations are given to allow for the flavour of the Tukang Besi style):

[Patient] [O] of a transitive clause:
(73) No-pepe-aku₁ na iai-su₁.  
3R-slap-1SG.OBJ NOM younger.sibling-1SG.POSS  
‘He slapped me my younger brother.’

[Patient] [S] of an intransitive clause:
(74) Ku₁-mohoo na lima-su.  
1SG-sick NOM hand-1SG.POSS  
‘My hand am sore.’

[Agent] [S] of an intransitive clause:
(75) * T₀₇-kulia i Haluoleo na toilda-nto₁.  
1PL.R-study.at.university OBL Haluoleo NOM cousin-1PL.POSS  
‘Our cousin are studying at Haluoleo university.’

[Agent] [S] of a transitive clause:
(76) * Ku₁-hu’u te Wa Kopi te kabali  
1SG-give CORE Wa Kopi CORE machete  
na iai-su₁.  
NOM younger.sibling-1SG.POSS  
‘My younger brother gave Wa Kopi a machete.’

Compare the following ungrammatical sentences employing [Dative] and [Instrumental] arguments:

(77) * No-hoti-aku₁ na toilda-su₁.  
3R-give-1SG.OBJ NOM cousin-1SG.POSS  
‘He donated to my cousin.’
(78) * Ku1-motindo’u na tolida-su1.
   1SG-thirsty NOM cousin-1SG.POSS
   ‘My cousin is thirsty.’

(79) * No-pake-aku1 na palu-su1.
   3R-use-1SG.OBJ NOM hammer-1SG.POSS
   ‘He used my hammer.’

Of course, the above sentences may be expressed with a third person affix on the verb. The difference, however, is that sentences using the possessor raising strategy imply that the possessor is more affected.

20.7 Non-nominative pivot

20.7.1 Floating adverbs

In addition to floating quantifiers, which are launched by the nominative argument in the sentence, it is also possible for an adverb to be launched by the non-nominative argument in the clause. This has been discussed in chapter 7.10. A floating adverb may be floated to anywhere in the verb phrase: immediately pre- or post-verbal, or following the object (if the object appears in the verb phrase; see chapter 3 and chapter 7). Only a few examples are given here. Additional examples are found in chapter 7.10.

(80) [No-lemba [moboha]ADV te wemba].
   3R-carry.on.shoulder heavy CORE bamboo
   ‘They carried the bamboo with difficulty.’
   (with the sense that the heaviness of the bamboo made it difficult)

(81) [Nolemba te wemba [moboha]ADV ]VP.

(82) [[Moboha]ADV nolemba te wemba]VP.


(84) [No-ala’e [menti’i]ADV ]VP na kaitela.
   3R-fetch-3OBJ fast NOM corn
   ‘They fetched the corn quickly.’

(85) * [[Menti’i]ADV noala’e]VP na kaitela.

(86) * [Noala’e]VP na kaitela [menti’i]ADV.

(87) * [[Menti’i]ADV noala te kaitela]VP.

20.8 [S,O] pivot

20.8.1 Reference of a floated conjunct

As has been seen in chapter 18, a conjoined core NP can sometimes ‘break up’, and the second conjunct appear floated away from the first conjunct. The reference of the floated conjunct is a KP in [S] function if the sentence is intransitive, but if transitive the floated conjunct can only be taken to refer back to a KP in [O] function, never one in [A] function. For instance, in (88) there is only one core argument in the clause, so the reference of the
floated conjunct is not ambiguous:

(88) *Ku-wila na iaku kua pante [kene Wa Akiri]CONJ.*
1SG-go NOM 1SG ALL beach and Wa Akiri
‘I went to the beach with Wa Akiri.’

With a transitive clause a floated conjunct can only refer to the [O] (that is, it can only have floated away from an [O] KP, not an [A] KP). This is exemplified in (89):

(89) *Ku-po-'awa-ngkene-'e te iaku na tolida-'u*
1SG-REC-get-COM-3OBJ CORE 1SG NOM cousin-2SG.POSS
di koranga [kene iai-su]CONJ.
OBL garden and younger.sibling-1SG.POSS
‘I met your cousin and my younger brother in the gardens.’
* ‘Me and my younger brother met your cousin in the gardens.’

This is examined in more detail in chapter 18, but the broad facts are that floating conjuncts are a process that ignores semantic roles or nominative status, and singles out [S] and [O] roles for the ability to launch a floating conjunct. A version of (89) with a nominative [A] shows that this is not sufficient to allow it to launch a floating conjunct:

(90) *Ku-po-'awa-ngkene te tolida-'u na iaku*
1SG-REC-get-COM CORE cousin-2SG.POSS NOM 1SG
di koranga [kene iai-su]CONJ.
OBL garden and younger.sibling-1SG.POSS
‘I met your cousin and my younger brother in the gardens.’
* ‘Me and my younger brother met your cousin in the gardens.’

20.9 Agent pivots

20.9.1 Addressee of imperatives

Tukang Besi requires that the addressee in an imperative be an agent regardless of the nominative/ non-nominative status of the argument:

(91) *Tu'o te kau measo'e ai! (na iko'o).*
fell CORE tree REF-yon ANA NOM 2SG
‘Chop down that tree!’

(92) *Tu'o-ke na kau measo'e ai! (te iko'o).*
fell-3OBJ NOM tree REF-yon ANA CORE 2SG
‘Chop down that tree!’

The fact that the restriction is that the addressee must be an [Agent], and not just an [S] or [A], is evident from the following sentences:

[Dative] [A]:

(93) * 'Awa te kado!*
get CORE present
‘Receive the present!’
[Theme] derived [S] of a passive sentence:

(94) * (‘U-)to-‘ita!
2SG.R-PASS-see
‘Be seen!’

20.10 Instrumental pivots

20.10.1 Object suffixes

An ‘intermediary-agent’ instrument (in Marantz’s (1984: 247) sense, one that is a direct source or the action’s success or failure) of a verb may be marked either as a core argument of the verb, as the object of a serialised verb, or as an oblique argument in a prepositional phrase. If it is treated as a core argument, it may be assigned nominative case and be indexed on the verb with object suffixes:

(95) No-tu‘o-ke na kau kuu (te baliu-no).
3R-fell-3OBJ NOM wood ebony CORE axe-3POSS
‘He felled the ebony tree (with his axe).’

(96) No-tu‘o-ke te kau kuu na baliu-no.
3R-fell-3OBJ CORE wood ebony NOM axe-3POSS
‘He felled the ebony tree with his axe.’

The instrument is not quite the same as other objects. It may not stand as the sole object KP, unlike the patient object of the verb or either of the objects of a ditransitive verb such as hu‘u ‘give’, sumbanga ‘donate’ or kahu ‘send’, or be indexed on the verb without appearing as a full nominal as well:

(97) * No-tu‘o-ke na baliu-no.
3R-fell-3OBJ NOM axe-3POSS
‘He felled with his axe.’

* ‘He felled them with his axe.’

(Technically possible for: ‘He chopped his axe down’, but seriously odd)

(98) No-hu‘u-(ke) te baliu-no.
3R-give-3OBJ CORE axe-3POSS
‘He gave (them) his axe.’

(99) No-hambere-(aku / -ko) te loka.
3R-throw.rotating-(1SG.OBJ / -2SG.OBJ) CORE banana
‘He threw a bit of banana tree at (me / you).’

(100) * No-hambere-‘e te (iaku / iko‘o).
3R-throw.rotating-3OBJ CORE 1SG 2SG
(Good for: ‘He threw me / you at it.’)

20.10.2 Instrumental relative clauses

The instrument of a verb may head a relative clause, using neither the -[um]- infix nor the
i- prefix on the verb (as in 1.5). The internal structure of the relative clause is almost the same as a subject relative clause, with a roughly complete clause left behind. Only the absence of a subject prefix on the verb indicates the subordinate status of the verb and its clause.

Main clauses:

(101) *Ku-bongko (te hao) te osimpu.
1SG-tie CORE rope CORE young.coconut
‘I tied the young coconuts (together) with a piece of rope.’

…and with object suffixes: two options

(102) *Ku-bongko-'e te hao na osimpu.
1SG-tie-3OBJ CORE rope NOM young.coconut
‘I tied the young coconuts (together) with a piece of rope.’

(103) *Ku-bongko-'e na hao te osimpu.
1SG-tie-3OBJ NOM rope CORE young.coconut
‘I tied the young coconuts (together) with a piece of rope.’

But note:

(104) *No-bongko te osimpu na hao.
3R-tie-3OBJ CORE young.coconut NOM rope
‘The rope tied the young coconuts.’

Relative Clause:

(105) Te iso te hao [bongko te osimpu]RC.
CORE yon CORE rope tie CORE young.coconut
‘That there is the rope that (I used / was used to) tie the young coconuts.’

We might expect that an [A] or [O] argument that is also an [Instrument] should be able to appear in this sort of relative clause, in addition to a subject or object relative clause, and this is in fact the case:

Subject Relative Clause, instrumental [A]:

(106) *O-saori-meransa na wande [rum]aho-'e i aba]RC.
3R-very-heavy NOM rain affect.SI-3OBJ OBL earlier
‘The rain that soaked them earlier on was really heavy.’

Instrumental Relative Clause, instrumental [A]:

(107) *O-saori-meransa na wande [raho-'e i aba]RC.
3R-very-heavy NOM rain affect-3OBJ OBL earlier
‘The rain that soaked them earlier on was really heavy.’

Instrumental Relative Clause, instrumental [O]:

(108) *O-isala-moboha na palu [pake i aba]RC.
3R-rather-heavy NOM hammer use OBL earlier
‘The hammer that (I was) using earlier is pretty heavy.’
Object Relative Clause, instrumental [O]:

(109) *O-isala-moboha na palu [i-pake-(su) i aba]RC.
     3R-rather-heavy NOM hammer OP-use-1SG.POSS OBL earlier
     ‘The hammer that (I was) using earlier is pretty heavy.’

Sentences (106) - (109) show that the syntactic role played by the argument is irrelevant for the purposes of determining eligibility for this construction; only the fact of an argument being an instrument or not is relevant.

20.10.3 The by-phrase in passive constructions

In chapter 11 we saw that there is a restriction such that there can be no mention of a by-phrase in a clause in which the verb is in a passive construction. If the [A] of the non-passive verb is an instrument, however, it may be mentioned as a core argument in the passive construction:

(110) *No-to-raho-mo te wande na amai min(a) i Tindoi.
     3R-PASS-affect-PF CORE rain NOM 3PL from OBL Tindoi
     ‘Those people from Tindoi have been rained on.’

Only an instrumental noun may be mentioned as the [A] in a passive construction; in 20.3.4 we saw that [Agent] actors may not be mentioned, and (130) shows that [Dative] actors are also completely deleted:

(111) No-to-'awa-mo (* te kalambe) na towu.
     3R-PASS-get-PF CORE young.girl NOM sugarcane
     ‘The sugar cane has been got (* by the girls).’

20.11 Mixed pivot: existential clauses

The pivot in an existential clause behaves unusually, the ‘existent’ NP appearing to be marked by the conjunct ke(ne), as in (112):

(112) Ane ke boku i waw(o) u meja.
     exist and book OBL top GEN table
     ‘There is a book on the table.’

Compare this with the following sentences, in which the existent boku is separated from ane by a nominal phrase or object suffixes, and in which the existent is marked with the nominative article na.

(113) Ane i waw(o) u meja na boku.
     exist OBL top GEN table NOM book
     ‘There is a book on the table.’

(114) Ane-'e na boku i waw(o) u meja.
     exist-3OBJ NOM book OBL top GEN table
     ‘There is a book on the table.’
     (This is also the usual pattern with the negative existential verb mbea-'e,
which is obligatorily suffixed to agree with the existent. All the remarks applying to *ane also apply to *mbea’e.*)

In none of these sentences, however, does this ‘nominative’ NP have any of the properties associated with a nominative NP, such as launching floating quantifier and controlling deletion in coordinate structures:

(115) $\ast$ Saba’ane *ane ke boku i waw(o) u meja.
(116) $\ast$ *Ane ke boku i waw(o) u meja i aba,
exist and book OBL top GEN table OBL previous
mean’a’e no-butí-mo.
now 3R-fall-PF
‘There was a book on the table earlier, but it’s fallen (off) now.’

It would appear that the nominative KP is a false nominative, just as was the case with the nominative argument in a passive clause. On the other hand, floating adverbs, which can be launched by a non-nominative core argument are out of the question. Pivot properties associated with an [S,A] pivot, such as indexing by subject prefixes or being the head of a relative clause, are also not allowed.

It can be indexed on the semi-verb by means of object suffixes, but may not head an object relative clause, or any other of the properties associated with [O] arguments:

(117) $\ast$ Te komporo i-ane i pangka.
CORE gas.cooker OP-exist OBL kitchen
‘The gas cooker that is in the kitchen.’

In order to grammatically express the meaning intended for (117), a simple verbless relative phrase is used, as in (117)’:

(117)’ Te komporo na di pangka.
CORE gas.cooker NOM OBL kitchen
‘The gas cooker that is in the kitchen.’

The existent does count as an [S,O] argument for the purposes of heading an object-suffixed external relative clause:

(118) *Ane ke mia g[um]ande-‘e.
exist COM person give.a.lift.SI-3OBJ
‘Someone gave him a lift.’

20.12 Pivotless constructions

Some constructions do not appear to have any pivot at all, in terms of the processes outlined above. These are clauses involving meteorological phenomena, and exclamatory clauses.

20.12.1 Weather verbs

Tukang Besi weather verbs do take a third person subject prefix, but cannot expand that
with the addition of a full NP, or any of the properties already shown for any of the pivot constructions (only a few of which are (negatively) illustrated):

(119) *No-wande (* na wande / langi / 'oloo / lono/ ia).  
3R-rain NOM rain / sky / cloud / day / 3SG
‘It’s raining.’

(120) *Te 'oloo w[um]ande iso dinggawi ala'a.  
CORE day rain.SI yon yesterday just
‘It was just yesterday that it was a rainy day.’

(121) *Sa-wande-no…  
when-rain-3POSS
‘Just as it started to rain…’

20.12.2 Exclamatory clauses

Exclamatory clauses are used to comment about some property that an object has, or a feeling that the speaker feels pertains about an event. This clause type, too, is a pivotless construction. A special nominal frame is used to present the information, using the conjunction *kenelke* and possessive suffixes on the verb; the single nominal in the clause has none of the properties normally associated with arguments of any category described in this chapter. Some examples

(122) *Ke 'eka-su i aba!  
and fear-1SG.POSS OBL earlier
‘I was really frightened just then!’  
(Lit., ‘And my fear earlier!’)

(123) *Ke to'oge nu ana-'u!  
and big GEN child-3POSS
‘Hasn’t your son grown up!’  
(Lit., ‘And the bigness of your child!’)

20.13 Grammatical categories

The different pivots and the processes in which they are relevant, which have been exemplified in the preceding sections, can be summarised as follows:

<table>
<thead>
<tr>
<th>PIVOT RESTRICTED TO:</th>
<th>GRAMMATICAL PROCESS(ES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[NOM]</td>
<td>Floating quantifiers</td>
</tr>
<tr>
<td></td>
<td>Cross-clausal deletion</td>
</tr>
<tr>
<td>[NOM] + [S,O]</td>
<td>Internal relative clauses</td>
</tr>
<tr>
<td></td>
<td>Temporal clause</td>
</tr>
<tr>
<td>[NOM] + [Theme/Patient]</td>
<td>External Possession</td>
</tr>
<tr>
<td>[- NOM]</td>
<td>Floating adverbs</td>
</tr>
</tbody>
</table>
Even allowing for some of these pivots being trivial, or argument-structure defined and thus not germane to the discussion of alignment in a particular language (see Manning 1995 for discussion of which sorts of grammatical constructions fit into this category), there is still a bewildering array of grammatical pivots shown in the summary above.

We can make more sense out of this apparent confusion by an examination of the terms and categories involved. The core semantic roles of [Agent], [Dative], [Instrument], [Theme/Patient] have been established by reference to the facts concerning causatives and applicatives (see chapters 9 and 10). Further restrictions on accessibility to various grammatical processes that are dependent on an argument bearing [Agent], [Instrument] or [Theme/Patient] role have been presented and summarised in this chapter. Reference to this thematic hierarchy and the semantic role that an argument bears is thus established as essential to a description of grammatical processes in Tukang Besi. The other terms used, the syntactic roles ([A], [S] and [O]) and the pragmatic roles ([NOM] and [-NOM]) will now be examined to determine their function in the description.

20.13.1 The category [A]

The [A] syntactic role, as defined in chapter 3, is a category that is filled by the [Agent] argument of a transitive verb that subcategorises for such an argument in all cases. In Tukang Besi, it sometimes includes a [Dative] or [Instrument] argument of a transitive verb if that is the most prominent argument (as defined in chapter 3). For example, with hoti ‘donate’, the [Dative] argument is not an [A], but with tarima ‘receive’ it is, as defined by, for instance, the ability of that argument to head a subject relative clause:
The category \([A]\) is thus independent of the actual semantic roles that the arguments bear. It is, however, predictable in terms of its position in the verb’s subcategorisation frame. We can define the \([A]\) role as being that borne by the argument in a transitive construction with the highest semantic role, as seen in (145):

\[
\text{(126) ‘PRED } \langle [\ldots], [\ldots] \rangle \text{’}
\]

An intransitive verb has no \([A]\), by definition, since, although it has a highest semantic role that argument is not higher than any other semantic role in the predicate. In order for an argument to be considered an \([A]\) it must be both the highest-ranked semantic role in its predicate, and be higher than at least one other core argument in that predicate.

20.13.2 The category \([S]\)

In chapter 3 the notion of a split \([S]\) category was introduced in terms of unergative subjects \([S_A]\) and unaccusative subjects \([S_O]\). There have been many reports of case marking or verbal indexing that monitor the unergative/unaccusative split, but many fewer of languages that monitor this difference syntactically; to my knowledge only Acehnese (Durie 1985, 1987), Eastern Pomo (Macendon 1978, Foley and Van Valin 1984: 95-97) languages of the Dani family (e.g. Bromley 1981, C. Grimes p.c., own field notes), Bauzi (David Briley p.c.) and Burmeso (own field notes) display split–intransitive switch-references systems, showing split-intransitivity to be a phenomenon which extends beyond the clause in which the verb is (such as the well described auxiliary choice in Indo-European).

The data from Tukang Besi suggests that in order to account for the treatment of the subjects of intransitive verbs in different syntactic processes we need to recognise not two, but three different groupings of intransitive subjects, those that have been referred to in chapter 4 as the verbs taking an [Agent] subject (active verbs), those that have a [Dative] subject (experiencer verbs), and those that have a [Theme/Patient] subject (non-active). These last two are collapsed for some purposes in the larger category “unaccusative”. The processes that differentiate these three groups of intransitive subjects are the ability to participate in a comitative applicative construction with -ngkene (chapter 10), and the ability to be the object of a factitive causative construction with hoko- (chapter 9). Examples of these constructions on three verbs from the three different groups are presented in the sentences in (127) - (132):
Active verb:
(127) * No-wila-ngkene-'e.
3R-go-COM-3OBJ
‘They went with him.’

Experiencer verb:
(128) * No-mo'aro-ngkene-'e.
3R-hungry-COM-3OBJ
‘They were hungry with him.’

Non-active verb:
(129) * No-mate-ngkene-'e.
3R-die-COM-3OBJ
‘They died with him.’

Active verb:
(130) * No-hoko-wila-'e.
3R-FACT-go-3OBJ
‘They made him go.’

Experiencer verb:
(131) * No-hoko-mo'aro-'e.
3R-FACT-hungry-3OBJ
‘They made him hungry.’

Non-active verb:
(132) No-hoko-mate-'e.
3R-FACT-die-3OBJ
‘They killed him.’

There is some evidence to suggest that both [Dative]-subject and [Theme/Patient]-subject verbs are in one class. When the purposeful verbalising prefix hoN- (see chapter 11.4.3) is added to verbs of both these classes, the [S] becomes an [O] in the derived transitive verb, whereas when an [Agent]-subject verb is prefixed with hoN- the [S] becomes the [A] of the derived verb (That is, the prefix is treated as a causative process with unaccusative verbs, and as an applicative process with unergative verbs.). This is illustrated in (133) - (135):

Active verb:
(133) No-ho-rau-'e.
3R-VRB-yell-3OBJ
‘She screamed at it.’

Experiencer verb:
(134) No-ho-mente-'e.
3R-VRB-surprise-3OBJ
‘They scared him half to death.’
Non-active verb:

(135) *No-ho-like-'e.
3R-VRB-awaken-3OBJ
‘They woke him up with a start.’

The only way to morphologically causativise rau is with the causative morpheme, as in (133)’:

(133)’ No:i-pa-rau-'e[j.
3R-CAUS-yell-3OBJ
‘They[i made her[j scream.’

Experiencer verbs can also be classed together with other non-active verbs in a greater unaccusative class on the basis of their common ability to have their subjects appear as the head of a subject relative clause with a nominative object. This contrasts with the inability of the subject of an active verb (unergative) to appear in this position:

Active verb:

(136) * No-wila na kalambe ‘[um]ita-aku.
3R-go NOM girl see.SI-1SG.OBJ
‘The girl who saw me has gone.’

Experiencer verb:

(137) No-mo’aro na kalambe ‘[um]ita-aku.
3R-hungry NOM girl see.SI-1SG.OBJ
‘The girl who saw me is hungry.’

Non-active verb:

(138) No-ma’ite na kalambe ‘[um]ita-aku.
3R-die NOM girl see.SI-1SG.OBJ
‘The girl who saw me is dying.’

The groupings that arise from looking at the restrictions found in these different grammatical processes is summarised in table 31:

<table>
<thead>
<tr>
<th></th>
<th>-ngkene</th>
<th>hoN- as causative</th>
<th>Relative Clause</th>
<th>hoko-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiencer</td>
<td></td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Non-active</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

This implies a classification of the category [S] as illustrated in figure 14:
In short, although we can say that there is a unified concept of [S] in the grammar of Tukang Besi, as evidenced by their similar treatment in relative clauses and pronominal indexing, there are many points of grammar that require reference to smaller divisions. This reference needs to mention to the particular semantic roles that are borne by those arguments, and this entails a division into three different groups.

20.13.3 The category [O]

There is generally only one argument in a clause that is treated in the same manner as the patient argument of a primary transitive verb (as per Andrews’ definition of the term, described in chapter 3). However, there are many cases of transitive clauses in which there is no argument that is treated in the same manner; all applicative constructions, for example, forbid a passive subject relative clause to be headed by either of the objects in the clause (see chapter 10), thus creating a situation in which a morphosyntactic property of the patient argument of a primary transitive verb is not replicated in a different construction. For simple transitive verbs, the second-highest ranked argument in the thematic hierarchy is the [O] of the clause, as seen in (139):

\[
\text{(139) 'PRED } \langle [\;] , [\;] \rangle' \]
\[
\quad \quad \quad \quad \quad [\text{O}]
\]

If we examine ditransitive, underived verbs we find that the argument most likely to be treated in the same way as the patient of a primary transitive verb depends on the semantic roles played by the different arguments in the clause. If the subcategorisation frame includes a recipient, and has the form \(\langle [\text{Ag}], [\text{Dat}], [\text{Thm}]\rangle\), such as is found with \textit{hu’u} ‘give’, then the second argument in this hierarchy is treated as the [O], and the lowest ranked argument has no object properties at all:

\[
\text{(140) 'PRED } \langle [\;] , [\;] \ldots \rangle' \]
\[
\quad \quad \quad \quad \quad [\text{O}]
\]

If, however, the verb subcategorises for an instrument, \(\langle [\text{Ag}], [\text{Instr}], [\text{Thm/Pt}]\rangle\), then the lowest ranked argument is treated as the [O] of the clause, and the instrumental argument is available for some properties otherwise associated with an object by virtue of its bearing the semantic role of [Instrument]:

Figure 14. The category [S] in Tukang Besi
The differences between the two types of ditransitives are actually not quite this simple. If we examine four different properties normally associated with the [O] in Tukang Besi, passivisation, the ability to head an Object Relative Clause, the ability to be indexed by object suffixes, and the ability to participate in a reciprocal predicate, we find the following properties for the two objects in the two different classes (table 32):

Table 32. Tests for object properties in ditransitive verbs

<table>
<thead>
<tr>
<th></th>
<th>[Ag], [Dat], [Thm]</th>
<th>hu’u</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASS</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ORC</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>-OBJ</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>REC</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>[Ag], [Instr], [Thm]</th>
<th>simbi</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASS</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>ORC</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>-OBJ</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>REC</td>
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</tbody>
</table>

In other words, there is in neither case an absolutely and exclusively definable [O] in the construction. In both cases, one object property is shared by both objects. I shall take the [O] position to be the second on the hierarchy, and the instrumental ditransitives to be irregular, on the basis of some subcategorisation frame alternations. In chapter 4 we saw that kahu ‘send’ has two possible subcategorisation frames, one ditransitive with three core arguments (⟨[Ag], [Dat], [Thm]⟩), and one with only two core arguments (⟨[Ag], [Thm]⟩ ⟨[Dat]⟩). In both of these cases it is the SECOND position that is treated as the [O] of the sentence. If we examine valency-increasing morphology (as seen in chapters 9 and 10), in all cases the most [O]-like argument is the one that is second on the hierarchy. Finally, when a ditransitive predicate has an applicative predicate added that would add an argument bearing the same semantic role as the SECOND argument in the base predicate, one argument in the base predicate is made oblique; if the applied object bears the same semantic role as the third-ranked argument of the base predicate, there is no such demoting behaviour (see chapter 10, sections 10.6 and 10.3.3 for details and examples exemplifying these points).

It may be that there is a process of reanalysis going on here, with a non-core instrument being reanalysed as a core argument. Compare the sentences with an instrument introduced with a serial verb construction, and with it appearing as a core argument:

(142) No-hugu te ro'o ako te poda.
     3R-chop CORE leaves INSTR CORE knife
     ‘She chopped the leaves up with the knife.’
(143) No-hugu te ro'o te poda.
3R-chop CORE leaves CORE knife
'She chopped the leaves up with the knife.'

The process is analogous to one that appears to be operating in Tagalog, in which a sentence such as (163) is being used without the overt oblique marker *sa*, as seen in (163)', by some speakers:

(163) Tagalog:
Nag-hiwa si Mark ng mangga
cut.AV NOM Mark GEN mango
*sa* pamamagitan ng kampit.
OBL use GEN knife
‘Mark cut the mango with a knife.’
(Lit., ‘Mark cut the mango with the use of a knife.’)

(163)' Tagalog:
Nag-hiwa si Mark ng mangga [ ] ng kampit.
cut.AV NOM Mark GEN mango GEN knife
‘Mark cut the mango with a knife.’

Just as the non-core instrument in Tagalog is (perhaps) being reanalysed, or at least case marked, as a core argument, the same might be happening in Tukang Besi. The only property that the instruments in these ditransitive verbs share with objects is the ability to be indexed on the verb with object suffixes, as seen in (164). This is also a property they have when in a serial verb construction, and are not core arguments of the left-most verb, as (165) shows:

(164) No-hugu-‘e te ro’o.
3R-chop-3OBJ CORE leaves
‘She chopped the leaves up with it.’

(165) No-hugu te ro’o ako-‘e.
3R-chop CORE leaves INSTR-3OBJ
‘She chopped the leaves up with it.’

The fact that the instrumental argument *poda* does not gain any object properties in the (putatively) ditransitive verbal analysis is a good argument for treating the assignment of object properties associated with the instrumental ditransitive verb pattern (seen in the second part of table 32) as not being the basic one in terms of assignment of [O] and [A] properties to arguments.

20.13.4 Nominative

The nominative argument in a simple intransitive clause is the sole argument of that clause. In a transitive clause the nominative argument may be either the [A] or the [O] (Though some verbs (see chapter 4) require that if there is an [O] present, it must be nominative); this alternation is monitored in Tukang Besi by the presence or absence of object suffixes
on the verb (as described in chapter 3). The important point to note is that the nominative argument is NOT definable in terms of the syntactic roles [A], [S] and [O] (either [A] or [O] may be the nominative argument in a transitive clause), nor in terms of the semantic roles that the argument bears (any argument in [A], [S] and [O] role may be the nominative argument in a clause regardless of its semantic role). It is thus an independent variable (probably based on pragmatic factors), and we must conclude that there are two different types of basic transitive clauses (discussed in chapter 3), with one more prevalent than the other. The assignment of the nominative grammatical relation is essentially as seen in (166) (though see the concluding remarks to chapter 3 for a more detailed representation of the structure of a clause):

(166) `PRED ⟨[…[ ]…]⟩'

That is, any argument that is subcategorised-for by the verb may be nominative (though see the discussion of the category [O] in 20.14.3 for the problems associated with ditransitive verbs). If there are no object suffixes on the verb, the [A] is the nominative argument. If there are object suffixes on the verb, the [O] is nominative:

Verbal pronominal suffix: (none)
(167) `PRED ⟨[ ], [ ]…⟩'

Verbal pronominal suffix: -object
(168) `PRED ⟨[ ], [ ]…⟩'

This is the same set of positions that are defined in the better-known Philippine type languages, such as Tagalog which uses the mag- and -in- forms of the verb to distinguish these categories, though with less regularity and more lexically-determined classes (see Donohue and Macalchlan forthcoming).

The fact that the Tukang Besi system of alternation involving the presence versus the absence of object suffixes on the verb monitors exactly the same set of relationships between arguments of the verb is strong evidence that the Tukang Besi system is, despite the appearance of being a system simply dedicated to inflecting the verb for person and number categories of the object, actually serving in the same function as the less ambiguous Tagalog system. Note that Sells’ suggestions that the subject (the nominative argument) in Philippine languages “is itself a null pronominal argument” would fit in well with the apparently conflicting evidence that the object suffixes in Tukang Besi are simultaneously pronominal elements and Philippine-style voice markers (Sells 1995b); the object suffixes would be viewed as overt pronominal elements (as described in chapter 5), and also part of the system monitoring the voice system (as described in chapter 7).
20.13.5 Non-nominative

The literature on Philippine languages is in the main concerned with the division of syntactic properties between what Philippinists have called the “Actor” ([S,A] pivot) and the nominative argument. There have been almost no reports of any syntactic properties associated exclusively with a non-nominative argument (that is, a process for which a non-nominative argument is eligible, but for which a nominative argument is not eligible), the only exception known to me being the ability of a non-nominative “Actor” to appear preverbally, a position in which a non-nominative non-actor may not appear (see Sityar 1994 on Cebuano, Maclachlan 1995b on Tagalog).

In Tukang Besi, on the other hand, there is one property, the ability to launch a floated adverb, that depends exclusively on the launching argument being a (core) non-nominative argument, regardless of its syntactic or pragmatic role in the clause, and is not available to a nominative argument. It is important, therefore, to identify which core arguments of a predicate are not nominative. The non-nominative pivot may be defined as in (176):

\[
\text{[NOM]} \quad \star \\
\text{PRED} \quad \langle \ldots [\ldots] \rangle \\
\text{non-NOM}
\]

This odd notation states that the non-nominative properties are assigned to a core argument that does not bear the nominative grammatical relation; this assignment of properties, like that of [Nominative], is not dependent on syntactic roles or semantic roles.

20.14 Summary

There is no one unified concept of the pivot in Tukang Besi, in the sense that one set of grammatical relations is the pivot for all constructions in the language. Even discounting the fairly universal pivot that seems to apply for imperatives and some Equi constructions, there is more than one pivot in Tukang Besi which a grammatical process can refer to, and often an argument is the pivot for some processes, but at the same time not for others. The labels ‘ergative’ and ‘accusative’ cannot be applied to the whole of Tukang Besi in any meaningful sense, only to individual grammatical constructions.

Perhaps more importantly, the notion of pivot in Tukang Besi is one not just based on one set of criteria. Languages such as English or Yup'ik Eskimo (Payne 1982), and many more, may all be characterised as having pivots based on syntactic categories (hence the use of the labels [A], [S] and [O], referring to syntactic roles). Typically, the language has either an [S,A] pivot, or an [S,O] pivot, though some languages refer to both of these for different processes (such as several Mayan languages; see Craig 1977, Day 1973, England 1983, Bear 1992). Other languages, such as Archi (Kibrik 1979) or Aceh (Durie 1985, 1987, Foley 1991b) appear to refer to the semantic roles directly, without the need to mediate these by means of syntactic roles (or grammatical functions, such as ‘subject’ and ‘object’). Yet others, notably those of the Philippine group, have a stronger orientation towards the direct encoding of pragmatic prominence, and do not operate directly in terms of either syntactic roles or semantic roles (Thai appears to be a language with a pragmatic
pivot, but with no morphological coding of the pivot choice.

The pivots in Tukang Besi, however, are divided amongst those that are based on syntactic roles, those based on pragmatic factors (i.e., set by discourse constraints, with a fair degree of freedom), and those that are dependent on semantic roles directly, regardless of their syntactic status. Additionally, the existential construction presents a mix of properties from several of these types, none of them as complete as a ‘normal’ verbal clause presents.

In short, whilst the labels [A], [S] and [O] are useful shorthand in a description of a language such as Tukang Besi, they are not sufficient, and moreover, as has been seen in sections 20.14.1 - 20.14.3, these syntactic roles are actually predictable for a given clause if we know the subcategorisation frame of its verb. That is, given the argument structure representation of semantic roles in the predicate, the syntactic roles [A], [S] and [O] are derivable concepts. The assignment of nominative case does not follow from any automatic process similar to the assignment of the [A], [S] and [O] syntactic roles, but is similarly based on the information present in the thematic hierarchy and thus the subcategorisation frame of the verb. Some processes, notably the ability to head an Instrumental relative clause, are sensitive only to semantic role information, and not to syntactic role information. We must, therefore, look past the labels [A], [S] and [O], the grammatical relations ‘subject’ and ‘object’, and the Philippine-style notions of nominative and non-nominative arguments, if we are to economically describe the full range of grammatical processes that are operating in Tukang Besi. Realising that all the processes are easily explainable in terms of the relative ordering provided by the thematic hierarchy, we can propose one underlying system that accounts for the large range of different groupings of arguments that are accessible to different grammatical processes in the language.
Although the formal characteristics of the Tagalog-style verbal morphology are quite different from the Tukang Besi system (see chapter 7), the same set of positions on the thematic hierarchy, highest and second-highest, are monitored in terms of the morphological choices that must be made for nominative arguments. I am using these terms to refer to (some of) the morphological choices for what Kroeger has called the ‘Actor voice’ (AV) and ‘Object voice’ (OV) forms of the verb respectively. See Kroeger (1993) or Maclachlan (1995b), and the references in those works, for some discussion of Tagalog morphology. Some Tagalog transitive verbs use \( i \) as the object voice marker, rather than \(-in\), and yet others allow alternations between the two. See Ramos and Bautista (1986) for more information on the morphological choices available for different verbs; special thanks to Anna Maclachlan for walking me through the intricacies of Tagalog. The verbal morphology used in Tagalog on transitive verbs is as follows for the two positions (Foley (1991b) presents a functionally similar but significantly different view of the argument structure of Tagalog, treating the verbal morphology as deriving different verbs with subcategorisation frames that specify different positions as being the nominative one (Foley’s ‘TOPIC’)):

\[
\begin{align*}
(169) \text{a. Tag: } & \text{‘PRED } [\text{ }, \text{ }, \text{ } ] \text{’} \\
& \text{mag- } \text{-in} \\
\text{b. Tag: } & \text{‘PRED } [\text{ }, \text{ }, \text{ } ] \text{’} \\
& \text{mag- } \text{i-}
\end{align*}
\]

Other analyses of Tagalog have treated the language as having many different voice constructions, each corresponding to different semantic roles. The data from causative constructions, however, and that seen in the few truly ditransitive verbs (such as alok ‘offer’ in (172), also tanong ‘ask’) points to an analysis that works in terms of ranked positions on a thematic hierarchy, and verbs with, in general, only two core arguments, just as in Tukang Besi. In addition to these voice markers, however, there is also a series of applicative affixes (such as \(-an\) in (173), elsewhere analysed as ‘dative voice’, or ‘benefactive topic’, amongst other labels) that allow otherwise oblique arguments to appear as nominative ones. The difference between the Tagalog and the Tukang Besi systems is that the Tukang Besi verbal system has applicatives with two argument positions, and so they do not automatically confer nominative status on the applied object argument; the voice marking on core arguments in Tukang Besi is functionally nearly equivalent to the Tagalog system, as shall be seen in the discussion that follows.

The function of the basic voice markers (those that refer to arguments of a verb that take the non-oblique case marker \( ng \), rather than the oblique marker \( sa \), when not bearing the nominative grammatical relation) is shown in (170) and (171), which show how a verb that subcategorises for two core arguments (the agent and the theme) and one oblique argument (the recipient), bigay ‘give’, uses mag- (or its perfective form nag-) to indicate the [A] is nominative, and \( i \) to show that the [O] is nominative (examples involving bigay are from McFarland 1984, reglossed according to the conventions in Kroeger 1993) (the subcategorisation frame is thus: ‘bigay \( \langle \text{Agent}, \text{Theme}\rangle \langle \text{Recipient}\rangle \)’, and the voice
marking choices for the two core arguments are \(\{[mag]-, \ [i]-\}\). The \(-in\)- affix is the perfective marker. See Sells (1995b) for a summary of the nominal case marking functions of \(ang\), \(ng\) and \(sa\) in Tagalog.)

\begin{equation}
\text{(170)} \quad \text{Nagbigay ako ng pera sa babae.}
gave.AV 1SG.NOM GEN money OBL woman
\text{‘I gave money to the woman.’}
\end{equation}

\begin{equation}
\text{(171)} \quad \text{Ibinigay ko ang pera sa babae.}
gave.OV 1SG.GEN NOM money OBL woman
\text{‘I gave the money to the woman.’}
\end{equation}

The evidence that the Tagalog verbal system operates in terms of an \([A]\) and an \([O]\) category can be exemplified in (172), in which the \(-in\)- form of the verb is used to show the nominative status of the recipient that is subcategorised for by the verb \(alok\) ‘offer’ (‘\(alok\) \(\{[Ag], \ [Dat], \ [Thm]\}\)’), thus indicating that the position of the recipient as a core argument in the subcategorisation frame is more important for determining verbal morphology than is its semantic role on its own (examples with \(alok\) are from Maclachlan 1995a):

\begin{equation}
\text{(172)} \quad \text{Aalukin ni Pedro si Rosa ng inumin.}
\text{will.offer.OV GEN Pedro NOM Rosa GEN drink}
\text{‘Pedro will offer Rosa a drink.’}
\end{equation}

If the goal/recipient in a non-ditransitive verbs such as \(bigay\) is to appear as a nominative argument in the clause, the applicative suffix \(-an\) must be used, since \(-in\)- is used to indicate the nominative status of the \([O]\), the theme (this is a different process to the applicative found in Tukang Besi and Bantu languages, since it serves not only to make an otherwise oblique argument a core one, but also specifies that argument as being the nominative one in the clause, in the one morphological choice):

\begin{equation}
\text{(173)} \quad \text{Binigyan ko ng pera ang babae.}
gave.DV/2OV 1SG.GEN GEN money NOM woman
\text{‘I gave money to the woman.’}
\end{equation}

Sentence (173) is here analysed as shown in the argument structure given in (173)’:

\begin{equation}
(173)’ \quad \text{‘APPL } \langle [Dat]_3 \ \text{give } \langle [Ag]_1, [Thm]_2 \rangle \langle [Rec]_3 \rangle \rangle \text{’}
\end{equation}

The difference between the Tagalog and Tukang Besi verbal systems is that in Tagalog there is a third affix form, \(i\)-, that may be used for the second object of a ditransitive verb, such as \(alok\) ‘offer’. In Tukang Besi there is no device that will directly make the theme of a ditransitive construction the nominative argument. An example of the use of a second object as nominative with \(i\)- is given in (174):

\begin{equation}
\text{(174)} \quad \text{Ibigay ko i ang pera ang babae.}
gave.OV 1SG.GEN NOM money NOM woman
\text{‘I gave the money to everyone.’}
\end{equation}
The schema representing the possibilities available for verbal morphology in Tagalog, updated to account for ditransitive verbs, is that shown in (175):

(175) Tag: ‘PRED 〈[ ], [ ], [ ]〉
mag- -in- i-

The positional constraints on the use of mag-, -in and i- forms are simply that the mag-form is used when the highest-ranked argument is nominative, the -in form is used when the second highest-ranked argument is nominative, and the i- form is used when the lowest ranked (but subcategorised-for) argument is nominative. This explains the fact that some transitive verbs (such as tago ‘hide’) take i- and not -in to mark their [O] as nominative, and the fact that some (such as ligpit ‘put away’) alternate between -in and i- to show that [O] is nominative.

1 How to say ‘I forgot that you fetched the bananas.’? With kua:

Ku-molinga kua ‘u-ala te loka.
1SG-forgot SW:COMP 2SG.R-fetch CORE banana

2 Making the subordinate verb passive is not an option; the derived subject of a passive verb does not gain the ability to be the target of Equi deletion: * Nu-nde’u (nu-)to-hu’u.
2SG.R-not.want 2SG.R-PASS-give
‘Don’t you want to be given it?’

3 How?: Mina nggai ku-’ita-’e, no-elo te ia na kalambe.
from immediate 1SG-see-3OBJ 3R-call CORE s/he NOM young.girl

4 How are these concepts expressed? Qualifiers may of course appear in the KP, and simply not float; coreferential deletion simply doesn’t work, and the KP needs to be mentioned again:

Ane ke boku i wawu meja i aba; meana’e te boku iso nobutimo.
CORE book yon

5 Though the owner of something may be the head of a relative clause:

Te mia [um]ane ke kolikoli.
CORE person exist.SI and canoe
‘The person who has a canoe.’

6 This would be expressed as Dinggawi ala’a nowande
yesterday just 3R-rain

7 This is the case in most languages with a split-intransitive system. Other languages, such as Lamma (Timor–Alor–Pantar family, own fieldnotes) group unergative subject ([S]A) with [O], and unaccusative subject ([S]O) with [A]. Kolana, of the same family, has a split-intransitive system, but one in which none of the three ways of expressing the intransitive subject are the same as that used to indicate the [A] (own fieldnotes, thanks to Johanna Nichols). Choctaw (Davies 1986) also shows a three-way split in the verbal indexing of intransitive subjects, and several Dagestanian languages show three different patterns of case-marking on the subjects of intransitive verbs. The most common form of split intransitive system, however, is that exemplified by Eastern Pomo.