# A typological overview of Mwotlap, an Oceanic language of Vanuatu

ALEXANDRE FRANÇOIS

#### Abstract

The typologist reader is presented here with an overview of the most interesting characteristics of Mwotlap, an Oceanic language of Vanuatu. After a short presentation of its phonology, its main morphosyntactic categories are described and explored from a functional angle. The construal of noun phrases reveals a cognitive asymmetry between human individuals and other referents. Nouns, just like verbs or adjectives, are predicative, and are even sensitive to tense-aspect-mood markers and actionality properties. The argument structure of a verb can regularly be affected by its modifiers. Finally, deictics can be shown to play a major role in the structuring of discourse and complex sentences. Whenever relevant, the grammar of Mwotlap is briefly compared to other languages, and assessed in the light of existing typological generalisations.

Keywords: actionality, animacy, aspect, clause combining, deixis, Mwotlap, negation, number, incorporation, Oceanic, possession, predication, pronoun, referentiality, serial verbs, valency change, vowel harmony

## 1. Introduction

Among the hundred or more Oceanic languages spoken today in the Republic of Vanuatu, Mwotlap is still well alive, being spoken by a dynamic population of 2,000 speakers of all ages. Apart from those who live in Vila, where the Bislama pidgin is threatening the vernaculars, the majority of Mwotlap-speaking people reside on their tiny island of Motalava, in the north of the archipelago. Their way of life, which combines subsistence agriculture and fishing, essentially perpetuates the culture of their Austronesian ancestors who first peopled these rainforest islands about 3,200 years ago. The slow introduction of Western education and economy has had limited impact upon daily life thus far;

## 116 Alexandre François

but the ancient social organisation and political institutions have been largely ruined by the Christian missionaries over the last 150 years, to such an extent that most of the knowledge regarding the traditional society now only survives in the memory of a few.

This paper aims at providing typologists with a synthetic view of Mwotlap grammar (François 2001b, 2003a). For present purposes, we will confine ourselves to the principal wheels of the system and focus on the characteristics that make this language typologically unusual. Although Mwotlap obviously shares a number of properties with other languages of the Oceanic family (Lynch et al. 2002), we will have to keep such comparisons to a minimum, for this might lead us beyond the scope of this presentation. Likewise, the historical dimension will have to be omitted, so that Mwotlap will only be described synchronically. Whenever useful, references to other relevant publications will be given.

After a review of its most salient phonological properties (Section 2), the following sections will describe the main regularities of the morphosyntax, as well as the semantic categories and functional motivations they reveal: in the domain of noun phrases (Section 3), in TAM-marked verb phrases and other forms of predicates (Section 4), in the managing of arguments (Section 5), and in the general organisation of the sentence (Section 6).

## 2. Phonology

## 2.1. Phoneme inventory

Crosslinguistically, labiovelar obstruents may consist of a combination of velar plosive plus labiovelar glide, as  $[k^w]$ ,  $[g^w]$  in Proto-Indo-European; labial plosive plus labiovelar glide, as  $[b^w]$ ,  $[m^w]$  in many Oceanic languages; or labiovelar plosive without glide, as [kp], [gb], [nm] in many languages of Central Africa. Mwotlap illustrates the maximal combination, with labiovelar plosive plus labiovelar glide, namely  $[kp^w]$  and [nm]. The now extinct dialect of Volow even had a more complex phoneme, a prenasalised voiced labiovelar stop [nm] [nm].

<sup>1.</sup> Mwotlap syllables have the form (C)V(C): see Section 2.2.2.

	labiovelar	bilabial	alveolar	velar	glottal
voiceless stops	$\widehat{kp}^w$		t	k	
prenasalised voiced stops		$^{m}b$	$^{n}d$		
fricatives		β	S	Y	h
nasals	$\eta \widehat{m}^w$	m	n	ŋ	
lateral			l		
glides	W		j		

Table 1. The consonants of Mwotlap

Vowels form a symmetrical system with seven members:  $/i \text{ I } \epsilon$  a  $\circ \text{ u } \text{ u/}$ , all short. Mwotlap lacks long vowels or diphthongs, as well as tones. All words, or phrases, are stressed on their final syllable.

#### 2.2. Main phonological rules

The phonology of Mwotlap is dominated by various forms of distance assimilation between vowels.

2.2.1. *Vowel harmony*. The Advanced Tongue Root (ATR) feature is involved in the contrast between [+ATR] /i/-/u/ on the one hand, and their [-ATR] counterpart /i/-/v/ on the other hand. Mwotlap is developing a form of [ATR] vowel harmony (François 1999; 2001b: 94, 472), which is unusual in the Oceanic area.

Indeed, the morphology of inalienable possession (see Table 3 and Section 3.2.3) involves two stems. Stem 1 combines with 1sG suffix -k, and ends with a vowel other than /a/, e.g., /kpw rlyg-k/ 'my father-in-law', /mɔju-k/ 'my uncle'; stem 2 combines with 3sG suffix -n, and always involves a final vowel that is one step lower than stem 1: thus /kpw rlyg-n/ 'his father-in-law', /mɔju-n/ 'his uncle'. Now, the rule for vowel harmony applies to those lexemes – in fact no more than ten – whose stem 1 displays two high [+ATR] vowels /i/ or /u/ in the last two syllables. In this case, the lowering of the final vowel from [+ATR] /i/ or /u/ to [-ATR] /i/ or /u/ contaminates the preceding syllable(s). This amounts to a form of leftward [ATR] harmonisation, e.g., /inti-k/ 'my child'  $\rightarrow$  /ntt-n/ 'his child'; /ni-nini-k/ 'my shadow'  $\rightarrow$  /nr-nunr-n/ 'his shadow'; /n-ulsi/ 'top (of)'  $\rightarrow$  /n-ulsi-n/ 'its top'.

Note that this rule does not operate in the other direction. For example, the [-ATR] stem  $2/n\upsilon-y\upsilon j\underline{\iota}-n/$  'its root' corresponds to a heterogeneous stem  $1/n\upsilon-y\upsilon ji/$  'root (of)', not \*/nu-yuji/. In other words, [-ATR] is the active value in this pattern of vowel harmony. Mwotlap therefore contradicts the general

tendency observed in Africa (Casali 2003: 356), that a /i I  $\epsilon$  a  $\upsilon$  u/ system should typically result in [+ATR] dominance.

*Vowel epenthesis and vowel copy* Also noteworthy in Mwotlap is the set of rules derived from phonotactic constraints. The only acceptable syllable pattern is (C)V(C). This implies that clusters of two (and no more) consonants are common within the word, but impossible in both word-initial and word-final position. Consequently, a root whose underlying form begins with C<sub>1</sub>C<sub>2</sub>V<sub>i</sub>- must undergo vowel epenthesis whenever C<sub>1</sub> coincides with the word boundary:  $C_1C_2V_{i^-} \rightarrow C_1V_iC_2V_{i^-} / \#_{\underline{\phantom{a}}}$ ; e.g., #mtij  $\rightarrow [mitij]$  'sleep';  $\#\beta lay \rightarrow [\beta alay]$  'run'. But this epenthesis is unnecessary when the  $C_1C_2V_{i-1}$ root takes a prefix of the form CV, like Perfect /m $\varepsilon$ -/: m $\varepsilon$ - + mtij  $\rightarrow$  [m $\varepsilon$ mtij] 'slept';  $m\varepsilon$ - +  $\beta lay \rightarrow [m\varepsilon play]$  'ran'. A corollary of this mechanism is its demarcative function: it helps locate the word boundary, and therefore provides a test to distinguish between compound words and phrases, as well as between affixes and clitics. For example, the single phonological word [na-pnv] 'a/the village' shows the nominal article to be an affix (prefix na-, see Section 3.2.1), whereas the sequence [nε βυηυ] 'of the village' must be analysed as two distinct phonological words, the preposition /nɛ/ 'of' being a clitic.

Besides epenthesis, the morphology of prefixes is characterised by pervasive rules of (i) vowel elision (e.g., /na-/ + /ɛt/  $\rightarrow$  [n-ɛt] 'person'; /mɛ-/ + /ak/ 'do'  $\rightarrow$  [m-ak] 'has done'); (ii) vowel copy (e.g., /na-/ + /yom/  $\rightarrow$  [no-yom] 'sickness'; /mɛ-/ + /yom/  $\rightarrow$  [mo-yom] 'got sick'); and (iii) vowel transfer (/na-/ + /βthoy/  $\rightarrow$  [nr-phoy] 'flesh'; /mɛ-/ + /liwo/ 'big'  $\rightarrow$  [mi-lwo] 'increased'). These rules, which cannot be detailed here, are best analysed in a multi-linear framework, resorting to such notions as "syllabic template" and "floating vowels" (François 2000a, 2001b: 96–128).

In the following sections, Mwotlap forms will be cited employing the orthography in use. The conventions include the following:  $e = [\varepsilon]$ ;  $\bar{e} = [\tau]$ ;  $o = [\upsilon]$ ;  $\bar{o} = [\upsilon]$ ;  $y = [\eta]$ 

#### 3. The mechanics of reference

In order to provide a predicate with its arguments, a preposition with its complement, or a possessed item with its possessor, one needs to refer to entities. This is done essentially by means of personal markers (Section 3.1) and noun phrases (Section 3.2).

#### 3.1. Pronouns and personal markers

3.1.1. *The main paradigms*. The distinction between inclusive and exclusive 1st person, combined with the use of four numbers (singular, dual, trial, plural), is the reason why Mwotlap possesses as many as fifteen combinations

	SINGULAR	DUAL	TRIAL	PLURAL
1INC 1EXC 2 3	no ~ nok nēk kē	dō ∼ dōyō kamyō kōmyō kōyō	ēntēl ~ dētēl kamtēl kēmtēl kēytēl	gēn kem ~ kemem kimi kēy

Table 2. The personal pronouns of Mwotlap

of person and number. No gender distinction of any kind is made in the morphology of this language. These fifteen categories are then distributed into several paradigms of markers according to their function. The principal set is that of simple personal pronouns (Table 2), which fill the slots of subject, object, complement of preposition:

(1) No m-et kōyō; kōyō m-et no. 1sg pft-see 3du 3du pft-see 1sg 'I saw them, and they saw me.'

Mwotlap follows a strictly nominative–accusative syntax, with SVO as the basic constituent order. In the absence of case marking, the function of the core arguments is only indicated by their position in the sentence.

Special emphatic forms, phonologically heavier (e.g., *ino* 1sG, *inēk* 2sG,  $(i)d\bar{o}y\bar{o}$  1INC.DU), must be used in the positions of topic, predicate, or focus:

(2) Et-in $\bar{e}k$  te, ino no ta-dam qiyig  $k\bar{e}$ . NEG<sub>1</sub>-2SG.EMPH NEG<sub>2</sub> 1SG.EMPH 1SG HF<sub>1</sub>-follow HF<sub>2</sub> 3SG (lit.) 'It's not you, (it's) me (who) will go with her.'

There is no reflexive or reciprocal<sup>2</sup> pronoun. The ordinary pronouns are used in all cases, with resulting ambiguity:

- (3) Kōyō mu-wuh mat kōyō.
  3DU PFT-hit dead 3DU
  - (i) 'They<sub>i</sub> killed them<sub>i</sub>.' (different participants)
  - (ii) 'They<sub>i</sub> killed themselves<sub>i</sub>.' (reflexive)
  - (iii) 'They killed each other.' (reciprocal)

Such a sentence can be disambiguated, at least partially, by the reversive modifier *lok* ('back'):

<sup>2.</sup> The reciprocal prefix vēy- is not syntactically productive, and is only attested in a handful of lexical collocations. The result of this derivation is an intransitive verb: tit 'knock (s.o.)' → vēy-titit 'fight (with each other)'.

Table 3. Possessive su	uffixes and sten	ı variation
------------------------	------------------	-------------

	SINGULAR	DUAL	TRIAL	PLURAL
1INC 1EXC	iplu- <i>k</i> iplu(-Ø)	ēplō- <i>dō</i> iplu- <i>mamyō</i> iplu- <i>mōyō</i>	ēplō- <i>ntēl</i> iplu- <i>mamtēl</i> iplu- <i>mētēl</i>	ēplō- <i>ngēn</i> iplu- <i>mem</i> iplu- <i>mi</i>
3	ēplō- <i>n</i>	ēplō- <i>yō</i>	ēplō- <i>ytēl</i>	ēplō-y

- (3') Kōyō mu-wuh mat lok kōyō. 3DU PFT-hit dead REVER 3DU
  - (i) ??'They<sub>i</sub> killed them<sub>i</sub> back.'
  - (ii) 'They<sub>i</sub> killed themselves<sub>i</sub>.' (reflexive)
  - (iii) 'They killed each other.' (reciprocal)

Another set of personal markers is the list of fifteen possessive suffixes, which combine with inalienable nouns and possessive classifiers (Section 3.2.3). The noun appears either with its stem 1 or its stem 2 (see Section 2.2.1), following some morphological variation which cannot be detailed here. Table 3 illustrates the inflection of nouns for possession, using the inalienable noun *iplu* 'friend, fellow'.

A particular pattern involving personal pronouns deserves attention: the "inclusory" constructions,<sup>3</sup> which are common in Oceania (Lichtenberk 2000). In one of these structures, a first phrase referring to a single person X (noun, proper name) is followed by a non-singular 3rd person pronoun, to refer to a group of people including X: e.g.,  $Edga\ k\bar{o}y\bar{o}$  (lit. Edgar they-two) 'Edgar and his fellow/his wife/his daughter ...';  $dokta\ k\bar{e}y$  (lit. doctor they) 'the doctor and his team/his friends/his relatives ...' (distinct from plural  $ige\ dokta$  'the doctors'). Another inclusory structure consists of a dual pronoun to be followed by a phrase referring explicitly to the second member Y of the couple:  $kamy\bar{o}$  welan (lit. we-two chief) 'the chief and I'; see (36). The same applies of dual possessive suffixes:

(4) inti-mamyō welan
child-1Exc.DU chief
'the son I had with the chief' (lit., the child of us-two chief)

Finally, the combination of these two inclusory constructions has paved the way for the 3rd person dual pronoun  $k\bar{o}y\bar{o}$  to grammaticalise as the standard

<sup>3.</sup> These constructions were described by François (2001b: 384–392; 477–481) under the name "associative non-singular", suggesting a comparison with a similar pattern known as "associative plural" (Corbett 2000: 101–110, Moravcsik 2003).

NP coordinator ( $X k \bar{o} y \bar{o} Y$  'X and Y'), at least when two human individuals are being associated:

- (5) No m-et vēglal imam kōyō tita.

  1sg PFT-see know father 3DU mother
  'I recognised dad and mum.' (lit., ... dad they-two mum)
- 3.1.2. *Some restricted paradigms*. What is particularly original among Mwotlap pronouns is the existence of three sets of markers, whose functional restrictions explain why they are limited to certain persons.

First, commands make use of a special list of imperative pronouns, centred on the addressee:  $\emptyset$  for 2sg,  $amy\bar{o}$  for 2du,  $amt\bar{e}l$  for 2TR, ami for 2pl. Imperative modality is therefore coded on the pronoun rather than on the verb:

- (6) a. *Kōmyō hohole liwo*.

  2DU AOR.speak.DUP big

  'You're speaking loudly.' (statement)
  b. *Amyō hohole liwo!* 
  - D. Amyo nonote tiwo 2DU.IMP AOR.speak.DUP big 'Speak up!' (command)

Second, the vocative function involves three pronoun-like forms, which of course are also reserved for the second person: *yohē* 'you two', *tēlhē* 'you three', *yēhē* 'you guys'. There is no specific form for the singular; other address strategies are used instead, such as a proper name (except for in-laws), a kin term, or a noun like *bulsal!* 'mate!':

- (7) a.  $\bar{E}t!$  Bulsal! ( $\emptyset$ ) van  $t\bar{o}$  me! EXCL mate (2sg.IMP) AOR.go POLIT hither 'Hey, mate! Come here for a second.'
  - b.  $\bar{E}t!$  Yohē! Amyō van tō me! EXCL DU.VOC 2DU.IMP AOR.go POLIT hither 'Hey, you guys! Come here for a second.'

A Mwotlap speaker will use the honorific dual when addressing, or talking about, an in-law. In this specific case, a sentence like (7b) will refer to a single person – as with the French honorific plural *vous*.

Third, the particle wo, which serves for quoting speech and facial expression, may take an ordinary pronoun as its subject ( $k\bar{e}\ wo$  ... 'he said: ...'). But the language also possesses a small set of quotative pronouns exclusively for this purpose, and reserved for the 3rd person:  $amtan\ 3sg$ ,  $amtay\bar{o}\ 3dg$ , etc.

(8)  $T\bar{o}$  amtan wo "M-akteg?!". then 3sg.quot quot pft-do.what 'So he went: 'What's going on?!'.'

The stylistically marked pronoun amtan is preferred to  $k\bar{e}$  when speakers want to make their speech more expressive or  $recherch\acute{e}$ , either in a literary or a jocular context (compare English he said vs. he went). Etymologically, these curious forms probably meant 'his face [went like this ...]' (cf. na-mta-n 'his eyes'). A rarer variant  $amtal\bar{n}an$  also includes the radical of na- $l\bar{n}a$ -n 'his voice'.

#### 3.2. Nouns and noun phrases

The canonical order of NP elements is stated and exemplified in (9):

- (9) a. article<sub>1</sub> head noun<sub>2</sub> modifying noun<sub>3</sub> adjective<sub>4</sub> purposive phrase<sub>5</sub> possessor<sub>6</sub> numeral<sub>7</sub> quantifier<sub>8</sub> locative<sub>9</sub> deictic<sub>10</sub> relative clause<sub>11</sub> discourse marker<sub>12</sub>
  - b.  $na_1$ - $tno_2$   $kikbol_3$   $liwo_4$  no- $ng\bar{e}n_6$   $v\bar{o}y\bar{o}_7$   $yow_9$   $n\bar{o}k_{10}$  ART-place soccer big POSS-1INC.PL two out there  $en_{12}$  BKG 'these two large soccer fields of ours over there seawards'

Notice that Mwotlap constitutes no exception to the typological observations made by Greenberg (1963): the post-nominal position of adjectives, possessors, and other modifiers is consistent with its SVO basic constituent order, as well as with the use of prepositions or clause-initial linkers.

The possible functions an NP can fulfil are verbal argument (subject, object: see Section 5), complement of preposition (Section 5.3), possessor phrase, or predicate (Section 4.1.1). This section will focus on the internal structure of the noun phrase, presenting the noun and its article (Section 3.2.1), as well as principles for coding number (Section 3.2.2) and possession (Section 3.2.3). Other elements of the NP, such as deictics or relative clauses, will be discussed later.

3.2.1. *Noun classes and the individuation scale*. Mwotlap possesses two classes of nouns, which differ in their morphosyntactic behaviour. Class I consists of lexemes that may function directly (that is, with no need of the article *na-*) as the head of an NP. Semantically speaking, these nouns all share the feature [+human]: e.g., *imam* 'dad', *moyu-k* 'my uncle', *tēytēybē* 'a/the healer', *welan* 'a/the chief'. These Class I nouns fill the same slot as proper names, as well as – to a lesser extent – personal pronouns.

Class II consists of those lexemes that need the article prefix na- ( $\sim nV$ -) in order to become the head of an NP. Generally speaking, the members of this class II are all [-human] nouns, whether animals, objects, abstract notions, verbal nouns, and so on: e.g., na-bago 'shark', ne-vet 'stone', na- $pn\bar{o}$  'village',

no-gom 'sickness', ne-welan 'chiefhood' (vs. welan 'chief'). The only exceptions to the [-human] rule are the three Class II nouns n-et 'person', na-tm̄an 'man', na-lqōvēn 'woman'.

When deprived of its article na-, a Class II lexeme does not form a valid NP, and can only function as a modifier of another head. Thus in each of the following phrases, the second word acts as a modifier to the preceding noun: e.g., n- $\bar{e}\bar{m}$  vet 'a stone house', n- $\bar{e}\bar{m}$  gom 'a sickness house (a hospital)',  $b\bar{o}b\bar{o}$   $ta\bar{m}an$  'grandparent male (grandfather)', na-he et 'a person's name'. The unprefixed form of the noun is also required after certain linkers, such as ne 'of': welan ne  $v\bar{o}n\bar{o}$  'the chief of the village'. Likewise, a bare Class II noun may modify a verbal head, as in the case of object incorporation (Section 5.2.1):  $ta\bar{n}ta\bar{n}$  et 'to person-touch (to massage)',  $w\bar{e}lw\bar{e}l\ l\bar{o}q\bar{o}v\bar{e}n$  'to woman-buy (to marry)'. In practically all these cases, the unprefixed Class II noun appears to point to a quality (e.g., vet 'stony',  $ta\bar{m}an$  'male') rather than designate an autonomous entity; and it is precisely the function of the article na- to embody this quality into a discrete, specific referent (e.g., ne-vet 'a/the stone', na- $t\bar{m}an$  'a/the man').

The formal split between these two noun classes can perhaps be explained in functional terms. The faculty of being compatible with both a referential and a non-referential interpretation is typically a characteristic of [-human] nouns, as well as of the three [+human] nouns that are statistically most likely to be used as a generic modifier ('person', 'man', 'woman'). All these Class II lexemes are thus potentially ambiguous on the scale of specificity, and this makes the formal contrast /article + N/ vs. /bare N/ functionally meaningful for them. Conversely, the referentiality criterion appears to be less relevant for the nouns of Class I, because designating a person typically implies a high degree of individuation.

- 3.2.2. *Coding for number.* The semantic feature of humanhood appears to be the key to understanding several formal categories throughout the grammar of Mwotlap. Indeed, besides accounting for the division of nouns into two lexical classes, the same property is also central to the mechanics of number marking. Briefly, number distinctions are formally coded with human referents, but are neutralised when the referent is non-human (François 2001b: 360–370).
- 3.2.2.1. *Collectives and number articles*. We already mentioned the four number categories of Mwotlap in our discussion of pronouns; indeed, person marking is typically a domain where a language should be expected to make number distinctions. As far as NPs are concerned, non-singular number is coded by a triplet of "collective" morphemes.

When used on their own, these pronoun-like collectives refer to a group of people, with no other qualification than the feature [+human]: yoge '(the) two

people', *tēlge* '(the) three people', *ige* '(the) people'. Unlike standard personal pronouns, these collectives typically designate a new referent (indefinite):<sup>4</sup>

(10) a. *Nitog ak magaysēn kēy!*PROH do sad 3PL

'Stop annoying them!' (personal pronoun)

b. *Nitog ak magaysēn ige!*PROH do sad COLL.PL

'Stop annoying people!' (collective)

Most of the time, however, these collectives are followed by some kind of modifier, just like any NP head would be (see 9). This can be an adjective  $ige\ qagqag$  '(the) white people'; a locative phrase  $ige\ ta$ -Franis 'the French'; a purposive phrase  $ige\ bi$ -kikbol (lit., people for soccer) 'soccer players'; a possessive classifier  $ige\ mino$  (lit., people my) 'my people, my family'; or a deictic  $yoge\ g\bar{o}h$  'these two people'. For each of these phrases, the syntactic head is clearly the collective.

Of course, nothing prevents this modifier from being a noun, as long as it is [+human]:  $t\bar{e}lge\ ta\bar{m}an$  (lit. three-people male) '(the) three men',  $yoge\ bulsal$  (lit. two-people friend) '(the) two friends'. As a matter of fact, this is how Mwotlap regularly forms non-singular numbers for all its [+human] nouns, whether of class I or class II: hence na- $lq\bar{o}v\bar{e}n$  '(a/the) woman',  $yoge\ l\bar{o}q\bar{o}v\bar{e}n$  '(the) two women',  $t\bar{e}lge\ l\bar{o}q\bar{o}v\bar{e}n$  '(the) three women', trace is singular reading (which it doesn't necessarily have with non-human nouns); and the collective, despite being formally the NP head, could well be analysed alternatively as a kind of number article.

3.2.2.2. *The morphosyntax of number.* Besides the use of collectives on the noun, number distinctions may be encoded by other formal clues in the sentence, such as the reduplication of certain nouns or adjectives  $^6$  ( $n\bar{e}t\bar{m}ey$  'child'

<sup>4.</sup> In other cases, the referent of the collective is already topical (definite) but has been temporarily deactivated in discourse. The difference between collectives and personal pronouns in terms of the cognitive activation of the referent (Givón 1983, Terrill 2001) will appear in (43), with tēlge 'the three fellows' (definite, deactivated) vs. kēytēl 'they' (definite, activated).

<sup>5.</sup> The singular equivalent of a collective phrase requires a noun as its syntactic head. When the modifier of the collective is itself a noun, then it may alone constitute the head: thus *ige*  $l\bar{o}q\bar{o}v\bar{e}n$  'women' corresponds to  $na-lq\bar{o}v\bar{e}n$  'a woman'. But other kinds of modifiers, such as those cited above, must resort to the dummy noun *et* 'person': n-et qagqag 'a Whiteman', n-et ta-Franis 'a Frenchman', n-et bi-kikbol 'a soccer player', n-et mino 'a relative of mine', n-et  $g\bar{o}h$  'this person'.

<sup>6.</sup> To some extent, reduplication on the verb may also suggest a plural argument (subject and/or object); but this is just one possible reading of plural action – which is what reduplication really codes for (François 2004b).

 $\rightarrow$  *nētnētīney* 'children'; *su* 'small.sg'  $\rightarrow$  *susu* 'small.non-sg'); the personal pronouns; and the agreement on the verb (only in the case of Aorist: 3sg *ni*- vs.  $\emptyset$ - elsewhere).

- (11) a. *Nētīmey su en, kē ni-mōl.* child small BKG 3SG AOR.3SG-return 'The small child (he) returned.'
  - b. Yoge nētnētīney susu en, kōyō COLL.DU child.DUP small.DUP BKG 3DU (Ø-)m̄ōl.

    AOR(NON3SG)-return 'The two small children (they) returned.'

Conversely, non-human referents formally neutralise all number distinctions. As a consequence, all Class II nouns but three are invariant with respect to number: e.g., *ne-vet* means 'stone' or 'stones'. In (12), the whole sentence is grammatically treated as singular, and only cultural knowledge reminds us that the cooking stones used in the Melanesian earth oven actually count in dozens:

(12) Gēn mōk ne-vet l-ep tō kē ni-vey.

1INC.PL AOR.put ART-stone LOC-fire then 3sG AOR.3sG-red.hot

'We lay the stone(s) on the fire till it gets (i.e., they get) red-hot.'

Non-human nouns are not compatible with collectives (\**ige vet*), and are treated as singular even in the presence of a numeral: e.g., *ne-vet vētēl ni-vey* '(lit.) the three stone gets red-hot'; see also (9).

3.2.2.3. The animacy hierarchy. This morphosyntactic split, which Mwotlap seems to have brought to an extreme, can be found in other Oceanic languages, and is not totally absent from other parts of the world. In such languages as Georgian (Hewitt 1996: 53) or Classical Greek, plural inanimate subjects take singular agreement on the verb; and Mundari (Austro-Asiatic; Bhattacharya 1976: 191–192) restricts number marking to animate referents. While these languages draw the categorial boundary with respect to the feature [animate], in Mwotlap what is relevant is humanhood. However, the essential point here is to note that all these languages satisfy the universal tendency known as "plurality split" (Smith-Stark 1974). If a language treats differently two sets of nouns, then those which are sensitive to number will be to the left of the following "animacy hierarchy" (Corbett 2000: 55–66), whereas those to the right will tend to neutralise number:

human > animate > inanimate referential > inanimate generic

Once again, the cognitive ground for this tendency derives from the high degree of discreteness that is characteristic of human referents. Conversely, the lower individuation typical of non-human beings explains why they tend more naturally to be coded as mass nouns: compare with English *cattle*, *furniture*, *vegetation*, *food*, which are coded as singular whatever the actual quantity.

3.2.3. *Possession*. The grammar of possession is complex in Mwotlap (François 2001b: 419–632), but it is similar in outline to many other Oceanic languages (Lichtenberk 1985). Regardless of their distribution between Class I and II (Section 3.2.1), nouns are divided into two watertight classes with regard to possession.

On the one hand, there is a closed set of about 125 inalienable nouns. They require a possessor to be overtly present immediately to their right, in the form either of a personal suffix (see Table 3), e.g.,  $na-y\bar{n}\bar{e}-k$  'my legs/feet', or of a postposed (unprefixed) possessor noun, e.g.,  $na-y\bar{n}o$  tarak 'the wheels of the car'. For these nouns, the absence of a possessor would be ungrammatical: \* $na-y\bar{n}o$  (?'a foot'). Semantically speaking, inalienable nouns refer to relational notions, such as kin terms ( $t\bar{e}ta-n$  'his sister/her brother',  $\bar{e}gn\bar{o}-n$  Sera 'Sera's spouse'), body parts ( $na-mn\bar{e}-k$  'my arms/hands',  $n\bar{e}-lwo$  bago 'shark teeth'), part terms (na-lo  $\bar{e}\bar{m}$  'inside of house', na-yo  $q\bar{e}t\bar{e}nge$  'tree leaves') and other relational terms (na-he-k 'my name', na-tno-n 'his/her/its place').

On the other hand, all other nouns form an open set of alienable terms, which can appear unpossessed, e.g.,  $n-\bar{e}\bar{m}$  'a/the house(s)'. The possessor, if present, cannot be added directly; instead, this requires the mediation of a linker which receives the possessive morphology, e.g.,  $n-\bar{e}\bar{m}$  no-NO-ng $\bar{e}n$  'our house'. To be precise, this linker must be chosen from among a set of four morphemes according to the semantics of the relationship involved. These four possessive classifiers are (here in their 3sg form): na-ga-n 'food possession', na-ma-n 'drink possession', no-no-n 'general possession, stable relationship', na-mu-n 'temporary possession, relationship restricted to a particular situation'.

(13) Nu-suk gōh na-mu-k, ba na-ma-nmōyō.

ART-sugar here ART-TEMPP-1sG but ART-DRINKP-2DU

'This sugar is mine (to buy), but it's for you (to drink with).'

For complex reasons, the syntax of alienable nouns seems to be currently gaining ground over inalienable patterns. Thus the inalienable form *ive-n* 'his

<sup>7.</sup> What is even more interesting for the typologist is probably the list of exceptions to these semantic motivations. For example, all body products (blood ...) and internal parts (guts, liver ...) are treated as alienable, because they are physically or conceptually separable from the body. See the discussion in François (2001b: 440–465), as well as contributions in Chappell & McGregor (eds.) (1996).

mother', now obsolete, has been replaced by the formally alienable phrase *tita no-no-n* (originally a term of address, 'his mum'). Similarly, compare *ni-hyi-mem* 'our strength; (formerly) our bones' with the more innovative pattern *ni-hiy no-no-nmem* 'our bones'. This evolution is much stronger in Mwotlap than in any other language in the area.

These boundaries between types of possessed nouns are in turn cross-cut by formal contrasts between different categories of possessors. If we take the example of the inalienable noun (na-)he 'name', we observe a morphological difference between, on the one hand, the use of personal suffixes if the possessor is [+human] [+referential] (e.g., na-he-k 'my name'; na-ha-n  $na-lq\bar{o}v\bar{e}n$   $g\bar{o}h$  'the name of this woman'); and on the other hand, the use of the unsuffixed form of the possessed noun if the possessor is either non-referential (e.g., na-he  $l\bar{o}q\bar{o}v\bar{e}n$  'a woman's name'), non-human (na-he  $v\bar{o}n\bar{o}$   $g\bar{o}h$  'the name of this village'), or both (na-he  $v\bar{o}n\bar{o}$  'a village name'). Once again, the grammatical categories of Mwotlap have remarkably crystallised what is fundamentally a cognitive difference of perception between human specific referents – which are highest on the scale of individuation – and all the rest.

#### 4. The mechanics of predication

A complete sentence may lack any argument phrase (see Section 5.1), but it cannot lack a predicate. For a language like Mwotlap, the syntax and semantics of predication involve more diverse patterns than the sole tense-marked verbheaded predicate. First, not all predicates involve Tense-Aspect-Mood (TAM) inflection; second, even those which are inflected this way can take other parts of speech than the verb as their head.

#### 4.1. Four basic predicate structures

4.1.1. *Direct noun predicates*. Direct noun predicates cover both equative predicates strictly speaking (the subject X is identified as coinciding with a known item Y, e.g., X is the doctor) and ascriptive predicates (the subject X is ascribed to a set defined by the notion Y, e.g., X is a doctor). In both cases, the clause structure simply juxtaposes two well-formed NPs  $\{X_{NP} \langle Y_{NP} \rangle\}$ :

(14) Imam mino  $\langle t\bar{e}yt\bar{e}yb\bar{e}\rangle$ . father my healer 'My father is a healer; My father is the healer.'

The following examples will signal the boundaries of the predicate phrase with pointed brackets \(\lambda...\rangle\).

Like most Austronesian languages, Mwotlap lacks any copula: it is a property of nouns, as a part of speech, to be directly predicative (see Lemaréchal 1989, Launey 1994).

If the predicate head belongs to Class II (see Section 3.2.1), then it must bear its article. Incidentally, given that non-human arguments are normally substituted by zero anaphora, it is frequent to hear sentences that consist of only one noun phrase, the predicate:

(15) a.  $Y \bar{o} y! \langle Na-naw \rangle!$ EXCL ART-salt.water 'Yuck! This is salt water!'

The same observation holds for possessive classifiers (Section 3.2.3), which form a subset of inalienable nouns. Thus the single word *Na-kis* [ART-FOODP. 1sG] forms a perfectly complete sentence 'That's mine (to eat)'; see also (13).

Negating a noun predicate requires the negation et-... te, still with no need of a copula (see also (2)):

(15) b.  $\langle Et$ - na-naw  $te \rangle$ . NEG<sub>1</sub> ART-salt.water NEG<sub>2</sub> 'This is not salt water.'

We will come back to noun predicates in Section 4.1.4.3.

4.1.2. Locative predicates. Locative predicates locate a subject X in space or time. Once again, in the absence of any copula, the predicate is constructed directly  $\{X_{NP} \langle Y_{LOC} \rangle\}$  X is at location Y. This predicate can be any well-formed locative phrase (see Section 5.3):

(16) a. Ithi-k (Ostrelia). same.sex.sibling-1sG Australia 'My brother is in Australia.'

Based on this locative construction, the anaphoric adverb  $a\bar{e}$  'there; on/for/with ... it' (see 38) provides the standard pattern for existential predicates (there is X), and hence for existential possessive predicates (there is my X, usual Mwotlap equivalent for English I have X):

- (16) b. *Ithi-k*  $\langle a\bar{e}\rangle$ . same.sex.sibling-1sg AA
  - (i) 'My brother is/was there.'
  - (ii) 'I have a brother.' (lit., there is my brother)

- 4.1.3. Other direct predicates. Apart from nouns and locatives, a handful of lexemes are also able to form a predicate directly (i.e., without any extra morphology): e.g.,  $it\bar{o}k$  '[be] alright' (20), yeh '[be] far',  $hayt\bar{e}y\bar{e}h$  '[be] sufficient', as well as numerals:
- (17)  $\langle Yeh meh \rangle$ . be.far too.much 'It's too far.'
- (18) Ithi-k  $\langle v\bar{e}t\bar{e}l\rangle$ . same.sex.sibling-1sG three 'I have three brothers.' (lit., my brother is three)

To this category of direct predicates, one could add certain linkers and subordinators, e.g., *qele* '[be] like', *veg* '[be] because':

- (19) \( \langle Qele \ le-pn\overline \ n\overline{n}\overline{n}\overline{n}\)\)
  like \( \text{LOC-village your} \)
  'It's like in your country.'
- (20)  $\langle Et\text{-}veg \qquad te \rangle \qquad so \qquad n\text{-}eh \qquad it\bar{o}k.$ NEG<sub>1</sub>-because NEG<sub>2</sub> COMPL ART-song be good 'It's not because the song is nice.'
- 4.1.4. *Tense–Aspect–Mood predicates*. The last type of predicate consists in characterising a subject X with a state of affairs or property P, in such a manner that P is assigned to a particular situation, is presented in its time perspective, and comes endowed with a certain modal value. This can be called a "Tense–Aspect–Mood predicate"; it is easily recognisable through the presence of a TAM marker (Section 4.2). As we shall see, these predicates may have not only a verb as their head, but also an adjective or a noun.
- 4.1.4.1. *Verbs in TAM predicates*. Being the head of a TAM predicate is practically the only syntactic position a verb may take in a sentence (but see Section 5.2.2). A verb without a TAM marker does not form a valid predicate:
- (21) a. Imam \( \lambda ne-mtiy \rangle \). [\*Imam mitiy.] father STA-sleep 'Dad is sleeping.'
  b. Imam \( \lambda me-mtiy \rangle \). father PFT-sleep 'Dad has fallen asleep.'

The syntax of verb-headed predicates will be further detailed in Section 5.

4.1.4.2. Adjectives in TAM predicates. Adjectives, which otherwise differ from verbs in their ability to modify nouns (3.2), share with verbs this property of mediate predicativeness: contrary to nouns and other direct predicates, adjectives can only form a predicate if they are combined with a TAM marker. Generally, but not necessarily, this marker is the Stative *ne*-.

(22) a. *N-ēlē-y* \(\sqrt{ne-mlēglēg}\).

ART-hair-3PL STA-black

'Their hair is black.'

The Stative<sup>9</sup> ascribes a stable property to the subject at a given point in time, regardless of any aspectual or temporal boundaries. Conversely, other markers, like Perfect *me*- or Apprehensive *tiple*, will put this property in a time perspective, endowing it with aspectual limits and/or with a marked modal value:

- (22) b.  $N-\bar{e}l\bar{e}-y$   $\langle me-ml\bar{e}gl\bar{e}g\rangle$ .

  ART-hair-3PL PFT-black

  'Their hair has turned black/has darkened.'
  - c. N-ēlē-y \(\lambda\) tiple mēlēglēg\\\.
    ART-hair-3PL APPREH black 'Their hair might turn black.'

This mechanism has important semantic implications, as the stative property '[be] black' now reads as a dynamic process 'darken'. The capacity for adjectives to combine with just the same TAM markers as verbs explains why the lexicon of Mwotlap manages not only without a stative copula (English be), but also without any dynamic copula (English become, turn). Indeed, the notion of quality change present in our verb become or in our change-of-state verbs (e.g., darken) here simply results from the combination of an adjective with a non-stative aspect. We shall come back to this crucial point in Section 4.2.4.

Rather than considering that TAM predication turns adjectives into verbs, it is probably more correct to say that adjectives can be inflected in Tense–Aspect–Mood just like verbs, without ceasing to be adjectives.

<sup>9.</sup> We follow here the usage among aspect typologists (e.g., Comrie 1976: 10) of designating with an uppercase letter the name of a formal category in a given language (e.g., "the Perfect *me*- of Mwotlap"), as opposed to the semantic concepts relevant to the typology of aspect (e.g., "the crosslinguistic properties of perfect"). Needless to say, a vernacular category labeled Perfect (or Stative, etc.) in a given language does not necessarily match all the properties of the general, supposedly universal, concept of the same name.

4.1.4.3. *Nouns in TAM predicates*. The same observations apply to the set of nouns, which also appear to be perfectly compatible with all TAM markers. Certainly, this special sort of noun predicates is statistically limited, as most TAM predicates take a verb as their head (Section 4.1.4.1), and most nounheaded predicates are constructed directly (Section 4.1.1).

However, the combination of nouns with TAM markers is well attested in Mwotlap (François 2003a: 47–75). It takes place whenever an essential property – which is what nouns fundamentally code for – is seen as unstable with regard to aspect or to modality (e.g., X has become a N, or X might be a N...).

- (23)  $K\bar{e}$   $\langle mal \ et \ liwo \rangle$ . 3SG CPLT person big 'He's already (become) an adult.'
- (24) Kōyō ma-tayak kē, tō kē \(\langle \text{ni-\bar{e}nt\bar{e}}\)-yō togolgol\(\rangle \text{.}\)
  3DU PFT-adopt 3sG then 3sG AOR-child-3DU straight
  "They have adopted him, so that he (became) their legitimate son."
- (25) Nēk \(\frac{te-lq\bar{o}v\bar{e}n}{c}\) to\(\frac{c}{c}\) en, togt\(\bar{o}\) nok leg mi 2sG CF1-woman CF2 BKG then.CF 1sG AOR.married with n\(\bar{e}k\). 2sG (If you were a woman, I would marry you.'

Once again, it would be arbitrary – or ethnocentric – to stipulate that the nouns  $^{10}$  et 'person' or  $lq\bar{o}v\bar{e}n$  'woman' must have been converted into verbs (through zero-derivation?) before being able to enter a TAM predicate. It seems closer to truth, and in fact more challenging for linguistic theory (Nordlinger & Sadler 2000), to suggest that TAM inflection is just not a privilege of verbs, and can equally affect verbs, adjectives, or nouns in Mwotlap. And still, to say that these three parts of speech merge in the same predicate slot does not mean they are not easy to distinguish in other distributional contexts.

4.1.4.4. *The limits of TAM predication*. Not all types of predicates may take TAM inflection. For example, locatives are not TAM-compatible:

(26) \*Ithi-k \quad \quad \text{Ostrelia}\\. same.sex.sibling-1sg \quad \text{CPLT Australia} \\ \*'My brother's already in Australia.'

<sup>10.</sup> Notice that, unlike in direct noun predicates (15a, b), Class II nouns here appear in their bare form, without the article na-. This is consistent with the semantic function of na- (Section 3.2.1).

## 132 Alexandre François

This point underlines the necessity to distinguish between the predicativeness of a given part of speech vs. its TAM-sensitiveness (François forthcoming a). For example, the category of locatives is predicative (16) but not TAM-sensitive (27); nouns are both; and so on.

#### 4.2. Semantics of Tense-Aspect-Mood

After this syntactic presentation of Mwotlap predicates, we shall present here the most notable characteristics of the TAM system with regard to the semantics of its markers (François 2001a, 2003a). The paradigm of Tense–Aspect–Mood contains, in all, twenty-six markers, fourteen of which are morphologically discontinuous but semantically non-compositional: e.g., me- 'Perfect', me-...  $t\bar{o}$  'Preterite'; te- 'Future', te-...  $t\bar{o}$  'Counterfactual', te-...  $v\bar{e}h$  'Potential'. Mwotlap has no auxiliary.

4.2.1. Affirmative vs. negative TAM. While most languages possess a separate negation morpheme which combines with TAM markers, in Mwotlap the polarity feature is included in the semantics of each TAM category. Thus, te-... is 'Affirmative Future', and contrasts with tit-... te 'Negative Future'. Other languages also contrast affirmative vs. negative tense markers, e.g., Fula (Arnott 1970).

But what is even more striking is the general mismatch between the nine-teen affirmative and the seven negative TAM, due to many markers being polysemic. Thus the single category of (affirmative) Prospective  $k\bar{e}$  so ni-mtiy 'he's going to sleep; he should sleep ...' (see Section 4.2.3) is negated sometimes by the Negative Future ( $k\bar{e}$  tit-mitiy te 'he won't sleep'), and sometimes by the Prohibitive ( $k\bar{e}$  nitog mitimtiy 'he mustn't sleep'). Conversely, several semantic distinctions that are made in affirmative clauses merge in negative contexts. For instance, such diverse sentences as Stative (21a)  $k\bar{e}$  ne-mtiy 'he's sleeping'; Perfect (21b)  $k\bar{e}$  me-mtiy 'he's fallen asleep'; Preterite  $k\bar{e}$  me-mtiy to 'he's been sleeping'; Aorist  $k\bar{e}$  ni-mtiy 'he slept ...' are all negated in the same way, with Realis Negative  $k\bar{e}$  et-mitiy te 'he's not sleeping; he hasn't slept; he didn't sleep ...'.

These semantic overlaps between affirmative and negative markers account for the system's asymmetrical architecture (Table 4).

4.2.2. Aspect without tense. It is in fact problematic as to whether the domain of tense is at all grammaticalised in this system. Indeed, if we see tense as encoding the deictic relationship between the reported state of affairs and the situation of utterance (Comrie 1985: 14), then it appears that the markers of Mwotlap are fundamentally ambiguous in this respect.

AFFIRMATIVE		NEGATIVE		
Completive	mal	'not yet' negation	at aata	
Remote Completive	$mal \dots t\bar{o}$	'not yet' negation	et qete	
Permansive	$\dots$ lapt $ar{o}$	'no longer' negation	et site	
Stative	ne			
Perfect	me	Realis Negative	et te	
Preterite	$me$ $t\bar{o}$	Realis Negative	e: te	
Aorist	(ni-)			
			nitog	
Polite Imperative	$(ni-)t\bar{o}$	Prohibitive		
Prospective	so (ni-)			
TI 1' 1E 4	•	Negative Future	titte	
Hodiernal Future	teqiyig	_		
Future	te			
Potential	$te$ $v\bar{e}h$	Negative Potential	tit vēste	
Counterfactual	$te$ $t\bar{o}$			
Apprehensive	tiple	Neg. Apprehensive	tiple tit te	
Static Presentative	$\dots t\bar{o}$			
Kinetic Presentative	vatag			
Time Focus	qoyo	Ø		
Immediate Completive	qoyo ēwē tō			
Prioritive	(ni-) bah en			

Table 4. The twenty-six TAM categories of Mwotlap

For example, the viewpoint suggested by the Completive marker in  $k\bar{e}$  mal leg may be anchored in the moment of speech (hence 'she's already married'), but it can also perfectly correspond to a past ('she was already married') or a future situation ('she'll be already married'), without any change in form. In other words, mal indicates nothing more than Completive aspect ('be already married') with respect to any anchoring situation retrievable from context. The same demonstration could be made for the other TAM markers of the system: their situational anchoring is always anaphoric, not deictic. To put it differently, we may say that Mwotlap grammaticalises aspect but not tense.

The only exception to this principle is the Hodiernal Future *te-... qiyig* – in itself a typological oddity (Comrie 1985: 94). All attested examples of this marker are with reference to the present day of utterance (see (2)); this deictic value is no doubt due to the meaning of its components before it was grammaticalised (*te-* Future + *qiyig* 'today').

In summary, Mwotlap brings together in a single paradigm portmanteau morphemes that convey at once aspect, mood, and polarity.

4.2.3. Aspectual polysemy. Certain TAM markers in Mwotlap show surprising polysemy. One example is the Prospective:  $k\bar{e}$  so ni-mtiy can mean 'he'd like to sleep; he's going to sleep; he's falling asleep; he must/should/had better sleep; let him sleep!; he was supposed to sleep; he almost fell asleep; if/when he sleeps; for him to sleep'. Despite the variety of meanings, it is not too difficult to figure out the central mechanism behind them: some modal source – the speaker, the actor, or someone else – is aiming at a certain state of affairs as being the expected outcome of the anchoring situation. This fits well with the notion of "prospective" aspect in use among typologists (Comrie 1976: 64).

On a more theoretical level, this case illustrates the importance of construing a semantic model which, instead of requiring the describer to choose between "monosemy" and "polysemy", should precisely allow for their mutual articulation. While the many contextual values of the Mwotlap Prospective (volitional, deontic, imperative, purposive, conditional, frustrative, ...) do definitely constitute a set of semantically distinct interpretations, this polysemy can be shown to result regularly from the combination of a single, monosemic marker *so ni*-with different syntactic and discourse configurations. A solution to this paradox can be obtained by resorting to instructional semantics: the Prospective asks the addressee to calculate the correct interpretation from the context, through the identification of such parameters as the relevant anchoring situation and the relevant modal source (François 2003a: 218–257).

Sometimes, however, the polysemy of a marker defines a unique configuration, which is hard to subsume under a single widely-used name. In this case, the choice of a label for the vernacular category necessarily involves a certain degree of arbitrariness. For example, the term "aorist" is endowed with quite different meanings among aspectologists, depending on the scholarly tradition they belong to. We have chosen to follow the recent usage among French scholars (after Culioli 1978) of giving this name to a marker which is sometimes called "neutral", "minimal", "indefinite", or "zero" aspect, but whose mechanism seems to be more constraining than these terms suggest.

What makes Aorist ni- so challenging is its high polyfunctionality (François 2003a: 165–199). It codes for the succession of events whether in realis, irrealis, or fictitious contexts (see (11), (43)); for imaginary or counterfactual statements (25); for generic sentences and procedure descriptions ( $m\bar{o}k$  in (12)); for the expression of intent (36), instructions (40), and orders (6b, 7a); for progressive aspect (6a, 35, 42). Finally, it is also the form required with purposive or other irrealis subordination (ni-vey in (12)), as well as realis result clauses (24). A first approximation would tentatively describe this ni- aspect as defining an "immediate new event", as opposed to the "anticipated new event" expressed by Prospective so ni-. However difficult it may be to define the semantic matrix behind such a polysemy, it can be fascinating to find other languages of

the world with surprisingly similar aspectual polysemies, like the "Aoriste" of Wolof (Robert 1996).

4.2.4. Aspect, actionality, and lexical properties. Among the twenty-six markers of the system, some (like the Stative in (21a)/(22a)) trigger a stative reading of the predicate head; others (like the Perfect in (21b)/(22b)) a dynamic reading. Not surprisingly, inherently dynamic verbs – e.g., van 'go', tot 'chop', lep 'take' – are compatible only with the latter, not with the former: thus van can combine with the Perfect (ma-van 'has gone'), not with the Stative (\*na-van).<sup>11</sup>

Crucially, however, the reverse is not true. Stative notions, which we would expect to be only compatible with stative TAM categories, can in fact combine with any marker. In other words, all lexemes capable of referring to an unbounded property – whether stative verbs (*hey* 'wear', *tēy* 'hold'), adjectives (*gom* 'sick', *wē* 'in good health') or even nouns (*welan* 'chief', *bulsal* 'friend') – are equally capable, with no derivation nor added morphology, of referring to the bounded, dynamic process that results in that same property (resp. 'put something on', 'grab', 'get sick', 'recover', 'become a chief', 'make friends').

The regular polysemy of all these words can be shown to follow a single two-phase pattern of the form {event<sub>1</sub> + state<sub>2</sub>}. This semantic model (François 2001a; 2003a: 346–363), which can be called "Twofold Actionality Pattern", articulates a [+bounded] initial phase<sub>1</sub> (e.g., *mtiy* 'fall asleep', *mlēglēg* 'turn black') with a [-bounded] resulting phase<sub>2</sub> (*mtiy* 'sleep', *mlēglēg* 'be black'). It is then a property of each aspect marker to select either the first (cf. Perfect in (21b)/(22b)) or the second phase (cf. Stative in (21a)/(22a)) in the lexeme's meaning. In other words, Mwotlap encodes in the grammar certain semantic distinctions which English encodes in its lexicon, such as the contrast between telic *fall asleep* and atelic *sleep*, or between *put on* and *wear*.

This "Twofold Actionality Pattern" hypothesis also proves powerful in accounting for several puzzling features of Mwotlap aspect, such as the "perfectal" paradox mentioned by Sasse (2002: 210): "the perfectal aspect associates a change of state (perfectivity) with its resultant subsequent state (imperfectivity)". This is how a single form of Perfect can be translated sometimes as a completed action (e.g., he has put my shirt on), sometimes as a present progressive (he is wearing my shirt) – see François (2003a: 82–104).

To sum up, the Mwotlap TAM system does not draw a simple boundary between stative and dynamic verbs. Rather, the line is drawn between, on the one hand, some verbs which are exclusively dynamic; and on the other hand,

<sup>11.</sup> Only reduplication (François 2004b) has the power to change a bounded verb into an unbounded one: e.g., Stative \*na-van, but na-vanvan 'go habitually'. Similarly, compare gen 'eat s.th.' in (40), and gengen 'eat [INTR], have one's meal' in (43).

the vast majority of lexical units (the rest of the verbs, plus all adjectives and all nouns) which are neither inherently stative nor inherently dynamic, but are potentially compatible with both interpretations depending on their morphological marking in the sentence.

## 5. Arguments and other complements

We shall outline briefly the syntax and semantics of Mwotlap arguments: subjects (Section 5.1), objects and valency issues (Section 5.2), and oblique complements (Section 5.3).

#### 5.1. Subjects

Like most Oceanic languages, Mwotlap lacks a passive voice. In a transitive clause, the subject always corresponds to the active entity (the actor), with no constraint whatsoever upon animacy, definiteness, or hierarchy among persons. Thus, while many languages would hardly allow sentences like *A tidal wave hit us* or *A stone cut my finger*, this is perfectly idiomatic in Mwotlap:

(27) Awē! Ne-vet vitwag \langle me-hel \rangle na-mnē-k!

EXCL ART-stone one PFT-cut ART-hand-1sG

'Ouch! I just cut my finger on a stone!' (lit., a stone has cut my finger)

A typical case when an inanimate force acts upon an animate experiencer is the domain of physical feelings and uncontrolled states (hunger, thirst, heat, cold, sleepiness, boredom, giggles, fear, hiccups, sneezing, coughing and all diseases). Once again, the syntax of Mwotlap employs an active pattern here: name of feeling<sub>SBJ</sub> + verb 'do, touch ...' + person affected<sub>OBJ</sub>.

(28) No-gom momyiy  $\langle m\text{-}ak \rangle$  no.

ART-sickness cold PFT-do 1sG

'I have malaria.' (lit., the cold sickness has done me)

Even weather and "ambient" statements (Chafe 1970: 101) must formally take a subject, e.g., *mahē* ('place, time'): *Mahē mō-qōī* 'It's night' (lit., the place has [become] night); *Mahē no-momyiy* 'It's cold' (the place is cold). An exceptional case of subjectless sentence appears in (8) *M-akteg?* 'What's going on?', with the question verb 'do what'.

## 5.2. Verb phrase internal structure and valency change

Verb phrases are easily delimited by any of the discontinuous TAM morphemes, such as the negations (Table 4). Their internal structure is:  $TAM_1$  – predicate head<sub>2</sub> – incorporated object<sub>3</sub> – serialised  $verb_4$  – adjective<sub>5</sub> – internal adjunct<sub>6</sub> –  $TAM_7$ . As we shall see briefly, all these verb modifiers prove capable of affecting the argument structure of their head.

- 5.2.1. Object incorporation. The main case when a noun directly modifies a verb<sup>12</sup> is object incorporation. Normally, objects appear as a full NP (Class II nouns taking their article) outside the verb phrase (29a). But sometimes, what is semantically the patient appears as a bare noun within the limits of the VP (see position of Preterite marker me-...  $t\bar{o}$ ):
- (29) a. No  $\langle m\bar{e}$ - $t\bar{e}q$   $t\bar{o}\rangle$   $n\bar{e}$ - $m\bar{e}s$  vitwag. 1sG PRT<sub>1</sub>-shoot PRT<sub>2</sub> ART-parrot one 'I hunted a parrot.'
  - b. No  $\langle m\bar{e}$ -teqteq  $m\bar{e}s$   $t\bar{o}\rangle$ . 1SG PRT<sub>1</sub>-shoot.DUP parrot PRT<sub>2</sub> 'I went parrot-hunting.'

Contrary to  $n\bar{e}$ - $m\bar{e}s$  in (29a), the incorporated object  $m\bar{e}s$  in (29b) is non-referential, having no other function than to define a sub-type of hunting. What results from this process of object demotion is a new lexical item, an intransitive "macro-verb"  $t\bar{e}qt\bar{e}q$   $m\bar{e}s$  'to parrot-hunt'. The syntax and semantics of object incorporation in Mwotlap are thus identical to what has been observed in other languages (Mithun 1984, Givón 1984: 416).

This syntactic structure has two morphological corollaries. For one thing, the reduplication of the verb reflects the shift from a bounded event  $t\bar{e}q$  'shoot s.th.' to an unbounded activity  $t\bar{e}qt\bar{e}q$  'shoot repeatedly > shoot virtually > hunt' (see Footnote 11). For another thing, the absence of the nominal article na- is consistent with our earlier semantic observations on Class II nouns (see Section 3.2.1). Despite the similarity between this structure and verb compounding, the verb and the incorporated noun still behave as two separate phonological words (Section 2.2.2).

Even if new collocations are regularly invented, the incorporating pattern is essentially attested in a limited set of lexical collocations, as often in Vanuatu. As is generally the rule when such lexicalisation takes place (Mithun 1984: 848), the combinations most likely to deserve a lexical status correspond to those activities that are socially relevant in the speakers' culture. Thus  $*t\bar{e}qt\bar{e}q$  qo 'pig-shooting' would not make sense in Mwotlap, because there are no wild boars in this part of Melanesia, and killing pigs is not traditionally done by shooting  $(t\bar{e}q)$  them, but by hitting them (wuh) with a club.

5.2.2. *Serial verbs*. A verb head is sometimes modified by another verb or two, hence forming a case of serialised verbs. Despite the wide variety of combinations attested, and the high productivity of this syntactic device, it is pos-

<sup>12.</sup> A less frequent incorporating pattern allows nouns to indicate the manner of a verb: *hohole lōqōvēn* 'talk (like a) woman', *et mete-k* 'see (with) my own eyes'.

sible to identify two essential functions that can be played by verb serialisation (a third pattern will be mentioned in Section 5.2.3).

One is CONCURRENT SERIALISATION, whereby two simultaneous (never sequential) actions are performed by the same subject A (see also (5): 'see know'):

(30)  $B\bar{o}yb\bar{o}y \ \langle m\bar{e}-h\bar{e}w \ t\bar{e}y \rangle \ me \ na-mtig.$  Boyboy PFT-go.down hold hither ART-coconut 'Boyboy has brought the coconuts down.'

The second pattern is CAUSATIVE SERIALISATION, whereby a subject A causes B to do something (see also (3): 'hit dead'; (10): 'do sad'):

(31) Na-lo \langle me-hey matyak \rangle no.

ART-sun PFT-shine be.awake 1sG

'I was woken up by the sun shining.' (lit., the sun shone me awake)

The modifying verb in a series is likely to affect the argument structure of its head. For example, (30) shows how a predicate phrase can be globally transitive although its head is intransitive; and (31) illustrates how two intransitive verbs can result in a transitive macro-verb. Incidentally, this possibility of serialising two verbs that share no argument at all constitutes a noteworthy exception to the definitions usually adopted for verb serialisation (Durie 1997: 291).

As is often the case throughout Oceania (Crowley 2002: 172, Bril & Ozanne-Rivierre 2004) as well as in other parts of the world (Aikhenvald & Dixon forth-coming), certain particular serialising patterns tend to specialise in the expression of certain grammatical functions. To take just one example, the transitive verb v(e)teg 'leave someone/something' is regularly used as a second member in a concurrent serial construction, to code for the comparative:

(32) Kē \( \langle n\bar{e}-mnay \\ veteg \rangle \ n\bar{e}k. \\
3sG \text{ STA-clever leave 2sG} \\
'He's cleverer than you.' (lit., he's clever he leaves you behind)

The issues raised by verb serialisation in Mwotlap, especially how it manages each verb's valency, are discussed in François (2004a, forthcoming b).

5.2.3. Adjectives as verb modifiers. An adjective can modify a verb to indicate the manner of the action: see (6a)–(6b) hohole liwo [speak big] 'speak loudly'. To the extent that adjectives can be viewed as a subset of verbs (Section 4.1.4.2), this pattern might well be analysed as a third type of serial verb, that is, "event-argument" serialisation (Aikhenvald forthcoming, François forthcoming b): in a sentence like 'you speak big', the semantic argument of 'big' is not 'you', but the subevent 'your speaking'.

Incidentally, this structure accounts for the paucity of manner adverbs (of the type *loudly*, *heavily*) in Mwotlap. Indeed, this function is fulfilled by plain adjectives in a serial pattern, with no need of creating adverbs by derivation.

5.2.4. *VP-internal adjuncts*. Mwotlap does have a class of VP-internal adverbs however, which can appear nowhere else in the clause than as a VP modifier. They are sometimes called "adjuncts" (Crowley 1982: 162) to distinguish them from VP-external adverbs such as locatives (Section 5.3). Examples include *lok* 'back' (3), *meh* 'too much' (17), *kal* 'upwards' (35), *tiwag* 'together', *galsi* 'properly'. Some adjuncts historically emerged – or are currently emerging – from verbs in serial constructions, e.g., *qēt* 'run out' > 'completely'; *tēy* 'hold something' > 'Comitative' (30); *veteg* 'leave something' > 'away from; than' (32).

As is suggested by the latter examples, adjuncts can be transitive. This makes them capable of disrupting the argument structure of the predicate:

- (33) a.  $\langle Hey \rangle$  na-trausis.

  AOR.wear ART-trousers 'Put some trousers on.'
  - b.  $\langle Hey goy \rangle$  na-y $\bar{n}\bar{e}$  den ne-nem mi AOR.wear (across) ART-leg.2sG from ART-mosquito with na-trausis.

ART-trousers

'Protect your legs from mosquitoes with trousers.'

In (34b), the adjunct goy does not only add to the verb hey its own semantic contribution (V + goy 'do something in such a way to obstruct, protect, impede, keep away, ...'); it also entails a complete shift in the argument structure of the VP. To be precise, two analyses could be proposed for (33b). A first approach would describe goy as an applicative, which promotes the beneficiary  $(na-y\bar{n}\bar{e})$  to the O function, simultaneously demoting the semantic patient (na-trausis) from the O slot towards the periphery, without fundamentally modifying each participant's semantic role (Dixon & Aikhenvald 2000). An alternative analysis would consider the sequence  $hey\ goy$  to form a new lexical macro-verb meaning 'protect something (using a garment)'; in this case, the formal shifting of arguments also implies a semantic reorganisation of the clause, whereby  $na-y\bar{n}\bar{e}$  has become the patient of  $hey\ goy$ , while na-trausis has lost all patient properties and is now a genuine instrument. Both the syntax-oriented and the lexicon-oriented analyses seem to be relevant to account for this sort of adjuncts (François 2000b).

The power of reshuffling the geometry of arguments is characteristic of transitive verbs as well as transitive adjuncts. It has been proposed (Crowley 1987: 61, 2002: 52) to analyse such structures {V+Adjunct} as a subtype of verb

## 140 Alexandre François

serialisation  $\{V+V\}$ . This analysis, in our view, unduly forces the facts, for adjuncts like goy do not qualify as verbs. It seems more fruitful to reverse the argument, and describe verb serialisation  $\{V+V\}$  as being just a subtype of a larger pattern of verb expansion  $\{V+x\}$ . This powerful syntactic device, which consists in providing a verb head with certain lexical modifiers in order to build a new macro-verb, may involve verbs as well as adjectives, nouns, or adjuncts (François 2004a).

## 5.3. Locative and oblique complements

- 5.3.1. Locatives and directionals. A locative phrase consists of one or more elements, in the following order: a space directional (e.g., hag 'up'); a Class II noun marked as a locative le- + N (e.g., le- $pn\bar{o}$  'in the village'); a locative adverb ( $h\bar{e}y\bar{e}t$  'in the bush',  $a\bar{m}ag$  'before'); a place-name ( $\bar{M}otlap$  'on Motalava'); a deictic (e.g.,  $g\bar{e}n$  'there', see Section 6.2.1). Unless they form the predicate itself (Section 4.1.2), locative phrases appear outside the verb phrase.
- (34) No  $\langle ma\text{-}van \ t\bar{o} \rangle$  hay  $l\bar{e}\text{-}tq\bar{e}$  mino  $g\bar{e}n$ . 1sg PRT<sub>1</sub>-go PRT<sub>2</sub> inland LOC-garden my there 'I went to my garden over there inland.'

Mwotlap makes frequent use of its six directionals me 'hither' (7, 30), van 'thither' (35, 36); hay 'in', yow 'out'; hag 'up',  $h\bar{o}w$  'down' (43). Horizontal vectors are not encoded by anthropocentric strategies (English right-left, in front-behind, ...) but by a geocentric system. This four-quadrant system formally employs the same directionals as locally-based strategies, but with different meanings: thus hay 'in' – yow 'out' serve to encode the topographical axis 'inland' (34) – 'seawards' (9); and hag 'up' –  $h\bar{o}w$  'down' encode the cardinal axis 'southeast [upwind]' – 'northwest [downwind]'. Because it is fundamentally based on the topography of islands and on the force of winds, this geocentric system reflects the history of the Austronesian navigators who peopled the Pacific (François 2003b; 2004c).

- 5.3.2. *Prepositions*. Despite taking exclusively human complements, the preposition *hiy* has primarily a locative meaning:
- (35) Kē ni-yemyem kal van hiy tita nonon!

  3sg Aor-climb.Dup up thither Loc mother his 
  'He's climbing on his mother!'

But most often, this spatial value of *hiy* receives a figurative interpretation, as it codes for dative or for benefactive:

(36) Nok se n-eh van hiy kōmyō Wemal. 1sG AOR.sing ART-song thither LOC 2DU Wemal 'Let me sing a song to you and Wemal.'

Other prepositions include instrumental-comitative [tiwag] mi '[together] with' (25, 33b); ablative den 'from (33b), than'; causal veg 'because of, about'; and a purposive-oblique prefix be- glossed 'for'.

#### 6. Complex sentences and discourse structure

In Mwotlap, there are two ways for a sentence to be complex. One takes the form of overtly marked coordination or subordination (Section 6.1). The other type is when two syntactically independent clauses appear to form a hierarchy in terms of their pragmatic status or information structure. The key to these constructions is the set of deictic markers (Section 6.2).

#### 6.1. Subordination

The clausal complements of verbs of speech, thought, will, and manipulation are introduced by a conjunction *so*:

(37) Iqet ma-galeg [so gēn so matmat].

(god) PFT-do COMPL linc.PL PROS dead.DUP

'Ikpwet is the one who made us mortal.' (lit., Ikpwet made THAT we should die)

The same morpheme *so* also introduces reported speech (like *wo* in (8)), as well as certain conditional and purpose clauses. There is all likelihood that this subordinator *so* is also the historical source of the Prospective marker *so* (*ni*-) (Section 4.2.3), even if both markers are now clearly distinct (cf. 37).

Relative clauses use a subordinator (mey) a. The relativised noun has to be explicitly cross-referenced inside the relative clause (here  $a\bar{e}$  'anaphoric adverb'):

(38)  $l\bar{o}$ - $q\bar{o}\bar{n}$  [mey a  $d\bar{o}$  me-leg  $t\bar{o}$   $a\bar{e}$  en] LOC-day the.one SUB 1INC.DU PRT<sub>1</sub>-married PRT<sub>2</sub> AA BKG 'the day we married' (lit., the day<sub>i</sub> that we married in-it<sub>i</sub>)

The relativisation strategy also serves to encode the presupposed element in cleft focus constructions:

(39)  $\langle T\bar{e}ta-nd\bar{o}\rangle$  [a  $k\bar{e}y$  so  $w\bar{e}l$   $k\bar{e}$  en]. sister-1INC.DU SUB 3PL PROS buy 3SG BKG (lit.) 'It's our sister; that they're going to marry (her;).'

Finally, the polyfunctional particle  $t\bar{o}$  (+ Aorist) is a subordinator expressing realis result (24) or irrealis purpose (12), as well as a coordinator ('so, then') in narratives (8, 43). The semantic contribution of the enclitic  $t\bar{o}$  appearing in several aspect markers (see Table 4) is difficult to associate with these clause-linking functions.

#### 6.2. Deictics and clause hierarchies

6.2.1. Deictics and discourse structure. Deictics in Mwotlap (François 2001b: 280–324) are organised into three degrees: (i)  $g\bar{o}h \sim ag\bar{o}h$  'here, this (within the speaker's sphere)'; (ii)  $n\bar{o}k \sim g\bar{e}n$  'here/there (to which I am pointing, whatever the distance)'.

More unusual is the complementary distribution of the two allomorphic series, depending on the pragmatic status of the clause, and the syntactic position of the deictic therein. The "conclusive" forms  $ag\bar{o}h$ , anen,  $g\bar{e}n$  are required if, and only if, the deictic meets the final boundary of an affirmative statement (34). The "non-conclusive" allomorphs  $g\bar{o}h$ , nen,  $n\bar{o}k$  are normally required in all other syntactic contexts, that is: any position in questions, commands, exclamations, negative statements; and non-final position in affirmative statements, especially topic position (9, 13). Thus compare  $n\bar{o}k$  and  $g\bar{e}n$  in (41):

(40)  $N\bar{e}k$  gen mey  $n\bar{o}k$ , nok gen mey 2sG AOR.eat the.one there[-CONCL] 1sG AOR.eat the.one  $g\bar{e}n$ . there[+CONCL] 'You eat that one, I'll eat that one.'

A corollary of this mechanism is its demarcative function. While non-conclusive deictics often suggest some sort of pragmatic incompleteness of the clause, their conclusive counterpart marks the end of an assertive utterance. In terms of the management of turn-taking in conversation, this normally coincides with a "transition relevance point" (Sacks et al. 1978) for the addressee.

6.2.2. Discourse backgrounding and clause hierarchies. Another connection between deixis and the organisation of discourse is drawn by the frequent phrase-final clitic *en* – originally a deictic. Its role is to signal the status of a phrase or clause as being background information, i.e., mental representations that are already present in the discourse or the context, and are supposedly shared by both the speaker and the addressee (Givón 1984: 239–267).

Due to this backgrounding property, this marker regularly codes for definiteness and anaphora (9), as well as topicalisation (11). But it may also have a whole proposition in its scope, which makes it almost always present in condi-

tional (25) and other topic clauses (Haiman 1978), in restrictive relative clauses (38), or in cleft constructions (39).

When *en* affects a clause that is syntactically well-formed as independent, one striking effect of information backgrounding is to induce pragmatic incompleteness, and hence discourse dependency or even *de facto* subordination:

- (41) Iqet mi-ti\(\bar{n}\) g\(\bar{e}n\) en, g\(\bar{e}n\) et-matmat te.

  (god) PFT-create 1INC.PL BKG 1INC.PL NEG1-dead.DUP NEG2

  'When Ikpwet created us, death was unknown to us.' (lit., Ikpwet created us, we were not dying)
- (42) Kimi galeg en, ne-het.

  2PL AOR.do BKG STA-bad

  'What you're doing is wrong.' (lit. You're doing (it), it's bad)

The clause hierarchies created by this backgrounding strategy are pervasive throughout Mwotlap speech. Likewise, this clitic *en* provides the standard way to link events together in narratives:

(43)Tēlge galeg Kēvtēl hōw n-ep en, tō gengen. COLL.TR AOR.do down ART-fire BKG then AOR.eat.DUP 3TR bah nen en. mitiv. AOR.eat.DUP finish there BKG AOR.sleep 'The three fellows made a fire and had their meal. [When] they finished up their meal, they fell asleep.'

When used in narratives, en often comes preceded by the deictic nen 'there, close to you' (Section 6.2.1), to which en is etymologically related. The "addressee's sphere" designated by this nen must here be understood figuratively: it stands for the mental representations the addressee keeps receiving from the speaker during their dialogue (cf. uses of la in colloquial French). Hence in (43),  $nen\ en$  could be glossed as 'there in your mind', i.e., 'as you know'. It thus looks as if nen were currently going through the same semantic shift as en evidently underwent earlier, from a spatial deictic value towards a discourse function of information backgrounding, and eventually a syntactic use as a clause linker. This kind of grammaticalisation process recalls how the formal structures of language can be deeply rooted in the pragmatics of face-to-face interaction.

#### 7. A final note

Of course, just a few pages are not sufficient to draw a comprehensive picture of a language. In order to be described with accuracy, each phenomenon should be discussed and illustrated at length. The characteristics of Mwotlap should

## 144 Alexandre François

be compared with other languages, whether on a genetic, an areal, or a typological basis. Whenever possible, diachronic reconstruction should help assess the historical depth of each aspect of the grammar. This is a matter for longer publications, some of which remain to be written.

Yet, whilst we had to limit ourselves to the essentials, we also endeavoured to briefly discuss the formal or functional implications of each grammatical structure. It is hoped that this short overview will help the reader situate Mwotlap in some of the debates currently taking place among typological linguists.

Received: 2 February 2004 LACITO-CNRS

Revised: 9 June 2004

Correspondence address: Laboratoire des Langues et Civilisations à Tradition Orale, CNRS, 7 rue Guy Môquet, 94801 Villejuif, France; e-mail: francois@vjf.cnrs.fr

Acknowledgements: My thanks go to Edith Moravcsik, Isabelle Bril, and three anonymous reviewers of Linguistic Typology, for their comments and advice on earlier drafts of this paper. During the five years I have dedicated to the description of Mwotlap, I benefited from the financial support of the Ecole Normale Supérieure, of the Académie Française, and of my research team of CNRS-LACITO. Finally, my warmest thanks are due to my friends of Motalava who taught me their language: Haget, Moses, Edgar, Milton, to name but a few.

Abbreviations: AA anaphoric adverb, AOR AOrist, APPREH Apprehensive, ART article, BKG background marker, CF Counterfactual, COLL collective, COMPL complementiser, CPLT Completive, DRINKP drink possession, DU dual, DUP reduplicated form, EMPH emphatic pronoun, 1EXC first exclusive, EXCL exclamative, FOODP food possession, IMP imperative pronoun, 1INC first inclusive, HF Hodiernal Future, LOC locative, NEG (realis) negation, PFT Perfect, PL plural, POLIT polite imperative, POSS possessive classifier, PROH Prohibitive, PROS Prospective, PRT Preterite, QUOT quotative marker, REVER reversive, SG singular, STA Stative, SUB subordinator, TAM Tense—Aspect—Mood, TEMPP temporary possession, TR trial, VOC vocative pronoun.

#### References

Aikhenvald, Alexandra (forthcoming). Serial verb constructions in typological perspective. In Aikhenvald & Dixon (eds.) forthcoming.

Aikhenvald, Alexandra & R.M.W. Dixon (eds.) (forthcoming). Serial Verb Constructions: A Crosslinguistic Typology. Oxford: Oxford University Press.

Arnott, David W. (1970). The Nominal and Verbal Systems of Fula. Oxford: Oxford University Press.

Bhattacharya, Sudhibhushan (1976). Gender in the Munda languages. In Philip Jenner, Laurence Thompson, & Stanley Starosta (eds.), *Austroasiatic Studies: Part I* (Oceanic Linguistics Special Publication, 13), 189–211. Honolulu: University Press of Hawaii.

Bril, Isabelle & Françoise Ozanne-Rivierre (eds.) (2004). Complex Predicates in Oceanic Languages: Studies in the Dynamics of Binding and Boundness. Berlin: Mouton de Gruyter.

Casali, Roderic F. (2003). [ATR] value asymmetries and underlying vowel inventory structure in Niger-Congo and Nilo-Saharan. *Linguistic Typology* 7: 307–382.

Chafe, Wallace L. (1970). Meaning and the Structure of Language. Chicago: Chicago University Press

- Chappell, Hilary & William McGregor (eds.) (1996). The Grammar of Inalienability: A Typological Perspective on Body Part Terms and the Part-Whole Relation. Berlin: Mouton de Gruyter.
- Comrie, Bernard (1976). Aspect. An Introduction to the Study of Verbal Aspects and Related Problems. Cambridge: Cambridge University Press.
- (1985). Tense. Cambridge: Cambridge University Press.
- Corbett, Greville (2000). Number. Cambridge: Cambridge University Press.
- Crowley, Terry (1982). *The Paamese Language of Vanuatu*. (Pacific Linguistics, B-87.) Canberra: Australian National University.
- (1987). Serial verbs in Paamese. Studies in Language 11: 35–84.
- (2002). Serial Verbs in Oceanic: A Descriptive Typology. Oxford: Oxford University Press.
- Culioli, Antoine (1978). Valeurs aspectuelles et opérations énonciatives: l'aoristique. In J. David & Robert Martin (eds.), Actes du colloque sur la notion d'aspect, 182–193. Metz: Klincksieck.
- Dixon, R. M. W. & Alexandra Aikhenvald (eds.) (2000). *Changing Valency: Case Studies in Transitivity*. Cambridge: Cambridge University Press.
- Durie, Mark (1997). Grammatical structures in verb serialization. In Alex Alsina, Joan Bresnan, & Peter Sells (eds.), Complex Predicates, 289–354. Stanford: CSLI.
- François, Alexandre (1999). Mouvements et clonages de voyelles en motlav: Entre phonologie et morphologie. *Bulletin de la Société de Linguistique* 94-1: 437–486.
- (2000a). Vowel shifting and cloning in Motlav: Historical explanation vs. formal description.
   In Marian Klamer (ed.), Proceedings of AFLA 7 (The Seventh Meeting of Austronesian Formal Linguistics Association), 49–68. Amsterdam: Vrije Universiteit.
- (2000b). Dérivation lexicale et variations d'actance: Petits arrangements avec la syntaxe. Bulletin de la Société de Linguistique 95-1: 15-42.
- (2001a). Gabarit de procès et opérations aspectuelles en motlav, Océanie. Actances 11: 145– 175
- (2001b). Contraintes de structures et liberté dans l'organisation du discours: Une description du mwotlap, langue océanienne du Vanuatu. Doctoral dissertation, Université Paris-IV Sorbonne. 3 volumes. Available at http://alex.francois.free.fr
- (2003a). La sémantique du prédicat en mwotlap (Vanuatu). (Collection Linguistique de la Société de Linguistique de Paris, 84.) Paris; Peeters.
- (2003b). Of men, hills and winds: Space directionals in Mwotlap. Oceanic Linguistics 42: 407–437.
- (2004a). Chains of freedom: Constraints and creativity in the macro-verb strategies of Mwotlap. In Bril & Ozanne-Rivierre (eds.) 2004, 107–143.
- (2004b). La réduplication en mwotlap: Les paradoxes du fractionnement. In Elizabeth Zeitoun (ed.), Les langues austronésiennes (Faits de langues, 24), 177–194. Paris: Ophrys.
- (2004c). Reconstructing the geocentric system of Proto Oceanic. Oceanic Linguistics 43: 1–32.
- (forthcoming a). Diversité des prédicats non verbaux dans quelques langues océaniennes. In Jacques François & Irmtraud Behr (eds.), Les constituants prédicatifs et la diversité des langues: Actes de la Journée de la Société de Linguistique de Paris. (Mémoires de la Société de Linguistique de Paris.) Louvain: Peeters.
- (forthcoming b). Serial verb constructions in Mwotlap. In Aikhenvald & Dixon (eds.) forthcoming.
- Givón, Talmy (1984/90). Syntax: A Functional-typological Introduction. 2 volumes. Amsterdam: Benjamins.
- Givón, Talmy (ed.) (1983). Topic Continuity in Discourse: A Quantitative Cross-language Study. Amsterdam: Benjamins.
- Greenberg, Joseph H. (1963). Some universals of grammar with particular reference to the order of meaningful elements. In Joseph H. Greenberg (ed.), *Universals of Language*, 58–90. Cambridge, Mass.: MIT Press.
- Haiman, John (1978). Conditionals are topics. Language 54: 564–589.

- Hewitt, George (1996). Georgian: A Learner's Grammar. London: Routledge.
- Launey, Michel (1994). Une grammaire omniprédicative: Essai sur la morphosyntaxe du nahuatl classique. Paris: CNRS.
- Lemaréchal, Alain (1989). Les parties du discours: Syntaxe et sémantique. Paris: Presses Universitaires de France.
- Lichtenberk, Frantisek (1985). Possessive constructions in Oceanic languages and in Proto-Oceanic. In Andrew Pawley & Lois Carrington (eds.), Austronesian Linguistics at the 15th Pacific Science Congress (Pacific Linguistics, C-88), 93–140. Canberra: Australian National University.
- (2000). Inclusory pronominals. *Oceanic Linguistics* 39: 1–32.
- Lynch, John, Malcolm Ross, & Terry Crowley (2002). The Oceanic Languages. Richmond: Curzon.
- Mithun, Marianne (1984). The evolution of noun incorporation. Language 60: 847-894.
- Moravcsik, Edith (2003). A semantic analysis of associative plurals. *Studies in Language* 27: 469–503
- Nordlinger, Rachel & Louisa Sadler (2000). Tense as a nominal category. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of LFG 2000*, 197–214. Stanford: CSLI.
- Robert, Stéphane (1996). Aspect zéro et dépendance situationnelle: L'exemple du Wolof. In Claude Müller (ed.), *Dépendance et intégration syntaxique: Subordination, coordination, connexion*, 153–161. Tübingen: Niemeyer.
- Sacks, Harvey, Emmanuel Schegloff, & Gail Jefferson (1978). A simplest systematics for the organization of turn taking in conversation. In Jim Schenkein (ed.), Studies in the Organization of Conversational Interaction, 7–55. New York: Academic Press.
- Sasse, Hans-Jürgen (2002). Recent activity in the theory of aspect: Accomplishments, achievements, or just non-progressive state? *Linguistic Typology* 6: 199–272.
- Smith-Stark, T. Cedric (1974). The plurality split. Chicago Linguistic Society 10: 657–671.
- Terrill, Angela (2001). Activation levels in Lavukaleve demonstratives: *Oia* versus *foia. Linguistic Typology* 5: 67–91.