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Predicate structure and valency changing processes of Vatulele Fijian

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Abbreviations

1	1 1	Diet	. 1 .
- morpheme boundary		INCL	inclusive
~ reduplication		IND	indicative
+ morpl	neme boundary within a phonological	INSTR	instrumental
word		INT	interrogative
1, 2, 3	1st, 2nd, 3rd person	IRR	irrealis
ABS	absolutive	N	neutral
ADJVZ	adjectivizer	NEG	negative
ADVLZ	adverbializer	NEGV	negative verb
ANAPH	anaphora	NMLZ	nominalizer
APPL	applicative	NOM	nominative
ART	article	NPST	nonpast
ASP	aspect	NS	nominal specifier
BF	Boumā Fijian	OBL	oblique
CAUS	causative	PA	paucal
CLF	classifier	PASS	passive
CNT	continuous	PL	plural
COMPL	completive	POL	polite
D	drinkable	PRES	present
DAT	dative	PRF	perfect
DEF	definite	PROP	proprietive
DES	desiderative	PRP	proper article
DU	dual	PST	past
E	edible	REAL	realis
ERG	ergative	RED	reduplication
EXCL	exclusive	RES	resumptive
F	female	SF	Standard Fijian
FACTUAL	factual	SG	singular
FO	formative	SUB	subordinator
FUT	future	TOP	topic
GEN	genitive	TR	transitive
HAB	habitual	VF	Vatulele Fijian

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1. Introduction

This thesis aims to describe the predicate structure and valency changing processes of Vatulele Fijian (*Voha Vāvahilele*, in the language). This language is spoken in Vatulele Island in the Republic of Fiji. A comprehensive grammar of Vatulele Fijian has not been written.

Some grammatical descriptions on other Fijian languages apply to Vatulele Fijian as well. From a phonological perspective, it has a typical Oceanic phonological system (i.e., a five-vowel system, an open-syllable structure, a penultimate-stress rule, and so forth). Grammatically, it exhibits VO language features. That is to say, prepositions are preferred to postpositions, articles precede the heads, relative clauses follow the heads, and so forth. In the same way as other Fijians do, Vatulele Fijian prefers transitivizing processes to detransitivizing ones. In other words, transitive verbs are derived from unmarked intransitive verbs.

However, it has features that have not been reported. For instance, although noun incorporation in Fijian languages has been analyzed as a detransitivizing device, Vatulele Fijian has noun incorporation that takes another object (Chapter 8). Another characteristic that has not been described is what is referred to as "the prepositional verb construction." In this construction, the preposition constitutes a phonological word with the preceding predicate (Chapter 9). This study will use some typological frameworks to clarify language peculiarities.

What I would like to claim in this thesis is that Vatulele Fijian strictly distinguishes core and peripheral arguments. A core argument agrees with a bound pronoun within a predicate, whereas a peripheral argument does not, marked by the preposition. There is no subject or object that is marked by the preposition. In addition, a phonological unity does not trigger a grammatical one, and vice versa. This means that a phonological boundary does not correspond to a grammatical boundary in Vatulele Fijian.

This chapter introduces the language before moving on to the main topic. Sections 1.1 and 1.2 illustrate the genetic and internal relationships of the language, respectively. Section 1.3 provides geographic and demographic information. Section 1.4 provides a summary of previous research on Fijian languages. Section 1.5 provides some notes on data, abbreviations, and notations used in this thesis. Section 1.6 describes the organization of the thesis.

1.1. Genetic relationship

Fijian languages, including Vatulele Fijian, genetically belong to Austronesian language family. Figure 1-1 depicts an Austronesian family tree (Lynch 1998: 47, Lynch et al. (eds.) 2002: 4, Blust 2013: 30-3).

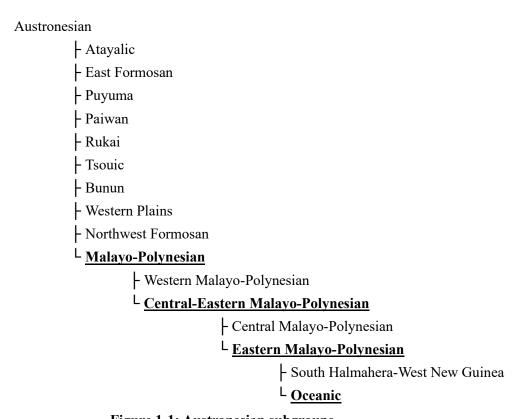


Figure 1-1: Austronesian subgroups (Lynch 1998: 47, Lynch et al. (eds.) 2002: 4, Blust 2013: 30-3).

Austronesian is first divided into ten subgroups, nine of which are indigenous Taiwanese languages, known as Formosan languages. Therefore, Malayo-Polynesian is an Austronesian language group spoken outside Taiwan. As illustrated in Figure 1-1, Fijian is an Oceanic, Eastern Malayo-Polynesian, Central-Eastern Malayo-Polynesian, and Malayo-Polynesian language. Subgroups to which Fijian languages belong are highlighted in bold and underlined in the figure.

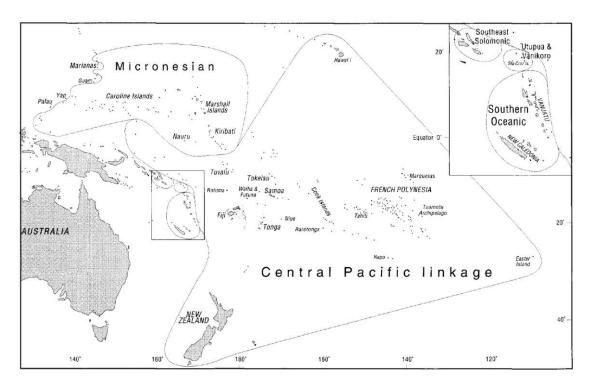
Subgroups of Oceanic languages are depicted in Figure 1-2 and Map 1-1 below (Blust 2013: 33, Lynch et al. (eds.) 2002: 94, 108). Fijian languages belong to the Central pacific linkage. Rotuman and Polynesian languages are also included in this subgroup.

Oceanic

- Admiralties family
- Western Oceanic linkage
- L Central/Eastern Oceanic
 - Southeast Solomonic family
 - Utupua and Vanikoro
 - Southern Oceanic linkage
 - Micronesian family
 - L Central Pacific linkage

Figure 1-2: Oceanic subgroups

(Blust 2013: 33, Lynch et al. (eds.) 2002: 94, 108)

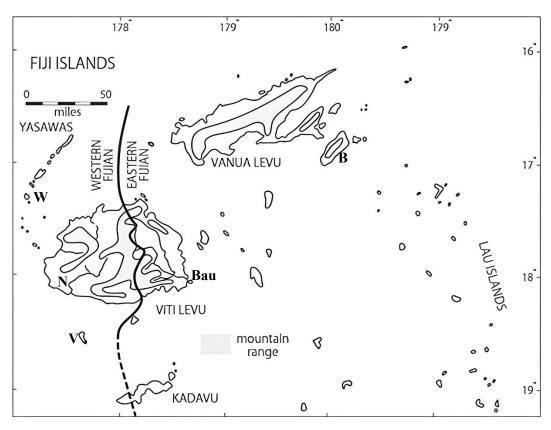


Map 1-1: Major subgroups within Central/Eastern Oceanic (Lynch et al. (eds.) 2002: 109)

In addition to Austronesian languages, Hindi or Fiji Hindi is spoken by Indian people descended from laborers brought to Fiji during the colonial period. According to Blust (2013: 44), Fiji Hindi was the native language of 44% of Fiji's population (893,354 as of 2005). Fijian, Fiji Hindi, and English are official languages of Fiji.

1.2. Internal relationship

Vatulele Island, where Vatulele Fijian is spoken, is denoted on Map 1-2 by the letter "V." Other capital letters represent abbreviations for other Fijian languages (see Section 1.4).



Map 1-2: The map of Fiji

(Based on Pawley and Sayaba 1971: 408, V: Vatulele, B: Boumā, N: Nadrogā, W: Waya)

Pawley and Sayaba (1971) classify Fijian languages into two groups: Western and Eastern Fijian. According to this classification, Vatulele Fijian belongs to Western Fijian. The Western Fijian group shares numerous phonological and grammatical innovations. For instance, velar consonants have the labialized/non-labialized contrast (Pawley and Sayaba 1971: 417, see Section 2.1). In addition, subject pronouns morphologically distinguish between nonpast and unmarked in Western Fijian, whereas Eastern Fijian lacks this distinction (Pawley and Sayaba 1971: 418-421, see Sections 3.1.1.2 and 5.2.1).

Eastern Fijian includes Bauan Fijian (*Vosa vakaBau*), on which Standard Fijian (hereafter SF) is based. Bauan Fijian is spoken on the Bau island (see Map 1-2 above), which once had the

major political power in the 19th century. Eastern Fijian and Polynesian languages share some innovations (Geraghty 1983, Blust 2013: 715).

In addition to these two Fijian subgroups, Rotuman is spoken on the Rotuma island, which is approximately 550 kilometers north of Vanua Levu. There are 330,441 speakers of Western Fijian (1996), 57,000 speakers of Eastern Fijian (1977), and 11,500 speakers of Rotuman (1996) (Blust 2013: 119).

Pawley and Sayaba (1971) propose two important notions in addition to the Western/Eastern division. One is a "communalect" (1).

(1) Communalect (Pawley and Sayaba 1971: 407)

The smallest dialect unit which can be systematically distinguished there is one which we can call the "communalect." This term refers to a community whose native-born inhabitants share a homogeneous speech tradition, quite free of regional variation. Normally, such a completely homogeneous language is confined to a relatively small area—a single village or group of villages occupying a small island or other naturally bounded geographic region.

Geraghty (1983: 18) defines a communalect as "a variety spoken by people who claim they use the same speech." Geraghty (2022: 9) claims that there are approximately 300 communalects in the country, which can be divided into 34 communalect groups.

A "dialect (communalect) chain" or "dialect (communalect) continuum" is another concept introduced by Pawley and Sayaba (1971). (2) is the definition given by Lynch (1998).

(2) Dialect chain (Lynch 1998: 26)

A dialect chain is found in a series of communities in which each community has a different dialect. Close neighbors can quite easily understand each other, but people have greater difficulty in understanding or communicating with people from communities farther along the chain.

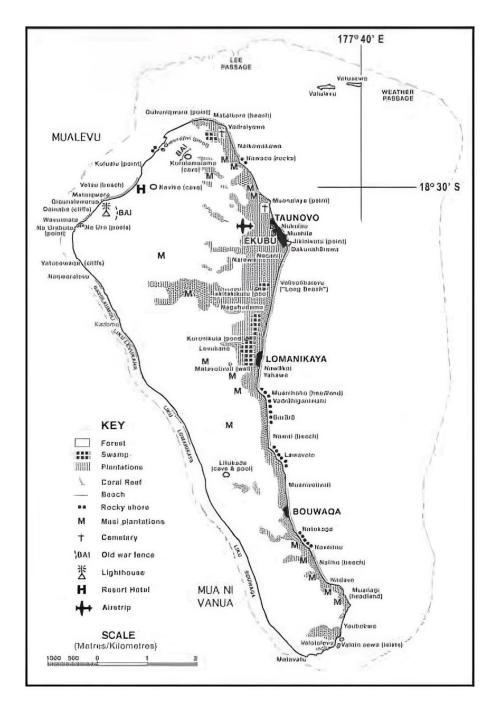
Geraghty (2022: 10) demonstrates a map of communalects of Fiji and believes that Vatulele Fijian is a communalect spoken only in Vatulele Island. This thesis describes Vatulele Fijian as a distinct language.

1.3. Geographic and demographic information

Vatulele Island is 30.76 square kilometers in size and located at 18.32° South and 177.3° East. According to the website of Population Statistics, Charts, Map, and Location,¹ its population was 775 as of 2017. Because SF is a school and media language, everyone understands it. English, an official language of Fiji, is also understood. There is no mountain in the land, whose highest point is only 320 meters. Rainwater is extremely important for the people of Vatulele Island because there are no rivers.

Vatulele Island has four villages: Taunovo, Ekubu, Lomanikaya, and Bouwaqa (Map 1-3). The data presented in this study were collected in Taunovo village. According to consultants, there are no linguistic differences between the villages.

¹ https://www.citypopulation.de/en/fiji/admin/nadroga_navosa/0808_vatulele/ [Accessed 2023-01-29].

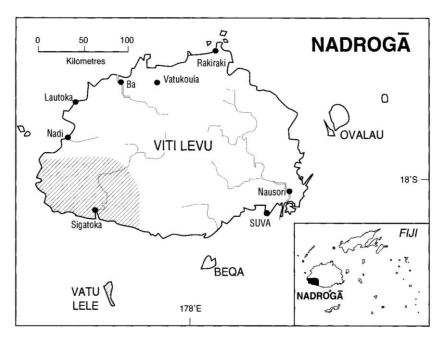


Map 1-3: Vatulele Island (Ewins 2009: xv)

1.4. Previous studies

Schütz (1961) writes some field notes with recording files for Vatulele Fijian, which are available online.² Paul A. Geraghty has some unpublished field notes and texts on Vatulele Fijian, which were collected in 1970s. The social study on Vatulele Island conducted by Ewins (2009) includes a small dictionary of Vatulele Fijian. Aside from these works, no comprehensive description of Vatulele Fijian grammar exists.

Other Western Fijian dictionaries and grammars are available. Pawley and Sayaba (2003) provide a dictionary of Waya Fijian (see Map 1-2). Geraghty (2002) has written a grammar of Nadrogā Fijian. Geographically, this communalect belongs to Western Fijian and is nearest to Vatulele Fijian (see Map 1-2 and Map 1-4).



Map 1-4: Nadrogā Fijian (Geraghty 2002: 894)

Geraghty (2022: 10) shows that Vatulele Fijian is independent from other communalects. However, Geraghty (2002: 833) states that "a dozen or so surrounding districts have quite similar communalects, and may be included in a 'greater Nadrogā language' area" and that "greater Nadrogā is closely related to the communalects of Vatulele to the south."

There are several reference SF grammars, including those by Churchward (1941), Milner (1956), and Schütz (1985, 2014). Dixon's (1988) work focuses on Boumā Fijian, which belongs

8

² http://www.language-archives.org/item/oai:paradisec.org.au:AS2-032a [Accessed 2023-01-29].

to Eastern Fijian³ (see Map 1-2 above). For comparison with Vatulele Fijian, Schütz (2014) and Dixon (1988) are cited in this thesis.

1.5. Data, Abbreviations, and notations

The data of this thesis is based on the author's fieldwork in Vatulele Island. The author stayed in the island in February and March 2016, February 2018, and March 2019. Examples were collected through both participant observation and elicitation. Anasa Tawake, a man who was in his fifties as of 2019, was the main consultant. The author collected the data for SF examples through elicitation with Leone Gukirewa, a native SF speaker, who was in his fifties as of 2019.

When comparing examples from other Fijian languages, the following abbreviations might be used: VF for Vatulele Fijian, SF for Standard Fijian, and BF for Boumā Fijian.

Examples are given in three-line style. The first line is an italicized orthographic transcription, the second is a gloss, and the third is an English translation. Lexical items are shown in lower case in glosses, whereas grammatical items are shown in SMALL CAPITAL, as listed on page xii.

A dot "." means that a morpheme is multifunctional. For instance, the morpheme qi is the first person singular pronoun. This pronoun also expresses a nonpast situation, so its gloss is "1SG.NPST." A colon ":" is used similarly, but it indicates that a morpheme is a fusional form. The morpheme mo, for example, can be analyzed as a fusion of the irrealis subordinator me and the second person singular pronoun o, which is glossed as "SUB.IRR:2SG" (3).

A hyphen "-" indicates a morpheme boundary. In (4), the nominalizer prefix i and the root sele 'cut' is connected by the hyphen.

Dixon (1988) himself refers to the language as "Boumaa" because he transcribes a long vowel as a sequence of two vowels.

A plus sign "+" indicates that two morphemes form a single phonological word but belong to different grammatical words (see Section 4.3). Dixon (1988: 22) introduced this notation system. In (5), the article *na* and the nominalizer *i* are combined by "+" because they form a single phonological word. On the other hand, *i* and *sele* 'cut' are tied by "-" because they constitute a single grammatical word.

(5) na+i-sele

ART+NMLZ-cut

'the knife'

When I do not focus on differences between phonological and grammatical words, the orthographic transcription is used as in (6) (see Section 4.4 for orthographic words).

(6) na iseleART knife'the knife'

Chapter 9 focuses on mismatches between phonological and grammatical words, so examples are given as in (5).

It should be noted that an asterisk "*" is used for two distinct purposes. One is to indicate that the linguistic form is ungrammatical. The other is to indicate that the linguistic form is a reconstructed proto form.

In each chapter, an example number restarts from (1). Unless otherwise noted, glosses are mine.

1.6. The organization of the thesis

Chapters 2 to 4 constitute an introductory part of the thesis. Chapter 2 summarizes the phonological system of Vatulele Fijian. Chapter 3 is a grammar sketch of the language written within Geraghty's (2002) framework. Chapter 4 discusses how a "word" is defined in Vatulele Fijian, which is relevant to later discussions.

Chapters 5 to 10 focus on the predicate structure and valency changing processes of Vatulele Fijian. Chapter 5 explains how a predicate constitutes. A predicate may contain both a head and bound pronouns in Vatulele Fijian, which is a head-marking language. In addition, modifiers may

appear within a predicate. Chapters 6 and 7 discuss transitivity in Vatulele Fijian. Chapter 6 discusses the monotransitive construction, whereas Chapter 7 addresses the ditransitive construction. Chapter 8 discusses noun incorporation, which is a morphosyntactic device used to change valency of verbs. Noun incorporation in Vatulele Fijian demonstrates grammatical features that have not been described in previous studies on Oceanic languages. Chapter 9 describes the prepositional verb construction. This construction has never been documented in any other Fijian languages. Chapter 10 discusses how existence and possession are expressed in the language. Finally, Chapter 11 concludes the thesis.

2. Phonology

This chapter outlines Vatulele Fijian phonology. First of all, Table 2-1 and Table 2-2 set out the consonant phoneme inventory and the vowel phoneme inventory, respectively.

Table 2-1: Consonants

	Bilabial	Dental	Alveolar	Postalveo	Palatal	Velar	Glottal
				lar			
Plosive	$/p/, /^{m}b/$	/t/, /nd/				$/k/$, $/^ng/$	
						$/k^{w}/, /^{\eta}g^{w}/$	
Affricate				/tf/, /ndz/			
Nasal	/m/	/n/				$/\mathfrak{y}/,/\mathfrak{y}^{\mathrm{w}}/$	
Trill			/r/, / ⁿ r/				
Fricative	/\psi/, /\beta/	/ð/	/s/				/h/
Approximant					/ j /	/w/	
Lateral			/1/				
approximant							

Table 2-2: Vowels

	Front		Back
High	i		u
Mid	e		o
Low		a	

Based on SF and Nadrogā Fijian (Geraghty 2002: 835), the orthography of consonants used in this study is given in Table 2-3.

Table 2-3: Orthography

	Bilabial	Dental	Alveolar	Postalveo	Palatal	Velar	Glottal
				lar			
Plosive	<i>p, b</i>	t, d				k, q	
						kw, qw	
Affricate				j, z			
Nasal	m	n				g, gw	
Trill			r, dr				
Fricative	f, v	C	S				h
Approximant					У	w	
Lateral			l				
approximant							

Table 2-4 presents the SF orthography for comparison. As shown in the table, SF does not distinguish between the labialized and non-labialized velar consonants. Note that phonemes observed only in loanwords are omitted from Table 2-4.

Table 2-4: SF Orthography

	Bilabial	Dental	Alveolar	Palatal	Velar
Plosive	b	t, d			k, q
Nasal	m	n			g
Trill			r, dr		
Fricative	v	С	S		
Approximant				y	w
Lateral			1		
approximant			ι		

(Based on Schütz 2014: 4)

Throughout the thesis, examples provided orthographically are written in *italics*, phonemic transcriptions in //, and phonetic transcriptions in [] as in (1). As mentioned in Section 4.4, the orthography is determined grammatically and not phonologically.

(1) Orthographic: driwadriwa 'cold'

Phonemic: /"riwa"riwa/
Phonetic: [ˌriwa'"riwa]

This chapter is organized as follows. Both consonants and vowels are described in detail in Sections 2.1 and 2.2, respectively. The syllable structure is outlined in Section 2.3. Section 2.4 deals with stress, which is essential to a phonological word.

2.1. Consonants

As shown in Table 2-1, Vatulele Fijian has 24 consonants including., eight plosives, two affricates, four nasals, two trills, five fricatives, and three approximants. Plosives and trills have voiceless/voiced-prenasalized contrast. Velar consonants have the labialized/non-labialized contrast.

2.1.1. Plosives

All the plosives have voiceless/voiced-prenasalized pairs. The distinctive feature of a plosive may be only either voicedness or prenaslity depending on its position. Voicedness is a distinctive feature in word-initial position because a prenasalized sound is weak or deleted (2), (3).

(3) a.
$$qu$$
 / $^{\eta}$ gu/ [gu] 'I'
b. $kequ$ / ke^{η} gu/ [' ke^{η} gu] 'mine (to eat)'

Prenasality, on the other hand, is a distinctive feature of word-medial position because voiceless plosives sometimes become voiced between vowels (4), (5).

(4)
$$[+plosive, -voice] \rightarrow [+plosive, +voice] / V V$$

The distribution of plosives has an asymmetric gap because the bilabial voiceless plosive /p/ is actually observed only in loan words (6)a. This phoneme is extremely rare because original /p/ in loanwords is usually replaced by /v/ (6)b.

/t/ and /d/ are palatalized before the high front vowel /i/ (7).

$$(7) \hspace{0.5cm} /t, \, {}^{n}d/ \hspace{0.5cm} \rightarrow \hspace{0.5cm} [\mathfrak{f}, \, {}^{n}d\mathfrak{z}] \, / \, \underline{\hspace{0.5cm}} [i]$$

Such palatalization is common in the southwest part of Viti Levu island (Geraghty 1983: 51-2, see also Map 1-2). (8) is an example of palatalization.

(8) a.
$$j\bar{\imath}$$
 /ti:/ [fi:] 'tea' SF: [ti:] b. $vuzi$ / $\beta u^n di$ / [' $\beta u^n d\bar{\imath}$ i] 'banana' SF: [$\beta u^n d\bar{\imath}$ i]

In addition to the voiceless/voiced-prenasalized contrast, velar plosives have the labialized/non-labialized distinction. (9) is a pseudo-minimal pair.

Note that prenasalized velar plosives \sqrt{g} and \sqrt{g} are represented orthographically as q and qw, respectively.

2.1.2. Affricates

The voiceless/voiced-prenasalized contrast is also observed in affricates. /tf/ is a voiceless postalveolar affricate, whereas / n dʒ/ is a voiced-prenasalized one. They are represented orthographically as j and z, respectively.

2.1.3. Nasals

Vatulele Fijian has four nasals: /m/, /n/, /n/, and $/n^w/$. Similarly to velar plosives, velar nasals have the labialized/non-labialized contrast. There is a common palatalization, where /n/ becomes [n] before [i] (10), (11).

$$(10) \quad /n/ \quad \rightarrow \quad [n] / \quad [i]$$

Note that $/\eta$ / and $/\eta$ ^w/ are orthographized as g and gw, respectively. As mentioned in Section 2.2 below, /m/ can be syllabic without a following vowel.

2.1.4. Trills

/r/ is an alveolar trill. As well as plosives, it has the prenasalized counterpart / n r/, which is orthographized as dr. This orthographic form dr does not represent a consonant sequence, as should be emphasized. As mentioned in Section 2.3, Vatulele Fijian does not contain consonant clusters.

2.1.5. Fricatives

There are five fricatives: $/\phi/$, $/\delta/$, $/\delta/$, $/\delta/$, and /h/. These fricatives have no voiced-prenasalized counterparts, unlike plosives, trills, and affricates. $/\delta/$ is represented orthographically as c, which is common in other Fijians.

Among them, $/\phi$ / is observed only in loanwords. For instance, (12) is a loanword from English *off* that has been transitivized through suffixation.

The distribution of fricatives is asymmetric. No fricative has the voiceless/voiced contrast. On the one hand, bilabial and dental fricatives have only voiced ones $(/\beta/, /\delta/)$. On the other hand, dental and glottal fricatives voiceless ones (/s/, /h/).

/s/ is palatalized when occurs before the high front vowel [i] (13).

$$(13) \quad /s/ \quad \rightarrow \quad [\iint] / \underline{\hspace{1cm}} [i]$$

/h/ corresponds to /s/ or /t/ in other Fijian languages (14), (15).

Geraghty's (1983: 180-1) historical explanation is as follows. In Nadrogā Fijian (see Map 1-4) including Vatulele Fijian, /*ti/ became /si/ by palatalization. After this sound change, /*s/ was shifted to /h/. As a result, /h/ in Vatulele Fijian corresponds to both /s/ and /t/ in other Fijians.

2.1.6. Approximants

There are two central approximants /y/ and /w/ and one lateral approximant /l/. Among them, /y/ and /w/ restrictedly occur. The labiovelar approximant /w/ is observed only before /a/, /e/, and /i/ (16), whereas the palatal approximant /y/ is observed only before /a/ (17).

2.2. Vowels

Vatulele Fijian has five vowels as shown in Table 2-2, which is common in Oceanic languages. /a/, /e/, /i/ are unrounded, whereas /o/ and /u/ are rounded.

/u/ in an unstressed position is optionally deleted when it follows /m/ (18), (19). Note that "below "m" in (19) means that [m] is syllabic, that is, it forms a syllable on its own.

$$(18) \quad /u/[-stress] \rightarrow [\emptyset]/[m]$$

All the vowels have their long counterparts. They have longer duration than short vowels. Because they are always stressed (see Section 2.4), the pitch is higher. Throughout the thesis, a long vowel is written with a macron, which is usually not marked in written texts of SF. (20) is a minimal pair to demonstrate a short/long vowel contrast.

There are 7 diphthongs (/ai/, /au/, /ei/, /eu/, /oi/, /ou/, and /ui/), all of which have the second vowel closer than the first (i.e., closing diphthongs). The second vowel functions rather as a glide, so the stress goes on to the whole diphthong rather than the first vowel (21).

Some speakers fuse two vowels (22).

Further research required to determine whether this fusion influenced by sociolinguistic factors such as age, gender, and so forth.

2.3. Phonotactics

The syllable structure of Vatulele Fijian is open, or (C)V, where C is any consonants, V is any vowel including long vowels and diphthongs, and parentheses indicate optionality. The only one exception is that /m/ forms a single syllable (23) (= (19)) due to the phonological rule (18) mentioned in Section 2.2.

This word is a combination of the possessive prefix and the noun, that is, *mu-yaca* (2sG-name). See Sections 3.1.6 and 10.2.1 for a complete discussion.

(23) a. tamu /tamu/ ['tam] 'not'
b. muyaca /mujaca/ [m'jaða] 'your name'

2.4. Stress

Stressed syllables have a higher pitch and longer duration than unstressed ones. The stress position is easily predictable. The stress rule of SF given by Schütz (2014) is provided as in (24).

(24) Stress rule (Schütz 2014: 5)

a. In words of two or three short syllables, it [stress] is always on the second-to-last syllable.

In the following examples, the vowel of the accented [or stressed] syllable is in boldface:

dua one mata eye, facetolu three totoka beautiful

b. A syllable with a long vowel or a diphthong as its nucleus is accented [or stressed], no matter what its position:

 $v\bar{a}$ four rai seen $kil\bar{a}$ know it $m\bar{a}.rau$ happy

Schütz (2014: 5) adds that words of four or more syllables have the secondary stress on the fourth syllable from the end.

Dixon (1988) assumes a phonological unit "mora" (25) and provides the stress rule (26).

- (25) Mora (Dixon 1988: 16-17)
 - a. A short vowel counts as one mora.
 - b. A diphthong counts as two moras (i.e., each component counts one mora).
 - c. A long vowel counts as two moras.

(26) Stress rule (Dixon 1988: 16-17, his italics)

Primary stress goes onto the *syllable* containing the *second mora from the end* (the penultimate mora) of the phonological word; secondary stress then goes onto the syllables containing the fourth and sixth moras from the end.

Throughout this thesis, the author takes Schütz's (2014) stance on the stress rule for the following reason. One important phenomenon in some constructions is the formation of

diphthong (see Chapter 9). The stress rule (24) is straightforward for the purpose of a brief description of such a construction (especially (24)b, that is, a syllable with a long vowel or a diphthong is stressed regardless of its position).

2.5. Summary

The phonological system of Vatulele Fijian as a whole is typical of Oceanic languages. There are five vowels and no consonant clusters. A stress goes on the penultimate syllable. The language has more consonants than SF because it has the labialized/non-labialized contrast in velar sounds.

Grammar sketch

This chapter provides a grammar sketch of the language before moving on to the main part. Generally speaking, Vatulele Fijian exhibits many VO language characteristics generally. That is to say, prepositions are preferred to postpositions, articles precede the heads, relative clauses follow the heads, and so forth. It is also a head-marking language. Core arguments, such as a subject and an object, are signaled on a predicate rather than on arguments.

As mentioned earlier in Section 1.4, Geraghty (2002) provides a grammar sketch of Nadrogā Fijian (see Map 1-2 and Map 1-4 in Chapter 1). This chapter uses his organization as the template. Section 3.1 deals with nouns and Section 3.2 with verbs, respectively. Section 3.3 provides an overview of clause structure. Section 3.4 is a brief description of complex sentences.

3.1. Nouns and noun phrases

The basic noun phrase structure is summarized in Figure 3-1.

article + possessor + HEAD+ adjective + demonstrative

Figure 3-1: Noun phrase structure

A noun must cooccur with an article when it functions as an argument. Adjectives and demonstratives follow the head noun to modify them. The term "noun phrase" might be inappropriate because a noun phrase can have either an adjective or a verb as its head. This point will be discussed in Section 5.1.

This section is organized as follows. Section 3.1.1 describes three types of pronouns: independent pronouns, bound pronouns, and possessive pronouns. Section 3.1.2 categorizes nouns into two types—common nouns and proper nouns—and explores the differences between the two. Section 3.1.3 focuses on articles, which play a crucial role in the language. Sections 3.1.4 and 3.1.5 discuss demonstratives and adjectives, respectively. Section 3.1.6 covers possessive construction that is discussed later in Section 10.2. Finally, the relative clause construction is described in Section 3.1.7.

3.1.1. Pronouns

This section is based on Geraghty's unpublished field notes. Vatulele Fijian has three types of pronouns: independent pronouns (Section 3.1.1.1), bound pronouns (Section 3.1.1.2), and possessive pronouns (Section 3.1.1.3).

On the whole, non-singular first person pronouns distinguish between inclusive and exclusive. In other words, a different set of pronouns is used based on whether "we" includes the addressee or not. Pronouns also distinguish between singular, dual, paucal, and plural numbers. When there are three to five references, paucal is usually used. When there are more references, plural is used. It must be emphasized that because the third person lacks a plural, it distinguishes between singular, dual, and plural. In other words, the plural number of the first and second person means more than paucal, whereas that of the third person means more than dual. It should be noted that SF uses the four-term number system for all persons.

3.1.1.1. Independent pronouns

Independent pronouns are summarized in Table 3-1.

Table 3-1: Independent pronouns of Vatulele Fijian

	1EXCL	1incl	2	3
SG	ус	ш	iko	kia
DU	kēmaru	kēdaru	kēmuru	kiru
PA	kēmamutou	kēdatou	kēmutou	1.:
PL	kēmamu	kēdā	kēmū	kira

Independent pronouns function as arguments in a clause. They must cooccur with the article o(1).

(1)
$$Qu$$
 $l\bar{a}$ $m\bar{a}$ i kei o yau 1SG go HITHER OBL here PRP 1SG 'I came here'

This article has the allomorph a for the third person pronouns. In (2), the third person singular pronoun kia follows the article a.

(2) Ai tamu mate a kia

3SG.NPST NEG die PRP 3SG

'He is not dead'

Because core arguments are indicated by bound pronouns within a predicate, independent pronouns are not required for a clause to be complete.

3.1.1.2. Bound pronouns

Bound pronouns, as the name implies, never appear independently. They obligatorily occur within a predicate and agree with core arguments (i.e., a subject and an object). There are two sets of bound pronouns: one is for a subject and the other for an object.

Table 3-2 summarizes subject bound pronouns. Each subject pronoun has an unmarked/nonpast distinction.

Table 3-2: Subject bound pronouns of Vatulele Fijian

	1excl		1 INCL		2		3	
	Unmarked	NPST	Unmarked	NPST	Unmarked	NPST	Unmarked	NPST
SG	qu	qi			o	oi	а	ai
DU	maru	mari	daru	dari	muru	miri	aru	ari
PA	matu	maji	du	zi	mutu	miji	~~~	avai
PL	тати	mami	da	dai	тū	тī	ara	arai

SF lacks this unmarked/nonpast contrast as shown in Table 3-3.

Table 3-3: Subject bound pronouns of SF

	1excl	1INCL	2	3
SG	au		0	e
DU	keirau	(e)daru	(o)drau	(e)rau
PA	keiratou	((e)da)tou	(o)dou	(e)ratou
PL	keimami	(e)da	(o)nī	(e)ra

A nonpast pronoun is used for present and future events (3)a. In SF, future events are expressed by the pre-head modifier na (3)b.

```
(3) VF: Qi huka tale

1SG.NPST return AGAIN

'I will return again'

SF: Au na suka tale

1SG FUT return AGAIN

'I will return again'
```

In contrast, an unmarked pronoun is used for past events (4)a. In SF, past events are expressed using the pre-head modifier \bar{a} (4)b.

(4) VF: Qu homu yaqona vāsewa

1SG drink kava little

'I kava-drank a little'

SF: Au ā gunu yaqona vakalailai

1SG PST drink kava little

'I kava-drank a little'

As demonstrated in (3) and (4) earlier, tense is indicated by pre-head modifiers in SF, whereas Vatulele Fijian lacks such modifiers (see Sections 3.2.2 and 5.3 for modifiers). Instead, a bound pronoun signals the tense of an event in addition to the person and number of a subject. The term "unmarked" is used in this thesis because unmarked pronouns occur in "unmarked" environments such as subordinate clauses. See Section 5.2.1 for details.

Object bound pronouns are shown in Table 3-4, most of which are morphologically identical to independent pronouns (see Table 3-1 in Section 3.1.1.1).

Table 3-4: Object bound pronouns

	1EXCL	1incl	2	3
SG	-au		-ko	-a
DU	kēmaru	kēdaru	kēmuru	-ru
PA	kēmamutou kēdatou		kēmutou	***
PL	kēmamu	kēdā	kēmū	-ra

In (5)a, the second person singular object pronoun -ko is suffixed to the verb stem. In SF, the second person singular iko is not a suffix (5)b.

An object of a common noun and a personal name appears outside a predicate. In (11)a and (11)b, volo 'ball' and Jone 'Jone' occur outside the predicate, which is confirmed by the position of the post-head modifier tale 'again.' Both volo and Jone agree with the third person singular object pronoun -a. In contrast, an object of a pronoun appears within a predicate. In (11)c, $k\bar{e}maru$ 'us' directly follows the verb stem and the post-head modifier tale 'again' appears after that.

To sum up, a bound pronoun appears within a predicate and agrees with core arguments in a clause. For this reason, Vatulele Fijian is analyzed as a head-marking language, although a predicate does not constitute one single phonological word. Bound pronouns are described later in Section 5.2.

3.1.1.3. Possessive pronouns

Possessive pronouns denote the possessor within a noun phrase. Possessive prefixes and suffixes are shown in Table 3-5. Sections 3.1.6 and 10.2 discuss possession in detail.

Table 3-5: Possessive pronouns

	1EXCL		1incl		2		3	
	Prefix	Suffix	Prefix	Suffix	Prefix	Suffix	Prefix	Suffix
SG	qu-	-qu			mu-	-mu	e-	-(y)a/-e
DU	maru-	-maru	daru-	-daru	muru-	-muru	dru-	-dru
PA	matu-	-matu	du-	-datou	mutu-	-mutu	du a	dua
PL	тати-	-тати	dā-	-dā	тū-	-mū	dra-	-dra

3.1.2. Nouns

Nouns in Vatulele Fijian have no grammatical gender. The category of number does not exist except pronouns. Case inflection is also absent.

Nouns in Vatulele Fijian are classified from a morphosyntactic perspective. First, they are classified into two types: common nouns and proper nouns. Proper nouns are further classified into three types: place names, pronouns, and personal names. Table 3-6 summarizes the four noun classes.

Table 3-6: Noun classes

		Article	Preposition	
Common nouns		na	i, mai	
	Place names	i		
Proper nouns	Pronouns	_	vē	
	Personal names	0	vō (< vē o)	

This classification is based on the cooccurrence of the article and preposition. Vatulele Fijian has three kinds of articles. na is used for common nouns, i for place names, and o for pronouns and personal names (see Section 3.1.3 for articles). Second, Vatulele Fijian has two sets of prepositions. Common nouns and place names appear with i and mai. What has to be noted here is that the common article na appears after a preposition (7)a, whereas place names directly follow a preposition (7)b.

When a common noun is construed as proper, *na* does not appear (8).

Pronouns and personal names cooccur with $v\bar{e}$. The preposition $v\bar{e}$ directly precedes pronouns (9)a. This preposition is fused with the proper article o to form $v\bar{o}$, which is used for personal names (9)b. Prepositions are explored in Section 3.3.3.

(9) a.
$$v\bar{e}$$
 $k\bar{e}datou$ b. $v\bar{o}$ $Mere$

OBL 1PA.INCL OBL:PRP Mere

'to us' 'to Mary'

In SF, the preposition *vei* is used for both pronouns and personal names (10). There is no fusional form $v\bar{o}$.

A noun can also be classified based on where it appears when it functions as an object (see Section 3.1.1.2). An object of a common noun and a personal name appears outside a predicate, whereas that of a pronoun appears within a predicate (11) (= (6)).

See Section 6.3.1.3 for a detailed discussion.

3.1.3. Articles

Generally speaking, Oceanic languages have articles, except for the New Guinea mainland, the islands of Papua, and Vanuatu (Lynch 1998: 110). Table 3-6 above shows that Vatulele Fijian has three types of articles.

The article na cooccurs with common nouns, whereas the article o appears before proper nouns and (independent) pronouns (12). The abbreviation for o is PRP (proper article).

The proper article o has the allomorph a for the third person pronouns (13) (see Section 3.1.1.1).

In addition to na and o, there is a special article for place names, i (14).

The proper article and the place article are semantically definite by definition. In contrast, there have been various opinions on whether the common article should be considered a definite marker.

Some consider *na* to be a definite article. Lynch (1998) regards *na* in SF to be a definite marker, citing (15) as an example, where an indefinite object noun *yaqona* 'kava' is not preceded by *na*.

Milner (1956: 11) also states that, generally, "na corresponds to the definite article in English, but it may often be found in phrases where English would use an indefinite article or no article at all." Similarly, Schütz (1985, 2014) argues that "the presence of na is the formal criterion for definiteness" (Schütz 2014: 199).

In contrast, Dixon (1988) does not see na as a definite marker. Dixon (1988: 114) argues that "the common article is basically unmarked for definiteness." Dixon (1988) demonstrates the e dua na construction in support of his idea. Syntactically, e dua 'one' is a relative clause that modifies the noun that follows na. This construction is semantically compatible with the English a(n). Milner (1956: 14) also notes that e dua na can be translated to the indefinite article in English (16).

The same construction is observed in Vatulele Fijian (17) (see Section 10.1.2).

Schütz (2014) notes that despite the presence of na, e dua na expresses indefiniteness. In addition to the construction of e dua na, e $s\bar{o}$ 'some' also expresses indefiniteness (18).

Schütz (2014: 205) explains that e dua na and e $s\bar{o}$ in (16) and (18) are "grammatically definite, but general with respect to the discourse."

As for na, this study follows Dixon (1988) and uses the abbreviation ART (article) for the common article, instead of DEF (definite). The article na is not a definite article because indefinite phrases include the article na, as shown in (16), (17), and (18).

In addition, the common article na signals that a phrase functions as an argument when it precedes a verb or an adjective. Because there is no overt morphological process on verbs or adjectives, the common article is the only indicator that marks the following element as an argument. As shown in (19)a, the article na indicates that the following verb functions as an argument, whereas in (19)b, the bound pronoun qu indicates that the verb is the head of a predicate. In other words, the function of na denotes the left edge of a boundary of an argument. In (19)a, na functions as an "argument marker," but I adopt the traditional term "article" here.

(19) a.
$$na$$
 $l\bar{a}$ b. qu $l\bar{a}$

ART go 1SG go

'going' 'I went'

This point will be revisited in Section 5.1.

3.1.4. Demonstratives

Demonstratives are divided into two types: nominal and adverbial. Vatulele Fijian utilizes the three-term system: (i) near the speaker, (ii) near the addressee, and (iii) far from both.

Nominal demonstratives are shown in (20).

(20) a.
$$yakw\bar{e}$$
 b. $yaq\bar{o}$ c. $h\bar{o}k\bar{e}$ this that that 'this' 'that (near you)' 'that (far from you and me)'

They can be an argument of a clause without any articles (21)a. They can also modify the preceding noun (21)b.

Local adverbial demonstratives are shown in (22).

(22) a.
$$kei$$
 b. $keiq\bar{o}$ c. $vanah\bar{o}k\bar{e}$ here there there 'here' 'there'

These demonstratives must cooccur with prepositions and function only as peripheral (23). Note that adverbial demonstratives also do not accompany any articles.

(23)
$$l\bar{a}$$
 $m\bar{a}$ i kei go HITHER OBL here 'come here'

3.1.5. Adjectives

Adjectives can be the head of a predicate (24)a and modify a noun (24)b.

Schütz (2014: 94) categorizes adjective as a subtype of a verb. Dixon (1988: 239), on the other hand, provides some criteria for distinguishing adjectives and verbs. One of them is that only adjectives are qualified by the pre-head modifier *rui* (see Section 5.3.1.4).

This study adopts the viewpoint of Dixon (1988) and considers a class of adjectives to be a distinct class rather than a subtype of verb.

3.1.6. Possession

Vatulele Fijian uses different devices to indicate the possessor of a noun based on its relationship with the possessed item (Table 3-7). The person and number of the possessor are indicated by possessive pronouns listed in Table 3-5 in Section 3.1.1.3 above.

Table 3-7: Nominal possessive expressions

Body parts	Possessive prefix-[Noun]		
Kinship terms	[Noun]-possessive suffix		
Edible	ke-possessive suffix [Noun]		
Drinkable	me-possessive suffix [Noun]		
Unmarked	le-possessive suffix [Noun]		

Examples of each expression are shown in (26)-(30) with SF counterparts. In Vatulele Fijian, a possessor of body parts is expressed by a possessive prefix (26), whereas that of kinship terms is indicated by a possessive suffix (27). SF does not morphologically distinguish them. That is, both are expressed possessive suffix in SF.

(26) Body parts VF: qu-mata SF: mata-qu

1SG-eye eye-1SG

'my eye' 'my eye'

(27) Kinship terms VF: tama-qu SF: tama-qu father-1SG father-1SG 'my father' 'my father'

For alienable possession, a classifier is combined with a possessive pronoun, which precedes the head noun (28)-(30).

(28) Edible VF: ke-qu keke SF: ke-qu keke

CLF.E-1SG cake CLF.E-1SG cake

'my cake (to eat)' 'my cake (to eat)'

(29) Drinkable VF: me-qu $j\bar{\imath}$ SF: me-qu $t\bar{\imath}$ CLF.D-1SG tea CLF.D-1SG tea 'my tea (to drink)' 'my tea (to drink)'

(30) Neutral VF: le-qu were SF: no-qu were

CLF.N-1SG house CLF.N-1SG house
'my house' 'my house'

Existential verbs and numerals are used to express predicative possession. In (31), the numeral *hila* 'one' functions as a predicate of possessive construction (see Section 10.1.2 for a detailed discussion).

(31) Ai hila le-qu waqa
3SG.NPST one CLF.N-1SG canoe
'I have a canoe (lit. My canoe is one)'

Section 10.2 discusses possessive expression.

3.1.7. Relative clause

In the relative clause construction, the head noun precedes a relative clause. This is similar to topicalization in that the head noun precedes the predicate, which is beyond the scope of this thesis.

First, I will demonstrate relative clauses whose heads are core arguments. In (32), a subject is the head of a relative clause. The head noun *ivola* 'book' precedes the relative clause $h\bar{a}$ *volai* yavu 'which has already been written.'

Superficially, this construction is same as topicalization, that is, 'As for the book, it was already written.' The anaphora marker $r\bar{\imath}$ is optional.

In (33), an object noun is the head. The head noun uvi 'yam' comes before the relative clause $o \ kau \ m\bar{a}$ 'which you brought.'

(33)
$$na$$
 uvi $(r\bar{\imath})$ o kau $m\bar{a}$

ART yam (ANAPH) 2SG take HITHER
'the yams which you brought here'

Again, this is similar to topicalization, that is, 'As for yams, you brought them.'

When the head is a peripheral argument, that is, a noun with a preposition, the resumptive marker $k\bar{e}$ must appear within the predicate. The SF counterpart of $k\bar{e}$ is kina. In (34), the temporal noun higa 'day' is the head, whereas in (35), the place noun is the head.

(34) VF:
$$na$$
 $higa$ qu $l\bar{a}$ $k\bar{e}$

ART day 1SG go RES

'the day that I went'

SF: na $siga$ au $lako$ $kina$

ART day 1SG go RES

'the day that I went'

(35)VF: na siti wini-takini-a mā kē metali kola na 3sg win-TR-3sg gold ART city HITHER RES ART medal 'the city where it (the team) won the gold medal' SF: na koro e wini-taka metali koula mai kina na city 3SG win-TR:3SG HITHER RES ART ART medal gold 'the city where it (the team) won the gold medal'

This resumptive modifier $k\bar{e}$ plays a significant role in distinguishing core arguments from peripheral ones. This point will be revisited in Section 3.3.3.

3.2. Verbs and verb phrases

The only obligatory element of a verb phase is the head, which is typically a verb. However, the head can be a word of other word classes, like an adjective (36)a or a noun (36)b.

(36) a. Ai katakata na wai

3SG.NPST hot ART water

'The water is hot'
b. Qi vūniwai

1SG.NPST doctor

'I am a doctor'

In these instances, there is no overt morphological process that converts adjectives or nouns to verbs. Instead, a bound pronoun indicates that the following content word serves as the head of a predicate. Therefore, the term "verb phrase" is inappropriate because its head can be anything other than a verb. Because of this, the term "predicate" is used throughout the thesis rather than "verb phrase." This point will be explored in Section 5.1.

The basic predicate structure is shown in Figure 3-2.

subordinator + subject pronoun + modifier + HEAD + object pronoun + modifier

Figure 3-2: Structure of predicate

Section 3.2.1 provides a brief overview of verbal derivation. Section 3.2.2 deals with modifiers that appear within a predicate. Section 3.2.3 addresses numerals because in Vatulele Fijian they are subsumed under the verb category.

3.2.1. Verbal derivation

A more in-depth discussion for verbal derivation will be presented in Chapter 6, so only a brief description is provided here.

All the morphological changes observed in Vatulele Fijian are derivational rather than inflectional. Verbal derivation is operated by affixation. For instance, the suffix transitivizes verbs. In (37), the transitive suffix -*ji* is added to the intransitive verb *hava* 'be washed.' Note that the English translation of *hava*, a so-called unaccusative verb, is "be washed" (see Section 6.2).

(37) hava-ji-a < hava
wash-TR-3SG wash
'wash it' 'be washed'

The language also has the prefix. (38) is an example of the causative suffix $v\bar{a}$ -.

(38) vā-katakata-ni-a
CAUS-hot-TR-3SG
'heat'

3.2.2. Modifiers

There are two kinds of modifiers: one appears before the head and the other appears after the head. Only the list of modifiers is given here because Section 5.3 describes these modifiers in detail.

Table 3-8 shows some pre-head modifiers.

Table 3-8: Pre-head modifiers

hā	Aspect	
tamu	Negative	
rui	'Very'	
matā	Desiderative	
lai	'Go and'	
mā	'Come and'	

(39) is an example of a sentence with pre-head modifiers. Note that, in Vatulele Fijian, negation is indicated by the pre-head modifier *tamu* (39)a, whereas in SF, it is indicated by the complement clause construction (39)b (see Section 3.3.4).

VF: Qi (39) tamu matā moce 1sg.npst NEG DES sleep 'I don't want to sleep' SF: *E* sega niu via тосе 3sg not.exist SUB:1SG DES sleep 'I don't want to sleep'

Table 3-9 summarizes some post-head modifiers.

Table 3-9: Post-head modifiers

cake	'Up'	
civo	'Down'	
yavu	Completive	
taucoko	'All'	
tale	'Again'	
hara	'Very'	
пō	Continuous	
gā	'Only'	
rē	'Please'	
wā	'Thither'	
mā	'Hither'	
kē	Resumptive	

In (40), three post-head modifiers appear in a sentence.

3.2.3. Numerals

Although Geraghty (2002: 838) describes numerals in Nadrogā Fijian in the chapter on "nouns and noun phrases," they are analyzed as a subtype of verb in this thesis (see Section 10.1.2 for details). The numeral system in Vatulele Fijian is a decimal one as shown in Table 3-10.

Table 3-10: Numerals

1	hila	6	ono
2	rua	7	vitu
3	tolu	8	walu
4	$v\bar{a}$	9	ciwa
5	lima	10	jini

These numerals often cooccur with the third person singular bound pronoun *ai* like *ai hila* 'one,' which means they function as the head of a predicate. In (41), *ai tulu* 'three' functions as a relative clause and modifies the subsequent noun *here* 'song.'

They also function as a predicate of existence expression (42) (see Chapter 10).

3.3. Clause structure

This section describes clause structures in Vatulele Fijian. Section 3.3.1 deals with verbless clauses, that is, clauses without a predicate. Sections 3.3.2 and 3.3.3 discuss the important notions in this thesis, that is, core and peripheral arguments. Section 3.3.4 describes negative clauses, which are expressed differently from SF. Sections 3.3.5 and 3.3.6 discuss imperative and interrogative clauses, respectively.

3.3.1. Verbless clauses

Vatulele Fijian has no copula verb. The concept of "identity" or "attribution" is expressed by juxtaposition of two noun phrases (43).

Geraghty (2002: 844) states that "both topic-comment and comment-topic orders are acceptable, the former is preferred." The relationship between word order and information structure would be explored in future.

A similar meaning to (43) can be expressed through an intransitive clause. In (44), the same noun $v\bar{u}niwai$ 'doctor' function as a predicate head, and the optional pronoun o yau 'I' appears as an intransitive subject.

A question word always comes first in verbless interrogative sentences (45).

(45) a.
$$O$$
 cei $h\bar{o}k\bar{e}$? b. Na c \bar{a} yakw \bar{e} ?

PRP who that ART what this 'Who is that?' 'What is this?'

3.3.2. Verbal clauses: core arguments

Core arguments are easily definable in Vatulele Fijian. In other words, a core argument is a noun phrase (or an argument more precisely) that is coreferential with a bound pronoun. In (46), *o yau* in the final position of the sentence can be said to be the subject because it is coreferential with *qu* in the predicate. In contrast, *o Jone* is the object, which agrees with the object pronoun *-a*.

The typical word order is VOS but a subject can precede an object. Therefore, it can be ambiguous which is the subject and which is the object (47).

Core arguments of a common noun must cooccur with the article na. In (48), object nouns follow na.

An object of noun incorporation cannot be considered core because it lacks an article and does not agree with an object-bound pronoun (49) (see Section 8.2).

Core arguments can be modified by adverbs like ruarua 'both' (50)a and by relative clauses (50)b.

On the other hand, incorporated objects are never modified by *ruarua* (51)a and relative clauses (51)b. This point is discussed in Chapter 8.

3.3.3. Verbal clauses: peripheral arguments

Like core arguments, peripheral arguments are simple to define. That is to say, a peripheral argument is one that is not coreferential with any bound pronouns and that cooccurs with a preposition. The terms "peripheral" and "oblique" are used in the same fashion.

As demonstrated in Section 3.1.2, there are two different sets of prepositions. One set (i and mai) is for common nouns and place names. I use the abbreviation OBL (oblique) for i since as discussed below it is the most unmarked preposition for peripheral arguments, or oblique arguments. For mai, the abbreviation LOC (locative) is used.

The preposition i expresses "goal" (52) and "location" (53). Note that SF has ki for "goal" and e for "location."

(52)VF: Qu wavu na koro 1s_G run OBL ART village 'I ran to the village' SF: Au cici ki koro na 1s_G village run TO ART 'I ran to the village'

-

¹ In SF, *e* is the most unmarked preposition because it is used for several semantic roles such as location, instrument, and so forth.

(53) VF: Ai tauhila i qase yaloga koro na ni old village 3SG.NPST most OBL ART inside of 'She is the oldest in the village'

SF: E qase taudua e na koro 3SG old most OBL ART village 'She is the oldest in the village'

For remote places, mai is used (54).

(54)VF: A tara mai Lawai 3sg do Lawai LOC 'It was done in (distant) Lawai' ā caka mai Lawai 3SG PST do LOC Lawai 'It was done in (distant) Lawai'

The preposition *i* expresses not only "place," but also "instrument" (55).

(55)VF: Ai taka-vi-a vunikai i kia na na 3sg.npst cut-TR-3SG ART wood OBL ART ax 'He cuts wood with the ax' SF: Eta-ya na vunikai е na kia 3sg cut-TR:3SG ART wood OBL ART ax 'He cuts wood with the ax'

The preposition $v\bar{e}$ is used to mark proper nouns as peripheral. I regard $v\bar{e}$ as an allomorph of i and use OBL for this preposition. After $v\bar{e}$, an object pronoun (see Table 3-4 in Section 3.1.1.2) directly follows (56).

(56) vē kēmaru

OBL 1DU.EXCL

'to us'

For the second person singular and the third person, $v\bar{e}$ is combined with pronouns (57).

The preposition $v\bar{o}$ is a fusional form of $v\bar{e}$ and the proper article o, which is used for peripheral personal names (58).

It is worth noting that in SF the proper article o never appears after the preposition (59).

As previously mentioned, a peripheral argument in Vatulele Fijian requires an oblique marker. Moreover, the presence of $k\bar{e}$ distinguishes core arguments from peripheral ones (see Section 3.1.7 and 5.3.2.5). When a core argument is relativized or topicalized, it precedes the predicate (60).

On the other hand, when a peripheral argument is fronted for relativization or topicalization, the resumptive marker $k\bar{e}$ must appear within the predicate as its trace (61).

(61) na koronivuli matu
$$l\bar{a}$$
 $k\bar{e}$

ART school 1PA.EXCL go RES

'The school to which we went'

3.3.4. Negative clauses

Negation is expressed by the pre-head modifier tamu (62) (see Sections 3.2.2 and 5.3.1.2).

(62) Qi tamu kila-a

1SG.NPST NEG know-TR:3SG

'I don't know'

In SF, the negative verb sega takes a complement clause as its subject to express negation (63).

(63) SF: E sega ni kila-a

3SG not.exist SUB know-TR:3SG

'I don't know (lit. That I know does not exist)'

3.3.5. Imperative

Verb stems without a subject pronoun are used to express imperative. Oftentimes, the post-head modifier $r\bar{e}$ appears in imperative clauses (64).

(64) Moce rēsleep POL'Good night (lit. Sleep please)'

The subordinator *me* is also used for imperatives (65) (see Section 3.4 for subordinators). This is a type of insubordination.

(65) Mo $l\bar{a}$ $m\bar{a}$ SUB.IRR:2SG go HITHER 'You come!'

3.3.6. Interrogative

The most common interrogative words are $c\bar{a}$ 'what' and cei 'who.' Because $c\bar{a}$ is a common noun, it cooccurs with the article na. In (66), the object is replaced by na $c\bar{a}$ 'what,' which precedes the predicate.

(66) Na cā ai tara-a nō o Jone?

ART what 3SG.NPST do-TR:3SG CNT PRP Jone

'What is Jone doing?'

On the other hand, *cei* 'who' is a proper noun that cooccurs with the proper article *o*. In (67), *o cei* 'who' appears in a verbless clause.

(67) O cei mu-yaca?

PRP who 2sG-name

'What is your name? (lit. Who is your name?)'

Both $c\bar{a}$ 'what' and cei 'who' have fusional alternatives. They are phonologically combined with articles and pronounced as a single phonological word (68).

(68) a. Na+ca? b. O+ce?

ART+what PRP+who

'What?' 'Who?'

vei 'where' must follow the preposition i, which means that it is always peripheral. Therefore, vei can be analyzed as a member of local adverbial demonstratives (see Section 3.1.4). In (69), vei comes after i, which forms a phonological word with the preceding verb $l\bar{a}$ 'go.' This construction will be explored in Chapter 9.

(69) Oi la+i vei?

2SG.NPST go+OBL where
'Where are you going?'

vica 'how many' functions as a predicate with the third person singular nonpast-bound pronoun ai (70). In this respect, vica is similar to numerals (see Sections 3.2.3 and 10.1.2 for numerals).

(70) Ai vica na kwāhewa?

3SG how.many ART child

'How many children are there?'

vica 'how many' is used for temporal expression (71).

(71) *Hā* vica na kaloko?

ASP how.many ART clock

'What time is it? (lit. How many clocks?)'

This interrogative word also modifies a noun (72).

(72) Oi yabaki vica?

2SG year how.many

'How old are you?'

kuca 'how' also functions as a predicate. (73) is an everyday greeting.

(73) $H\bar{a}$ kuca $n\bar{o}$?

ASP how CNT

'How is it?'

kuca has the fusional alternative form ku. In (74), the stress goes on /ha/.

(74) *Ha+ku?*ASP+how
'How?'

3.4. Complex sentences

Subordinators appear on the left edge of a predicate, that is, immediately before a bound pronoun. Table 3-11 displays subordinators in the Vatulele Fijian language.

Table 3-11: Subordinators

ni	that (realis)
те	that (irrealis)
he	or
ke	lest
kodaki	if

After a subordinator, only unmarked bound pronouns appear (see Section 5.2.1). *ni* and *me* can function as both adverbial and complement clauses. (75) is an example of the subordinator *ni*, which forms an adverbial clause similar to *when* in English.

(75)
$$Qu$$
 dani-ko ni o $l\bar{a}$ n \bar{o} m \bar{a}
1SG see:TR-2SG SUB 2SG go CNT HITHER

In (76), the irrealis subordinator me complementizes the following clause, which is the object of the verb $v\bar{a}r\bar{o}jia$ 'command.'

(76) Ai vā-rō-ji-a vē kēmamu me mamu nō i kei 3SG CAUS-order-TR-3SG OBL 1PL.EXCL SUB.IRR 1PL.EXCL exist OBL here 'He commanded us to stay here (lit. He commanded to us that we exist here)'

^{&#}x27;I saw you were coming (lit. I saw you when you were coming)'

4. Phonological word and grammatical word

This chapter takes the position of Dixon and Aikhenvald (2002) and Dixon (2010) to describe two types of words in Vatulele Fijian: phonological words and grammatical words.

The organization of the chapter is as follows. Section 4.1 demonstrates how a "word" is defined in previous studies. Section 4.2 explores phonological words and grammatical words in Vatulele Fijian. Section 4.3 deals with one of the most fascinating phenomena in Vatulele Fijian, that is, mismatches between a phonological word and a grammatical word. An orthographic word is briefly mentioned in Section 4.4. Section 4.5 summarizes the chapter.

4.1. Previous studies

Section 4.1.1 deals with typological studies on word. Section 4.1.2 shows how a "word" is described in Fijian.

4.1.1. Typological studies

A word has been thought to be the basic unit in any language. Traditionally, a word is defined as (1) and (2).

(1) Sapir (1921: 34)

The word is one of the smallest, completely satisfying bits of isolated "meaning" into which the sentence resolves itself.

(2) Bloomfield (1933: 178, his italics)

A word, then, is a free form which does not consist entirely of (two or more) lesser free forms; in brief, a word is *a minimum free form*.

However, these definitions are so simple and vague that they cannot be applicable to all languages (Dixon and Aikhenvald 2002: 5).

Matthews (1974: 32) proposes two types of words: phonological words and grammatical words. Other linguists such as Julien (2006) agree with it. Dixon and Aikhenvald (2002) and Dixon (2010) provide more sophisticated definitions of these two types of words. Dixon (2010) defines a phonological word as "a phonological unit larger than the syllable (in some languages

it may minimally be just one syllable)." He adds that a phonological word has at least one (and generally more than one) phonological property chosen from the criteria illustrated below (3).

(3) Criteria for phonological word (Dixon 2010: 7)

- a. Segmental features—internal syllabic and segmental structure; phonetic realizations in terms of this; word boundary phenomena; pause phenomena.
- b. *Prosodic features*—stress (or accent) and/or tone assignments; prosodic features such as nasalization, retroflexion, vowel harmony.
- c. *Phonological rules*—internal syllabic and segmental structure; phonetic realizations in terms of this; word boundary phenomena; pause phenomena.

On the other hand, Dixon (2010) provides eight criteria for grammatical words (4). Among them, (4)a-d are the main criteria.

(4) Criteria for grammatical word (Dixon 2010: 13-9, his italics)¹

- a. A grammatical word has as its base one or more lexical roots to which morphological processes (compounding, reduplications, shift of stress, change of tone, internal change, subtraction, affixation) have applied.
- b. A grammatical word has a conventionalized coherence and meaning.
- c. When a grammatical word involves compounding or affixation, its component grammatical elements always occur together, rather than scattered through the clause (the criterion of cohesiveness).
- d. When a grammatical word involves compounding or affixation, its component grammatical elements generally occur in a fixed order.
- e. There will be just one inflectional affix per word.
- f. Morphological processes involved in the formation of words *tend* to be non-recursive. That is, as a rule, one element will not appear twice in a word.
- g. A speaker may pause between words but not within a word.
- h. A word may constitute a complete utterance, all by itself.

Dixon (2010) adds some notes to these criteria. (4)g seems, in most cases, "to be related not to grammatical word but to phonological word" (Dixon 2010: 18). (4)h applies "to a unit which is both a grammatical word and a phonological word" (Dixon 2010: 19).

4.1.2. Studies on word in Fijian

Before proceeding to the main analysis of words of Vatulele Fijian, I briefly summarize how a word is treated in SF grammar. Although Schütz (1985, 2014) classifies linguistic units from both phonological and grammatical perspectives, he avoids using the term "word" in describing SF. Schütz (2014: 334) introduces the term "measure" to refer to a phonological word, whose definition is that "a stretch of speech that contains only one accented syllable." First, Schütz (1985, 2014) sets out two phonological units.

(5) Phonological classification (Schütz 2014: 407)

BASE: a form that can serve as a measure

PARTICLE: a form that cannot serve as a measure

Besides the phonological classification, Schütz (2014) proposes the grammatical classification for linguistic units in SF (6).

(6) Grammatical classification (Schütz: 2014: 407)²

ROOT: a morpheme that functions as the head of a phrase

MARKER: a morpheme that functions in the periphery of a phrase

Schütz (2014) notes that these two classifications are not equivalent and shows the correlation between the two (7).

(7) Correlation between two classifications (Schütz 2014: 407)

- a. Every root must have the form of a base. That is, in order to serve as the head of a phrase, a form must be at least one measure in length.
- b. A particle always functions as a marker, not as the head of a phrase. That is, a form such as *na* (definite article), *e* (third person singular subject), or *-qu* 'my' serves in the periphery of a phrase, not as the head.

As shown in (7)b, the notion "particle" includes both function words and affixes.

What confuses is that Milner (1956: 10) uses the terms "base" and "particle" to refer to Schütz's (2014) ROOT and MARKER, respectively.

4.2. Word in Vatulele Fijian

In this section, the author states that it is useful in Vatulele Fijian to set up both a phonological word and a grammatical word. These two kinds of words are explored in Sections 4.2.1 and 4.2.2, respectively. Following that, the difficulties in defining affixes and clitics are discussed in Sections 4.2.3 and 4.2.4.

4.2.1. Phonological word

As mentioned in Section 2.4, Vatulele Fijian uses the penultimate-stress rule, which is common in Oceanic languages (8). This is applied to a phonological word (see (3)b above).

(8) Stress rule (Schütz 2014: 5)

a. In words of two or three short syllables, it [stress] is always on the second-to-last syllable.

In the following examples, the vowel of the accented [or stressed] syllable is in boldface:

dua one mata eye, facetolu three totoka beautiful

b. A syllable with a long vowel or a diphthong as its nucleus is accented [or stressed], no matter what its position:

 $v\bar{a}$ four rai seen $kil\bar{a}$ know it $m\bar{a}.rau$ happy

In addition to the stress rules, a diphthong indicates that a unit containing it forms a phonological word (see (3)a above). A diphthong is pronounced as a sequence of vowels within a single phonological word, the latter component of which is a high vowel. However, when the same sequence appears across a boundary of phonological words, it is pronounced as two distinct vowels (Dixon 1988: 24, Schütz 2014: 341) In (9)a, the vowel sequence /au/ is pronounced as a diphthong, whereas in (9)b, the same sequence never forms a diphthong.

(9) a. kau-ji-a b. na ura
take-TR-3SG ART prawn
'take it' 'the prawn'

A phonological word can consist only of function words. In (10), the preposition i and the article na, both of which are monosyllabic morphemes (particles in Schütz's term), combine to

form a single phonological word. Note that "+" indicates that two morphemes form a single phonological word but belong to different grammatical words.

4.2.2. Grammatical word

Dixon and Aikhenvald (2002: 36) characterize a grammatical word in Fijian languages, as cited below. This is related (4)a-d above.

A grammatical word is centered on a root or a compound stem (combining two roots) and may have prefixes and/or suffixes added to it. The components must appear together, in fixed order, with the word having a conventionalized coherence and meaning (speakers will talk of the form and meaning of grammatical words, called *vosa*).

(Dixon and Aikhenvald 2002: 36)

Grammatical words are classified into two subtypes: "lexical roots" and "function words." They correspond to what Schütz (2014) refers to as roots and markers.

A lexical root is a single phonological word by itself. Without any derivational processes, many lexical roots can be the head of a predicate and that of an argument. In (11), the verb *kana* 'eat' functions as both the predicate head (11)a and the argument head (11)b, whereas in (12), the noun $v\bar{u}niwai$ 'doctor' appears in both the argument (12)a and the predicate (12)b. This will be addressed in Section 5.1.

(11) a. *Qi* kana nō

1SG.NPST eat CNT

'I am having a meal'

b. *Hā* yavu na kana

ASP finish ART eat

'The meal is finished'

-

Dixon (1988) uses the term "function items," but I adopt "function word" instead to emphasize that they are grammatical words.

(12)lā kei vūniwai a. Ai $m\bar{a}$ пō na 3SG.NPST go **THITHER** CNT OBL here ART doctor 'The doctor is coming here' b. Qi vūniwai

1SG.NPST doctor

A function word, on the other hand, cannot be the head, a predicate, or an argument and does not take affixes. Some function words, such as tamu 'not' and $mat\bar{a}$ 'want to,' are independent phonological words, whereas others such as the oblique marker i and the article na are not. It is difficult to distinguish a function word from a dependent form such as an affix and a clitic. The following two sections deal with this issue.

4.2.3. Affix

A phonological word has one (primary) stress. Because of this stress rule, monosyllabic morphemes with a short vowel, all of which are function words, cannot be phonologically independent. Therefore, they must depend on the preceding or subsequent element to form a phonological word. As Geraghty (1983) states, it is difficult to define an affix in Fijian languages.

"Prefix," "suffix," and "word" are not well-defined terms in Fijian. For the moment, we shall call a form bound to the base, with no intervening forms permitted, a prefix or suffix.

(Geraghty 1983: 16)

Thus, there are no evident phonological criteria to distinguish between a function word and an affix. This is most likely why Schütz (1985, 2014) uses the term "particle" instead of these terms.

From a phonological standpoint, it is impossible to define a prefix. For example, in (13)a, the article *na*, which is a function word, forms a phonological word with the following *were* 'house.' In (13)b, the third person singular possessive prefix is phonologically combined with the subsequent *yaca* 'name.' Both (13)a and (13)b exhibit the same stress pattern.

```
(13) a. na were [na'were]

ART house
'the house'

b. e-yaca [e'jaða]

3SG-name
'his name'
```

However, because the stress position has been shifted, it is easy to define a monosyllabic suffix. (14) is an example of the monosyllabic suffix -qu 'my,' which forms a phonological word with the preceding word taci 'sibling.' By adding the suffix, the stress position is shifted from [ta] to [δi]. As Milner (1956: 71n) claims, the stress shift is a defining feature of a suffix in Fijian languages.

```
(14) a. taci ['taði]
sibling
'my sibling'
b. taci-qu [taˈðiʰgu]
sibling-1SG
'my sibling'
```

When a suffix has two syllables, it is unclear whether it is a suffix or not because "suffixation by a bisyllabic form does not affect stress assignment in the base" (Geraghty 1983: 274). (15)a consists of a lexical root and a suffix. There is no stress shift. (15)b is pronounced in the same way as (15)a although it consists of a lexical root and a function word.

```
(15) a. taci-maru ['taði 'maru]
sibling-1DU.EXCL
'our sibling'
b. homu tale ['hoṃ 'tale]
drink again
'drink again'
```

-maru in (15)a is analyzed as a suffix not a function word because it belongs to the same paradigm as a monosyllabic form (i.e., a suffix) like -qu in (14)b.

To summarize, phonologically defining an affix is difficult in Vatulele Fijian. Instead, Dixon (1988: 27) syntactically defines an affix as "a form which, when added to a root, changes the syntactic potential of that root." The author adopts this criterion to determine an affix in Vatulele Fijian.

4.2.4. Clitic

Haspelmath and Sims (2010: 322) simply define a clitic as "a bound word-form—i.e. a word-form that is prosodically dependent on a host." Based on their definition, function words such as the preposition *i* and the article *na* are clitics. In addition, one of the main features of clitics is that they can attach to a word of different word classes (Haspelmath and Sims 2010: 198). As mentioned in Section 5.1, the article *na* precedes both nouns and verbs, so it can be said to be a clitic. Dixon (2010: 20-1) regards some function words in Fijian as clitics.

Throughout the thesis, I refer to these "clitics" just as "function words" and do not use "=," which usually signals clitic boundaries. Instead, I adopt the traditional orthography.

4.3. Mismatches between two types of word

What is interesting, as discussed in previous literature on Fijian languages by Hale (1846), Schütz (1985, 2014), Dixon (1988), and others, is that there are some mismatches observed between phonology and grammar. Monosyllabic morphemes consisting only of /i/ are frequently involved in such mismatches.

One example is the nominalizer *i*-. This is a prefix that derives an instrumental noun from a verb. In (16), on the one hand, the nominalizer *i* is grammatically attached to the verb *vola* 'write' and derives *ivola* 'book.' On the other hand, from the perspective of the stress position, the article *na* and the nominalizer *i*- form a single phonological word *nai* because it has its own stress. Note that "+" indicates that two morphemes form a single phonological word but belong to different grammatical words.

(16) na+i-vola ['nai̯ 'ßola]

ART+NMLZ-write

'the book'

The preposition i is yet another example. This function word denotes a peripheral argument and creates a prepositional phrase (see Section 3.3.3). This preposition is usually fused with the subsequent word to form a single phonological word. In (17)a i is combined with the article na, whereas in (17)b it is combined with kei 'here.'

```
(17) a. i+na were ['ina 'were]

OBL+ART house

'to the house'

b. i+kei [i'kei]

OBL+here

'here'
```

However, the preposition i is combined with certain verbs that precede it to form a phonological word. (18) is such an example.

First of all, the stress is on the syllable ["rai], not on [ta]. Some speakers pronounce ["rai] as ["rɛ:], implying that these two vowels combine to form a single diphthong. Furthermore, a pause can be placed between [ta.'"rai] and ['kei]. As shown in (3) above, these are phonological word criteria. This construction is referred to as a "prepositional verb" in this study. This type of mismatch has not been reported in other Fijians. However, several syntactic operations confirm that a prepositional verb is not a grammatical word. Chapter 9 explores this point.

It is worth noting that only these two homonymic morphemes (i.e., the nominalizer i- and the preposition i) cause mismatches between phonological and grammatical words. In (19), for example, the lexical noun ika 'fish' follows the article na. However, the sequence of /a/ and /i/ never constitutes a diphthong /ai/. That is, they are two separate phonological words.

4.4. Orthographic word

Throughout this thesis, the orthographic transcription is used to demonstrate Vatulele Fijian texts

unless otherwise noted. This is similar to SF orthography, which is based on grammar rather than

phonology.

There are several possibilities for inserting spaces between "words," particularly when a

grammatical word and a phonological word do not coincide. Dixon (1988: 22) states that there

are three patterns for writing down an *i*-derived noun, as discussed in the previous section (20).

(20) a. ai sele

b. a i sele

c. a isele

'knife'

With regard to these variations in writing, Dixon (1988) claims as follows.

There is merit in each of these alternatives: (i) [= (20)a] shows the phonological word, (iii) [= (20)c]

shows the grammatical word, while (ii) [= (20)b] simultaneously recognizes both kinds of word

boundary.

(Dixon 1988: 22)

When asked to write a text in Vatulele Fijian, speakers prefer (20)a. That is, they recognize a word

as a phonological unit. As stated above, this thesis uses the orthographic transcription based on

grammar. Therefore, the nominalizer i- is written together with the subsequent word, whereas the

preposition i is a separate word like (20)a.

What is considered a word in this study is sometimes inconsistent with what speakers

consider a word to be. This study examines qu in (21)a as a prefix because there is a parallelism

between the possession of body parts and that of kinship terms, both of which are inalienable

possessions. qu in (21)b is definitely a suffix from the phonological point of view, as discussed in

Section 4.2.3.

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However, speakers insert a space between qu and mata (i.e., between a prefix and a root) when writing, which never occurs between a root and a suffix as in (21)b. Rather, in speakers' minds there might be a parallelism between a possessive prefix and an unmarked bound pronoun, which is written independently as in (22).

Despite this, I analyze qu in (22)a as a prefix and qu in (22)b as a function word for the following two reasons. First, while some possessive prefixes are formally the same as unmarked bound pronouns, other differ, particularly in the third person (see Table 3-3 and Table 3-5 in Section 3.1.1). Second, various function words, such as the aspect marker $h\bar{a}$ in (23), can be inserted between the bound pronoun qu and the head of a predicate. However, the possessive prefix qu has to be attached directly to the noun. See Geraghty's (1983) claim cited in Section 4.2.3.

4.5. Summary

A word's phonological and grammatical boundaries may coincide in some languages. Such languages have no difficulty in defining what is a "word" and in establishing the orthography. This is not the case with Vatulele Fijian. This chapter provided examples of studies on "words" and claimed that there are two types of words in Vatulele Fijian: phonological words and grammatical words. This is useful to analyze Fijian languages. Section 4.3 shows that there are some mismatches between the two kinds of words. Chapter 9 will cover this in more detail.

5. Construction of predicate

A predicate is the core of a clause in Vatulele Fijian. It may consist of several grammatical and phonological words. Because a subject and an object (if any) are indicated on the predicate, Vatulele Fijian is a head-marking language. Figure 5-1 is a template of a predicate.

subordinator + subject pronoun + modifier + HEAD + object pronoun + modifier

Figure 5-1: Structure of predicate

"Verb phrase" is a term that appears in many studies. Because the predicate head cannot be a verb, I avoid this term and prefer "predicate." Section 5.1 addresses this point. Section 5.2 describes bound pronouns and Section 5.3 describes modifiers, respectively. Section 5.4. provides the summary. Subordinators are not described in this study.

5.1. Predicate head

A verb is usually the head of a predicate, but it can also be a noun or an adjective (see Section 3.2). Milner (1956: 10) points out that Fijian "has a great many words which can be used either as verbs or as nouns" and calls these words "bases." His description seems to hold for Vatulele Fijian. For example, *kana* 'eat' functions as the predicate head in (1)a, which is considered to be canonical function of verbs. However, the same word serves as an argument in (1)b.

(1) a. *Qi* kana nō

1SG.NPST eat CNT
'I am having a meal'
b. *Hā* yavu na kana
ASP finish ART eat
'The meal is finished'

Similarly, the noun $v\bar{u}niwai$ 'doctor' is the head of the argument in (2)a, whereas it is the predicate head in (2)b.

(2) a. Ai vūniwai lā $m\bar{a}$ пō i kei 3SG.NPST go **THITHER** CNT OBL here ART doctor 'The doctor is coming here' b. Qi vūniwai 1SG.NPST doctor 'I am a doctor'

In this study, I distinguish lexical classes (noun, verb, etc.) from syntactic functions (argument, predicate, etc.) in the same manner as Dixon (2010). The relationship between lexical classes and syntactic functions is "strong" in some languages. In such languages, a noun functions exclusively as an argument and a verb as a predicate. When a noun is used as a predicate or a verb as an argument, certain derivational processes are operated. Other languages have a "weak" relationship between lexical classes and syntactic functions, where both a noun and a verb can function as an argument and as a predicate. Broschart (1997), who analyzes Tongan, an Oceanic language, identifies the former as "noun/verb languages" and the latter as "type/token languages," which includes Tongan.

Vatulele Fijian is the latter type of language. Thus, as shown in (1) above, verbs are not strictly related to predicates. Similarly, nouns are not confined to arguments as shown in (2). Luuk (2010) typologically classifies languages based on the correlation between lexical classes and syntactic functions. He classifies Tongan and Samoan as type F (or flexible). Languages of type F have "no stems that map to either LA [lexical argument] but not LP [lexical predicate] or LP but not LA" (Luuk 2010: 360). Vatulele Fijian belongs to this type.

Since they imply that the head is a noun and verb, I will no longer use the terms "noun phrase" and "verb phrase" unless otherwise noted. Instead, I use the terms "argument" and "predicate" to refer to syntactic functions.

5.2. Bound pronouns

As Vatulele Fijian is a head-marking language, an argument itself does not indicate whether it is the subject or the object. Instead of using case inflection or case markers for arguments, bound pronouns within the predicate indicate syntactic functions of arguments. There are two types of bound pronouns: subject pronouns (Section 5.2.1) and object pronouns (Section 5.2.2).

5.2.1. Subject pronouns

A subject pronoun must be selected from Table 5-1 for a clause to be completed, except imperative.

Table 5-1: Subject bound pronouns

	1EX	KCL	1IN	ICL	2	2	3	3
	Unmarked	NPST	Unmarked	NPST	Unmarked	NPST	Unmarked	NPST
SG	qu	qi			0	oi	а	ai
DU	maru	mari	daru	dari	muru	miri	aru	ari
PA	matu	maji	du	zi	mutu	miji		
PL	тати	mami	da	dai	тū	тī	ara	arai

Bound pronouns use the nominative-accusative alignment, so subject bound pronouns indicate the person and the number of intransitive subject (S) (3) and transitive subject (A) (4).

- (3) Ara nō i koronoivuli na kwāhewa

 3PL exist OBL school ART child

 'Children were at school'
- (4) Matu vuli-ci-a na vosa vāvalagi

 1PA.EXCL learn-TR-3SG ART speech European
 'We learned English (lit. European language)'

All the subject pronouns have a distinction between nonpast and unmarked, which is not observed in SF (see Section 3.1.1.2). From a historical perspective, Geraghty (1983: 282-3) points out that the two sets of subject pronouns emerged in only some Western Fijians.

Nonpast pronouns are used, as its name suggests, to express present and future events (5).

(5) Ai vinā na draki

3SG.NPST good ART weather

'It is nice weather'

The third person nonpast pronoun *ai* is used with numerals (6). This point will be discussed in Section 10.1.2.

(6) Ai hila na rumu

3SG.NPST ART room

'There is one room'

On the other hand, unmarked pronouns are not only morphologically but also functionally unmarked. First, they express past situations that are not represented by nonpast pronouns (7).

(7) Qu hava-ji-a qu-lima

1SG wash-TR-3SG 1SG-arm

'I washed my hand'

They are also used to identify the subject in a subordinate clause. (8) is an instance where the second person singular o is fused with the subordinator me to form mo, whereas the third person singular a is dropped. The nonpast alternatives oi and ai never appear after subordinators.

(8) Mo lai covi-a mā me mai vuke-i-ko

SUB.IRR:2SG GO.AND call:TR-3SG HITHER SUB:3SG COME.AND help-TR-2SG

'Please go and call him so that he might help you'

Clearly, a nonpast form is morphologically marked. For instance, the second person singular nonpast pronoun is oi and its unmarked counterpart is o. It seems that the former is derived by adding the suffix -i to the latter. This study, however, does not consider -i to be a separate morpheme because, in most pronouns, i is so completely fused that they cannot be analyzed as distinct morphemes.

5.2.2. Object pronouns

Table 5-2 lists the object-bound pronouns of Vatulele Fijian, the majority of which are identical to independent pronouns (Table 5-3).

Table 5-2: Object bound pronouns

	1EXCL	1incl	2	3	
SG	-a	ıu	-ko	-a	
DU	kēmaru	kēdaru	kēmuru	-ru	
PA	kēmamutou	kēdatou	kēmutou		
PL	kēmamu	kēdā	kēmū	-ra	

Table 5-3: Independent pronouns

	1EXCL	1incl	2	3
SG	yc	ıu	iko	kia
DU	kēmaru	kēdaru	kēmuru	kiru
PA	kēmamutou	kēdatou	kēmutou	Lina
PL	kēmamu	kēdā	kēmū	kira

This study distinguishes object pronouns from independent ones. Another alternative analysis would be that the first and second person singular independent pronouns and the third person independent pronouns have allomorphs in the object position.

Object pronouns require a transitive suffix before them. The first and second person singular pronouns as well as the third person pronouns are suffixes (9), which is common in Western Fijians (Geraghty 1983: 211, see Section 1.2).

The third person singular -a follows the transitive suffix when the object is a common noun. Even if an object refers to more than one entity, -a appears as object agreement. Therefore, the third person singular is unmarked for number, particularly when an object is inanimate (10).

Section 6.3.1.2 will treat object pronouns again.

5.3. Modifier

In this section, major modifiers are described. There are pre-head and post-head modifiers. Pre-head modifiers appear between the bound pronoun and the head. On the other hand, post-head modifiers follow the head. This study adopts the viewpoint of Dixon (1988) and considers that these modifies occur within a predicate.

Each of these elements is phonologically independent, some of which may be phonologically fused with the head. These modifiers can be called "function words" because, unlike "content words" such as nouns or verbs, they cannot be the head of a predicate or an argument and cannot be attached by any derivational affixes. They must appear in the slots to which they are assigned. However, some of them can stand alone without the head (11).

(11) Tale!
again
'(Do it) again!'

5.3.1. Pre-head modifiers

Table 5-4 shows some major pre-head modifiers. It is difficult to generalize a common meaning of pre-head modifiers.

Table 5-4: Pre-head modifiers

hā	Aspect	
tamu	Negative	
qai	'Then	
rui	'Very'	
matā	Desiderative	
lai	'Go and'	
mai	'Come and'	

Modifiers in the table appear in this order (up to down) when they cooccur (12).

(12) $H\bar{a}$ tamu matā lai kana

ASP NEG DES GO.AND eat

'He does not want to go to eat'

5.3.1.1. Aspect hā

 $h\bar{a}$ is an aspect marker. Broadly speaking, it expresses present events. This modifier immediately follows a bound pronoun (13).

(13) Aru hā lā mā

3DU ASP go HITHER

'They (two) have just come'

It should be emphasized that the subject bound pronoun of third person singular is omitted when preceded by $h\bar{a}$. In (14), there is no subject pronoun because the subject is the third person singular.

(14) Hā kuca nō?

ASP how CNT

'How is it?'

The SF counterpart is $s\bar{a}$ and Schütz (2014) explains its function as cited below.

The marker $s\bar{a}$ indicates that an action/state contrasts with a previous one. The effect of this contrast is to focus attention on the action/state marked by $s\bar{a}$.

(Schütz 2014: 42)

Therefore, for instance, (15) implies that $T\bar{e}$ had been ill but now he is well.

(15) SF: Sā bula vinaka o Tē

ASP health good PRP Tē

'Tē is well now' (Schütz 2014: 42)

 $h\bar{a}$ in Vatulele Fijian also functions to contrast an event with a previous one. (16) implies that kava-drinking was being held but it has just stopped now.

(16) Hā yavu na homu yaqona

ASP finish ART drink kava

'Kava-drinking is finished'

I use the abbreviation ASP (aspect) for this modifier, which is also adopted by Dixon (1988) and Schütz (2014). The vowel of $h\bar{a}$ might be shortened to ha^1 .

(17) Qu ha holi-a vuā na ivola

1SG ASP give-TR:3SG OBL:3SG ART book

'I have given the book to him'

5.3.1.2. Negative tamu

Negation is expressed by the pre-head modifier tamu. (18)

(18) *Qi* tamu kila-a

1SG.NPST NEG know-TR:3SG

'I do not know'

In SF, negation is expressed differently. Negation does not have a modifier in SF. Instead, it uses the negative verb *sega*, which takes a complement clause as the subject (19).

(19) SF: E sega niu kila-a

3SG not.exist SUB:1SG know-TR:3SG

'I don't know (lit. That I know does not exist)'

For negation, see also Section 3.3.4.

5.3.1.3. 'Then' qai

The function of *qai* is to indicate that an event follows another event. This modifier often occurs in serialization of predicates. (20) implies that there was something done before resting.

Dixon (1988: 70) regards sa not as the allomorph of $s\bar{a}$ but as the distinct marker in Boumā Fijian.

(20) Du qai vā-cegu

1PA.INCL SEQ CAUS-rest

'Then, let's have a rest'

5.3.1.4. 'Very' rui

This pre-head modifier cooccurs with adjectives to express 'very' (21).

(21) *Hā rui levu*ASP VERY big

'It is too big'

Dixon (1988: 239) asserts that only adjectives are modified by *rui* in Boumā Fijian. Therefore, he differentiates adjectives from verbs and defines a distinct adjective class. This seems hold for Vatulele Fijian (See Section 3.1.5).

5.3.1.5. Desiderative matā

Desiderative, or 'want to,' is expressed by $mat\bar{a}$, whose SF and Boumā Fijian counterpart is via (22).

(22) VF: Qi matā moce SF: Au via moce

1SG.NPST DES sleep 1SG DES sleep

'I want to sleep' 'I want to sleep'

A lexical word for 'want' is vinājia (23).

(23) *Qi* vinā-ji-a na wai

1SG.NPST want-TR-3SG ART water

'I want some water'

matā can be used only if a "wanter" and the subject of an event are coreferential. If not, the lexical verb vinajia is used with a complement clause. In (24), the "wanter" is 'me' and the subject of the event is gwata 'snake,' so matā cannot be used here.

(24) *Qi* vinā-ji-a me hila le-qu gwata

1SG.NPST want-TR-3SG SUB.IRR:3SG one CLF.N-1SG snake

'I want to have my own snake (lit. I want that my own snake exists)²'

Schütz (2014: 74-6) considers *via* in SF to be a prefix probably because some phrases with *via* can be translated as adjectives in English (25).

Contrary to this, Dixon (1988: 27) does not consider via in Boumā Fijian to be a prefix because it does not change the syntactic potential of the root (see Section 4.2.3). This study takes the position of Dixon (1988) and considers $mat\bar{a}$ as an independent function word, not a prefix.

5.3.1.6. Directional lai, mai

lai expresses 'going for a purpose' (26)a, whereas mai 'coming for a purpose' (26)b.

(26) a.
$$H\bar{a}$$
 lai sota b. Mai kana!

ASP GO.AND meet COME.AND eat

'He went to meet' 'Come and have a meal!'

These markers are mutually exclusive.

5.3.2. Post-head modifiers

Similar to pre-head modifiers, it is difficult to extract a common meaning of post-head modifiers. Table 5-5 summarizes major post-head modifiers in Vatulele Fijian.

² In Vatulele Fijian, possession is expressed by the existential verb. See Chapter 10 for fuller discussion.

Table 5-5: Post-head modifiers

cake	'Up'	
civo	'Down'	
yavu	Completive	
taucoko	'All'	
tale	'Again'	
hara	'Very'	
nō	Continuous	
gā	'Only'	
rē	'Please'	
wā	'Thither'	
mā	'Hither'	
kē	Resumptive	

This study classifies them into (i) directional I, (ii) aspectual, (iii) politeness, (iv) directional II, and (v) resumptive. Note that post-head modifiers in the table appear in this order when they cooccur (27).

5.3.2.1. Directional I

Directional I modifiers expresses vertical motions. This category includes *cake* 'upward' (28)a and *civo* 'downward' (28)b.

(28) a.
$$t\bar{u}$$
 cake b. $dr\bar{o}dr\bar{o}$ civo stand UP flow DOWN 'stand up' 'flow downward'

Semantically, they are mutually exclusive.

5.3.2.2. Aspectual

The term "aspectual" is not well established here. Rather, I use this term in a broad sense, which includes not only traditional aspects but also some additional nuances.

taucoko 'all' modifies a subject or an object though it occurs within a predicate. In (29), taucoko 'all' modifies the object tuba 'crab.'

(29) Qu kani-a taucoko na tuba

1SG eat:TR-3SG ALL ART crab

'I ate all crabs'

When a subject is non-singular, it would be ambiguous whether *taucoko* 'all' modifies a subject or an object (30).

(30) Ara kani-a taucoko na tuba
3PL eat:TR-3SG ALL ART crab
'They all ate crabs' or 'They ate all crabs'

hara functions as an intensifier (31). This function is similar to the pre-head modifier *rui* (see Section 5.3.1.4).

(31) Hā katakata hara

ASP hot VERY

'It's very hot'

Unlike rui, hara cooccurs with a verb with the meaning 'soon' (32).

(32) Hā huka hara

ASP returen VERY

'He returned soon'

tale expresses an action done again (33).

(33)a. Sota tale! AGAIN meet 'Meet again!' b. Ai hila tale bilo? na 3SG.NPST one AGAIN ART cup 'How about another cup?'

yavu is an aspect marker to indicate an action is completed (34).

(34) Qu kani-a yavu

1SG eat:TR-3SG COMPL

'I ate it up'

This modifier originates from the lexical word meaning 'finish' (35).

(35) Hā yavu na kana
ASP finish ART eat

'The meal has finished'

There are numerous modifiers for continuous aspect, including the content words jiko, $t\bar{u}$, koto, and $n\bar{o}$. Dixon (1988: 76) refers to them "stance-aspect" and explains that "they describe the temporal duration, etc, of the activity or state referred to by the predicate head." Schütz (2014) describes these four modifiers in SF as (36)-(39).

- (36) *tiko* (lexical meaning 'stay,' VF: *jiko*) (Schütz 2014: 175) This marker is used to indicate temporary duration.
- (37) $t\bar{u}$ (lexical meaning 'stand') (Schütz 2014: 176) An action/state followed by the marker $t\bar{u}$ is more permanent (than that by tiko).
- (38) *koto* (lexical meaning 'lie down') (Schütz 2014: 177) *koto* is used to indicate a continuing state that is related to the meaning of *koto* as a verb: 'lie down.'

(39) nō (lexical meaning 'exist') (Schütz 2014: 178)
nō functions as a synonym of koto. It is used as a marker in SF only after koto, when koto is used as a main verb meaning 'lie down.'

As mentioned earlier in (39), the distribution of $n\bar{o}$ is limited. However, in Vatulele Fijian, $n\bar{o}$ is the most-used continuous modifier. For example, $n\bar{o}$ appears in conventionalized expressions like greetings (40).

(40) a.
$$H\bar{a}$$
 kuca $n\bar{o}$?

ASP be.how CNT

'How are you doing?'
b. Ha vin \bar{a} $n\bar{o}$

ASP good CNT

'That's good'

Another interesting point about $n\bar{o}$ is that it is fused with the head to form a single phonological word. In (41), $n\bar{o}$ and the preposition i are phonologically fused. I call this construction a "prepositional verb" and explore it in Chapter 9.

 $g\bar{a}$ occurs at the right edge of the Aspectual modifier slot. It means 'only' (42).

5.3.2.3. Politeness

 $r\bar{e}$ is a politeness marker used in imperative like English 'please.' It is often used in imperative sentences (43).

(43) Moce $r\bar{e}$ sleep POL 'Good night'

5.3.2.4. Directional II

Directional II category is related to deictic meanings. $w\bar{a}$ expresses 'thither,' whereas $m\bar{a}$ expresses 'hither.' These two modifiers never appear in the same clause (44).

(44) kau-ji-a wā/mā
carry-TR-3SG THITHER / HITHER
'take it away / bring it'

Intriguingly, these modifiers are frequently phonologically fused with the head (45). This point will be revisited in Section 5.3.2.6.

(45) a. la+wa ['la.wa] b. kau+ma ['kau̯.ma] go+THITHER take+HITHER
'go away' 'bring'

5.3.2.5. Resumptive

 $k\bar{e}$, which I label "resumptive" here, differs from other modifiers in that it has no lexical meaning. This modifier obligatorily appears at the end of a predicate when a peripheral argument is fronted. Thus, Geraghty (2002: 843) calls it "oblique anaphoric." A peripheral argument is defined syntactically, not semantically. That is, any arguments marked by the preposition i is peripheral (see Section 3.3.2). In (46)-(48), peripheral arguments with various semantic roles are fronted for formation of a relative clause (or topicalization).

(46) Goal

- a. na koronivuli matu $l\bar{a}$ $k\bar{e}$ ART school 1PA.EXCL go RES
 - 'The school to which we went'
- b. Matu $l\bar{a}$ i na koronivuli 1PA.EXCL go OBL ART school 'We went to school'

(47) Location

- a. na were qi moce $k\bar{e}$ ART house 1SG sleep RES

 'The house in which I slept'
- b. Qi moce i na were1SG sleep OBL ART house'I slept in the house'

(48) Instrument

- a. na veni o vola \sim vola 3 $k\bar{e}$ ART pen 2SG RED \sim write RES

 'The pen with which you wrote'
- b. O vola~vola i na veni
 2SG RED~write OBL ART pen
 'You write with a pen'

In SF, $k\bar{e}$ corresponds to kina (49).

(49) SF: na waqa eratou lako kina ki Suva ā ART canoe 3PA PST Suva RES go to (Milner 1956: 49) 'the canoe in which they sailed to Suva'

³ The function of reduplication will be described in future.

This function of $k\bar{e}$ supports the notion that this language makes a clear difference between core and peripheral arguments because it never occurs when a core argument is fronted (50).

5.3.2.6. Fusional forms

All of the post-head modifiers are phonologically independent. However, as mentioned above, long vowels of $n\bar{o}$, $w\bar{a}$, and $m\bar{a}$ are sometimes shortened to form a phonological word with the preceding head (51).

(51) a.
$$la+wa$$
 ['la.wa] b. $kau+ma$ ['kau̯.ma] go+THITHER take+HITHER 'go away' 'bring'

For the following two reasons, these expressions have been lexicalized and conventionalized. First, the syntactic and lexical distribution of fusional forms is restricted. Fusional forms are attached only to commonly used verbs, such as $l\bar{a}$ 'go' and kau 'carry.' In addition, they are fused only with verb roots and not with other modifiers or suffixed verbs (52).

The second reason is that not all modifiers have shortened forms. For instance, both the politeness marker $r\bar{e}$ and the resumptive marker $k\bar{e}$ also have a long vowel and lack fusional alternatives (53), (54).

```
(53) l\bar{a} r\bar{e}. [la: re:] *['la.re] go POL 'Please go'
```

(54) na koronivuli qu
$$l\bar{a}$$
 $k\bar{e}$ [gu.la: ke:] *[gu.'la.ke]

ART school 1SG go RES

'The school that I went to'

These fusional forms are relevant to "prepositional verbs." (55) is an example of a prepositional verb in which the preposition i is phonologically fused to the combination lama 'come.'

(55) a.
$$la+ma+i$$
 kei [la.'mai.'kei] go+HITHER here 'come to here'

This construction will be described in Chapter 9.

5.4. Summary

This chapter provided an overview of the predicate structure. Typically, a predicate comprises a number of components. In addition to being a verb, the head of a predicate can also be a noun or an adjective. The subsequent chapters will focus on cases in which the predicate head is a verb.

In addition to the head, a predicate includes bound pronouns and modifiers. Bound pronouns are coreferential with core arguments, that is, a subject and an object. Some bound pronouns are phonological words, whereas others are suffixes. Modifiers within a predicate convey various meaning. Some modifiers are same in form as lexical items, but this study considers them as distinct grammatical words. Although all modifiers are phonologically independent, some have fusional alternatives.

6. Transitivity

Transitivity in Vatulele Fijian is described in this chapter. The organization of the chapter is as follows. Section 6.1 outlines the scope of investigation for this chapter. Section 6.2 discusses two kinds of verbs observed in Fijian languages. Section 6.3 explores morphological devices to change valency. Section 6.4 is a case study to examine transitivity in Vatulele Fijian. Section 6.5 concludes the chapter.

6.1. Valency

This chapter focuses on transitive verbs in Vatulele Fijian. As discussed in Section 5.1, not only a verb (1)a but also a noun (1)b and an adjective (1)c can function as the predicate head in Fijian languages, making it difficult to build word classes, including the verb class. In (1), each example contains the same bound pronoun qi, which indicates that the following word is the predicate head regardless of its word class.

(1) a. Qi homi-a nō na sucu 1SG.NPST drink:TR-SG CNT ART milk 'I am drinking milk' b. *Qi* vūniwai 1SG.NPST doctor 'I am a doctor' c. Oi rui gase 1SG.NPST VERY old 'I am too old'

Schütz (2014: 24, his italics) defines a verb as "a form that occurs *most commonly* as the head of a verb phrase [i.e., a predicate in this study]."

This chapter introduces the concept of "valency," which is useful to consider the verb class. A transitive verb is a word whose syntactic valency is two. In other words, if a predicate takes two core arguments, its head is a verb (see Section 3.3.2 and 3.3.3 for the distinction between core and peripheral arguments). Nouns and adjectives never take two core arguments (Dixon 1988: 239). In addition, morphologically, a typical transitive verb has a transitive suffix (see Section 6.3.1).

However, it should be noted that two-valency is a sufficient condition for a verb, not a necessary condition. In other words, not all verbs require two main arguments. For example, motion verbs such as $l\bar{a}$ 'go' and existential verbs $n\bar{o}$ 'exist' are inherently intransitive and do not have transitive alternatives. All of verbs, nouns, and adjectives can be a predicate whose valency is one.

There appears to be no word with zero valency. That is to say, there are no impersonal constructions in Vatulele Fijian. The intransitive construction is used even in meteorological expressions. For instance, $na\ draki$ 'weather' appears as a subject of the predicate $h\bar{a}\ katakata$ 'hot' in (2).

(2) Hā katakata na draki

ASP hot ART weather

'It is hot (lit. The weather is hot)'

An expression like (2) can have an "experiencer" as the subject (3).

(3) Qi hā katakata

1SG ASP hot

'It is hot for me (lit. I am hot)'

(4) is another example, which literally means 'the rain is falling.'

(4) $H\bar{a}$ tau $n\bar{o}$ na buya

ASP fall CNT ART rain

'It is raining (lit. The rain is falling)'

One possible exception is the verb *kuca*, which means 'be how' (see Section 3.3.6). (5) is a conventionalized expression commonly used in everyday conversation. The expected subject would be something like 'situation,' but it does not appear in the clause.

(5) Hā kuca nō?

ASP how CNT

'How is it?'

Vatulele Fijian has no verb with a valency of three. In other words, verbs never take three core arguments. If a verb semantically requires three participants, one of object-like arguments should be peripheral. In (6), the theme-like argument *na ivola* 'book' appears as the object, whereas the recipient-like argument appears as peripheral.

(6) Qu holi-a vuā ai hila na ivola

1SG give-TR:3SG OBL:3SG 3SG one ART book

'I gave a book to him'

I refer to such verbs as "ditransitive verbs" and explore them in Chapter 7.

6.2. Two types of verbs

Intransitive verbs are morphologically unmarked in Vatulele Fijian. The suffix is added to form transitive verbs. This transitive suffix is generalized as -Ci or -(Caki)ni, where C represents a lexical-determined consonant including \mathcal{O} (zero). Verbs are divided semantically into two categories: S = A type (7) and S = O type (8). Intransitive subject (S) of the former verbs corresponds to transitive subject (A), whereas S of the latter verbs corresponds to transitive object (O). These two types of verbs are commonly referred to as unergative and unaccusative verbs.

- (7) S = A verbA caqe A caqe-ji-a na volo

 3SG kick 3SG kick-TR-3SG ART ball

 'He kicked' (intr.) 'He kicked the ball' (tr.)
- (8) S = O verbAAdola-vi-a dola na mataniwere na mataniwere 3sg 3sg open ART open-TR-3SG ART door door 'The door opened' 'He opened the door'

Different terms are used for the two verb types shown in (7) and (8). Geraghty (1983) introduces "ergative" and "transitive" for these two types of verbs (9).

- (9) Two types of verbs (Geraghty 1983: 7-8)
 - a. Ergative-type verb (ve)subject of unsuffixed base same case as object of suffixed base
 - b. Transitive-type verb (vt)subject of unsuffixed base same case as subject of suffixed base

Schütz (1985, 2014) uses the terms "active" and "stative" for this distinction (10).

- (10) Two types of verbs (Schütz 2014: 85)
 - a. Active verb the subject represents the actor
 - b. Stative verb the subject represents the goal¹

Active verbs are classified into A1 and A2 verbs and stative verbs are classified into S1 and S2 verbs. A1 and S1 verbs are inherently intransitive, but A2 and S2 are transitivized by suffixes. According to Schütz's classification, S1 verbs contain adjectives. Based on his classification, (11) is an A2 verb and (12) is an S2 verb.

Dixon (1988) adopts syntactic concepts S, A, O for the verb classes in Boumā Fijian (13).

Schütz (2014: 250) defines the term "goal" as the "recipient of an action—the person or thing affected, described, or in a state." It corresponds to "patient" in this thesis.

(13) Two types of verbs (Dixon 1988: 45)

- a. A = S type verb, or A-type verbintransitive subject (S) corresponds to transitive subject (A)
- b. O = S type verb, or O-type verbintransitive subject (S) corresponds to transitive object (O)

Dixon (2010) uses the similar terms as cross-linguistic concepts. (14)c and (14)d below correspond to A = S and O = S type verbs in (13), respectively.

(14) Transitivity types of clauses (Dixon 2010: 123-4)

- a. Strictly intransitive verbs—may occur only in intransitive clauses; for example, *go* and *chat* in English.
- b. Strictly transitive verbs—may occur only in transitive clauses; for example, *recognize* and *promote* in English.
- c. Ambitransitive of type S = A. These verbs can occur in either an intransitive or transitive clause, with the S of the intransitive corresponding to the A of the transitive. For example, *knit* in English—one can say either She_S is *knitting* or She_A is *knitting* [a scarf]_O.
- d. Ambitransitive of type S = O. These verbs can occur in either an intransitive or transitive clause, with the S of the intransitive corresponding to O. For example, *trip* in English—one can say either He_S tripped or She_A tripped him_O .

Table 6-1 below summarizes the terms used in previous studies.

Table 6-1: Terms for verb types

	rai 'see' type	bulu 'be buried' type
Geraghty (1983) Ergative verb		Transitive verb
Schütz (1985, 2014)	A2 verb	S2 verb
Dixon (1988)	A = S verb	O = S verb
Dixon (2010)	S = A verb	S = O verb
This work	S = A verb	S = O verb

This work adopts Dixon's (2010) terms because they are the latest ones among them and are invented as cross-linguistic concepts.

There is an additional note for kana 'eat' and homu 'drink.' These verb function as both S = A and S = O verbs (15).

(15) a.
$$S = A \text{ verb}$$
 b. $S = O \text{ verb}$

$$Qu \quad kana / homu \quad H\bar{a} \quad kana / homu \quad vin\bar{a}$$

$$1SG \quad \text{eat / drink} \quad ASP \quad \text{eat / drink} \quad \text{good}$$
'I ate / drank' 'It tastes good'

6.3. Verbal derivation

There is no verbal inflection in Vatulele Fijian. All morphological changes in the language are derivational. This section focuses on valency-changing derivation, that is, transitivization and detransitivization.

Following are descriptions of three types of transitivization. The first type is suffixation, which is the most typical transitivizing process (Section 6.3.1). In (16) (= (7)), caqe 'kick' is transitivized by the suffix -ji.

```
(16) a. A caqe

3SG kick

'He kicked' (intr.)

b. A caqe-ji-a na volo

3SG kick-TR-3SG ART ball

'He kicked the ball' (tr.)
```

The second type is "unsuffixed" transitive, where a bare verb functions transitively (17) (Section 6.3.2).

The third type is prefixation by the causative prefix $v\bar{a}$ - (Section 6.3.3). This derivational process applies not only to verbs but also to adjectives and nouns. In (18), the adjective *mamaca* 'dry' is transitivized.

(18) *O vā-mamaca-ni-a le-mu ivāvā?*2SG CAUS-dry-TR-3SG CLF.N-2SG shoes

'Did you dry your shoes?'

Section 6.3.4 treats valency-decreasing processes. In (19), the passive suffix -*i* attaches to the verb *vola* 'write.'

(19) A vola-i yavu

3SG write-PASS COMPL

'It was written'

6.3.1. Typical transitive

As discussed in Section 6.1, a transitive verb is defined as a word that requires two core arguments. A typical transitive verb consists of three elements, i.e., a verb root, a transitive suffix, and an object bound pronoun (Figure 6-1).

verb root + transitive suffix + object pronoun

Figure 6-1: Template of typical transitive verb

Sections 6.3.1.1 and 6.3.1.2 describe the transitive suffix and object pronouns, respectively. Section 6.3.1.3 compares the verbal forms of Vatulele Fijian with those of SF.

6.3.1.1. Transitive suffix

As stated previously, transitive verbs are formed by adding the suffix -Ci or -(Caki)ni. These suffixes were derived from the Proto Oceanic forms *-i and *-aki(ni). Lynch et al.'s (2002: 44) historical explanation is as follows. In Proto Oceanic, these suffixes were attached to an intransitive verb having a final consonant. Fijian languages lost word-final consonants. As a result, this ancient consonant is retained before transitive suffixes. This consonant is now reanalyzed as

part of the suffix. Consequently, C is determined lexically. Lynch et al. (2002: 44) demonstrate this as (20).

```
(20)
       Proto Oceanic
                                       SF
       tagis
                   tagis-i-a
                                       tagi
                                                    tagi-ca
                   weep-TR-3SG
       weep
                                       weep
                                                    weep-TR:3SG
       'weep'
                   'cry for'
                                        'weep'
                                                    'cry for'
                           (Lynch et al. (eds.) 2002: 44, my glosses, Fijian orthography is used)
```

Traditionally, these two suffixes are known as the short suffix and the long suffix, respectively. The former takes "goal," "patient," or "(affected) location," as its object, whereas the latter takes "cause," "instrument," or "beneficiary" (Geraghty 1983: 260-1). The latter suffix derives transitive verbs whose object is "an argument which would otherwise be an oblique noun phrase" (Lynch et al. 2002: 44). In this regard, transitive verbs with the long suffix are functionally similar to applicative construction.

These two suffixes may be added to the same verb. For instance, *ciri* 'throw' is attached by the short suffix *-vi*, taking "goal" as its object (21)a. When it is attached by the long suffix *-takini*, the object is "instrument" or "theme" (21)b (see Section 7.2.2). Note that the third person singular object pronoun *-a* follows the transitive suffixes in both cases. This point will be considered soon in Section 6.3.1.2.

```
(21) a. ciri-vi-a na volo
throw-TR-3SG ART ball
'throw (something) to the ball'
b. ciri-takini-a na volo
throw-TR-3SG ART ball
'throw the ball'
```

In SF, motion verbs such as *lako* 'go' also takes both short and long suffixes. When *lako* is suffixed by the short suffix, it takes "goal" as its object (22)a, but when it is marked by the long suffix, its object is "accompaniment" (22)b.

Motion verbs in Vatulele Fijian, however, do not take any transitive suffixes. Instead, they might be combined with the preposition i to form a prepositional verb (23). Chapter 9 explores this construction in detail.

(23) la+i na were
go+OBL ART house
'go to the house'

The long suffix -(Caki)ni is used to transitivize loanwords (24), the consonant is usually t.²

(24) a. ofu-takini-a b. wini-takini-a switch.off-TR-3SG win-TR-3SG 'switch it off' 'win it'

In previous research, -Ci/-(Caki)ni (and their counterparts in other Fijians) has been described as "suffix." However, the transitive suffix in Vatulele Fijian is attached not only to a verb root but also to a "phrase." This function appears to be limited to the suffix -(Caki)ni. In (25), the suffix -ni is attached not to the verb root but to the noun incorporation kata domo 'neck-bite' (see Section 8.2.2 for details).

(25) Ha kata-domo-ni-a na tamata na gwata

ASP bite-neck-TR-3SG ART man ART snake

'The snake neck-bit the man'

(26) is another example, where -ni follows the post-head modifier cake. In other words, the host of -ni is not the verb root $t\bar{u}$ but the phrase $t\bar{u}$ cake 'stand up.' This construction will be explored in Section 6.3.3.

-

² Tamata (2003) explores how loanwords are transitivized in SF.

(26) Hā vā-tū-cake-ni-au

ASP CAUS-stand-UP-TR-1SG

'He made me stand up'

It might be correct that -Ci/-(Caki)ni is analyzed as an "enclitic" rather than a suffix because it can be attached to words from different syntactic categories (Haspelmath and Sims 2010: 198, see also Section 4.2.4). However, as discussed in Section, 4.2.3, an affix is "a form which, when added to a root, changes the syntactic potential of that root" (Dixon 1988: 27). Although, in (25) and (26), what to which -ni is attached is a "phrase" rather than a root, it changes the syntactic potential. Therefore, this study treats it as suffix based on traditional descriptions.

6.3.1.2. Object pronouns

As discussed in Section 5.2.1, Vatulele Fijian has object bound pronouns (Table 6-2).

inoie o	able of 20 object pronouns				
	1EXCL	1INCL	2	3	
SG	-au		-ko	<i>-a</i>	
DU	kēmaru	kēdaru	kēmuru	-ru	
PA	kēmamutou	kēdatou	kēmutou		
PL	kēmamu	kēdā	kēmū	-ra	

Table 6-2: Object pronouns

They appear after the transitive suffix. When an object is a common noun, the third person singular -a appears after the transitive suffix as shown in above examples. Transitive forms containing the suffix -a are considered as citation forms.

As demonstrated in Section 3.3.2, a core argument can be defined as an argument that is coreferential with a bound pronoun. In (27), the subject, o yau, is coreferential with qu within the predicate, whereas the object, o Jone, is coreferential with -a.

Except for suppletive verbs, these object pronouns never appear without a transitive suffix. For instance, the transitive counterpart of *kata* 'bite' is *kaji* 'bite.' This transitive verb root *kati* 'bite' is directly followed by the object pronoun without the transitive suffix -Ci (28).

It can be generalized that these suppletive verbs are transitivized by alternating the root-final vowel with *i*. Other instances of suppletive verbs are *kana* 'eat' (29) and *homu* 'drink' (30).

It appears that the third person singular object pronoun -a is attached directly to a verb root when the consonant of -Ci is \emptyset . holia 'give' derived from holi is such a verb. I analyze it as follows. The transitive suffix $-\emptyset i$ and the object pronoun -a are fused as -a, which is then attached to the verb root. In (31), -a is considered as a portmanteau morpheme.

kila 'know' is another example. Its transitive form is $kil\bar{a}$, where the fused form -a is suffixed to the verb root, forming the long vowel \bar{a} (32).

This phonological change occurs only when the object pronoun is -a. When an object pronoun is the second person singular, -Oi is never fused (33).

6.3.1.3. Comparison with SF

A transitive verb in Vatulele Fijian is morphosyntactically distinct from its SF counterpart. This section describes the differences between the two.

First, in SF, the third person singular object bound pronoun -a is phonologically fused with the preceding transitive suffix, which is often analyzed as a single morpheme. Thus, the final syllable of the verb root is stressed. However, in Vatulele Fijian, this pronoun -a appears as a separate morpheme, with the stress being placed on the transitive suffix -Ci (34).

The second difference involves the placement of an object of a proper noun. In SF, proper nouns appear just after the transitive suffix, that is, inside the predicate (35).

However, in Vatulele Fijian, both proper and common nouns appear outside the predicate when they function as an object (36).

Table 6-3 summarizes the differences in verbal forms and object positions between Vatulele Fijian and SF. The post-head modifier *tale* of each example in the table shows the right edge of the predicate.

Table 6-3: Verbal forms and object positions in Vatulele Fijian and SF

	Vatulele Fijian	SF	
Common nouns	caqe-ji-a tale na volo caqe-ta tale na polo		
Common nouns	'kick the ball again'	'kick the ball again'	
Pronouns	caqe-ji kēmaru tale	caqe-ji keirau tale	
Pronouns	'kick us again'	'kick us again'	
Dana an maying	caqe-ji-a tale o Jone	caqe-ji Jone tale	
Proper nouns	'kick Jone again'	'kick Jone again'	

As shown in the table, Fijian languages use a differential object marking (DOM) system. This DOM system is typologically unusual. Typical DOM system provides nouns with higher animacy and/or more definite with some morphological marking. However, in Vatulele Fijian, pronouns that are definite by definition appear inside the predicate without the article. Therefore, the DOM system in Vatulele Fijian is inconsistent with typological generalization (for more details, see van Urk 2020).

6.3.2. Unsuffixed transitive

As demonstrated in (37), a transitive construction in Vatulele Fijian lacks both the transitive suffix and an object pronoun. The transitive suffix is therefore not required for the transitive construction. I refer to this construction as "unsuffixed transitive."

Unsufficed transitive verbs are morphologically same as intransitive verbs. Therefore, (38) is ambiguous as to whether *na ika* 'the fish' is a subject or an object. In many instances, however, it can be determined from the context.

(38) *Hā* kana na ika

ASP eat ART fish

'The fish ate' or 'He ate the fish'

The unsuffixed transitive construction differs from noun incorporation (see Chapter 8). First, the article must precede the object. Second, post-head modifiers such as *tale* 'again' appear between the verb and the object. Compare (39)a ("authentic" transitive), (39)b (unsuffixed transitive), and (39)c (noun incorporation).

(39)a. Hā laga-ji-a tale here na ASP sing-TR-3SG again ART song 'He sang the song again' b. *Hā* laga tale here na sing again ART ASP song 'He sang the song again' c. Hā laga here tale ASP sing song again 'He sang songs again'

The object of an unsuffixed transitive construction may be claimed to be an argument although it does not agree with a bound pronoun. The reason is that it may precede the verb and be modified by adverbs such as *ruarua* 'both' (40). These two points are characteristic of arguments (see also Section 3.3.2).

```
(40)
      a. Na
                here hā
                           laga
         ART
                song ASP
                           sing
         'The song, he sang'
      b. Hā
                laga
                     ruarua
                                na here
         ASP
                sing
                       both
                                ART song
         'He sang both songs'
```

In contrast, the object of noun incorporation is never fronted and modified by adverbs (41) (see Section 8.2.3).

Schütz (2014: 151) states that the unsuffixed transitive construction focuses on the activity rather than on the object noun. Okamoto (2016a) surveys what verbs in SF can be unsuffixed transitive verbs and concludes that only verbs whose object is a "theme." Theme is an entity that "is displaced as the result of an initiator's influence and moves from some resting point along a trajectory, often to another resting point" (Frawley 1992: 218).

Unlike SF, unsuffixed transitive verbs are not limited to verbs that take "theme" objects. As demonstrated in 6.4.1.2 below, prototypical transitive verbs ("direct effect on the patient" in Tsunoda's (1985) terminology) have the unsuffixed alternatives. For instance, *vāmate* 'kill,' which takes a "patient" object, is expressed by the unsuffixed construction (42).

(42) Hā vā-mate ai hila na yamu

ASP CAUS-die 3SG.NPST one ART mosquito

'He killed a mosquito'

In Vatulele Fijian, unsuffixed transitive verbs are often observed in casual conversation. For instance, *kana* 'eat,' *homu* 'drink,' and *kau* 'take' have the unsuffixed alternatives. In (43), *kau* 'take' does not have the transitive suffix but takes the object.

6.3.3. Causative

Valulele Fijian has the causative prefix $v\bar{a}$ -.³ This prefix is added to a transitive verb to derive a ditransitive verb (44).

It also derives a transitive verb from an adjective (45).

Note that adjectives must be transitivized by both $v\bar{a}$ - and the transitive suffix. They cannot be transitivized only by the transitive suffix. Compare (45) and (46), which is a transitive verb derived only by the suffix -ci.

(46) mataku-ci-a < mataku
afraid-TR-3SG afraid
'be afraid of' 'be afraid'

The SF counterpart to this prefix is vaka- and $v\bar{a}$ -. The latter appears only if the following morpheme begins with a velar consonant.

Although I call $v\bar{a}$ - "causative," this prefix is multifunctional. Dixon (1988: 181) refers to this prefix⁴ as "a most versatile prefix, occurring with roots from every word class with wide functional and semantic possibilities" and points out that "it usually, but not always, changes word class membership." For instance, it derives a noun into a "proprietive" adjective (see Section 10.2.2.2). In (47), the $v\bar{a}$ -derived adjective is the predicate head, whereas in (48) one modifies a noun.

- (47) Ai $v\bar{a}$ -waji na tamata 3SG.NPST PROP⁵-spouse ART man 'The man has a spouse'
- (48) Ai katakata na jī vā-sucu

 3SG.NPST hot ART tea CAUS-milk

 'The tea with milk is hot'

Another function of $v\bar{a}$ - is to derive adverbs. For example, $v\bar{a}levu$ 'very' is derived from levu 'big.' This chapter focuses solely on the causative function.

They require transitive suffixes to take objects. ⁶ In other words, (44) and (45) are transitivized by circumfix-like process—namely, the combination of the prefix $v\bar{a}$ - and the suffix -Ci/-(Caki)ni. When the root of a word is a transitive verb, the same suffix appears in its $v\bar{a}$ -derived form as in (44). (49) is another example. tagi 'cry' takes the transitive suffix -ci to derive tagica 'cry for.' The same suffix is added to the $v\bar{a}$ -derived form, resulting in $v\bar{a}tagicia$ 'make cry.'

(49) $v\bar{a}$ -tagi-ci-a < tagi-ci-a CAUS-cry-TR-3SG cry-TR-3SG 'cause to cry' 'cry for'

When a root is an adjective, which never takes any transitive suffixes, -ni is often attached to the $v\bar{a}$ -derived form (see (45) above). In SF, on the other hand, -taka is usually suffixed to adjectives. Compare (45) and (50).

-

⁴ The Boumā Fijian counterpart is *va'a*.

This thesis provides the prefix $v\bar{a}$ - with different glosses depending on its function.

Without the transitive suffix, a vā-derived verb functions as an S = O verb (Schütz 2014: 58).

(50) SF: vaka-mamaca-taka < mamaca
CAUS-dry-TR:3SG dry
'make dry' 'dry'

A ditransitive verb derived by $v\bar{a}$ - uses the secundative alignment. That is, a recipient-like argument (i.e., a causee) appears as an object, whereas a theme-like argument appears as a peripheral argument marked by the preposition (51). This point will be discussed in Chapter 7.

(51) vā-kani-ra na gone i na raisi

CAUS-eat:TR-3PL ART child OBL ART rive

'feed children rice'

It is essential to note that the combination of $v\bar{a}$ - and -Ci/-(Caki)ni is used to transitivize a "phrase." In (52), $v\bar{a}$ - and the transitive suffix -ni are added to the phrase $t\bar{u}$ cake 'stand up.'

(52) *Hā vā-tū-cake-ni-au*ASP CAUS-stand-UP-TR-1SG

'He made me stand up'

This combination also transitivizes noun incorporation. (53) is such an example, where the whole phrase *laga here* 'song-sing' is transitivized. This point is explored more in Chapter 8.

(53) Qu hā vā-laga-here-ni-a o taci-qu
1SG ASP CAUS-sing-song-TR-3SG PRP sibling-1SG
'I made my brother sing a song'

In the above examples, the transitive suffix does not appear after a verb root. It appears after the post-head modifier *cake* in (52) and after the incorporated noun in (53). (54) is an expected form of (52), where the transitive suffix attaches to the verb root $t\bar{u}$ 'stand.' Such a form is not actually observed.

(54) * vā-tū-ni-au cake

CAUS-stand-TR-1SG UP

Because phrases such as $t\bar{u}$ cake and laga here are highly conventionalized, they may function as one grammatical word and receive transitive suffixes. Additionally, it should be noted that $v\bar{a}$ -never attaches to pre-head modifiers such as $mat\bar{a}$ (55).

(55) a. Qi matā vā-hulu-ni-ko
1SG DES CAUS-dress-TR-2SG
'I want to dress you up'
b. * Qi vā-matā-hulu-ni-ko
1SG CAUS-DES-dress-TR-2SG

6.3.4. Passive

Passive is a morphosyntactic operation that "applies to an underlying transitive clause and forms a derived intransitive" (Dixon 2010: 206). In (56)a, the prefix *me*-derives an intransitive verb from the transitive verb *dolavia* 'open' (56)b. The original O *mataniwere* 'door' becomes an S.

(56)a. *A* me-dola na mataniwere 3sg PASS-open door ART 'The door was opened' b. *A* dola-vi-a na mataniwere 3s_G open-TR-3SG ART door 'He opened the door'

A derived passive verb of an S = O verb is similar to its bare verb root in that an S argument semantically corresponds to an O argument. Compare (56)a and (57). (56)a implies an agent who opens the door, whereas (57) dose not.

(57) A dola na mataniwere

3SG open ART door

'The door opened'

In addition to *me*-, there are some passive prefixes such as *lau*- and *ra*- (58). It is still unclear which prefix attaches which verb.

(58) a. *lau-kana* b. *ra-muhu*PASS-eat PASS-break

'be eaten' 'be broken'

These derived verbs follow a noun to modify it (59).

(59) na kwā lau-kana

ART thing PASS-eat

'food (lit. thing eaten)'

Verbs are also passivized by the suffix -Ci/-(Caki)ni, which I described as "transitive suffix" in Section 6.3.1.1. In (60), the suffix -i is attached to the root kila 'know' to derive a passivized verb.

(60) Ai kila-i levu

3SG.NPST know-PASS big

'It is known well'

Similar to prefixed passive verbs, a suffixed passive verb directly modifies a noun (61).

(61) na here kila-i levu

ART song know-PASS big

'a song known well'

From (59) and (61), it can be said that passive forms are adjectives because they directly modify nouns. A typical verb, on the other hand, modifies a noun through relativization (62).

(62) na kwā o kani-a

ART thing 2SG eat:TR-3SG

'thing you ate'

Although this study uses the term "passive," it might be inappropriate. In SF, Milner (1956: 96) and Schütz (2014: 215, 252) state that the agent-like argument cannot appear in the "passive" construction. One cannot say like (63) to mean that 'the house is made by the carpenter.'

Therefore, the term "anticausative" might be preferred to "passive." However, this study adopts the traditional terminology and uses the term "passive."

One may ask why -Ci/-(Caki)ni is used for two different syntactic operations—namely, transitivization and passivization. When -Ci/-(Caki)ni precedes an object bound pronoun, it functions as a transitivizer. When it does not accompany an object pronoun, it derives a passive verb. Kikusawa (2000) claims that the so-called transitive suffixes (i.e., -Ci/-(Caki)ni in Vatulele Fijian) never reflect the syntactic transitivity because they appear in both transitive and intransitive verbs. Her conclusion is that they possess the semantic feature (Kikusawa 2000: 41). She illustrates using examples from Wailevu Fijian (64). Both (64)a and (64)b have the suffix -vi, glossed -CI. In both cases, -vi requires an argument with the semantic feature of "location." (64)a is a transitive clause with the object bound pronoun -a fused with -vi. It is the object that carries the semantic feature of "location." In contrast, in (64)b, the subject carries the semantic feature of "location." When -vi is not suffixed to the verb as in (64)c, no "locational" argument appears.

```
(64)
       a. E
              laxo-va
                          na
                                 suxa
                                         na
                                                agone
         3SG go-CI:3SG ART
                                 sugar ART
                                                child
         'The child went for (to get) sugar'
       b. E
                 laxo-vi
                          na
                                 suxa
         3SG
                go-CI
                          ART
                                 sugar
         'The sugar was gone for'
       c. E
              laxo
                     na
                            agone
         3SG go
                     ART
                             child
         'The child went'
                                         (Kikusawa 2000: 41-2, my transcription and glosses)
```

I use two abbreviations here for -Ci/-(Caki)ni—TR (transitive) and PASS (passive)—because I focus on their functions in a clause.

6.4. Intransitive/transitive alternation pattern

This section⁷ analyzes the intransitive/transitive verb alternation within the framework of Nichols et al. (2004). They demonstrate nine alternation patterns illustrated in (65)-(73) with examples from various languages. In each example, "a" is plain (i.e., semantic non-causative) and "b" is induced (i.e., semantic causative).

```
(65) AUGMENTED (Ingush, Nichols et al. 2004: 158)
```

a. wa.d.ozh 'fall (down)'

b. wa.d.uozha-d.u 'drop, let fall'

(66) REDUCED (Russian, Nichols et al. 2004: 158)

a. serdit'-sja'be/get angry'

b. serdit' 'anger, make angry'

(67) DOUBLE DERIVATION (Siberian Yupik, Nichols et al. 2004: 159)

a. aghagh-nga- 'hang'

b. aghagh-te- 'hang (tr.)'

(68) AUXILIARY CHANGE (Ingush, Nichols et al. 2004: 160)

a. ieghaz-d.uoda 'be/get angry'

b. ieghaz-d.ug 'anger, make angry'

(69) ABLAUT (Lai, Nichols et al. 2004: 160)

a. ?a-thin phaan 'be afraid'

b. ?a-thin pha?n 'frighten'

(70) SUPPLETION (English, Nichols et al. 2004: 160)

a. learn

b. teach

(71) AMBITRANSITIVE (Hausa, Nichols et al. 2004: 159)

a. tafasa 'boil' (intr.)

b. tafasa 'boil' (tr.)

⁷ This section is a revised and expanded version of Okamoto's (2018b) work.

(72) CONJUGATION CLASS CHANGE (Western Armenian, Nichols et al. 2004: 159)

a. var.i- 'burn' (intr.)

b. var.e- 'burn' (tr.)

(73) ADJECTIVE (English, Nichols et al. 2004: 159)

a. be afraid

b. frighten

I surveyed 18 verb pairs listed in Table 6-4.

Table 6-4: Verb pairs surveyed

No.	Plain	Induced
1.	laugh	make laugh, amuse, strike as funny
2.	die	kill
3.	sit	seat, have sit, make sit
4.	eat	feed, give food
5.	learn, know	teach
6.	see	show
7.	be/become angry	anger, make angry
8.	fear, be afraid	frighten, scarce
9.	hide, go into hiding	hide, conceal, put into hiding
10.	(come to) boil	(bring to) boil
11.	burn, catch fire	burn, set fire
12.	break	break
13.	open	open
14.	dry	make dry
15.	be/become straight	straighten, make straight
16.	hang	hang up
17.	turn over	turn over
18.	fall	drop, let fall

(Nichols et al. 2004: 156)

The result is shown in Table 6-5. [] indicates the number of verb pairs. I used Nichols et al.'s (2004: 187-188) sentences to gather examples.

Table 6-5: Alternation patterns in Vatulele Fijian

Туре	Subtype	Example
	By transitive suffix [3]	'break / break'
		'open / open'
		'turn over / turn over'
	By causative prefix [4]	'die / kill'
AUGMENTED [0]		'catch fire / set fire'
AUGMENTED [9]		'hang / hang up'
		'fall / drop'
	By causative prefix and transitive suffix [2]	'eat / feed'
		'learn / teach'
		'be afraid / frighten'
REDUCED		_
NEUTRAL		_
	d1. suppletion [5]	'laugh / make laugh'
		'see / show'
		'be angry / make angry'
INDETERMINATE [6]		'hide / conceal'
INDETERMINATE [6]		'be straight / straighten'
	d2. Ambitransitive ⁸ [1]	'sit / seat'
	d3. CONJUGATION CLASS	_
	CHANGE	
ADJECTIVE [3]		'come to boil / bring to boil'
		'dry / make dry'

As can be seen in Table 6-5, there is no REDUCED alternation pattern. In brief, it can be said that Vatulele Fijian is a "transitivizing language," preferring a pattern with a basic intransitive and a derived transitive verb. Each category is fully explained in the sections that follow.

⁸ This patten might be excluded because, as discussed below, there is a possibility the consultant misunderstood the English sentence.

6.4.1. Augmented

There are three AUGMENTED patterns in Vatulele Fijian: (i) by the transitive suffix (Section 6.4.1.1), (ii) by the causative prefix (Section 6.4.1.2), and (iii) by both of them (Section 6.4.1.3).

6.4.1.1. Augmented by transitive suffix

The AUGMENTED alternation by transitive suffix is observed with 'break / break' (74), 'open / open' (75), and 'turn over / turn over' (76).

- (74)a. *Hā* muhu na veni ASP break ART pen 'The pencil broke' muhu-ki-a b. Hā Jone na veni 0 ASP break-TR-3SG ART pen PRP Jone 'Jone broke the pencil'
- (75)a. *Hā* dola na mataniwereleka window open ART ASP 'The window opened' b. *На* dola-vi-a mataniwereleka Jone na 0 ASP open-TR-3SG ART window PRP Jone 'Jone opened the window'
- (76)a. *Hā* vuli cake na waqa ASP UP turn ART canoe 'The boat turned over' b. *Нā* vuli-ci-a na waqa Jone ASP turn-TR-3SG Jone ART canoe PRP 'Jone turned the boat over'

As discussed in Section 6.3.1, the canonical device for transitivizing verbs is the suffix. All the three pairs are S = O verbs.

6.4.1.2. Augmented by causative prefix

The AUGMENTED alternation by causative prefix is observed with 'die / kill' (77), 'catch fire / set fire' (78), 'hang / hang up' (79), and 'fall / drop' (80).

- (77) a. $H\bar{a}$ mate o Jone

 ASP die PRP Jone

 'Jone died'
 - b. $H\bar{a}$ $v\bar{a}$ -mate o Mere o Jone

 ASP CAUS-die PRP Mere PRP Jone

 'Jone killed Mere'
- (78) a. $H\bar{a}$ mudre le-e were o Jone

 ASP burn CLF.N-3SG house PRP Jone

 'Jone's house burned up'
 - b. $H\bar{a}$ $v\bar{a}$ -mudre le-e were o Jone

 ASP CAUS-burn CLF.N-3SG house PRP Jone

 'Jone burned his house'
- (79) a. *Hā* lili tali na ASP hang ART towel 'The towel hung (from the branch)' b. *Нā* vā-lili tali na 0 Jone ASP **CAUS-hang** ART towel PRP Jone

'Jone hung the towel (from the branch)'

(80) a. $H\bar{a}$ lutu na vatu

ASP fall ART stone

'The stone fall'

b. $H\bar{a}$ $v\bar{a}$ -lutu na vatu o Jone ASP CAUS-fall ART stone PRP Jone 'Jone dropped the stone'

This pattern is referred to as "unsuffixed transitive" in Section 6.3.2. Unsuffixed transitive verbs are unique in that they do not accompany both the transitive suffix and the object pronoun. Semantically speaking, these unsuffixed transitive verbs express that an agent does something to a patient, resulting in a change of state. (77)b is a prototypical example. The agent *o Jone* 'Jone' commits a murder and alters the state of the patient *o Mere* 'Mere.' To summarize, if a transitive verb has a high semantic transitivity, it appears without the transitive suffix.

6.4.1.3. Augmented by causative prefix and transitive suffix

The AUGMENTED alternation by both the causative prefix and the transitive suffix is observed with 'eat / feed' (81), 'learn / teach' (82), and 'be afraid / frighten' (83).

- (81) a. $H\bar{a}$ kana na ika o Jone

 ASP eat ART fish PRP Jone

 'Jone ate fish'
 - b. Hā vā-kani-a ika Mere Jone νō na ASP CAUS-eat:TR-3SG ART fish OBL:PRP Mere PRP Jone 'Jone fed Mere fish'
- (82) a. $H\bar{a}$ vuli-ci-a na voha vāvālagi o Jone

 ASP learn-TR-3SG ART speech English PRP Jone

 'Jone learned English'
 - b. *Hā* vā-vuli-ci-a na voha vāvālagi vō Mere ASP CAUS-learn-TR-3SG speech English Mere ART OBL:PRP Jone 0 Jone PRP 'Jone is teaching Mere English'
- (83) a. Ai mataku o Jone

 3SG.NPST afraid PRP Jone

 'Jone is afraid'
 - b. $H\bar{a}$ $v\bar{a}$ -mataku~taku-ci-a o Mere o Jone

 ASP CAUS-afraid~RDP-TR-3SG PRP Mere PRP Jone

 'Jone frightened Mere'

(81)b, (82)b, and (83)b are ditransitive, which means that a predicate requires three participants. The prefix $v\bar{a}$ - here derives ditransitive verbs from transitive verbs (see Section 6.3.3). Although *mataku* is translated as 'afraid' in (83), it is a verb because it has the transitive form *mataku-cia* 'be afraid of' (see (46) in Section 6.3.3). As mentioned in Section 6.1, only verbs can take an object.

6.4.2. Indeterminate

INDETERMINATE is a type that is not derived from another. Section 6.4.2.1 deals with SUPPLETION and Section 6.4.2.2 with AMBITRANSITIVE.

6.4.2.1. Suppletion

SUPPLETION is observed with 'laugh / make laugh' (84), 'see / show' (85), 'be angry / make angry' (86), 'hide / conceal' (87) and 'be straight / straighten' (88). As shown in the following examples, all induced (or transitive) verbs are derived by the prefix $v\bar{a}$ - or the suffix -Ci (or both of them), as demonstrated in Section 6.4.1.

- (84) a. $H\bar{a}$ mali o Jone

 ASP laugh PRP Jone

 'Jone laughed'
 - b. $H\bar{a}$ $v\bar{a}$ -laha~laha o Mere o Jone

 ASP CAUS-RDP~please PRP Mere PRP Jone

 'Jone made Mere laugh'
- (85)a. Hā dani-a Mere Jone le-e motokā 0 CLF.N-3SG car ASP see:TR-3SG PRP Mere PRP Jone 'Jone saw Mere's car' b. Hā vā-taki-a $v\bar{o}$ Mere le-e motokā ASP CAUS-show:TR-3SG OBL:PRP Mere CLF.N-3SG car

o Jone

PRP Jone

^{&#}x27;Jone showed Mere his car'

(86)a. Ai borihi $n\bar{o}$ Jone 0 3SG.NPST PRP Jone angry CNT 'Jone is angry' b. *Н* \bar{a} vā-rarawa-ji-a Mere Jone 0 0 CAUS-angry-TR-3SG ASP PRP Mere PRP Jone 'Jone made Mere angry'

(87)a. Hā Jone cuva hide PRP ASP Jone 'Jone hid' b. *Hā* yaba-ni-a Mere o Jone $n\bar{o}$ hide-TR-3SG ASP CNT PRP Mere PRP Jone 'Jone hid Mere'

(88)a. *Hā* dodonu na waya ASP straight ART wire 'The wire was straight' b. *На* doki-a Jone na waya srtaighten:TR-3SG ASP wire PRP Jone ART 'Jone straightened the wire'

(84)b is a $v\bar{a}$ -derived verb without the transitive suffix, that is, unsuffixed transitive verb. (85)b and (86)b are augmented by both $v\bar{a}$ - and the transitive suffix, whereas (87)b and (88)b are typical transitive verbs.

6.4.2.2. Ambitransitive

AMBITRANSITIVE is observed with only 'sit / seat' (89). (89)b is not a transitive clause because the causee *Mere* appears as a peripheral argument rather than as an object.

This pattern might be excluded from the data because there is a possibility that the consultant misunderstood the English sentence used through elicitation. That is, (89)b might be translated from 'Jone sat on Mere' not from 'Jone seated Mere.' This pair needs to be reinvestigated.

6.4.3. Adjective

ADJECITIVE is observed with 'come to boil / bring to boil' (90) and 'dry / make dry' (91).

Both (90)b and (91)b are derived by the causative prefix and the transitive suffix. Therefore, they can be classified as a subtype of AUGMENTED.

6.5. Summary

This chapter discussed the transitivity of Vatulele Fijian. Section 6.1 claimed that only a verb can take two core arguments. In Section 6.2, two types of verbs, S = A and S = O, were described. As discussed in Section 6.3, the language has both transitivizing and detransitivizing derivations, all of which are affixation. In Vatulele Fijian, as in other Fijian languages, intransitive verbs are morphologically unmarked, and transitive verbs are typically derived by the transitive suffix. However, some verbal forms differ from SF.

Section 6.4 revealed that Vatulele Fijian uses three AUGMENTED devices: (i) by transitive suffix, (ii) by causative prefix, and (iii) by both of them. When a verb is prototypical transitive, that is, when the subject does something to the object and causes a change of state, it does not accompany the transitive suffix. These verbs include *vāmate* "kill" and *vā-mudre* "burn."

Vatulele Fijian uses transitive verbs to express semantic properties that would otherwise be expressed by adjectives. In Vatulele Fijian, "feeling" is expressed using the transitive construction. In (92), the subject is an "experiencer" and the object is a "stimulus."

```
(92) a. Hā mārau-takini-a na itukuni
ASP happy-TR-3SG ART story
'He rejoiced at the story'
b. Ai mataku-ci-a na kolī
3SG afraid-TR-3SG ART dog
'He is afraid of dogs'
```

The transitive verb, however, does not express possession. Rather, the existential construction expresses it. In (93), the possessed item is the subject, whereas the possessor appears within a noun phrase.

```
(93) Ai tolu le-qu kwāhewa

3SG.NPST three CLF.N-1SG child

'He has three children (lit. His children are three)'
```

The possessive construction is the main theme of Chapter 10.

7. Ditransitive construction

The previous chapter described transitivity in Vatulele Fijian. This chapter focuses on another aspect of transitivity. This chapter will look at ditransitive constructions in Vatulele Fijian. As mentioned below, the ditransitive construction requires three arguments: an agent argument (A), a recipient-like argument (R), and a theme argument (T) (Malchukov et al. 2010: 1). (1) is an example of the verb *holia* 'give,' where the T argument is *lē ivola* 'his book,' the R argument is *na tamata* 'man,' and the A argument is *o Mere* 'Mere.'

(1) A holi-a le-e ivola i na tamata o Mere 3SG give-TR:3SG CLF.N-3SG book OBL ART man PRP Mary 'Mere gave his book to the man'

The chapter is organized as follows. First, Section 7.1 summarizes the previous research on ditransitive constructions. Section 7.2 describes the ditransitive construction in Vatulele Fijian. Section 7.3 is a conclusion of the chapter.

7.1. Previous studies

This section summarizes previous research on ditransitive verbs before moving on to the main discussion. Section 7.1.1 provides a synopsis of ditransitive constructions. Section 7.1.2 demonstrates how ditransitive constructions are described in SF.

7.1.1. Malchukov et al. (2010)

According to Malchukov et al. (2010: 1), the ditransitive construction is "a construction consisting of a (ditransitive) verb, an agent argument (A), a recipient-like argument (R), and a theme argument (T)." Typical ditransitive verbs are *give*, *lend*, *hand*, *sell*, and *return*, where "an agent participant causes an object to pass into the possession of an animate receiver (= recipient)" (Malchukov et al. 2010: 2, see also Haspelmath 2011: 558).

Malchukov et al. (2010) demonstrates three basic alignment types of ditransitive construction in terms of the encoding of the T and the R when compared to the monotransitive patient argument (P¹) (Figure 7-1).

-

¹ I use the abbreviation O for patient arguments throughout this thesis.

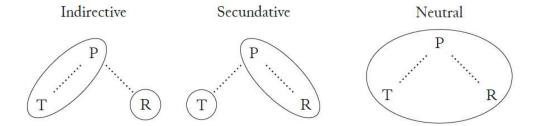


Figure 7-1: Three major alignment (Malchukov et al. 2010: 5)

The R and P are marked differently in the indirective alignment. However, in the secundative alignment, the T is treated differently than the P. Finally, all arguments in the neutral alignment are encoded similarly. They demonstrate examples of each alignment type (2)-(4) (their glosses and translations).

(2) Indirective (German)

a. (monotransitive)

Ich aß den Apfel

I.NOM ate the.ACC apple

'I ate the apple'

b. (ditransitive)

Ich gab dem Kind den Apfel

I.NOM gave the.DAT child the.ACC apple

'I gave the child the apple'

(Malchukov et al. 2010: 3)

(3) Secundative (West Greenlandic, Fortescue 1984: 193, 88)

a. (monotransitive)

Piita-p takurnarta-q tuqup-paa?

Peter-ERG.SG stranger-ABS.SG kill-INT.3SG>3SG

'Did Peter kill the stranger?'

b. (ditransitive)

(Uuma) Niisi aningaasa-nik tuni-vaa

(that.ERG) Nisi money-INSTR.PL give-IND.3SG>3SG

'He gave Nisi money' (Malchukov et al. 2010: 4)

(4) Neutral (Dagaare, Bodomo 1997: 41-2)

a. (monotransitive)

O na ngm ma la

he FUT beat me FACTUAL

'He will beat me'

b. (ditransitive)

O ko ma la a gane he give.PRF me FACTUAL DEF book

'He gave me the book'

(Malchukov et al. 2010: 4)

Malchukov et al. (2010: 55) also provide a semantic map of ditransitive verbs (Figure 7-2), with the typical ditransitive verb GIVE in the middle. The map depicts which semantic type is expressed by ditransitive construction in three languages: Jaminjung, Finnish, and West Greenlandic.

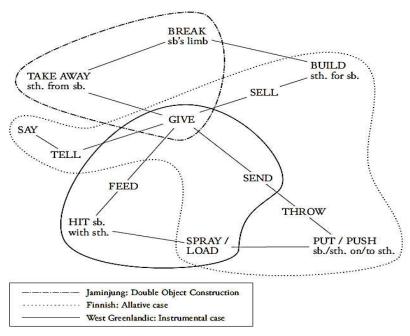


Figure 7-2: Semantic map of ditransitive construction (Malchukov et al. 2010: 55)

It should be noted that Malchukov et al. (2010: 2) do not consider benefactive constructions to be ditransitive construction because an intransitive verb can have a beneficiary argument, as in

'She sang for me.' Furthermore, they restrict themselves to underived ditransitive verbs and exclude derived verbs such as causative verbs (Malchukov et al. 2010: 2). However, in the following discussion, both the benefactive and causative constructions are described because they are expressed in the same way as the ditransitive construction in Vatulele Fijian.

7.1.2. Ditransitive verbs in SF

Okamoto (2016b, 2017c) describes ditransitive verbs in SF. Typical ditransitive verbs such as solia 'give' show the indirective alignment. In (5), na ivola 'book' is the T argument, which agrees with the third person singular object pronoun -a within the predicate. The R argument, on the other hand, is a peripheral argument denoted by the preposition ki.

However, the indirective alignment is not used by all ditransitive verbs. The secundative alignment can be seen in two verb types.

The first one is what are known as THROW verbs. In (6), the R argument *na gone* 'child' is the same as the P in that it agrees with the third person singular object pronoun of *virika* 'throw.' On the other hand, the T argument *na polo* 'ball' appears as a prepositional phrase.

THROW verbs are not typical ditransitive verbs because the R is not a recipient but a goal (Okamoto 2016b: 33). That is, (6) does not imply that the child receives the ball. They demonstrate the indirective alignment by using the long transitive suffix. (7) is such an example, in which the T argument *na polo* is the object of the predicate.

Second, verbs derived by the causative prefix $VAKA^{-2}$ exhibit the secundative alignment. As discussed in Section 6.3.3, this prefix derives a ditransitive verb from a transitive verb. (8) is an example of $v\bar{a}kania$ 'feed.' This verb uses the secundative alignment, so the R argument koya 'him' is the object, and the T argument na dalo 'taro' is marked by the preposition e.

It's worth noting that only *VAKA*-derived verbs that express "telling" use both the indirective and the secundative alignment. In (9)a, the object is the R argument *e dua na lesoni* 'a lesson,' whereas the object in (9)b is the R argument *na gonelalai* 'children.'

7.2. Ditransitive verbs in Vatulele Fijian

In Vatulele Fijian, intransitive verbs are unmarked, whereas transitive verbs are morphologically marked (see Section 6.3). Because ditransitive verbs are transitive by definition, they are derived through morphological processes.

Vatulele Fijian has no "double object" construction. In other words, because Vatulele Fijian takes only one object per clause, either the T or the R should be a peripheral argument marked by the preposition i. (10) shows the indirective alignment, with the R argument being $k\bar{e}mamu$ 'us' and the T argument being na walewale ni qito $r\bar{a}kavi$ 'how to play rugby.' The resumptive marker $k\bar{e}$ appears in the predicate when the oblique T argument is fronted (see Section 3.3.3).

This prefix has two allomorphs: vaka- and $v\bar{a}$ -. The latter appears only if the following morpheme is velar. VAKA- is used as a representative form. The counterpart in Vatulele Fijian is $v\bar{a}$ - (see Section 6.3.3).

(10) Na walewale ni qito rākavi a vā-vuli-ci kēmamu kē

ART way of play rugby 3SG CAUS-learn-TR 1PL.EXCL RES

'How to play rugby, he taught us'

Section 7.2.1 focuses on the indirective alignment and Section 7.2.2 on the secundative alignment. Section 7.2.3 discusses with verbs with both alignments. In general, the description of SF ditransitive construction shown in Section 7.1.2 also applies to Vatulele Fijian one.

7.2.1. Verbs using indirective alignment

The indirective alignment is most commonly used in Vatulele Fijian ditransitive construction. For instance, typical ditransitive verbs, such as *holia* 'give' use the indirective alignment. In (11) (= (1)), the T argument $l\bar{e}$ *ivola* 'his book' agrees with the object bound pronoun -a within the predicate. The R argument *na tamata* 'man,' on the other hand, is marked by the oblique marker i. Note that the order of the T and the R seems to be free.

- (11)Aholi-a ivola i le-e Mere na tamata 3sg give-TR:3SG CLF.N-3SG book OBL PRP Mary ART man 'Mere gave her book to the man'
- (12) is another example of indirective alignment.³ The T argument is *na voha vāViti* 'Fijian language,' which agrees with the object bound pronoun -a, whereas the R argument *kwāhewa* 'child' concords with the oblique marker *vuara*.
- (12) Qi vā-vuli-ci-a na voha vā-Viti vuara na kwāhewa
 1SG CAUS-learn-TR-3SG ART language ADJVZ-Fiji OBL:3PL ART child
 'I taught Fijian to children'

SAY verbs also use the indirective alignment. In (13), the R argument ko 'you' is peripheral.

-

³ As discussed in Section 7.2.3, *vāvulica* 'teach' uses not only the indirective but also the secundative alignment.

(13) Qu kwe-a vei-ko
1SG say-TR:3SG OBL-2SG
'I said it to you'

The benefactive construction is also expressed through the indirective alignment. In (14), the beneficiary *au* 'me' is marked by the preposition. It seems that Vatulele Fijian appears to lack a device for promoting a beneficiary to a core argument.

(14) A tara-a na were $v\bar{e}$ au

3SG make:TR-3SG ART house OBL 1SG

'He built a house for me'

In short, typical ditransitive verbs use the indirective alignment in Vatulele Fijian.

7.2.2. Verbs using secundative alignment

There are two types of verbs that use the secundative alignment: THROW verbs (Section 7.2.2.1) and $v\bar{a}$ -derived verbs (Section 7.2.2.2).

7.2.2.1. THROW verbs

Both alignment types are possible for THROW verbs, as they are in SF (see Section 6.3.1.1). When they take the short transitive suffix, they use the secundative alignment. In (15), what agrees with the object bound pronoun -a is the R argument $l\bar{e}$ were 'his house.' The T argument na volo 'the ball' is indicated by the preposition i.

(15) A ciri-vi-a le-e were i na volo

3SG throw-TR-3SG CLF.N-3SG house OBL ART ball

'He threw the ball to his house'

When they take the long transitive suffix, they have an R argument as its object. That is, the alignment is indirective. In (16), the T argument *na volo* is the object, whereas the R argument is peripheral.

(16) A ciri-takini-a na volo i le-e were

3SG throw-TR-3SG ART ball OBL CLF.N-3SG house

'He threw a ball to his house'

As shown in (15) and (16), the preposition i indicates a peripheral argument regardless of its semantic role (see Section 3.3.3). *na volo* 'the ball' in (15) is a T argument, whereas $l\bar{e}$ were 'his house' in (16) is an R argument, both of which are marked by the same preposition i. THROW verbs are not typical ditransitive verbs because (i) they do not imply that the R receives the T and (ii) the R can be inanimate. This implies that the R argument of THROW verbs is a goal rather than a recipient.

vanakia 'shoot' is another THROW verb. (17) depicts a secundative alignment in which the R argument is the object and the instrument dakai 'gun' is a peripheral argument.

(17) Qu vana-ki-a na kolī i na dakai

1SG shoot-TR-3SG ART dog OBL ART gun

'I shot a dog with a gun'

HIT verbs also use the secundative alignment. In (18), the T argument, or the instrument, *kai* 'stick' is marked by the preposition.

(18) Qu rubi-ci-ko i na kai

1SG hit-TR-2SG OBL ART stick

'I hit you with a stick'

7.2.2.2. vā-derived verbs

 $v\bar{a}$ -derived verbs use the secundative alignment in the same way as SF does. In (19), the R argument $na\ vusi$ 'cat' appears as the object, whereas the T argument $na\ ika$ 'fish' is the peripheral argument.

(19)Оu vā-kani-a ika na vusi i na 1s_G CAUS-eat:TR-3SG ART cat OBL ART fish 'I fed a cat with fish'

 $v\bar{a}kania$ 'feed' in (19) can be analyzed as causativization of *kania* 'eat.' That is to say, (19) is formed by adding another agent argument (i.e., a causer) to the (mono)transitive construction as in (20) (see Section 6.3.3).

As mentioned previously, because any clauses never allow more than one object, the original object is demoted to a peripheral argument and the original subject (i.e., the causee) remains an object in (19).

To summarize, secundative alignment is observed in Vatulele Fijian with THROW verbs, HIT verbs, and $v\bar{a}$ -derived verbs.

7.2.3. Verbs using both alignment types

Both the indirective and secundative alignments are used for utterance verbs. Other ditransitive verbs do not have this feature. On the one hand, (21)a is an indirective alignment with the T argument $na\ qito\ r\bar{a}kavi$ 'playing rugby' as the object. On the other hand, (21)b is an example of secundative alignment, with the R argument $o\ Mere$ 'Mere' as the object.

Utterance verbs often take a complement clause as a T argument (see Section 3.4 for complement clauses). In (22), the complement clause $me \ mamu \ l\bar{a} \ v\bar{a}totolo$ 'that we go soon' is the object of the verb $v\bar{a}r\bar{o}jia$ 'command.'

(22) Ara vā-rō-ji-a vē kēmamu me mamu lā vātotolo 3PL CAUS-order-TR-3SG OBL 1PL.EXCL SUB.IRR 1PL.EXCL go soon 'They commanded us to go soon (lit. They commanded to us that we go soon)'

As described in Section 7.2.1 above, THROW verbs also use the two alignments (23) (=(15) and (16)).

(23)ciri-vi-a i a. *A* le-e were na volo throw-TR-3SG 3sg CLF.N-3SG OBL ball house ART 'He threw a ball to his house' b. *A* ciri-takini-a volo le-e were 3SG throw-TR-3SG ART ball OBL CLF.N-3SG house 'He threw a ball to his house'

Utterance verbs differ from THROW verbs in that they have both alignments without any morphological changes to the verb. In (21), the same form $v\bar{a}vulicia$ 'teach' is used for both the indirective and the secundative alignment. In (23), however, the verb root ciri 'throw' takes a different transitive suffix in each alignment type.

It should be noted that indirective/secundative alternation does not occur in all utterance verbs. As mentioned in Section 7.2.1, kwea 'say' never takes the R argument as its object. It uses only the indirective alignment (24) (= (13)).

(24) Qu kwe-a veiko

1SG say-TR:3SG OBL:2SG

'I said it to you'

It can be concluded that an utterance verb can use both alignment types only if it is derived by the prefix $v\bar{a}$. If an utterance verb is not a $v\bar{a}$ -derived one, it uses only the indirective alignment as in (24). If a $v\bar{a}$ -derived verb has no meaning of utterance, the secundative is solely used as in (25) (= (19)).

(25)Qи vā-kani-a ika na vusi i na 1s_G CAUS-eat:TR-3SG fish ART cat OBL ART 'I fed a cat with fish'

In other words, $v\bar{a}$ -derived utterance verbs share characteristics with both (underived) utterance verbs and $v\bar{a}$ -derived verbs.

7.3. Summary

A semantic map of ditransitive construction in Vatulele Fijian is shown in Figure 7-3. It demonstrates which semantic types use the indirective, the secundative, or both alignments.

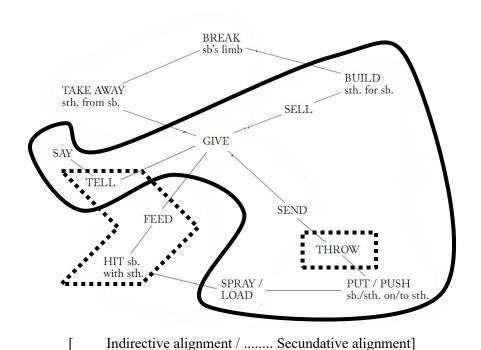


Figure 7-3: Semantic map of ditransitive construction in Vatulele Fijian (Based on Malchukov et al. (2010: 55))

As shown in Figure 7-3, the typical ditransitive GIVE is expressed by the indirective alignment. However, this does not apply to every Fijian language. Geraghty (1983: 10-1) points out that *vaga-n* 'give' in Western Fijian takes the R argument as its object. The indirective alignment is also used for PUT / PUSH and SPRAY / LOAD verbs, which are placed at the bottom of the semantic map.

THROW uses both the indirective and secundative alignments by taking different transitive suffixes. It is located on the "allative path" in the map above, which goes from the center to PUT / PUSH (Malchukov et al. 2010: 54). However, it is isolated because only THROW on this path uses the secundative alignment. Therefore, it might be positioned on the "instrumental path," which extends to HIT (Malchukov et al. 2010: 54). More specifically, in Vatulele Fijian, THROW could be placed between FEED and GIVE. In other words, the T argument of THROW is "instrument" rather than "theme." The semantic map given by Malchukov et al. (2010: 55) may need to be reconsidered.

TELL can be expressed using both the indirective and secundative alignments. This might hold for other languages. Actually, Japanese *oshieru* 'teach' can take both the T and R arguments as the object. Typological studies are required to clarify this.

8. Noun incorporation

This chapter¹ deals with noun incorporation (hereafter NI) in Vatulele Fijian. (1) is an example of NI, where the verb *laga* 'sing' and the object *here* 'song' are juxtaposed. In the following examples, I use a hyphen "-" for English translations as in *song-sing* in (1).

In NI, the verb laga lacks the transitive suffix and the common article na does not precede the noun phrase (hereafter NP²). This differs from a transitive construction like (2).

It has been debated whether a construction like (1) is NI. One of reasons against NI in Oceanic languages, including Fijians, is that it consists of more than one phonological word. However, I refer to this construction as NI because, as this chapter shows, it constitutes one single grammatical word.

This chapter is organized as follows. First of all, Section 8.1 summarizes previous research on NI. After that, Section 8.2 describes NI in Vatulele Fijian phonologically (Section 8.2.1), morphologically (Section 8.2.2), syntactically (Section 8.2.3), and semantically (Section 8.2.4). Section 8.3 is a summary.

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comments.

This chapter is partially based on my presentation "Noun incorporation in Vatulele Fijian" (in Japanese) made at "The Third Convention of Association of Global Studies (AGS-TUFS)" held online on February 11, 2023. I would like to thank those who provided me with many helpful and constructive

² In Section 5.1, I claim that I avoid using "noun phrase." However, I use this term because an incorporated object of NI must be a noun (or noun phrase). For the same reason, the term "NP" will be used in Chapters 9 and 10.

8.1. Previous studies

To begin, Mithun's (1984) cross-linguistic study on NI is discussed. Mithun (1984: 847) defines NI as construction where "a N[oun] stem is compounded with a V[erb] stem to yield a larger, derived V stem." She categorizes NI constructions cross-linguistically into four types as shown in (3) and suggests that NI develops diachronically from Type I to IV.

- (3) Four types of NI (Mithun 1984)
 - a. Type I: Lexical compounding

A verb stem and a noun stem are combined into form an intransitive predicate denoting a unitary concept (Mithun 1984: 856)

- b. Type II: The manipulation of case
 Instead of simply reducing the valence of the V by one, NI permits another argument of the clause to occupy the case role vacated by the IN (Mithun 1984: 859)
- c. Type III: The manipulation of discourse
 NI is used to background known or incidental information within portions of discourse
 (Mithun 1984: 859)
- d. Type IV: Classificatory noun incorporation
 The compound stem is accompanied by a more specific external NP which identifies the argument implied by the incorporated noun. (Mithun 1984: 863)

Among them, NI in Oceanic languages is classified into Type I and called "composition by juxtaposition." (4) is an example from Tongan, where (4)a is a transitive clause and (4)b is its NI counterpart. In (4)b, the verb *inu* 'drink' and the noun *kava* 'kava' constitute NI.

(4) Sione a. Na'e inu 'a kavá 'e PST drink ABS ART kava ERG John 'John drank the kava' b. Na'e Sione kava inu PST drink kava ABS John 'John kava-drank' (Churchward 1953: 76)

Dixon (1988) characterizes NI in Boumā Fijian as in (5).

- (5) NI in Boumā Fijian (Dixon 1988: 50)
 - a. An object-incorporated verb is always intransitive
 - b. A nominal object replaces the transitive suffix
 - c. Underlying A NP becomes derived S
- (6) is an example of NI, where the verb 'ana 'eat' and dalo 'taro' form an intransitive predicate.
- (6) BF: E 'ana dalo

 3SG eat taro

 'He is taro-eating' (Dixon 1988: 49)

It is worth noting that opinions on NI in Oceanic languages differ. Milner (1956: 25) does not use the term "noun incorporation" to refer to a construction like (6) in SF, although he agrees that it is an intransitive predicate. Geraghty (2002: 841) calls this construction in Nadrogā Fijian "semitransitive."

One distinguishing feature of Type I NI is that a verb and a noun remain separate words phonologically (Mithun 1984: 849). For this reason, Gerdts (1998) uses the term "noun stripping" rather than "noun incorporation" and cites the same example from Tongan as (4).

For another reason, Massam (2001) disagrees with the idea that Oceanic languages have NI. She shows an NI-like construction from Niuean, stating that an example like (7) is not "authentic" NI because it involves a noun with a modifier. She coined the term "pseudo noun incorporation" to describe such a phenomenon.

Although there are some discussions about NI in Oceanic languages mentioned above, I will use the term "NI" throughout the thesis.

8.2. Noun incorporation in Vatulele Fijian

NI in Vatulele Fijian, like in other languages, should be analyzed as a derived intransitive predicate. That is, NI is detransitivized from a transitive clause. In the following sections, I describe NI from phonological, morphological, syntactic, and semantic perspectives.

8.2.1. Phonological point of view

As previously stated, NI in Oceanic languages consists of phonologically independent two (or more) words. That is, each word has its own stress, which holds for NI in Vatulele Fijian (8). That is why some scholars never consider this construction to be NI.

(8) A kana raisi o Jone

3SG eat rice PRP Jone

'Jone rice-ate'

The phoneme /i/ tends to be fused with the preceding word, which results in a mismatch between grammar and phonology (see Sections 4.3 and 9.2). In (9), the nominalizer i forms diphthong /ai/ with the article na.

(9) na+i-vola /na ißola/ ['nai̯ 'ßola]

ART+NMLZ-write

'the book'

In (10), the preposition i is phonologically fused with the preceding verb tadra 'sit.'

(10) tadra+i kei /taʰra i kei/ [ta.ˈʰrai̯ ˈkei̯]~[taˈʰrɛː ˈkei̯] sit+OBL here

'sit here'

However, even when the incorporated object ends with /i/ like (11), this phenomenon never happens in NI.

To summarize, NI in Vatulele Fijian never forms a single phonological word.

8.2.2. Morphological point of view

As previously stated, NI in Vatulele Fijian is morphologically characterized by the following two points. First, the transitive suffix never attaches to a verb. The second point is that the common article *na* does not cooccur with an NP. Compare NI (12)a and its transitive counterpart (12)b.

Not only a bare verb but also a derived verb stem can constitute NI. For instance, $v\bar{a}mate$ 'kill' in (13), which has the causative prefix $v\bar{a}$ -, is combined with yamu 'mosquito.'

Similarly, not only a bare noun but also a compound and a phrase can be incorporated. In (14), the whole phrase *lewe ni manumanu* 'flesh of animal' is incorporated.

As cited in (5), Dixon (1988: 50) argues that an object replaces the transitive suffix. That is why NI can be analyzed as an intransitive predicate. However, (15) shows that NI is transitivized again by the transitive suffix, having another object.

(15) Hā kata-domo-ni-a na tamata na gwata

ASP bite-neck-TR-3SG ART man ART snake

'The snake neck-bit the man'

This is what Mithun (1984) refers to as Type II NI (see (3)b in Section 8.1), which has not been described in Oceanic languages. Type II NI "advances an oblique argument into the case position vacated by the IN [incorporated noun]" (Mithun 1984: 856). In (15), the body part term is incorporated and the possessor NP is advanced into the new object. NI of body parts is often observed in Type II NI (Frantz 1971, Kroeber 1909, Sapir 1911, Mithun 1984). This results from "the frequent recurrence and natural cohesion of many activities affecting parts of the body, e.g. 'to hand-wash' or 'to tooth-brush'" (Mithun 1984: 858). In fact, 'tooth-brush' is expressed by NI in Vatulele Fijian (16).

- (16) Oi matā mahi baji?

 2SG.NPST DES brush tooth

 'Do you want to tooth-brush?'
- (17) is NI in Blackfoot, where *o'kakin'* 'back' is incorporated. There is a similarity between (15) and (17) in that a body part term is incorporated.
- (17) Nít-ssik-o'kakín-aw óma nínaawa.

 I-break-back-him that man

 'I broke the man's back' (Frantz 1971: 72, glosses by Mithun 1984: 858)

As mentioned in Section 8.1, Mithun (1984) assumes that NI diachronically develops from Type I to IV. According to her hypothesis, NI of Vatulele Fijian might be now developing from Type I to Type II.

(18) is another interesting example, in which the NI construction *laga here* 'song-sing' is transitivized by the causative prefix $v\bar{a}$ - and the transitive suffix -ni (see Section 6.3.3), the causee o taciqu 'my brother' being the new object. The combination of *laga here* may be so conventionalized that it is construed as a single grammatical word.

(18) Qu hā vā-laga-here-ni-a o taci-qu

1SG ASP CAUS-sing-song-TR-3SG PRP sibling-1SG

'I made my brother sing a song'

From (15) and (18) above, because it can be transitivized, NI in Vatulele Fijian can be considered an intransitive predicate. In addition, NI can be claimed to be one grammatical word because the affixation is operated on it (see (4)a in Section 4.1.1).

This study uses a hyphen "-" to connect each constituent of a transitivized NI to show that NI constitute one grammatical word. However, this notation is debatable. First, in these cases, the transitive suffix attaches to an incorporated noun rather than a verb root. This means that the transitive suffix is attached to words from different syntactic categories. A clitic rather than an affix has this property (see Section 6.3.1.1). Second, phonologically speaking, a verb and a noun remain separate phonological words (see Section 8.2.1).

8.2.3. Syntactic point of view

An object noun of NI corresponds to an object of transitive clause (19). Any other arguments such as a subject or a peripheral argument are never incorporated.

A noun and a verb of NI remain two separate phonological words as mentioned in Section 8.2, however, they need to be syntactically adjacent to each other. They are never moved from where they are. For instance, *ika* 'fish' of *kana ika* 'fish-eat' is never fronted before the predicate (20)a, which is possible in the transitive clause (20)b.

In addition, post-head modifiers like $n\bar{o}$ are never inserted between a verb and a noun (21).

In the transitive construction, post-head modifiers appear between a verb and an object (22).

This means that an NI object appears inside the predicate, whereas that of transitive clause appears outside the predicate.

An object pronoun also appears within the predicate. In other words, an object precedes post-head modifiers (23) (see Section 6.3.1).

Because (23) seems to be NI in that an object occurs within the predicate, this construction is also sometimes referred to as "noun incorporation" (Geraghty 1983: 229-31, Schütz 2014: 147). However, I do not consider it as NI for the following two reasons. First, there is an overt marker of transitivizer—namely, -*ji* in (23), which is absent in NI. Second, unlike NI of common nouns, there is no alternative transitive construction with a pronoun object outside the predicate. As mentioned previously, NI is analyzed as an derived intransitive construction.

Dixon (1988) views NI as an intrasitivizing device and points out that the underlying A NP is derived into an S. In a language like Tongan, which uses the ergative—absolutive alignment, the alternation of case markers indicates detransitivization. That is, a subject of transitive clause is

marked by the ergative case 'e (24)a (= (4)a), whereas that of NI is marked by the absolutive case 'a (24) (= (4)b).

However, it is unclear whether NI in Fijian languages, including Vatulele Fijian, is detransitivized because (i) there is no case marker on NPs and (ii) a bound pronoun within a predicate agrees with an S or A argument (25).

However, there is syntactic evidence to support the notion that NI is intransitive. This is confirmed by stranding modifiers. Stranding modifiers in Fijian include *ruarua* 'both' and *taucoko* 'all.' They appear as post-head modifier and modify both a subject and an object (26) (see Section 3.3.2).

When a subject of a transitive clause is dual, it is ambiguous which ruarua 'both' modifies (27).

(27) Ari kani-a ruarua na ika
3DU.NPST eat:TR-3SG both ART fish
'They will eat both fish / Both of them will eat fish'

These stranding modifiers never modify incorporated nouns (28) (Dixon 1988: 228, Rosen 1989: 311-2, Okamoto 2017a).

(28) * Qi kana ika ruarua

1SG.NPST eat fish both

When a subject is dual, *ruarua* modifies it, not an incorporated object *ika* 'fish' (29).

(29) Ari kana ika ruarua
3DU.NPST eat fish both
'Both of them will eat fish'

Furthermore, NI can be said to be intransitive because it takes a transitive suffix as described in Section 8.2.2 above (30) (= (15)).

(30) Ha kata-domo-ni-a na tamata na gwata

ASP bite-neck-TR-3SG ART man ART snake

'The snake neck-bit the man'

8.2.4. Semantic point of view

An incorporated noun is frequently used to refer to a generic and nonspecific entity (Mithun 1984: 856, Gerdts 1998: 94). For example, in (31) (= (16)), baji 'tooth' of $mahi\ baji$ 'tooth-brush' lacks the possessive suffix -mu 'your,' which is necessary for body part nouns. In other words, the incorporated object baji 'tooth' lacks individual salience.

(31) Oi matā mahi baji?

2SG.NPST DES brush tooth

'Do you want to tooth-brush?'

In addition, an incorporated object is not modified by a relative clause like (32) (see Section 3.3.2).

Demonstratives also cannot not be incorporated, so the individual salience of an incorporated noun is low (33).

However, NI in Vatulele Fijian may involve NPs with a possessor. In (34), a possessive pronoun is combined with a noun. This is why Massam (2001) refers to the incorporation of modified noun in Niuean "pseudo noun incorporation" (see Section 8.1).

(34) Homu me-mu jī rē

drink CLF.D-2SG tea POL

'Your-tea-drink please'

Okamoto (2017a, 2017b) observes NI in SF only with verbs with high semantic transitivity. In other words, the semantic role of a subject of NI is restricted. It is still unclear whether this generalization applies to Vatulele Fijian as well.

8.3. Summary

This chapter described NI in Vatulele Fijian within the typological framework. Fijian NI is a type of compound, as previously demonstrated in studies. In other words, NI is a single grammatical word. Phonologically speaking, a verb stem and an NP do not constitute a single phonological word. However, in terms of syntax, NI functions intransitively. In other words, NI is a valency-decreasing device that converts an A argument to an S argument.

I would like to reemphasize that NI in Vatulele Fijian can be transitivized to take another object (see (15) and (18) above). As shown in Section 8.1, some previous studies avoid the term "noun incorporation." However, it is truly intransitive at least in Vatulele Fijian because it can be transitivized. Furthermore, this could imply that NI is developing from Type I NI to Type II NI within the Mithun's (1984) framework.

One of remaining issues is what verb involves NI. Section 8.2.4 implies that verbs with low semantic transitivity might not have NI alternatives. This point needs to be investigated further. Further research is also needed to examine whether other Fijian and Oceanic languages transitivize NI. If they do so, Mithun's (1984) diachronic hypothesis would be more plausible.

9. Prepositional verb construction

This chapter¹ deals with a construction as in (1), which is referred to as "the prepositional verb construction" or a "prepositional verb²." This construction is not observed in SF. In (1), the preceding predicate is phonologically attached to the preposition i. In the below examples, a plus sign "+" indicates that two morphemes form a single phonological word but belong to different grammatical words (see Section 1.5).

(1) la+wa+i na koronivuli go+THITHER+OBL ART school 'go to school'

This construction is interesting because there is a phonological and grammatical mismatch. In (1), the morpheme i is combined phonologically with the preceding predicate, and grammatically (or syntactically) with the following NP.

This chapter will demonstrate that in Vatulele Fijian, the phonological boundary does not correspond to the grammatical boundary. The chapter is structured as follows. Section 9.1 discusses prepositional verbs from semantic, phonological, and syntactic perspectives. Although the prepositional verb construction is similar to applicative constructions in other languages, two syntactic operations show that an NP after a prepositional verb (e.g., *koronivuli* 'school' in (1)) is a peripheral argument rather than a core one. Section 9.2 explains the mismatch between phonology and grammar of prepositional verbs through some comparisons with similar phenomena both inside and outside of Fijian. Then, I explain why this mismatch occurs. Section 9.3 is a summary that also addresses some outstanding issues.

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This chapter is based on Okamoto's (2022) study on the prepositional verb construction in Vatulele Fijian

The term "prepositional verb" is borrowed from English grammar. Quirk et al. (1985: 1155) define a prepositional verb as a verb that "consists of a lexical verb followed by a preposition with which it is semantically and/or syntactically associated" Prepositional verbs in English include *look at, cope with, care for* and so forth.

9.1. Description of prepositional verbs

Section 9.1.1 summarizes the semantic characteristics of prepositional verbs. Sections 9.1.2 and 9.1.3 are directly related to the core of this chapter, where phonological and syntactic descriptions are given, respectively.

9.1.1. Semantic point of view

Prepositional verb construction is observed only with verbs that are strongly associated with "location" or "goal" such as $l\bar{a}$ 'go,' tadra 'sit,' $n\bar{o}$ 'exist / stay,' koto 'lie,' moce 'sleep,' and so forth (2).

Verbs whose meaning is not necessarily associated with "location" or "goal" do not have the prepositional verb counterpart. With *kana* 'eat,' for example, the prepositional verb construction is never observed (3).

The preposition i often forms a phonological word with $w\bar{a}$ 'thither' and $m\bar{a}$ 'hither' (4). This reason is that these post-head modifiers are also associated with "goal."

9.1.2. Phonological point of view

Usually, the preposition i forms a phonological word with the following element and indicates that the NP is peripheral (5) (see Section 3.3.3). In these cases, the stress is on i itself.

(5) a.
$$i+na$$
 were b. $i+kei$

ART+OBL house OBL+here

'to the house' 'here'

However, in prepositional verbs, the preposition i forms a diphthong with the final vowel of the preceding verb or modifier, with the stress being placed on it. That is, the preposition i is phonologically combined with the preceding predicate, not the following NP. (6)a is an example of a prepositional verb, in which the preposition i is combined with the verb tadra [tanⁿra] 'sit,' forming the diphthong [ai]. (6)b is a stress pattern that can be expected from (5).

Besides the stress position, another piece of evidence for a single phonological word is that some speakers shorten the diphthong [ai] and pronounce it like [$ta^nr\epsilon$], which is never observed between independent words (see Section 2.2).

There are some additional notes for $l\bar{a}$ 'go.' $l\bar{a}$ 'go' has a long vowel, so it is phonologically independent alone (7).

This verb is combined with a post-head modifier such as $w\bar{a}$ (thither), $m\bar{a}$ (hither), or $n\bar{o}$ (continuous aspect), forming a single phonological word (8) (see Section 5.3.2.6).

(8) a.
$$la+wa$$
 < $l\bar{a}$ $w\bar{a}$

go+THITHE go THITHER

'go away'

b. $la+ma$ < $l\bar{a}$ $m\bar{a}$

go+HITHER

'come'

c. $la+no$ < $l\bar{a}$ $n\bar{o}$

go+CNT go CNT

'going'

The prepositional verb construction is often observed with these combined forms (9), the stress being on the diphthong [ai] or [oi].

9.1.3. Syntactic point of view

As discussed in Section 9.1.2, a prepositional verb is a single phonological word. One may predict that a prepositional verb also behaves as a single grammatical word. It may have some of the characteristics of a transitive verb, with the subsequent NP serving as an object. In other words, prepositional verb can be analyzed as an applicative construction.

Cross-linguistically, adpositions (i.e., prepositions and postpositions) tend to become applicative markers (Craig and Hale 1988, Peterson 2007: 125-9). (10) is an example from Nadëb, a Nadahup language of the Brazilian Amazon. In (10)a, $y\dot{o}$ functions as a postposition indicating that the preceding noun is a location. However, (10)b is the applicative construction in which the same morpheme is prefixed to the verb sooh 'sit.'

```
(10)
       a. Kalapéé a-sooh
                             bxaah
                                        νó
          child
                    FO-sit
                             tree
                                        on
          'The child is sitting on the tree'
       b. Baah
                   kalapéé ya-sooh
                    child
                             APPL-sit
          tree
          'The child is sitting on the tree'
                                                       (Craig and Hale 1988: 313-4, my glosses)
```

Another example is from Kinyarwanda, a Bantu language. In (11)a, ku is a preposition, whereas in (11)b the same morpheme functions as the applicative suffix. Note that there is a sound change on the morpheme, that is, ku is realized as -ho in the applicative construction (Kimenyi 1980: 90).

```
a. Ábáana
(11)
                      b-iica-ve
                                     ku
                                            mééza
          children
                      3PL-sit-ASP
                                            table
                                     on
          'The children are sitting on the table'
       b. Ábáana
                      b-iica-yé-ho
                                          ámééza
          children
                      3PL-sit-ASP-APPL
                                          table
          'The children are sitting on the table'
                                                                (Kimenyi 1980: 94, my glosses)
```

These constructions appear to be similar to a prepositional verb in Vatulele Fijian in that an adposition is attached to a verb. One can see the similarity between (10)b, (11)b, and (12).

```
(12) Arai tadra+i na tēveli na kwāhewa
3PL.NPST sit+OBL ART table ART child
'The children are sitting on the table'
```

However, the claim of this chapter is that a prepositional verb is not an applicative construction. The following sections provide two syntactic explanations to support this claim. One is from the replaceability with an interrogative noun (Section 9.1.3.1) and the other from the formation of a relative clause (Section 9.1.3.2). To put it another way, an NP after a prepositional verb is a peripheral argument rather than a core argument.

9.1.3.1. Replacement with interrogative word

The replacement with an interrogative word confirms the fact that an NP after a prepositional verb is a peripheral argument. Interrogative words are covered in Section 3.3.6.

In interrogative sentences, Vatulele Fijian replaces their core arguments with $c\bar{a}$ 'what.' In (13), an object of a transitive verb *dania* 'see' is replaced with $c\bar{a}$ 'what.'

(13)
$$O$$
 dani-a na $c\bar{a}$?

2SG see:TR-3SG ART what 'What did you see?'

A peripheral argument that means location, on the other hand, are replaced with vei 'where' (14).

If a prepositional verb functions as a transitive verb, the same interrogative noun $c\bar{a}$ 'what' should be used because the following NP is an object. This is not the case with prepositional verb constructions. An NP after the prepositional verb must be replaced with *vei* 'where' (15)a, not with $c\bar{a}$ 'what' (15)b.

(15) a.
$$O$$
 $la+i$ $vei?$

2SG go+OBL where
'Where did you go?'
b. * O $la+i$ na $c\bar{a}$?

2SG go+OBL ART what

(16) is another example. The argument NP of tadra+i 'sit on' should be replaced with vei 'where' (16)a, not with $c\bar{a}$ 'what' (16)b.

kwāhewa? (16)a. Arai tadra+i vei na 3PL.NPST sit+OBL where child ART 'Where are the children sitting on?' b. * Arai tadra+i kwāhewa? na $c\bar{a}$ na child 3PL.NPST sit+OBL what ART ART

In short, an NP of a prepositional verb is a peripheral argument because an NP of a prepositional verb is replaced with vei rather than $c\bar{a}$.

9.1.3.2. Relativization

Relativization also shows that an NP after a prepositional verb is a peripheral argument.

Relative clauses of core arguments are expressed by fronting (see Sections 3.1.7). (17) is a transitive clause, where the object of a transitive verb *kania* 'eat' is placed before the predicate.

(17) na ika qu kani-a

ART fish 1SG eat:TR-3SG

'the fish which I ate'

However, the relativization of NPs of prepositional verbs is different from that of core arguments. (18) is ungrammatical, where an argument NP of la+i 'go to' is fronted.

(18) * na koronivuli matu la+i

ART school 1PA.EXCL go+OBL

When an NP of a prepositional verb is relativized, the NP is fronted and the resumptive marker $k\bar{e}$ must appear as a trace within the predicate as in (19) (see Section 5.3.2.5).

(19) na koronivuli matu lā kē

ART school 1PA.EXCL go RES

'the school which we went to'

This is the same case as other peripheral arguments such as a temporal expression (20).

(20) na higa matu $l\bar{a}$ $k\bar{e}$ ART day 1PA.EXCL go RES
'the day when we went'

Based on these considerations, it is not possible to assert that a prepositional verb is a single grammatical word, that is, a transitive verb.

In SF, some verbs can take an object with the semantic role of "location" or "goal" (see Section 6.3.1). *dabeca* 'sit on' in (21), for example, has the object *na ibe* 'mat.'

(21) Au ā dabe-ca na ibe

1SG PST sit-TR:3SG ART mat

'I sat-on the mat'

Unlike the prepositional verbs discussed here, these SF verbs can be considered transitive from both a morphological and syntactic standpoint (Okamoto 2018a). Morphologically, the transitive suffix is attached to the verb root. Syntactically, an object noun is replaced with *cava* 'what' (22).

(22) Na cava au ā dabe-ca?

ART what 1SG PST sit-TR:3SG

'What did you sit-on?'

In addition, an object is relativized by fronting and the resumptive marker does not appear (23).

(23) na ibe au ā dabe-ca

ART mat 1SG PST sit-TR:3SG

'the mat I sat-on'

9.2. Mismatch between phonology and grammar

As discussed in the previous section, a prepositional verb is a single unit from a phonological point of view. However, grammatically, the preposition i is connected with the following NP because it is a syntactic marker to indicate that the following NP is peripheral. In other words, the phonological boundary and the grammatical boundary are not coincident.

Before proceeding into the discussion, it is necessary to state that this i is not a transitive suffix. It is true that some Austronesian languages have i as "local transitive suffix" (Austronesian Comparative Dictionary). In addition, Pawley (1973) reconstructed the transitive suffix *-i in Proto-Oceanic. However, *-i corresponds to the transitive suffix -Ci in Vatulele Fijian, where C is a lexically determined consonant. This is discussed in Section 6.3.1.

Sections 9.2.1 and 9.2.2 provide two constructions similar to prepositional verbs. Through the comparison with them, Section 9.2.3 points out what is peculiar to prepositional verbs in Vatulele Fijian.

9.2.1. The nominalizer i- in Fijian languages

As discussed in Section 4.3, the nominalizer i involves a mismatch between phonology and grammar (24).

(24) na+i-sele

ART+NMLZ-cut

'the knife'

Phonologically, the article *na* and the nominalizer *i* are pronounced as a single word *nai*. Grammatically, on the other hand, the nominalizer *i* is attached to the verb *sele* 'cut' and derives a noun *isele* 'knife.' In (24), there are two phonological words, *nai* and *sele*, as well as two grammatical words, *na* and *isele*.

9.2.2. Case-marking prepositions in Philippine languages

There are also phonological and grammatical mismatches in Philippine languages. Reid (2006a, 2006b) demonstrates that, in Nuclear Cordilleran languages, case-marking prepositions have two forms depending on the phonetic environment of the preceding word. Consider the oblique preposition in Guinaang Bontok for example. When the preceding word ends with a consonant, the form of this preposition is *as* (25)a. When the preceding word ends with a vowel, on the other hand, this preposition is optionally encliticized to it (25)b (Reid 2006a: 460). Mismatches between phonology and grammar can be seen in the latter case. Note that [] in the second line of (25) indicates the grammatical boundary.

(25)a. As omára=ak afong=cha as nan fótog as house=GEN.3PL] **FUT** get=NOM.1SG OBL NS+DEF pig] OBL as kasi. OBL one.day.removed] 'I will get some of the pigs from their house the day after tomorrow' b. As omára=cha=s afong=cha=s nan $\dot{a}so=s$ dog]=[OBL house=GEN.3PL]=[OBL FUT get=NOM.3PL=[OBL NS+DEF kasi. one.day.removed] 'They will get some of the dogs from their house the day after tomorrow' (Reid 2006a: 460, my glosses)

9.2.3. The peculiarity of prepositional verbs

The prepositional verb construction appears to be similar to the phenomena discussed in the preceding sections. However, I demonstrate that it is still slightly distinct from them and discuss how peculiar it is and why it results in a mismatch between phonology and grammar.

First, the nominalizer i is considered. An example like (26) (= (24)) is a combination of monosyllabic morphemes.

What is crucial about prepositional verbs in Vatulele Fijian is that the preceding predicate is otherwise phonologically independent itself. In the case of the combination of na and i in (26), the reason that they form a single phonological word is that both of them cannot stand alone phonologically. In the case of prepositional verbs, on the other hand, there is no reason for the preposition i to combine with the preceding verb as in (27)a because it can form a phonological word with the following monosyllabic na like (27)b

(27) a.
$$la+ma+i$$
 $na+were$ b.* $la+ma$ $i+na$ $were$ go+HITHER+OBL ART+house go+HITHER OBL+ART house 'come to house'

Second, in Philippine languages, encliticized prepositions are very similar to prepositional verb constructions in that an NP marker is attached to the preceding verb. They differ from one another in the following two ways. First, while the cliticization of prepositions in Philippine languages are phonologically conditioned, there is no phonological restriction on the prepositional verb construction in Vatulele Fijian. Rather, it is semantically or lexically conditioned as discussed in section 9.1.1. That is, the preposition i is combined with words that are associated with "location" or "goal." Second, the preposition i in a prepositional verb can be said to be a suffix rather than an enclitic because it causes the stress of the preceding element to shift³ (see (29) below). According to Haspelmath and Sims (2010: 198), "clitics may be less prosodically integrated with their hosts than are affixes." In this sense, the preposition i is not different from suffixes. According to Milner (1956), the stress shift is one of the defining features of a suffix in SF (see Section 4.2.3).

uluqu (which is stressed on the second syllable whereas in *ulu* the first syllable is stressed) provides evidence to show that the ending -qu must be considered as a suffix of the base and not as a separate word.

Milner (1956: 71n)

(28) is an example of a transitive suffix. The stress is shifted to the last syllable containing the long vowel.

One can see the same stress shift in prepositional verbs (29). In each example, the stress goes on to the final syllable containing the diphthong.

-

³ The nominalizer *i* may trigger the stress shift in Vatulele Fijian. See Section 10.2.1.2 for a detailed discussion.

(29)
 a.
$$la+ma+i$$
 < $la+ma$

 go+HITHER+OBL
 go+HITHER

 'come to'
 'come'

 b. $no+i$
 < $n\bar{o}$

 exist+OBL
 exist

 'stay in'
 'exist'

 c. $tadra+i$
 < $tadra$

 sit+OBL
 sit

 'sit on'
 'sit'

One may inquire as to why this mismatch occurs. First, the phoneme i appears to form a diphthong with the preceding vowel. On the other hand, the SF counterpart prepositions, ki and e, are not combined with the preceding element (30).

It should be noted that the formation of a diphthong is not an automatic process. For instance, in Vatulele Fijian, the diphthong /ai/ is not formed between the article *na* and a lexical item with the word-initial vowel /i/ (31).

The mismatch can be explained from another perspective. According to Asao (2014, 2015), it is preferrable for a long element to come before a short one as in (32)a rather than the converse order as in (32)b. Furthermore, the phonological boundary is more likely to occur immediately after a short element (Asao 2014: 314).

```
(32) Long and short element (Asao 2014: 314)

a. [ a long element ] [ a short element ]

b. [ a short element ] [ a long element ]
```

That (32)a is more preferred means that suffixing is more preferred, which is pointed out by Sapir (1921), Bybee et al. (1990), and others. Asao (2015: 70) argues that "shorter morphemes are harder to identify, because shorter morphemes are more likely to match a part of other morphemes by chance," providing an example as follows:

Consider the English word form pipes /pajps/, which has the plural suffix -s. After hearing the first three segments /pajp/, one can be very sure that the morpheme pipe is used, and can be ready to hear the next morpheme. On the other hand, imagine a hypothetical language where everything is the same as English except that the plural morpheme is a prefix s-, and suppose that one hears the plural of pipe, which is s-pipe /spajp/. When hearing s-, one cannot be sure whether this is the plural prefix or a part of another morpheme. After hearing /spaj/, one is still not sure whether one has already passed a morpheme boundary, or a morpheme such as spy or spike is being uttered. When hearing the entire sequence /spajp/, one is finally able to notice that there was in fact a morpheme boundary in an earlier stage, assuming that there is no morpheme that begins with /spajp/. This means that the fast recognition of a morpheme boundary near the beginning of a phoneme sequence tends to be difficult.

(Asao 2015: 71)

This generalization may apply to both the prepositional verb construction and the applicative construction in Kinyarwanda discussed in Section 9.1.3.

Despite its phonological unity, it is still unclear why the prepositional verb construction does not result in a single grammatical word. In other words, why does not a reanalysis happen? One possible explanation is that prepositional verbs have no morphological similarity to "authentic" transitive verbs. In Vatulele Fijian, a transitive verb usually has the ending vowel /a/ when it takes a common noun as the object (33) (see Section 6.3.1), so there is no transitive verb with a diphthong like /ai/ as the ending.

(33) Qu dola-vi-a na mataniwere

1SG open-TR-3SG ART door

'I opened the door'

That is why speakers do not reanalyze a prepositional verb as a transitive verb.

9.3. Summary

This chapter demonstrated that the prepositional verb construction causes a phonological and

grammatical mismatch. To put it another way, Vatulele Fijian has a distinct core and peripheral

argument.

As mentioned in Section 3.3.6, Dixon (1988, 2010) defines two different types of words, i.e.,

phonological words and grammatical words. According to his definition, the mismatch of the

prepositional verb construction can be easily explained. A prepositional verb consists of a single

phonological word, the preposition *i* being an independent grammatical word.

According to Asao's (2014, 2015) theory, languages with VO word order, which generally

prefer prepositions than postpositions (Dryer 2007: 89), will have a phonological and grammatical

mismatch. The reason is that a preposition, usually a short form, is usually attached to the

preceding longer form (perhaps a verb or a predicate). The relationship between mismatches and

word order may have played a role in the development of the applicative construction. Peterson

(2007) claims as follows:

These adpositional applicatives are of interest because they are examples of adpositional applicatives

in languages which do not have basic word OV order (which is the case for most languages discussed

by Craig and Hale [(1988)]), and hence they provide instances of a comparable development in VO

languages.

(Peterson 2007: 127)

Further investigations are of course needed. As mentioned in Section 9.1.1, only verbs whose

meaning is strongly related to "location" or "goal" have the prepositional verb alternative.

However, it is still unclear which verbs have the prepositional verb construction. It should also be

noted that there is a possibility that the prepositional verb construction is in the process of

grammaticalization. Prepositional verbs may develop into an applicative construction in future.

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10. Existence and possession

This chapter¹ explores expressions that involve existential verbs. Of course, they are used for existential expressions. Furthermore, they are used for possessive expressions. There is no morphosyntactic distinction between the two.

In the following sections, I describe existential expression (Section 10.1) and possessive expression (Section 10.2), respectively.

10.1. Existential expression

An existential construction is made up of an existential verb or a numeral. The former is explored in Section 10.1.1 and the latter in Section 10.1.2.

10.1.1. Existential verb

In the existential construction, the verb $n\bar{o}$ 'exist' is generally used (1).

(1) Ai $n\bar{o}$ na vatu i na rumu 3SG.NPST exist ART stone OBL ART room 'There is a stone in the room'

The unmarked word order is VS. In (1), the "theme" argument *na vatu* 'a stone' and the "location" argument *i na lequ rumu* 'in my room' are placed after the predicate. However, both constituents can precede the predicate to be topicalized. In (2), the subject, or the theme, is topicalized.

(2) Na vatu ai nō i na rumu

ART stone 3SG.NPST exist OBL ART room

'The stone is in the room'

This chapter is partially based on my presentation "Possessive construction in Vatulele Fijian" made at the international symposium "Fijian Languages Symposium" held at Massey University, Palmerston North, New Zealand on January 31, 2020. I would like to thank those who provided me with many

helpful and constructive comments.

In (3), on the other hand, the locational NP is fronted. It should be emphasized that the resumptive marker $k\bar{e}$ obligatorily appears as the trace when a peripheral argument, that is, any arguments, but a subject or an object, precede the predicate (3) (see Sections 3.3.3 and 5.3.2.5).

(3) Na rumu ai $n\bar{o}$ na vatu $k\bar{e}$ ART room 3SG.NPST exist ART stone RES

'In the room, there is a stone'

I have not observed any cases where a theme and a location simultaneously precede the predicate (4).

(4) * Na vatu na rumu ai $n\bar{o}$ ART stone ART room 3SG.NPST exist

It is worth noting that the existential verb $n\bar{o}$ is grammaticalized into a post-head modifier (5) (see Section 5.3.2.2).

(5) Qi kani-a nō na raisi
1SG.NPST eat:TR-3SG CNT ART rice
'I am eating rice'

This modifier $n\bar{o}$ never cooccurs with the original lexical verb $n\bar{o}$ (6).

(6) * Qi $n\bar{o}$ $n\bar{o}$ i were

1SG.NPST exist CNT OBL house

('I am in the house')

SF has two existential verbs: tiko and $t\bar{u}$. Schütz (2014: 83) states that "tiko refers to entities that are movable, not fixed in a place." In (7), the verb tiko 'exist' is used because na raisi 'rice' is a movable thing.

```
(7) SF: a. E tiko e sō na raisi?

3SG exist 3SG some ART rice

'Is there any rice?'

b. Io, e tiko

yes 3SG exist

'Yes, there is'

(Schütz 2014: 83)
```

 $t\bar{u}$, on the other hand, expresses "more permanent existence, and hence, not confined to the situation at hand" (Schütz 2014: 83). Dixon (1988: 128) provides the same conclusion for these two existential verbs in Boumā Fijian. Schütz (2014) provides (8) as an example of $t\bar{u}$, which lacks both a "theme" and a "location."

(8) SF: $E t\bar{u}$ 3SG exist
'There's some (somewhere); there's a general quantity available' (Schütz 2014: 83)

Nonexistence or absence is expressed by the negative verb *jikai* in Vatulele Fijian (9).

(9) Ai jikai na wai 3SG.NPST not.exsit ART water 'There is no water'

This verb also functions as an interjection 'no' (10).

(10) a. $H\bar{a}$ $vin\bar{a}$ $n\bar{o}$?

ASP good CNT

'Is it good?'

b. Jikainot.exist

'no'

The SF counterpart of this verb is sega. One can see that (11) is parallel with (9) above.

(11) SF:
$$E$$
 sega na wai

3SG not.exsit ART water

'There is no water'

In SF, *sega* is used for general negative sentences. That is to say, it takes a complement clause as its subject. (12) literally means that 'It does not exist that I song-sing.'

(12) SF:
$$E$$
 sega niu laga sere 3SG not.exsit SUB:1SG sing song 'I do not song-sing'

On the other hand, *jikai* in Vatulele Fijian is not used for sentential negation. Instead, the preverbal modifier *tamu* expresses negation (13) (See Sections 3.3.4 and 5.3.1.2).

10.1.2. Numerals

Vatulele Fijian uses the decimal numeral system (Table 10-1, see also Section 3.2.3).

Table 10-1: Numerals

1	hila	6	ono
2	rua	7	vitu
3	tolu	8	walu
4	$v\bar{a}$	9	ciwa
5	lima	10	jini

A numeral more than 11 is expressed by combining numerals using the conjunction ka 'and' (14).

(14) jini ka hila
ten and one
'eleven (lit. ten and one)'

hagavulu 'ten' (sagavulu in SF) is an ancient Proto Polynesian word, which is now replaced by the English loanword *jini* (tini in SF, ten in English) (Gatty 2009: 214). Instead, hagavulu is suffixed to numerals to form twenty, thirty, and so forth (15).

(15) rua-hagavulu two-ten 'twenty'

For the following reasons, numerals are classified as verbs. First, numerals cannot directly modify noun phrases (16)a but through the relative clause construction (16)b ([] indicates a relative clause).

(16)a. * A hila lā $m\bar{a}$ i kei yalewa na 3sg THITHER OBL here ART woman go one b. *A* lā тā kei [ai hila] na yalewa 3sg go THITHER OBL 3SG.NPST here one ART woman 'One woman came here'

In (16)b, the relative clause *ai hila* 'one' precedes the head *na yalewa* 'woman.' This is peculiar to numerals because the relative clause in Vatulele Fijian follows the head (see Section 3.1.7). In (17), the relative *ara laga here n\bar{o}* 'who are singing songs' comes after the head *na yalewa* 'woman.'

(17) Ara lā kē yalewa [ara laga $m\bar{a}$ na here $n\bar{o}$] 3_{PL} THITHER OBL here ART woman 3PL sing song CNT 'Women who are singing songs came here'

Numerals often cooccur with modifiers like $g\bar{a}$ 'only' and tale 'again' as in (18) in the same way as typical verbs (19).

- (18)a. Ai hila bilo gā na 3SG.NPST one only ART cup 'There is only one cup' b. Ai hila tale bilo na 3SG.NPST one again ART cup 'There is another cup'
- (19) a. Ai kila-a $g\bar{a}$ na voha $v\bar{a}$ -Nadrog \bar{a} 3SG.NPST know-TR:3SG only ART speech ADJVZ-Nadrog \bar{a} 'He knows only the Nadrog \bar{a} language'

 b. A huka tale
 - 3sG return again 'He returned again'

In Vatulele Fijian, a numeral expresses existence with the third person nonpast pronoun ai when the subject is the third person. Among them, hila 'one' is the most common verb for the existential construction. In (20), hila 'one' expresses the general existence and does not focus on the number of references. hila in this example would be replaceable with the existential verb $n\bar{o}$.

(20) Ai hila na mudre

3SG.NPST one ART fire

'There was a fire'

This is also confirmed by (21), where the theme is an abstract thing.

(21) Ai hila na kwā qi matā kwe-a veiko

3SG.NPST one ART thing 1SG DES say-TR:3SG OBL:2SG

'There is something I want to tell you'

In addition, *hila* is relativized to indicate indefiniteness of noun phrases (22) (= (16)b) (see Section 3.1.3).

(22)Ailā тā kē [ai hila] na valewa 3SG THITHER OBL here 3SG.NPST go one ART woman 'A woman came here'

Although numerals are subsumed under the verb category, they have some grammatical characteristics that distinguish them from other verbs.

First, they do not have their transitive alternatives. In other words, they are inherently intransitive and never transitivized by any morphological processes (see Section 6.3).

Second, they must cooccur with the third person singular nonpast bound pronoun *ai*. Even when the subject is anything but singular, *ai* appears as in (23).

(23) Ai tolu na ivola i na tēveli

3SG.NPST three ART book OBL ART table

'There are/were three books on the table'

Although *ai* is the nonpast marker, the temporal property is neutralized before numerals. Therefore, (23) above is ambiguous as to the tense.

Finally, they are derived into adverbs by reduplication and by the prefix $v\bar{a}$ -. In (24), rua 'two' is reduplicated to derive ruarua 'both.'

(24) *O kani-a rua~rua na vuzi?*2SG eat:TR-3SG RDP~two ART banana 'Did you eat both bananas?'

In (25), the prefix $v\bar{a}$ - attaches to rua 'two,' resulting an adverb $v\bar{a}rua$ 'twice' (see Section 6.3.3 for $v\bar{a}$ -).

(25) *O kani-a vā-rua na vuzi?*2SG eat:TR-3SG ADVLZ-two ART banana 'Did you eat bananas twice?'

These derivational processes are not observed for any other verbs.

10.2. Possessive expression

In this section, possessive expression in Vatulele Fijian is described. As mentioned below, existential verbs are used for possession. Section 10.2.1 explores nominal possession. Section 10.2.2 demonstrates predicative possession.

10.2.1. Nominal possession

Although this thesis focuses on the predicate structure and valency changing processes, this section describes nominal possession in Vatulele Fijian because it is relevant to predicative possession.

Oceanic languages formally distinguish two types of possessive construction—namely, "direct" and "indirect" possession. This distinction roughly corresponds to a semantic distinction between inalienable and alienable possession. According to Lynch et al. (2002: 40), in direct possession, "a possessor suffix (§2.1) [sic] is attached directly to the possessed noun," whereas in indirect possession, "an uninflected possessed noun is either preceded or followed by an independent possessive constituent, which is itself marked with one of the possessor suffixes."

This direct/indirect distinction is also found in Vatulele Fijian. The possessive pronouns in Vatulele Fijian are summarized in Table 10-2. Every possessive pronoun has prefix and suffix forms, with the majority of them being the same.

Table 10-2: Possessive pronouns

	1EXCL		1INCL		2		3	
	Prefix	Suffix	Prefix	Suffix	Prefix	Suffix	Prefix	Suffix
SG	qu-	-qu			mu-	-mu	e-	-(y)a/-e
DU	maru-	-maru	daru-	-daru	muru-	-muru	dru-	-dru
PA	matu-	-matu	du-	-datou	mutu-	-mutu	dra-	-dra
PL	тати-	-тати	dā-	-dā	mū-	-mū		

Section 10.2.1.1 deals with direct possession and Section 10.2.1.2 deals with indirect possession, respectively.

10.2.1.1. Direct possession

Direct possession includes body parts and kinship terms. A possessor of body parts is expressed by a possessive prefix (26)a, whereas that of kinship terms is expressed by a possessive suffix

(26)b. It should be noted that when a possessive pronoun is attached to a noun, a noun does not cooccur with the common article na.

In SF, on the other hand, a possessor of both body parts and kinship terms is indicated by a possessive suffix (27).

10.2.1.2. Indirect possession

Indirect possession is expressed by a combination of a classifier and a possessive suffix. This combination form is phonologically independent, preceding a possessed noun. Vatulele Fijian has three classifiers: *ke*- for "edible" (28), *me*- for "drinkable" (29), and *le*- for "neutral" (30). SF has the same classifiers except the last one. In SF, neutral classifier is *no*-. Note that when classifier (plus a possessive pronoun) appears, the common article *na* is optional.

(28) Edible

ke-qu kekeCLF.E-1SG cake'my cake (to eat)'

(29) Drinkable

me-qu $j\bar{t}$ CLF.D-1SG tea 'my tea (to drink)'

The classifier *me* is used for fruits because they are what to drink, not eat in Fijian languages (Schütz 2014: 309). In addition, the verb *homu* 'drink' is used for fruits.

(30) Neutral

le-qu were
CLF.N-1SG house
'my clothes'

A possessor of common noun is placed after the head (31).

(31) le-e veni na kwāhewa

CLF.N-3SG pen ART child

'clothes of the child'

Schütz (1985, 2014) uses "possessive classifiers" for these classifiers. Instead, Lichtenberk (1983) coined the term "relational classifiers" to refer to classifiers in SF. Relational classifiers differ from possessive classifiers in that they are chosen based on the relationship that exists between a possessor and a possessed item (Aikhenvald 2003: 144-6, Aikhenvald 2013: 21). That is, a classifier is not determined by the property of a possessed noun itself.

The same analysis applies to Vatulele Fijian. (32) shows that the same noun *yaqona* 'kava' follows different classifiers to convey different meanings. (32)a implies that the possessor 'I' possess *yaqona* 'kava' for drinking, whereas (32)b implies that 'I' possess it for selling, giving, and so forth.

As its name implies, an unmarked classifier le- is widely used. One of its functions is to indicate a subject of clausal nominalization. As discussed in Section 5.1, there is no overt morphological change required for a verb to function as an argument. Instead, a possessive pronoun indicates that the following verb functions as an argument. In (33), $l\bar{a}$ 'go' undergoes no nominalization process at all but lemu 'your' shows that it is an argument rather than a predicate.

(33) Qu dani-a le-mu lā mā

1SG see:TR-3SG CLF.N-2SG go HITHER

'I saw your coming'

Compare (33) and (34). In (34), $l\bar{a}$ 'go' function as a predicate, which is signaled by the bound pronoun o (for bound pronouns, see Section 5.2).

(34) $O = l\bar{a} = m\bar{a}$ 2SG go HITHER 'You came'

Possessive pronouns and bound pronouns are mutually exclusive. The former shows that the subsequent word is an argument, whereas the latter shows that it is a predicate.

Possession in Vatulele Fijian is interesting in that a different classifier is used depending on whether the possessor is an agent-like or a patient-like. In (35), the same noun *itukutuku* 'story' appears in nominal possessive construction. In (35), the possessor 'you' is who tells a story. In this case, the classifier *le*- is selected.

(35) *le-mu itukutuku*CLF.N-2SG story

'your story (story which you tell)'

In (36), on the other hand, the possessor 'you' is the topic of a story, that is, a story is about the possessor 'you.' Such a possessor is marked by the edible classifier *ke*-.

(36) ke-mu itukutuku

CLF.E-2SG story

'your story (story about you)'

Geraghty (1983: 248) calls them active and passive possession, respectively.

Before concluding this section, consider the combined forms of a classifier and the third person singular -e, such as $l\bar{e}$, $k\bar{e}$, and $m\bar{e}$. They are phonologically independent because they are long vowels. However, they have short vowel alternative forms, such as le, ke, and me. These

alternative forms are not phonological words themselves, so they are phonologically dependent on the following word. In the same way as the article na, they form a diphthong with the nominalizer i-, resulting in a mismatch between phonology and grammar (see Sections 4.3 and 9.2.1). In (37), the nominalizer i is phonologically fused with le 'his,' but it is grammatically attached to the following verb vola 'write.'

(37) *le+i-vola*CLF.N:3SG+NMLZ-write
'his book'

What is more interesting is that the nominalizer i may be attached to the preceding independent phonological word. In (38), the nominalizer i is combined with lemu 'your,' with the stress being on the diphthong [ui].

(38) le-mu+i-sele

CLF.N-2SG+NMLZ-cut

'his knife'

The phenomenon like (38) is similar to the prepositional verb construction discussed in Chapter 9 in that the phoneme /i/ attaches to a phonological word, resulting in the stress shift (see Section 9.2.3).

10.2.2. Predicative possession

This section describes the predicative possession in Vatulele Fijian within Stassen's (2013) typological framework.

10.2.2.1. Previous studies

Stassen (2013) provides five types of predicative possession with examples from various languages (39). Among them, Have-possessive uses a transitive verb as predicate (39)a. Other four types contain an existential verb as a predicate (39)b-e.

- (39) Five types of predicative possession (Stassen 2013, his glosses and translations)
 - a. Have-possessive: West Greenlandic

Angut taanna qimmi-qar-puq

man that dog-have-3SG.IND

'That man has dogs' (Fortescue 1984: 171)

b. Locational possessive: Written Mongolic

Na-dur morin bui

1sg-at horse be.3sg.pres

'I have a horse (lit. 'At me is a horse)' (Poppe 1954: 147)

c. Genitive possessive: Avar (Daghestanian, Caucasus)

Dir mašina b-ugo

1SG.GEN car III-be.PRES

'I have a car' (Kalinina 1993: 97)

d. Topic possessive: Tondano (Austronesian, northern Sulawesi)

Si tuama si wewean wale rua

ANIM.SG man TOP exist house two

'The man has two houses (lit. As far as the man is concerned, there are two houses)'

(Sneddon 1975: 175)

e. Conjunctional possessive: Sango (Adamawa-Ubangi, Central African Republic)

Lo eke na bongo

3SG be and/with garment

'She has a garment' (Samarin 1967: 95)

According to typological studies on predicative possession, Fijian is a locative possessive language (Heine 1997: 51, Stassen 2009: 130, 755, Stassen 2013). Dixon (1988) provides examples of locational possessive construction in Boumā Fijian. In (40), the existential verb *ti'o* is used. The possessed noun *pua'a* 'pig' appears as an intransitive subject whereas the possessor *au* 'me' is indicated by the preposition *vei*.

(40) BF:
$$S\bar{a}$$
 ti'o vei au e dua a pua'a

ASP be OBL 1SG 3SG one ART pig

'I now have a pig (lit. a pig is now to me)'

(Dixon 1988: 128)

In SF, both locational and genitive possessives are observed. (41) is an example of locational possessive, in which the possessor is marked by the preposition *vei*.

(41) SF:
$$E$$
 $t\bar{u}$ vei au e dua na $ilavo$

3SG be OBL 1SG 3SG one ART money

'I have some money (lit. some money is to me)' (Milner 1956: 59)

In genitive possessive (42), on the other hand, the possessor occurs as a possessive suffix within an NP. Note that in (42) the predicate is *dua* 'one.' Stassen (2009: 31) calls this phenomenon "quantifier/modifier-raising."

Okamoto (2021) explores how locational and genitive possessive are selected in SF within the framework of Heine (1997) (43).

- (43) Possessive relationship (Heine 1997: 34-5)
 - a. Physical possession (PHYS) I want to fill in this form; do you have a pen?
 - b. Temporary possession (TEMP) I have a car that I use to go to the office but it belongs to Judy.
 - c. Permanent possession (PERM) Judy has a car but I use it all the time.
 - d. Inalienable possession (INAL) I have blue eyes/two sisters.
 - e. Abstract possession (ABST) He has no time/no mercy.
 - f. Inanimate inalienable possession (IN/I) That tree has few branches.
 - g. Inanimate alienable possession (IN/A) That tree has crows on it.

I claim that locational possessive expresses impermanent and temporary possession, whereas genitive possessive is widely used (Table 10-3).

Table 10-3: Predicative possession in SF

	IN/A	PHYS	TEMP	ABST	PERM	INAL	IN/I
Permanence	_	_	_	+/-	+	+	+
Locational	+	+	+	+	_	_	_
Genitive	_	+	+	+	+	+	+

(Okamoto 2021: 57)

My conclusion is that the prototypical predicative possession of SF is genitive possessive rather than locational possessive.

10.2.2.2. Predicative possession in Vatulele Fijian

The generalization of predicative possession in SF suggested by Okamoto (2021) holds for Vatulele Fijian. Thus, genitive possessive is mainly used, whereas locational possessive is restricted to temporary possession.

In genitive possessive, a possessor is indicated by a possessive pronoun (and a classifier if needed). Body parts and kinship relations are typical permanent possession and expressed only by genitive possessive. This is because the majority of body parts and kinship terms are bound nouns, which require a possessive pronoun. (44) and (45) are examples of body parts. In these cases, the possessor is expressed by a possessive prefix.

- (44) Ai karakarawa e-mata

 3SG.NPST blue 3SG-eye

 'He has blue eyes (lit. his eyes are blue)'
- (45) Ai balavu e-ulu

 3SG.NPST long 3SG-head

 'She has long hair (lit. her head is long)'
- (46) is another example of genitive possessive. *kwāhewa* 'child' is not a bound noun, so the possessor is signaled by the neutral classifier *le*-.

(46) Ai tolu le-e kwāhewa

3SG.NPST three CLF.N-3SG child

'He has three children (lit. His children are three)'

It is worth noting that quantifier/modifier-raising is common in Vatulele Fijian, especially for direct possession, because the possessive relationship is expected by definition in inalienable possession. For instance, eyes must be somebody's eyes, and it is unlikely that there are eyes possessed by nobody. Therefore, the property of a possessed noun is foregrounded. In (44), instead of 'he has blue eyes,' they say 'his eyes are blue.'

Permanent possession, or ownership is expressed by genitive possessive (47).

(47) Ai levu le-e ilavo

3SG.NPST big CLF.N-3SG money

'He has lots of money (lit. His money is big)'

A possessed item can be an abstract thing (48).

(48) Ai hila le-e kalugata

3SG.NPST one CLF.N-3SG luck

'He has a luck (lit. His lucy is one)'

For temporary possession, on the other hand, both genitive and locational possessives are used. A possessor is indicated by a preposition in locational possessive. Genitive possessive always implies an ownership (49).

(49) Ai nō le-mu veni?

3SG.NPST exist CLF.N-2SG pen

'Do you have a pen? (lit. Does your pen exist?)'

Locational possessive, on the other hand, not always means that there is an ownership relationship. (50) merely means that a pen is at hand of 'you' and the possessor might not be 'you.'

(50) Ai nō veiko na veni?

3SG.NPST exist OBL:2SG ART pen

'Do you have a pen? (lit. A pen exist to you?)'

The structure of a locational possessive is the same as that of an existential expression. In other words, a possessed item appears as a theme, whereas a possessor appears as a location. According to Heine (1997), a construction like (51) is a subtype of possession with an inanimate possessor.

(51) Ai tolu na tēveli i na rumu

3SG.NPST three ART table OBL ART room

'The room has three tables (lit. The tables are three in the room)'

(51) is parallel with the possessive construction like (50) above. This means that the possessive construction is continuous with the existential construction.

In addition to genitive and locational possessives, which of both utilize existential verbs and numerals, the multifunctional prefix $v\bar{a}$ - is also used for possession (52) (see Section 6.3.3).

(52) Ai vā-waji na tamata
3SG.NPST PROP-spouse ART man
'The man has a spouse'

Further investigation is needed to clarify what type of possession is expressed by $v\bar{a}$ -.

10.3. Summary

This chapter discussed existential and possessive expression in Vatulele Fijian. One of interesting points of Vatulele Fijian is the use of a numeral for existential expression. When the number of references is irrelevant, *hila* 'one' expresses existence.

As revealed in Chapter 6, Vatulele Fijian prefers the transitive construction, so one may expect that possession is also expressed by transitive verbs. However, this is not the case. As demonstrated in this chapter, possessive expression is continuous with existential expression. According to Stassen (2013), transitivization or HAVE-Drift often occurs in topic and conjunctional possessive and rarely in locational possessive. In Vatulele Fijian, locational

possessive is not transitivized. In (53) (= (50)), the subject is not the possessor but the possessed item, as confirmed by the bound pronoun ai.

A bound pronoun at the left edge of a predicate never agrees with a possessor (54).

This means that Vatulele Fijian does not allow what is called "dative subject construction." A possessor NP of the possessive construction does not have any features of a subject.

To put it slightly differently, existential verbs and numerals never function transitively. The desiderative construction supports this fact. The pre-head modifier $mat\bar{a}$ is used when the "wanter" is coreferential with the subject of an event (Section 5.3.1.5) (56).

This $mat\bar{a}$ is not used for predicative possession because the possessor is not the subject of possessive construction (56).

Instead, the lexical verb *vinājia* 'want' is used with a complement clause (57).

(57) Qi vinā-ji-a me hila le-qu gwata

1SG.NPST want-TR-3SG SUB.IRR:3SG one CLF.N-1SG snake

'I want to have a snake (lit. I want that my snake exists)'

Namely, there is a clear distinction between core and peripheral arguments in Vatulele Fijian. A core argument appears without a preposition, whereas a peripheral argument must cooccur with it.

11. Conclusion

This thesis described the predicate structure and valency changing processes of Vatulele Fijian and compared them to other Fijian languages. Although this was a descriptive work, several typological considerations were included to reveal uniqueness of the language.

Chapter 2 provided an overview of Vatulele Fijian phonology, which serves as the foundation for subsequent discussion. Overall, it is a typical Oceanic phonological system, that is, a five-vowel system, an open-syllable structure, and a penultimate-stress rule. Chapter 3 was a language grammar sketch. Some aspects discussed in this chapter were explored later.

Chapter 4 discussed what a "word" is in Vatulele Fijian. This is because a phonological boundary does not correspond to a grammatical boundary in Fijian languages. I concluded that Vatulele Fijian has two types of words: phonological words and grammatical words. A phonological unity does not trigger a grammatical one, and vice versa. For example, NI is one grammatical word but consists of two (or more) phonological words. In contrast, a prepositional verb constitutes one single phonological word but never functions as one grammatical word, that is, a transitive verb. I also demonstrated that there are some mismatches between the two kinds of words.

Some linguistic features are shared by Vatulele Fijian and other Fijian languages such as SF. Chapter 5 demonstrated the structure of the predicate. Because a predicate head is not limited to a verb, establishing word classes in Fijian languages is difficult. This study distinguished lexical classes (noun, verb, etc.) from syntactic functions (argument, predicate, etc.). Vatulele Fijian has a "weak" relationship between lexical classes and syntactic functions, where both a noun and a verb can function as an argument and as a predicate. A predicate includes bound pronouns that agree with core arguments in a clause. In addition to these bound pronouns, optional modifiers occur in a predicate. Vatulele Fijian can be considered a head-marking language based on these characteristics.

Chapters 6 revealed that Vatulele Fijian is dominantly a "transitivizing language," which means that the language tends to derive a transitive verb from an intransitive one, not vice versa. This generalization seems to hold for other Fijian languages. Typical transitive verbs are formed by adding the suffix -*Ci* or -(*Caki*)*ni*. When a verb has a high semantic transitivity such as *vāmate* 'kill' and *vāmudre* 'burn,' it functions transitively without the transitive suffix.

Chapter 7 dealt with ditransitive verbs, i.e., verbs that require three arguments: an agent argument, a recipient-like argument, and a theme argument. The analysis of ditransitive verbs in

this study calls into question Malchukov et al.'s (2010) typological model. To be precise, the position of THROW verbs in the semantic map may need to be reconsidered (see Section 7.3).

Other linguistic aspects discussed in this thesis, on the other hand, are not described or reported in other Fijians. In Chapter 8, I showed that NI in Vatulele Fijian can be transitivized, having another object. Oceanic languages have never been identified as having this type of NI by typological studies. The fact that NI undergoes transitive derivation supports the idea that NI is intransitive in Vatulele Fijian. According to Mithun (1984), NI in Vatulele Fijian is now progressing to the next stage of development.

Another point peculiar to Vatulele Fijian is the prepositional verb construction (see Chapter 9). In this construction, the preposition acts like a suffix to the preceding element. Previous research has not described this construction. Some syntactic operations support that a prepositional verb is not a grammatical word, although it constitutes a phonological word.

As previously stated, Vatulele Fijian is a transitivizing language, so possession would be expected to use the transitive construction. However, it is not expressed by the transitive construction. Rather, the existential construction is used for possession (see Chapter 10).

Vatulele Fijian is a language that strictly distinguishes between core and peripheral arguments. There are no examples of peripheral arguments acting like core arguments. An NP after a prepositional verb does not exhibit any morphosyntactic characteristics of an object (see Section 9.3). Similarly, even in the possessive construction, an argument with the preposition can never be a subject (see Section 10.3).

There are numerous issues that have yet to be addressed. "Complex sentences" received little attention in this thesis. Furthermore, information structure, which should be correlated to the word order, was not considered in this study. Such "larger units" are to be described in future. Because this study focused on the predicate structure and valency changing processes, other word classes such as nouns and adjectives need to be described in another study.

Few diachronic explanations were provided because this thesis focused on a synchronic description of grammar. In future, historical description should be compared to other Fijian languages, particularly Western varieties.

References

- Aikhenvald, A. Y. 2003. Classifiers: A typology of noun categorization devices. Oxford: Oxford University Press.
 _______. 2013. Possession and ownership: A cross-linguistic perspective. In: A. Y.
 Aikhenvald and R. M. W. Dixon (eds.) Possession and ownership: A cross-linguistic typology, 1-64. Oxford: Oxford University Press.
- Asao, Y. 2014. Left-right asymmetries in affixes, clitics and compounds: Towards a unified account. The 148th LSJ Meeting Handbook: 314-319.
- . 2015. *Left-right asymmetries in words: A processing-based account*. A dissertation submitted to the Faculty of the Graduate School of the University at Buffalo.
- Bloomfield, L. 1933. Language. New York: Holt., Rinehart & Winston.
- Blust, R. 2013. *The Austronesian languages*. Revised edition. Canberra: Asia-Pacific Linguistics, School of Culture, History and Language, College of Asia and the Pacific, Australian National University.
- Bodomo, A. 1997. The structure of Dagaare. Stanford: CSLI Publications.
- Broschart, J. 1997. Why Tongan does it differently: Categorial distinctions in a language without nouns and verbs. *Linguistic Typology* 1(2), 123-166.
- Bybee, J. L, W. Pagliuca and R. D. Perkins. 1990. On the asymmetries in the affixation of grammatical material. In: W. Croft, K. Denning and S. Kemmer (eds.) *Studies in typology and diachrony: Papers presented to Joseph H. Greenberg on his 75th birthday*, 1-42. Amsterdam/Philadelphia: John Benjamins.
- Churchward, C. M. 1941. *A new Fijian grammar*. Sydney: Australasian Medical Publishing Company.
- . 1953. *Tongan grammar*. Oxford: Oxford University Press.
- Craig, C. and K. Hale. 1988. Relational preverbs in Some languages of Americas: Typological and historical perspectives. *Language* 64, 312-44.
- Dixon, R. M. W. 1988. A grammar of Boumaa Fijian. Chicago: University of Chicago Press.
- ______. 2010. *Basic linguistic theory: Grammatical topics*. Volume 2. Oxford: Oxford University Press.
- Dixon, R. M. W. and A. Aikhenvald. 2002. Word: A typological framework. In: R. M. W. Dixon and A. Aikhenvald (eds.) Word: A cross-linguistic typology, 1-41. Cambridge: Cambridge University Press.

- Dryer, M. S. 2007. Word order. In: T. Shopen (ed.) *Language typology and syntactic description:*Clause structure. Volume 1. Second edition. 61-131. Cambridge: Cambridge University Press.
- Ewins, R. 2009. *Staying Fijian: Vatulele Island barkcloth and social identity.* Honolulu: University of Hawaii Press.
- Fortescue, M. 1984. West Greenlandic. London: Croom Helm.
- Frantz, D. G. 1971. *Toward a generative grammar of Blackfoot*. Norman, OK: University of Oklahoma and Summer Institute of Linguistics.
- Frawley, W. 1992. *Linguistic semantics*. Hillsdale, NJ, Hove and London: Lawrence Erlbaum Associates.
- Gatty, R. 2009. Fijian-English dictionary: With notes on Fijian culture and natural history. Suva: Oceania Printers.
- Geraghty, P. A. c.1970s. Field notes of Vatulele Fijian (unpublished).

 ________. 1983. The history of the Fijian languages. Honolulu: University of Hawaii Press.

 ________. 2002. Nadrogā. In: John Lynch, Malcolm D. Ross and Terry Crowley (eds.) The

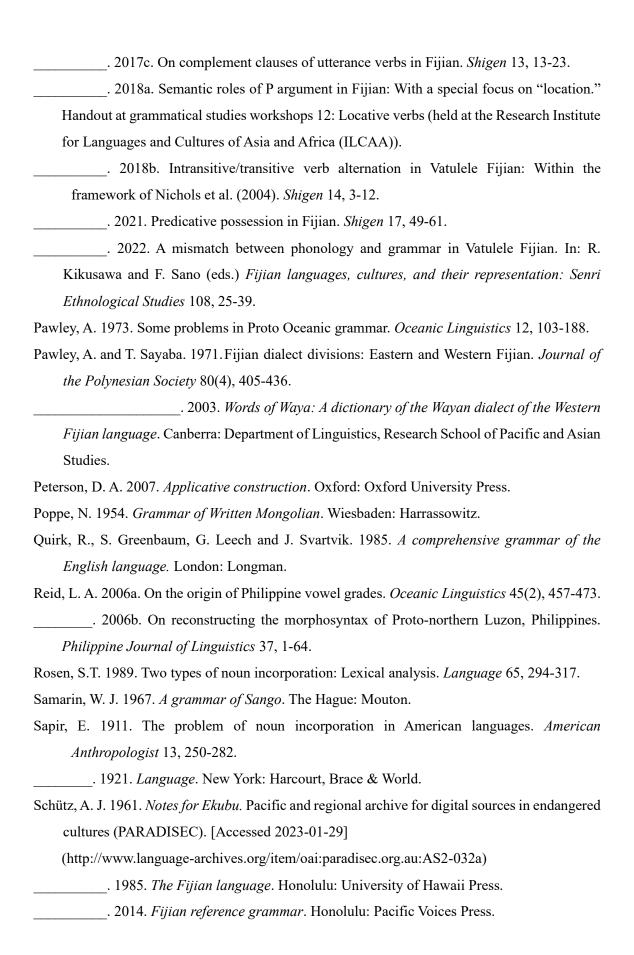
 Oceanic languages. 833-847. Richmond, Surrey: Curzon Press.

 _______. 2022. Indigenous languages of Fiji: an overview. In: R. Kikusawa and F. Sano

 (eds.) Fijian languages, cultures, and their representation: Senri Ethnological Studies 108,
 9-24.
- Gerdts, D. B. 1998. Incorporation. In: A. Spencer and M. Arnold Zwicky (eds.) *The Handbook of Morphology*, 84-100. Oxford: Blackwell.
- Hale, H. 1846. A grammar and vocabulary of the Vitian language. In: Ethnology and philology, United States Exploring Expedition 1838-42, vol 6, 365-424. Philadelphia: Lea and Blanchard.
- Haspelmath, M. 2011. On S, A, P, T and R as comparative concepts for alignment typology. *Linguistic Typology* 15(3), 535-567.
- Haspelmath, M. and A. D. Sims. 2010. *Understanding morphology*. Second edition. London: Hodder Education.
- Heine, B. 1997. *Possession: Cognitive sources, forces and grammaticalization.* Cambridge: Cambridge University Press.
- Julien, M. 2006. Word. In: K. Brown (ed.) *Encyclopedia of language and linguistics*. Second edition. 617-624. Amsterdam: Elsevier.

- Kalinina, E. 1993. Sentences with non-verbal predicates in the Sogratl dialect of Avar. In: A. E.Kibrik (ed.) *The noun phrase in the Andalal Dialect of Avar as spoken at Sogratl*, 90-104.Strasbourg: Eurotyp Working Papers.
- Kikusawa, R. 2000. Transitivity and verb forms in Fijian. In: R. Kikusawa and K. Sasaki (eds.) *Modern approaches to transitivity*, 29-51. Tokyo: Kurosio.
- Kimenyi, A. 1980. *A relational grammar of Kinyarwanda*. Berkeley: University of California Press.
- Kroeber, A. L. 1909. Noun incorporation in American languages. In: H. Frantz (ed.) XVI Internationaler Amerikanisten-Kongress, 569-576. Vienna & Leipzig: Hartleben.
- Lichtenberk, F. 1983. Relational classifiers. *Lingua* 60, 147-176.
- Luuk, E. 2010. Nouns, verbs and flexibles: implications for typologies of word classes. *Language Sciences* 32, 349-365.
- Lynch, J. 1998. Pacific languages: An introduction. Honolulu: University of Hawaii Press.
- Lynch, J., M. D. Ross, and T. Crowley (eds.) 2002. *The Oceanic languages*. Richmond, Surrey: Curzon Press.
- Malchukov, A., M. Haspelmath, and B. Comrie. 2010. Ditransitive constructions: a typological overview. In: A. Malchukov, M. Haspelmath, and B. Comrie (eds.) *Studies in ditransitive constructions: A comperative handbook*, 1- 64. Berlin: De Gruyter.
- Massam, D. 2001. Pseudo noun incorporation in Niuean. *Natural Language and Linguistic Theory* 19, 153-197.
- Matthews, P. H. 1974. Morphology. Cambridge: Cambridge University Press.
- Milner, G. B. 1956. Fijian grammar. Suva: Fiji Government Press
- Mithun, M. 1984. The evolution of noun incorporation. *Language* 60, 847-894.
- Nichols, J., D. A. Peterson and J. Barnes. 2004. Transitivizing and detransitivizing languages. *Linguistic Typology* 8(2), 149-211.
- Okamoto, S. 2016a. Transitive verbs with no suffix in Fijian. *The 153rd LSJ Meeting Handbook*, 342-347.

. 2016b. Ditransitive verbs and throwing verbs in Fijian. Shigen 12, 31-39.
 2017a. Transitive clause and noun incorporation in Fijian. Unpublished master's
thesis, Tokyo University of Foreign Studies.
 . 2017b. An RRG analysis of noun incorporation in Fijian. Handout at the biannual
international conference on Role Reference Grammar 2017 at University of Tokyo, Tokyo,
Japan.



- Sneddon, J. N. 1975. *Tondano phonology and grammar* (Pacific Linguistics, Series B, 38). Canberra: Australian National University.
- Stassen, L. 2009. Predicative possession. Oxford: Oxford University Press.
- 2013. Predicative possession. In: M. S. Dryer and M. Haspelmath (eds.) *The world atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. (http://wals.info/chapter/117 [Accessed 2023-01-29])
- Tamata, A. 2003. The Fijian transitive ending -(C)aki/a in loan words. Journal of Asian and African Studies 65, 207-227.
- Tsunoda, T. 1985. Remarks on transitivity, Journal of Linguistics 21, 385-396.
- van Urk, C. 2020. Object licensing in Fijian and the role of adjacency. *Natural Language and Linguistic Theory* 38, 313-364.
- Austronesian Comparative Dictionary [Accessed 2023-01-29] https://www.trussel2.com/ACD/
- Vatulele (Tikina, Fiji) Population Statistics, Charts, Map and Location [Accessed 2023-01-29] https://www.citypopulation.de/en/fiji/admin/nadroga_navosa/0808_vatulele/