Word classes in Timor-Alor-Pantar and the Papuan region

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41.1 Introduction

This chapter describes the word classes of the Timor-Alor-Pantar (TAP) family of Papuan languages in eastern Indonesia, see Fig. 1 and 2. The TAP languages are an outlier "Papuan" group, located some 1000 kilometers west of the New Guinea mainland. The term Papuan is used here as a cover term for the hundreds of languages spoken in New Guinea and its vicinity that are not Austronesian (Ross 2005, 15), it says nothing about the genealogical ties between languages in that area. The TAP family constitutes some 25 languages, which belong to a number of subgroups as indicated in Fig. 3 below.

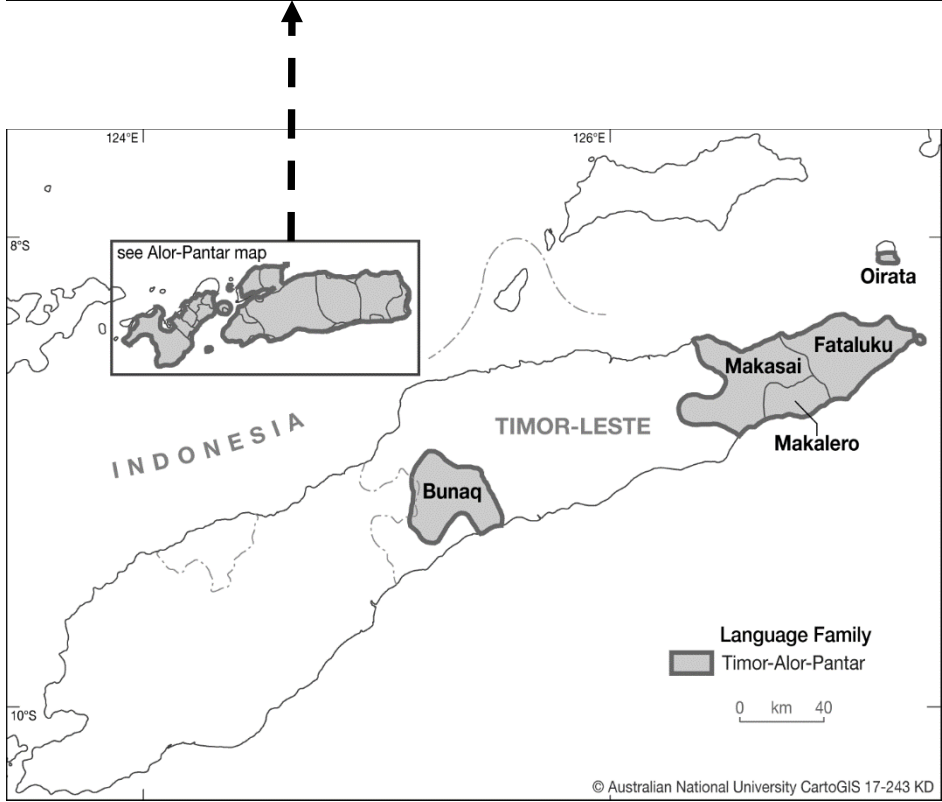Fig. 1. Location of the Timor-Alor-Pantar languages in Indonesia
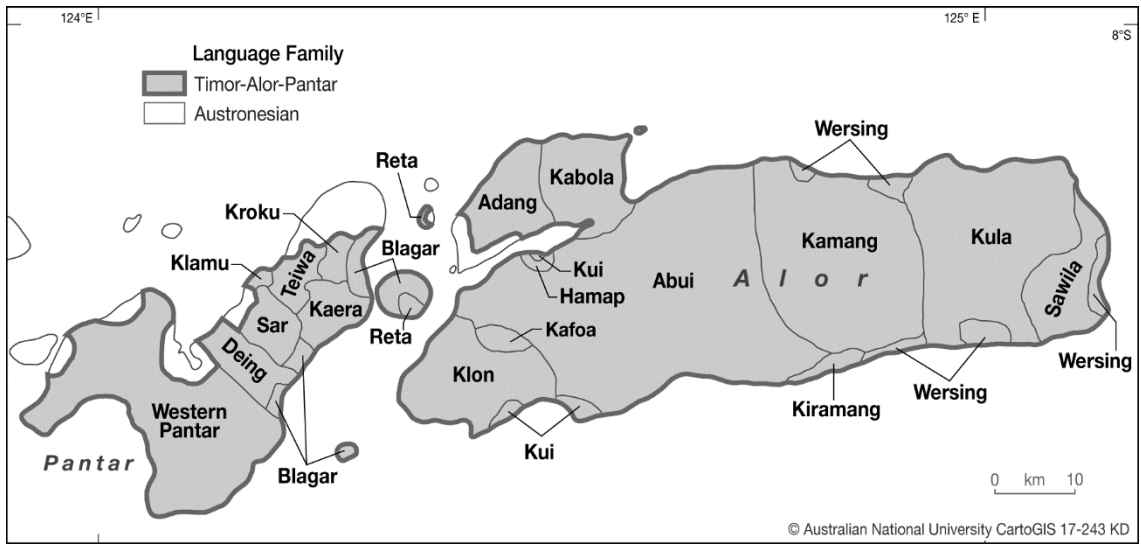
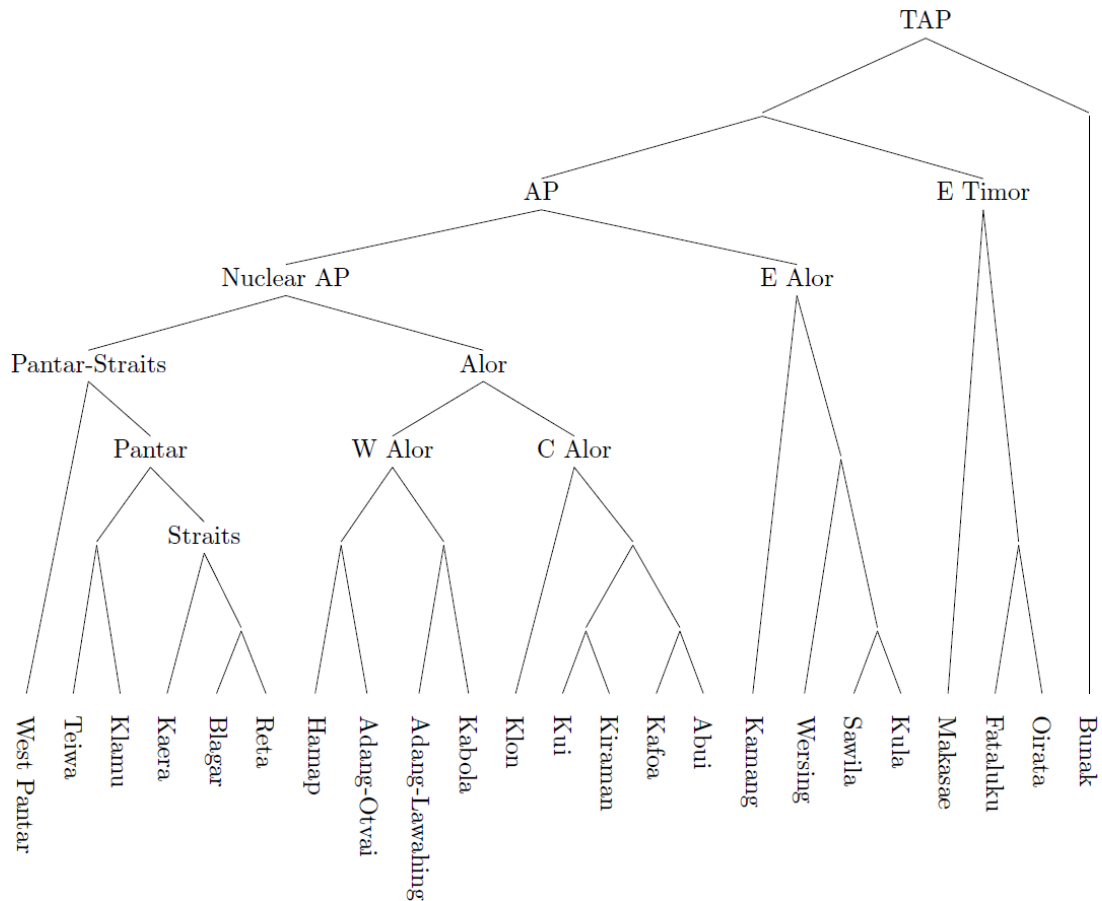Fig. 2. The Timor-Alor-Pantar languages

Fig. 3. A possible tree of the Timor-Alor-Pantar language family (Kaiping and Klamer, In press)

This chapter is based on a comparative study of a selection of TAP languages for which a descriptive grammar, or grammar sketch, exists. To ensure genealogical balance, I take into consideration languages from each of the subgroups in Fig. 3. From left to right in Fig. 3 (or West to East on the map in Fig. 2), the languages investigated here are: Teiwa or Kaera of the Pantar-Straits subgroup, Adang and Abui of the Alor subgroup, Sawila or Wersing of the East Alor subgroup, and Bunaq or Makasae/Makalero[1] of the Timor subgroup.

The chapter is structured as follows. In section 2-7 I discuss the salient characteristics of the verbs, nouns, adjectives, adpositions, adverbs and numerals in TAP languages. In section 8, I report on the category changing morphology and multifunctional words in TAP languages. In section 9, I show that despite the heavy dominance of the national language Indonesian, its influence on the lexicon of TAP languages remains limited. In section 10, I

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[1] Makalero and Makasai are closely related to the extent that they can be considered dialects; only Makasae is represented in Fig. 3.

place the observations about word classes in TAP against the background of other Papuan language families.

41.2 Verbs

Across the TAP languages, verbs can be clearly distinguished from nouns by their functional-semantic, distributional and morphological properties. Verbs canonically head VPs, function as predicates and take object prefixes, while nouns typically occur as heads of NPs, function as clausal arguments and take possessor prefixes. In (1), the verb *bun* 'answer' has a prefix that indexes the object *goqai* 'his child', and the object has a prefix indexing the person and number of the possessor *a* '3.SG'.

Teiwa (Klamer 2010, 168)

(1)   *Na   iman   g-ua'.*
        1.SG   3.PL   3-hit
        'I hit them.'

Word order in TAP is head-final: object NPs, adverbs and adjunct phrases typically precede the verb which occurs in clause-final position. In (2), the adverb *di* 'still' precedes the object NP *patara ma* 'rice' (lit. 'edible corn'), which in turn precedes the clause-final verb. In (3), the adverb *user-user* 'quickly' precedes the serial verb *bir bleling* 'run open' in the first clause, while the locational adjunct phrase *gom mi* 'at/from inside' precedes the verb *eserit* 'exit' in the second clause.

Sawila (Kratochvíl 2014b, 368)

(2) *Ni-ya   di patara ma   maana.*
     1.SG.II-mother   still corn   edible   FIN.cook
     'My mother is (still) cooking rice.' [N12.64]

Kaera (Klamer 2014, 111)

(3)   *Ilwang gang user-user bir   bleling [g-om   mi] eser-it...*
      Ilwang 3.SG RDP-quick run   open   3.SG.POSS-inside   LOC exit-IPFV
      'Ilwang quickly ran outside...'

Clausal negation is generally also final. The examples (4)-(5) from Bunaq illustrate a negated verbal and nominal clause. The other TAP languages spoken on East Timor (Makalero, Makasae and Fataluku) are exceptions to the general TAP pattern, having a pre-predicate negator.

Bunaq (Schapper 2009, 181)

(4)   *Hot   baq   no   zapal   ga-sasi   niq.*
         sun   noon OBL folktale.AN 3.AN-say   NEG
         'During the day (we) don't tell folktales.'[Bk-70.102]

Bunaq (Schapper 2009, 138)

(5)   *Nei   milisi   niq.*
         1.PL.EXCL militia NEG
         'We are not militia.'

Besides negative particles, clauses may also be negated using negative verbs found across the TAP family. An illustration is the negative existential Bunaq verb *hobel* 'not exist' in (6).

Bunaq (Schapper 2009, 204)

(6)   *En   waqen mar   hobel.*
         person PART   garden not.exist
         'Some people don't have gardens.'

Other negative verbs found in TAP languages include verbs denoting negative intention ('not want'), prohibition ('do not, should not, must not') and disability ('not be able to, not know'). The latter is illustrated with *paat* 'not know' in (7).

Teiwa (Klamer 2010, 263)

(7)   *Ha'an   tei   wrer-an   paat...*
         you   tree climb-REAL   not.know
         'You don't know how to climb a tree...'

Note that TAP languages do not use copular verbs, neither for equative clauses with non-verbal predicates, as illustrated in (5), nor for existential clauses. To assert the existence of a

referent in space or time, an existential verb is used, as illustrated in (8) (and a negative existential verb to negate such an existence, see (6) above).

Bunaq (Schapper 2009, 370)
(8)   *Gewal gene ewi   hati.*
         Kewar LOC   soldier exist
         'There are soldiers in Kewar.'

Across the TAP languages, the person and number of verbal arguments is expressed by free pronouns and/or verbal affixes. The examples (1)-(2) above illustrate a pronominal and nominal subject and object. The typical pronoun paradigm in TAP languages distinguishes three persons and singular from plural, and also has a two-way distinction in the first person plural (exclusive/inclusive), which is expressed by pronouns containing the consonants <n> and <p>. Very commonly, we find a theme vowel <a> for singulars and <i> for plurals, and a 'distributive' pronoun that refers to a (non-collective) plurality of human referents.

The TAP languages are typologically unusual (Siewierska 2013) in that they show a preponderance to index the person and number of transitive objects (P) on verbs, more than transitive and intransitive subjects (A/S) (Klamer 2017; Holton and Klamer 2017), although some languages also index S under certain conditions (this is discussed below). The indexing of P on the verb is found across Alor and Pantar but is less frequent in the TAP languages of Timor. Bunaq indexes only the person (not the number) of P. In Makalero/Makasae only some fossilized forms of an earlier P-indexing system remain (Huber 2017: 329).

P-indexing in the TAP languages is determined by a number of factors, one of which is the animacy of the referent. The animacy of P may determine whether it is indexed with a prefix on the verb or expressed as a free lexical NP or free pronoun. Animacy may also play a role determining which of several possible prefixes is chosen to express the P in the specific context at hand. The role of animacy in the indexing of P is illustrated for Abui in (9). In (9a) the inanimate P *kanai do* 'these pili nut(s)' is not indexed on the verb *bol* 'to hit', while in (9b) the animate (human body part) P *netoku* 'my leg(s)' is indexed refixed on *bol* 'to hit'.

Abui (Kratochvíl 2014a, 566)

(9) a. *Di   kanai   do   bol   took.*
　　　3.AGT 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 1.SG.POSS-leg 3.SG.LOC-hit 3.SG.LOC-beat.PFV   SIM
　　　'The *baloka* grass hit my legs slashing them...'

Animacy is found as a condition on P-marking across the TAP family, and shows interesting variation in how it plays out in the individual languages (Fedden et al. 2013; 2014; Holton and Klamer 2017; Klamer and Kratochvíl 2018). In addition, in an individual TAP language, the marking of P may be sensitive to additional semantic conditions, such as the semantically more narrow distinction between human and non-human referents, or the affectedness of P (see Klamer and Kratochvíl 2018 for discussion).

Most TAP languages have more than one prefix to encode P, and the semantic role of the object can determine which prefix is used. In (10) it is illustrated how different Abui prefixes may roughly correspond to semantically different Ps (Klamer and Kratochvíl 2018, 83–84). The Abui prefixes differ in vowel quality and vowel length, and in (10) they express respectively: a patient (10a), a location (10b), a recipient (10c), a benefactive (10d), or a goal (10e).[2]

Abui (Kratochvíl 2007, 592)[3]

(10) a. *Na   **ha**-ruidi.*
　　　1.SG.AGT 3.SG.PAT-wake.up.PFV
　　　'I woke him/her up.'

　　b. *Di   palootang   mi   **ne**-l=bol.*
　　　3.AGT   rattan   take 1.SG.LOC-give=hit
　　　'He hit me with a rattan (stick).'

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[2] Note also that some of the examples contain complex predicates that consist of two or more verbs forming a single phonological word, as in *l=bol* 'give=hit' in (9b) and *k=yai* 'throw=laugh' in (9c), where a verb may be shaped as just a single consonant (Klamer and Kratochvíl 2010).
[3] The 3SG object prefix in (10a) is erroneously glossed as 2SG in the source.

c. *Fanmalei **no**-k=yai.*

   Fanmalei   1.SG.REC-throw=laugh

   'Fanmalei laughed at me.'

d. *Ma   na   **ee**-bol.*

   be.PROX   1.SG.AGT   2.SG.BEN-hit

   'Let me hit [it] for you.'

e. *Simon   di   **noo**-dik.*

   Simon   3.AGT   1.SG.GOAL-prick

   'Simon is poking me.'

    Although the examples in (10) show rather transparent relations between the prefix and the semantic role of the argument it encodes, in most instances where different prefixes are used to index P in TAP languages, the relation between the form of a prefix and the semantic role it encodes is vague or indirect; or the semantic relation is lexicalized. Part of the reason for this is that P-indexing in TAP languages is also heavily determined by inflection classes of verbs, and inflectional class assignments are mostly idiosyncratic (Fedden et al. 2013; 2014).

    Verb classes reflecting different argument-indexing properties are found across the TAP family. For instance, Sawila has four inflectional verb classes (Kratochvíl 2014b, 407-418), of which class I-III are relatively large and class IV is small, only containing about a dozen verbs. Class I verbs do not index their arguments, except when they are morphologically derived with an inverse or an applicative prefix. Class II verbs index their subject (S/A) argument. Class III index their P argument. Class IV verbs are monovalent but index their S in variable ways. Other TAP languages with verb classes that are distinguished by the way they index their arguments are Teiwa (Klamer 2010, 87), Abui (Fedden et al. 2013; 2014), Makalero (Huber 2017a) and Bunaq (Schapper 2009, 338-352).

    The synchronic pattern of the 'differential' marking of objects attested across the TAP family has led to a reconstruction of two classes of bivalent verbs for proto-Alor Pantar (the first order sub-branch of TAP encompassing all the Papuan languages of Alor and Pantar, not those of Timor). One class consists of bound verb forms (e.g. **-wel* 'bathe someone') which

index P with a pronominal prefix; the other class consists of free verb forms (e.g. *nai* 'eat') which use a free form to index P (Klamer and Kratochvíl 2018).

In addition to the verbal indexing of P, the subject of a monovalent predicate (S) can also be indexed. When this is done, often a prefix is used that also functions as one of the P indexing prefix series, thus reflecting a 'semantic alignment' system (Mithun 1991; Donohue and Wichmann 2008; Klamer 2008). In such a system, the semantic features of the core argument (such as their more or less volitional involvement in the event encoded by the predicate) have an impact on the way they are marked (Holton and Klamer 2017, 598–99). Semantic alignment systems are found across Alor and Pantar, including Abui and Sawila (Klamer 2008; Kratochvíl 2011). Accusative alignment is confined to a smaller region covering parts of Alor and Pantar, including Teiwa and Adang; as well as the region of Timor (Klamer and Kratochvíl 2018). The Pantar language Kaera has accusative alignment in combination with some fossilized encoding of S of a small set of monovalent verbs, where a prefix is used that is otherwise used to index P (Klamer 2014a, 135–36). In (11), the intransitive verb *nimin* 'die' in the first clause has no subject prefix (as is the rule in Kaera), while the intransitive *waat* 'live' in the second clause is one of the verbs with an obligatory prefix indexing S. The prefix cannot be omitted, as shown by the ungrammatical example between brackets.

Kaera (Klamer 2014a, 136)

(11)   a. *N-uax   nimin-i   sei,   nang yedi n-waat.   (*Nang yedi waat.)*
         1.SG-child die-PFV   COMPL 1.SG still 1.SG-live 1.SG   still live
         'My child is dead already, I still live.'

On the basis of the geographical spread and the fossilized state of these S-prefixes in Kaera it has been hypothesized that semantic alignment was the original system of the Alor Pantar languages, from which the accusatively aligning languages diverged (Klamer and Kratochvíl 2018).

Besides pronominal prefixes, verbal inflectional morphology in TAP languages also includes suffixes encoding aspect. For example, in (11) above, *nimin-i* 'die-PFV' in the first clause has a perfective suffix; compare the imperfective suffix of *eser-it* 'exit-IPFV' in (3). In Abui, the coding of aspect may also cause verb stem alternations, as the Abui examples above show. Mood distinctions are encoded by suffixes indicating a realis-irrealis distinction in Teiwa (Klamer 2011) and Sawila (Kratochvíl 2014b). Overall, however, TAM morphology is

rather limited in TAP languages, and some languages, such as Adang and Bunaq, lack aspect and mood morphology altogether. Verbal markings of tense, active/passive voice morphology, and finiteness are lacking in all TAP languages.

Valency-changing verbal morphology is limited, and mostly confined to applicative prefixes, as illustrated in (12) (cf. the overview in Klamer 2018, 241). Most of the applicative prefixes historically derive from locational or deictic verbs in former serial verb constructions (see section 41.5), which would also explain why the applicative *u-* attaches outside of the object-verb combination in (12b).

Adang (Robinson and Haan 2014, 270)

(12) a. *Sa   na-tan.*
        SG.SBJ 1.SG.OBJ-ask
        'S/he asked me.'

    b. *Uli   lod   habar   ho   u-na-tan.*
        Uli   shirt   new   DEF   APPL-1.SG.OBJ-ask
        'Uli asked me about the new shirt.'

A few languages (including Adang and Kaera) have a causative prefix or suffix. All TAP languages express causation analytically, using serial verb constructions. Serial verb constructions are prevalent in TAP languages. Serial constructions are analyzed here as in Klamer (2010, 27–28): two or more verbs that occur together in a single clause under a single intonation contour which share minimally one argument that is expressed maximally once.

In the TAP languages, serial verb constructions are 'core-layer' serializations (Foley and Olson 1985). They are distinguished from bi-clausal constructions by the presence of a clause boundary marker (which can be a conjunction-like element, or an intonational break).

Verbs in serial verb constructions express notions such as purpose, manner, time, and direction; they encode modalities such as intention, obligation, imperative, hortative and ability; they encode aspect such as continuous, imperfective, and perfective, and they function to introduce additional participants with semantic roles including goals, sources, locations, instruments, and displaced themes. Across the family, such participant-adding verbs in serial constructions have developed, or are currently developing into postpositions and/or valency-changing verbal prefixes. In this grammaticalization process some verbs are attested in an 'intermediate' stage of formal defectiveness: they are phonologically reduced, have lost some

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of the typical verbal properties such as the ability to take person or aspect/mood inflections, and/or have undergone semantic bleaching (cf. Klamer 2018, and section 41.5 below).

As a result of the proliferation of verbs in many functional and semantic domains, classes of adverbs that express aspect, mood and manner adverbs are typically small in TAP languages. In case their etymology can be established it seems that historically, they often derive from verbs (see section 41.6).

Another salient feature of TAP verbs is that languages generally have intransitive and mono-transitive verbs, but no ditransitive verbs; and in case they do have a ditransitive, it is usually only the verb 'give'. Most often, however, three-participant transfer events are in TAP languages are expressed as mono-clausal serial verb constructions, illustrated in (13), where the first verb 'take' takes a theme P, and the second verb 'give' takes a recipient P. Alternatively, bi-clausal constructions involving two mono-transitive verbs may be used, as illustrated in (14), where the conjunction *ba* links the two clauses.

Abui (Klamer and Schapper 2012, 186-187)

(13)   *Hen seng   hu   mi   he-l-e.*
          3   money DEM take   3-give-IPFV
          'Give him just money.'

(14)   *Hen mi   ba   Lius   la   he-l-e.*
          3   take CONJ Lius   PART 3-give-IPFV
          'Just give that one to Lius.'

41.3 Nouns and pronouns

Noun inflection in TAP languages is simple. All languages mark person and number of possessors with nominal prefixes, but lack inflection for case or gender. All TAP languages divide the class of common nouns into nouns with an 'alienable' possessor and nouns with an 'inalienable' possessor. The class of alienable nouns generally includes all nouns, except those referring to body parts and kinship terms - those are typically inalienable. In all TAP languages, alienable and inalienable nouns are formally distinguished by having an optional vs. obligatory possessive prefix. This is illustrated in (15) where the possessor of the inalienable noun *fasu* 'skin' must be expressed either as a prefix (15a) or as a possessor noun (15b). In contrast, alienable nouns such as *sefar* 'dog' can occur with a possessor (16a) or without a possessor (16b).

Makalero (Huber 2017b, 317-318)

(15) a. *ki-fasu*
          3.POSS-SKIN
          '(its) skin, peel'

      b. *muʔu   fasu*
          banana   peel
          'banana peel'

(16) a. *Kiloo sefar=ee pase.*
          3.SG   dog=DEF hit
          'He hit the dog.'

      b. *...ki-sefar   potil=ee   hai   mutu-puna...*
          3.POSS-dog   bottle=DEF INITIAL inside-look
          '...his dog is looking into the jar...'

In most TAP languages, alienable and inalienable prefixes do not only differ in obligatoriness, but also occur in distinct configurations. For example, in Abui, the alienability distinction is encoded by a theme vowel in the possessor prefix: prefixes with the vowel *e* are alienable, as illustrated in (17a); prefixes with the vowel *a* are inalienable, as illustrated in (17b). Note that a third person possessor noun such as 'Daniel' in (17) precedes the possessed NP and forms a nominal phrase with it. The order possessor-noun is universal in the TAP family.

Abui (Saad, Klamer, and Moro 2019, 9)

(17) a. *Daniel   he-faling.*
          D.   3.AL-axe
          'Daniel's axe'

b. *Daniel   ha-min.*

D.   3.INAL-nose

'Daniel's nose'

In some TAP languages, including Teiwa and Abui (Klamer and Kratochvíl 2006), the possessive prefix paradigm shows formal similarities with the object paradigm. For example, in Abui, the possessive prefix *he-* '3.SG.AL' in (17a) is formally identical to the object prefix *he* '3.SG.LOC' in (9b), and the same is true for possessive *ha-* in (17b) and object *ha-* '3.SG.PAT' in (10a). The formal similarity in the encoding of *objects* and nominal possessors observed in TAP languages contrasts with the cross-linguistically more commonly observed similarity in the marking of *subjects* and possessors (Bittner and Hale 1996, 60).

Number is morphologically expressed on nouns in the TAP languages of the Timor branch, but not in those of Alor Pantar. Makasae has a nominal plural suffix *-la* (Huber 2008:14) (e.g. *asukai-la* 'man-PL'), while Makalero has different plural suffixes for kinship terms (*-raa*) and for other nouns (*-laa*) (Huber 2011, 236–37). Fataluku encodes plurality with an enclitic *=éré* on nouns (Heston 2015, 21). Bunaq nouns are generally unmarked for number, but nouns with human referents can be pluralized with =i 'HUM.PL', an enclitic that derives from the third person plural pronoun *hala'i* (Schapper 2009, 197-199). In the Alor-Pantar branch of the TAP family, the use of a plural word to encode nominal plurality is widespread (Klamer, Schapper, and Corbett 2017). There is good evidence to reconstruct a plural word *non for proto-Alor-Pantar (Klamer, Schapper, and Corbett 2017, 376-380). Some Alor-Pantar languages, such as Adang in (18), inherited both form and function from this proto-form, others innovated a new form for the plural word. The languages under investigation do not show restrictions on which referents can be marked plural with a plural word.

Adang (Robinson and Haan 2014, 252)

(18)   *Pen   ti   matɛ   nun   ʔa-bɔ-ʔɔi.*

P.   tree   large   PL   3.INCL.OBJ-cut

'Pen cut some large trees.'

For the expression of plural referents, TAP languages also use special sets of pronouns. Some, but by no means all, TAP languages have a set of dual pronouns alongside the singular and plural; languages with dual pronouns are Teiwa and Bunaq. The Bunaq free

pronouns given in (19) distinguish singular, plural and dual numbers, and have three persons, including an inclusive-exclusive distinction in both non-singular numbers. Instead of a 3SG personal pronoun Bunaq uses demonstratives (Schapper 2009, 90–91).

(19)   Bunaq free pronouns

	SINGULAR	PURAL	DUAL
1.EXCL	*neto*	*nei*	*neli*
1.INCL		*i*	*ili*
2	*eto*	*ei*	*eli*
3	--	*halaqi*	*halali*

There there are also languages with pronouns that refer to explicitly singular referents ('*x* alone'), illustrated with Adang *ilɔ* '2PL.ALONE' in (25). The paradigm of Teiwa '*x* alone' pronouns is given in (21). The Teiwa forms are derived from the root *qai* 'only, just' which is prefixed with a mix of object prefixes and short subject pronouns.

Adang (Robinson and Haan 2014, 265)

(20)   *(I)*   *ilɔ*   *sam don.*
         2.PL.SUBJ 2.PL.ALONE go   shop
         'You go shopping by yourselves.'

Teiwa (Klamer 2010, 83–84)

(21)   '*x* alone' pronouns in Teiwa

1.SG-only	*na-qai*	'I alone'
2.SG-only	*ha-qai*	'you (SG) alone'
3.SG-only	*a-qai*	'he alone'
1.PL.EXCL-only	*ni-qai*	'we alone (excluding you)'
1.PL.INCL-only	*pi-qai*	'we alone (including you)'
2.PL-only	*yi-qai*	'you (PL) alone'
3.PL-only	*i-qai*	'they alone'

Teiwa also has pronouns referring to entities that are in the company of others ('*x* and they'), (22) (where the base *iqap* has no independent meaning), and pronouns referring to groups of

particular numbers, (23) (where the base *man* also has no independent meaning). After a pronoun '*x* as a group of *y*', the number of *y* is given, as shown in (24) with *ut* 'four'.

Teiwa (Klamer 2010, 83)

(22) '*x* and they' pronouns in Teiwa

2.SG-and.they	*h-iqap*	'you (SG) and they'
3-and.they	*ø-iqap*	's/he/they and they'
1-and.they	*n-iqap*	'I/we (excluding you) and they'
1.PL.INCL-and.they	*p-iqap*	'we (including you) and they'
2.PL-and.they	*y-iqap*	'you (PL) and they'

Teiwa (Klamer 2010, 84)

(23) '*x* as a group of *y*' pronouns in Teiwa

1.PL.EXCL	*ni-man* y	'we (excluding you) as group of *y* numbers'
1.PL.INCL	*pi-man* y	'we (including you) as group of *y* numbers'
2.PL	*yi-man* y	'you (pl) as group of *y* numbers'
3.PL	*i-man* y	'they as group of *y* numbers'

(24) *Pi-man*   *ut*   *ina.*
1.PL.EXCL-man   four   eat
'The four of us (not including you) eat'

41.4 Adjectives

In many TAP languages, property-denoting words are not distinguished as a class separate from intransitive stative verbs. This includes Adang (Robinson and Haan 2014, 249), Sawila (Kratochvíl 2014b, 381), Makalero (Huber 2017a, 293) and Bunaq (Schapper 2009, 83). These TAP languages show similarity to Austronesian languages, where adjective-like words are also typically classed with stative verbs (Robinson and Haan 2014, 252). Among the TAP languages that have adjectives, there are languages with a large class of adjectives, or a small class of adjectives to which no new members can be added. Languages like Teiwa have a large class of adjectives which can be used as modifiers and predicates, compare the use of *qa'an* 'black' in (26a-b). Teiwa adjectives are distinct from verbs in that adjectival predicates do not take a realis suffix, as shown in (26c), while verbal predicates do (Klamer 2010, 116–21). Adjectives also frequently occur with a possessor prefix, (26d). Such formally derived

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nominals can be used as nominal attributes, (26d), and as independent nominal expressions, (26e) (cf. section 41.3). The use of possessive prefixes on adjectives is different from the use of possessive suffixes on nouns: on adjectives, the prefix functions to derive nominals and mark a 'part-whole' relation, as in constructions like (26d), while on underived nouns, the affix refers to possessors but is not used to encode 'part-whole' relations in nominal compounds, as shown in (27).

Teiwa (Klamer 2010, 413, 120, 75)

(25)   a.   *Mauqubar   qa'an.*
             frog   black
             'A black frog'

       b.   *Mauqubar   la   qa'an.*
             frog   FOC   black
             'A frog that is black'

       c.*   *Mauqubar   la   qa'an-an.*
             frog   FOC   black-REAL
             'A frog that is black' (constructed from field notes, cf. Klamer 2010, 120)

       d.   *Mauqubar   ga-qa'an.*
             frog   3.SG.POSS-black
             'Of the frogs the black one'

       e.   *Ga-qa'an.*
             3.SG.POSS-black
             'The black one'

(26)   *batar   (*ga-)bag;   batar   (*ga-)kir*
             corn   (3.SG.POSS-)seed   corn   (3.SG.POSS-)ear
             'corn seed(s); corn cob(s)'   (cf. Klamer 2014b, 145)

     In Abui, there is a small class of six adjectives, *akan* 'black', *kul* 'white', *abet* 'young', *maek* 'young', *dakun* 'dirty' and *san* 'clean' (Kratochvíl 2007, 101–2). Abui

adjectives are differentiated from the stative verbs by their distinct distributional properties: they may only occur as adnominal modifier and cannot head a predicate. Most other property-words in Abui are classified as stative verbs.

41.5 Adpositions

Overall, adpositions are rare in TAP languages. In most languages that have synchronic adpositions, the adpositions are etymologically related to verbs. This is illustrated for Adang in (29). In (29a), *mi* functions as a postposition, in (29b), *mi* is a transitive locational verb with the object *baang* 'house', and in (29c), the function of *mi* is ambiguous: it can either be analysed as the transitive locational verb *mi* in a serial verb construction with *ʔArabah* as its object, or as a postposition, as the gloss indicates.

Adang (Robinson and Haan 2014, 235-236; Haan 2001, 403;)

(27) a. *Aru banary mi.*
       deer forest in
       'There are deer in the forest.'

    b. *Roni ip-   l-   e   baang mi.*
       R.   go.down- DIR- DIST   house be.in
       'Roni is down there at the house.'

    c. *Na   ʔArabah mi mih.*
       1.SG.SUBJ Kalabahi in   sit/live
       'I live in Kalabahi.'

Additional examples of transitive locational verbs are given in (27)-(28). In (27), the P is *ita'a* 'where' and *uyan* 'mountain', in (28), the P is *lemari* 'closet'.

Teiwa (Klamer 2010, 69)

(28)   *Lius ita'a me'? A   uyan   me'.*
       Lius where be.in 3.SG   mountain be.in
       'Where is Lius? He is in the mountains.'

Kaera (Klamer 2014a, 118)

(29)   *Ne-na   xas-i   ula lemari   ming.*

         1.SG-thing   split-PFV   FOC closet (IND)   be.at

         'My clothes (lit. split things) are in the closet.'

Adang *mi,* Teiwa *me'* and Kaera *ming* are all modern reflexes of the proto-TAP locational verb *mi 'be in, be at'. Reflexes of this proto-verb are found in ten languages across the TAP family, and these reflexes occupy different points on the continuum locative verb > locative postposition > applicative verbal prefix (Klamer 2018).

Another verb that has developed adpositional functions in some TAP languages is proto-TAP *ma 'come (here, to deictic centre)'. The verb has modern reflexes as main and serial verb in thirteen TAP languages, and evolved into a postposition/enclitic in three of them. The semantics of the original TAP verb *ma combine a motion with a deictic component. The Teiwa reflex of this verb is illustrated in (32).

Teiwa (Klamer 2010, 326)

(30)   *Ha'an la   ma   le   na'an la   wa?*

         2.SG   FOC   come   or   1.SG   FOC   go

         'Are you coming (to me) or am I going (to you)?'

When the verb grammaticalizes into an adposition, the semantic motion component gets 'bleached' and only its deictic semantics survive (Klamer 2018, 246–49). Such forms developed adpositional functions that 'flag' oblique arguments such as goals, benefactives, sources, instruments or themes; the Teiwa examples in (33)-(34) illustrate how *ma* 'come' flags a goal and a benefactive.

Teiwa (Klamer 2010, 334)

(31)   *A   ta   war upar   ma   ga-ayas.*

         3.SG TOP rock pebble   come   3.SG-throw.at

         'He throws pebbles at him.'

(32)   *Xa'a   ma   ha-bif   ga-mai.*

         this.one   come   2.SG.POSS-younger.sibling   3.SG-save

         'Save this for your younger sibling(s).'

There are far fewer languages showing the grammaticalization continuum from verb to adposition for TAP *ma 'come' than there are showing this continuum for TAP *mi 'be in, be at'. The reason for this difference likely lies in the different semantic composition of the two verbs. It is easier to develop the original locational verb *mi 'be in, be at' into a locational adposition because it requires less semantic bleaching than the deictic verb *ma 'come'. The latter contains information on both movement and location, and the entire movement component must be bleached from its verbal semantics in order for it to function as a locational adposition.

The third example of grammaticalization of verbs in the TAP family is the development of the handling verb *med 'take'. Reflexes of this verb are found in twelve TAP languages. In all languages the verb occurs frequently in SVCs that express 'give events' and consist of reflexes of *med 'take' and *-en(a/i) 'give', as shown for Abui in (13). In such constructions, both verbs are monotransitive; the verb 'take' takes the transferred object as its complement, and the verb 'give' has the recipient as complement.

Grammaticalization of verbs into postpositions and affixes is common in TAP languages because the grammar of the languages allows it: objects precede the predicate, locations and directions are typically expressed as arguments of locational and deictic verbs; locations, directions, instruments, goals, sources, and comitatives precede the major verb in a serial verb construction; and there is an overall prevalence for such serial verb constructions. Furthermore, there is little verb morphology indicative of the categorical status of verbs, so that in a serial construction the first verb can easily be reinterpreted as an oblique marker and grammaticalize as a prefix on the V2, as was illustrated in (12b).

In sum, most TAP languages have only a few synchronic adpositions, and typically, these are etymologically related to locational, deictic or handling verbs. In addition, locations in TAP languages may also be expressed with locational nouns in possessive constructions. For example, in (30), the locational noun *siban* 'behind' is grammatically possessed by the 'ground' *axala'* 'his/its mother'.

Teiwa (Klamer 2010, 118)

(33) *Bif   g-oqai   un   a-xala'   ga-siban   ma   o'on.*
      child 3.SG.POSS PROG 3SG.POSS-mother 3SG.POSS-behind   come hide
      'Her child is hiding behind its mother.'

41.6 Adverbs

Since the class of verbs dominates many functional and semantic domains in TAP languages (section 41.2), classes of aspectual, modal and manner adverbs are typically small. The grammars and sketches currently available do not provide sufficient information on adverbs to describe patterns that apply across the TAP family.

41.7 Numerals

In the TAP family, the AP branch reflects a typologically rare combination of mono-morphemic 'six' with quinary forms for numerals 'seven' to 'nine', a pattern which can be reconstructed to go back to proto-AP (Schapper and Klamer 2017). Illustrations are given in Table 1. A second strategy of creating numerals 'seven' through 'nine' found in the AP languages is subtraction (e.g., [10-3] for 'seven', [10-2] for 'eight', [10-1] for 'nine'). Adang applies this subtractive system (Schapper and Klamer 2017, 290-294) and is thus lacking from Table 1. The TAP languages of the Timor branch have a decimal system.

Table 1. Numerals 'seven' to 'nine' in AP languages (Schapper and Klamer 2017, 288)

	'seven' **5 2**	**'eight'** **5 3**	**'nine'** **5 4**
Teiwa	*jesraq*	*jesnerig*	*jesnaʔut*
Kaera	*jesrax-*	*jentug*	*jeniut*
Abui	*jetiŋajoku*	*jetiŋsua*	*jetiŋbuti*
Sawila	*jo:tiŋjaku*	*jo:tiŋtuo*	*jo:tiŋara:siiku*
Wersing	*wetiŋyoku*	*wetiŋtu*	*wetiŋarasoku*

41.8 Category-changing derivation

Category-changing derivation is sparse in TAP languages. For Adang, Abui, Sawila, and Bunaq no category-changing morphology has been observed. In Teiwa, adjectives, adverbs, question words and verbs can be nominalised with a possessor prefix (Klamer 2010, 29, 76, 86), but besides possessive prefixes, the language has no dedicated nominalising morphology. In Makalero/Makasai a few unproductive derivational suffixes can be identified, illustrated in (35). Morphology deriving verbs from other word classes appears to be absent in the TAP languages.

Makalero/Makasai (Huber 2017b, 289)

(34)	Makalero	*nua*	>	*nua-ini*	'food'
		eat		eat-NMLZ	
	Makasai	*paʔ*	>	*paʔ-ini*	'everything related to sewing'
		sew		sew-NMLZ	
	Makalero	*ʔuri*	>	*ʔuri-ʔ*	'to brush'
		brush(n.)		brush-VBLZ	
	Makasai	*wali*		*wali-ʔ*	'to hear'
		ear	>	ear-VBLZ	

41.9 Relative frequency of Indonesian loans across the word classes

All the TAP languages are currently under dominance of Indonesian, the national language of Indonesia used in education and the media. The dominance of Indonesian is a relatively recent phenomenon which started with the establishment of Indonesian schools in the 1960's and 1970's.[4] In East Timor, many adult speakers of TAP languages also speak Indonesian, as Indonesian was the language of education in Timor Leste since 1976 until it became independent from Indonesia in 2002. Today, Indonesian is still used in contacts between people from Timor Leste and people in West Timor and other parts of Indonesia. Given the dominant role of Indonesian in the TAP region over the last 40 years, the question can be asked whether, and if so, how this contact has influenced the word classes of TAP languages. In particular, what is the relative frequency of Indonesian loans across the various word classes of the TAP languages?

Using the data in the lexical database LexiRumah (Kaiping, Edwards, and Klamer 2019; Kaiping and Klamer 2018) with word lists from 42 TAP varieties (i.e. both dialects and languages), we filtered the word lists of these TAP languages for those words that are identical or very similar to Indonesian words in both form and meaning. Such words we identified as Indonesian loans. Out of a total of 23,247 words, we found 212 possible Indonesian loans. The avarage number of items on each word list is 553 and the number of

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[4] Note that on Alor and Pantar, in places like the capital Kalabahi, a local variety of Malay referred to as Alor Malay was already spoken before the advent of Indonesian. Alor Malay is similar to the Malay variety spoken in the provincial capital of Kupang on Timor island. Malay has been the lingua franca in eastern Indonesia for centuries. Because of the lexical similarities between Malay and Indonesian, current speakers on Alor and Pantar consider Alor Malay as the colloquial variety of standard Indonesian, even though the two languages have very different histories.

loans in each variety range from 1 – 20 loans per list, so on average the lists contain less than 3.6% Indonesian loans.

Among the loans, nouns are the majority. Indonesian nouns were borrowed 155 times, denoting 49 concepts; followed by 23 verbs denoting 12 concepts, and 16 adjectives denoting eight concepts. Nouns that were borrowed in five or more language varieties are given in Table 2, verbs and adjectives that were borrowed in three or more varieties are given in Table 3.

Table 2. Indonesian nouns borrowed in five or more TAP varieties

(35)	English	Indonesian	Borrowed in N varieties
	cookhouse, kitchen	*dapur*	11
	jackfruit	*nangka*	12
	lamp	*lampu (< orig. Dutch lamp)*	7
	candle	*lilin*	7
	rope	*tali*	7
	market	*pasar*	8
	window	*jendela (<orig. Portuguese janela)*	8

Table 3. Indonesian verbs and adjectives borrowed in three or more TAP varieties

(36)	English	Indonesian	Borrowed in N varieties
	worship	*bersembayang*	6
	poor	*miskin*	5
	same	*sama*	4
	fold	*lipat*	3
	learn	*belajar*	3

Temporal expressions were borrowed in ten varieties (eight times *tahun* 'year', two time *jam* 'hour), numerals in seven varieties (four times 'three' and three times 'five'), and the conjunction *kalau* 'if' was present in the word list of four varieties.

What this shows is that, overall, borrowing of Indonesian word appears to be very limited in the word lists of TAP languages. Of the content words, nouns are more frequently borrowed than verbs and adjectives, and only a few borrowed temporal nouns, numerals and conjunctions occur. Given the low rate of lexical borrowing, we do not expect to see much Indonesian influence on the word classes of TAP languages.

41.10 Discussion: Word classes in TAP and other Papuan families

In this section, I place the word classes of TAP languages against the background of other Papuan languages. I compare the TAP features discussed above with those that have been suggested as characteristic for Papuan languages in general (Foley 2000; 2017; Aikhenvald and Stebbins 2007) or Trans New Guinea (TNG) in particular. The comparison with the TNG family is especially relevant because in earlier literature, the TAP family has been hypothesized to be a sub-branch of the TNG family (Wurm, Voorhoeve, and McElhanon 1975; Ross 2005). Historical comparative research has not yet found sufficient lexical evidence to support such an affiliation, so that in the absence of such evidence, the TAP languages are presently assumed to form an independent genealogical unit (Holton et al. 2012; Holton and Robinson 2017). In this section, I mostly use Foley (2017) as the reference to Papuan typology in general, and Fedden (To appear) as the most up-to-date survey of the properties of TNG languages. In what follows, I first discuss the commonalities between TAP languages and those of the TNG family, followed by a discussion of the differences.

In terms of syntax, TAP languages are right-headed, with SPV/AV word order and postpositions, as most other Papuan languages, including the TNG languages. TAP languages also agree with Papuan languages in general, and TNG languages in particular, by having a clear distinction between verbs and nouns, and having verbs as the morphologically most complex word class. Verbs in TNG languages are frequently sorted into inflection classes, just like we find for TAP languages.

Much of the verbal complexity in Papuan languages comes from inflections for modal distinctions like realis and irrealis, object and/or subject marking, and valency-increasing derivational processes, such as causatives and applicatives. Applicative constructions add arguments by making benefactive, comitative, locative or temporal adjuncts into objects of the verb. This is also true for TAP languages. Besides using valency-increasing derivational morphemes, Papuan languages, including TNG and TAP, also express causative and applicative functions by verbs in serial verb constructions, or by using morphemes that are transparently derivable from such earlier verbal uses. Serial verb constructions are also employed to encode aspectual distinctions.

The great majority of the Papuan languages with pronominal agreement affixes for both subject and object arrange them according to an accusative alignment, though some Papuan languages have semantic alignment, an agreement system that is sensitive to the semantic notions of agent versus patient. In the TAP languages, we find accusative alignment,

while semantic alignment may have been the original alignment system of the AP branch of the TAP family.

In many Papuan languages that have a verb meaning 'give', this verb is mono-transitive. In constructions with three arguments, TNG languages in particular realize the theme (the object that is transferred) as the complement of another predicate in a serial verb construction, or as the complement of an adposition; and this is also observed in TAP languages. In those Papuan languages that have object agreement, it is the recipient that is expressed as the object affix on the 'give' verb, not the theme (cf. Reesink 2013).

Nouns in Papuan languages are commonly uninflected for number, as they are in most TAP languages. In TNG languages, nominal inflection for only the possessor can be found, and most TNG languages make a formal distinction between alienable and inalienable possession, where the inalienable nouns include kinship terms and body part nouns. As in TAP, the typical TNG pattern involves obligatory inflection of the possessed noun for the person and number of the possessor, while the forms used are often similar to the pronominal prefixes that index objects on verbs.

Turning now to the differences between TAP and other Papuan languages, including Trans New Guinea languages, we observe the following. The majority of Papuan languages has at least subject verbal agreement, which can be expressed as suffixes or (less frequently) as prefixes. Typical TNG languages have subject suffixes, while their objects can be either suffixes, prefixes, or not indexed on the verb. The pattern of TAP languages, with their pervasive object prefixes and only occasional subject prefixes is thus quite distinct from patterns in both TNG and Papuan languages in general. But TAP languages do share with TNG languages that if object affixes are used, these are typically associated with animate referents.

The typical Papuan and TNG pronoun paradigm distinguishes three persons, and singular from plural number. TAP pronoun paradigms are more elaborate, including a separate distributive pronoun, and pronouns distinguishing clusivity. An inclusive-exclusive distinction in pronouns is not commonly found in TNG languages.

Papuan languages, including the TNG family, can have elaborate tense systems. Particularly in past tenses one often finds multiple distinctions, for example a general past, a near past, a hesternal (yesterday's) past, a non-hodiernal (not today's) past and a remote past (e.g. in Mian, Fedden 2011). In sharp contrast to this, TAP languages do not inflect for tense. Another difference is that in TNG languages, negation is often done by means of a verbal prefix or proclitic, while in TAP, clauses are negated by post-verbal negators.

In the nominal domain, gender is a very common grammatical category in Papuan languages, with often a binary contrast between masculine and feminine. However, in both TNG as well as TAP languages, a gender distinction is uncommon, and languages often lack gender marking on nouns altogether. Papuan languages in general, and TNG languages in particular, mark core arguments with person indices on the verb, while using a range of case markers for peripheral arguments such as locations, goal, sources, and instruments. TAP languages generally lack case marking on nominal constituents.

Concerning the class of adjectives, no generalizations can be made that apply across the Papuan sphere: 'Some languages have a distinct class of adjectives, while others – subsuming the words denoting qualities and properties into the classes of nouns and verbs – do not' (Foley 2017, 896). TNG languages typically have sizable classes of adjectives, although languages with smaller sets of adjectives are also attested. In amny of the TAP languages there is no separate class of adjectives, and property concepts are expressed as stative verbs.

TNG languages show a wide range of numeral systems, but the most widespread type in TNG is a restricted system with numerals only for 'one' and 'two' (Pawley and Hammarström 2017, 128). In contrast, the most widespread numeral system in TAP is a quinary system.

In sum, the word classes in TAP languages share many morphological features with Papuan languages in general, and with TNG languages in particular. At the same time, there are also some significant differences between TAP languages and other Papuan languages. These differences relate to the position of subject and object affixes, the shape and place of negation, the form of pronominal paradigms, the lack of marking for tense, gender and case, and the use of quinary numerals in TAP.

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