Chapter 3

The evolution of differential object marking in Alor-Pantar languages

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This paper investigates the evolution of Differential Object Marking (DOM) in Abui and Teiwa, two Papuan languages of the Alor-Pantar family in Eastern Indonesia. In both languages, reflexes of the same proto-morpheme are used in the differential marking of P (the non-agentive argument in transitive constructions), but the languages contrast in the way Ps are differentiated. We compare the synchronic DOM patterns of Abui and Teiwa with each other as well as with the DOM patterns we reconstruct for their shared ancestor. We establish how different patterns of DOM in this family have evolved over time, and which semantic and morphological changes occurred in the process.

In their morphological expression, there are two strategies by which P's are differentiated: (i) the asymmetrical strategy involves an opposition between P as either a verbal prefix or a free nominal, and (ii) the symmetrical strategy where the choice of a P-prefix is variable depending on the semantics of P. Both strategies are used in both Teiwa and Abui, but the symmetrical strategy involves a choice between two different prefixes in Teiwa and five different prefixes in Abui.

Different factors trigger DOM in both languages: in Teiwa it is mostly based on the inherent properties (animacy) of P, while in Abui there are many other triggers besides the animacy of P, including the affectedness relation between the action and the P referent and the inflectional class of the verb. Furthermore, Abui has developed an extra, third, formal strategy to differentiate human Ps from non-human ones in a serial verb construction.

The alignment system we reconstruct for the proto-language was semantic. It evolved into an accusative alignment system in Teiwa, but was retained and further complexified in Abui. Alignment systems are not static: their forms and triggers may be modified and complexified over time.

1 Introduction

This paper describes and compares the differential object marking in Teiwa (Klamer 2010a) and Abui (Kratochvíl 2007; 2014a; Kratochvíl & Delpada 2015b), two members of the AP language family of Papuan[1] languages spoken in eastern Indonesia (Figure 1–3). We show that different members of a language family may show different patterns of Differential Object Marking (DOM) that are triggered by different factors and involve different forms, and that the evolutionary path of DOM has both stable and unstable features.

Figure 1: The islands of Timor, Alor and Pantar in Indonesia

After an introduction to the history and typology of the Alor-Pantar (AP) language family (§1), we present evidence that Proto-AP (the ancestor language of Teiwa and Abui) treated both transitive objects (P) and intransitive subjects (S) in a split fashion, and we list the morphological forms involved in the proto-splits (§2). In §3, we describe the formal and semantic characteristics of DOM in Teiwa, pointing out the elements of the proto-DOM system that have been retained, changed and lost in Teiwa. In §4, we similarly describe DOM in Abui and compare it to the proto-system.

By studying patterns of DOM in these two related languages and comparing them with their shared ancestor, we can establish how different patterns of DOM evolve over time, and which semantic and morphological changes occur in the process. For the descriptive data presented in this paper, we build on our own publications on Teiwa and Abui, as well as unpublished fieldwork data included in the respective corpora of Teiwa and Abui.[2]

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[1]Note that the term 'Papuan' is not a genealogical term, but rather refers to a cluster of several dozens of unrelated language families that are spoken on or close to the Papuan mainland, and are not Austronesian.

[2]These corpora are available as part of the Laiseang corpus in The Language Archive (TLA) at the Max Planck Institute for Psycholinguistics in Nijmegen http://tla.mpi.nl.
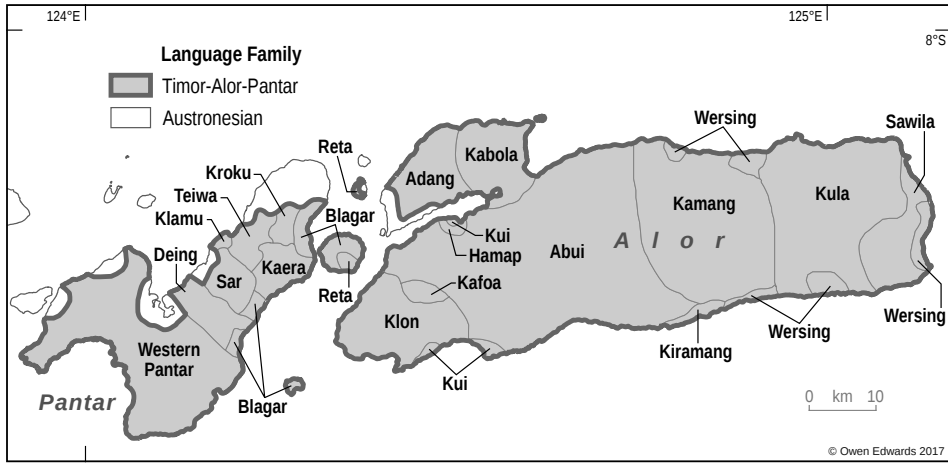
Figure 2: The Papuan languages of Timor (in the areas that are left white, Austronesian languages are spoken)
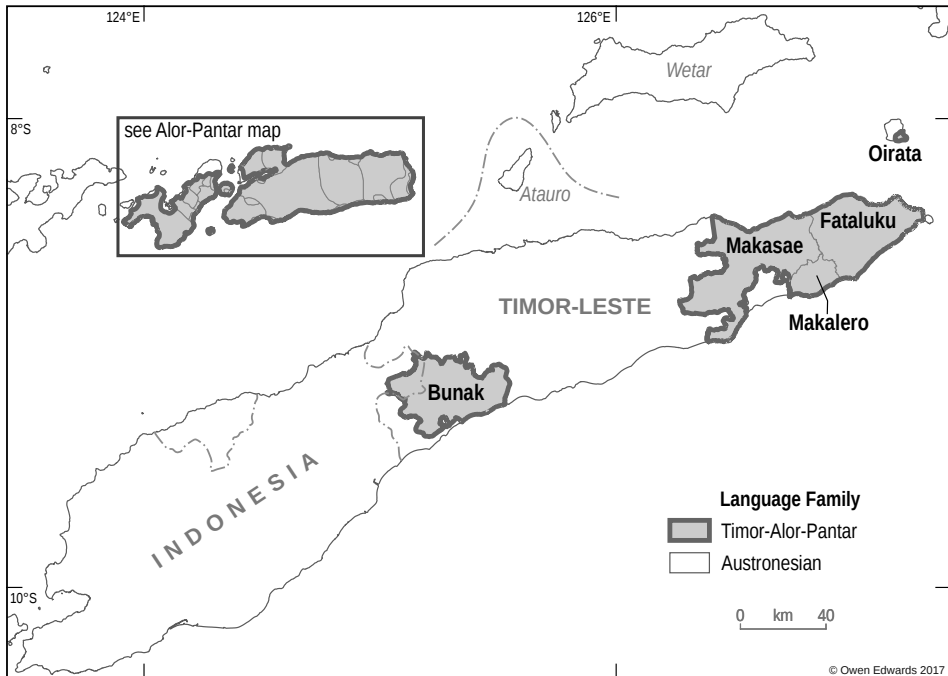
Figure 3: The languages of Alor and Pantar

For the typological component of the paper, we have used information on argument encoding in the AP languages that has been published elsewhere (e.g. Klamer 2010b,c,2017; Kratochvíl 2011, 2014a; Klamer & Kratochvíl 2012; Klamer & Schapper 2012; Fedden et al. 2013; 2014, Kratochvíl & Delpada 2015a; 2015b). For the historical reconstruction of the DOM system in Proto-AP, we draw on published historical reconstruction work on the AP family (Holton et al. 2012; Holton & Robinson 2014; 2017).

2 Introduction to the history and typology of Alor-Pantar languages

Together with the Papuan languages spoken on the neighbouring island of Timor, the AP sub-family constitute the larger Timor-Alor-Pantar family counting about 30 languages (Figure 2–4) (Holton et al. 2012; Holton & Robinson 2014; 2017; Robinson & Kratochvíl 2014; Schapper 2014; Schapper et al. 2017). An indication of the position of Teiwa and Abui in the Timor-Alor-Pantar family tree is shown in Figure 4. Based on phonological innovations (Holton et al. 2012), we assert that Teiwa and Abui share a common ancestor, Proto-AP, but are not direct sister languages, as it is possible to construct an intermediate node (labelled Proto-Alor in Figure 4) between Teiwa and Abui.
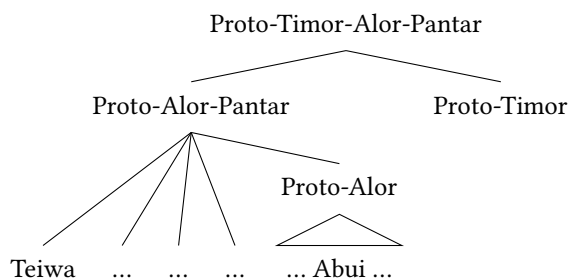

Figure 4: The position of Teiwa and Abui in the Timor-Alor-Pantar family tree (derived from Holton et al. 2012: 114, Fig. 2).

Basic (pragmatically unmarked, declarative) transitive clauses in the AP languages are verb-final, and Agent-Patient-Verb (APV) and Subject-Verb (SV) is the basic constituent order attested in all the modern languages.[3] Objects in AP languages are expressed with free nominal constituents (NPs or pronouns), which exist alongside verbal affixes that index person and number of verbal arguments. The AP languages are all head-marking and show a preponderance to index P over S/A (Klamer 2017: 20). This pattern is typologically extremely rare, occurring in only 7% of the 378 languages surveyed by (Siewierska 2013), yet it is universally found in the AP family. In other words, in AP, a person-number

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[3]The notions A, S and P are used here as comparative concepts, where A is the most Agent-like argument of a transitive clause and P the least Agent-like, while S is the single argument of an intransitive verb (Comrie 1989).

prefix on a verb typically indexes the object (P), while subjects (S/A) may also be indexed but are more typically expressed as free forms (pronouns or NPs).

Differential Object Marking (DOM) is seen here as 'the non-uniform grammatical marking of objects which occurs within one and the same language, with objects of one and the same verb' (Dalrymple & Nikolaeva 2011: 1). The grammatical marking of objects in AP languages involves differential patterns of object indexing on verbs (Iemmolo 2011), and in this respect is crucially different from differential marking of arguments by case marking on the noun phrase. In the AP family, nouns are never marked for case, and alignment is always defined relative to the pronominal indexing of the verb.

Other crucial differences between the AP languages and the well-known European languages include the following. First, AP languages have few, if any, tri-valent (ditransitive) verbs. Instead of having a predicate with three arguments, two of which are object-like, the languages use a strategy where serial verb constructions express events which involve more than two participants. Second, the object (P) of a bi-valent verb in AP languages can express a multitude of semantic roles: a P may be a semantic patient, recipient, goal, benefactive, or source. This is illustrated for Teiwa in (1a),[4] where P is a patient; in (1b), where the P of bi-valent -*an* is a recipient, in (1c), where the P of -*mian* 'put at' is a goal; in (1d), where the P of -*lal* 'show' is a benefactive, and in (1e), where the P of -*umbangan* 'ask (something) from someone' is a source. Similar observations can be made for Abui, see (10a)–(10e) below.

(1)   Teiwa (Klamer 2010a: 114, 169, 334–335, fieldnotes, TSS: 001)

a.   *Sematar*   *na*   **h-ua'.**
in.a.moment(IND)   1SG   2SG-hit

'I'll hit you!'

b.   *Uy*   *ga'an* *u*   *sen*   *ma*   *n-oma'*   **g-an.**
person DEM DIST money come 1SG.POSS-father 3SG-give

'That person gives my father money.'

c.   *Jadi* *hala* *biar*   *kriman* *la* *pin* *aria'* *ma*   **ni-mian**...
so   others children small FOC hold arrive come 1PL-put.at

'So other people brought some small children here and gave them to us...'

d.   *Yitar* *ga-qau*   *ma*   **na-lal-an.**
road 3SG.POSS-good come 1SG-show-REAL

'[You] show me the right way.'

e.   *A*   *daa*   **n-um-bangan.**
3SG ascend 1SG-APPL-ask.for

'He comes up to ask [sth.] from me' or 'He comes up to ask me [for/about sth.].'

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[4]Orthographic conventions used in this article: *x* = /ħ/, *q* = /q/, *'* =/ʔ/, and a double vowel symbol stands for a long vowel.

Note that in (1b), (1c) and (1d) the theme participants (*sen* 'money', *biar kriman* 'small children', *yitar gaqau* 'right way') are introduced with a separate verb (*ma* 'come').[5] This verb occurs in a serial verb construction with a second verb in clause final position.[6] The second verb carries the P-prefix. Homologous affixes combine with nouns to index possessors: examples include *n-oma* '1SG.POSS-father' in (1b) and *ga-qau* '3SG.POSS-good' in (1d).

3 Differential object marking in Proto-Alor-Pantar

Pronouns and pronominal indexes are known to belong to the most stable and archaic part of the lexicon (Filimonova 2005; Heine & Song 2011a,b). Given their stability, pronouns have been used to suggest deep genetic relationships (Nichols & Peterson 2013). The morpho-syntactic patterns attested in the modern AP languages regularly involve morphemes reflecting forms that are reconstructable up to the ancestor language of the family, Proto-AP.

Table 1 lists the reconstructed pronoun forms (Holton et al. 2012; Robinson & Kratochvíl 2014; Holton & Robinson 2017: 170). In AP pronouns, initial consonants encode

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[5]This function of Teiwa *ma* is further described in Klamer (2010a,b).

[6]Example (1c) involves another serial verb (*pin aria* 'arrive holding something'). We will not discuss serialization in Teiwa or Abui here; see the respective grammars for further information.

Table 1: Reconstructed forms for A, P, and Possessor in Proto-Alor-Pantar

	A free pronoun	**P prefix**	**Possessor prefix**
1SG	**na(N)*[a]	**na-*	
2SG	**a(N)*	**(h)a-*	
3	**ga(N)*	**ga-*[b]	**ge-*[c]
DISTR		**ta-*	
1PL.INC	**pi(N)*	**pi-*	
1PL.EXC	**ni(N)*	**ni-*	
2PL	**i(N)*	**(h)i-*[d]	

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[a]N represents a nasal unspecified for place.

[b]Holton & Robinson (2017) reconstruct two separate third person prefixes, of which the singular is **ga-* and the plural **gi-*.

[c]Proto-AP may also have had possessor prefixes for other persons but only the third person form is reconstructed so far. Possible reconstructed forms would be **ne-* '1SG', **(h)e-* '2SG', **te-* 'DISTR'. In the plural, the vowel distinction was likely neutralized.

[d]Robinson & Kratochvíl (2014) do not reconstruct the initial consonant of this prefix as optional, because of the regular reflex of Proto-AP **h in Western Pantar and Sar.

person features, while theme vowels encode number features (/a/ singular, /i/ plural) and possession (/e/).[7]

In addition to reconstructing the form of the Proto-AP prefixes we can also reconstruct some of the Proto-AP bi-valent verbs as bound forms, and others as unbound. We reconstruct a verb as bound when that has a P-prefix in daughter languages across the family, while a verb is reconstructed as unbound when all its modern reflexes lack a P-prefix. The reconstructed verbs are given in Table 2.

Table 2: Reconstructed bi-valent verbs in Proto-Alor-Pantar (Holton et al. 2012; Holton & Robinson 2017; Schapper et al. 2017; Klamer in press).

With P-prefix		Without P-prefix	
Proto-AP verb	**Meaning**	**Proto-AP verb**	**Meaning**
-ten	wake up someone	*tapai*	pound, pierce
-wel	bathe someone	*mi*	be in, be at
-ena	give to someone	*magi*	hear
-asi	bite someone (of dogs)	*(ta)ki*	bite (food?)
		nai	eat
		med	take
		kabar	scratch
		tiari(n)	close[a]

[a]Holton & Robinson (2017: 75) reconstruct 'close' with a prefix. We find no evidence for this in a larger dataset.

In other words, Proto-AP encoded its Ps in a split fashion: certain verbs indexed P using a pronominal prefix, other verbs used (only) a free form to express P. Even with the limited evidence these verbs provide us with, it is already possible to see that this split in P-marking probably had a semantic motivation. For the reconstructed verbs with a P-prefix, the prefix likely indexed a human/animate referent, as waking up and bathing someone are activities applied to a human object. Also, across the AP family, the (single) object of the verb 'give' is always a human referent (the P-prefix always indexes a recipient), while the theme (=the thing given) is encoded as either a separate oblique constituent or with its own predicate, using a serialization strategy (Klamer & Schapper 2012).

In contrast, the verbs that are reconstructed without a P-prefix such as 'be in, be at', 'eat', and 'take' seem to typically have an inanimate P. The object of the verb 'scratch' is typically a surface (which may or may not be a human skin). The verb 'pound' typically

[7]Proto-AP *ta-* is grouped with the singular forms in Table 1 because it carries the singular theme vowel /a/. *ta* has a common or impersonal referent (cf. *one* in English 'One should consider this'), and its reading is often distributive or reflexive ('each one', 'each other').

refers to pounding food objects (e.g. rice or corn). The two verbs for 'bite' may have been split in use depending on the animacy of the object. And in the AP languages, the verb 'hear' does not typically take a personal object (as in *I heard your father sing*) but rather a sound or a sound-producing event (e.g. *Your father's singing, I heard it*). In sum, Proto-Alor Pantar had a split in the marking of P, and this split was probably motivated by the distinction between human/animate objects (which were indexed with a verbal prefix) versus inanimate objects (which were expressed as free constituents). The fact that the feature 'human/animacy' triggers the indexing of Ps is cross-linguistically not unusual: agreement is often sensitive to the discourse salience of arguments, and since humans/animates have more discourse prominence than inanimates they are more eligible to be indexed on verbs (cf. Dalrymple & Nikolaeva 2011).

In addition to a split P-marking, the proto-language may also have had a split in the marking of intransitive subjects (S) that was based on semantics (Klamer 2012; Robinson & Kratochvíl 2014); a system referred to in the literature as 'semantic alignment' (Mithun 1991; Donohue & Wichmann 2008), in contrast to 'accusative alignment' or 'ergative alignment'. Languages with accusative alignment treat S and A alike, as opposed to P; languages with semantic alignment encode S sometimes like P (by prefixing it to the verb, as in the AP languages), and sometimes like A (eg by expressing it as a free pronoun, as in the AP languages). The variable encoding of S is motivated by the semantics of the verb and its argument, but the lexical sub-categorisation characteristics of verbs also play a role (cf. Fedden et al. 2013; 2014).

The hypothesis that Proto-AP had semantic alignment is based on the following observations.[8] First, AP languages with semantic alignment are found across the region, while languages with accusative alignment are confined to a region in the centre, as shown in Figure 5. This geographical spread suggests that semantic alignment was the original pattern from which the accusatively aligning languages diverged.

Second, some languages that today have accusative alignment show morphological traces of semantic alignment. An example is Kaera (Pantar), which encodes the S of certain intransitive verbs with a prefix otherwise typically used to index P arguments (Klamer 2014: 135–136). This Kaera class of verbs includes verbs such as 'live', 'be silent', 'jump up', 'faint, be unconscious', 'think', 'give birth'.[9] The presence of such morphological fossils suggests that there may have been an earlier historical stage with semantic alignment from which modern Kaera with accusative alignment has developed.

Third, some languages that are accusatively aligning today are still attuned to semantic factors in the alignment of P. Examples are Adang (Haan 2001; Robinson & Haan 2014) or Blagar (Steinhauer 2014). This sensitivity to semantics in an otherwise accusative

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[8]To reconstruct the alignment system of Proto-Alor Pantar with confidence, comparative data from cognate sets of a sizable number of verbs across a wide range of Alor Pantar languages need to be collected and their alignment patterns compared, work that yet needs to be done.

[9]Although the coverage of our comparative database is currently insufficient to determine whether the Kaera forms are regularly inherited from the Proto-AP lexicon, verbs with the similar senses regularly either allow or require S-indexing in semantically aligned languages such as Western Pantar (Holton 2014), Klon (Baird 2008), Abui (Kratochvíl 2007; 2011), Kamang (Schapper 2014), Sawila (Kratochvíl 2014b), and Wersing (Schapper et al. 2017).
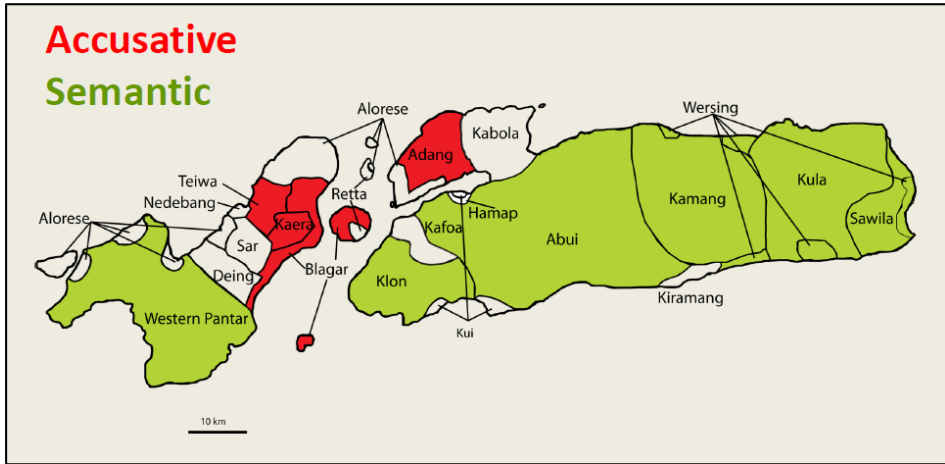
Figure 5: Semantic (green) and accusative (red) alignment in Alor-Pantar languages. (For the language areas left white, information on alignment is lacking).

alignment system suggests that the language developed from an earlier language with semantic alignment.[10]

If Proto-Alor Pantar indeed had semantic alignment, then it must have expressed intransitive S sometimes like A, using a free form, and sometimes like P, using a verbal prefix (compare Table 2). Some examples of reconstructed mono-valent verbs in Proto-AP are presented in Table 3.[11]

We have not, or not yet, been able to reconstruct bound mono-valent verbs, i.e. verbs that encode their S argument with a prefix in their modern reflexes across the AP family. The evidence for the semantic alignment of Proto-AP is thus circumstantial.

To summarize, the following grammatical information about Proto-AP, the ancestor language of Teiwa and Abui has been presented:

1. The reconstructed pronouns include free and bound forms that are formally clearly related (cf. Table 1).

2. In Proto-AP, free pronouns express A while bound pronouns typically express P and Possessor.

3. Proto-AP has some kind of DOM, as Ps are expressed in a split fashion: some bivalent verbs take a P-prefix, other bi-valent verbs express P with a free form.

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[10]In Adang, objects are either indexed by prefixes on the verb or expressed by free object pronouns. There is a tendency for verbs with animate objects to be prefixing (Fedden et al. 2013). In Blagar, various degrees of affectedness can be distinguished using object pronoun, possessive pronouns, or a prefix (Steinhauer 2014: 167, 189).

[11]Holton & Robinson (2017: 75) reconstruct 'close' with a prefix. We find no evidence for this in a larger dataset.

Table 3: Reconstructed mono-valent verbs in Proto-Alor-Pantar (Holton et al. 2012; Holton & Robinson 2017; Schapper et al. 2017; Klamer in press).

Proto-AP verb	Meaning
*tas	stand
*tia	sleep
*purVn	spit
*jagir	laugh
*luk(V)	crouch
*mai	come (here)
*kabar	scratch
*tiari(n)	close

4. The P-split is likely based on the distinction between human/animate and inanimate referents, where human/animate Ps are indexed on the verb and inanimate Ps are not.

5. Proto-AP likely has semantic alignment, encoding the S of certain intransitive verbs with a prefix otherwise typically used to index P arguments. However, so far we have only been able to reconstruct mono-valent verbs with a free-standing S.

4 Differential object marking in Teiwa

In Teiwa, some of the Proto-AP properties listed above were retained, while others were lost. Teiwa retained both the proto-prefix for P (and some S) and the free proto-pronoun that encoded A (and some S). The full set of Teiwa pronouns and person prefixes encoding A, P, S, and the possessor is given in Table 4. (Using a long rather than a short free pronoun encodes contrastive focus of A and S in Teiwa.) As in Proto-AP, free pronouns express A while bound pronouns typically express P and Possessor. Unlike Proto-AP, Teiwa has no semantic alignment where S can be marked like P: Teiwa is completely accusative.

As in Proto-AP, some bi-valent verbs in Teiwa take a P-prefix, while other such verbs express P with a free form. Teiwa bi-valent verbs typically use a prefix to index an animate P, while a free form (pronoun or NP) expresses an inanimate P. This is illustrated in (2). In (2a),[12] the object of *mai* is *ha-gas qai* 'your younger sister', an animate referent that is indexed on the verb. In (2b) the verbs *mai* 'keep' and *usan* 'lift' share a single object *aga'* 'all [of it]', which is not indexed on the verb because the referent is inanimate.

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[12]Compare *Xa'a ma **na**-mai* 'this come 1sg-keep.for' 'Keep this for me.' [constructed example].

Table 4: Teiwa pronouns (S, A, P) and prefixes (P and possessor) (Klamer 2010a: 77–78)

	A, S long pronoun	A, S short pronoun	P free pronoun	P prefix	Possessor prefix[a]
1SG	*na'an*	*na*	*na'an*	*n(a)-*	*n(a)-*
2SG	*ha'an*	*ha*	*ha'an*	*h(a)-*	*h(a)-*
3SG	*a'an*	*a*	*ga'an*	*g(a)-, gə-*	*g(a)-, a-*
DISTR	*ta'an*	*ta*	*ta'an*	*t(a)-*	*t(a)-*
1PL.INC	*ni'in*	*ni*	*ni'in*	*n(i)-*	*n(i)-*
1PL.EXC	*pi'in*	*pi*	*pi'in*	*p(i)-*	*p(i)-*
2PL	*yi'in*	*yi*	*yi'in*	*y(i)-*	*y(i)-*
3PL	*iman, i'in*	*i, a*	*iman, gi'in*	*g(i)-, ga-*	*g(i)-, a-, ga-*

[a]Possessors can also be expressed with short and long forms of free pronouns, see (Klamer 2010a: 79). Teiwa possessive prefixes contain the theme vowel /a/ just like the prefixes that index P. Alienable and inalienable possession are distinguished by the optional versus obligatory use of the possessive prefix *na-yaf* '1SG.POSS-house' 'my house(s)' vs. *yaf* 'a house, house(s)'; *na-tan* '1SG.POSS-hand' 'my hand(s)' vs. **-tan* (intended reading 'a hand, hand(s)').

(2) Teiwa (Klamer fieldnotes TAS:0055; TAS2012:001)

a. *Xa'a   ma   ha-gas qai   ga-mai.*
   this   come 2SG.POSS-younger.sister   3SG-keep.for

   'Keep this for your younger sister.'

b. *Aga'   usan   kamar   gom   ma   mai.*
   all   lift   room(IND)   inside   come   keep

   'Pick up all (of it) and keep (it) inside the room.'

Another example of an animate P that is indexed on the verb is given in (3a). It contrasts with the P in (3b), which is inanimate and not indexed. A similar contrast is shown in (4), but here the free form is a pronoun rather than a lexical constituent.

(3) Teiwa (Klamer fieldnotes TAS2011:138; TPV2011_2:016)

a. *Bif   g-oqai   sen   ma   ga-mian.*
   child   3SG.POSS-child   money   come   3SG-put.at

   'His child gave him money.'

b. *In   qap   ii'   kalax   gom   mian.*
   thing   cut   red   basket   inside   put.at

   'A red cloth is put inside a basket.'

(4) Teiwa (Klamer 2010a: 91)

    a. *Na   ga-mar.*
       1SG   3SG-take
       'I follow him/her.'

    b. *Na   ga'an   mar.*
       1SG   3SG   take
       'I take it.'

Some additional illustrations of Teiwa verbs that show DOM based on animacy are given in (5). These verbs are attested with both an animate and inanimate object in the Teiwa corpus.

(5) Illustrations of Teiwa transitive verbs showing DOM

With P-prefix		Without P-prefix	
ga-mar	'follow someone'	*mar*	'take (something)'
ga-sii	'bite someone'	*sii*	'bite (into) (something)'
ga-dee	'burn someone'	*dee*	'burn (something)'
ga-sar	'notice, find someone'	*sar*	'notice, find (something)'

However, DOM in Teiwa is not completely predictable and regular, as there are also some verbs that index Ps which are not animate. First, the Teiwa corpus contains some examples of verbs whose prefix optionally indexes an animate or an inanimate referent. An example is *uyan* 'search for' in (6). Both (6a) and (6b) are grammatical, but in (6b) the indexed P has an inanimate referent (*wat* 'coconut(s)'). In examples (6c)–(6e) the prefix on other verbs from the same class indexes inanimate referents: a tree, a coconut, and a spoon.

(6) Teiwa (Klamer, fieldnotes TAS:0628, TC:025a, TTR2010:024; Klamer 2010a: 307)

    a. *Na   n-ogai   ga-uyan.*
       1SG   1SG.POSS-child   3SG-search
       'I'm looking for my child.'

    b. *Na   wat   ga-uyan.*
       1SG   coconut   3SG-search
       'I'm looking for coconut(s).'

    c. *Burilak   ga'an   ma   Sibari   heer   nuk   ga-sar.*
       clan.name   3SG   come   k.o.tree   stem   one   3SG-notice
       'The Burilaks noticed a Sibari tree'

    d. *...uy   quaf   eran   ta   om   qalixil ta[13] a-fat   mat*
       person   grandmother   that   TOP   inside   angry   TOP   3SG-foot   take
       ma,   wat   u   ga-tane'   si...
       come   coconut   DIST   3SG-kick   SIM

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[13] *Ta* marks switched topics, but here it functions as a clause-linking device. Its interclausal function may be characterized as marking the discontinuity or asymmetry of events in discourse (Klamer 2010a: Sec. 11.4).

'…that grandmother was angry and with (lit. taking) her foot kicked that coconut, then…'

e. *Sii'*   *ga'an*   *in*   *qap*   *ga-tiri*   *ba*   *ga-wa'*   *la*   *a'an*
   spoon   DEM   thing   cut   3SG-float   SEQ   3SG.POSS-leaf   FOC   3SG
   dagar.
   be.visible

'That spoon is covered by a cloth so that [only] its round part is visible.'[14]

Second, there is a set of verbs that take alternating prefixes to index animates and inanimates: the 'normal' prefix *ga-* encodes inanimate Ps, while an 'augmented' prefix *ga'-* (pronounced as [gaʔ]) encodes animate Ps. Illustrations are given in (7). To distinguish animate and inanimate objects by choosing a different prefix seems to be a minority pattern in Teiwa, attested at least for the verbs listed in (8).

(7)   a.   Teiwa (Klamer 2010a: 92)
          Na   *gi*   *ga'-tad.*
          1SG   go   3ANIM-strike

          'I go hit him/her.'

     b.   *Na*   *gi*   *ga-tad.*
          1SG   go   3SG-strike

          'I go hit it.'

(8)   Teiwa transitive verbs with alternating prefixes (Klamer 2010a: 91–92)

With *ga'*-prefix		With *ga*-prefix	
ga'-wulul	'talk with s.o., tell s.o.'	*ga-wulul*	'talk about sth., tell sth.'
ga'-wultag	'talk to/about s.o., tell s.o.'	*ga-wultag*	'talk about sth.'
ga'-tewar	'go/walk together with s.o.'	*ga-tewar*	'his (manner of)
		ga-tewar	walking'
ga'-tad	'hit, strike, touch s.o.'	*ga-tad*	'hit, strike at sth.'

Note that definiteness does not play a role in the distinction as both definite and indefinite Ps can be indexed. An example of a definite Ps that is indexed is *wat u* 'that coconut' in (6d), while *wat* 'coconut(s)' in (6b) is an indexed indefinite P.

The distinction between free and bound pronouns (person prefixes) is not uniquely reserved for marking the animacy of a referent but is also used to encode contrastive or identificational focus in Teiwa.[15] This is illustrated in (9), where the animate P is indexed on the verb with a prefix in (9a), but is expressed as a free form in (9b), where it encodes a focused constituent.

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[14]A more literal translation of this sentence is 'That spoon, a cut thing floats on [it] so that only its leaf is visible'.

[15]New information focus (Lambrecht 1994; Dalrymple & Nikolaeva 2011: 47–48) is marked in Teiwa with a dedicated focus particle *la* and is not further discussed here, see Klamer (2010a: Ch. 11).

(9) Teiwa (Klamer 2010a: 407)

    a. *Miaag*   *yivar*   *ga-sii.*
        yesterday   dog   3sg-bite

        'Yesterday a dog bit him.'

    b. *Miaag*   *yivar*   *ga'an*   *sii.*
        yesterday   dog   3sg   bite

        'Yesterday a dog bit HIM (not me).'

In sum, the Proto-AP split marking of P plus its semantic alignment system developed into an accusative system with DOM in Teiwa. The distribution of the person prefix paradigms is lexicalized (normal vs. 'augmented'). The person prefix that was used for human/animate Ps (and some S) in Proto-AP is used in Teiwa to index mostly animate Ps. A small class of verbs lexicalized the prefix, and indexes both animate and inanimate Ps. The original free pronouns that were used to express A (and some S) in Proto-AP function in modern Teiwa to express both A and S (in an accusative system), and also as a marker of contrastive focus of P.
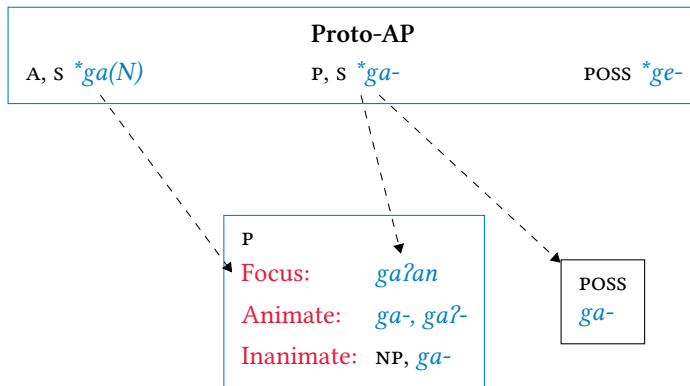

Figure 6: The historical relation between forms encoding P in Proto-Alor-Pantar and in Teiwa

5 Differential object marking in Abui

Reflexes of the Proto-AP pronouns in Table 1 are attested in Abui, both in free and bound forms, as shown in Table 5. Taking the theme vowel /a/, the first (PAT) paradigm reflects the Proto-AP prefixes that encoded Ps in the proto-language. The additional paradigms, distinguished by vowel grading and vowel lengthening, elaborated the proto-system.[16]

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[16]Most languages of the Alor branch have expanded their verbal prefix paradigms in a similar way as Abui; with a prefix containing an /o/ and/or an /e/. Sawila has two verbal prefix paradigms (Kratochvíl 2014b), Adang, Klon, and Wersing have three paradigms (Haan 2001; Baird 2008; Robinson & Haan 2014; Schapper et al. 2017), and Kamang has seven paradigms (Schapper 2014). This suggests that Proto-Alor may already have had two verbal prefixes.

Table 5: Abui pronominals (Kratochvíl 2007: 78, 2011: 591, 2014a: 555)

	free pronoun	I (PAT)	II (LOC)	III (REC)	IV (BEN)	V (GOAL)
1SG	*na*	*na-*	*ne-*	*no-*	*nee-*	*noo-*
2SG	*a*	*a-*	*e-*	*o-*	*ee-*	*oo-*
3	–	*ha-*	*he-*	*ho-*	*hee-*	*hoo-*
DISTR	–	*ta-*	*te-*	*to-*	*tee-*	*too-*
1PL.EXC	*ni*	*ni-*	*ni-*	*nu-*	*nii-*	*nuu-*
1PL.INC	*pi*	*pi-*	*pi-*	*pu-*	*pii-*	*puu-*
2PL	*ri*	*ri-*	*ri-*	*ru-*	*rii-*	*ruu-*

Each of the five prefix paradigms may be used to index Ps, and a vague connection may be seen between a particular paradigm and the semantic role of the P it encodes, as indicated by the semantic role given in brackets in the column header.

The second (LOC) paradigm has the theme vowel /e/, and is a reflex of the Proto-Alor Pantar possessive prefix **ge-* '3GEN'. It has often been noted that location and possession are semantically related notions: an item is typically located at or near the person that possesses it. Abui has drawn on this relation to recruit the possessor prefix of Proto-AP as a locative person index.[17] Paradigm four (BEN) elaborates on the locative paradigm by lengthening the theme vowel /e/. Vowel lengthening is a strategy to create new forms in Abui, and is also used to create a separate set of goal prefixes on the basis of the Recipient paradigm. The recipient (REC) paradigm itself contains the theme vowel /o/. While a prefix with this vowel cannot be reconstructed to the level of Proto-AP, it may have been present in Proto-Alor as similar forms are found in other languages of Alor, e.g. Adang *ʔo* (Haan 2001), Klon *go-* (Baird 2008), and Kamang *wo-* (Schapper 2014), where they have a locative function. Prefixes with /o/ might have evolved from a word that was originally locative postposition or verb, and became reanalyzed as a verbal prefix.

In (10a)–(10e) it is illustrated how the different Abui prefixes roughly correspond to semantically different Ps. The prefix expresses, respectively: a patient (10a), a location (10b), a recipient/benefactive (10c), a benefactive (10d), or a goal (10e). Note also that some of the predicates are complex, consisting of two or more verbs forming a single phonological word, as in *-l=bol* 'give=hit' in (10b) and *-k=yai* 'throw=laugh' in (10c) (cf. Klamer & Kratochvíl 2010).

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[17]In Abui possessive constructions, the Proto-AP possessor prefix (with theme vowel /e/) is used to express alienable possession, while the Proto-AP P-prefix (with theme vowel /a/) is used for inalienable possession (Kratochvíl 2007): *ne-fala* '1SG.POSS.AL-house' 'my house' versus *na-min* '1SG.POSS.INAL-nose' 'my nose'. Other Alor languages share this innovation.

(10)   Abui (Kratochvíl 2007: 592)

    a. *Na   a-ruidi.*
       1SG.AGT   2SG.PAT-wake.up.PFV

       'I woke you up.'

    b. *Di   palootang   mi   ne-l=bol.*
       3AGT   rattan   take   1SG.LOC-give=hit

       'He hit me with a rattan (stick).'

    c. *Fanmalei   no-k=yai.*
       Fanmalei   1SG.REC-throw=laugh

       'Fanmalei laughed at me.'

    d. *Ma   na   ee-bol.*
       be.PROX   1SG.AGT   2SG.BEN-hit

       'Let me hit [it] for you.'

    e. *Simon   di   noo-dik.*
       Simon   3AGT   1SG.GOAL-prick

       'Simon is poking me.'

Although the above examples show rather transparent relations between the prefix and the semantic role of the argument it encodes, in most instances where prefixes are used in Abui, the relation between form and semantics is either vague, or absent. This is because in Abui, P-indexing is also heavily determined by inflectional classes of verbs, and inflectional class assignments are mostly idiosyncratic (see below).

In Abui, the different semantic types of transitive verbs (e.g. verbs of perception, cognition, speech, or transfer) encode their P in various ways. Here we will not describe all the possible patterns, as that would amount to writing another article (see Kratochvíl 2007; 2011; 2014a; Kratochvíl & Delpada 2015b). Rather, we focus here on the differential marking of the P of so-called 'typical transitive' (Comrie 1989: 111; Haspelmath 2011: 545) verbs only. Such verbs convey the most typical transitive activities, such as kill, hit, kick, carry, search for, take, and hold, which have a highly agentive A and a highly patientive P. In Abui, even this restricted class of typical transitive verbs shows significant differentiation in the marking of P, as we will discuss now.

In Abui, as in Teiwa, animacy determines whether or not a prefix is used on the verb. This is illustrated in (11a)–(11b): the inanimate P *kanai do* 'these pili nut(s)' is not indexed on the verb *bol* 'to hit' in (11a), while the human body part *netoku* 'my leg(s)' is prefixed on *bol* in (11b).[18] Note that both NPs are definite: possessives and NPs marked with the demonstrative *do* are definite in Abui (Kratochvíl & Delpada 2015a).

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[18]Unlike English 'hit' and many other verbs, Abui bi-valent *bol* can take different prefixes, indicating arguments with different semantic roles and often somewhat different senses: *PAT-bol, REC-bol* 'hit at s.o.', BEN-*bol* 'hit for/instead of s.o.', GOAL-*bol* 'dust off s.o.'.

(11) Abui (Kratochvíl 2014a: 566)

    a. *Di   kanai   do   bol   took.*
        3AGT pili.nut PROX hit drop
        'He was hitting pili nuts (and) dropping [them].'

    b. *Baloka   ne-toku   he-bol   he-balasi   ba...*
        k.o.grass 1SG.POSS-leg 3.LOC-hit 3.LOC-beat.PFV SIM
        'The *baloka* grass hit my legs slashing them...'

The variation in (11a) and (11b) is an instance of asymmetric morphological alternation between a nominal P and a P indexed on the verb with an overt morphological exponent Witzlack-Makarevich & Seržant (2018 [this volume]). It is parallel to the reconstructed Proto-AP pattern and to the pattern in Teiwa, illustrated in (3)–(4) above. In addition, animacy also determines marking of P in Abui following a symmetric system, where both alternatives are morphologically marked. In (12a), the inanimate P of *puna* 'hold' is encoded with a LOC prefix, while in (12b), the same verb takes an animate P which is indexed with a GOAL prefix. This type of DOM marking in Abui is analogous to the symmetrical pattern in Teiwa, illustrated in (7)–(8) above.

(12) Abui (Abui corpus: E15BD071, E15BD072)

    a. *Maama,   na   mahiting he-puna   yo!*
        father   1SG.AGT meat   3.LOC-hold.IPFV MD.AD
        'Father, I will hold the meat (while you slice it)!'

    b. *Di   noo-puna!*
        3.AGT 1SG.GOAL-hold.IPFV
        'He is grabbing (groping) me!'

In addition, Abui P-marking is also sensitive to the semantically more narrow distinction between human and non-human referents. When the referent of P is human, the main transitive verb combines with another (generic) verb in a complex predicate where the P-prefix attaches to the generic verb, as illustrated in (13). The semantic contribution of the generic verb 'give' in (13) is to flag the presence of a human P. In (13) we illustrate two such serial constructions: *-l=bol* 'give hit' and *-l=balasa* 'give beat'. In both cases, the referent is human, therefore must prefix to *-l* 'give'. When a referent is not human, the prefix is not expressed in such a serial construction with *-l*, but rather attached directly to the main verb, as was illustrated in (11a) and (11b) above. Kratochvíl (2014a: 567–569) provides further examples of this asymmetrical DOM pattern, which is sensitive to the distinction [+/- human]. This pattern is quite frequent in Abui and typical for verbs of change (impingement, locomotion, search verbs) and spreading into emotion and cognition verbs.

(13) Abui (Abui corpus: N12.070)

> *Markus   di   ne-l=bol   ne-l=balasa.*
> M.   3sg   1sg.loc-give=hit   1sg.loc-give=beat.ipfv
> 'Markus gives me a beating (lit. hits me (and) beats me).'

Furthermore, besides animacy and humanness, the affectedness of P also plays a role in the choice of prefix. This DOM type is the topic of Kratochvíl & Delpada (2015b). Abui systematically encodes the degree of affectedness for predicates that describe change (observable change, (loco)motion, physical impingement, and going out of or coming into existence).[19] In terms of Beavers's (2011) account of affectedness, the Abui pat-indexed verbs indicate a maximum degree of affectedness while the loc-indexed verbs shift one degree lower (Kratochvíl & Delpada 2015b: 232). The alternation of the degree of affectedness can be tested with entailments, as shown in (14a)–(14b). The pat-indexed verb entails a maximal change to the effect described by the verb and this change cannot be negated by the entailment (14a), but this is possible with loc-indexed verbs, as shown in (14b).

(14) Abui (Abui corpus: E15BD51, E15BD52)

> a. *di   kawen   ha-komangdii   #haba de-i=bula*
>   3.agt machete   3.loc-make.blunt.pfv but   3i.loc-have=be.sharp
>   'He made the knife blunt, #but it's still sharp.'

> b. *di   kawen   he-komangdii   haba de-i=bula*
>   3.agt machete   3.loc-make.blunt.pfv but   3i.loc-have=be.sharp
>   'He made the knife blunter, but it's still sharp.'

A number of verbs of change participate in this DOM pattern in Abui, with some examples given in (15)–(18). The entailments work in the same way as for the verb -*komangdii* 'make blunt' above. It should be noted that the Abui senses may map sometimes onto different verbs in English, underlining the semantic distinctions invoked by this DOM pattern.

(15) Observable Change verbs (Kratochvíl & Delpada 2015b: 222)

> a. +Affected: pat *ha-*
>   *ha-lilri*   'boil it'
>   *ha-siki*   'separate it'
>   *ha-kol*   'tie it up'
>   *ha-kuya*   'expose it'

> b. −Affected: loc *he-*
>   *he-lilri*   'warm it up'
>   *he-siki*   'split it'
>   *he-kol*   'tie it'
>   *he-kuya*   'peel it'

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[19] Other AP languages have been described having DOM systems where 'affectedness' is one of the trigger features: Blagar (Steinhauer 2014: 188–189); Kamang (Fedden et al. 2014: 64–66); Klon (Baird 2008); Sawila (Kratochvíl 2014b); Kula (Williams 2016).

(16) Move and Stay at Some Location verbs (Kratochvíl & Delpada 2015b: 227)

    a. +Affected: PAT *ha-*

        ha-taang   'give it away'
        ha-fil   'pull it'
        ha-bel   'pull it out'
        ha-baang   'put on (its lid)'
        ha-kil   'turn it upside down'

    b. −Affected: LOC *he-*

        he-taang   'pass it along'
        he-fil   'pull on it'
        he-bel   'pluck it'
        he-baang   'put on shoulder'
        he-kil   'put it out'

(17) Physical impingement verbs (Kratochvíl & Delpada 2015b: 227)

    a. +Affected: PAT *ha-*

        ha-dik   'pierce it, stab through it'
        ha-ril   'ram it in'
        ha-taakda   'stab to death'
        ha-keila   'plug it'
        h-afuui   'scoop it up'
        h-ahii   'remove it'
        ha-fuuidi   'flatten it'

    b. −Affected: LOC *he-*

        he-dik   'stab at it'
        he-ril   'plant it in'
        he-taakda   'skewer it'
        he-keila   'block it'
        he-afui   'scoop it'
        he-ahii   'select it, pick it'
        he-fuuidi   'made it flatter'

(18) Go Out of Existence verbs (Kratochvíl & Delpada 2015b: 228)

    a. +Affected: PAT *ha-*

        ha-lak   'destroy it'
        h-akung   'extinguish it'

    b. −Affected: LOC *he-*

        he-lak   'demolish it'
        he-akung   'shade it'

And finally, P-indexing is also restricted by Abui verbal inflectional classes, which in some cases stipulate the P-index type as PAT, irrespective of the semantics of the event expressed by the verb, as described in Fedden et al. (2013; 2014); Fedden & Brown (2017). In these studies the prefixing behaviour of Abui verbs was examined. About 10% of the verbs always index the P with the PAT prefix and do not allow any symmetrical DOM.

This particular inflectional class includes both typical transitive verbs, describing events of observable change (19), (loco)motion (20), physical impingement (21), and going out of or coming into existence (22)) (e.g., *-balak* 'to hit, punch s.o./sth.' and *-basa* 'to brush off sth.'), but also verbs of speech, cognition and transfer, as well as verbs of perception, posture, placement and sound (Fedden et al. 2014; Kratochvíl & Delpada 2015b). It is possible that these verbs represent an older layer of the Abui lexicon, and reflect an older stage of its grammar, before the systematic DOM alternation between PAT- and LOC-indexed verb was fully grammaticalized.

(19) Observable Change verbs (Kratochvíl & Delpada 2015b: 222)
ha-basa	'brush him off, dust it'	*ha-weel*	'wash him, bathe him'
ha-kuol	'shave it'	*h-iel*	'roast it'
ha-tamadia	'repair it'		

(20) Move and Stay at Some Location verbs (Kratochvíl & Delpada 2015b: 223)
ha-fik	'pull it, pull him'	*ha-kuoila*	'topple it'
ha-ai	'add it'	*ha-bi*	'lean against it'
ha-suonra	'push it'	*ha-kai*	'drop it, trip him'
ha-reng	'turn to it'		

(21) Physical impingement verbs (Kratochvíl & Delpada 2015b: 224)
ha-balak	'punch him'	*h-uol*	'hit/strike him'
ha-laanga	'grope him'	*ha-paakda*	'slap him'
ha-taak	'shoot him'		

(22) Go Out of Existence verbs (Kratochvíl & Delpada 2015b: 224)
ha-al	'burn it'	*ha-pok*	'cover it'
ha-fuul	'swallow it'	*ha-yol*	'bury it'

The inflectional verb class illustrated in (19)–(22) contrasts with the PAT~LOC alternating verbs in (15)–(18) in that the degree of affectedness of their P is not fixed. This can be seen when the entailment is a 'failed' reading, as shown in (23a)–(23c), something not possible for the PAT-indexed verbs that participate in the symmetrical DOM discussed above. For more details, see Kratochvíl & Delpada (2015b).

(23) Abui (Abui corpus: E15BD34, E15BD35, E15BD36)

    a. *na*   *ha-fik-i*   *haba*   *burook*   *naha*
       1SG.AGT   3.PAT-pull-PFV   but   but   not
       'I pulled it but it didn't move.'

    b. *na*   *ha-fik-i*   *haba*   *sik*   *naha.*
       1SG.AGT   3.PAT-pull-PFV   but   snap   not
       'I pulled it but it didn't snap.'

    c. *na*   *ha-fik-i*   *haba*   *dara*   *de-yal*   *mia.*
       1SG.AGT   3.PAT-pull-PFV   but   still   3I.AL-place   be.in
       'I pulled it but it is in its place (it's too heavy).'

Clearly, this class does not show any evidence of symmetrical DOM as it marks P always in the same way (with a PAT prefix). Yet it is important to mention it in the context of the current paper, because it shows that while Abui differentiates Ps in symmetric and asymmetric ways, along a number of different semantic dimensions, the language also has a reasonably large class of bivalent verbs that do not take part in symmetrical differential marking of P at all.

The DOM pattern of alternation between LOC- and PAT-indexed verbs is attested with 22% of the sample investigated by Fedden et al. 2013; 2014. Furthermore, verbs in this class can also combine with other series (BEN, REC, or GOAL), i.e. alternate symmetrically. At the same time, verbs in this class can also occur without a prefix and alternate asymmetrically in complex predicates (see Fedden et al. 2014: Table 5). In general, the three additional series (BEN, REC, and GOAL) are less restricted and combine on average with about 87% of the roots. This is expected, given their later development and greater productivity.

In sum, there is a variety of factors involved in the marking of the objects of the typical transitive verbs in Abui. These include:

- the semantic role of P (where Ps that are semantically patient, locative, benefactive or goal can be marked differently);

- the inherent semantic properties of the argument (whether P is animate or not, whether P is human or not);

- the relation between the verb and its argument (whether P is affected or not and to what degree);

- the inflectional verb class (which determines whether or not P is marked differentially, and how it is marked differentially, i.e. using a symmetrical or asymmetrical pattern).

The Abui data clearly show that in a single language, DOM can have multiple triggers, involving inherent lexical argument properties, inflectional classes, and event semantics; and combine symmetrical and asymmetrical morphological alternations. In a language family such as the AP family, which tends to index P over S/A, languages may develop in a direction where they elaborate on the encodings of P in new ways, as Abui demonstrates. Figure 7 shows how the modern Abui morphemes used for DOM relate to the reconstructed forms in Proto-AP.

Unlike in Teiwa, Abui retained the semantic alignment of Proto-AP, where S could sometimes be marked as P. In numerous cases, S arguments can be indexed on verbs as if they are Ps. In general, such S arguments have a more affected, and less volitional, semantics than free-standing S arguments (Kratochvíl 2007; 2011; 2014a; Fedden et al. 2013; 2014; Fedden & Brown 2017).
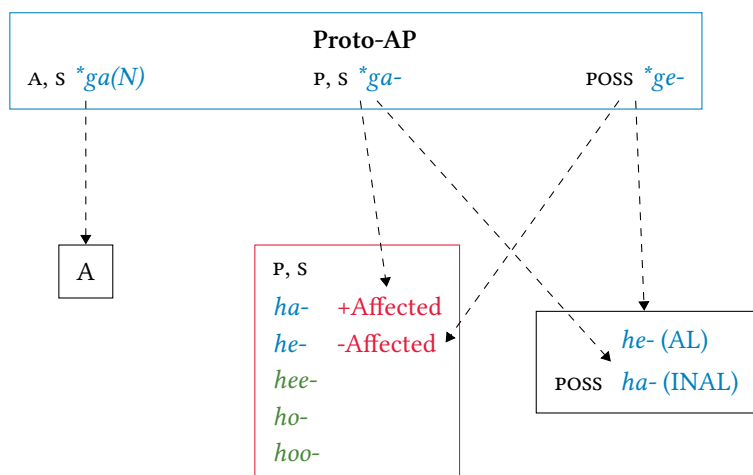
Figure 7: The historical relation between forms encoding P in Proto-Alor-Pantar and Abui.

6 Conclusions

Sharing a common ancestor that had DOM, Teiwa and Abui still mark objects differentially, and in both languages, reflexes of the same proto-morpheme are used in the differential marking of P. Yet, there are many differences between the two languages in the proto-forms that have been retained and innovated, and in the way DOM is applied.

In their morphological expression, there are two dimensions in which Ps are differentiated in both Teiwa and Abui. The first is asymmetrical: either P is expressed as a verbal prefix (with an optional co-referent pronoun or NP in the clause), or P is expressed as a free pronoun or nominal phrase. Second, Ps may be differentiated symmetrically, by the variable choice of a P-prefix depending on the semantics of P. Both strategies are used in both languages, but the symmetrical strategy involves two prefixes in Teiwa and five prefixes in Abui. The DOM patterns are summarized below (the information structure uses are not included).

Also, the factors triggering DOM are different: in Teiwa it is mostly based on the inherent properties (animacy) of P, while in Abui there are many other triggers besides the animacy of P, including the affectedness relation between the action and the P referent and the inflectional class of the verb. Furthermore, Abui has developed an extra, third, formal strategy to differentiate human Ps from non-human ones in a serial verb construction.

The reconstructed alignment system of Proto-AP was semantic. In Teiwa, this system has evolved into an accusative alignment system, but the original system was retained and further complexified in Abui. This indicates that alignment systems are not static

and can be modified and complexified over time by putting morphemes of an ancestor language into new uses and creating new forms, e.g. by adding symmetrical paradigms of person-indexing prefixes.

An interesting comparison can be made with the semantic alignment systems of the Papuan languages of North Halmahera discussed in Holton (2008). While there is evidence for syntactic alignment in proto-North Halmaheran, many of the modern North-Halmaheran languages have innovated semantic alignment (Holton 2008: 274–275). In the AP languages, the situation is the opposite: the semantic alignment is reconstructed for the proto-language, and the syntactic alignment in Teiwa is an innovation. The path of historical evolution of alignment system can therefore not be unidirectional (from syntactic to semantic alignment), but the evolution in both directions is possible, and facilitated by DOM (in Alor Pantar) and optional or pleonastic marking (in North Halmahera).

It seems that languages that have semantic alignment (or differential S marking) alongside DOM, such as Abui, tend to develop more complex systems of DOM than languages with accusative alignment, such as Teiwa.

In the development of their respective DOM systems, Teiwa and Abui underwent different morphological changes. The Proto-AP prefix *ga-* is reflected in the Teiwa prefix that encodes topics and animate Ps, as well as in Teiwa possessors. In Abui, this prefix is reflected as the PAT prefix and could be the source of the innovated prefixes as well (Klamer & Kratochvíl 2012). The PAT prefix is the most semantically bleached prefix of all five of the Abui P-prefixes, as it is obligatory for a semantically diverse class of verbs that makes up 10% of the total number of verbs investigated in Abui. Most of these verbs encode events describing various types of change (observable change, (loco)motion, physical impingement, going out of and coming into existence) – suggesting a relationship with affectedness. The Abui LOC and BEN prefixes feature the theme vowel /e/, reflecting the Proto-Alor Pantar possessive prefix *ge-* '3GEN', but in Teiwa no reflex of this prefix has been retained.

The proto-pronoun *ga(N)* that was used to encode A and S in Proto-AP is reflected in modern Teiwa as the free pronoun *ga'an*, but in Teiwa it encodes contrastive focused Ps. In Abui it encodes A, but the final nasal has been lost. Abui has also innovated a new prefix paradigm with a theme vowel /o/, and two additional paradigms by lengthening the vowel of existing paradigms. Apart from the use of reflexes of the Proto-AP object prefix *ga-*, very few similarities remain between the morphemes that are used in Teiwa and Abui DOM.

In sum, this study has shown that the evolutionary path of DOM from Proto-Alor Pantar into its daughter languages has both stable and unstable features. Stable features are the inherent semantic feature of humanness/animacy of P that is being coded, and the shape of the person prefix that is used in the coding. However, the semantic alignment system of Proto-Alor Pantar appears to be volatile, as it changed to accusative in Teiwa. This is not an unexpected result since alignment patterns are sensitive to morphological and phonological changes. Also, a language can develop additional triggers for DOM as well as the additional person markers that it needs to encode these additional types of

Ps alongside inflectional verb classes, as has happened in Abui. In general, the DOM triggers in Abui shifted away from being purely participant-related, to include event-related features (degree of affectedness) as well. The Alor Pantar languages show that alignment systems are not static: their forms and triggers may be modified and complexified quite substantially over time.

Acknowledgements

Abbreviations

1	person markers	GOAL	undergoer prefix paradigm (goal-like)
2	second person	INC	inchoative
3	third person	IND	Indonesian
AD	addressee-perspective	LNK	linker
AGT	agentive pronoun	LOC	undergoer prefix paradigm (location-like)
ANIM	animate		
AP	Alor Pantar	MD	medial
APPL	applicative	MOD	modal
ASSOC	associative	PAT	undergoer prefix paradigm (patient-like)
BEN	undergoer prefix paradigm (benefactive-like)		
CONT	continuative	PRIOR	priorative
DEM	demonstrative	PROX	proximate
DIST	distal	REC	undergoer prefix paradigm (recipient-like)
DISTR	distributive		
DOM	differential object marking	SEQ	sequential
EVID	evidential	SIM	simultaneous
FOC	focus	SPC	specific determiner
		TOP	topic

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