The economy of word classes in Hiw, Vanuatu: Grammatically flexible, lexically rigid

Alexandre FRANÇOIS
LACITO-CNRS, Paris
A.N.U., Canberra

Abstract

The issue of lexical flexibility is better tackled as the articulation of two separate mappings: one that assigns lexical items to word classes; another one that associates these word classes with the syntactic functions they can access. A language may endow its lexemes with more or less multicategoriality, and its word classes with more or less multifunctionality: these are two distinct facets of lexical flexibility, which should be assessed separately. Focusing on Hiw, an Oceanic language of northern Vanuatu, I show that lexical flexibility is there mostly due to the high multifunctionality of its word classes, each of which can regularly access a broad array of syntactic functions. Conversely, Hiw ranks relatively low on the scale of multicategoriality: most of its lexemes are assigned just one word class. This is how a language can be grammatically flexible, yet lexically rigid.

1 Walk on two legs: Lexical mapping, grammatical mapping

1.1 On lexical flexibility

The notion of lexical flexibility measures the ability, for individual lexemes in a language, to fill a number of different syntactic functions in the sentence. A language will be assigned a higher degree of flexibility if it can be shown to allow a larger number of functions to its lexemes. By contrast, the other end of the typological spectrum will include languages that

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1 The author would like to thank XXX for their comments on earlier drafts of this paper. This work is part of the program Investissements d’Avenir overseen by the French Agence Nationale de la Recherche, ANR-10-LABX-0083 (Labex EFL) – and of its axis Typology and dynamics of linguistic systems.
The economy of word classes in Hiw can be described as more “rigid”, as they only allow their lexemes to fill one specific function.

A language like Latin shows very low flexibility: words are normally assigned a single category (noun, adjective, verb...) and a root can only change category membership by means of morphological derivation. Thus, from the root *tim-* ‘fear’, Latin would derive a verb (*timeō* ‘to fear’), an adjective (*timidus* ‘fearful’) or a noun (*timor* ‘fear’); each of these lexemes, taken individually, would be assigned a very limited set of syntactic functions.

By contrast, Oceanic languages are often considered to be more flexible in their lexicon. Thus Tahitian (Polynesian) has a word *ite* which can function as a transitive verb ‘to see, to know’ as well as a noun meaning ‘knowledge’ or ‘witness’. Furthermore, the contrast between nouns and verbs in Tahitian is less clearcut than in European languages, since both categories are found in similar syntactic contexts – both nouns and verbs can be the head of a predicate marked in Tense-Aspect-Mood; both nouns and verbs can be preceded by the determiner *te* (Lazard & Peltzer 2000:23). A language like Tahitian would clearly rank high on a typological scale of lexical flexibility.

The question central to the present volume is whether the lexical flexibility observed for a language like Tahitian can be generalised to the whole Oceanic family, or if Oceanic languages show a lot of variation on this scale. The present paper will look closely at Hiw, a non-Polynesian language of the Oceanic family spoken in Vanuatu [§1.4]. I will show that the grammar of Hiw shows both signs of high flexibility and high rigidity; and will attempt to solve this paradox.

### 1.2 From lexemes to word classes, from word classes to functions

It is in fact problematic to define lexica**l flexibility** as though it simply involved a direct mapping from individual lexemes to syntactic functions in the clause. I believe it is both heuristic and more accurate to introduce here an intermediary step, namely the notion of parts of speech or word classes.¹ What might have appeared, as a first approximation, as a single mapping – from lexemes to functions – is in fact a two-step process:

- **Lexical mapping:** 
  
  Each individual lexeme is assigned one or several word classes.

- **Grammatical mapping:** 
  
  Each individual word class is assigned one or several functions.

Thus in English, consider the word *paper*. While it typically heads an argument phrase as in (1a), it can also function as a modifier to another head, as in (1b):

(1a) I need *paper*.
(1b) I need a *paper* clip.

¹ My reflection on these matters owes considerably to the work of Alain Lemaréchal, especially his 1989 volume on parts of speech, *Les parties du discours* (Lemaréchal 1989).
Should we say that paper shows lexical flexibility? that it behaves sometimes as a noun, and sometimes as an adjective? Hardly. In English, it is a property of all common nouns to be compatible both with the function of head in an argument phrase, and with that of modifier. Thus paper can take on two different syntactic functions, not because it is a flexible lexeme, but merely by virtue of being a noun. The fact that nouns can access not just one but two functions in English is worthy of notice; but rather than constituting a case of lexical flexibility as such, it would be more accurate to describe it as an example of grammatical flexibility, as it were. It is a property of word classes in the grammar, not a property of individual words in the lexicon.

This is not to say that English lacks lexical flexibility altogether. Consider the word travel, which can occupy the functions {head of argument phrase}, {modifier of head in argument phrase}, and {head of TAM-inflected predicate}:

(2a) Travel will be expensive.
(2b) I’ll bring my travel documents.
(2c) We will travel together.

This example illustrates both lexical and grammatical flexibility. On the one hand, (2a) and (2b) reflect the polyfunctionality of the word class Noun in English, just like we saw for (1a)-(1b) above: this pertains to grammar, and says little about the lexicon. Yet on the other hand, (2c) features the same word as {head of TAM-inflected predicate} – a function that English does not normally associate with Nouns, but with Verbs. The best analysis is to consider that the same lexeme travel maps onto two different word classes: it is a Noun – which accounts for (2a) and (2b) – and it is a Verb – which explains (2c). This double membership does constitute, this time, a proper case of lexical flexibility.

A second example of lexical flexibility in English would be a word like home. It behaves like a Noun in (3a) and (3b), but like an Adverb in (3c), normally the only word class that can directly fill the slot of adjunct.

(3a) My home is yours.
(3b) This is my home country.
(3c) There’s nobody home.

Once again, what we have here is a dual lexical mapping \((home \rightarrow \{\text{NOUN}; \text{ADVERB}\})\), followed by a grammatical mapping that can be either simple \((\text{ADVERB} \rightarrow \text{adjunct})\) or dual \((\text{NOUN} \rightarrow \{\text{head in argument phrase}; \text{modifier in argument phrase}\})\). The English situation is summarised in Figure 1.

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1 Throughout this paper, I will capitalise the name of parts of speech. This usage is based on a structuralist notion, that the “nouns” in one language are a totally different sort of reality from the “nouns” in another language. This point has been argued, among others, by Haspelmath (2010, 2012), and is in fact central to this whole study. The typography intends to reflect this analysis (cf. Haspelmath 2010).
1.3 Multicategoriality vs. multifunctionality

This two-mapping view will allow us to disentangle the intricacy of lexical flexibility. I thus propose to break up the gradient of flexibility into two different metrics, which I will call *multicategoriality* and *multifunctionality*:

(4) the scale of **MULTICATEGORIALITY** reflects the ability, for individual lexemes, to be regularly assigned several word classes

(5) the scale of **MULTIFUNCTIONALITY** reflects the ability, for individual word classes, to be regularly assigned several syntactic functions

**Multicategoriality** is a property of the lexicon; **multifunctionality** a property of the grammar. By extension, both metrics can be seen as properties of a language as a whole.

A language like Latin would be a case of a maximally rigid system, as it shows low rankings on both dimensions. Most lexemes are assigned a single part of speech (e.g. *tempō* is rigidly a verb), and most parts of speech are restricted to essentially one or two functions (e.g. finite verbs can only be a predicate head).

At the other end of the flexibility scale, a language like Tahitian (briefly mentioned in §1.1) ranks high on both parameters. First, the majority of lexemes can map onto several word classes (e.g. ‘*ite* is both a verb and a noun): the lexicon of Tahitian shows high levels of multicategoriality. Second, each word class is compatible with a broad array of syntactic functions in the clause: the grammar of Tahitian shows high levels of multifunctionality.

English fits somewhere between these two extremes. As *Figure 1* shows, it appears quite rigid for many lexemes (*small* is strictly an adjective, *know* strictly a verb, etc.), yet it does show some degree of multicategoriality (cf. *travel, home*).¹ English also shows a certain

¹ Note that the term *precategoriality* sometimes used in the literature would be inadequate. If a word like *travel* were analysed as "precategorial", we would still have to explain why it never behaves like an adjective or an adverb. It is therefore more accurate to speak of *multicategoriality*, whereby a given
degree of multifunctionality – illustrated here for its nouns – but this remains quite limited: unlike Tahitian for example, English does not allow its nouns or its adjectives to head a predicate, or its verbs to head an argument.

It would be worthwhile to design a quantitative method for actually rating languages along these two metrics. Thus, for languages endowed with lexicographic resources (ideally digital), multicategoriality could be assessed by counting the number of lexemes associated with more than one part of speech, as a proportion of the whole lexicon. More fine-grained measurements could count the proportion, say, of noun–verbs or noun–adverbs within the noun lexicon. As for multifunctionality, it could be measured based on a grammar of reference, that would list the different syntactic functions associated with each part of speech. While such quantitative methods fall beyond the scope of this study, some suggestions will be made in §0.

1.4 Assessing lexical flexibility in Hiw

The present article will focus on the description of one language, namely Hiw. This is an endangered language spoken by about 280 people on the island of the same name, at the northwestern tip of the Vanuatu archipelago, in the Torres Islands (François 2010a, 2012). This small island group is also home to Lo-Toga, a language very close to Hiw (François 2010b, 2014:182). The present study rests on primary data collected by the author during several field trips to the Torres Islands, between 2004 and 2011. My corpus includes elicited material, as well as narratives and conversations.1

I will thus attempt to assess the forms taken by lexical flexibility in Hiw. Following the reasoning in the previous sections, it is clear that this type of study will first require us to establish the inventory of word classes in this language. Because such an inventory is always language-specific, the analysis will have to be conducted on a structuralist, empirical basis: I will examine the behaviour of each word class in my corpus, and list the array of syntactic functions they can regularly access in the clause.

Observing the general behaviour of parts of speech in the language’s grammar – that is, what I called patterns of grammatical mapping from word classes to functions – is a prerequisite before we can survey individual lexical items, and assess the patterns of lexical mapping from lexemes to word classes. (Likewise, we needed to know about the syntactic properties of nouns in English, before being able to assess the lexical flexibility of individual words like paper or travel.)

lexeme maps onto specific word classes: travel is both a verb and a noun, home both a noun and an adverb. As for the term precategorial, it is probably better suited for roots, at a sublexical level (cf. Verhaar 1984, Lehmann 2004) – see in §1.1 the example of the Latin root *tim-.

1 I will indicate the source of my examples using simple conventions. Sentences taken from my recorded texts will note the story and the sentence number – e.g. [Meravtit.051]. Sentences obtained through elicitation refer to my field questionnaires – e.g. [d12:12]. Spontaneous speech heard during language immersion has a reference to my notebooks – e.g. [r3-28b]. (My field notes are archived online, at www.odsas.net.)
For example, consider the pair of sentences in (6a-b). It shows that the same form \textit{mařenage} can act as the head of an argument phrase (6a), but also as the head of a predicate phrase inflecting for tense (6b).

\begin{align*}
(6a) & \quad \textit{Mařenage} \quad \textit{mмо} \quad \textit{ti} \quad \textit{tuwtōw}. \\
& \hspace{1cm} \text{chief} \quad \text{sick} \quad \text{PAST} \quad \text{before} \\
& \hspace{1cm} \text{‘The chief was sick before.’} \\
(6b) & \quad \textit{Noke} \quad \textit{Mařenage} \quad \textit{ti} \quad \textit{tuwtōw}. \\
& \hspace{1cm} \text{1sg} \quad \text{(be).chief} \quad \text{PAST} \quad \text{before} \\
& \hspace{1cm} \text{‘I was a chief before.’}
\end{align*}

A superficial, anglocentric analysis could be tempted to describe these two functions, respectively, as “nominal” and “verbal”; and even infer that \textit{mařenage} is a noun ‘chief’ in (6a), and a verb ‘be chief’ in (6b). This analysis would be legitimate, for example, if it could be shown that nouns are normally incompatible with the function of (TAM-inflected) predicate head: we would then have a case similar to (2c) for English, and good reasons to analyse it as a dual mapping (\textit{mařenage} \rightarrow \{noun; verb\}). This would be an instance of \textit{multicategoriality}.

But the analysis becomes entirely different if it turns out that (head of TAM predicate) is in fact a syntactic function open to all nouns. This would mean that this ability to fill that function is not encoded among the special characteristics of the lexical item \textit{mařenage}, but is simply a general property of the class of Nouns in Hiw. If so, we would be dealing with \textit{multifunctionality}, a feature of the grammatical system rather than the lexicon.

In this paper, I will demonstrate that it is the second analysis which is correct – not just for this example (6a-b), but for many similar configurations. What may seem, at first glance, to constitute lexical flexibility in Hiw, is in fact quite often an optical illusion. While it is true that lexical items are able to occupy many syntactic slots in the sentence, this is generally not due to flexibility inside the lexicon, but rather to the very wide array of functions that are made accessible to each part of speech in the grammar. In other words, what characterises Hiw is first and foremost a high level of grammatical \textit{multifunctionality}.

By contrast, and somewhat surprisingly perhaps, this language ranks relatively low on the scale of \textit{multicategoriality}. Just like the word \textit{mařenage} is strictly a noun, likewise the majority of lexemes in Hiw are assigned just one word class. Lexical flexibility does exist (for example, we will see in §4.1 that \textit{veřoye} is both a noun ‘war’ and a verb ‘to wage war’) but it applies only to a couple dozen words, and is much more limited than, say, in English. In sum, the present study will show that the Hiw language is \textit{lexically rigid} (low \textit{MULTICATEGORIALITY}) yet \textit{grammatically flexible} (high \textit{MULTIFUNCTIONALITY}).

\subsection*{1.5 This study}

The present article is organised as follows.

Section 2 will survey the syntax of the clause in Hiw, and present the formal clues for identifying the main syntactic functions in the clause.
Section 3 will then define the different word classes of Hiw, based on their compatibility with these functions. This will provide an assessment of the language’s multifunctionality.

Finally, Section 4 will briefly survey the lexicon in search of multcategorial words. While these do exist, I will show that their number is in fact quite limited.

2 The main syntactic functions of Hiw

2.1 The clause in Hiw

Before we examine the properties of individual parts of speech in Hiw, it is useful to begin with an overview of its basic syntax. This section will examine how the clause is organised in this language, and what are the formal correlates – e.g. in terms of word order – of its main syntactic constituents.

Like most other Oceanic languages, Hiw is a configurational, right-branching language in which word order tends to be strict. Its basic constituent order would be traditionally described as SVO. However, in this study I will deliberately refrain from labelling basic constituents using terms inherited from word class labels: thus rather than parsing the sentence into the classical units of formal syntax “NP” and “VP”, I will choose to employ functional labels such as “argument phrase” or “predicate phrase”. This is a cautionary step in order to avoid any aprioristic bias regarding the nature of each phrase’s head. For example, in sentence (6b) above [§1.4], rather than describe the constituent mařenage ti as a Verb Phrase, I will use the neutral label “TAM-inflected predicate”: this has the advantage of leaving open all options as to the nature of its head (noun, verb or otherwise).

The order of the main components in a Hiw clause comes as follows:

(7) (TOPIC) (SUBJECT)ArgP PREDICATEPredP (ADJUNCTS)

The PREDICATE PHRASE (PredP) may itself parse into a head and its modifiers:

(8) PredP \rightarrow \{ HEAD (MODIFIERS) \}_{PredP}

If the predicate head is transitive, then it takes an object argument, which inserts inside the Predicate phrase:

(9) PredP \rightarrow \{ HEAD (MODIFIERS) [OBJECT]_{ArgP} \}_{PredP}

Both the subject and the object take the form of an ARGUMENT PHRASE (ArgP). The latter may also parse into a head followed by its optional modifiers:

(10) ArgP \rightarrow \{ HEAD (MODIFIERS) \}_{ArgP}

This study will focus on six main syntactic functions:

- head of predicate phrase
- modifier in predicate phrase
- head of argument phrase
- modifier in argument phrase
- adjunct
The following subsections [§2.2–2.6] will illustrate these syntactic functions, and provide more detail about their formal manifestations. Little will be said, quite deliberately, about the word classes compatible with these functions, as this is the topic of Section 3 below.

### 2.2 Head of a predicate phrase

A well-formed clause consists of at least one obligatory phrase, the **predicate**:¹

(11)  ⟨MEₐ⁰ₐ⁰ₐwε⟩.
      perfect
      ‘It’s perfect.’

Hiw has regular *zero* anaphora for non-human subjects – as in (11). All other cases require an overt subject. This takes the form of an argument phrase [§2.4], which always precedes the predicate:

(12)  Sọ́ţō ⟨PUN⟩.
      3du  quarrel
      ‘They argued.’

The predicate can inflect overtly for Tense-Aspect-Mood. I will call these cases, for the sake of brevity, “**TAM predicates**”:

(13)  Sise ⟨nē KEKKÈ⟩.
      3pl  STAT small INTSF
      ‘They’re very small.’

**TAM** markers in Hiw can precede the head, like Stative *nē* in (13). They can follow the head, like Past *ti* in (6b) above, or in (14):

(14)  Kemi ⟨MOT ري⁰⁰⁰⁰⁰⁰⁰ ti⟩ vo?
      2pl  sleep:PL PAST where
      ‘Where did you guys sleep?’

Finally, certain **TAM** markers take the form of a discontinuous morpheme ⟨**TAM**₁… **TAM**₂⟩, like the Background Perfect² *ve… ti* in (15):

(15)  Tuⁿwuyegē ⟨ve ṭAK ti⟩.
      HUM:FEM:PL BkP₁ make BkP₂
      ‘The women made it.’

The two components of such bipartite **TAM** morphemes form a bracket around a string of elements that come in a strict order, including the predicate head and its modifiers [§2.3].

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¹ Throughout the examples of this study, I will help the reader by indicating the limits of the predicate phrase with pointy brackets ⟨…⟩. The syntactic head of certain phrases will be capitalised.

² On the semantics of the Background Perfect in Hiw, see François (2010b).
2.3 Modifier in a predicate phrase

The head of a predicate phrase (PredP) can take one or several modifiers internal to the phrase. The order of constituents within the PredP was foreshadowed in (9) above; (16) shows it in more detail:

\[
\langle (TAM_1) \text{HEAD (modifiers)} \rangle_{\text{PredP}} \langle \text{object} \rangle_{\text{ArgP}} \langle (TAM_2) \text{(directional)} \rangle
\]

The modifiers within a predicate phrase always follow their head:

(16) 
Ike \langle tati TITTÖM \text{ tnēg } \rangle \text{ pēne}.
2sg NEG think too.much about.it

‘Don’t worry too much about it.’

If the predicate phrase is headed by a transitive verb, the modifiers normally insert between the verb and its object argument:

(17) 
Ike \langle ŪÆ \text{ wetewate} \rangle \langle \text{ne yō ēñwe} \rangle \text{ ArgP}!
2sg sweep clean ART inside house

‘(You) sweep the room clean!’

The head of a predicate phrase may be followed by more than one modifier:

(18) 
Tite \langle ŪÆ \text{ tōur ṭūr} \rangle \text{ tom tite} \langle ŪÆ \text{ tērōg t̄gō} \rangle
1inc:pl see follow properly COMP 1inc:pl attach.bait trying firm

tom ne pyē mik īn̄wot.
COMP ART bait APPREH break

‘Let’s make sure we try to attach the bait firmly so it doesn’t come off.’

This example will be explained in §3.5 below.

Care must be taken to distinguish between those specifiers that are internal to the PredP – like \text{tnēg} in (17) – and those that fall outside of it – like \text{pēne} in (17). Even though both would be translated by adverbs in English, they constitute distinct parts of speech in Hiw, occupying two different syntactic slots. The distributional contrast between the two slots is made evident when the PredP includes more material. For example, (20) includes a postverbal TAM\_2 marker \text{ti}, followed by a spatial directional \text{vēn ‘up’}. The latter two – as per (16) above – mark the right boundary of the Predicate phrase:

(20) 
Meravtit \langle VĒN \text{ wrōg ti vēn} \rangle \text{ ēn̄e}n̄e.
M. ascend through PAST up above

‘Megavtit managed to climb through to the top.’

A sentence like (20) makes it clear that \text{wrōg} is internal to the PredP, whereas \text{ēn̄e}n̄e \text{‘above’} never inside. Each of these lexical items is strictly bound to its own syntactic slot: \text{wrōg ‘through’} can never appear outside the PredP, and \text{ēn̄e ‘above’} never inside. I propose to keep the term \text{ADVERB} [see §3.5] for those lexemes that are only found within the boundaries of the PredP – e.g. \text{wrōg ‘through’ or tnēg ‘too much’}. Conversely, those words which,
like *pëne* in (17) or *erëne* in (20), can only occupy an adjunct slot outside the PredP, will be called **adjuncts**. In Hiw, lexical adverbs and lexical adjuncts constitute two watertight categories.

As we’ll see later, the syntactic function **modiﬁer of a head within a PredP** can be ﬁlled by a variety of lexical categories: either lexical Adverbs – which are specialised in this function – or other parts of speech, especially Verbs and Adjectives.

### 2.4 Head of an argument phrase

Argument phrases are used as arguments of a verb (subject, object), as the object of a preposition, or as a possessor. Hiw follows a nominative-accusative syntax.

An argument phrase (ArgP) can be headed by a personal pronoun – cf. *sörö ‘3du’* in (12), *sise ‘3pl’* in (13), *kemi ‘2pl’* in (14)... – or by a proper noun – like *Meřavtit* in (20).

Nouns split into two noun classes, depending on their syntactic behaviour in argument phrases. **Strong nouns** are able to form the head of an ArgP, like *mařenage* in (6a), or *temarëřë* in (21):

\[(21) \{ \text{TEMAŘEŘE} \}_\text{ArgP} \quad \text{ve kay me.} \]
\[
\text{old.man} \quad \text{IPFV} \quad \text{crawl hither} \]
\[
\text{‘There’s an old man coming here.’} \quad \text{[Meravtit.121]} \]

By contrast, **Weak nouns** are unable to form directly the head of an ArgP: in order to do so, they require a determiner of some sort, like the article *ne*. While *temarëřë* ‘old man’ was a strong noun, its synonym *tamesō* is a Weak noun:

\[(22a) \ast \{ \text{TAMESŌ} \}_\text{RefP} \quad \text{ve kay me.} \]
\[
\text{old.man} \quad \text{IPFV} \quad \text{crawl hither} \]
\[
\text{‘There’s an old man coming here.’} \]

\[(22b) \{ \text{ne} \quad \text{TAMESŌ} \}_\text{RefP} \quad \text{ve kay me.} \]
\[
\text{ART} \quad \text{old.man} \quad \text{IPFV} \quad \text{crawl hither} \]
\[
\text{‘There’s an old man coming here.’} \quad \text{[Meravtit.129]} \]

I will get back to the distinction between Strong and Weak nouns in §3.7. For the time being, sufﬁce it to say that only Strong nouns can form directly the head of an argument phrase.

### 2.5 Modifier in an argument phrase

A fourth key function in the clause is that of **modiﬁer of the head in an ArgP** – for example, a noun’s attribute. This slot follows the lexical head of the ArgP:

\[(23) \text{ne ſũwate ᵃkē} \]
\[
\text{ART snake little} \]
\[
\text{‘a little snake’} \]
As we’ll see, this modifier function can be filled by Adjectives, Weak nouns and Numerals.

### 2.6 Adjuncts

The adjunct phrase normally comes after the predicate phrase, as in (17) and (20) above. Adjuncts can also be topicalised:

\[(24) \quad \text{Köň së, sise vën toş se rekove yöte.}\]

\[
\begin{array}{llllll}
\text{day} & \text{INDF} & \text{3pl} & \text{go:PL} & \text{COMP} & \text{3pl} & \text{work in:STAN}\n\end{array}
\]

‘One day, they went to work in the garden.’

The adjunct phrase can consist of a prepositional phrase, a phrasal adjunct, or a lexical adjunct. In (24), Köň së is a phrasal adjunct; yöte is a lexical adjunct [see §3.6, 4.3].

### 3 Defining the word classes of Hiw

#### 3.1 Grammatical flexibility in Hiw

The five functions we examined in the previous section were defined using functional and syntactic criteria, independently of the word classes that can populate them. As stated in §2.1, this was a conscious choice to avoid making any aprioristic assumptions about the distribution of word classes in the language.

These key functions will provide us with a grid that will help us, precisely, define the parts of speech of the Hiw language based on an empirical, distributional approach. Indeed, Section 3 will show that each word class in this language is defined by the specific array of syntactic functions it can access. Table 1 shows the correspondence between Hiw’s word classes and the syntactic functions they can regularly occupy.

This table displays what I called earlier [§1.2] the grammatical mapping, from word classes to functions. What is immediately striking is the relatively high number of functions which can be occupied by a given word class directly, i.e. with no need of derivation or extra morphology. In other words, Hiw shows a high degree of syntactic multifunctionality. I will come back to this table in the later discussion [§0].

### Table 1 – Major word classes in Hiw and their syntactic functions

<table>
<thead>
<tr>
<th>Syntactic function</th>
<th>VERB</th>
<th>ADJECTIVE</th>
<th>NUMERAL</th>
<th>STRONG NOUN</th>
<th>WEAK NOUN</th>
<th>ADVERB</th>
<th>ADJUNCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>head of argument phrase</td>
<td>–</td>
<td>–</td>
<td>+</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>modifier in argument phrase</td>
<td>–</td>
<td>+</td>
<td>+</td>
<td>–</td>
<td>+</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>head of TAM-inflected predicate</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>head of direct predicate</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>modifier in predicate phrase</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td>+</td>
<td>–</td>
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<tr>
<td>adjunct</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>+</td>
</tr>
</tbody>
</table>
The next subsections will examine word classes one after the other, based on my corpus, so as to provide evidence for the claims made in Table 1.

### 3.2 Verbs

A large subset of the lexicon falls under the word class Verb. These verbs may be transitive or intransitive, have static or dynamic semantics.

The principal function open to verbs is \{head of a predicate phrase\}. This normally entails the presence of a TAM marker that precedes or follows it [see §2.3]:

\[(25)\] Ne tamesō n̄ot \(\langle ve\ \textbf{TU}\rangle\).

\[
\begin{array}{llllll}
\text{ART} & \text{old.man} & \text{INDEF} & \text{IPFV} & \text{stand:NPL} \\
\end{array}
\]

‘There was an old man standing.’ [Ed.07]

\[(26)\] Nine \(\langle\textbf{MITIR} ti\rangle\) yōn̄we.

\[
\begin{array}{llllll}
3\text{sg} & \text{sleep:NPL} & \text{PAST} & \text{at.home} \\
\end{array}
\]

‘She slept at home.’

Hiw also allows its verbs to head a predicate phrase with no TAM marking:

\[(27)\] Sōrō \(\langle \textbf{TU} \rangle\) yō tapego tuwē.

\[
\begin{array}{llllll}
3\text{du} & \text{stand:NPL} & \text{LOC} & \text{mat} & \text{one} \\
\end{array}
\]

‘They’re standing on the same mat.’ [Hades.45]

A structure like (27) may receive two interpretations. On the one hand, it could be analysed as a case of a TAM-marked predicate in which the TAM happens to be zero. On the other hand, it may also qualify as what I will later call a “direct predicate”. Indeed, as we’ll see in §3.7.6, the latter category (direct predicate, uninflected for TAM) needs to be posited to account for equational predicates in the domain of nouns. Given the existence of this type of predicates in the system, it may be wise to consider that sentences like (27) constitute an instance of a direct predicate. This reasoning explains why Table 1 assigned verbs to two slightly different functions: \{head of TAM-inflected predicate\}, and \{head of direct predicate\}.

Another function that can be filled by Hiw lexical verbs is \{modifier of the head in a predicate phrase\}. This happens when the verb comes second in a serial construction. Thus the verb tu ‘stand’ can be serialised to another verb rōw ‘dash, fly, leap’, yielding a compound rōw tu \(\langle\text{dash − stand}\rangle\): [of an arrow] ‘fly and reach a certain spot, get stuck somewhere’:

\[(28)\] Ne mesoř =ena \(\langle\textbf{RŌW tu}\rangle\) i ne řōt pake.

\[
\begin{array}{llllllll}
\text{ART} & \text{arrow} & =\text{his} & \text{dash} & \text{stand:NPL} & \text{OBL} & \text{ART} & \text{root} & \text{banyan} \\
\end{array}
\]

‘His arrow stuck in the banian root.’ [Meravit.t.199]

Likewise, (29) shows how moketog ‘release’ can be serialised to mañe ‘talk’, resulting in a compound \(\langle\text{talk − release}\rangle\) ‘authorise s.o. to do s.th.’:
Hiw has several syntactic structures which can be analysed as verb serialisation. The one illustrated in (28)-(29) consists in stringing together two verb lexemes so as to form a “macro-verb” (François 2004), a compound verb made up of several phonological words.

While this structure can indeed be analysed as verb serialisation, it also follows a more general syntactic template in the language, that of a head followed by its modifier [§2.3]. This modifier is not necessarily a Verb, but can also be an Adjective, a Numeral or an Adverb. As far as the grammatical mapping [word classes → syntactic functions] is concerned, we can therefore conclude that the function {modifier in a predicate phrase} is open to verbs.

Conversely, verbs in Hiw are not allowed to form either the head of an argument phrase, nor its direct modifier:

\[\text{ne tayö tu} \]
\[\text{ART person stand:NPL} \]
\[\text{*the standing person} \]

The only way for a verb to modify an argument head within an ArgP, would be in a relative clause, using the relativiser pe and a TAM-inflected predicate:

\[\text{ne tayö [pe v' ag tu řê]} \]
\[\text{ART person REL IPFV inland stand:NPL DEM} \]
\[\text{‘the person who’s standing over there inland’} \]

### 3.3 Adjectives

Just like verbs, Adjectives can head a TAM-inflected predicate. This is illustrated by the Stative aspect nê in (13) above, or the Complete aspect piti in (32):

\[\text{Nine } (PWÔ piti).} \]
\[\text{3sg big CPLT} \]
\[\text{‘[the eel] it’s already large.’} \]

An adjective can also head a direct predicate, with no TAM marking:

\[\text{Vē~n vën, meřempê } (PWÔ).} \]
\[\text{CONT CONT eel big} \]
\[\text{‘Over time, the eel got big.’} \]

---

1 François (2010b:511-512) briefly presents these serial structures, which are shared by Hiw and Lo-Toga. François (2004, 2006) is a more detailed account of serial verb constructions in the neighbouring language Mwotlap. See also Crowley (2002) for other languages of Vanuatu.

2 This pattern would be described as *nuclear-layer serialisation* in the framework of Foley & Olson (1985) or Crowley (2002).
Also like verbs, adjectives can modify the head of a predicate phrase. In (34), the adjective *kkē* ‘small’ modifies the head *mesō* ‘large’:

(34) Ne got 〈peon MESŌ kkē〉.
    ART food.parcel FUT large small
    ‘The portions should be slightly larger.’

The semantic function of adjectival modifiers is sometimes to qualify the head — like the attenuative use of *kkē* ‘small’ in (34) — and sometimes to indicate a result:

(35) Nine pō vën vën nine 〈PŌ mët〉.
    3sg slender CONT CONT 3sg slender dead
    ‘He lost weight, lost so much weight that he died.’

An adjective can modify a head which is itself another adjective — as in (34) and (35) — or it can modify a verb head — as in (18) above, repeated here:

(18) Ike 〈ŘYË wetewate ne yö ĕñwe〉!
    2sg sweep clean ART inside house
    ‘(You) sweep the room clean!’

Unlike verbs (cf. 30), Adjectives can modify the head of an argument phrase:

(36) TEKNWA meyigeyige
    HUM:MY:PL black
    ‘Black people’

(37) ne ňwē wye mi ne ňwē sa
    ART demon good with ART demon bad
    ‘the good demon and the bad demon’

However, adjectives cannot themselves head an argument phrase:

(38) *kkē / *ne kkē
    small ART small
    *a/the small one...

In order to do so, an adjective needs to be preceded by a dummy head of the form *nē* similar to English ‘the one’ (etymologically from *ne gē* ‘the thing’):

(39) NĒ kkē
    the.one small
    ‘a/the small one’

3.4 Numerals

Numerals in Hiw form a closed lexical class which has its own set of possible functions. They commonly occupy the slot {modifier in an argument phrase}:
Yet contrary to adjectives, numerals can directly head an argument phrase:

(41) \text{VIRÖ} \langle \text{yēreh pe}. \rangle \\
\text{two be.absent now} \\
‘Two are missing now.’ \\
\text{[Meravtit.180]}

They can form direct predicates, with no need of a copula:

(42) Ne megoye =na \langle \text{VIRÖ ñwutuye} \rangle. \\
\text{ART child =her two just} \\
‘She has only two children.’ \\
\text{[Meravtit.156]}

Numerals can even head a PredP that inflects for TAM – e.g. with the Subjunctive:

(43) Ike go ne wnot \langle \text{on VIRÖ} \rangle. \\
2\text{sg wrap ART parcel SBIV two} \\
‘You should wrap two parcels.’ \\
\text{[lit. ‘You wrap parcels so they are-two.’]} \\
\text{[Ed.40]}

My corpus doesn’t have many cases of a numeral modifying the head of a PredP. Yet one does occasionally find them in that position, reduplicated, with a distributive meaning (tuwë ‘one’ \rightarrow tuwtuwë ‘one by one’).

(44) Sise peon köge tuwtuwë i ne ti-rēgye. \\
3\text{pl FUT tie one~DISTR OBL ART leaf-Cordyline} \\
‘They will tie them up \text{one by one}, using Cordyline leaves.’ \\
\text{[d10.Bekem:09]}

The only function that numerals cannot occupy is that of adjunct.

In sum, as Table 1 p.11 suggested, numerals are the most grammatically flexible word class in Hiw – the one that can fill the most different functions.

### 3.5 Adverbs

I call lexical Adverbs those words which can only function as a modifier inside the boundaries of a predicate phrase. I have more than sixty different Adverbs in my corpus, including wuyog ‘again’, verog ‘also’, rake ‘up’, sur ‘down’... We’ve seen already some examples of them, like tnēg ‘too much’ in (17), wīrog ‘through’ in (20), ñwutuye ‘just’ in (42). Adverbs contrast with Adjuncts, which appear outside the PredP [§3.2, 3.6].

We have seen that the function (modifier in a predicate phrase) can also be occupied by verbs [§3.2] or by adjectives [§3.3]. By contrast with these two parts of speech, adverbs are restricted to that particular function: unlike adjectives, they cannot appear inside an

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1 In previous publications, the category I here call adverb has been named using the term adjunct (Crowley 1982:162; François 2004, 2005a:139, 2006) or as postverb (e.g. François 2011:216-222).
The economy of word classes in Hiw

argument phrase; and unlike both verbs and adjectives, they are ill-formed to head a predicate phrase themselves:

(45)  *Nine  \( w\rl\og \) ...
3sg through
*He went through... (?)

These observations can be turned into a set of syntactic tests. If a lexeme is used as a modifier in a predicate phrase, it may be either a verb, an adjective or an adverb. Thus (19), reproduced here, has four such modifiers, whose word-class membership is in principle ambiguous:

(19)  Tite  \( \langle \text{Y\r
}\text{E} \ t\text{o}\text{\u0143} \ w\rl\og \rangle \)  tom  tite  \( \langle \text{P}\rl\text{\u0143} \ t\text{\r\u0143}\text{\o} \ t\text{\o} \rangle \)  
1inc:pl  see  follow  properly  COMP  1inc:pl  attach.bait  trying  firm

tom  ne  py\rl\Ø  mik  \r\u0143\wot.
COMP  ART  bait  APPREH  break

‘Let’s make sure we try to fix the bait firmly so it can’t come off.’ [d11.Wora:19]

However, eliciting these words in different contexts makes the following points clear:

– *t\text{o}\text{\u0143} is a verb, since it can head a predicate phrase, with the meaning ‘follow’. In (19) it is serialised to another verb \( \text{y\r\u0143} \ ‘see’ \), yielding the compound meaning (see follow) ‘look carefully’. [This is structurally parallel to (28) above.]
– *tg\text{o} is an adjective meaning ‘hard, solid, firm’, which as such can modify a noun. In (19) it is used adverbially, to indicate the manner of the main verb py\rl\Ø ‘attach bait’. [This is structurally parallel to (35) above.]
– *w\rl\og ‘properly’ cannot be used in other positions than this adverbial slot, so it is an adverb.
– *te\rl\og is also found only as a verb modifier, with a conative meaning ‘(do) tentatively, try’.

It may be useful to note that some modern adverbs originate in former adjectives, or former verbs in a serial construction, which have ended up specialising in this adverbial function. Of course, as far as this study is concerned, the word-class status of a word should be assessed purely based on its synchronical distribution in the modern language.

3.6 Adjuncts

The class of lexical Adjuncts consists of words whose main syntactic function is that of an adjunct in the clause. As explained in §2.3, these adjuncts are always external to the predicate phrase, and are normally never found inside its boundaries. Their default position is to the right of the PredP (after a TAM marker or a space directional if there is one), but occasionally adjuncts are topicalised.

\[1 \text{See François (2006:225) for similar cases in Mwotlap.}\]
The vast majority of lexical adjuncts are locatives. These are lexemes referring to locations in space (e.g. yöwe ‘at home’, yönwërëwôn ‘in the bush’, ginë ‘here’) or in time (e.g. tôwtôw ‘in the past’, qutukënaëne ‘now’, meënë ‘tomorrow’):

(46) Ye 〈ve tõ ti iy me〉 yöwe?
   who:SG BkPF₁ go:NPL BkPF₂ in hither in.house
   ‘Who came in here in the house?’ [Grouper.33]

(47) Ne vot in 〈ve toge wate që me〉 qutukënaëne.
   ART stone ANAPH IPFV stay until still hither now
   ‘This rock still exists today.’ [Stories.009]

(48) Tôwtôw, ne wane, sise tat wane vitkeyë.
   formerly ART drink.kava 3pl NEG:IRR drink.kava casually
   ‘In the old days, the drinking of kava, that was not done casually.’ [Stories.101]

This category also includes all place names:

(49) Sôrô peon yöy Vile.
   3du FUT stay:NPL Vila
   ‘They’ll be staying in Vila.’

As we will see in §4.3, Hiw has a few words which pattern both as (Weak) nouns and as Locatives: e.g. yöte ‘garden; in the garden’, wônyaye ‘road; on the road’. Yet that syntactic behaviour is not available to all locative words.

As mentioned in §2.6, adjuncts can also consist of a prepositional phrase, whether this preposition has a locative meaning (yö ‘in, at’; rë ‘on’…) or a non-locative one (mi ‘with’, pê ‘about’, ti ‘Dative’…). When the object of these prepositions is already activated in discourse, it is indexed as a 3sg suffix on the preposition – e.g. mi-e ‘with him/her/it’. The resulting form is sometimes unpredictable, and ultimately functions as a monomorphic word: yö ‘in’ → yöne ‘in it, inside’; rë ‘on’ → (e)řëne ‘on it, above’ (20); pê ‘about’ → pëne ‘about it’ (17); ti ‘Dative’ → se ‘to him/her’. Insofar as these words can be considered unanalyzable, they qualify for the status of lexical adjuncts, in the same way as Locatives.

Lexical Adjuncts cannot head a predicate phrase:\(^1\)

(50) *Ñwati-ki Vile.
    brother-1sg Vila
    ‘My brother is in Vila.’

Likewise, they normally cannot modify directly a noun. In order to do so, they must be derived using a particle te (glossed DELOC for ‘delocative’):

(51) *tuñwuyegë Hiw → tuñwuyegë te Hiw
    ‘the women of Hiw’ [Stories.085]

---

\(^1\) This is one of the few differences between the system of Hiw and that of Mwotlap, which allows locative predicates (François 2003:14, 2005:128).
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In sum, the only syntactic function that is productively accessible to all lexical Adjuncts is that of syntactic adjunct (see Table 1 p.11).

3.7 Nouns

We now come to the domain of nouns, which is less straightforward than other parts of speech in Hiw. Indeed, there are good reasons – already foreshadowed in §2.4 – for positing the existence of two noun classes, based on their behaviour in argument phrases.

3.7.1 Strong nouns vs Weak nouns

It is expected that nouns in a language should be able to head an argument phrase. And indeed, this is the case for one class of nouns in Hiw. Take the example of mar enage ‘chief’ in (6a) p.6, temarēē ‘old man’ in (21) p.10, or ququy ‘friend’ in (53):

(53) QUQUY =ena megoye penēne ve yērē.
friend his child DEM IPFV be.absent
‘His child friend was not there.’

[Music.037]

Proper nouns, incidentally, behave in the same way:

(54) SËKŌP tō piti.
Jacob go:NPL CPLT
‘Jacob has already left.’

I propose to call “Strong nouns” those words which are – so to speak – ‘strong’ enough to head an argument phrase on their own. Yet the majority of nouns in Hiw belong to the second class, which I will call “Weak nouns”. This class consists of nouns which are, strictly speaking, unable to form an argument phrase by themselves. Thus compare the examples of Strong nouns above, with the behaviour of tamesō ‘old man’ in (22) p.10, or of megoye in (55):

(55a) *MEGOYE =na (virō ūwutuye).
child =her two just

In order to form a valid argument phrase, Weak nouns require to be preceded by a Determiner: this can be the article ne, or a possessive classifier (56), or a Gender classifier²

---

1 I thank Mark Donohue (pers. com.) for suggesting these terms to me.
2 About Gender classifiers, see §3.7.4.
that codes for gender and number (57):

(56) Sōrö ṛak [Nō-SA megoye tuwē].
    3du make POSS-3pl child one
    ‘They gave birth to a child.’ [lit. ‘They made their child’] [Eel.02]

(57) [Tōrōqate megoye nome] nē wye?
    HUM:MX:DU child your STAT good
    ‘Are your two kids alright?’ [Brothers.37]

3.7.2 SYNTACTIC ANALYSIS

If argument phrases are to be equated with Noun phrases – as one could assume – how can’t they be headed by nouns like tamesō or megoye?

One way of analysing these structures is to equate the argument phrase not with a Noun Phrase (NP), but with a Determiner Phrase (DP). Since Abney (1987), DPs have been understood – at least within the framework of Government & Binding theory – to form a syntactic entity distinct from NPs. While an NP is headed by a noun, a DP is headed by a Determiner (or other words inherently endowed with the ability to head a DP, such as Strong nouns). In (55b), the D head of the DP is the determiner ne, itself modified by the noun megoye.

The syntactic restrictions of Hiw are not unlike those found in some more familiar languages. In English, the head of a DP can be a pronoun (SHE is asleep), a proper noun (MIKE is asleep), or certain particular nouns, e.g. some kin terms (DAD/GRANDPA is asleep). However, the majority of common nouns are ill-formed to constitute a DP by themselves, and require some sort of determiner to do so (*CAT is asleep → THE cat is asleep). Likewise in Hiw, an ArgP (=DP) may be headed by a pronoun, a proper noun, or a noun like ququy in (53); but the majority of common nouns can only constitute an ArgP with the support of a determiner.

I thus conclude that Hiw has not one word class “Noun”, but two distinct classes – respectively, STRONG NOUNS vs. WEAK NOUNS. Their difference in grammatical behaviour is rendered in the form of two separate columns in Table 1 p.11, where the function {head of argument phrase} is only associated with Strong nouns.

3.7.3 SEMANTIC DEFINITION OF THE TWO CLASSES

The distribution of nouns across the two nominal classes is not entirely random, and follows some semantic tendencies.

The Strong nouns of Hiw are all semantically human (e.g. maënage ‘chief’, ququy ‘friend’, aukē ‘uncle’...). The category of Weak nouns includes all other nouns: inanimates (e.g. wake ‘boat’), animals (pegēwe ‘shark’), but also some human nouns (megoye ‘child’, yeqēn ‘woman’...). Table 2 provides a comprehensive list of the Strong nouns of Hiw. Table 3 gives an overview of the Weak nouns (++’ means that a given category includes many more lexemes).
Table 2 – The Strong nouns of Hiw: a comprehensive list

<table>
<thead>
<tr>
<th>SEMANTIC TYPE</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>other human nouns</td>
<td>ququ ‘friend’; tuqunkē ‘children’; mañenage ‘chief’; temarērē ‘old man’; mašē ‘old woman’; Mema ‘Pastor’;</td>
</tr>
<tr>
<td>other words</td>
<td>fiētē ‘HUM:FEM:SG, woman’; tekriwa ‘HUM:MIX:PL, people’… (§3.7.4)</td>
</tr>
<tr>
<td>PROPER NAMES</td>
<td>Tōrā ‘Andora’; Sēkōp ‘Jacob’ ++</td>
</tr>
</tbody>
</table>

Table 3 – The Weak nouns of Hiw: an overview

<table>
<thead>
<tr>
<th>SEMANTIC TYPE</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL inanimates</td>
<td>ērē ‘tree, wood’; vōnā ‘island, country’; yōte ‘garden’; niwate ‘place’; mya ‘hand’; to ‘year’; miře ‘wrath’; yönyiis ‘desire’; vegevage ‘speech’ ++</td>
</tr>
<tr>
<td>ALL animals</td>
<td>powē ‘shark’; ūte ‘octopus’; qē ‘dolphin’; niwate ‘snake’; gusuwe ‘rat’; tok ‘dog’; sōq ‘pig’; gove ‘heron’; sō ‘chicken’ ++</td>
</tr>
<tr>
<td>MOST human Ns</td>
<td>tov ‘person’; qin ‘person’; teiwe ‘man, husband’; yeqēn ‘woman, wife’; megoye ‘child, offspring’; yūmegov ‘young boy’; ḥweyeqweye ‘young girl’; tameso ‘old person’; tayoy ‘leader’; vetave ‘teacher’ ++</td>
</tr>
<tr>
<td>human-like Ns</td>
<td>temēt ‘ghost’; wu ‘spirit, God’</td>
</tr>
</tbody>
</table>

The split thus runs across the set of human referents: some are Strong nouns, others are Weak nouns. The assignment of a concept to one of these two nominal categories is sometimes arbitrary – as witnessed by the pair temarērē [STRONG] vs. tamesō [WEAK] for the exact same meaning ‘old man’. That said, the tendency is for Strong nouns to encode those human referents which rank higher on the individuation scale, especially kin terms like mam ‘Dad’; these nouns really follow the patterns of proper nouns [see (54)], which are by definition individuated. By contrast, Weak nouns with human referents often correspond to qualitative properties, devoid of extension: for example, yeqēn ‘woman’ or megoye ‘child’ refer to an intensional quality (the quality of being female, or of being a child) and are not typically individuated.

One may propose that it is precisely the role of determiners to provide intensional notions with extension and individuation. Thus, the bare noun yeqēn would represent the intensional notion ‘womanly, female’, whereas ne yeqēn would refer to ‘a/the [particular] woman’.

3.7.4 GENDER CLASSIFIERS

Hiw has a closed paradigm of words – arguably grammatical rather than lexical – whose syntactic behaviour espouses that of Strong nouns. This paradigm is a set of portmanteau
morphemes which always refer to humans, and combine number with gender. Among the
three semantic features encoded by these morphemes (humanhood, number, gender), the
only one that is unique to this paradigm — and in fact, very seldom encoded in Oceanic
languages — is that of gender. This explains my choice to call these morphemes Gender
classifiers, as a short form for gender-and-number classifiers for human referents.

Specific to the paradigm are the following parameters:

- four numbers: singular, dual, (optional) paucal, plural
- three genders: masculine, feminine, mixed

Table 4 provides the full paradigm of gender classifiers in Hiw.

<table>
<thead>
<tr>
<th></th>
<th>SINGULAR</th>
<th>DUAL</th>
<th>PAUCAL</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASC</td>
<td>(ne qin)</td>
<td>tőrâte</td>
<td>tuwesate</td>
<td>teñwañe</td>
</tr>
<tr>
<td>FEM</td>
<td>rêtègé</td>
<td>tőrõřé</td>
<td>tuwútgé</td>
<td>tuñwuyegè</td>
</tr>
<tr>
<td>MIXED</td>
<td>(ne qin)</td>
<td>tőróqate</td>
<td>tuwesate</td>
<td>tekñwa</td>
</tr>
</tbody>
</table>

The Gender classifiers of Hiw are partly similar to the articles or pronouns of other
languages, but are in fact a distinct sort of grammatical device; their closest equivalent
would be certain hyperonymic nouns like ‘person’, ‘people’, ‘women’. For example, the
form tuñwuyegè in (51) above was glossed HUM:FEM:PL, meaning ‘a set of human referents
of feminine gender, with more than two members’ — that is, ‘(the) women’. Earlier on in (36),
the most frequent gender classifier, tekñwa, was glossed HUM:MX:PL — that is, a mixed group
of several humans, generally rendered in English as ‘people’. As for tõrõqate in (57), it was
glossed HUM:MX:DU, meaning ‘a pair of humans of mixed gender’ — in other words, a married
couple, or a brother–sister pair, etc.

Relevant to our main discussion is the fact that these gender classifiers have the same
syntactic distribution as Strong nouns. They do not need any extra morphology to head an
argument phrase (DP). They can be used absolutely:

(58) **Tuñwuyegè pypĕ n’ov; alè teñwañe vařerage.**
HUM:FEM:PL light ART fire then HUM:MASC:PL climb
‘The women lit fires, while the men went to the gardens.’ [Eel.68]

Like most argument heads (except personal pronouns), Gender classifiers can have their
own modifiers:

(59) **Tuñwuyegè trôõ tati yömeřen wuřog ne vevè.**
HUM:FEM:PL some NEG know properly ART weaving
‘Some women don’t know well how to weave.’ [Hades.49]

Crucially, Gender classifiers — which themselves function like Strong nouns — are
commonly modified by a Weak noun:
Likewise in (57) above, töröqate was modified by megoye ‘child’, yielding the meaning ‘two (mixed-gender) children’:

(57') TÖRÖQATE megoye
HUM:MX:DU child
‘two children’

In such structures, the Gender classifier is syntactically the phrasal head, followed by a nominal modifier. Yet by the same token, it can also legitimately be analysed as a determiner for the following noun – similar to an article that would encode gender and number. Both analyses are correct, and mutually compatible: the gender determiner is the head of the DP, which is modified by the noun that follows.

A Weak noun with human reference encodes number by replacing the singular article ne with a non-singular gender classifier:

(61) ne ŋweyeñwaye → tuñuyegë ŋweyeñwaye
ART girl HUM:FEM:PL girl
‘(a/the) girl’

(62) ne tamesō → tekîwa tamesō
ART old.person HUM:MX:PL old.person
‘an old person’

‘(the) old people’

3.7.5 Modifiers in an argument phrase

We saw in §3.7.1 that Strong nouns and Weak nouns differ in their ability to head an argument phrase. Interestingly, their distribution is reversed when it comes to the function {modifier in an argument phrase}.

3.7.5.1 Weak nouns

Weak nouns are able to act as modifiers in an argument phrase – a characteristic they share with Adjectives [§3.3]. They can modify a Strong noun – as in (53) above, where the Weak noun megoye ‘child’ modified the Strong noun ququy ‘friend’. They can also do so with Gender classifiers, which arguably form a subset of Strong nouns: we saw this in (57) with megoye, and in (60)-(62) with other nouns.

In addition, a Weak noun can commonly modify another Weak noun – itself preceded by the article:

(63) ne MEGOYE teñwên
ART child man ANAPH
‘the boy’
3.7.5.2 Strong nouns

My corpus doesn’t feature Strong nouns in a modifying position. The only exception is when a Strong noun is preceded by a gender classifier:

(65) ŋwati-k → tekňwa ŋwati-k
brother-1sg HUM:MX:PL brother-1sg
‘my brother’ → ‘my brothers’ [Meravit.076]

In principle, the internal structure of a phrase tekňwa ŋwati-k is one where tekňwa is the head, and ŋwati-k the modifier; at least, this analysis was the most convincing one in the case of Weak nouns such as tamesô in (62). In this perspective, an example like (65) could be taken to show that Strong nouns can occupy the slot of modifier in an argument phrase, just like Weak nouns.

However, it is worthy of notice that this construction (Gender classifier + Strong noun) is the only case where Strong nouns appear on second position in a phrase: other combinations – e.g. one where a Strong noun would modify another noun – are unattested. One may thus propose an alternate analysis for (65), namely that ŋwati-k is the head of the argument phrase not only in the singular, but also when marked in number; under that analysis, the Gender classifier tekňwa in (65) would simply be there to indicate number, without affecting the internal structure of the argument phrase.

In sum, there is legitimate doubt as to which term is the head in (65) tekňwa ŋwati-k. For this reason, the evidence is not strong enough to conclude that Strong nouns can regularly function as modifiers in Hiw. I will conclude that they cannot – as represented in Table 1 p.11.

3.7.6 HEAD OF DIRECT PREDICATE

Like most Austronesian languages, Hiw lacks a copula: its nouns are directly predicative. Yet we want to be more precise here: are both noun classes in Hiw equally predicative? Do they differ in their syntactic behaviour? They do.

Just like Strong nouns were able to head an argument phrase, they can also form the head of a predicate phrase, with no need of any morphology. Thus, a nominal predicate, whether it is equational (X is [the] Y) or ascriptive (X is [a] Y), follows in Hiw a simple pattern (X \(\langle Y \rangle\)) in which a subject DP (X) is followed immediately by the predicate (Y), which also has the syntactic structure of a DP:

(66) Kamañe \(\langle\text{QUQUY}\rangle\).
1exc:du friend
‘We are friends.’ [Music.31]
The economy of word classes in Hiw

3pl HUM:MX:PL different completely
‘They are completely different people.’ [Stories.031]

By contrast, Weak nouns are unable to form a direct predicate – that is, a predicate with no TAM specification:

*Noke ⟨YEQËN⟩.

*I’m a woman.

In order to form a predicate, Weak nouns need to be preceded by a Determiner – typically, the article ne:

Noke ⟨ne YEQËN⟩.

I’m a woman.’ [d12.Sintia:16]

Ne tamesō in, nine ⟨ne TEMËTRÔN⟩.

That old man, he was a shaman.’ [Yams.08]

The reader will be familiar with the pattern here. The only way to form an ascriptive predicate is by way of a DP, not an NP. By definition, Strong nouns are able to form DPs by themselves, so they can easily head a direct predicate too, as in (66). Conversely, Weak nouns are unable to form a DP unless they combine with a determiner; this rule, which applied in the case of argument phrases [§3.7.2], also applies for non-verbal predicates.

In sum, a strict analysis of Hiw entails that Strong nouns are predicative, but Weak nouns are not. This is not about the need of a copula – as Hiw does without any such device in all cases – but about the requirement for Weak nouns to combine with extra material in order to constitute a well-formed DP. In application of this strict analysis, the conclusion is that Weak nouns are unable to head a direct (non-TAM) predicate.

3.7.7 HEAD OF A TAM PREDICATE

The situation is slightly different when the predicate is endowed with Tense-Aspect-Mood specifications – what I have called “TAM predicate” [§2.2]. This is in fact the only syntactic function which is open equally to both categories of nouns, whether strong or weak.

3.7.7.1 Strong nouns

Strong nouns can form a predicate by themselves, as in (66) above. But to this faculty of being predicative, they also add the ability to combine with TAM specifications:

Tôrô ⟨peon QUQUY⟩.

You and I will be friends.’ [Music.22]

From the semantic point of view, a nominal predicate inflecting for TAM is an ascriptive predication enriched with a time perspective. On the one hand, (66) above simply ascribed
a nominal property to the subject (*we = friends*), yet said nothing about the time limits of that property. On the other hand, a TAM-inflected noun predicate like (70) assigns the property N to the subject at a certain point in time, contrasting it with other periods when \(X\) was not yet N, and/or \(X\) will be no longer N. Likewise, if the TAM marker is semantically modal, it sets a contrast between different possible worlds (a world where \(X\) is N vs. other worlds defined by \(X\) is not N, etc.):

(71) Noke (\(\text{ta} \ \text{QUQUY}\)) mi-ke?
1sg POT friend with-2sg
‘Can I be friends with you?’ [Hades.30]

While a direct (non-TAM) predicate will often translate in English as a present tense ‘\(X\) is N’, its TAM-inflected counterpart will usually involve a TAM-inflected copula in English (‘\(X\) has been/was/will be/could be… N’), or a change-of-state predicate (‘\(X\) has become N’, ‘\(X\) turned into an N’...).\(^1\)

Due to these semantic restrictions, the TAM inflection of nouns tends to be limited to certain nominal concepts which are inherently unstable – or rather, inherently compatible with an unstable reading. For example, being a ‘house’ is normally conceived as a stable property (something either is a house or is not), so this noun is not commonly found associated with TAM marking in Hiw. Conversely, that construction is more typically found with nouns depicting properties that do change over time – e.g. *ququy* ‘(be) friend’, *mařenage* ‘(be) chief’, *yumegov* ‘(be) young’, *tamesō* ‘(be) old’...\(^2\)

Precisely, section §1.4 already cited the noun *mařenage* in ex. (6b), repeated here:

(6b) Noke (\(\text{MAŘENAGE} \ \text{ti}\)) tuwtōw.
1sg chief PAST before
‘I was a chief before.’

The question initially asked in §1.4 was whether (6b) illustrated lexical flexibility for Hiw. It would be the case if *mařenage* were to be analysed as a NOUN ‘chief’ in some constructions, but as a VERB in (6b) with the meaning ‘be a chief’. In fact, we now know that the function *{head of a TAM-inflected predicate}* is in principle – semantics permitting – open to all nouns in the language. As a consequence, a sentence like (6b) does not illustrate lexical but *grammatical* flexibility – that is, the ability for a given word class (in this case, Strong nouns) to regularly fill a variety of syntactic functions. I will get back to this point in the conclusion.

### 3.7.7.2 Weak nouns

We saw in §3.7.6 that Weak nouns cannot, strictly speaking, head a direct predicate – unless they are derived into a DP by means of some determiner.

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\(^1\) See François (2003:53-72; 2005b) for an in-depth analysis of TAM-inflected noun predicates in Mwotlap.

\(^2\) Among the four nouns cited here, the first two are Strong nouns, the latter two are Weak nouns (for which, see §3.7.7.2).
However, this rule changes in the presence of TAM marking, which enables any Weak noun to form a predicate. For example, the Weak noun yumegov ‘young boy’ is ill-formed to head a predicate by itself, but it can do so when combined with the Stative nē as in (72’):

(72) *Kimiře 〈yumegov〉
    2du young.boy
*You are young boys...

(72’) timeřen pe kimiře 〈nē YUMEGOV qē〉
    time REL 2du STAT young.boy still
‘at a time when you were both still young (boys)’ [d12.12]

Likewise, the Weak noun kön ‘night’ commonly serves as a predicate to the subject ńwute (literally ‘place’), to indicate the time of day, in which case it takes TAM inflection:

(73) Ne ńwute 〈KÔN piti〉.
    ART place night CPLT
‘Night has already fallen.’
[lit. The place has already nighted.] [d08.Rao:02]

And in a more figurative way, the same word kön ‘(be) night’ can take the word ‘mind’ as its subject (yō-), yielding a sentence that means ‘to forget’:

(74) Ne yō-k 〈KÔN piti〉 ie.
    ART mind-1sg night CPLT ANAPH
‘I have forgotten about it.’
[lit. ‘My mind has nighted about it.’] [d12.Sintia:13]

Formally speaking, it could be argued that the underlying head of a TAM predicate is really the TAM specification itself – a notion akin to the concept of Infl in Minimalist theory. Under such an analysis, the actual “Infl” head of the predicate (72’) would be its Stative nē, of which the noun yumegov would only be a specifier. Such a syntactic analysis would have the advantage of providing a consistent account of Weak nouns, which in all other constructions appear ultimately unable to head any major constituent: these nouns can only function as complements to a D head in a DP, whether it is an argument or a predicate. In the case of TAM predicates, it might well be that Weak nouns are really complements to the I (Infl) head in an IP. I will not go further into this reasoning, which is not essential to our discussion anyway.

3.7.8 SUMMARY: NOUNS

The section on nouns was the most complex of our grammatical overview, and may warrant a brief summary.

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1 This turn of phrase is common in northern Vanuatu, for several predicates relating to emotions and mental faculties (see François 2013:204-209).
2 In Minimalist theory, a node called IP (with I for ‘inflection’) has a category Infl (‘inflection’) as its head, and a VP as its complement (see Radford 1997:65).
Hiw does not have one but two categories of nouns – labelled here Strong vs. Weak nouns. These two categories share the same behaviour only with respect to the modifiers they can take on their right (adjectives, demonstratives, possessives, etc.). However, these two classes of nouns differ in their syntactic distribution, as they cannot occupy the same syntactic slots in the clause.

The only function that is shared by Strong and Weak nouns is that of head in a predicate inflecting for Tense-Aspect-Mood – see (70) and (72'). Functions exclusively filled by Strong nouns include: (head of argument phrase) and (head of direct predicate). As for Weak nouns, they are normally restricted to functions of modifier: they can modify a Strong noun, a Gender classifier (which itself behaves like Strong nouns), or another Weak noun. The most common construction in which they appear is in combination with the article ne (or other determiners), which is the device required to derive them into a well-formed DP – whether an argument phrase or a predicate.

Besides the main functions which have been discussed here, a number of other syntactic constructions treat Strong and Weak nouns differently. For example, prepositions form two distinct classes, depending on whether they take as their object a Weak noun (“light” prepositions) or a Strong noun (“heavy” prepositions). Likewise, the morphosyntax of possession differs widely depending on the nature of the nouns involved; etc. All these observations point to the same conclusion: Weak nouns and Strong nouns constitute two distinct word classes in Hiw.

Finally, Hiw uses a set of Determiners (notably the article ne) as a productive strategy to turn a Weak noun, so to speak, into the structural equivalent of a Strong noun. Without going into the detail of each construction here, Table 5 (from Author, in prep.) makes it clear that Determiners enable Weak nouns to fill all the syntactic functions that are normally open to Strong nouns.

### Table 5 – Determiners enable Weak nouns to fill the syntactic functions of Strong nouns

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>WEAK NOUNS (bare form)</th>
<th>WEAK NOUNS with prenominal Determiner</th>
<th>STRONG NOUNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>object of associative modifier</td>
<td>+</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>incorporated object</td>
<td>+</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>object of light preposition</td>
<td>+</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>generic direct possessor</td>
<td>+</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>modifier of another N</td>
<td>+</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>TAM-inflected predicate</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>equational/ascriptive predicate</td>
<td>–</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>core argument of predicate</td>
<td>–</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>topic</td>
<td>–</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>appellative</td>
<td>–</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>object of heavy preposition</td>
<td>–</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>referential constructed possessor</td>
<td>–</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

1 Bolded rows in the table correspond to those syntactic functions that were discussed in this study.
To use the approach developed by Lemaréchal (1989) inspired by Tesnière (1959), one could say that the role of the Determiner is to productively transfer (Fr. “translater”) a Weak noun into the class of Strong nouns. Syntactic transfer (Fr. “la translation”) is an efficient strategy that allows the member of a given word class to easily access the functions normally licensed to a different word class.

### 3.8 Discussion: Measuring grammatical flexibility

The previous sections provided an overview of syntax in Hiw. Section 2 first examined the main syntactic functions found in the clause; then Section 3 defined the principal word classes of this language, by empirically examining the array of syntactic functions they can regularly fill. The best way to summarise our results is by referring the reader back to Table 1 p.11, which will not be repeated here.

*Table 1* can be taken as a way to visualise the degree of multifunctionality in a grammatical system [§1.3]. But more than just a visualising tool, such a table can even be used as a base for assessing multifunctionality as a metric. Indeed, it allows us to count the exact number of syntactic functions which the language licenses for each word class.

Given seven major word classes considered there, a minimal mapping – the one found in a hypothetical language showing extreme rigidity – would have been seven, each word class being assigned a single function. The maximum possible mapping would be 7 (word classes) times 6 (main functions), namely 42; this number would correspond to a hypothetical language that would be maximally multifunctional. Between these two canonical extremes, Hiw shows a rate of 19 matches (the number of ‘+’ signs in *Table 1*), i.e. an average of $f=19/7=2.71$ syntactic functions for each word class; this could be labelled a rate of **MULTIFUNCTIONALITY $f$**.

We could also count the maximum “leeway” for grammatical flexibility on top of the 7 minimal ones, namely 42–7 =35. Now, out of these 35 available class/function pairings, the grammar of Hiw instantiates (19–7=) 12: this yields a rate of **GRAMMATICAL FLEXIBILITY $\varphi$ = 12/35 =34.29%**. In other words, when assigning functions to its word classes, Hiw takes advantage of 34 percent of the available grammatical space, as it were.

Should similar measurements be carried out for other languages, Hiw would probably rank comparatively high. Obviously, cross-linguistic comparison would take us beyond the scope of this study; yet for a quick comparison, we might look at the very rough, admittedly simplified representation of the grammatical mapping of English proposed in §1.2. *Figure 1*, crossing four major parts of speech and four major functions, showed only 5 matches: that is, a multifunctionality rate of $f=1.25$ syntactic function per word class, way lower than the 2.71 rate for Hiw. As for the potential for grammatical flexibility there, it equalled (16–4=) 12 (that is, twelve class/function pairings available for flexibility besides the four minimal ones); out of these, English apparently has only taken advantage of one such extra pairing, yielding a grammatical-flexibility rating of $\varphi = 1/12 = 8.33\%$ – that is, way lower than the 34% of Hiw.
These numbers would deserve to be refined based on specific case studies for English or other languages; but they provide a rough idea of the sort of quantitative cross-linguistic comparison that could be carried out.

4 Multicategoriality in Hiw

In sum, what may seem to constitute, at first glance, lexical flexibility in Hiw, can in fact largely be explained by its high rates of multifunctionality, that is, grammatical flexibility. Is this to say that Hiw lacks any lexical flexibility at all? This would be exaggerated. The language does also show genuine flexibility in the lexicon, in addition to its high rates of multifunctionality. This lexical flexibility is best defined as multicategoriality [§1.3], that is, the ability for a single lexical form to belong to more than one word class.

For reasons of space, I will not endeavour to provide a comprehensive discussion of multicategoriality in Hiw. In the remainder of this paper, I will simply illustrate a few multicategorical lexemes, so as to pursue my general methodological reasoning on assessing flexibility in a language.

4.1 Noun–Verb hybrids

Towards the beginning of this study, I illustrated multicategoriality using the example of English words like travel, which combine the properties of a common noun with those of a verb. Hiw also has a number of lexemes which can add up the grammatical behaviour of a Verb with that of a (Weak) noun. I will call them NOUN–VERB HYBRIDS. Table 6 provides a sample of such Noun–Verb hybrids.

Table 6 – Some Noun–Verb hybrids of Hiw

<table>
<thead>
<tr>
<th>VERB</th>
<th>NOUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ūrekove</td>
<td>‘work’</td>
</tr>
<tr>
<td>ūrařon</td>
<td>‘lament’</td>
</tr>
<tr>
<td>genegone</td>
<td>‘battle, war’</td>
</tr>
<tr>
<td>vēroye</td>
<td>‘fight’</td>
</tr>
<tr>
<td>vēgevege</td>
<td>‘speech, language’</td>
</tr>
<tr>
<td>tōgekeše</td>
<td>‘game’</td>
</tr>
<tr>
<td>wēte</td>
<td>‘rain’</td>
</tr>
<tr>
<td>pyē</td>
<td>‘attach bait’</td>
</tr>
</tbody>
</table>

Most of the nouns in Table 6 can be understood as the nomen actionis corresponding to the homophonous verb: thus ūrekove as a noun ‘work’ designates the activity defined by the verb ūrekove. Being semantically inanimate, they are all Weak nouns [§3.7.3].

Let’s consider, for example, the lexeme vēroye. As a verb, it can form the head of a direct (non-TAM) predicate phrase, with the meaning ‘fight, carry a fight’:
The economy of word classes in Hiw

(75) Tek̓na tuwt̓ow sise (ve̱roye) u̱ ne tēn.
   HUM:MK:PL in.past 3pl fight CAUS ART land
   [VERB] ‘Our ancestors used to fight for land.’
   [Stories.086]

Yet the same form is also a noun. This is how ve̱roye can be preceded by the noun article ne – a property which is exclusive to Weak nouns – to form an argument phrase:

(76) Nine gat ōw tom ne ve̱roye (on pa) p’ āne.
   3sg say out COMP ART fight SBV end FOC DEM
   [NOUN] ‘He ordered that the fight should stop right now.’
   [Stories.075]

As a noun, the same form can be the object of the locative preposition yō:

(77) Sise vēn ti yō ve̱roye.
   3pl go:PL PAST LOC fight
   [NOUN] ‘They went into a fight.’
   [Stories.004]

Likewise, rekove can be used as a verbal predicate, meaning ‘to work’, as in (24) p.11. When the same word functions as a Weak noun, it can be used as a nominal predicate, this time with the meaning ‘to be a work’:

(78) Ne ōk-vē-suqe (ne rekove mesō).
   ART make-NMLZR-initiations ART work big
   [NOUN] ‘The preparation of initiations is a huge work.’
   [Stories.048]

Because it is a Weak noun, rekove here requires the article ne to form a predicate. The sentence (78) is a sequence of two DPs, the subject followed by the predicate.

The same demonstration could be carried out for the other lexemes of Table 6. In those functions which are typically filled by verbs, they behave like any verb. Yet they are also compatible with the functions occupied by nouns in the language (modifier of Determiner in argument phrase; object of preposition...). What is special about these lexemes is not so much that they occupy several functions – after all, we’ve seen that multifunctionality is a staple of Hiw grammar. Rather, my main point here is that the array of functions attested for these lexemes does not match any single word class; instead, they combine the functions of two distinct classes, respectively that of verbs and of (weak) nouns.

These hybrid lexemes correspond to only a subset of the language’s verbs, and a subset of its nouns. Nothing in the grammatical system makes it predictable that a word like ve̱roye ‘fight’ could be used as a noun and a verb, while a verb like tō ‘walk’ cannot. In other terms, the fact that a given form is a pure noun, a pure verb, or a verb–noun hybrid, needs to be learnt by the speaker: it is stored in the lexicon, as a property specific to certain lexical items. This is the sort of multiclass_the nervous system would like to use this vocabulary

4.2 Hybrid lexemes and derivation

While the words in Table 6 are only a sample of a larger list, it is necessary to point out that the number of Noun–Verb hybrids in Hiw is relatively low. I do not have statistics at this
point, but I would say that this sort of lexical flexibility is much lower in Hiw than the one found in English. Verbs like vën ‘go’, sō ‘fall’, sag ‘sit’, tu ‘stand’, woge ‘cry’, tōm ‘think’, mañe ‘talk’, tō ‘walk’, yō ‘see’... are exclusively verbs, and are incompatible with any syntactic use as a noun; in particular, they cannot be preceded by the article ne. The only way for these verbs to fill the functions of a noun is by derivation, of which there are two kinds. One is a suffix -ove which creates nouns from (some) verbs:

**Table 6 – Suffixal derivation of some verbs into nouns**

<table>
<thead>
<tr>
<th>verb</th>
<th>derived N ('V-ing')</th>
</tr>
</thead>
<tbody>
<tr>
<td>'walk'</td>
<td>tö</td>
</tr>
<tr>
<td>'go'</td>
<td>vën</td>
</tr>
<tr>
<td>'sit'</td>
<td>sag</td>
</tr>
<tr>
<td>'sleep'</td>
<td>mitiř</td>
</tr>
<tr>
<td>'stay'</td>
<td>toge</td>
</tr>
</tbody>
</table>

(79) Yōywye ti-ke ti ne sag-ove nome mi kema. thanks DAT-2sg DAT ART sit-NMLZR POSS:2sg with 1ex:pl 'Thanks for having sat with us.' (lit. 'Thank you for YOUR SITTING with us') [EP3-04a]

The roots of Table 6 are rigidly verbs; and the derived forms ending in -ove are rigidly nouns.¹

The second type of derivation is reduplication – a morphological device particularly common among Austronesian languages. Many verbs form their *nomen actionis* by reduplication (Table 7). While the simplex form of the word can only be a verb, the reduplicated form is a noun–verb hybrid: it can be a verbal form contextually endowed with reduplication, as is common for verbs; or it can be a nominalisation, in which case it behaves like any (weak) noun in the language.

This process is productive, but also lexicalised. For example, *tenteno* can mean both ‘learning’ (due to productive derivation from *teno* ‘learn’) and ‘song’ – due to semantic shift from ‘learning’. This conventional information must be stored in the lexicon.

**Table 7 – Some reduplicated forms are both verbs and nouns**

<table>
<thead>
<tr>
<th>SIMPLE</th>
<th>verb</th>
<th>REDUPLICATED</th>
<th>verb</th>
<th>noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>gon</td>
<td>‘eat:TR’</td>
<td>gengon</td>
<td>‘DUP’ ‘eat’</td>
<td>‘food, meal’</td>
</tr>
<tr>
<td>sawe</td>
<td>‘dance’</td>
<td>sewesawe</td>
<td>‘DUP’ ‘dance’</td>
<td>‘dance’</td>
</tr>
<tr>
<td>vë</td>
<td>‘weave’</td>
<td>vevë</td>
<td>‘DUP’ ‘weave’</td>
<td>‘weaving’ (ex.59)</td>
</tr>
<tr>
<td>tēp</td>
<td>‘love, give’</td>
<td>teptēp</td>
<td>‘DUP’ ‘love’</td>
<td>‘love; present’</td>
</tr>
<tr>
<td>vatego</td>
<td>‘teach’</td>
<td>vetvatego</td>
<td>‘DUP’ ‘teach’</td>
<td>‘teacher’</td>
</tr>
<tr>
<td>teno</td>
<td>‘learn’</td>
<td>tenteno</td>
<td>‘DUP’ ‘learn’</td>
<td>‘learning; song’</td>
</tr>
</tbody>
</table>

¹ Interestingly, the word *rekove* ‘work’ probably results historically from an ancient nominalisation of the verb *rak* ‘do, make’ (*rak-ove* ‘making’ > *rekove* ‘work’). If this hypothesis is correct, this would be rare case of a deverbal noun which has later been itself reanalysed as a Verb–Noun hybrid.
Another sign that lexical flexibility is limited in Hiw is that only a few combinations are actually found between word classes. Essentially, only two types are attested: Noun–Verb hybrids, which we just saw; and Noun–Locative hybrids. Not much flexibility is found beyond these two types of lexemes.

Hiw has a handful of words which are both locative Adjuncts [§3.6] and (Weak) Nouns. These noun–locative hybrids include metēkṇaỵe ~ wōṇaỵe ‘(on) the road’; tētēṇeṇ ‘(on) the beach’; yo ‘(on) the shore’; yöte ‘(in) the garden’; yöye ‘(in) the cave’. Place names, like Hiw ‘Hiw island’, also behave like noun–locative hybrids.

When these hybrid lexemes are used in a referential function, they behave like ordinary nouns in a noun phrase. They combine with the nominal article ne in order to form an argument phrase; they can take modifiers, etc.

(80)  Ne yöye in řēptog p’ ēne.
   ART cave ANAPH close FOC DEM
   [NOUN] ‘That cave is just over there.’ [d01.15]

(81)  Ne yöte =nome nē pusune.
   ART garden =your STAT numerous
   [NOUN] ‘You have many gardens.’ [Stories.040]

(82)  Ike vati kema i ne wōnaye.
   2sg show 1ex:pl OBL ART road
   [NOUN] ‘Show us the road.’ [Meravitt.194]

Such nominal functions are not open to lexical locatives (e.g. yọ̈we ‘at home’): they are only open to Noun–Locative hybrids.

But these same lexemes can also be used as Locatives – in particular, by forming syntactic adjuncts directly, with no need of a preposition. Thus whereas a pure noun can only form a locative phrase by means of a preposition yö – as in (27) or (77) above – Noun-Locative hybrids do so directly:

(83)  Ike yö ne yiwe (moneřg̣) yöye.
   2sg see ART (arrow) lie:pl cave
   [LOCATIVE] ‘You can see the arrows lying down in the cave.’ [Stories.008]

(84)  Ike (va tī) yöte =nome?
   2sg plant:pl PAST garden your
   [LOCATIVE] ‘Did you plant them in your garden?’ [d09.Karen:07]

(85)  Kema (teurai-se) wōnaye.
   1ex:pl meet:3pl road
   [LOCATIVE] ‘We met them on the road.’ [d01.01]

Their status as Locative also explains why these words can combine with the ‘delocative’ particle te [cf. (51) p.17], which is only compatible with locatives and not nouns:
Whether a word will be a pure noun, a pure locative, or a hybrid, cannot be predicted from its semantics. For example, the lexeme vönyö ‘island, country’, despite referring to a location in space, is a pure noun; it can only form a locative with the help of a preposition:

\[(87)\] Sōrō (tō ūwuye) yö vönyö =sa. (*tō ūwuye vönyö =sa)
3du go:NPL return loc island their
‘They returned to their island.’

\[(88)\] ne gengon te yö vönyö =ma
ART food DELOC loc island our
‘food from our island’

Such cases of Noun–Locative hybrids may be compared with some lexemes in English, which also share syntactic properties both with nouns and locatives: see the example of home in (3) p.3. Again, nothing makes it possible to predict that home can behave like an adjunct (e.g. There’s nobody home.) whereas house cannot (*There’s nobody house.). Whether for English or for Hiw, the assignment of lexemes to word classes, and their status as hybrids, must be learned on a case-by-case basis, within the lexicon.

5 Conclusion: Lexically rigid, grammatically flexible

The system of Hiw is one in which a given lexeme is typically assigned one word class, and only one. Cases of multicategoriality are attested for sure: we have seen that some lexemes can function both as a verb and a noun; and others, both as a noun and a locative adjunct. However, these hybrid words are the exception rather than the norm, and concern perhaps not more than two dozen words in the language.

In this respect, lexical flexibility – in the strict, lexical sense of the word – is lower in Hiw than it is in a language like English. While this statement is here impressionistic, it could be measured quite easily if we had a dictionary of the language [cf. §1.3]: we would then be able to calculate, among the lexemes of Hiw, how many are endowed with more than one word class. While a word like rekove ‘work’ belongs to two classes (verb + weak noun), most lexemes would show a single word-class affiliation: e.g. vönyö ‘island’ is exclusively a noun, toge ‘stay’ exclusively a verb, yöñwe ‘at home’ exclusively an adjunct, and so on.

That said, a striking property of Hiw is its high degree of grammatical flexibility. This corresponds to the number of functions which can routinely be accessed by each given word class in the system. We saw, for example, that Hiw allows most of its word classes (verb, adjective, numeral, nouns…) to head a TAM-inflected predicate, a function which would be reserved to verbs in a language like English. Likewise, Numerals are found in at least five syntactic functions (head of argument phrase; modifier in argument phrase; head of TAM predicate; head of direct predicate; modifier in predicate phrase). I described this
The economy of word classes in Hiw

form of flexibility in the grammar with the concept of multifunctionality, and proposed ways to quantify it, so as to compare this dimension across languages [§0].

In sum, a language like Hiw shows the paradox of being lexically rigid, yet grammatically flexible. The real domain where this language appears impressively adaptive and protean is in the grammatical economy of its word classes, at the interface between parts of speech and syntactic functions – much more than in the lexicon itself. It would be instructive to see how far this analysis could apply to other Oceanic languages. And beyond the Pacific, further studies may want to examine how these two dimensions (multicategoriality in the lexicon, multifunctionality in the grammar) are treated in the language families of the world.

Abbreviations

Glosses

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>ANAPH</td>
<td>anaphoric</td>
</tr>
<tr>
<td>APPREH</td>
<td>apprehensional modality</td>
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<tr>
<td>ART</td>
<td>article</td>
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<tr>
<td>BkPF</td>
<td>Background Perfect</td>
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<td>CAUS</td>
<td>causal preposition</td>
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<tr>
<td>COMP</td>
<td>complementiser</td>
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<td>CONT</td>
<td>continuous aspect</td>
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<td>complete aspect</td>
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<td>DELOC</td>
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<td>demonstrative</td>
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<td>distributive</td>
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<td>differential object marking</td>
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<td>FUT</td>
<td>future</td>
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<td>HUM</td>
<td>gender classifier for humans</td>
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<td>INDF</td>
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<td>INTSF</td>
<td>intensifier</td>
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<td>imperfective</td>
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<td>MX</td>
<td>mixed gender</td>
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<td>NMLZR</td>
<td>nominaliser</td>
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<tr>
<td>NPL</td>
<td>non-plural (verbal number)</td>
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<td>OBL</td>
<td>oblique</td>
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<td>PAST</td>
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<td>possessive classifier or linker</td>
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<td>stative aspect</td>
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<tr>
<td>TAM</td>
<td>Tense-Aspect-Mood</td>
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</table>

Hiw orthography

orth. a e ə ë ã ɠ ɨ k m n ŋ n̄w o õ ɔ p q ř s t u v w y
IPA a e e ɪ y ɨ k m n ð n̄ c o o p kʷ ɻ s t u ð w j

References


