Coding choices in argument structure

Austronesian applicatives in texts[*]

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The syntactic properties of applicatives have received a large amount of attention. Despite this there have been almost no attempts to explain the reasons behind the choice of an applicative coding of an argument when there is an grammatical oblique coding strategy available. This study focuses on dynamic applicative constructions in Tukang Besi, an Austronesian language of central Indonesia, and examines a large corpus for reasons why applicative coding is chosen over oblique coding. Factors such as semantic role information and animacy are as important as textual prominence in the coding decision. The implications of these findings for typological divisions that have been proposed within Austronesian are discussed.

1. Applicatives: The basis for dynamic alternation

Applicative constructions are those in which an argument that is not otherwise subcategorised for by a verb is treated as the object of that verb. Typically the 'new' argument is a beneficiary, instrument or location, though other semantic roles are also found in some languages. More important than the semantic roles themselves is the question of the treatment of any original ('base') objects, and this has been the subject of much research (eg., Baker 1988, Bresnan and Moshi 1990, Kisseberth and Abasheikh 1977, amongst others).

Equally important is the question of whether an alternative exists to the use of an applicative construction in order to express a particular concept — this is the difference between a dynamic system, and a non-dynamic one (the existence of non-dynamic applicative systems has long been known, and parallels the existence of non-dynamic case marking strategies in languages without applicative constructions).

Less investigated, however, is the underlying pragmatic reasons behind the choice of an oblique or an applicative coding to express the argument. After a discussion of the morphosyntactic status of applicative versus oblique arguments in Tukang Besi, we shall examine the textual differences between these two means of coding arguments, and how they vary for arguments of different semantic roles, basing the discussion on the notion of the thematic hierarchy (Bresnan and Kanerva 1989). I shall assume their version of the hierarchy, which is as follows:

agent > beneficiary > goal/experiencer > instrument > theme/patient > locative

Based on the environments in which applicatives occur in terms of textual development, and the differential coding of arguments with different semantic roles as oblique or applicative O, I shall propose that there is evidence for a matching of discourse prominence with grammatical function coding strategy, such that the more highly salient an argument is the more central a role in the clause it shall play. This is diagrammed in Figure 1.
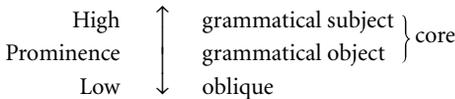
High   ↑   grammatical subject ⎫
Prominence   grammatical object ⎬ core
Low   ↓   oblique ⎭

Figure 1. Prominence and Coding strategy

That is to say, the higher discourse functions, such as Topic and Focus, align with the higher grammatical functions (on the hierarchical scale SUBJECT » OBJECT » OBLIQUE). Furthermore, we shall see that although three positions are distinguished in Tukang Besi, in terms of the available grammatical function slots and the morphology that specifies them, only two of those coding choices, oblique and grammatical subject, are in frequent use in Tukang Besi. The appearance of an argument as the (applicative) object, not subject, in a clause is very unusual, and occurs only in very restricted textual contexts. The implications of these findings for the typological classification of Austronesian languages is discussed in Section 8.

1.1 This study

In this article I seek to examine the reasons behind the use of applicative constructions in narrative texts in the Tukang Besi language. This language has dynamic applicative constructions, and so the use of an applicative is usually matched by an alternative in which the argument could have been expressed as

an oblique argument of the clause. I shall seek to demonstrate that the prime reasons for the choice of an applicative, rather than an oblique, coding strategy are to do with pragmatic prominence. This prominence involves factors along several dimensions, and we can see the workings of Hopper and Thompson's (1980) criteria for high transitivity at play in the kinds of factors that play a role in determining whether or not an argument is sufficiently salient to merit treatment as the applicative O of a verb. This is dependant on the construal of the discourse, as well as the inherent semantics of the construction.

2. Tukang Besi: Oblique cases and applicatives

Tukang Besi is an Austronesian language spoken on the islands of the Tukang Besi archipelago of central-east Indonesia, and in numerous trading communities between Singapore and New Guinea (Donohue 1999).

It is a VOS Philippine-type language with obligatory agreement for the S/A of the clause (by verbal prefix), and optional agreement for O (by verbal enclitic) (I use A, S and O to indicate the subcategorised-for arguments of a clause; for definitions, see Andrews 1985). Nominal case marking follows a Philippine-style pattern (Schachter 1976, 1977 and many others both before and since), and I follow a long tradition in using the label NOM for 'nominative' to gloss the case which marks the argument that has been selected as the grammatical subject (in the Philippine literature also referred to as the 'focus', 'topic', or pivot) in these languages, and which in Tukang Besi is marked with *na*. The other nominal cases are the GENitive *nu*, the OBLique *i* / *di*, and the non-nominative core case *te*, here glossed CORE. Additionally, there are various more specific prepositions, and serial verb constructions. In a clause without an O-agreement enclitic on the verb, the O(s) of the verb are marked with *te*; in no case may more than one O show verbal agreement; Tukang Besi is an asymmetrical language, in that it does not offer equal treatment to both Os of a ditransitive verb; a discussion of this as is relevant to applicative constructions can be found in Donohue (1997).

For many arguments which are not subcategorised for by the verb, there are alternatives in their morphosyntactic coding: they may appear either as oblique arguments of the verb, or as the applicative O of the verb (Donohue 1997). Compare the following two clauses, with much the same literal meaning: in the first, *baliu* 'axe' is marked with the preposition *kene*, here an instrumental marker, and in the second it is marked with *te* as the O of the applicative verb

tu'oako. As reflected in the translations, there is some difference in the pragmatic status of the instrument in the different constructions.

(1) a. *No-tu'o   te   kau kene baliu.*
       3R.S/A-fell CORE tree INSTR axe
       'He chopped the tree with an axe.'

   b. *No-tu'o=ako   te   baliu te   kau.*
       3R.S/A-fell=APPL core axe   CORE tree
       'He used the axe to chop the tree.'

Before examining the circumstances in which one or the other of these morphosyntactic strategies is used, we shall examine what is considered a dynamic applicative construction in Tukang Besi, and demonstrate the grammatical alternatives that these constructions display with oblique coding strategies.

2.1 Dynamic semantic role coding

With qualifications based on the restrictions described above, in which there is not a dynamic alternation by reason of the more restricted semantics associated with the applicative (thus not having a one-to-one correspondence with the oblique case-marking strategy), or the restrictions of a particular construction, we still have a very dynamic system of applicative O / oblique alternations in Tukang Besi that is productive for a large range of semantic roles, and in a large variety of contexts. The following semantic roles show alternations between oblique case marking (or (non-contiguous) serial verb constructions), and applicative constructions; examining Table 1 we can see that there is a many-to-one relationship in both directions, from (most) obliques to applicatives and from (most) forms of the applicative morpheme to obliques. The general applicative *=ako* has the widest range of functions, and *=ngkene* the most

Table 1. Dynamic applicatives in Tukang Besi

	Oblique	Applicative
(co-) agent	*kene*	*=ngkene*
beneficiary	*ako te*	*=ako*
instrument	*ako te, pake, kene*	*=ako*
(inner) locative, goal	*di / i, kua*	*-VCi*
purpose	*ako te*	*=ako*
cause	*ako te*	*=ako*

precisely defined. The locational and goal applicative *-VCi* has a range of unpredictable allomorphs, always consisting of the vowel i, and usually a consonant (*p, t, k, ʔ, m, s*), and sometimes a preceding vowel (*a* or *i*).

Examples of some of these alternations have already been seen in (1) (instrument); co-agent), beneficiary, goal, purpose and cause are illustrated in the pairs of sentences found in (2)–(6).

Beneficiary

(2) a. *No-wila kua koranga=no **kene** porai=no.*
       3R.S/A-go ALL garden=3GEN and fiancee=3GEN
       'He went to his gardens with his fiancee.'

     b. *No-wila=ngkene te porai=no kua koranga=no.*
       3R.S/A-go=APPL CORE fiancee=3GEN ALL garden=3GEN and
       'He went to his gardens with his fiancee.'

Beneficiary

(3) a. *No-balu te   bambai **ako te**   porai=no.*
       3R.S/A-buy CORE comb   BEN core fiancee=3GEN
       'He bought a comb for his fiancee.'

     b. *No-balu=**ako**   te   porai=no   te   bambai.*
       3R.S/A-buy=APPL CORE fiancee=3GEN CORE comb
       'He bought a comb for his fiancee.'

Goal

(4) a. *No-aso   te   bae **kua** tolida=no.*
       3R.S/A-sell CORE rice ALL cousin=3GEN
       'She sold the rice to his cousin.'

     b. *No-aso-**api**   te   tolida=no   te   bae.*
       3R.S/A-sell-DIR CORE cousin=3GEN CORE rice
       'She sold the rice to his cousin.'

Purpose

(5) a. *No-bose   ako te   kawi-'a.*
       3R.S/A-paddle PURP CORE marry-NL
       'They are paddling for the wedding.'

     b. *No-bose=**ako**   te   kawi-'a.*
       3R.S/A-paddle=APPL CORE marry-NL
       'They are paddling for the wedding.'

Cause

(6) a. *No-mate **ako te** buti.*
       3R.S/A-die CAUS CORE fall
       'He died in a fall.'

    b.   *No-mate=**ako**   **te**   buti.*
          3R.S/A-die=APPL CORE fall
          'He died in a fall.'

In the case of the first two semantic role types, beneficiary and goal, the applicative O is treated as the primary object of the verb, and may show any of the morphosyntactic behaviour associated with objects, such as alternations with nominative case (and syntactic status) if there is object agreement on the verb, heading relative clauses, appearing in the preverbal focussed position, etc. (Donohue 1997). Purposes and Causes, while using the same morphology as some of the other applicative strategies, do not have the same privileges available to the applicative Os that they create, and because of this problem in comparability, as well as the extremely small number of examples, they are not considered any more in this study.

One additional construction that is discussed here, despite not showing an alternation with applicative coding, is the ablative, or source, construction, which is only possible in Tukang Besi with an obliquely coded argument. Although it does not display an alternation with applicative codings, there being no ablative applicatives in Tukang Besi, it is mentioned here in order to facilitate comparison with the goal and location arguments.

Source is most commonly marked in Tukang Besi with *mina* 'from', and an obliquely case marked nominal, as in

(7)   *No-rato   mina i   pulo-pulo ito.*
       3R.S/A-arrive from OBL RED-island that:higher
       'They arrived from the islands to the east.'

The goal-directional orientation of this verb means that without *mina*, the source interpretation is very unlikely or ungrammatical

(8)   *No-rato   i   pulo-pulo ito.*
       3R.S/A-arrive OBL RED-island that;higher
       'They arrived at the islands to the east.'
       */## 'They arrived from the islands to the east.'

On occasion a source is marked with nothing more than the oblique case marker, but in most cases where there is any possible ambiguity this is most likely to be interpreted as a goal:

(9) *Te   wurai=su   no-buti   i   tondo.*
CORE sarong=1SG.GEN 3R.S/A-fall OBL stone.fence
'My sarong fell off the fence.' (most likely)
'My sarong fell onto the fence.' (less likely)

The only reason that fence is interpreted as the starting point of the fall is that it is common cultural knowledge that clothing is dried on fences and bushes, and so is a likely starting point for a fall. Nonetheless, the ambiguity exists; the only way, using this verb, to make the sentence completely unambiguous, is to use *mina*:

(10) *Te   wurai=su   no-buti   mina i   tondo.*
CORE sarong=1SG.GEN 3R.S/A-fall from OBL stone.fence
'My sarong fell off the fence.' (only possible interpretation)

With another verb of motion, however, the situation is less clear, and the source interpretation is highly unlikely. The preposition *kua* would also be grammatical here, with little difference in meaning.

(11) *Maka   no-tinti   i   koranga.*
and.then 3R.S/A-run OBL garden
'And then it ran to the garden.' (most likely)
'And then it ran about in the garden.' (unlikely)
'And then it ran from the garden.' (extremely unlikely)

The discourse characteristics of sources in texts will be presented after a discussion of the variation between applicative and oblique coding for the other semantic roles, prior to a more integrated discussion of the overall picture gained from these comparisons.

3.   Textual analysis

In order to determine the discourse environments in which an applicative construction is chosen over an oblique coding of an argument, a large corpus of texts, representing a variety of genres of discourse, was examined, with all occurrences of either applicative Os or oblique arguments that could have displayed an alternation noted and compared.

3.1 Materials

The material examined was a machine-readable collection of Tukang Besi narrative texts, some of which have appeared in Donohue (1999), but the vast majority of which have not. In total about 100 pages (before being glossed and translated) of machine-readable texts were examined. This material was collected form both male and female informants, of varying social backgrounds and varying ages (from early 20s to late 70s).

3.2 Results

The results of the examination of discourse circumstances in which applicatives are found will be presented according to the semantic roles of the arguments, since the different semantic roles dictate different coding strategies. Despite these differences based on semantic role, there are clear general patterns in the appearance of applicatives versus obliques, and these commonalities will be brought together in Section 4.

3.2.1 *Instruments*

The appearance of instruments in textual discourse is surprisingly rare; in all, only four instrumental arguments were found, three of them in the same fragment of one text. The way in which the instrument becomes the applicative O of the discourse, and grammatical subject, after being introduced without any special marking or as an oblique, is both interesting and atypical of the behaviour of applicatives. A special property of instruments will be discussed following the relevant extract from the text.

This fragment contains three mentions of instruments; notice the first mention of *kabali* in the second line, followed by the use of an applicative construction in the next line to make it the grammatical subject. After being coded as a subject applicative O the argument remains in this status for the space of one more verb, and then appears as a pronominal enclitic on the verb alone, before the topic shifts to the husking of the coconut (by hand, once the machete has been used to cut the husk into chunks), and *kaluku* is selected as the subject. .

(12) *Te benusi iso, to-'ambe*   *te*   *benu nu kaluku.*
      TOP husking yon 1PL.R.S/A-remove CORE husk GEN coconut

      Te cara=no,   *to-simbi='e*   *te*   ***kabali.***
      TOP method=3GEN 1PL.R.S/A-slash=3O CORE machete

*Te   simbi iso, to-taha=**ako**='e*   *na*   **kabali**
TOP slash yon 1PL.R.S/A-hit.in=APPL=3O NOM machete

*di   kaluku. To-taha=**ako**='e,*   *sampe*
OBL coconut 1PL.R.S/A-hit.in=APPL=3O such.that

to-pali='e   *na*   *kaluku. Maka to-benu=si='e.*
1PL.R.S/A-go.around=3O NOM coconut then   1PL.R.S/A-husk=DIR=3O

'(For) that husking, you take off the husk of the coconut. The
way to do it, you slash it with a machete. That slashing, you use
the machete to hit into the coconut. You hit in with it, until
you've gone all round the coconut. Then you husk it.'
(Pada: 9–13)

Here we can see the growing pragmatic salience of the machete, morphosyn-
tactically indicated by the coding of it as unmarked O. The atypicality of the
instrument verbs in a study of applicative use is due to the fact that Tukang
Besi has a number of verbs which allow the instrument to be treated as a
second O of the verb; the verb is, in a sense, ditransitive, and so the applicative
coding is less necessary than with other obliquely-coded adjuncts. We can,
nevertheless, see that the introduction of *kabali* is as the unmarked core
argument, and then the applicative coding appears once it is established
information. The morphosyntactic coding reflects the development of the
argument in the text as a discussion of the (essential) use of the machete as
part of the process of coconut collecting, before moving on to other parts of
the process. The part of the text in which the machete is treated as an applica-
tive O is the part in which the machete is essential to the development of the
story; it is part of the foregrounded material, not just an accessory to the
action, but an essential part of it.

This can be contrasted to the other occurrences of an instrumental in a
text, in which the instrument is not treated as an applicative, but remains an
oblique for its brief mention. This time the instrument occurs in a quite
different context. In this other text, the instrument is the means of transport,
shown in (13).

As can be seen from the text fragment preceding the mention of the
instrument, the focus of the discourse is one particular character, La Mansi, and
what he did after falling on a stonefish when walking back from the Nua Ponda
lagoon, near Sousu. Here the instrument is clearly not the focus of attention; as
can be seen from examining the context both before and after the mention of
the motorbike, the story revolves around the stonefish patient, and the mention

of the motorbike is incidental to the development of the story line; it is back-grounded information, and so is not treated as the O of an applicative construc-tion, but simply as an (adjunct) oblique argument. Additional support for this view of the motorbike as backgrounded material comes from the fact that the speaker hesitated before mentioning the mode of transport, repeating the preposition. Clearly the motorbike was not salient in the speaker's mind at the time of the utterance.

(13) *Iso no-namisi='e=mo na pa'a=no kene=mo o-bengki.*
      yon 3R.S/A-feel=3O=PF NOM thigh=3GEN and=PF 3R.S/A-swollen

      Jari sa-, po'oli=mo iso, o-, o-waliako=mo.
      so   when- finish=PF yon 3R.S/A- 3R.S/A-return=PF

      O-pakesaa='e na orungu=no. Sa-mpuu-mpuu=no
      3R.S/A-sore=3O NOM body=3GEN when-RED-just=3GEN

      ara te wunua=no i Sousu iso a-mb[um]ale-mbale=mo.
      if TOP house=3GEN OBL Sousu yon 3I.S/A-RED.SI-lie.down=PF

      Min(a) i Sousu, a-'[um]epe=mo mina i Sousu.
      from   OBL Sousu 3I.S/A-treat.SI=PF from OBL Sousu

      Toka karenaa te wunua=no i Patuno, o-,
      but fact   CORE house=3GEN OBL Patuno 3R.S/A-

      o-pakesaa ala'a, o-'eka **kene** *e,* **ke** *motoru.*
      3R.S/A-sore just 3R.S/A-climb INSTR ah INSTR motorbike

      Saw(i) i motoru iso, o-mai kua Patuno.
      ride   OBL motorbike yon 3R.S/A-come ALL Patuno

      Jari o-rato i wunua maka no-'epe.
      so   3R.S/A-arrive OBL house and.then 3R.S/A-treat

      Apa meana'e ai ane=ho te mbale=no
      ENDPOINT now   ANA exist-yet CORE lie.down=3GEN

      mina i aba.
      from OBL PREV

      'Then he felt his thigh, and it was swollen. So, when he, after that, he returned. His body hurt. Well, if his house had been in Sousu there, he would have rested (there). If it was in Sousu, he would got treatment from those in Sousu. But because his house is in Patuno, and he was, he was in pain, he went by, um, by motorbike. Riding on the motorbike, he came to Patuno. So he

arrived in his house, and then they treated him. Even now he's
still lying down, since earlier on.' (LaM: 15–24)

The textual circumstances here are quite different to those in the coconut story, and this is reflected in the coding choice for the instrument, which is not present long enough to be developed as an applicative, since it is not fore-grounded material.

As mentioned earlier, the fact that many instruments (those that can be characterised as intermediary agents) can appear, even in the absence of applicative morphology on the verb, as a non-oblique argument, means that their behaviour with respect to coding choice is likely to be atypical. The only really surprising fact about the appearance of instruments is that they are so infrequent in texts in Tukang Besi. Since the texts examined represent a wide variety of genres, this infrequency cannot explained by subject matter type, and remains a peculiarity of the corpus.

3.2.2 *Beneficiaries*
Unlike instruments, beneficiaries are quite frequent in the texts examined, with 31 occurrences of an argument with a beneficiary semantic role. Interestingly, exactly 31 of these occurrences of a beneficiary were encoded as the O of an applicative construction; there were no instances of a beneficiary expressed as an oblique argument, despite the existence of such a mechanism, and its unsolicited appearance in conversations and subsequent acceptance by speakers of all ages.

Clearly the occurrence of a beneficiary argument in a text is something highly salient; unlike instruments, a beneficiary is by necessity animate, sentient and (usually) human. Furthermore, in many cases the beneficiary mentioned is first or second person (15 cases, all in quotes of direct speech).

The high degree of definiteness (in the sense employed by Hopper and Thompson) of first or second persons would constitute a good reason for their being assigned an obligatorily high degree of pragmatic prominence, and so encoded morphosyntactically to reflect this prominence. In this light, the coding choice as O of an applicative construction, appears to be a clear choice for textual salience, with respect to oblique marking. This explains the appearance of the applicative with all beneficiaries, and is consistent with the (limited) data seen for instruments.

In addition to the high definiteness of the person of the beneficiary, we might note that, as with instruments, most beneficiaries (94%) are additionally

coded with an enclitic on the verb, making them the subject, as well as the applicative O. Although the option exists to code the beneficiary as an applicative O object, this is in fact never utilised for beneficiaries, a point that will be discussed in more detail in Section 3.3. For beneficiaries at least, the discourse factors that determine that they shall be coded as applicative Os rather than obliques are sufficiently strong that they also ensure that in almost all cases the beneficiary is treated as the grammatical subject. Reasons for this will be suggested before examining some actual occurrences of beneficiary applicatives.

In sixteen of the 31 occurrences of beneficiaries, they appear in direct quoted speech, in which one character is talking to another. In these quotes, all the applicatives occurred with O pronominal enclitics, as would be expected: the speaker, or the addressee, is the most salient part of any speech act, and normally treated as such in terms of morphosyntactic coding. In this case the choice of the beneficiary as the nominative argument in the clause, in addition to the applicative which allows it to be treated as a core argument, is quite natural.

An example of this benefactive applicative is presented in the following extract. Here we have an exchange between two characters, the Monkey and the Tortoise, who have planted a banana tree, and are at the point that the Monkey, having climbed up the tree, is not throwing down bananas to the Tortoise (who cannot climb) as promised, but eating them all himself.

(14) *No-pogau=mo kua*   *"Kambeda mombaka, La bela Kolokolopua."*
      3R.S/A-say=PF COMP fact   delicious   La dear Tortoise

      No-balo=mo   *La Kolokolopua* *"Oho. Toka nabu=**ako**=aku*
      3R.S/A-answer=PF La Tortoise   yes   but drop=APPL=1SG.O

      *ke **iaku**." O-balo   na   Kandokendoke kua*
      and 1SG   3R.S/A-answer NOM Monkey   COMP

      *"Ku-nami-nami-ngkuku='e=do." Po'oli no-nabu=**ako**='e=mo*
      1SG-RED-taste-prior=3O=EMPH   finish 3R.S/A-drop=APPL=3O=PF

      *te   kuli=no   na   **La Kolokolopua**.*
      CORE skin=3GEN NOM La Tortoise

      *Po'oli no-waa='e=mo   "Koka! Nabu=**ako**=aku*
      finish 3R.S/A-tell=3O=PF peel   drop=APPL=1SG.O

      te   ba'e=no   La Kandokendoke." No-balo=mo
      CORE fruit=3GEN La Monkey   3R.S/A-answer=PF

      na   La Kandokendoke kua   "Ku-nami-nami-ngkuku='e=do."
      NOM La Monkey   COMP 1SG-taste-RED-prior=3O=EMPH

*Po'oli no-nabu=**ako**='e=mo   'uka   te   kuli nu loka*
finish 3R.S/A-drop=APPL=3O=PF again CORE skin GEN banana

*manga-'a=no na   **La Kolokolopua.***
eat-NL=3GEN NOM La Tortoise

'He said "They're delicious, dear Tortoise." And Tortoise answered "Uh-huh. But drop (some) for <u>me</u>." Monkey answered "I'm tasting them first, you see." Then he dropped the skins for Tortoise. Then (Tortoise) told him "Peel! Drop the <u>fruits</u> for me, Monkey." Monkey answered "I'm tasting them first, you see." Then he dropped the skins of the bananas he'd dined on for Tortoise' (SA: 38–44)

The first mention of a beneficiary is by the Tortoise, who codes himself as the subject applicative O in *nabuakoaku*. As the narration continues after Monkey's response the Tortoise remains the subject applicative O.

Another instance of the appearance of a beneficiary applicative, but not first or second person, can be seen in the next example. In this case the beneficiary refers to what is clearly a discourse topic: the children are the subject of the intransitive clause preceding the applicative, and the eaters in the following clause, as well as the continuing topic for the nest few clauses. This speaker does shift the grammatical subject about rather faster than is normal in Tukang Besi; this might reflect the dialect he uses, a very north-eastern Wanci one, or it might be his young age.

(15) *Jari te   ama=no   no-wila, no-tunga no-'awa=mo*
      So   CORE father=3GEN 3R.S/A-go 3R.S/A-fish 3R.S/A-obtain=PF

      te   simbuku. No-waliako no-rengka='e=mo na   simbuk=no.
      CORE octopus   3R.S/A-return 3R.S/A-dry=3O=PF NOM octopus=3GEN

      Po'oli te   ana=no   dodua iso no=mo'aro=mo
      finish CORE child=3GEN two   yon 3R.S/A-hungry=PF

      *karena mbea'e   na   i-manga=no. No-helo'a=**ako**='e*
      because not.exist NOM OP-eat=3GEN 3R.S/A-cook=APPL-3O

      te   simbuku iso. Sa-mota'a=no   no-manga='(e)=mo
      CORE octopus yon when-ripe=3GEN 3R.S/A-eat=3O=PF

      no-ha<u>b</u>isi='(e)   na   simbuku iso, no-helawe=mo.
      3R.S/A-finish=3O NOM octopus yon, 3R.S/A-rest=PF

      Mbeaka lengo 'umpa no-melu=mo   'uka   te   i-manga
      not   long which 3R.S/A-plead=PF again CORE OP-eat

> *na   ana=no   meai iso.*
> NOM child=3GEN ANA yon

'So their father went, fished and caught an octopus. He returned
home and set the octopus out to dry. Then, the two children
were hungry because they hadn't had any food, and she cooked
that octopus for them. When it was ready they ate and finished
that octopus, and rested. Not long afterwards those children
asked for some food again.' (WaIID: 2–5)

In one of the two examples where the beneficiary is not encoded with a clitic on
the verb, the applicative occurs in a direct quote from one character, the main
protagonist, talking to another character who had spoken in the previous
clause. In the short clause the main character (who is a woman dressed as a
man) is explaining the reason for her seeking a particular kind of coconut;
clearly in this case the most natural conversational gambit would be to treat the
speaker and addressee as more salient than the intended beneficiary, who is not
present; furthermore, the important part of the information exchange is the
object of the search, the *kaluku bumanguntiu*, as seen by its repetition in the
following clause; the parents are not mentioned again for another 41 clauses,
thus clearly not the most salient local topic of discourse.

(16) *"E, parisa='e. Parisa='e, te wowine na iso."*
      Hey investigate=3O investigate=3O CORE woman NOM yon

   Jari no-sale='e=mo   "Mai=mo to-wila=ako."
   so   3R.S/A-command=3O=PF come=PF 1PL.R.S/A-go=APPL

   Jari kambea, o-potae   "Te awana ku-mai=mo   mina
   so   fact   3R.S/A-say CORE manner 1SG-come=PF from

   *ku-l[um]aha=**ako** te   ro'o   te   **mansuana=su**.*
   1SG-search.SI=APPL CORE medicine CORE parent=1SG.GEN

   Te   kaluku b[um]angu-ntiu=mo na   ro'o=mo."
   CORE coconut half.old.SI-old=PF NOM medicine=PF

"Well, check it out. Check it out, That's a woman, that one over
there is." He (the king) commanded him (the king's son)
"Come on, let's go." Well, she said "The reason is that I am
searching for a medicine for my parents. A coconut that is
banguntiu, that's the medicine.' (WaI: 22–25)

The interesting point to note about the non-subject applicative O in the
example above is that, although not pragmatically salient in the discourse, the

parents are still coded as an applicative O, and not as an oblique. If the oblique coding option were chosen, we would expect a sentence like the following.

(16)′ *Ku-l[um]aha te   ro'o   ako te   mansuana=su.*
1SG-search.SI CORE medicine BEN CORE parent=1SG.GEN
'I am searching for medicine for my parents.'

Unlike an instrument, which we have seen is coded obliquely if it is peripheral to the topic of discourse, a beneficiary is still coded as an applicative O even when not a salient part of the narrative. There is clearly a difference in the constraints operating in the coding of beneficiaries and instruments. In the other non-subject applicative O the beneficiary is again not germane to the discourse, which centres about music making and parenthetically mentions that the noise and clamour is made for the benefit of one's family, not just for oneself.

3.2.3 *Co-agents*

Co-agent applicative Os (henceforth *comitatives*) are infrequent in narrative texts, though not as rare as instruments. This might in part reflect the fact that the usual narration is one that traces the story of one character at a time, and so represents a skewed picture of social interaction: a lone hero(ine) is less likely to either accompany, or be accompanied by, other characters than are Tukang Besi people in real life (in which most undertakings are cooperative endeavours).

In the following example the occurrence of the comitative applicative can be explained as responding to make the co-agent the O of the verb, to fulfil restrictions on what may head a relative clause (Donohue 1996a); additionally, another reason for the appearance of *-ngkene* with this particular verb is to force the verb to be interpreted as 'have sex' (a volitional event), not just 'sleep'; *moturu* is one of several verbs that may have both a volitional and non-volitional reading (for a partial list, see Donohue 1996b), with some morphology forcing one interpretation over the other, as in this case.

(17) *O-nggaleso=mo   nggaleso=mo nggaleso=mo, eaka o-hada*
3R.S/A-nervous=PF nervous=PF nervous=PF, not 3R.S/A-want

*di-moturu-**ngkene**.*
OP-sleep-COM

'She was very nervous, she didn't want to be slept with.'
(WaI: 39)

Apart from this one case, in which it is not possible to have O enclitics on the (subordinated) verb because of the construction in which it appears (object relative clause), all occurrences of comitative applicatives in texts occurred with pronominal enclitics.

An example of the more typical appearance of a comitative applicative in texts, with enclitic marking the O on the verb, is the following. In this example we have the subject applicative O of the verb marking the co-agent comitative argument, despite the fact that this construction is not strictly required either by the verb and the meaning it is intended to convey (*pokahakaha kene La bela Kompakompa*, with an oblique *La bela Kompakompa*, would also convey the same meaning), and the fact that contextually *La bela Kompakompa* is not as important as either the speaker of the direct quote, or the addressee — that the speaker is treated morphosyntactically more important can be deduced from the fact that in the following clause *La bela Kompakompa* is not coded as the grammatical subject, losing out to the speaker in this regard.

(18)   "*Wila po-kaha-kaha-**ngkene**='e na*   ***La bela Kompakompa***
　　　go   REC-RED-bite-COM=3O   NOM La dear Eel

　　　parantai ku-ho-[m]o'oro　　te　　wela'a　no-kaha=aku
　　　because 1SG.S/A-VRB-grope CORE k.o.crab 3R.S/A-bite=1SG.O

　　　te　　La bela　Kompakompa."
　　　CORE La dear Eel

　　　"Go and bite with Eel, because I was feeling around for crabs
　　　and Eel bit me." (Oen: 16)

It is worth noting that, of the five uses of comitative applicatives, three were in quotes of direct speech; for the oblique comitatives, the opposite was found, with five of the six oblique comitatives occurring in main text, and only one in direct speech. One example of a main clause non-applied comitative can be seen below, where it is clear that the discourse is centred about the trip itself, and not about the daughter except as an accessory to the trip. Note that after discussing the boat that will be used for the journey there is another use of a comitative to indicate the object of the visit on Buru; again, the family there is not the topic of the narrative, and so it is not coded with an applicative. The following line mentions the family again, but it is in a backgrounded clause, and after this aside the narrative returns to the journey.

(19) *Ku-rencana=mo ku-h[um]ali-hali   i   'uka sa-wali*
      1SG.S/A-plan=PF 1SG.S/A-RED.SI-wander OBL also 1-turn

      i   Jayapura. Karna ane   ku-mai   kene ana=su
      OBL Jayapura fact   exist 1SG-come COM child=1SG.GEN

      Wa Ode Rahimi. *Mina i   ana ku-rencana a*
      Wa Ode Rahimi from OBL here 1SG.S/A-plan ah

      ku-l[um]aha   te   kapala ane ke Tunas Jaya.
      1SG.S/A-search.SI CORE ship   exist and Tunas Jaya

      Ku-s-[um]awi   i   Tunas Jaya kua Buru lagi.
      1SG.S/A-travel.SI OBL Tunas Jaya ALL Buru now

      A kua Buru, ane ku-t[um]olu   ku-'[um]awa
      ah ALL Buru exist 1SG.S/A-stop.SI 1SG.S/A-get.SI

      ke   tuha-tuha mai. *Sa-kampo sa-kampo i   Buru*
      COM RED-family INAL one-village one-village OBL Buru

      (o)-leama karna (o)-koruo   a   tuha mai, [m]e-koranga
      3R.S/A-good because 3R.S/A-many NOM family INAL, do.SI-garden

      i   Buru. O-[m]e-mbula   te   cengke. Jari, [araboa],
      OBL Buru. 3R.S/A-do.SI-plant CORE cloves. so   whatchamacallit

      mina i   Buru, ka-wila   kua Ambo.
      from OBL Buru 1PA.I.S/A-go ALL Ambon

      'I am planning to go for a trip to, for once to Jayapura. In fact
      I'll be heading there with my daughter Wa Ode Rahimi. From
      here I plan to, ah, to look for a boat, there's the Tunas Jaya. I'll
      travel in the Tunas Jaya to Buru first. Um, at Buru, that is I'll
      stop off and get to see the family, they make gardens on Buru.
      They plant cloves. So, well, from Buru, we'll go on to Ambon.'
      (Jay: 2–9)

An example of the context in which a comitative applicative is used in a non-
quoted clause is given below. Here we can see that the applicative correlates
strongly with the topic of discourse: the female character, the main protagonist
(the same as the one who searched for coconuts for her parents, in the discus-
sion on beneficiaries, and who refused to sleep with someone in example (17)
above), is being discussed by the king and his son, who, fooled by her clothing
and her used of wild animals to solve puzzles, cannot determine whether she is
a man or a woman. After the stretch of direct speech between the king and his
son, which ends at the beginning of this fragment, the narrator introduces Wa

Iambo as the subject applicative O of the verb *nopotondatondakene'emo*, and she continues to code Wa Iambo a the subject in the next two sentences until the direct quote from her, after which the narration switches back to the King.

(20) *Jari te   ia   (a)na o-potae   kua   "O-[m]o'oli=aku=mo*
      so   CORE 3SG this 3R.S/A-say COMP 3R.S/A-finish.SI=1SG.O=PF

      te   mia   ana. E,   ana ana."
      CORE person this Hey here child

      Jari no-anu=mo   no-,   no-po-tonda-tonda=(ng)kene='e=mo,
      so   3R.S/A-whatsit=PF 3R.S/A- 3R.S/A-REC-RED-grope=COM=3O=PF

      o-panganta no-gua. Potae=m(o) kua "Oho.
      3R.S/A-not.willing 3R.S/A-pull back say=PF COMP yes

      O,   ku-wila=mo."   Jari no-morondo no-ho-mo-moturu=mo
      right 1SG.S/A-go.SI=PF so   3R.S/A-night 3R.S/A-VRB-RED-sleep=PF

      'uka moturu=mo ka   dodua='e.
      also sleep=PF   COMP be.two=3O

      'So he said "She will convince me, this person; here, child." Well then he, whatsit, he groped at her, but she wasn't willing, she pulled back. She said "All right then, I'm leaving." Well, when it was night he tried to sleep about as well, to sleep, together with her.' (WaI: 35–38)

      (=*kene* is an allomorph of =*ngkene* following a prenasalised consonant)

Clearly we can see the same tendency that was observed with the beneficiaries, that the (necessarily animate) co-agent is treated as especially salient when it is in a quote, being most likely second person, and out of quotes is more likely to occur as the (subject) applicative O when it is a salient argument in the narrative.

3.2.4 *Goals*
Goals display behaviour quite different from the three types of applicatives discussed above. Although goals are vastly more frequent than co-agents, instruments and beneficiaries combined, they are also much more commonly encountered in oblique coding strategies than as applicatives. This is because they are typically less important for the development of a storyline. Consider the following extract, in which the narrator follows some aspects of the life-history of a particular culture hero, La Ode Wuna.

(21) *No-rato   **di** Pomantuda na   La Ode Wuna*
3R.S/A-arrive OBL Pomantuda NOM La Ode Wuna

o-pa-nangu='e=mo   di iso. Sampe   no-wila
3R.S/A-OCC-swim=3O=PF OBL yon such.that 3R.S/A-go

***di** uwe i Goraka maka   te   La Ode Wuna iso*
OBL water OBL Goraka and.then CORE La Ode Wuna yon

no-tako='e=mo   i   uwe i   Goraka.
3R.S/A-ritually.clean=3O=PF OBL water OBL Goraka

Jari mina i   iso o-torusu=mo   no-langke.
so   from OBL yon 3R.S/A-continue=PF 3R.S/A-sail

Sa-langke=no   te   ama no La Kilaponto no-parentae
when-sail=3GEN CORE father GEN La Kilaponto 3R.S/A-because

*na   La Ode Wuna a-langke=mo **kua** wawo. Jari no-poga(u)=mo*
NOM La Ode Wuna 3I.S/A-sail=PF ALL up   so   3R.S/A-say=PF

*mina i   Kadatua te   La Ode Wuna no-rato   **kua** Buru.*
from OBL Kadatua CORE La Ode Wuna 3R.S/A-arrive ALL Buru

'La Ode Wuna arrived in Pomantuda, and he would bathe there.
When he went to the waters at Goraka, then La Ode Wuna
cleansed himself in the waters at Goraka. And from there he
went on sailing. When he, the father of La Kilaponto, sailed, La
Ode Wuna sailed upwards (to the east). So they say that from
Kadatua La Ode Wuna arrived at Buru.' (Lord Wuna: 13–17)

In this extract it is obvious that the focus of attention is La Ode Wuna, and not
the various locations that he visits in the course of his travels. For this reason all
of the destinations mentioned are coded with oblique case marking strategies
(using the general oblique case *di*, and the allative preposition *kua*), and not
with the applicative strategy.

As can also be seen in this extract, a goal is frequently discarded soon after
it appears in a text, or at best becomes a scene-setting locative, or the source
from which the action subsequently moves. In the above example *Pomantuda*
appears as a goal, and is next mentioned as a setting, *di iso* 'at that place'. The
next goal, *te uwe i Goraka*, is similarly introduced as a goal, and then becomes
a setting, and finally a source *mina i iso* 'from there'. In no case is the original
goal mentioned more than twice after the initial appearance before it disappears
forever in the text, behaviour typical of locational obliques in Tukang Besi.
These goals are all clearly not essential to the development of the main storyline,

and so do not merit coding as an applicative O.

Applicative codings may be found when a goal is not incidental to the storyline, but is rather an essential part of it, through being one of the protagonists. Compare the coding choices taken for different goals in the following extract. The first goal mentioned, *wunuano* 'his house', is a setting for the action, and not an important part of the story itself: it is mentioned as an oblique argument. The next goal, however, is the protagonist of the story itself, and so is clearly a more salient argument, and as such is coded as the applicative O of the verb, not as an oblique argument. Unlike *wunuano*, which was not mentioned prior to the sentence below, the protagonist has been mentioned many times in the previous 32 sentences, and so is topical enough to qualify for treatment as an applicative O, rather than an oblique.

(22)   *Mina no-rato*   **di wunua=no** *no-heka-heka-rau=mo.*
from 3R.S/A-arrive OBL house=3GEN 3R.S/A-RED-VRB-yell=PF

Po'oli no-rodongo='e=mo te   mia   nu wulumba-'a   ana.
finish 3R.S/A-hear=3O=PF CORE person GEN neighbour-NL this

Jari no-sumbere   (o)-mai-si='e=mo   te   mia
so 3R.S/A-immediate 3R.S/A-come-DIR=3O=PF CORE person

no wulumba-'a=no.   "U-ha'a   La Kape'ingkape'i?"
GEN neighbour-NL=3GEN 2SG.R.S/A-why La Fool

No-balo=mo   kua "No-kiki'i=aku   te   La Kompakompa
3R.S/A-answer=PF COMP 3R.S/A-bite=1SG.O CORE La Eel

kene no-hoko-mate='e   kene beka=su   te   La Kompakompa."
and 3R.S/A-FACT-dead=3O and cat=1SG.GEN CORE La Eel

'After he arrived at his home, and howled. After that, the neighbours heard him. So the neighbours immediately came up to him. "What's up, Fool?" He replied: "Eel bit, and Eel killed my cat."' (Oen: 33–37)

(the first person O clitic on *Nokiki'iaku* is an instance of external possession; *kene* is also used as a replacement for *na* as the case marker on the O in the final clause *Nohokomate'e kene bekasu te La Kompakompa*; this is a normal way of marking emphasis, and should not be confused with the use of *kene* to mark comitative arguments, discussed in Section 3.2.3)

Notice that a further difference between the two goal arguments in the above example is that the animate goal *La Kape'ingkape'i* shows considerable subsequent mention, whereas the inanimate goal *wunuano* has the typical scene-setting

property of disappearing from the discourse right after it has been used.

A similar example showing the discourse continuity of animate goals appears in the following extract, in which the human object of discussion appears first as the subject of a series of intransitive verbs, then as the subject applicative O.

(23) *Po'oli a   sambahea te   mia   no-hena'u=ako   min(a)*
     finish NOM, prayers   CORE person 3R.S/A-descend=APPL from

     i   masigi no-po-konta=mo   maka   la'a=mo no-po-sepa.
     OBL mosque 3R.S/A-REC-hold=PF and.then just=PF 3R.S/A-REC-kick

     Na po-sepa iso, no-po-konta-dodua-dodua   maka
     NOM REC-kick yon 3R.S/A-REC-hold-RED-be.two and.then

     no-wila   kua aropa. Sa-wila-no   kua aropa
     3R.S/A-go ALL front   when-go-3GEN ALL front

     *no-mai-**si**='e   dodua-'uka maka   o-po-aropi.*
     3R.S/A-come-DIR=3O 2-again   and.then 3R.S/A-REC-face.off

     'After the prayers, the people come down from the mosque and
     hold on to each other, then they kick each other. The kicking,
     they hold on to each other two by two, and they go to the front
     (of the crowd). When they've gone to the front, two others
     come up to them and they face off against each other.'
     (Lia: 8–10)

This said, goals do tend to be oblique, certainly the non-human ones. It might be that humanness, rather than topicality or other pragmatic salience, is the key to coding choice, but since humans are inherently more pragmatically salient than non-human arguments, this is hard to test.

3.2.5 *Locations*
As with goals, locations are much more commonly encountered in oblique coding strategies than as applicatives. This is because they are typically less important in a storyline, being neither active in the story nor destinations for action to move towards (there is a lot of movement in Tukang Besi narratives).

This tendency to appear as an oblique argument can be over-ridden, when there is some degree of topicality assigned to the location. The following extract shows that the text is about various gardens owned by the speaker in different locations about the island. From a more general discussion of the different gardens, he focuses on a particular garden in Katapi, and then describes what

has been planted there. Since the garden in Katapi is the topic of discussion at this point, it is salient enough to be coded as an applicative O; at this point it has already been mentioned twice, once as an oblique and once as the topic/subject of the clause in which the applicative appears. Furthermore, in the next ten clauses the same referent receives two more mentions as the focus of the discourse shifts towards a discussion of the relative yields of different crops.

(24) *Po'oli sambahaea, ku-helawe=mo ki'iki'i. Pasi ku-helawe*
      finish prayers 1SG.S/A-rest=PF little after 1SG.S/A-rest

      ki'iki'i, ku-makanu=mo.   Maka   la'a=mo ku-wila
      little   1SG-make.ready=PF and.then just=PF 1SG-go

      i   koranga. Te koranga=su   ane kene i   Walobu,
      OBL garden   TOP garden=1SG.GEN exist and OBL Walobu

      ane'uka kene i,   i   Katapi. Te   koranga=su
      existalso and OBL OBL Katapi TOP garden-1SG.GEN

      i   Katapi, te   hembula-ti='e te   jambu, lima-ta'o-mo
      OBL Katapi CORE plant-DIR=3O CORE jambu five-year=PF

      no-ba'e.
      3R.S/A-fruit

      'After I finish my prayers, I rest a little bit. When I'm rested, I get ready to go out. Then I head off to the garden. Well, my gardens, I have (one) in Walobu, I have one in Katapi as well. My garden in Katapi, it's planted with jambus, and I've been getting a crop for the last five years now.' (Kor: 3–7)

This example is atypical. Of the 20 location arguments found in the texts, only two appear as applicative Os. The other occurrence of an applicative location is in a descriptive text. Here the narrator is describing a rough piece of what might be a coral-covered shell, or might be a piece of rock the shape of a shell.

(25) *Jari ara te   an(a) iso? Pasi-mo.   Ara te   ia*
      so   if CORE this yon already=PF if   CORE 3SG

      i   ana, ara to-'ita   te   hebuntu kona   awana
      OBL here if 1PL.R.S/A-see CORE shape   ILL.FORCE manner

      kua   te   piripiri. Toka eaka to-dahani   ka,
      COMP CORE shell   but not 1PL.R.S/A-know ILL.FORCE

      o-mura   nanoka, baabaa-no (o)-mur(a)   e   piripiri
      3R.S/A-maybe ILL.FORCE first=3GEN 3R.S/A-maybe CORE shell

*'uka. Sa-'anu=no,   o-,   'ido-**api**-'e-mo, te   watu,*
also when-whatsit=3GEN 3R.S/A- live-DIR=3O=PF TOP stone

jari sa-to-to'oge.   Sampe, o-membali   (a)wana (a)na.
so   when-RED-big such.that 3R.S/A-become manner this

'So this one? OK. This one here, the appearance is like it's a
shell. maybe it is, firstly maybe it is a shell too. When it was, um,
it lived on one, a rock, so it became big. That, that's how it got
to be like this.' (PP: 18–22)

Comparing the applicative locations with oblique ones, we again see a clear
difference in textual salience. In the fragment below, the location is merely part
of a description of some of the salient differences between the various islands in
the Tukang Besi archipelago. The narrator is interested in bringing out a
number of differences, between the islands, and not dwelling on any one issue
too much. Rather than use the applicative structure *Nohe'urangisi te wunua*, the
use of which would imply a level of prominence and relevance of the houses to
the narrative, he has coded houses as an oblique. It is worth noting that *di
wunua* in the narrative is a nonreferential entity, and this probably plays a large
part in the decision to code it as an oblique.

(26) *Jari te   po-sala-'a   u   Wanse kene Kahedupa,*
     so   TOP REC-fault-NL GEN Wanci and Kaledupa

te   Wanse bisa te   wowine mai o-karajaa,
TOP Wanci can CORE woman INAL 3R.S/A-work

no-para-aso. Te Kahedupa, buntu te   mo'ane
3R.S/A-ITER-sell TOP Kaledupa only   CORE man

na   koruo k[um]arajaa, te   wowine mai, e, no-he-'uranga
NOM many work.SI   TOP woman INAL ah 3R.S/A-DO-live

***di   wunua.** Kana   eaka no-monea i   para-asa-'a.*
OBL house   because not 3R.S/A-usual OBL ITER-sell-NL

Te   bukti=no,   te   Kahedupa apa   meana'e ai
TOP proof=3GEN TOP Kaledupa ENDPOINT now

apa   le'ale'ana mbea-ho a   daoa=no.
ENDPOINT today   not-yet NOM market=3GEN

'So the differences between Wanci and Kaledupa are that on
Wanci even the women work and sell things. On Kaledupa only
the men do a lot of work, and those women, well, they stay at
home. Because they're not used to selling things. I mean, really,

> on Kaledupa up to now, up to this very day, they still don't have
> a market.' (TkB: 8–11)

> (*bukti* is either an unassimilated Indonesian loan, or more likely an
> example of code switching with local Malay; Kaledupa gained a market
> in Ambeua in 1993, after this text was recorded)

About the same percentage of locations appear as applicative Os as do goals, despite locations never expressing a human or animate entity. This suggests that the animacy alone is not the determining factor in the coding choice of those goals that were marked as applicative Os.

3.2.6 *Purpose and Cause*

Purposes are a form of applicative that is atypical both language internally and cross-linguistically. Although these applicatives do have an argument that appears morphologically as the object of the verb, the range of object properties displayed by the purpose or cause applicative O is very limited

For these reasons, as well as their very infrequent appearance in texts, they are not considered in the discussion that follows.

3.3 General patterns

In all of the applicatives we have seen that there is an overwhelming tendency for the applicative O to be the grammatical subject, with all the status that is associated with that argument (as summarised in Section 3). This reflects the fact that, facing a coding choice for the argument as (less salient) oblique or more prominent applied O, the prominence associated with the second choice is enough to mean that the relative prominence of subject over non-subject functions in the core is also triggered.

The apparent exceptions to subject-choice for applicative Os are easily explained: examining the thematic hierarchy, the highest roles that are eligible for applicative coding in Tukang Besi are agent and beneficiary, the two which have appeared as applicative Os without subject status. With the agent this was because the particular construction in which the applicative appeared does not permit the use of O-enclitics. With the beneficiaries, however, it seems that there is another explanation.

In both cases of non-subject beneficiary applicative Os the beneficiary is peripheral to the narration, but is not coded as an oblique; I suggest that in narratives the minimum level of salience that must be marked on an argument

with these semantic roles is as a core argument of the clause, and so the oblique strategy, whilst recognised as a grammatical alternative, is not employed in real speech with these semantic roles. It is probably the case that the grammaticality judgements on sentences such as (41) are based on analogy with the acceptable oblique locations and oblique goals, which show much more paradigmaticity between the oblique and applicative codings. This might well represent a case where the speaker's perception of grammaticality is influence by the grammaticality patterns in another, more dynamic and closely related, part of the grammar, and does not reflect the actual patterns of usage.

4. Interpretation

In this section I shall attempt to generalise from the observations made for the individual semantic roles above, to see if it is possible to determine the constraints that operate to determine the coding choice of the arguments.

4.1 Factors deciding the use of an oblique strategy

One obvious division exists between main storyline clauses and backgrounded clauses, as judged by the appearance of direct speech quotes in texts; in quotes there is a higher proportion of obliquely coded arguments than in main clauses, significantly so for both comitatives and beneficiaries, as noted earlier. This is, however, overridden in the case of first or second person arguments by the salience of that argument on the animacy hierarchy: pronominal arguments are almost never coded as obliques, despite there being constructions that are reported as grammatical by speakers, such as:

(27) *No-wila   kua daoa   kene=su.*
       3R.S/A-go ALL market and=1SG.GEN
       'They went to the market with me.'

The non-use of this construction with pronouns in narrative implies that, while perhaps acceptable with (lower-animate) nominal arguments, it is not used with pronouns due to the conflict in encoding of prominence: pronouns are inherently prominent, and oblique functions are inherently non-prominent. The conflict is resolved in favour of the coding of prominence.

   The semantic role of the argument is another significant factor in coding choice: as will be seen in Section 6, the lower semantic roles are much more

prevalent as oblique arguments than are the higher ones, a correlation that is to be expected given what we know of preferences for the subcategorised arguments of verbs.

4.2 Factors deciding the use of an applicative strategy

In the previous sections we have seen that applicatives overwhelmingly occur with pronominal arguments, indexed on the verb. Since the appearance of O agreement markers on the verb is an indicator of privileged grammatical status, a pragmatically determined position, we can state that, while not obligatory, it is usual for an applicative O to be made the grammatical subject of the clause it is in. In some cases, as in (42), the applicative morphology is required in order to satisfy grammatical constraints on which argument may appear as the head of a relative clause (see also Donohue 1996a).

4.3 Competing constraints

The discussion of the different semantic roles and their appearance in applicative and oblique constructions has identified the following factors that determine the coding choice.

– higher semantic roles are more likely to be expressed as applicative Os;
– higher animate arguments are more likely to be expressed as applicative Os;
– discourse-prominent referents are more likely to appear as applicative Os;
– main storyline clauses tend to code with applicatives, when compared to backgrounded clauses, judged by the appearance of direct speech quotes in texts;
– applicatives overwhelmingly occur with subject Os, showing pronominal indexing on the verb.

These factors compete: we can see that the applicativisation of clauses with higher semantic roles can be overridden by non-topicality if that clause is a backgrounded one in the narration. Also, the comitatives don't 'fit in' too well; they seem to be more favoured as applicative Os when in quotes; this might be a result of the small number of comitatives occurring in the sample. Clearly, more work remains to be done on these constructions in other languages to gain a clearer picture of the constraints on these systems.

5.   Quantification of coding choices

We have had a qualitative analysis of the appearance of an argument as an applicative O or an oblique. In this section I shall present quantified data on the occurrence of dynamic applicative constructions, and examine the notions of discourse prominence that were developed qualitatively in the previous sections.

5.1   Proportions of applicatives vs. obliques

In addition to the choice between applicative and oblique coding, when an argument is treated as the applicative O of the main verb we also have the choice of coding it as either a subject, with agreement on the verb, or simply as the (primary) O of that verb. This choice, as well as the choice of applicative versus oblique coding, is presented in Table 2.

Table 2. Applicative O vs. oblique codings

	Applicative O		Oblique
	enclitic	no enclitic	number
comitative	4	(1)	6
benefactive	29	2	0
instrumental	2	0	2
location	2	0	18
goal	9	0	128
(source	0	0	47)
Total	46	2 (3)	201
GF:	SUBJ	OBJ	OBL

The same information is presented in Table 3 below, showing in addition to the raw figures on the distribution of coding choices the percentages of coding choice arranged by semantic role.

Arranging the material in Table 3 another way, we can examine what proportion of each coding strategy (subject applicative O, non-subject applicative O, and oblique) is distributed amongst which semantic roles. Reading this table we can see that, for instance, nearly two thirds of all occurrences of subject applicative Os are beneficiaries, whereas for oblique codings two thirds of all occurrences are goals.

The figures in Table 4 partly reflect the large numbers of beneficiary (31)

Table 3. Proportions of applicative O vs. oblique codings

	Applicative O				Oblique	
	SUBJ	%age	OBJ	%age	number	%age
comitative	4	36	(1)	(9)	6	54
benefactive	29	94	2	6	0	0
instrumental	2	50	0	0	2	50
location	2	10	0	0	18	90
goal	9	7	0	0	128	93
source	(0	0	0	0	47	100)
Total / Average	46	23	2	1	201	80
Just applicatives:	46	96%	2	4%		

Table 4. Prevalence of a semantic role in a coding choice

	Com	Ben	Instr	Loc	Goal	Source	Total
APPL.SUBJ	9	63	4	4	20	n/a	100%
APPL.OBJ	-	100	-	-	-	n/a	100%
OBL	3	-	1	9	64	23	100%

and goal (128) arguments in the corpus; the two-thirds figure for oblique-codings being goals reflects almost exactly their proportion of the sample. The skewing in favour of beneficiaries as subject applicative Os is striking, however, and reflects their high position on the thematic hierarchy as well as their high frequency in the sample.

5.2 Discourse characteristics of the arguments

Having discussed the appearance and disappearance of the arguments coded as applicative O or oblique, we shall now examine some quantified data on their persistence. The variables used are those described and employed by Givón (1983) for textual analysis, and one addition that has proven to be useful in this analysis, subsequent reference. The different tests represent the following counts:

Referential distance (RD): the average number of clauses prior to the one in question that the argument was last mentioned. For instance, a RD value of 1.8 for comitatives in Table 6 means that comitative applicative Os occur when that same argument has been mentioned on average 1.8 clauses previously.

Topic continuity (TC): the average number of subsequent mentions of that argument in the following ten clauses. Location applicative Os, for instance, are mentioned an average of only 1.5 times in the ten clauses following their appearance in an applicative construction.

Subsequent reference (SR): this is the opposite of RD: SR is the measure of the average distance from the appearance of an argument in the applicative construction to its next mention, whether that is an applicative O or in any other form. Locations, for instance, have a mean RD of 10.5, but the figures of SR are only 2.5: this reflects the pattern already commented on, that locations are frequently introduced as settings, but become unimportant after this mention.

For a more detailed description of the methodologies involved, the reader is referred to Givón (1983), and the papers in Givón (1985, 1994). In the case of RD and SR, the absence of any mention in the preceding 20 clauses is assigned a value of 20. For RD and SR, the lower the value the more highly prominent the argument is in the discourse, since a low value for either of these implies that there is little time between mentions of the argument. With TC, on the other hand, the higher the value the better for discourse status, since this measures the number of repeat mentions of the argument in the discourse following its appearance as an applicative O or oblique.

5.2.1 *Applicative Os in discourse*

Table 6 presents the results of calculation values for RD, TC and SR of instances of applicative Os; subject applicative Os and non-subject applicative Os have been collapsed in this table, since the number of non-subject applicative Os is not great enough to warrant separate calculation. The exceptional figures have been noted in bold; in this table, and Table 6, instruments have not been calculated because of the small sample size involved.

   Examining just RD in Table 6, it is clear that the locative applicative Os represent a very different set of criteria for selection than do the other semantic roles; in all other semantic roles the RD value is very low and, given the standard deviations, equivalent: about 1.5 clauses distance separates an applicative O and its most recent prior mention. With respect to SR, however, the figures are much closer, with locations too displaying the same short distance from applicative O appearance to the next mention. It seems that SR is a stronger indicator of eligibility for applicative O status than is RD.

   With respect to TC, the degree of variation masks any significant generalisations, but again the locations (and here, to a lesser extent, the goals as well)

Table 5. Discourse characteristics of applicative arguments

	Referential distance		Topic continuity		Subsequent reference	
	mean	sd	mean	sd	mean	sd
comitative	1.8	0.8	5.8	2.2	1.4	0.5
benefactive	**1.2**	0.5	5.8	2.4	2.2	3.7
instrumental	n/a	n/a	n/a	n/a	n/a	n/a
location	10.5	13.4	**1.5**	0.7	2.5	0.7
goal	1.3	1.0	2.6	2.7	**1.1**	0.3
source	n/a	n/a	n/a	n/a	n/a	n/a
Average	3.7		3.9		1.8	

stand out as displaying a much lower degree of prominence than the other semantic roles.

5.2.2 *Obliques in discourse*

As is to be expected, oblique arguments behave very differently to applicative Os. We shall first discuss the between-semantic role differences before comparing the applicative Os with the obliques.

Table 6 shows that there is little difference in the RD values for the different semantic roles, all averaging about 10, with a high standard deviation in all cases. With SR the high standard deviations also hide any differences there might have been; these high standard deviations are in part due to the frequent loss in discourse of an argument altogether, with no subsequent mention at all.

Topic continuity also shows very little significant differentiation between the semantic roles, though there is a tendency for the comitative to be more persistent than the more peripheral roles. Sources are the least persistent of all the peripherals, perhaps due to the fact that the typical appearance of a source is following its mention as a goal: a source is at the wrong end of a topic chain to score highly in topic continuity. An example of this is given below, in which the return leg of a trip is described, mentioning the places where different transport is used. The narrator has completed most of the return voyage to Wanse, and is describing the last sea-leg of the return.

(28) *A buntu te   leama-mpuu=no 'uka ara ane ke   sawi-ka*
     ah in.fact CORE good-really=3GEN also if   exist and travel-NL

     (mina i   do   Wajo…), mina i   Baubau
     from   OBL Psa… wajo   from OBL Baubau

Table 6. Discourse characteristics of oblique arguments

	Referential distance		Topic continuity		Subsequent reference	
	mean	sd	mean	sd	mean	sd
comitative	14.7	8.5	2.7	2.4	5.3	7.3
benefactive	n/a	n/a	n/a	n/a	n/a	n/a
instrumental	n/a	n/a	n/a	n/a	n/a	n/a
location	10.5	9.4	1.0	1.2	10.6	9.4
goal	11.5	8.7	1.3	1.4	7.8	8.5
source	7.2	8.5	0.8	1.0	10.4	9.2
Average	11.0		1.5		8.5	

> *to-'eka*   *i*   *oto* **kua Daoa Wajo.**
> 1PL.R.S/A-ascend OBL car ALL Pasarwajo
>
> *I*   **Daoa Wajo** *ku-sawi-mo*   *i*   *jonso,*
> OBL Pasarwajo   1SG.S/A-travel=PF OBL motorboat
>
> **mina i**   **Daoa Wajo** *kua Wanse kana*   *te*   *jonso.*
> from OBL Pasarwajo   ALL Wanse because CORE motorboat
>
> 'In fact it's best if there's some transport from Pasarw … from
> Baubau, we get on a verhicle to Pasarwajo. In Pasarwajo we get
> on a motorboat, from Pasarwajo to Wanse, because there are
> motorboats.' (Jay: 32–33)

The three mentions of Pasarwajo show a typical pattern of development for scene-setting nominals in Tukang Besi narratives, in which they first appear as the goal of movement, then optionally appear as the location for an action, and then are the source of subsequent movement again. The average figures RD, TC and SR also reflect his pattern, with goals outscoring sources for higher TC and closer SR, but sources outscoring goals (and locations) for close RD. When not following this pattern, sources are usually omitted; notice that the figures for subsequent reference are exactly halfway between immediate subsequent reference (1) and lack of any following reference (20).

5.2.3 *Applicative O versus oblique coding strategies*
Having examined the peculiarities of both the applicative and oblique coding strategies, we are in a position to contrast the patterns in the two. Firstly, we must note that there are no occurrences of beneficiaries as obliques, or sources as applicative Os, so no comparison can be made with these semantic roles.

Comparing the RD values for applicative and oblique coding strategies, we can see a strong tendency for the applicative strategy to occur with recently mentioned participants. The only exception to this is with locations, in which the same size for applicative coding is found (two members in the set) and which shows the same values for applicative as for oblique codings. In the case of this semantic role we cannot declare referential distance to be a prerequisite to appearance in an applicative construction, but based on the other semantic roles examined it is very likely that referential distance is an important determiner of the choice of an applicative coding strategy.

The comparison of TC between the applicative coding and oblique coding constructions shows a similar split between the behaviour of applicative Os and the behaviour of obliques, and also a split between the higher semantic roles (co-agent and beneficiary) on the one hand and the lower ones (location, goal, source) on the other.

As mentioned in Section 5.2.2, a source is typically the follow on from a goal mention, with a form of tail-head linkage operating. This explains the higher value for TC in goals than in the other low semantic roles, though the standard deviations are in these three semantic roles high enough to make any tendencies that only, and not significant variation. The difference between the applicative and oblique codings of comitatives is significant, and points to the higher prominence in discourse of the applicative-coded roles, certainly for the higher semantic roles; with the lower semantic roles there is not a significant difference in TC between the applicative and oblique strategies.

The data on subsequent reference is not surprising, with the applicative coded arguments showing a much shorter distance to their next reference, as would be predicted from their behaviour in the RD and TC tests. With SR, however, there is so much variation that none of the contrasts are statistically significant.

Table 7. Referential distance of applicative O vs. oblique codings

	applicative O	Oblique
comitative	1.8	14.7
benefactive	1.2	n/a
instrumental	n/a	n/a
location	10.5	10.5
goal	1.3	11.5
source	n/a	7.2
Total / Average	3.7	11.0

Table 8. Topic continuity of applicative O vs. oblique codings

	applicative O	Oblique
comitative	5.8	2.7
benefactive	5.8	n/a
instrumental	n/a	n/a
location	1.5	1.0
goal	2.6	1.3
source	n/a	0.8
Average	3.9	1.5

Table 9. Subsequent reference of applicative O vs. oblique codings

	applicative O	Oblique
comitative	1.4	5.3
benefactive	2.2	n/a
instrumental	n/a	n/a
location	2.5	10.6
goal	1.1	7.8
source	n/a	10.4
Average	1.8	8.5

Comparing the three tables in this section, it is plain to see that in all cases where there is a difference in discourse treatment of applicative Os and oblique arguments, the applicatively coded arguments are more prominent in the discourse, both in terms of their recent mention in the narrative, or the number of subsequent mentions that they receive: they are both given information, and thus more topical, and also tend to reflect a participant with a higher degree of retention in the narrative. For these reasons we can say that the quantitative figures presented in this section support the qualitative assessment of the data that was presented in Section 4. There is a component of discourse prominence involved in the selection process, but there are also significant discrepancies between the factors underlying the coding of different semantic roles, with a rough break occurring between co-agents and beneficiaries on the one hand, and local roles (location, source and goal) on the other.

6.   Conclusions: the choice of coding strategies

We can examine the average length of reference of arguments which are coded as obliques or as applicative Os; in all other cases the applicative Os exhibit a longer referential distance.

The connection between semantic role and coding choice is also clear, with the higher semantic roles having more selection of applicatives, and the lower ones much less. There is a degree of iconicity in the coding of the lower semantic roles in a low prominence manner more of the time, as obliques, than the high semantic roles.

High   (SUBJECT,OBJECT)$_{CORE}$ Salience/Prominence   (OBLIQUE) Low

⟵――――――――――――――――――――――――――――――――⟶

(co-)agent beneficiary   (instrument) [$_{LOCAL}$ goal   location   source]

Figure 2. Correlating the thematic hierarchy and prominence

When an argument appears in a higher-than-canonical position, the reasons are discourse-driven: we have seen both qualitative and quantitative data that support the claim that, especially for goals, the appearance in an applicative construction is associated with a higher degree of topicality and prominence in the narrative. With the higher semantic roles this is not necessarily the case, since they are, by virtue of their high position on the thematic hierarchy, normally coded as core arguments anyway.

The semantic role information might simply reflect the distribution of animate arguments amongst the different semantic roles, with the higher semantic roles associated with higher animate entities. Since there are no occurrences of animate locatives or goals in the corpus, and since it is ungrammatical to have inanimate agents in Tukang Besi, we cannot test which of these models is the correct one with complete confidence. With respect to the coding choice, it is likely that the applicative coding strategy reflects the higher prominence associated with core arguments of the clause as opposed to oblique ones, and so aligns on the grammatical functions hierarchy.

Regardless of whether animacy or semantic role information is the key to determining this latter constraint, it is clear that it is outranked by the constraint that aligns higher discourse functions (Topic, Focus) with higher grammatical functions. There appears to be a general process of alignment, such that lower pragmatic status correlates with lower grammatical function status, as does lower semantic role/animacy status. Independent evidence for

the correlation of topicality and grammatical functions comes from the comitative applicative.

In the comitative applicative construction the constraint on the semantic type of verb is simple: the applicative O must be a co-agent capable of volitionally and deliberately carrying out the action in concert with the A. An example of a verb that does not permit the comitative applicative suffix in any context is *mohoo* 'be sick'; being sick with someone can only be expressed with *kene*, which marks an oblique:

(29) a. *No-mohoo **kene** La Mansi.*
          3R.S/A-sick and La Mansi
          'He was sick (along) with La Mansi.'
          (that is, he and La Mansi were sick at the same time, in the same place)

      b. **No-mohoo-**ngkene** te   Wa Inggi.*
          3R.S/A-sick-COM   CORE La Mansi

Other verbs that cannot occur with =*ngkene* include *'awa* 'get', *molo* 'drown in shallow water', *motondu* 'drown at sea', and other such non-volitional verbs. With verbs that do allow the comitative applicative suffix, that is, which take an agentive S or A, we notice that for meanings such as (51), there are two possible coding choices, seen in (52):

(30) 'sat (x), x = 1SG' & 'sat(y), y = La Mansi'

(31) a. *Ku-kede=**ngkene** te   La Mansi.*
          1SG.S/A-sit=COM CORE La Mansi
          'I sat with La Mansi.'

      b. *No-kede=**ngkene**=aku te   La Mansi.*
          3R.S/A-sit=COM=1SG.O CORE La Mansi
          'La Mansi sat with me.'

The choice of coding strategies in this case is driven by pragmatic factors: both arguments of the verbs in (27) are co-agents, and either may be coded as A, or as O. The inherent topicality of a first person over a third person will mean that (27)a is the less marked strategy of the two, but (27)b is normal if the immediately preceding topic of discussion was La Mansi, of if he was the focus of attention in this clause.

We can thus state that the following set of ranked constraints operate in the determination of coding strategies in Tukang Besi applicatives:

*High Topicality & Low GF » *Low Semantic role & High GF

Of course, if animacy rather than semantic role turns out to be the constraining factor, then the constraints would be

*High Topicality & Low GF » *Low animacy & High GF

Regardless of whether the salient factor is semantic role or animacy, this study has shown definitively that high topicality is strongly associated with the higher grammatical functions. Based on the Tukang Besi evidence, it also appears that the primary division, as regards topicality in narrative discourse, is between subject on the one hand and object and oblique on the other; there is not a strong support for the notion that subject and object form a distinct grouping against the obliques. This is a point that deserves to be continued in subsequent, more cross-linguistic, work, since it bears on a long-stated putative division in the structure of the Austronesian languages of the Philippine-type versus those of Indonesia, with applicatives.

Note

Abbreviations

The following abbreviations have been used in glosses of sentences and elsewhere. Portmanteau agreement markers use the following abbreviations: 1, 2, 3: first, second and third person; SG, PA, PL: singular, paucal and plural number; R, I: realis and irrealis mood; A, S, O: syntactic roles, following Heath (1975) and Dixon (1979), for definitions see Andrews (1985:68); GEN genitive. The other, non-portmanteau, glosses used are: ABS, absolutive; ALL, allative; ANA, anaphoric; APPL, applicative; ASP, aspect; BEN, benefactive; CAUS, causative; CLF, classifier; COM, comitative; COMP, complementiser; CORE, core case; DAT, dative; DEF, definite; DIR, directional; DO, verbaliser$_1$; EMPH, emphatic; endpoint, endpoint (preposition); ERG, ergative; FACT, factitive; GEN, genitive; ILL.FORCE, illocutionary force; INAL, inalienable; IND, indicative; INSTR, instrumental; ITER, iterative; NL, nominaliser; NOM, nominative; OBJ, object; OBL, oblique; OCC, occupational; OP, object prefix; PAST, past; PF, perfective; PREV, previous; PURP, purposive; REC, reciprocal; RED, reduplication; REQ, requestive; SI, subject infix; SUBJ, subject; TENSE, tense; TOP, topic; TRY, try; VRB, verbaliser$_2$.

The following abbreviations have been used for the different texts consulted: And: The Monkey and the Tortoise (version 1); EiT: climbing up to Tindoi; Jay: A journey to Jayapura; Kor.: Gardening; LaM: La Mansi and the stonefish; Lia: Traditions in Lia; Lord Wuna: The travels of Lord Wuna; Oen: The fool and the eel; Pada: The gardens in Pada; PP: Shells from the beach; SA: The Monkey and the Tortoise (version 2); TkB: The Tukang Besi islands; WaI: The travels of Wa Iambo; WaIID: Wa Indoindodiu the dugong woman.

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