The Palu'e passive: from pragmatic construction to grammatical device

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Voice constructions are usually associated with changes in the pragmatic status of the arguments of a clause, and so bear a strong resemblance to topic constructions in terms of their information structuring effects and entailments. Importantly, however, a defining criterion of voice alternations is that they morphologically monitor the changing status of the arguments of the verb, in terms of their grammatical function identity. By contrast, topic constructions are held to not affect the grammatical status of the arguments, but to restructure their pragmatic status. Data from Palu'e, an Austronesian language of Central Indonesia, is presented showing an example of a language that has just begun grammaticalising a topic construction into a grammatical voice system, providing evidence for the origin of voice systems in pragmatic structuring devices.

1. An alternation in Palu'e

Palu'e is an Austronesian language spoken on the island of Palu'e, just off the middle of the north coast of Flores, in southern Indonesia. As with other languages of central Flores it has little bound morphology, with only some aspectual and adverbial clitics joining the four genitive clitics in the language as enclitics; there are some incipient proclitics, marking case and agreement for 1SG subject, but they do not concern us here. There are two possibilities for encoding bivalent clauses, which can be illustrated in the alternation between (1) and (2), showing clauses with AVP and PAV orders, respectively. The translations offered are taken from informants' translations into Indonesian. I have called them 'unmarked' and 'marked', based mainly on their frequency of occurrence.[1,2]

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[1] Palu'e examples are presented in a phonemic transcription. This matches IPA norms, with the following exceptions: *b*, *c*, *j*, *ng* represent [ɓ tʃ dʒ ŋ], *mb* and *nd* (and *ngg*, which does not appear in the data here) are prenasalised (marginal) phonemes, and the accent ´ marks regular bimoraicity for the vowel of a monosyllabic foot. The dash - marks a clitic boundary; there are no affixes in Palu'e, so this distinction does not need to be maintained. In the other language data cited a distinction between clitics and affix is shown with = and -.

[2] In addition to A, S and P, which are defined following Comrie (1978) as the most agent-like argument of a lexical predicate, the single argument of a monovalent verb, and the most patient-like argument of a lexical predicate, respectively, the following abbreviations are used: 1, 2, 3: first, second and third person; COMP complement(iser); CORE core; EMPH emphasis; GEN genitive; LNKR linker; NOM nominative; PASS passive; PERF perfective; PL plural; PRED predicate; PREP preposition; R realise; RED reduplication; SG singular; V$_1$ active-like voice; V$_2$ passive-like voice; VP verb phrase.

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Unmarked clause type in Palu'e

A	V	P

(1)   Ia   cube   vavi   vaʔa.
        3SG   shoot   pig   that
        'He shot that pig.'

Marked clause type in Palu'e

P	A	V

(2)   Vavi vaʔa ia   cube.
        pig   that   3SG shoot
        'That pig, he shot (it).' ~ 'That pig was shot by him.'[3]

There is no doubt that sentences such as (1) represent the unmarked, or 'basic', coding choice in Palu'e: this is the structure most frequently encountered in narrative of whatever genre, it is the form given in response to pragmatically neutral translation requests, and it is the form that is translated with unmarked (= active, non topicalised) clause structures in Indonesian. Our question concerns the best analysis of (2): is it better analysed as an instance of topicalisation, bearing a relationship to (1) similar to that which pertains between the first translation given for it, 'That pig, he shot', and the translation given for (1), or is it in fact an instantiation of a voice alternation, showing a relationship more similar to that between the second translation of (2) and the translation given for (1)?

Following a short survey of voice systems, and the prototypical passive in particular, I shall present various tests for the syntactic status of the arguments in AVP clauses such as (1) and PAV clauses such as (2), and based on this empirical investigation shall discuss the implications of the Palu'e data for our models of voice systems in general, and the historical development of the Austronesian voice system in particular.

2. Voice systems and some atypical passives

All languages utilise some form of diathesis, and often more than one; but they can be hard to tell apart. This article discusses a case where the analysis of the diathesis is problematic.

An alternation in diathesis may be grammaticalised, as in the use of a voice system, or more purely pragmatic, such as in the function of topicalisation, which is 'overlaid' as a separate module on the grammatical structure without affecting, for instance, the assignment of subject and object functions. In many instances these two systems will overlap in a language: most languages with a passive voice, for instance, require the P to be topical, and code it as such. English is a language that does not have this requirement, but does have both a grammaticalised voice system and a productive system of pragmatic topichood.

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[3]   For these two sentences, the Indonesian forms given would be: (1), *Dia panah babi*. (2), *Babi itu dia panah*, ~ *Babi itu dipanah dia* ~ *Babi itu dipanahnya*.

English: voice alternation

(3)   Cats always chase those rats in the afternoon.

(4)   Those rats always get chased by cats in the afternoon.

English: topic alternation

(5)   Cats always chase those rats in the afternoon.

(6)   Those rats, cats always chase('em) in the afternoon.

English: topicalised agent appearing with a voice alternation in the same sentence

(7)   By **cats**, those rats always get chased in the afternoon.

The similarity of voice and topicality is often reflected in the morphosyntax of a language. A complement clause in (Singapore) Hokkien may appear without a complementiser if the main clause object is in the VP, as in (8), but requires a complementiser if the object is external to the VP, through either topicalisation or passivisation, seen in (9) and (10), respectively. Thus, regardless of the grammatical status of the VP-external argument, its absence from the VP serves to trigger the requirement for a complementiser, *khi*.

Hokkien: simple complement construction

(8)   Mama   [$_{VP}$ kio   kin na [$_{COMP}$ ciaq   png]].
      mother   tell   child   eat   rice
      'Mother told the child to eat the rice.'

Hokkien: main clause passivised

(9)   Kin na   [$_{VP}$ [ho   mama]   kio   [$_{COMP}$ *(khi) ciaq   png]].
      child   PASS mother   tell   COMP eat   rice
      'The child was told by mother to eat the rice.'

Hokkien: main clause topicalised

(10) Hi   e   kin na,   mama   [$_{VP}$ kio   __ [$_{COMP}$ *(khi)   ciaq   png]].
      that LNKR child   mother   tell   COMP eat   rice
      'That child, mother told to eat the rice.'

Comparing the English and Hokkien passive constructions shown in the sentences above we can observe most of the cross-linguistic diversity that is associated with passives, and which is summarised in table 1. Here the notation **m-**X is used to indicate that some element of morphology is present on the X, be it inflectional, derivational, adpositional or case.

Table 1. The English and Hokkien passive constructions compared

	English		Hokkien	
	Active	Passive	Active	Passive
word order	A [$_{VP}$ V P]	P [$_{VP}$ V (A)]	A [$_{VP}$ V P]	P [$_{VP}$ A V]
verbal morphology	V	*m*-AUX *m*-V	V	V
nominal morphology (A)	NP	(*m*-NP)	NP	*m*-NP
Grammatical status of A	SUBJ	OBL	SUBJ	OBL
Grammatical status of P	OBJ	SUBJ	OBJ	SUBJ
Pragmatic status of A	(free)	(free)	(free)	not TOPIC
Pragmatic status of P	(free)	tends to TOPIC	(free)	(free)

In English, and indeed in overwhelmingly most languages with a voice construction, there is marking on the verb, or at least on a verbal auxiliary or the verb phrase, to indicate the passive construction. Similarly the A, optional in the passive construction, is overtly marked usually in a way that is consistent with some sort of adjunct nominal. In Hokkien, on the other hand, we find that the verb is unchanged morphologically from the form seen in the active, and that the only indicators of the passive are the preverbal position of the A (the normal position for adjuncts to appear) and the marker ho that appears with this NP. Another difference is related to the sole morphological exponence of the passive being the marking on the A: the A is obligatory in this clause, not optional, as in English.

Hokkien: active clause

(11) I   [$_{VP}$ phah hi   e   kau].
      3SG   hit   that   LNKR   dog
      'He hit that dog.'

Hokkien: passive clause

(12) Hi   e   kau   [$_{VP}$ [ho   i]   phah].
      that LNKR   dog   PASS 3SG   hit
      'That dog was hit by him.'

Hokkien: agentless passive clause

(13) * Hi   e   kau   [$_{VP}$ phah].
        that LNKR   dog   hit
      'That dog was hit.'

Unlike a language like English, in which the pragmatic and grammatical tiers are quite separate, allowing for a demoted agent to be topicalised, the passive agent cannot appear topicalised in Hokkien, a fact which sets it apart from other adjuncts.

Hokkien: main topicalised P

(14) Hi   e   kau,   i   [$_{VP}$ phah].
      that LNKR   dog   3SG   hit
      'That dog, he hit.'

Hokkien: topicalised agent in passive clause[4]

(15) * [Ho   i],   hi   e   kau   [_{VP} phah].
         PASS 3SG   that LNKR dog   hit
      'By <u>him</u>, that dog was hit.'

The differences between the passives in the two languages shown are quite considerable, but commonalities do emerge: the grammatical status of the arguments changes, crucially involving what seems to be a defining feature of voice systems generally, a change in the assignment of subject status in the clause. The morphology required by the construction ranges from the highly explicit and multiple, as in English, to the single NP-marker *ho* in Hokkien.

With this background sketch of passive variation (and it is just a sketch; more detailed accounts of the kind of variation encountered cross-linguistically can be found in, amongst others, Foley and Van Valin 1984, Klaiman 1991, Shibatani ed. 1988, Siewierska 1984, and Van Valin and LaPolla 1997) we can proceed to a syntactically detailed discussion of the AVP:PAV alternation in Palu'e.

3. The Palu'e alternation: syntactic or pragmatic?

We can first examine whether the PAV clauses in Palu'e are in fact instances of simple topicalisation, rather than a distinct clause type, or whether they are simple sentences without any necessary topicalisation, but with another sort of clause-internal alternation.

We know there is a pre-clausal topic position from sentence pairs such as the following. In (16) the goal appears in the usual post-verbal position, but in (17) it appears in a sentence-initial topic position. The usual prosodic correlates of topical status are found: an intonationally distinct contour on the topical phrase, the possibility of a pause following the topic, and (for core nominals) the possibility of appearing in the clause with a resumptive pronoun (this will be illustrated later).[5]

(16) Ia   pana   le   nata-gu.
      3SG   go   PREP   village-1GEN
      'He went to our village.'

(17) Le   nata-gu,   ia   pana.
      PREP   village-1GEN   3SG   go
      'To our village, he went.'

It is possible to topicalise on any phrasal element in the clause, in (18) we can see an adaptation of (16) with a topicalised subject; (19) shows the use of a resumptive pronoun inside the clause.

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[4] There is another passive construction in Hokkien, involving a VP-initial passive marker *tioq*. This is a compulsorily agentless passive, allowing sentences such as *Hi e kau tioq phah* 'That dog was hit.', but not (for most speakers) **hi e kau tioq i phah*.

[5] Three morphemes, *le*, *lae* and *lau*, will all be glossed simply as preposition. They are generic prepositions which vary, amongst other factors, in the relative elevation of the NP that they mark (*lae*: lower, *lau*: higher). These factors are not relevant to the discussion here.

(18)   Ata   laki   vaʔa,   pana   le   nata-gu.
          person   male   that   go   PREP   village-1GEN
          'That man$_{(,)}$ went to our village.'

(19)   Ata   laki   vaʔa,   ia   pana   le   nata-gu.
          person   male   that   3SG   go   PREP   village-1GEN
          'That man, he went to our village.'

We can determine that the topic must appear preceding the clause by examining the distribution of temporal expressions in the clause. Building on (16), (20) and (21) show the (myriad) possibilities for the temporal noun *vaicvi* 'yesterday'.

(20)   Ia   pana   le   nata-gu   vaicvi.
          3SG   go   PREP   village-1GEN   yesterday
          'He went to our village yesterday.'

(21)   a.   Ia pana vaicvi le natagu.

          b.   Ia vaicvi pana le natagu.

          c.   Vaicvi ia pana le natagu.

Simply put, the time expression can appear in any position in the clause, as shown in (22).

          The location of a time adverbial in the clause:

(22)   A time adverbial may occur anywhere in a sentence, not intruding into NPs or PPs

When there is a topicalised element in the sentence we find a change in the possibilities: the temporal may not appear preceding the topicalised phrase. In (24) the inability of a time expression to precede a topicalised oblique is illustrated, and in (26) we can see the inability of a time expression to precede a topicalised subject (S).

(23)   Le   nata-gu,   ia   pana   vaicvi.
          PREP   village-1GEN   3SG   go   yesterday
          'To our village, he went.'

(24)   a.   Le natagu, ia vaicvi pana.

          b.   Le natagu, vaicvi ia pana.

          c. * vaicvi le natagu, ia pana

(25)   Ata   laki   vaʔa,   pana   le   nata-gu   vaicvi.
          person   male   that   go   PREP   village-1GEN   yesterday
          'That man$_{(,)}$ went to our village yesterday.'

(26)   a.   Ata laki vaʔa, (ia) vaicvi pana le natagu.

          b.   Ata laki vaʔa, vaicvi (ia) pana le natagu.

          c. * vaicvi ata laki vaʔa, (ia) pana le natagu

The placement of time expressions clearly delimits the left edge of the clause, and the topic, which occurs preceding the elements of the clause, can only be followed by a time expression.
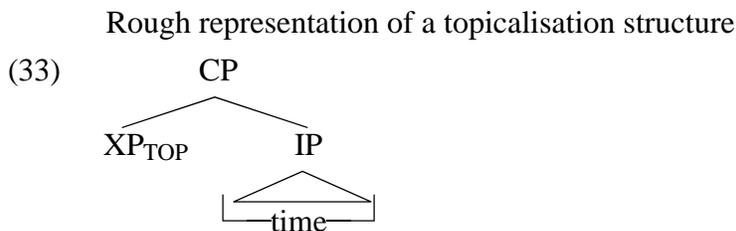
Turning to transitive clauses, we find a very similar picture. The basic AVP sentence in (27) can be expanded by means of a time expression as shown in (28), with the temporal occurring in all positions, as described in (29).

(27) Ia   cia   kami.
      3SG   look.for   1PL.EX
      'He looked for us.'

(28) Ia   cia   kami   vaicvi.
      3SG   look.for   1PL.EX   yesterday
      'He looked for us yesterday.'

(29) a. Ia cia vaicvi kami.

      b. Ia vaicvi cia kami.

      c. Vaicvi ia cia kami.

When we examine the PAV construction, we find that there is no evidence to indicate that the sentence-initial P NP is a topic. There is no intonation break between this NP and the rest of the clause,[6] and we find that time expressions may precede this NP. This is shown in (31) and (32), particularly (32)c, elaborating on the basic clause in (30).

(30) Kami   ia   cia.
      1PL.EX   3SG   look.for
      'He looked for us.' (or ~ 'We were looked for by him.')

(31) Kami   ia   cia   vaicvi.
      1PL.EX   3SG   look.for   yesterday
      'He looked for us.'

(32) a. Kami ia vaicvi cia.

      b. Kami vaicvi ia cia.

      c. Vaicvi kami ia cia.

These facts suggest the following different structures, representing a topic structure in (33), and the PAV structure in (34).

Rough representation of a topicalisation structure

(33)   CP
          ╱   ╲
      XP_TOP   IP
                ╱────╲
              —time—

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6   Topicalisation of the P, with behaviour identical to other topics, including the intonation cues, is possible, but is not the construction being discussed here.

Rough representation of a PAV structure

(34)   IP
            ⟋   ⟍
        NP_P   IP/NP
         | ⟋ ⟍
         └──────time──────┘
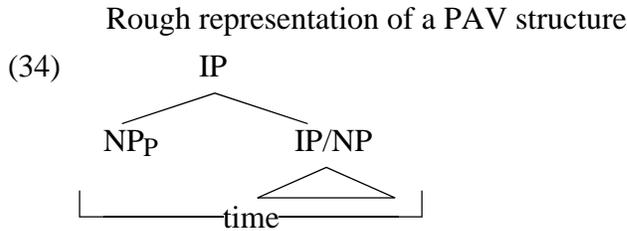
It is clear, then, that the PAV clause in Palu'e does not involve the P appearing in a pre-clausal position. Having established that the PAV construction does not involve an instance of topicalisation, we can now turn to tests that will elicit the syntactic status of the arguments in AVP and PAV clauses.

4. Testing the syntactic status of the alternation

In this section I shall present arguments that the alternation between AVP and PAV orders in Palu'e correlates with a change in the grammatical status of the arguments of the clause. The evidence used comes from three different constructions: the two floated quantifier constructions allow us to identify core arguments, and conjunction reduction and purposive subordination allow us to identify which core argument is the grammatically-privileged subject.[7]

4.1 ARGUMENT/ADJUNCT STATUS

The status of the PAV clauses as instances of topicalisation or passives can be partly decided by examining the status of the A. If the A is a core argument, then the topicalisation analysis is strongly supported, since that would indicate no 'demotion'. On the other hand syntactic evidence that the A is not a core argument would strongly support an analysis of this construction as involving a voice contrast.

Morphologically it is clear that the A should not be treated as an adjunct. It is a general characteristic of adjuncts in Palu'e that they are marked by a preposition (though the converse, prepositions always mark adjuncts, is not true, as will be demonstrated below), and that they follow all subcategorised-for nominals in the clause. Some examples are shown in (35) - (37), illustrating a locative preposition and the instrumental/accompaniment preposition.

Clause with two core arguments and one adjunct (locative)

(35)   Ia   bere   kaju   lae   uma.
        3SG   chop   wood   PREP   garden
        'He chopped the wood in the garden.'

(35)' * ia bere kaju uma

(35)" * ia bere lae uma kaju

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7   Donohue (2003a) shows that, in essence, not all construction are equal for the purposes of determining subject. The constructions selected here appear to be adequately diagnostic for Palu'e.

Clause with an instrumental

(36) Ia   bere   kaju   noʔo   tobo.
      3SG   chop   wood   PREP   machete
      'He chopped the wood with a machete.'

(36)' * ia bere kaju tobo

(36)" * ia bere noʔo tobo kaju

Clause with a comitant

(37) Aku   pana   lau   Todo   noʔo   ina-gu.
      1SG   go   PREP   Todo   PREP   mother-1GEN
      'I went to Todo with my mother.'

(37)' * aku pana lau Tobo inagu

(37)" # aku pana noʔo inagu lau Todo

The presence of prepositional marking, in contrast to the bare NPs that are core arguments, might be thought to be a test for grammatical status. On the other hand, there are some verbs that select for prepositionally-marked post-verbal NPs (thus, PPs), which are demonstrably not adjuncts, evidenced by their different behaviour when appearing pre-verbally. An example of this sort of obliquely-marked object in an unmarked postverbal position can be seen in (38). We can see from this example that there are some predicates that, when they take a nominal object, must have it marked with a preposition; *ngaro* is one such predicate. The use of this preposition is obligatory with this predicate.

Object obligatorily marked by a preposition

(38) Aku   ngaro   noʔo   kau.
      1SG   love   PREP   2SG
      'I love you.'

(39) * aku ngaro kau

(The morphosemantic information encoded in the preposition *noɹo* can also be coded by the obviously related, but proscribed, incipient case marker *no(ɹ)-*; thus, in the immediately preceding sentences the object of hatred, *noɹo ia*, will be realised prescriptively as [ˈnɔʔɔ ˈia] ~ [ˈnɔʔɔˌja], but in normal speech as [ˈnɔʔia] or [ˈnɔija], these last two variants showing degrees of cliticisation: *no-ia* ~ *noɹ-ia*, rather than being realised as two separate words, *noɹo ia*. The syntactic behaviour of the two morphemes in the clause is in all cases identical, and for the sake of brevity only the full preposition *noɹo* will be described here.)

Other predicates, however, appear with objects that may be marked with a preposition, or with a bare NP. An example of this kind of predicate is *kau* 'hate'.

Object optionally marked by a preposition

(40) Aku   kau   noʔo   ia
      1SG   hate   PREP   3SG
      'I hate him.'

(41)   Aku   kau   ia
            1SG   hate   3SG
            'I hate him.'

When we compare the behaviour of the PP that normally follow a predicate such as *ngaro* or *kau* with a PP in a clause such as those seen in (35) - (37), we find differences. Sentences with a topicalised adjunct appear with the PPs retaining their prepositions when appearing preverbally, as in (42) and (43), based on (37).

(42)   Noʔo ina-gu,   aku   pana   lau   Todo.
            PREP   mother-1GEN 1SG   go   PREP   Todo
            'With my mother, I went to Todo .'

(43)   Lau   Todo, aku   pana   noʔo   ina-gu.
            PREP Todo 1SG   go   PREP   mother-1GEN
            'To Todo, I went with my mother.'

On the other hand, the preposition must be omitted in sentences based on clauses such as (38) - (41) with a topicalised object. This can be seen in (31) - (34), where only bare NPs are acceptable, regardless of whether or not the verb permits alternation in the appearance of the preposition or not.

(44)   Ia   aku   ngaro.
            3SG   1SG   love
            'I love him.'

(45)   * noʔo ia aku ngaro

(46)   Ia   aku   kau.
            3SG   1SG   hate
            'I hate him.'

(47)   * noʔo ia aku kau

When in a preverbal position, then, we can see that some prepositionally-marked NPs behave as do Ps in bivalent clauses, showing that they are not in fact adjuncts, but rather exceptionally case-marked arguments of the verb. These arguments show that morphological tests alone, such as the presence or absence of a preposition marking an NP, are not sufficient to judge the grammatical status of a participant. The floated quantifier constructions do, however, provide us with a syntactic test that can be appealed to to decide the status of a nominal as argument or adjunct.

4.1.1 Simple floated quantifiers

The universal quantifier *tetiːón* 'all' must appear in a clause final position in Palu'e.[8] When a monovalent clause appears with a clause-final quantifier, the quantifier can only be interpreted as

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[8]   It is clear that *konen* '3PL' and *tetiːón* 'all' must, at least historically, be morphologically complex, involving the use of the third person genitive *-n*. Synchronically, however, there is no alternation and so these lexemes must be treated as unanalysable. Some of the data in this section was presented as Donohue (2003b).

being restricted to the S of the clause (regardless of the semantic nature of the S; this applies to all the tests illustrated here, though other tests, such as the possibilities available for adverbial clause marking, are sensitive to the unergative/unaccusative distinction).

(48)   Aku   ari-gu   nodo   tetiʔón.
         1SG   younger.sibling-1GEN   sit   all
         'All of my younger brothers and sisters are sitting down.'

Even when there is an adjunct closer to the quantifier than the subject, the quantifier cannot be interpreted as being restricted to the adjunct.

(49)   Konen   pana le   nua   tetiʔón.
         3PL   go   PREP village   all
         'All of them went to the village(s).'
         * 'They went to all of the villages.'

Floated quantifiers are also found with bivalent verbs; in this case the restriction of the quantifier is potentially ambiguous, as the quantifier can be interpreted as being restricted to either of the core arguments.

(50)   Konen   bere   somu tetiʔón.
         3PL   chop   garlic all
         'They chopped all of the garlic.' ~
         'All of them chopped the garlic'

Notably, in bivalent clauses too the quantifier cannot be interpreted as being restricted to an adjunct nominal; only the core arguments of the clause are eligible.

(51)   Konen   bere   somu noʔo   kti tetiʔón.
         3PL   chop   garlic with   knife all
         'All of them chopped the garlic with knives.'   *OR*
         'They chopped all of the garlic with knives.'
         * 'they chopped the garlic with all the knives'

When we examine a PAV construction with a floated quantifier, we find that a reading with the quantifier restricted to the A is not possible, as seen in (52).

(52)   Somu konen bere   tetiʔón.
         garlic 3PL   chop   all
         'They chopped all of the garlic.' ~ 'The garlic was all chopped by them.'
         * 'all of them chopped the garlic'

The data here indicates that the restriction of the floated quantifier is to non-adjunct arguments; as long as an argument is core, be it an A, S or P, it may be the restriction of the floated quantifier. This applies to monovalent clauses, and to bivalent AVP clauses. In PAV clauses, however, only the P may be the restriction of the quantifier. Either the restriction of this quantifier construction changes in the PAV clause type, or else the grammatical status of the arguments has changed, such that only the P 'counts' as a non-adjunct, while the A behaves as an adjunct.

4.1.2 Augmented floating quantification

Floated quantifiers may appear with other arguments, notably with non-core ones, but in these cases the verb has an extra cliticised unit, *naba*, and the nominal to which the quantifier is restricted must be reduplicated.[9] If either the reduplication or the clitic *naba* are omitted, then the clause is ungrammatical; if both are omitted, then the only possible interpretation of the restriction of the quantifier is to a core argument of the clause, since this is then a case of simple, rather than augmented, floating quantification. These possibilities (and impossibilities) are shown in (53) - (56).

(53) Konen vaʔa pana-naba le nata-nata tetiʔón.
3PL that go-all PREP village-RED all
'They went to all the villages.'
* 'all of them went to the villages'

(54) * konen vaʔa pana naba le nata tetiʔón

(55) * konen vaʔa pana le nata-nata tetiʔón

(56) Konen vaʔa pana le nata tetiʔón.
3PL that go PREP village all
'They all went to the villages.'
* 'they went to all of the villages'

The sentences in (53) - (56) show the behaviour of the quantifier in monovalent clauses. It is not the case that the *-naba* (RED-) construction is only used to express modification of adjunct participants. This quantifier construction is also found with bivalent clauses without adjuncts, in which case the floated quantifier is unambiguously restricted to the P, not the A. This can be seen in (57).

(57) Konen vaʔa ka-naba keʔo-keʔo tetiʔón.
3PL that eat-all corn-RED all
'They ate all the corn.'
* 'all of them ate the corn'

If a bivalent clause has an adjunct, then ambiguity over the scope of the quantifier arises; the restriction of the quantifier is to either the P in the clause or to an adjunct.

(58) Konen bere-naba lambu-lambu noʔo kti tetiʔón.
3PL cut-all cloth-RED PREP knife all
'They cut all the cloth with knives.' ~
'They cut the cloth with all of the knives.'

Although we have seen instances of the augmented quantifier with both monovalent and bivalent clauses, with the quantifier restricted to an adjunct or the P, this behaviour changes in PAV clauses. This construction can be used with a PAV construction but then the only possible interpretation is that it is restricted to the A; again we have evidence of the changing status of the P.

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[9] Reduplication is an option that is available for indicating plurality of nouns, regardless of the present of quantifiers in the clause.

(59) Keʔo(-keʔo)   konen   vaʔa   ka-naba   tetiʔón.
     corn-RED   3PL   that   eat-all   all
     'They all ate the corn.'
     * 'They ate all of the corn.'

It is clear that the simple *tetiːón* construction is restricted to core arguments, any of A, S or P, as opposed to adjuncts, over which it cannot have scope. The augmented *-naba* (RED-) *tetiːón* is differently restricted, being able to modify non-core participants or a core P: it is restricted to anything other than an S or an A. This data shows that in the PAV construction, the A cannot be interpreted as a core argument, and shows similar behaviour to the adjuncts of other clause types. The P in a PAV clause, on the other hand, behaves in a similar way to the S or A of the other clause types in not being able to be modified by the floated quantifier. This suggests that the assignment of lexical arguments to grammatical functions is different in the two clause types.

4.2 TESTING FOR SUBJECT

The tests in the previous section allow us to judge the core status of the A in a PAV clause. We have not, however, judged the functional status of the A with respect to the P; in other words, we have not evaluated which of the A and the P should be considered the subject of the clause in an AVP and a PAV clause. Two tests are advanced here to investigate this question.

4.2.1   Conjunction reduction

In sentences with coordinated clauses we find that one NP may be omitted under conditions of co-identity with another NP. In SV/AVP conjunction there is a restriction on the identity of the omitted arguments and its antecedent, in that they must both be either an S or an A.

S = S

(60) Aku   pula   lae   nua   lka   ___   nodo   le   kandera.
     1SG   return PREP   house   and.then   sit   PREP   chair
     'I$_j$ came back home, and then Ø$_j$ sat down.'

S = (A)

(61) Ama-gu   pana   le   uma   lka   ___   take   rero-n.
     father-1GEN   return PREP   garden   and.then   meet   friend-3GEN
     'My father$_j$ went to the garden, and then Ø$_j$ met his friend.'

A = (S)

(62) Ama-gu   kla   kaju   lka   ___   pula   lae   nua.
     father-1GEN   split   wood   and.then   return PREP   house
     'My father$_j$ split some wood, and then Ø$_j$ returned home.'

P   S

(63) Ama-gu   lie   ina-gu   lka   ___   nodo.
     father-1GEN   see   mother-1GEN   and.then   sit
     'My father$_j$ met my mother$_k$, and then Ø$_{j/*k}$ sat down.'

From the data above it seems uncontroversial to assume that there is a constraint that restricts conjunction reduction to members of the S,A grouping, indicating its privileged status in this

construction. We do, however, find instances of S = P correspondences, but only when the P occurs preverbally in a PAV clause.

P = S with preverbal P

(64)

Aku	ia	balu	lka	___	palu	lae	nua-n.
1SG	3SG	hit	and.then		return	PREP	house-3GEN

'He$_j$ hit me$_k$, and then Ø$_k$ returned to his house.'
* 'He$_j$ hit me$_k$, and then (he$_j$) returned to his house.'

P S if P is postverbal

(65)

Ia	balu	aku	lka	___	palu	lae	nua-n.
3SG	hit	1SG	and.then		return	PREP	house-3GEN

* 'He hit me, and then I returned to his house.'
'He hit me, and then (he$_j$) returned to his house.'

Other instances of the S,P grouping being the privileged one when the P is preverbal can be seen in the following examples.

S = P

(66)

Ina	loʔo-gu	ia	pela	lka	___	mea-ʔu.
mother	small-1GEN	3SG	watch	and.then		shy-PERF

'He$_i$ watched my aunt$_j$, and then (she$_j$) got embarrassed.'
* 'He$_i$ watched my aunt$_j$ and then Ø$_i$ got embarrassed.'

P = A

(66)

Ama	loʔo-de	ia	pela	lka	___	kau	ia.
father	small-12GEN	3SG	watch	and.then		angry	3SG

'He$_i$ watched my uncle$_j$, and then (he$_j$) got angry with him$_i$.'
* 'He$_i$ watched my uncle$_j$ and then Ø$_i$ got angry with him$_j$.'

It is clear that, whatever special syntactic privileges in cross-clausal deletion accrue to S in a monovalent clause SV and the A in an AVP clause with respect to conjunction reduction are also found with the P in a PAV clause, to the exclusion of those privileges being manifest on the A.

4.2.2 Purposive clauses

Purposive clauses with *tene* 'will' can be argued to be similarly restricted, allowing omission of an argument in the subordinate clause if and only if both it and the argument with which it shares identity are either an S or an A in their own clause. The data, however, is not so clear, and requires a more elaborate argument.

The following data is equivocal:

(67)

Keʔo-gu	pana	le	Cua	tene
elder.sibling-1GEN	go	PREP	Cua	for

cia	ata	pisa-n-e.
search	person	shaman-3GEN-EMPH

'My elder brother went to Cua in order to look for a shaman.'

(68) Keʔo-gu   pana le   Cua   tene
      elder.sibling-1GEN   go   PREP Cua   for
       ata   pisa-n-e   ravi.
       person   shaman-3GEN-EMPH   cure
      'My elder brother went to Cua in order for a shaman to heal him.'

This can be interpreted as showing that in purposive clauses the omitted argument can be either the A or the P of the purposive clause. Alternatively, looking at the construction through voice-coloured glasses, we could analyse the second clause as showing a preverbal 'by-phrase' NP *ata pisane*, and an omitted S (of a passive clause). The nature of the restriction only becomes clear when we examine sentences in which the first clause is bivalent (or if we apply the floated quantifier test described in the next section). In these instances there are clear restrictions on which argument can be gapped into the purposive clause.

(69) Ia   cube   vavi   tene   ___   mata.
      3SG   shoot pig   for   die
      'He shot the pig in order to die.'
      * 'He shot the pig in order for it to die.'

In this sentence the only grammatical reading is the implausible one, that the A of the first clause, the shooter, is coreferent with the S of the second clause, the doer. This indicates that the constraints on cross-clausal coreference are syntactically governed, and not simply pragmatically constrained. We can confirm this impression by examining a similar bivalent-monovalent coordination, with a PAV construction in the first clause:

(70) Vavi ia   cube   tene   ___   mata.
      pig   3SG   shoot for   die
      * 'He shot the pig in order to die.'
      'He shot the pig in order for it to die.'

Here the same semantic constraints on plausibility are operating, but the only possible interpretation has changed. Clearly conjunction reduction in Palu'e is governed by syntactic factors, more than semantic or pragmatic plausibility.

4.2.3   Tests for subject status

The data from coordination and purposive subordination shows that there is a clearly privileged argument in both constructions, and that in both cases, while the S of a monovalent clause is privileged, the privileged argument in a bivalent clause is the A if the clause has AVP order, and the P if it has PAV order. Assuming that conjunction reduction, if restricted, is restricted to a subject, this means that the subject of an AVP clause is the A, and the subject of a PAV clause is the P. These facts, combined with the evidence for valency alternations presented in 2.1, clearly indicate that a voice alternation has applied in the language.

4.3 CONSTRUCTIONS WITH INVARIANT RESTRICTIONS

The tests in 2.2 have shown that there is morphosyntactic evidence for an alternation in the assignment of grammatical functions to different syntactic roles in the different coding options. In this section I shall show that, if we examine the data from reflexive constructions, we find that

there is also evidence for the grammatical relationship between the A and the P remaining the same.
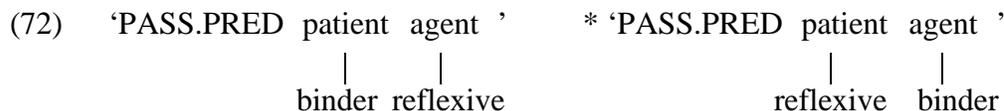
4.3.1 Reflexive binding

A complication in the analysis is found when we examine the data that reflexive constructions allow us to examine. A standard analysis of reflexive binding involves the assumption that the higher argument (in terms of a thematic hierarchy) may bind the reflexive pronoun in a lower argument; conversely, a reflexive in a higher position may not be licensed by a lower argument. Thus given a bivalent clause with two core arguments, an agent and a patient, an agent may bind a reflexive pronoun for the patient, but not the other way around (Dalrymple 1993). This is shown in (71), representing a sentence such as 'He hurt himself.'

Reflexive binding: active clause

(71)   'PRED agent, patient '   * 'PRED agent, patient '
                      | | | |
               binder reflexive   reflexive binder

In a passive clause there is only one core argument; it will, by virtue of its core status, outranking any adjuncts. In this case the only reflexive that may be coded is on the (adjunct) agent, not the (core) patient. The disparity in grammatical functions overrides the difference in semantic roles. The following schema illustrates sentences such as 'I was hurt by myself.'

Reflexive binding: passive clause

(72)   'PASS.PRED patient agent '   * 'PASS.PRED patient agent '
                            | | | |
                   binder reflexive   reflexive   binder

When we examine the data from reflexives in Palu'e AVP clauses, the predictions from (71) are borne out: only the A may bind a P, not the other way round.

(73)   Aku   bere   tmbo-gu.
         1SG   chop   body-1GEN
         'I chopped myself.'

(74)   * tmbo-gu   bere   aku
         body-1GEN   chop   1SG
         'myself chopped me'

The data for the PAV construction, however, does not fit the predictions from (72). Only the P may be coded with a reflexive, bound by the A; the predicted patient binding a reflexive A does not emerge.

(75)   Tmbo-gu aku   bere.
         body-1GEN   1SG   chop
         'Myself, I chopped.' ~ 'Myself was chopped by me.'[10]

(76)   * aku   tmbo-gu   bere
         1SG   body-1GEN   chop
         'I, myself chopped.' ~ 'I was chopped by myself'

The reflexive data, then, does not obviously support the view that in the PAV construction the A is demoted to adjunct status. It can, however, be interpreted as suggesting that the A in the PAV construction is just as much a core argument as it is in an AVP construction, which would not be compatible with a passive analysis.

4.3.2 Discussion of the reflexive data

Up to the presentation of the reflexive data, the analysis of the Palu'e AVP/PAV alternation could unproblematically be described as one showing an active:passive alternation. While there are two core arguments in the AVP construction, with the A being the syntactically most privileged argument, the PAV construction presents the A as a non-core argument, and the P as the privileged argument. Apart from the lack of any morphological marking, this presents itself as a classic case of a passive alternation. The reflexive data, however, does not behave in that way. By comparison, Western Malayo-Polynesian voice systems typically do not involve demotion of the agent to non-argument status, and so the reflexive data seen in 2.3.

When we compare the Palu'e reflexive data with that from other Austronesian languages with symmetrical voice systems (Tagalog, Tukang Besi and Indonesian have been used to exemplify these patterns), we find a remarkable coincidence in the facts of reflexive binding. In the sentences below the grammatical subjects have been shown in bold (the Palu'e judgements based on the evidence from the quantifier constructions, conjunction reduction and purposive sentences). In the first three examples, we can see the predicted pattern of the A binding a reflexive P, while the A is the grammatical subject.[11]

Voice$_1$, A antecedes reflexive P

(77)   **Aku** pela   tmbo-gu.   (Palu'e)
         1SG   watch   body-1GEN
         'I looked at myself.'

(78)   Naka-kita=**ako**   ng=sarili=ko   (Tagalog)
         V$_1$:PERF-see=1SG.NOM   GEN=self=1SG.GEN
         'I saw myself.'

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[10] Ungrammatical in English, but acceptable in Indonesian (with different grammatical function assignment) as *Diriku kuiris*.

[11] In examples from Tagalog and Indonesian a distinction between clitics and affixes needs to be made, and so the conventions = to indicate a clitic boundary and - to indicate an affix boundary are used. These conventions differ from the presentation of Palu'e material elsewhere in this paper.

(79) **Te   ia**   no-'ita   te   karama=no.   (Tukang Besi)
CORE 3SG 3R-see   CORE self=3GEN
'S/he saw her/himself.'

(80) **Dia**   me-lihat   diri=nya.   (Indonesian)
3SG v_1-see   self=3SG.GEN
'S/he saw her/himself.'

In the alternative voice, morphologically marked in Indonesian and Tagalog, though not in Palu'e, the grammatical subject has changed, but the conditions on binding remain the same.

Voice$_2$, A antecedes reflexive P

(81) **Tmbo-gu**   aku   pela   (Palu'e)
body-1GEN   1SG   watch
'I looked at myself.'

(82) Na-kita=ko   **ang=sarili=ko**   (Tagalog)
V_2:PERF-see=1SG.GEN NOM=self=1SG.GEN
'I saw myself.'

(83) **Te   karama=no**   no-'ita='e   te   ia.   (Tukang Besi)
CORE self=3GEN   3R-see=3P CORE 3SG
'S/he saw her/himself.'

(84) **Diri=nya**   di-lihat=nya   (Indonesian)
self=3SG.GEN v_2-see=3SG.GEN
'S/he saw her/himself.'

For Indonesian and Tagalog the explanation of these patterns is that we find the non-subject A binding the subject P in (99) and (99) because, unlike English passives, there is no agent demotion involved in the Western Austronesian voice system. This analysis is problematic for Palu'e, however, since we have good evidence, from the augmented floating quantifier construction, that the A in PAV clauses behaves as an adjunct, indicating that a 'garden variety' passive has applied, as far as the assignment of grammatical functions is concerned in the voice alternation (active subject corresponds to passive adjunct, active object corresponds to passive subject). All we can state with certainty is that while the AVP clauses show a clear alignment of grammatical properties, the PAV clauses show a split in these properties.

5. Conclusions: the Palu'e voice system

We have seen that there is a passive alternation in Palu'e, although some data, here represented by the reflexive construction, does not line up with the prototypical structure that might be expected, based on a cross-linguistic survey, with the behaviour of passives. Table 2 shows which argument displays the most syntactically 'active' behaviour in the constructions examined here. The columns are divided according to whether we are discussing the (bivalent) AVP construction, the PAV construction, or a monovalent construction, in which case the single argument must precede the verb.

Table 2. Grammatical evidence: the restriction of a construction is …

	AVP construction			PAV construction			S V	
	A	P	OBL	A	P	OBL	S	OBL
Floated quantifiers: I								
Floated quantifiers: II								
Conjunction reduction								
Purposive clauses								
Reflexives: antecedent?								

Almost all the evidence points clearly to the PAV construction being best analysed as a coding choice that involves an alternation in voice, compared to the AVP construction. If the PAV construction was simply a topicalised variant of the AVP construction, then we would not expect to see the variation in behaviour that marks the A as privileged in AVP and the P as privileged in PAV clauses, nor the relative orderings with respect to time adverbials that we examined in section 3. The data from all the constructions except reflexive bindings indicates that the voice alternation is an active:passive one, involving a pivotal P in the PAV construction, in which the A is syntactically oblique. The reflexive data is not consistent with this analysis. The reflexive data imply that there is no change in the status of the A and the P, which is incompatible with a passive analysis involving demotion. But the data from the *naba* RED- *teti.ón* quantification construction clearly points to the A of the PAV construction being best analysed as an adjunct. How can this be resolved?

The answer lies in the morphological form of the Palu'e voice construction. While a typical voice alternation involves the structures seen in the left columns of table 3, as exemplified by the English passive data in section 2, the Palu'e voice shows the pattern seen on the right. This is clearly typologically marked with respect to the other two patterns, which both show strong patterns of morphological imbalance between the two.

Table 3. Passive voice, antipassive voice and voice in Palu'e compared

	active:passive			active:antipassive			Palu'e alternation		
	A	P	V	A	P	V	A	P	V
basic voice	NP	NP	V	NP	NP	V	NP	NP	V
non-basic voice	*m*-NP	NP	*m*-V	NP	*m*-NP	*m*-V	NP	NP	V

There are, of course, language with voice systems other than those involving passive or antipassive alternations, most notably the voice alternations found in the Algonquian languages or the Western Austronesian languages, in which there is no morphological markedness relation between the two (or more) voices in the language; table 4 compares Palu'e to representations of these language types, arranged for comparison with table 3.

Table 4. Inverse voice, Philippine-like voice and Palu'e compared

	Inverse voice			Philippine-like voice			Palu'e alternation		
	A	P	V	A	P	V	A	P	V
voice$_1$ ('A-centric')	NP	NP	*m*-V	NP	NP	*m*-V	NP	NP	V
voice$_2$ ('P-centric')	NP	NP	*m*-V	NP	NP	*m*-V	NP	NP	V

Comparing these data, we can see that there is more commonality between Palu'e and the other language types, in terms of what Foley (1998) calls 'symmetricality' between the voice alternations in these systems. In both the inverse and the Philippine-type systems the amount of morphological marking on the verb is the same in both voice types, just as it is in Palu'e (of course, the fact that in Palu'e there is no morphology in both instances is significant, as we shall relate). Another point of similarity between the Philippine-type voice alternation and the Palu'e one concerns reflexive antecedency: the Palu'e data on reflexives from section 4.3.1 are a challenge to the analysis of the AVP/PAV alternation as involving a passive voice alternation, but, as we saw in 4.3.2, they are consistent with the types of voice systems observed in related languages to the west. These languages, however, do not employ passive voices,[12] while we have seen that Palu'e does. Can we reconcile the evidence for a passive voice alternation in Palu'e with the fact that the A and P in the reflexive construction does not show a change in syntactic status?

An unambiguous example of a language with a passive construction, involving demotion of the A to an adjunct function and yet retaining the A as the antecedent of a reflexive in either passive or active voice, is Marathi (Joshi 1993). In Marathi the verb is marked as passive, and there is a special case marker for the (optional) *by*-phrase agent in these clauses, all indicating an unproblematic passive. Yet at the same time the antecedent of the *aapaṇ* reflexive is restricted to only the *by*-phrase agent (which Joshi calls the logical subject), not the grammatical subject. Similar conditions apply to reference to gapped arguments in *un* adverbial clauses. This arises because of a condition in the grammar of Marathi that requires these constructions to refer to the argument that is highest-ranked on the thematic hierarchy from the verb's subcategorisation frame. While the agent in the sentences is clearly adjunct, marked by the postposition *kạḍun*, the higher thematic role that it bears is enough to license it, and only it, being the antecedent of the reflexive, regardless of the changes in grammatical function assignment. These data are proof that it is possible for a construction to be analysed as a passive while the reflexive data behaves very

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12 See Schachter (1976, 1977) for a classical presentation on these issues, Kroeger (1993) or Falk (2000a, 2000b) for more recent formal treatments. Indonesian is the exception. In Indonesian in addition to an 'A-centric' and 'P-centric' voice, which behave as described in 4.3.2 without demotion, there is a passive voice, which employs the same verbal morphology as the P-voice, but with additional nominal-marking morphology, suggesting that the importance of nominal marking, hinted at in the Hokkien examples seen in section 2, is also salient in Austronesian languages. The equivalents of (84) in this true passive voice would be the clause seen in (i). Note that (ii) is ungrammatical, confirming the oblique status of the *oleh* phrase.

(i) *Dia   di-lihat   oleh   diri=nya.*   (ii) * *diri=nya   di-lihat   oleh=nya*
    3SG   V$_{2+}$-see   by   self=3GEN   self=3GEN   V$_{2+}$-see   by=3SG
    'He was seen by himself.'   'himself was seen by him'

differently from the expected pattern. The behaviour of reflexives indicates that, at least optionally, they can best be regarded as being constrained by the relative positions of the arguments in argument structure, regardless of any grammatical-function changing operations such as passive or other voice.[13] The reflexive data, in short, is not incompatible with a passive analysis of the voice system, though it does reveal an unusual pattern.

What, then, of the lack of passive-marking morphology? While there are examples of languages lacking verbal (or auxiliary) morphology to indicate the passive, there is usually at least some indication of the passive, either as a VP-level marker (such as the Mandarin *bèi*, and other passive markers) or on the NP itself (such as Hokkien *ho* described in section 2, or Manggarai *le* (Arka and Kosmas, this volume). Is there a precedent for a voice alternation with no morphological marking at all?

A case similar to the Palu'e one can be found in Lango (Noonan and Bavin-Woock 1978, Foley and Van Valin 1984, Noonan 1992), in which only the order of the A and the P indicates the choice of voice. In (85) the grammatical subject is *dákó*, while in (86) it is *lócà*. The only difference between the two clauses is the position of the P in the clause.

Voice₁: active

(85) Dákó ò-jwát-ò lócà.   (Lango)
woman 3SG-hit-3SG man
'The woman saw the woman.'

Voice₂: passive

(86) Lócà dákó ò-jwát-ò.   (Lango)
man woman 3SG-hit-3SG
'The man was seen by the woman.'

In Lango, too the A is the antecedent of the reflexive in both voices, and the marking of agreement on the verb shows clearly that there is no demotion of either argument. Some controversy has been associated with the analysis of the Lango alternation shown above as a voice alternation (for examples, Woolford 1991). In Tukang Besi, which we saw in examples (79) and (83), there is no dedicated voice morphology, but the alternation in voice is indicated by a (potential) change in case marking on the NPs, and a change in the amount of pronominal agreement found on the verb (Donohue 1999: 51-54, 461-490, Donohue 2004).

Indonesian also shows what appears to be a purely word-order defined voice alternation, but only for first and second person As, and only with that class of verbs that do not show regular voice marking. Consider the following sentences using the verb *makan*, which in this construction shows no verbal marking in the active or non-active voices, and has a first person singular A and a P that vary only in its positions, not in any NP-marking.[14]

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[13] This predicts that a 'quirky reflexive' such as that in Palu'e or Marathi should be possible in a language with a non-passive voice alternation (an antipassive, for instance). This has not yet been attested.

[14] The lack of alternation in *makan* reflects the fact that the morphology cognate with the me-seen in (80) is here frozen onto the lexical root as **ma-*, attached to the historical root *ᵏⁿᵃᵘ. This historical

Indonesian

Voice₁: active

(87) *Saya   makan   nasi   itu.*
    1SG   eat   rice   that
    'I ate that rice.'

Voice₂: 'objective' / 'inverse'

(88) *Nasi   itu   saya   makan.*
    rice   that   1SG   eat
    'I ate that rice.' ~ 'That rice was eaten by me.'

This alternation seems to be identical to that found for Palu'e. The only significant differences involve the non-oblique status of the A in (88) compared to the Palu'e translation in (89), in which *aku* is oblique.

(88) *Lama   vaˌa   aku   ka.*
    rice   that   1SG   eat
    'I ate that rice.' ~ 'That rice was eaten by me.'

More significantly, the apparently zero-morphological alternation seen in the Indonesian examples only manifests itself in a highly restricted set of circumstances: the A must be first or second person, and the verb must (irregularly) not take any active marking. In Palu'e, on the other hand, this alternation is regular for all persons and for all verbs.

In summary, the Palu'e PAV construction that we have examined can be productively analysed as a passive alternative of the AVP construction, and the apparently aberrant reflexive data is, while unusual, not unprecedented.

6. Implications for our understanding of 'voice'

The Palu'e voice is an unusual exemplar of a voice system. In analysing it, when compared to more prototypical voice systems, we must conclude that either it is either the very beginnings of a voice system, or the very end of one. The two competing hypotheses run as follows:

1. Palu'e voice is an inceptive 'proto-voice' system

- voice is a recent innovation in Palu'e, and as such has not yet acquired all of the hallmarks of a fully 'mature' voice alternation, including morphological marking (on nouns and on the verb), nor has the reflexive construction yet adapted to the presence of a function-changing construction in the language;

2. Palu'e voice is the relic of an earlier more elaborate system

- an earlier stage of the language possessed a more 'complete' voice system, presumably with both morphological and syntactic characteristics that were more 'neat' with respect to their characterisation in a typology of voice.

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prefix is present even in the non-local A non-active voices, where marking with *di-* is obligatory: *di-makan*, **di-kan*.

The implications of these two positions are quite different. If we assume position 1, then we are claiming that it is possible for a passive alternation to exist in a language in the absence of any morphological marking. In effect, we are claiming that there is such a thing as a passive construction, independent of any morphological 'load-bearers'. While this is not necessarily a bad claim, it certainly is one that is awkward for most of the widespread theoretical approaches to morphosyntax. In a theory, such as Lexical-Functional Grammar, which claims that operations such as passive, causative, applicative etc. are derived in the lexicon, the absence of any morphological material means that we must assume a zero-derivational process such as that which is assumed by some to apply to noun-verb alternations in, for instance, English. The extensive precategoriality that characterises Palu'e would lend support to this view of zero derivation (for instance, *tusu* can be used in a sentence as either 'breast' or 'suckle (on a breast)', and *kti*, translated here as 'knife', can equally be used verbally as 'cut off (as if using a knife)'). More problematic would be those theories (such as most Chomskyan-derived models) that assume that the alternation in grammatical behaviour between the active and the passive is due to a change in the available Case roles: we could imagine that the Hokkien-style passive, in which only the demoted A is marked with an extra morpheme, could be analysed as having this morpheme absorbing the object-assigning Case role, and then being realised through movement prepositionally on the preverbal oblique A, but this is obviously not possible with any overt morpheme in Palu'e, unless we are to posit a phonologically-null morpheme, or movement at LF. Adopting this first position would also be the same as claiming that many of the diagnostics that are used to test kinds of voice systems, particularly the reflexive construction as a test of core or oblique status, only belong together in the passive 'construction' artefactually: that they are, in fact, independent variables that only coincide as what we recognise as voice 'types' (passive, antipassive, inverse, Philippine-type) over a long period of time.

If we were to adopt the second stance, then we would be assuming that some of the diagnostics of a 'construction' are more or less stable than others. Assuming that Palu'e previously possessed a Philippine-type voice alternation (since we have attested examples of non-demoting voice in the Western Malayo-Polynesian languages, and a reflexive construction in Palu'e that behaves just as the reflexive behaves in these related languages), we would be claiming that the amount of morphological material slowly reduced (similar to a language-wide extension of the particular Indonesian construction seen in (87) and (88)), but that even as the morphological clues to the construction are dropping the construction is changing. The motivation for the change towards an active-passive alternation, rather than the A-voice–P-voice alternation can only be guessed at, but the implication is that syntactic change is possible without any morphological grammaticalisation: rather than morphology instigating the syntactic reinterpretation, the departure of morphology would have to be held to be responsible for the reinterpretation. We are also dealing, if we attempt to model this historical picture in morphologically-based frameworks such as described above, a sequence of two different null morphemes. Clearly a model that admits the existence of various grammatical constructions is preferable to one that requires morphological markers to drive the syntactic derivations that it assumes. We also require the model to allow a relationship to exist between the A and the P in both the AVP and the PAV constructions that is identical, in order to drive the reflexive binding data. That is, there must be something constant in the representation of both the AVP and the

PAV construction, even though there are clearly changing patterns of grammatical behaviour with respect to, for instance, floating quantifiers and conjunction reduction. This implies that we are best off considering a theoretical model that allows us to deal with separate modules of structure at the same time, such as the argument structure, distinct from functional and constituent structures, in Lexical Functional Grammar (eg., Bresnan 2001).

As an epilogue, it is worth considering the analytical passive in Palu'e, which is formed with the verb coma '(be) affect(ed)'. This construction does not allow for the expression of the A, but also acts to change grammatical functions, as seen in the coordination data in (90).

Analytical passive in Palu'e
P   V

(89)   Vavi   vaʔa   coma   cube.
       pig   that   affect shoot
       'That pig was shot.'

(90)   Vavi   vaʔa   coma   cube   lka   __   laju   lae   uta.
       pig   that   affect shoot and.then   run   PREP bush
       'That pig was shot and then ran to the bush.'

An analytical passive such as that seen in these two sentences is clearly an innovative development in Palu'e, since most other instances of passives in Austronesian languages, and certainly the more archaic versions, involve morphological marking.[15] This might imply that systemically the language is filling a 'need' for a voice, which might conceivably lend some weight to the second proposition above: as the earlier voice system deteriorates, a new analytical passive construction is born. But without extensive comparative data from other Flores languages, we can only speculate.

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[15] The striking exception to this concerns the numerous analytical passives that can be found in non-standard varieties of Malay, using *kena* 'affect' or *dapa* 'receive'. These, too, seem to appear in varieties of Malay that have lost the synthetic *di-* prefix in a passive use on verbs.

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