A Grammar Sketch of Natqgu [ntu]:
An Oceanic language of Santa Cruz, Solomon Islands

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1. Introduction[1]

1.1 About Natqgu [ntu] language

Natqgu [ntu], also spelled Natügu, is an Austronesian language, of the Temotu sub-group of Oceanic (Ross & Næss 2007). It belongs to the Reefs-Santa Cruz (RSC) languages, comprised of Äiwoo [nfl] (Næss, multiple refs) in the Reef Islands, and the three other Santa Cruz (SC) languages—Engdewu [ngr] (Vaa 2013), Nalögo [nlz] (Boerger 2008, Boerger & Zimmerman 2012, Alfarano 2021) and Noipä [npx] (Boerger 2017).

Natqgu is spoken by nearly 5,000 people living in the home area on Santa Cruz Island, in Temotu Province, the easternmost province of Solomon Islands. Maps are included in the separate PDF, *Background and Technical Guide*. Natqgu is concentrated in Graciosa Bay's fourteen villages and forms a dialect chain that reaches from Baengr (Mbaengö) on the west coast, going along the bay and across the north coast as far as Nokz (Noka) in the northeast. The north coast villages are primarily earlier settlements by speakers from Graciosa Bay, but also include settlements by speakers of other languages from the province. Natqgu is also spoken by Santa Cruz Islanders who reside in the national capital, Honiara, or who have intermarried with speakers of other languages. The variety spoken in Bznwz village was identified as having the highest status and being understood by the most speakers of more distant villages (Simons 1977).

Earlier descriptions of Natqgu were undertaken in part by Wurm (1970, 1978, 1992), but to date, no grammar or grammar sketch has been produced. More recently, aspects of Natqgu have been described in the literature[2]. Some key grammatical properties of Natqgu warrant foreshadowing here before the more detailed discussion later.

One feature that distinguishes Natqgu from many other Oceanic languages is its distinct lack of reduplication for any purpose. However, exact repetition is used in narratives for stylistic purposes.

The person and number enclitics are also unusual. Natqgu has two sets of person and number enclitics, a primary set (Set I) normally used on verbs to signal subjects, and a secondary set (Set II), (van den Berg & Boerger 2011), which can sometimes replace the Set I enclitics, and with the same Set II forms also modifying free pronominal forms and possessives. Like the other Santa Cruz languages,[3] Natqgu has a minimal-augmented enclitic pronominal system with four basic persons: first person, first+second person ('you and I'), second person, and third person, which occur in two numbers, minimal and augmented. Nouns are either possessed directly or indirectly by the use of nine possessive classifiers and generic genitives, (§3.6).

In terms of clause structure, also like other SC languages (Alfarano & Boerger 2022), Natqgu has a transitivity-based clause system with 16 valency-changing morphemes. Intransitive clauses have one core argument S (subject). When the S argument is an NP, the word order is SV, but can change to VS when S is a pronominal enclitic. The third person augmented in both Set I

[1] I am indebted to scholars working on other Santa Cruz languages. I have leaned heavily on the grammars of Nalögo (Alfarano 2021) and Engdewu (Vaa 2013) in this write up. I'm also grateful to Åshild Næss, Paul Unger, and Deborah Hill, the latter in her role as *TILP* editor, whose comments on drafts of the grammar sketch significantly improved its accuracy, clarity and flow.

[2] Boerger 1996, Boerger 2007, Næss & Boerger 2008, Boerger 2009, Lober & Boerger 2009, Van den Berg & Boerger 2011, Boerger et al 2012, Boerger 2013, Boerger 2019, Lackey & Boerger 2021, Alfarano & Boerger (2022), and Næss, Alfarano, Boerger & Vaa, (To appear). My fieldwork on Natqgu was supplemented by two 12-month Documenting Endangered Languages Fellowships in 2010–11 (#FN-50063-10) to work on the grammar and in 2015–16 (#FN-230212-15) to work on the lexicon.

[3] Äiwoo has an additional number that adds one to the minimal set, for a third distinction called unit-augmented (Næss & Boerger 2008).

and Set II is a circumfix form with a prefix and a subject enclitic. Transitive clauses display two core arguments A (agent) and O (object), in the word order VAO, where A is either a nominal argument or a person and number enclitic. [4]

Subordinate clauses and most peripheral arguments occur post-verbally. Peripheral arguments are communicated by a varied collection of prepositions, conjunctions, and verb-internal valency changing devices, which license additional arguments, as described in §7.

The fieldwork and primary text are described in the *Background and Technical Guide.*

2. Phonology

2.1 Phonemes

While there are clearly cognates of ProtoOceanic (POc) in Natqgu, there has also been considerable change in the vowels between the POc system and Natqgu (Lackey & Boerger 2021). In fact, Natqgu has 10 oral and five nasalized vowel phonemes, as in Table 1 (Andrews 2020). In place of the IPA symbols /y/ and /ɵ/, I use instead the symbols <ü> and <ö> respectively. Similarly, in place of /j/, I use the symbol <y> for the glide. These adjustments make the prose flow more smoothly in the sections which follow, and correlate better with both the earlier and later orthographies.

Table 1. Natqgu vowels

	oral			**nasal**		
	front	central	back			
high	i, ü		u			
mid	e, ö		o	ẽ		
		ə	ɔ		ə̃	ɔ̃
low	æ	a		æ̃	ã	

In addition, Natqgu has 14 consonant phonemes as identified in Table 2. The voiced stops are optionally prenasalized with the oldest speakers preferring prenasalization and the youngest speakers normally choosing not to use it, except in some fixed expressions.

Table 2. Natqgu consonants

	labial	**alveolar**	**palatal**	**velar**
voiceless stop	p	t		k
voiced stop	b	d		g
nasal	m	n		ŋ
fricative	ß	s		
lateral		l		
semivowel	w		y	

These consonants combine to produce the following word-initial consonant clusters: *pw, bw, mw, tw, dw, nw, gw, py, by, my, ny, ky, ngy, pl, bl, gl, pn, mn,* and *lv* [lß]. The most unusual of these is [lβ], in which [l] is not syllabic. This sequence violates the sonority sequencing principle (Parker 2012) which prefers that initial cluster sequences exhibit increasing sonorance approaching the nucleus of the syllable. That is, the clusters like *pl, bl*, and *gl,* start with a stop and the more sonorant liquid *l* follows, and is in turn followed by a vowel. But the verb *lvc* 'fly' has an *lv* sequence, where sonority does not increase approaching the vowel. That is, even though the liquid *l* is more sonorous than the voiced fricative *v*, the *l* precedes *v*.

The maximum syllable template is [CXV)]σ_{max}, in which X is a consonant or a vowel.

[4] Some theories prefer P patient (Kroeger 2004), rather than O object, but I maintain the S, A, and O terminology published by other authors working on Reefs-Santa Cruz languages. See discussion in 3.1.

2.1.1 Diphthongs and vowel-vowel patterns

Given the ten oral vowels of Natqgu, there are 100 possible vowel-vowel combinations. Pronunciation depends on several factors: slow vs. fast speech, emphatic vs. non-emphatic speech, stressed vs. unstressed syllables, and morpheme boundaries.

The diphthongs of Natügu involve a progression from open to more closed, i.e. lower to higher, with the first, more open vowel as nucleus and the closed one acting as an off glide. The preferred second position vowels, then, are [i] and [u]. The attested diphthongs within a single morpheme are listed here: with initial [a]—/ae/, /ai/, /ao/, /au/, /aɔ/, /aü/, /aö/,

- with initial low (non-[a])—/æu/,
- with initial [e]—/ei/, /eu/,
- with initial mid—/oi/, /ou/, /öi/, and /əu/.

We see that /a/ initiates seven diphthongs and /æ/ one, for a total of eight which start with low vowels. In addition, there are six diphthongs which start with mid vowels. Every vowel is a member of at least one diphthong.

There is frequently a difference between the pronunciation of vowel sequences within a morpheme and those produced at the junction of two morphemes. For example, /kai/ [kʰay] ‘first’ is articulated as a diphthong, while /na-iklö/ composed of an irrealis prefix with the verb root ‘sprinkle,’ is pronounced [na.'i.kʰlö]. If the second vowel of a two vowel sequence must occur in a position to receive stress, the vowels must be assigned to separate syllables.

Generally for vowel-vowel sequences, if the vowel sequence is HIGH-LOW, it is manifested as two syllables. If the vowel sequence is LOW-HIGH, it is one syllable.

2.2 Phonotactics

Words can begin with any consonant or vowel except the high front rounded vowel /ü/. Text analysis shows that the open syllable structure CV occurs most frequently (76%). The single vowel, V, is the next most frequently occurring syllable type (14%). Syllables composed of a consonant and two vowels CVV, occur 9% of the time. Closed syllables are infrequent, under 1% of the total. The final consonant in CVN syllables is always a nasal. The only true closed syllables involve these syllable-final nasals, whereas other apparent C-final words are actually an instance of the deletion of /ü/ or /u/ word-finally. See rule 4 below.

2.3 Stress

Natqgu, like most Oceanic languages, exhibits stress on the penultimate mora of a syllable. Single morphemes have been identified with from one to six syllables. Most roots are comprised of one, two or three syllables. Primary stress remains penultimate in multisyllabic complex words. The placement of secondary stress correlates with the basic foot type found in Natügu. Beyond one-syllable words the foot type is a syllabic trochee. That is, feet are left headed and quantity insensitive.

2.4 Orthography

The Natqgu vowel inventory is comprised of ten oral and five nasalized vowels. In an orthography suggested by Stephen Wurm (1970, 1978), the additional oral vowels beyond <a, e, i, o, u> were written using diacritics, as indicated below in Table 3. The nasalized vowels were marked with a tilde. A revised version of the old orthography has nasalization marked with a straight apostrophe following the vowel and the symbol for [ɔ] was changed from an underlined ‘o’ to *â*, in collaboration with linguists working in related languages. Note that both the old and new orthographies use ‘j’ for the affricate [dʒ] and ‘y’ for the glide [j], following their use in the orthography of English, the national language of Solomon Islands.

Table 3. Old and New Natqgu Vowel Orthographies

old	new	IPA	Examples		English glosses
a	a	a	*kalva*	*kalva*	betel nut
e	e	e	*neke*	*neke*	who, interrogative
i	i	i	*mibi*	*mibi*	rotten
o	o	o	*itoto*	*itoto*	infant
u	u	u	*tumu*	*tumu*	triggerfish
â	c	ɔ	*nâdâ*	*ncdc*	carrying stick from which things hang
ü	q	y (ü)	*nümü*	*nqmq*	way, tradition, character
ö	r	ɵ (ö)	*möbö*	*mrbr*	forget
ä	x	æ	*käökä*	*kxrkx*	that which is spicy
ë	z	ə	*ëvë*	*zvz*	always

In the mid-1990s the orthography was modified to facilitate typesetting at the time and to eliminate diacritics, such that *c, q, r, x* and *z* became vowel symbols, and a straight apostrophe replaced the tilde to indicate nasalization (Boerger 1996, 2007). Natügu was spelled Natqgu.

2.5 Morphophonemics

Natqgu exhibits a number of morphophonemic rules, primarily relating to labial consonants and rounded vowels. Most of the rules are more like principles, in that they vary between speakers, dialects, and registers and their triggering environments also show some variation. Some dialect differences are accounted for by differences in rule ordering. Over all, these capture the predominant processes in Natqgu.[5]

2.5.1 **Rule 1. Consonant epenthesis, with [n] (or [l]) insertion**

Three members of Set I person and number enclitics (Table 6, §3.1) begin with vowels: *=x* 'first person minimal', *=q*, 'second person minimal,' and *=amu* 'second person augmented.' To break up a vowel+vowel sequence created when the preceding morpheme ends in a mid vowel, an epenthetic [n] (or sometimes [l]) is optionally inserted between the two morphemes. Older speakers prefer the insertion, younger ones do not.

(1) *Öpiobële badö kä "Nike tükuki-ngö**namu**?"*

r-pi-o-bz=le		ba=dr	kx
MID-say-GDIR.down-PDIR.yon=3MINIA		DAT=3AUGII	SUBR
nike	tq-kuki-ngr=**amu**		
what	RL-cook-APPL=2AUGI		

'He said down to them, "What are you cooking?"' (33.17)

In the first line of sentence (1), look at the last word in the direct speech quotes. The /n/ of *namu* is epenthetic. It is not included in the analysis lines.

2.5.2 **Rule 2. Assimilation - Devoicing**

Devoicing occurs across morpheme boundaries when a morpheme beginning with a voiceless stop, usually /t/ or /k/, precedes a morpheme beginning with a voiced bilabial consonant, that is, either /m/ or /b/.

(2) *X **nëalvëtöplö** bagö kämu nëöpna'ngö më pu ä nëotangö më tokiö vea.*

x	**nz-alvztr-mq=lr**			bagr		kxmu	nzrpna'ngr
and	3AUG-teach-PDIR.hither=3AUGIA			DAT=1AUGII		how	shooting
mz	pu	x	nzotangr	mz	toki-r-vea		
PREP	gun	and	fighting	PREP	knife-GEN1B-war		

'And they taught us how to shoot with guns and to fight with swords.' (52.09)

[5] Abbreviations are found in Appendix A.

In sentence (2), compare the second word, *nëalvëtöplö,* to the morpheme line to see that the form underlying 'p' is actually *-mq* 'PDIR.hither.' In it, the 'm' has devoiced to 'p' by rule 2 and then the final 'q' in *-pq* is deleted by rule 4.

2.5.3 Rule 3. Metathesis and Class Change

In most dialects the final *-u* 'neg' of the circumfix negative is transposed with the immediately preceding person and number marker and subsequently changes from /u/ to /w/. Some speakers have both metathesis and also add a further *-u* 'neg' anyway.

(3) *X vea-mâpü bange "**Tödwatöwamu** më naonöä lâ?"*

x	vea-mou-mq=Ø		ba=nge	**tr-dwa-tr=amu-u**
and	ask-again-PDIR.hither=3MINIS		DAT=1MINII"	NEG-jump-GDIR.in=2AUGI-NEG
mz	naonrx	lc		
PREP	doorway	DEM1.DIST		

'And he questioned me further, "You didn't go inside that doorway, did you?"' (06.07)

In sentence (3), look at *tödwatöwamu* 'you didn't go in'. Note that *-u* 'neg' in the morpheme line has jumped over the entire preceding morpheme and not just the immediately preceding sound, and it has changed to [w] in the context of the following [a], maintaining a CV sequence.

(4) *Dâkta badö kru kâng **nëpötë-mopwëng** më lâsu nëötöngëtiolö Këpten, nëötâo-ngödö më bot.*

dckta	badr	kru	kc-ng	**nz-prtz-mou-bz=ngq**	mz	lcsu	
doctor	COM.PL	crew	DEM2.DIST-PL	3AUG-enter-again-PDIR.yon=3AUGIS	PREP	ship	
nz-rtrngz-ti-o=lr			kzpten	nz-rtc-o-ngr=dr		mz	bot
3AUG-do-TR-GDIR.down=3AUGIA			captain	3AUG1-throw-GDIR.down-APPL=3AUGII		PREP	boat

'The doctor and the crew reboarded the ship, they got the Captain, and threw him down into a boat.' (19.10)

Note that a similar metathesis and class change occurs when *mou* 'again' occurs before another morpheme starting with a bilabial consonant. In sentence (4), *-bz* becomes *-pz* by dissimilation and the final /u/ of *mou* methathesizes with /p/ and changes its class from vowel to a glide, yielding *pwz* of the surface form. If, on the other hand, the personal directional had been *-mq* rather than *-bz*, the same processes would have occurred, yielding *pwq* rather than *pwz*. In these sequences of morphemes, then, the only phone of the underlying personal directional which is preserved is its vowel, either /q/ or /z/.

2.5.4 Rule 4. Word/Syllable Final 'q' Deletion

Whenever 'q' occurs word-finally, it is deleted in fast speech, but may be retained in careful speech. This happens no matter what the preceding consonant is. This was illustrated by sentence (2) when *mq* became [p]. When the preceding consonant is a voiceless stop the 'q' can become aspiration. For example, *vz-tr-mq* |go-GDIR.in-PDIR.hither| 'come in' becomes [vztrp^h] with stress on *trp^h*. That is, penultimate stress is assigned, rule two applies, then rule 4 deletes [q], leaving stress where it originally occurred.

2.5.5 Rule 5. Dissimilation in the context of nasals:

When two consecutive morphemes begin with a voiced stop or nasal and a homorganic nasal, in either order, the first consonant of the second morpheme is changed to increase contrast between the morphemes. This can involve devoicing, denasalization, or a change in place of articulation.

Sentence (5a) illustrates /m/ in *-mq* 'hither' being denasalized and devoiced due to the previous morpheme also staring with /m/. In (5b) the sequence /ngr+nge/ becomes [ngrne], with the second velar nasal changed to an alveolar nasal.

(5) *a. Mëdealwä mwitä käpipëne ä sâ tümelëpe-**moupü**.*

Mzdealwx	mwi-tx=Ø	kx-pipz-ne	x	sc=
Mzdealwx	sleep-INTS=3MINIS	SUBR-few- INTS	and	PFV=

tq-melz=pe-**mou-mq=Ø**
RL-awaken=cos-again-PDIR.hither=3MINIS
'Mzdealwx slept just a little while and then he woke back up.' (23.13)

b. Skul kä mnâ-ayönö-ngöne dötüde Alankaulë.

skul	kx	mnc-ayrnr-ngr=nge	drtq=de	Alankaulz
school	SUBR	stay, live, be-first-APPL=1MINII	name=3MINII	Alangaula

'The school that I first lived at is named Alangaula.' (28.01)

2.5.6 Rule 6. Nasal maintenance rule

If a nasal consonant, frequently /m/, is denasalized to /p/ (due to assimilation rule 2 or dissimilation rule 5), the presence of the consonantal nasal may be maintained by shifting nasalization to the following /a/, /o/, or /c/ vowel, even if there is an intervening consonant.

(6) *Öpibë Mama kä, "Ninge Käakölë kä ngi naö skul ä **ni-këpâ'** Mama."*

r-pi-bz			mama	kx	ninge	kx-a-krlz	kx	ngi
MID-say-PDIR.yon			priest	SUBR	be=1MINII	SUBR-CAUS-know	SUBR	be
nar	skul	x	**ni-kz-mq=x**			mama		
head	school	and	be-also-PDIR.hither=1MINI			priest		

'Father said, "I am a teacher who is head of the school and I am also a priest."' (42.28)

In example (6), the underlying *ni-kz-mq=x* 'I am also' becomes *ni-kzpc'.* The voiceless /k/ of *kz* 'also' causes *-mq* 'hither' to devoice to *-pq*. Then a dispreference for 'q' plus 'x' sequences triggers a change from *=x* to *=c*, one of several variants of the first person minimal enclitic. The nasalization from /m/ in *-mq* is transferred to the vowel /c/ so its presence is preserved.

3. Nouns and Noun Phrases

3.1 Pronouns

As introduced and illustrated above, Natqgu has two sets of person and number enclitics. The primary set (Set I), to signal subjects and third person objects. The secondary set (Set II), replaces Set I enclitics in some contexts. The Set II forms also occur as enclitics in possessive constructions (column 6) and free pronominal forms (columns 4 and 5). In glossing the forms, the set to which an enclitic form belongs is indicated by I or II as part of its gloss.

These occur in a minimal-augmented system with four basic persons: first person, first+second person ('you and I'), second person, and third person, which occur in two numbers, minimal and augmented, as illustrated in Table 4.

Pronominal objects of transitive clauses often use the free pronouns of columns 4 and 5. In some contexts, the 3MIN and more rarely the 3AUG objects from column 2 are marked directly on verbs. These object forms are identical to the subject forms, except that as objects the 3AUG forms do not co-occur with a 3AUG prefix. The objects are identified by the presence of a subject already being present in the clause, either an enclitic subject preceding the enclitic object or with a following unbound nominal subject. Since I discuss transitivity using S, A, and O, I adopt P as part of the gloss for these third person objects. Some speakers attach the object enclitics to subject nouns as in 'wave/it' of *nzalxngitikr **ebio le*** 'the wave causing it to tilt' of example (49). Others attach an object enclitic (such as *=ng* 3AUG) to the verb with the subject (God) following, as in (110): *leplz kx ka-neba**=ng Gct** zmatq* 'people to whom God gives (them) power.'

The Set II pronominal enclitics of column 3 are triggered by two contexts: i) to mark subjects following the peripheral applicative (§7.6) and ii) to mark subjects of passive clauses (§7.7).

Column 4 of Table 4 shows that these free pronouns are made up of a base *ni-* 'be'[6] to which person and number enclitics are attached. Similarly, indirect object pronouns of column 5 have a dative base *ba-* to which the person and number enclitics are attached.

Table 4. Natqgu person and number enclitics

	Set I		**Set II**			
	1	**2**	**3**	**4**	**5**	**6**
Person	Verbal subject enclitics	Verbal object enclitics	Verbal enclitics	Free subject/ object pronouns	Free indirect object pronouns	Possessive construction enclitics
minimal						
1	*=x*		*=nge*	*ni=nge*	*ba=nge*	*=nge*
1+2	*=ki*		*=gi*	*ni=gi*	*ba=gi*	*=gi*
2	*=u*		*=m(q)*	*ni=mq*	*ba=mq*	*=mq*
3	*=le* (A, O) *=Ø* (S)	*=le*	*=de*	*ni=de*	*ba=de*	*=de*
augmented						
1	*=kr*		*=gr*	*ni=gr*	*ba=gr*	*=gr*
1+2	*=ku*		*=gu*	*ni=gu*	*ba=gu*	*=gu*
2	*=amu*		*=mu*	*ni=mu*	*ba=mu*	*=mu*
3	*nz-* '3AUG' *tz-* 'RL.3AUG' *na-* 'IRR' *=lr* (A) *=ng(q)* (S)	*=lr* *=ng(q)*	*nz-* '3AUG' *tz-* 'RL.3AUG' *na-* IRR' *=dr* (A) *=ng(q)* (S)	*ni=dr*	*ba=dr*	*=dr*

3.2 Noun types

3.2.1 Count vs. mass nouns

Natqgu subcategorizes nouns around four parameters—i) count vs. mass nouns, ii) common vs. proper nouns, iii) animate vs. inanimate nouns, and iv) direct vs. indirect possession.

There is no case or number marked on nouns. Instead, the role of the noun is determined in part by word order. Number, if indicated, occurs on a demonstrative modifier. Within that context, Natqgu's categorization of count and mass nouns is fairly typical. Mass nouns are those expressing quantities of rice or water, for example, which are not counted. Such mass nouns take a form of the indefinite plural *du* 'some' as in (7).

(7) *Angüpäamu du lue më belue lâng.*

Angq-px=amu	**du**	**lue**	mz	be-lue	lc-ng
draw-GDIR.out=2AUGII	INDF.PL	water	PREP	skin-water	DEM1.DIST-PL

'Draw out some water from those waterskins.' (John 2:8)

The form *du* can also occur with nouns which in other contexts are countable, but which in a particular context are indefinite, as in (8).

[6] Wurm (1978: 973) analyses the form *ni-* as a reduction of the Natqgu verb *ngini* 'to be.' Næss and Boerger (2008) accept this hypothesis. Additionally, in Natqgu, the possibility of the change-of-state enclitic *=pe* occurring between the base and the person ending as in *ni=pe=de* 'he has become' gives evidence for the use of *ni* as a predicate.

(8) *A' koma, kä tümâlamu du peao kälöpö më löpëki, bëkü kalëmamu.*

a'	koma	kx	tq-mc=amu	**du**	**peao**	kx-lrpr	mz	lrpzki
but	today	SUBR	RL-see=2AUGI	INDF.PL	torch	SUBR-wet	PREP	road
bzkq		kalz-mq=amu						
PROH		pick.up-PDIR.hither=2AUGI						

'But today, if you see some wet coconut torches on the road, don't pick them up.' (26.10)

A count noun is one which can co-occur with a numeral quantifier following it. In sentence (9) the phrase 'six not very tall coconut trees' is formed by the noun 'coconut trees' followed by a simple relative clause with the subordinating particle *kx* 'which are not long'. In place of the subordinating particle one can also find one of the four simple demonstratives. They occur after something has already been introduced and is therefore definite. See discussion in §10.2.

(9) *Tupäm më nabë nounâ mölâde nâ nëlu kä töboiu esë'më.*

tu-px-mq		mz	nabz	nounc	mrlcde	**nc**	**nzlu**
stand-GDIR.out-PDIR.hither		PREP	area	tree	there	tree	coconut
kx	**tr-boi-u**	**esz'mz**					
SUBR	NEG-be.long-NEG	six					

'Standing in a grove of trees there were six not very tall coconut trees [*Cocos nucifera*].' (39.04)

Natqgu numerals can also function as predicates, as illustrated in (10). Note that in the noun phrase 'those two guys,' the form 'two' is actually a verb 'they are two,' with the identical morphology as on the next verb 'they went,' literally, 'Those men who are two they went…'

(10) *Nâblo kâng nëling nëvëng sâ tëobü-kapüpäpeng më skul.*

ncblo	kc-ng	**nz-li=ng**	nz-vz=ng	sc=
man	DEM2.DIST-PL	3AUG-two=3AUGIS	3AUG1-go=3AUGIS	PFV=
tz-obq-kapq-px=pe=ng		mz	skul	
RL.3AUG-look-hidden-GDIR.out=COS=3AUGIS		PREP	school	

'Those two men went and they spied out the school.' (38.01)

Furthermore, the noun or noun phrase may also be modified by a bare numeral as in (13a)'s *wiki tq* 'three weeks'.

Natqgu nouns have little inflectional morphology. There are no person or gender affixes on common nouns. Plurality on count nouns is beginning to be marked by the youngest generation, who add the plural suffix *-ng(q)* to some nouns to make them plural, possibly as a result of contact with English. The norm, though, is for context to disambiguate number or to add the plural suffix *-ng(q)* to a demonstrative as in (7)'s *belue lcng* 'those waterskins.'

3.2.2 Common vs. proper nouns

In addition, Natqgu distinguishes proper nouns from common nouns. The naming conventions of Santa Cruz Island differentiate some proper names of people based on whether they are male or female, doing so by means of prefixes, such that *me-* indicates a male (example 11) and *i-* a female (example 12). The slot following the marker for gender is normally filled by a verb, and yields attributive names. The same verb can be used in both the male and female names. Not all indigenous names follow this convention, but very many do. Occasionally, in narratives, animals are personified and given human names.

(11)

Meya	*Meplc*	*Menapi*	*Mewxbu*
M-paddle	M-ripe	M-IRR-say	M-sit
'Paddle guy'	'Ripe guy'	'Wants to talk guy'	'Sit guy'

(12)

Ikai	*Inapi*	*Iwxbu*
F-first	F-IRR-say	F-sit
'First gal'	'Wants to talk gal'	'Sit gal'

3.2.3 Animate vs. inanimate nouns

The distinction between animate and inanimate nouns is manifest in a handful of verbs which make this distinction. Two of these are *mnc* vs. *yc* 'stay~live' (13) and *bz* vs *mz* 'die' (14). Note that in (13a) *mnc* takes an animate subject 'group of people' while in (13b) *yc* takes an inanimate subject 'ship'.

(13) a. *Dëbede lâ ne Mr Lore nëmnâtipämlö peto wiki tü....*

dzbede	lc	ne	Mr	Lore
group	DEM1.DIST	PCLF.rsbl	Mr	Lore

nz-**mnc**-ti-px-mq=lr	peto	wiki	tq
3AUG-stay-TR-GDIR.out-PDIR.hither=3AUGIA	bush	week	three

'That group of Mr. Lore's were out in the bush for three weeks,…' (43.07)

b. *Më nëveângö lâde yâtäbë lâsu sâdö lö Japan kätöka.*

mz	nz-vec-ngr	lc=de	**yc**-tx-bz	lcsu	sc=dr
PREP	NMLZ1-fight-NMLZ	DEM1.DIST=3MINII	stay-INTS-PDIR.yon	ship	PCLF.hand=3AUGII

lr	Japan	kx-trka
TPNYM	Japan	SUBR-bad

'From that battle there was a damaged Japanese ship.' (39.13)

Similarly, in (14a) 'no one knows when he died' uses the animate verb *bz* 'die', while (14b) uses the inanimate verb *mz* 'die' to talk about a sore healing up and (14c) uses *mz* 'die' to talk about a tree dying. Another context where *mz* 'die' occurs is when fires die out. So the inanimate category includes plants as living things which are inanimate, as well as things which were never living.

(14) a. *Ä töpnëngö kä ökölë me vëkimle, mëli kä nëmângö mëte ä mëli kä bë-ngöde.*

x	trpnzngr	kx	r-krlz	me	vz-ki-mq=le	mzli
and	none	SUBR	MID-know	place	go-path-PDIR.hither=3MINIA	time

kx	nz-mc-ngr	mz=te	x	mzli	kx	**bz**-ngr=de
SUBR	PAS-see-APPL	eye=3MINII	and	time	SUBR	die-APPL=3MINII

'And there was no one who knew where he came from, when he was born, and when he died.' (Hebrews 7:3)

b. *Ä mëli kâpwë käsüki lepë kâ mëtätö pnë kë.*

x	mzli	kcpwz	kxsqki	lepz	kc	**mz**-tx-tr=pnz-kz=Ø
and	time	same	sore	leper	DEM2.DIST	die-INTS-GDIR.in=CMPL-also=3MINIS

'And at the same time the leper's sore also died out completely.' (Matthew 8:3)

c. *Öpibo bade kä, "Tüyökelvëä nâ nëlu kâ yöplatöngö naöm mëtupe."*

r-pi-bz=x	bade	kx	tq-yrke-lvz=x
MID-say-PDIR.yon=1MINI	DAT=3MINII	SUBR	RL-exclaimed-about=1MINI

nc.nzlu	kc	yrpla-tr-ngr=Ø	nar=mq	mz-tu=pe=Ø
tree.coconut	DEM2.DIST	bang-GDIR.in-APPL=3MINIS	head=2MINII	die-stand=COS=3MINIS

'I told him, "I exclaimed about the coconut tree which banged your head being dead."' (30.17)

3.2.4 Nouns with either direct or indirect possession

The possessive system of Natqgu makes a distinction between nouns which are directly possessed—with no morphology between the noun and possessor—and those which are indirectly possessed by use of a morpheme meaning 'of' or 'belonging to'. The directly possessed noun class is primarily composed of inalienable relationships like body parts and many kinship terms.

When the possessor is an enclitic, it attaches to the possessed noun itself for direct possession and by use of a possessive classifier to which the enclitics are attached for indirect possession. More details are given in §3.6 on possessives.

(15)	a) *mrlx ncblo*	b) *doa ncblo*	c) *doa ne*	*ncblo*
	son man	child man	child PCLF.rsbl	man
	'man's son'	'male child'	'man's child'	

Noun-noun sequences can seem ambiguous with regard to whether the relationship is possessive or attributive. Compare the forms in (15), in which (a) is a directly possessed noun, (b) is attributive, and (c) is a possessive using one of the possessive classifiers.

3.3 Nominalized, derived, and complex nouns

Natqgu has seven strategies for deriving complex nouns as delineated in the subsections below: §3.3.1) the subordinator for participant nominalization, §3.3.2) a circumfix action nominalization, §3.3.3) a proprietive suffix signaling 'having the property of X', §3.3.4) an adjectival verb prefix, §3.3.5) compounding, §3.3.6) animate/human and inanimate descriptive nominal phrases, and §3.3.7) a prefix for group/place membership of animate/human participants.
All of these exhibit indirect possession.

3.3.1 Participant nominalization with subordinator *kx*

Participant nominals are formed using the subordinator *kx* which in one of its subordinating functions changes a verb into a doer of the verb. This can be further modified with other morphemes as illustrated by the singular forms in (16), with the causative, passive, and an adverb meaning 'for free.' Thus, the one who works is a worker, the one who causes work is an employer, and the one who is caused to work by someone is either an employee or a slave and the one who works for free is a volunteer.

(16)	a) *kx-wz*	b) *kx-a-wz*	c) *kx-nz-a-wz*
	SUBR- work	SUBR-CAUS-work	SUBR-PAS-CAUS-work
	'worker'	'employer'	'employee, servant'

	d) *kx-nz-a-wz-nrbalq*	e) *kx-nz-wz-nrbalq*
	SUBR-PAS-CAUS-work-nothing	SUBR-PAS-work-nothing
	'slave'	'volunteer'

3.3.2 Circumfix—action nominalization with *nz-* + *-ngr*

The most basic form of nominalization is an action nominalization formed by the addition of the circumfix *nz-* plus *-ngr*, creating nouns like, 'working,' or 'going,' as in a) and b) of (17).

(17)	(a) *nz-wz-ngr*	(b) *nz-vz-ngr*	*(c) nz-wz-kr=de*
	NMLZ1-work- NMLZ	NMLZ1-go-NMLZ	NMLZ1-work-NMLZ.PCLF=2MINll
	'working'	'going'	'his working'

Natqgu makes frequent use of this strategy in forming subordinate clauses. Such nominalized forms can also be possessed by substituting *-kr* NMLZ.PCLF for *-ngr* and adding an indication of possessor, either an enclitic pronominal from Table 4 as in (17c) or a simple noun or NP.

3.3.3 Secondary nominalization of verbs with *-nr*

Certain nominalized forms can undergo further permutations, which maintain their status as nouns. The addition of the middle prefix *r-* changes one instance of the nominalization into its generic or habitual practice, giving *nzrwzngr* 'habitual working'. This prefix is discussed in §7.2.

Some such forms can be further modified by the addition of a second nominalizer, *-nr* NMLZ2, between the verb root and *-ngr*. The form maintains its nominal category but looks at the nominalized action as an entire event, with a resultant reading being 'the characteristic of' the nominalized verb. This is illustrated in (18) with *kcmnz* 'covet'.

(18)

nz-kcmnz-ngr	*nz-r-kcmnz-ngr*	*nz-r-kcmnz-nr-ngr*
NMLZ1-COVET-NMLZ	NMLZ1-MID-COVET-NMLZ	NMLZ1-MID-COVET-NMLZ2- NMLZ
'coveting' [instance]	'coveting' [habitual]	'covetousness' [habitual characteristic]

3.3.4 Nominalization of stative verbs with *z-*

Natqgu preserves 38 attested nominalizations of stative verbs denoting properties, which are formed with the prefix *z-*. This prefix appears not to be productive, since younger speakers reject some less common nominalizations which the older speakers find acceptable and still use. Examples of this type of nominalization are shown in (19). Note though, that when these nouns are possessed or occur in more complex phrases, they revert to the circumfix nominalization strategy in §3.3.2.

(19)

(a) *z-bao*	(b) *z-blqki*	(c) *z-mrlz*	(d) *z-ngya'*
NMLZ-be.cold	NMLZ-be.dirty	NMLZ-be.good	NMLZ-be.angry
'coldness'	'dirtiness'	'goodness'	'anger'

3.3.5 Noun-noun compounds

Some nouns are formed by simple noun-noun juxtaposition, such as *be-lue* 'water container' formed from 'skin' and 'water' see previously in example (7).

3.3.6 Attributive phrasal nouns

Complex nouns are also formed using attributive phrases as demonstrated below in (20a) and (20b). In (20a) the final form is a noun, as it is in (20b). But note in (20b) that there is a further attributive noun 'those who are sick' inside the larger phrase, as described in §3.3.1. I analyze these as complex nouns rather than NPs because modifiers cannot be inserted in the sequence, but the sequence can be modified with following modifiers and can also be moved as a unit. See example (64) where *lcsukxlvc* 'flying ship (airplane)' is modified by *lcdeng* 'those', rather than saying, *lcsu lcdeng kxlvc*.

(20)

(a) *mangönëköka'ngö*	(b) *ma-nyë-kä-në-yagoä-ng*
ma-ngr-nz-krka'-ngr	ma-nyz-kx-nz-yagox-ng
house-GEN1A- NMLZ-pray-NMLZ	house-PCLF.B&G-SUBR-3AUG1-sick=3AUGIS
'house for praying' (church)	'house of those who are sick' (hospital)

3.3.7 person/people belonging to a place or group *lr-*

Natqgu also has a toponymic form *lr-* TPNYM, which precedes a toponym, that is, a noun denoting a place or ethnicity, and derives a noun which categorizes the group as a whole or a member of that group. Orthographically, speakers decided *lr-* should be written separate from the noun it modifies, since often the modified noun is a proper noun, and writing them separately allowed for capitalization of the proper noun itself, rather than capitalizing *lr-* wherever it occurred. It is, however, a bound morpheme. Note that in (21) the single instance of *lr-* has scope over the names of two villages.

(21) *…doa lö Nepa' ä Pa'lë sâ tëmâpäpelö ninge kä nanginibo käaonöwä më mëtea lâng li.*

doa	**lr**	Nepa'	x	Pa'lz	sc=	tz-mcpx=pe=lr		ninge
person	TPNYM	Nepa'	and	Pa'lz	PFV=	RL.3AUG-choose=COS=3AUGIA		be=1MINII
kx	na-ngini-bz=x		kx-a-o-nrwx		mz	mztea	lc-ng	li
SUBR	IRR-become- PDIR.yon=1MINI		SUBR-CAUS-go-peace		PREP	village	DEM1.DIST-PL	two

'…the people of Nepa' and Pa'lz villages chose me that I might become a peacemaker for those two villages.' (71.01)

This is identical in form with the possessive classifier encoding associative relationships §3.6.2, that is, things which are closely associated. Since people are closely associated with the place they live, it might seem that these two forms could be merged. However, the TPNYM usage

only applies to places inhabited by humans and can occur with just the toponym following and no preceding noun, as in *lr Japan* 'the Japanese.' But the PCLF requires a noun prior to *lr*, as in *nqvi lr Menesa'* 'Menesa''s (ancestral) line'. Both forms, though, co-occur with *da* 'thing' yielding forms like *dalr Inglan* 'thing-TPNYM England' referring to people from England in spite of 'thing' and *dalr trau scgr* 'thing-PCLF.assoc our money.'

3.4 Demonstratives

Unlike other Oceanic languages with three degrees of distance (Lynch, Ross and Crowley 2002), the basic Natqgu demonstrative system is a two-by-two grid as shown in Table 5. Using terms from Alfarano (2021:212-224), the consonants *l-* and *k-* signal 'listener anchored' and 'speaker anchored' respectively, where either the listener or the speaker is the deictic anchor for the discourse. The vowels *a* and *c* signal whether the modified noun is near (proximal) or far (distal) based on time, space, or discourse parameters. Frequently, *kc* functions as a subordinator or relativizer, replacing *kx* in a sentence. The other demonstratives have this function less frequently. See the form *kcng* in example (10) and further discussion in §3.7.2.

Table 5. Simple Demonstratives

	proximal	**distal**
listener anchored	*la* DEM1.PROX	*lc* DEM1.DIST
speaker anchored	*ka* DEM2.PROX	*kc* DEM2.DIST

All of the simple demonstratives can co-occur with other morphemes, as laid out in the position class chart in Table 6. The columns in parentheses are optional. These forms take the basic meaning of the simple demonstratives and add an additional piece of information with each morpheme, such as plurality of the modified noun in the +3 column. Column -1 is the slot for morphemes being modified, that is nouns and pronominal prefixes, the locative morpheme *mr*, the relative pronoun *kr-,* the anaphoric reference prefix *de-,* and the indefinite pronominal prefix *ne-*. All four simple demonstratives co-occur with *de-,* which refers back to a previously mentioned nominal, yielding meanings like 'that's how,' 'that's why,' 'that's all,' 'that's who,' 'that's the one,' and so forth. Only *=lc* and *=kc* co-occur with *ne-*, which also occurs in the form *neke* 'who' in combination with the relative pronominal suffix *-ke*.[7] Discussion of other limitations on the combinations of forms is beyond the scope of this grammar sketch, but not all combinations are equally possible.

Table 6. Affixes combining with demonstratives

-1	**0**	**(+1)**	**(+2)**	**(+3)**	**(+4)**
prefixes	**DEM**	**specifier**	**person/# or state**	**plural**	**restrictive**
noun	*=la*		*=pe* COS	-ng(q) PL	=pwz 'just'
mr- LOC	*=lc*	*-monr* DEIC	*=pnz* CMPL		
kr- RPRN	*=ka*		*=le ~ =de* 3MIN		
de- ANA	*=kc*	*-ma* SPEC			
ne- 'who'					

In column +1, *-monr,* means the entity which is being pointed at physically, and is glossed DEIC. It has a restricted distribution and only occurs with *=lc*, giving a meaning like 'that one there'. It does not occur in the SGM text. The second form which can fill the +1 slot is, *-ma,* which only co-occurs with *=kc*. It is immediately preceded by the specific noun already established in the discourse and is glossed SPEC. Its function is to track participants in a discourse. When other nouns have been mentioned in the discourse, *kcma* reintroduces a previously mentioned noun which is returning to focus in the discourse (§11).

[7] The relative pronominal suffix *–ke* is identical in form with an interrogative *–ke*. Some speakers only use *neke* in an interrogative sense, while others use it both as an interrogative 'who?' and as a relative 'he who'.

The optional forms in column +2 of Table 6 are *=pe* 'change of state' and either of the third person minimal forms, meaning the entity pointed to by the demonstrative. The addition of *=pe* or *=pnz* increases the specificity or definiteness of a phrase, as in the difference between *mzli kc* 'that time' and *mzli kcpe* 'that very time.' Depending on the temporal setting of the discourse the addition of the enclitic aspect markers can also signal that the noun modified already exists or has existed in the past. The single morpheme in the +3 column is the plural marker. Likewise, only one form occurs in the +4 column, and that is the restrictive enclitic *=pwz* which means 'just,' 'only,' or 'exactly.'

There are constraints on what combinations actually occur, the discussion of which is outside the scope of this write up. The simple and complex demonstratives are highly frequent, with nearly one per sentence in connected discourse, and with *kc* far outnumbering the other demonstratives.

3.5 Numerals and number-marking

3.5.1 Cardinals

The Natqgu numerals follow an 'imperfect decimal system' (Lynch 2009) composed of two sets of five, as illustrated by the numbers one through ten in Table 7. The numbers six through nine are formed by compounds using the numbers one through four, while the number ten receives a non-derived, non-compounded form.

In composing more complex numbers, the first step is to divide the tens from the single digit numbers by use of *nrade* 'its fruit' which joins the two halves of the number. Similarly, *nrbalq* 'freely' is added to divide the hundred thousands from the numbers less than one hundred, as illustrated in the contrast between 100,045 and 145,000 near the end of column two. For million and billion,[8] there are no complex numbers attested having anything but zero in the last six or more slots, as for example, in 200 billion. Practically speaking, numbers in the thousands would be the highest used for their numerical value, while million and billion are probably closer to 'exceedingly uncountable' and 'even more exceedingly uncountable,' similar to the way some English speakers use 'gazillion.'

Table 7. Natqgu Numeral System

1	*esz' ~ tesz'* (when counting)	20	*nzpnu-li*
2	*li*	100	*trtqki ~ trtqki-esz'*
3	*tq*	200	*trtqki-li*
4	*pwx*	759	*trtqki-rlimz-nzpnu-nzlvqn-nrade-rpwxmz*
5	*nzlvqn*	1000	*siu siu-esz'*
6	*esz'mz*	8,263	*siu-rtqmz-trtqki-li-nzpnu-esz'mz-nrade-tq*
7	*rlimz*	100,045	*siu-trtqki-esz'-nrbalq-nzpnu-pwx-nrade-nzlvqn*
8	*rtqmz*	145,000	*siu-trtqki-esz'-nzpnu-pwx-nrade-nzlvqn*
9	*rpwxmz*	million	*nyrmz*
10	*nzpnu ~ nzpnu-esz'*	million	*nyrngc*
11	*nzpnu-esz'-nrade-esz'*	billion	*obu*
12	*nzpnu-esz'-nrade-li*	200 billion	*obu-trtqki-li*
234,567	*siu-trtqki-li-nzpnu-tq-nrade-pwx-nrbalq-trtqki-nzlvqn-nzpnu-esz'mz-nrade-rlimz* [thousand-((hundred-two)-((ten-three)-and-four))]-free-[(hundred-five)-((ten-six)-and-seven)]		

[8] The Commonwealth and US uses of 'billion' differ in the number of zeros involved. But that fact does not come into play here, since the meanings of the Natqgu words are catch-all terms for large amounts and do not refer to actual, specific numbers.

Even though the number 234,567 at the bottom of Table 7 is possible, it was elicited specifically for this chart. It takes 15 syllables to articulate the numeral in English, but 31 syllables in careful speech in Natqgu. The length of the Natqgu numerals in combination with extensive English contact through the educational system has made younger speakers of Natqgu comfortable with English numeral vocabulary, while struggling to process complex numbers in Natqgu. In light of this waning command of the numerals, it was refreshing to attend a church business meeting in 2002 in which the entire treasurer's report was presented in the vernacular, including all the numbers. Even more significantly, the treasurer was from the youngest group of speakers. He was so fluent that some middle-aged speakers struggled to process at the speed he was speaking. Even though most speakers conduct mathematical calculations in English, this man was an exception.

Natqgu Language Project (NLP) team members had also experienced this loss. In fact, Mr. Simon, the oldest member, was the only one to fully command Natqgu numbers. In the local Anglican churches, when the lectionary-assigned scriptures are read in public, the reader announces the chapter and verses of the passage. When reading Natqgu, some speakers struggled to articulate the numerals or came to us the night before to ask for help. To address this loss, the NLP team decided to spell out all the longer cardinal numbers when they occurred in the scripture text and to include Arabic numerals in parentheses. For the Psalms, ordinal numbers were printed as the title; such as, *Sam kra-nzpnu-li-nrade-esz'mz* 'Twenty-sixth Psalm.'

3.5.2 Ordinals

The form of the ordinals of Natqgu follows the majority of the world's languages in having a suppletive form for 'first,' with all subsequent ordinals being derived from their cardinal counterparts (Stolz and Veselinova 2008). The prefix *kra-* is added before a cardinal numeral to form its ordinal. The vowel combination is difficult to perceive in fast speech and many of the youngest group of speakers have internalized this form as [kaa] or [ka].

There are two words for 'first' in Natqgu: *kai* which means first in time or prior to something else and *ayrnr* which means first in importance. Sentence (22) uses both of them.

(22) *Vë-kaipo, a' kökâ navëm më nibönge, na-ayönöngö më ëmatü, muöde mnâ-pnë-kai më ninge.*

vz-**kai**-bz=x	a'	kr-kc	na-vz-mq=Ø	mz	
go-first-PDIR.yon=1MINI	but	RPRN2-DEM2.DIST	IRR-go-PDIR.hither=3MINIS	PREP	
nibr=nge	na-**ayrnr-ngr=Ø**	mz	zmatq	murde	
back=1MINII	IRR-first-APPL=3MINIS	PREP	power	because	
mnc=pnz-**kai**=Ø	mz	ni=nge			
be=CMPL-first=3MINIS	PREP	be=1MINII			

'I came first, but he who comes after me, he's the one who must be premier-first in power-authority, because he pre-existed me.' (John 1:15)

3.5.3 Use of 'two' in the SGM text

An examination of 117 uses of *li* 'two' in the full SGM text gives the following uses: 68 times as a predicate, 24 times in as nominal head of a noun phrase, 15 times as an ordinal number, seven times as a cardinal number, twice adjectivally, and once within an idiom. The general distinction between the inflected or uninflected forms follows an animacy and specificity hierarchy, such that animate and specific nouns are modified using *nzling*, with its circumfix 3AUG forms, while inanimate things are normally modified with a simple *li*. The few instances when animate nouns are modified with *li* occurred when the referents were either generic or hypothetical. A discussion of each of the possible forms is outside the scope of this grammar sketch, but they can be studied by noting numerals as they occur in the text.

(23) *Nigö kä nëlutäpepwë nëpnu-ligö-nöade-li.*

ni=gr	kx	nz-lu-tx=pe-pwz	nzpnu-li=**gr**-nra=de-li
be=1AUGII	SUBR	3AUG-live-INTS=COS-just	ten-two=**1AUGII**-fruit=3MINII-two

'We who were the only ones living there were the twenty-two of us.' (14.04)

The cardinal number in example (23) is of particular interest. In it, there's a person and number enclitic in the middle of the numeral, with the rest of the numeral following, rather than *=gr* 'us' occurring at the end of the numeral where it might be expected. This is the only occurrence in my data of anything intersecting a numeral. Together with the uses catalogued above, this demonstrates the category fluidity of Natqgu's numerals.

3.5.4 Non-numeral quantifiers

Non-numeral quantifiers fall into three classes. First, the quantifier *amrlx* 'all' as in (28) follows the noun it modifies and co-occurs with true adjectives. Second, the quantifiers *pipz* 'few' (5a), (170) and *kqlu* 'many' (155) require the subordinator *kx*, patterning like stative verbs. They follow the noun they modify. A third non-numeral quantifier type is exhibited by two-morpheme forms meaning 'a/an' and 'some,' composed of the bound attributor *kz-* as the first morpheme, with either *dq* 'indefinite singular' or *du* 'indefinite plural' as the second morpheme. The morphemes in the second slot also occur independently. These two quantifiers occur before the noun they modify, as shown in sentences (39) and (46).

3.6 NP-level Possession

In this section, I discuss possessive constructions at the NP level. As noted in §3.2.4, Natqgu nouns are either directly or indirectly possessed.

3.6.1 Direct possession

The directly possessed noun class is primarily composed of inalienable relationships like body parts and many kinship terms. When the possessor is a noun or NP it immediately follows the possessum (24a,b) and no pronominal enclitic is found on the directly possessed noun. In fact, the construct would be ungrammatical with both. When the possessor is represented by a pronominal enclitic, it attaches to the possessed noun (24c,d).

(24)	(a) *nar ncblo*	(b) *nar Menapi*	(c) *nar=de*	(d) *drtq=de*
	head man	head PN	head= 3MINII	name= 3MINII
	'man's head'	'Menapi's head'	'his head'	'his name'

3.6.2 Indirect possession

Indirectly possessed nouns precede their possessors, with an intervening genitive or possessive classifier. The genitives encode things that may be part of something else or related in some other way, but not necessarily having an ownership relationship. The possessive classifiers on the other hand generally encode a closer relationship or responsibility, often ownership.

Comparatively, the other two Santa Cruz languages with published grammars have 14 possessive classifiers for Engdewu (Vaa 2013) and seven for Nalögo (Alfarano 2021), along with the eight (or nine) I analyze below for Natqgu. These numbers are in the middle of the range of Oceanic possessive systems, many of which have fewer than four classifiers, but others of which, especially Micronesian languages and Oceanic languages of New Caledonia, have upwards of twenty (Lichtenberk 1983, Dotte & Moyse-Faurie 2021).

There are two free genitives, *ngr* GEN1A and *r* GEN1B, with *r* being a phonologically conditioned variant of *ngr* which has become fixed in some constructions. The other bound form in the genitive category is *-kr*, which serves as the second half of a circumfix in an action nominalization and introduces the agent of the action. Like with genitives and other possessive forms, *-kr* either combines with an enclitic or is followed by the possessor noun or NP.

These generic forms can be used as possessives, but also to indicate contents, relationships, locations, or properties, as illustrated by the examples in the genitive section of Table 8. The remainder of Table 8 shows the possessive classifiers, each of which encodes various relations: handheld, betel nut, drink, food, responsibility, property, hearth, associative, and feelings.

Table 8. Genitives and Possessive Classifiers

	Gloss	Meaning	Description	Examples
GEN				
ngr	GEN1A	of, from, genitive	Contents, relationships, location & properties	*zyzlr ngr nepi* 'light of the sun' *lue ngr dxbu* 'water of the lake'
r	GEN1B	variant	Phonologically set, resulting in deletion or palatalization	*olvz r=de* → [olv(z)rde] 'his wife' *esaki r be* → [esakyr be] 'end of story' *lzm r kai* → [lzm r kai] 'bowl of pudding'
-kr	NMLZ.PCLF		possessive of action nominalizations and a few other nouns	*kave kr Sawa* 'Sawa's cousin' *nqmq kr=de* 'his way' *nztulz-kr=de* 'his standing up'
PCLF				
sc	PCLF.hand	handheld	Handheld and moveable possessions; can act as generic possessor	*tengz sc=nge* 'his comb' *nuzmu sc=de* 'his canoe' *kx-nz-rngi-sc=ng* 'the haves' *kx-tr-nz-rngi-sc-u=ng* 'the have nots'
ma	PCLF.betel	betel nut	and related items, such as leaf, lime, container	*pxi ma Samwi* 'Samwi's leaf' *kalva ma=de* 'his betel nut'
mq	PCLF.drink	drinkables	including wet fruits, like papaya and watermelon	*tabao mq=nge* 'my papaya' *lue mq=m(q)* 'your water'
na	PCLF.food	edibles	all food, except those categorized as drinkable	*nya na Ikai* 'Ikai's taro (food)' *bia na=de* 'his breadfruit (food)'
ne	PCLF.rsbl	underlings	ownership, creation, or responsibility; refers to children, animals, but not spouse or deities	*doa ne Saemon* 'Simon's child' *poi ne=de-ng* 'his pigs' *nabz ne=nge* 'my song' (I wrote)
nyz	PCLF.B&G	property & time	immovable property and time at a fixed point	*ma nyz ile=nge* 'my sister's house' *nrlanc nyz=de* 'his garden' *mzli nyz Noa* 'time of Noah'
mnr~ pnr	PCLF.fire	hearth & home	fire, firewood, blankets, mats, hearth and home	*nqni mnr=de* 'his mat' *nqni pnr Tina* 'Tina's mat' *nabxbq pnr=nge* 'my firepit'
lr	PCLF.assoc	associative	closely associated with or intrinsically part of	*nqvi lr Samwi* 'Samwi's line' [family] *nivz lr lxe=de* 'love of his mother' *dzwr lr popz'* 'strength of the bow' *bq lr nounc* 'sap of a tree'
nr	PCLF.feel	feelings	co-occurs only with thoughts, heart, desires	*nqmq nr drtwrde* 'his way of thinking' *nepu nr drtwrgu* 'our desire of thought'

These categories warrant further discussion. First, *sc* PCLF.hand is normally used for handheld possessions which can be moved or carried, and for generic possession, as in the second and third examples in the Table 8—'the haves and the have nots.' Younger speakers,[9] aged 10-45

[9] I have identified at least three generational age-lects in Natqgu (Boerger 2007:130, Boerger et al 2012:118). In addition, the youngest speakers today are considerably less fluent than their predecessors at the same age. So as

use *sc* more frequently than older speakers over 45, considering it to be a generic classifier for all items difficult to categorize. For example, older speakers prefer *lr* PCLF.associative as the possessive classifier for God's love, but younger speakers use *sc* instead.

The classifier *ne* PCLF.rsbl categorizes two things—animate beings for which the possessor is responsible and creations of the possessor, like songs, paintings, books, or crafts. This differs from Nalrgo (Alfarano 2021:193) and Engdewu (Vaa 2013:227-228), where cognates of *ne* require 'animate' possessums, but lack the created works usage.

The last possessive classifier in the table, *nr* PCLF.feel, sits at the intersection of a genitive 'of' meaning and a possessive since it enables feelings to be possessed. That is, *nr* itself does not take possessive enclitics, but instead they attach to *drtwr* 'neck~thinking' or *nabz* 'insides~heart,' one of which occurs in all expressions of thinking and feeling.

The remaining possessive classifiers are used similarly by all speakers. A canoe classifier, identified by Vaa (2013) for Engdewu does not exist in Natqgu, since canoes are possessed using *sc*. Buildings and grounds is abbreviated 'B&G' in the gloss for *nyz* PCLF.B&G, categorizing immovable possessions, such as houses, trees, and land.

Natqgu nouns are not assigned to just one classifier; instead the classifier selected depends on how the noun is employed or its relationship to the possessor. See examples (25) and (26), where 'knife' co-occurs with any of three classifiers and 'taro' with at least two. Similarly, homonyms, like *nabz* 'heart' and 'song' in (27) can be disambiguated by the possessive construction in which they occur.

(25) *(a) toki na=nge*
knife PCLF.food=1MINII
'my eating knife'

(b) toki mq=nge
knife PCLF.drink=1MINII
'my wet fruit knife'

(c) toki sc=nge
knife PCLF.hand=1MINII
'my working-in-the bush knife'

(26) *(a) nya na=nge*
taro PCLF.food=1MINII
'my taro to eat'

(b) nya nyz=nge
taro PCLF.B&G=1MINII
'my taro in my garden'

(27) *(a) nabz=nge*
heart=1MINII
'my heart'

(b) nabz ne=nge
song PCLF.rsbl=1MINII
'my song (I wrote)'

Lichtenberk (1983:167) claims that if kinship nouns are used with possessive classifiers, "there is a tendency for the *general classifier* (if the language has one) rather than any other to be used so." This does not hold across the board for Natqgu, since as we saw in (15c), the responsibility classifier *ne* is used with *doa* 'child,' and not a general classifier. However, a general classifier is used in the husband and wife relationship, presumably since the relationship can be severed by divorce or death. In counterpoint to this, all in-law terms are directly possessed, as in (28), reflecting the cultural reality that the people who become in-laws through marriage remain in-laws even after divorce or death, and the in-law cultural taboos remain, as well.

(28) *kzdo=nge*
in.law=1MINII
my (male) in-law of a female

3.7 Adjectives and nominal modifiers

Natqgu exhibits multiple ways to modify nouns: a) a small set of mono-morphemic true adjectives §3.7.1, b) subordinated verbs, especially stative verbs, functioning as adjectives §3.7.2, c) a proprietive suffix (Lichtenberk 2009) changing a noun to an adjective 3.7.3, and d) word order positional modification with no morphology as seen previously in (15b) and illustrated again in §3.7.4.

long as there are elderly speakers in their 70s and older, there are four age-lects in Natqgu, each from 15 to 20 years long.

3.7.1 Six simple adjectives

Syntactically, there are only a handful of simple adjectives in Natqgu. These are defined as those which immediately follow the noun they modify without the use of the subordinator and with no intervening morphemes. The six adjectives which fill this role are *amrlx* 'all,' *angidr* 'true,' *dau* 'main,' *drlr* 'wild,' *txne* 'lowly,' and *zpwx* 'real,' as illustrated by the sentences below.

(29) *Yölübële dölëdöng amölä.*
yrlq-bz=le drlz=dr-ngq **amrlx**
put-PDIR.yon=3MINIA colour=3AUGII-PL all
'He made all their colors.' (08.13)

(30) *Vë-nüblüle da angidö.*
Vz-nqblq=le da **angidr**
go-follow=3MINI thing true
'He follows the truth.'

(31) *Pwökilvâ-ngögö nëälö-kögö kä lö Japan sâ tëmnâpeng Tulëgi, mëteadau ngö Solomon.*
pwrkilvc-ngr=gr nz-xlr-kr=gr kx lr Japan
startled-APPL=1AUGII NMLZ1-hear-NMLZ.PCLF=1AUGII SUBR TPNYM Japan
sc= tz-mnc=pe=ng Tulzgi mztea-**dau** ngr Solomon
PFV= RL.3AUG-be=COS=3AUGIS Tulagi village-main GEN1A Solomon Islands
'We were shocked from our hearing that the Japanese were staying at Tulagi, the capital of Solomon Islands.' (36.03)

(32) *Mwa'-ti=le poi dölö.*
mwa'-ti=le poi **drlr**
hunt-TRNS=3MINIA pig wild
'He is hunting for wild pigs.'

(33) *…nëapä-ngöbë badö doa känëtopwë ä nâblo täne nëdwatö-ködö ma kâ."*
nz-apx-ngr-bz ba=dr doa kx-nz-topwz
PAS-restrict-APPL-PDIR.yon DAT=3AUGII child SUBR-3AUG-little and
x ncblo **txne** nz-dwatr-kr=dr ma kc
and man lowly NMLZ1-enter-NMLZ.PCLF=3AUGII house DEM2.DIST
'…it is forbidden for small children and lowly men to enter that building.' (04.02)

(34) *Muöde nëmu mnâ-ëpwäkö mölâde më nëvë-köm dävo ä nöâ käpötë käoda.*
murde nzmu mnc-**zpwx**=kr mr-lc=de mz
because if stay-real=1AUGI LOC-DEM1.DIST=3MINII PREP
nz-vz-kr-mq dxvo x nrc ***kx-prtz=Ø*** ***kx-oda=Ø***
NMLZ1-go-NMLZ.PCLF-PDIR.hither tsunami and wave SUBR-enter=3MINIS SUBR-destroy=3MINIS
'Because we might have been really safe there in the coming of the tsunami and the intrusive, destructive waves.' (16.10)

Note in (34) that the italicized adjectival forms combine with the subordinator *kx*, as described next in 3.7.2.

3.7.2 Adjectives with subordinator *kx*

The above set of syntactically simple adjectives is typologically interesting because in *Where Have All the Adjectives Gone?* Dixon (2010c:3-4) finds that other languages having small adjective classes normally include some variation of the following pairs in that set: large/small, long/short, new/old, good/bad, black/white, and red/green (unripe).

While Natqgu has these semantic concepts, syntactically they are encoded by stative verbs, requiring the subordinator *kx* for their adjectival use as in:

kxetu 'large' *kxtopwz* 'small'

kxboi 'long'	*kxmrbc* 'short'
kxmrna 'new'	*kxblzlo* 'old'
kxbo 'black'	*kxprki* 'white'
kxpc 'red'	*kxmqbq* 'green, unripe'

This form: NP + subordinator *kx* + (be)verb is by far most common adjectival strategy in Natqgu. It was illustrated earlier with non-stative verbs by the last two words in sentence (34) describing the intrusive, destructive waves, (bolded and italicized). The demonstrative *kc* DEM2.DIST can be substituted for the subordinator *kx* (Lynch et al. 2002:53, Early 2009), when the nominal is definite and already introduced in the discourse; see *kcng* in example (10).

3.7.3 The proprietive: subordinated verbs functioning adjectivally

Natqgu derives stative verbs from nouns using *-ngr* PROP 'proprietive' indicating the noun is 'with or has something' (Haspelmath 2008, Lichtenberk 2009); here, the property of something. These can, in turn, serve in adjectival roles as in (35) and (36).

(35) *Animol kä-në-topwë=ng në-mnâ-kapü-ne=ng me öplë-ngö.*

Animol	kx-nz-topwz=ng	nz-mnc-kapq-ne=ng	me	rplz-**ngr**
animal	SUBR-3AUG-small=3AUGIS	3AUG-stay-hide-DSTR=3AUGIS	place	stone-PROP

'Small animals hide around in the rocky places.' (Psalm 104:18)

(36) *Këdü ëbü tötenge ä Menabë nëabëlö bona kä nâblongö li.*

kz-dq	zbq	trte=nge	x	Menabz	nz-a-bz=lr
AT-INDF.SG	day	father=1MINII	and	Menabz	3AUG1-CAUS-die=3AUGIA
bona	kx	ncblo-ngr	li		
pigeon	SUBR	man-PROP	two		

'One day my father and Menabz killed two male pigeons.' (07.01)

3.7.4 Modification by nouns

Another modification strategy has the head noun followed directly by a word which could also fill a noun slot, but which serves as a noun modifier. Compare *doa ncblo* 'male child' in (15b) with *gout kx ncblongr* 'male goats' in (36). The animacy hierarchy (Comrie 1981:38) accounts for the fact that humans and animals are modified differently.

3.7.5 Comparatives & superlatives

There are no unique morphemes to express comparatives and superlatives. However, the sequence of a geometric directional and a personal directional serves this function, as shown in the forms in (37) based on *etu* 'be.big'. The morphemes *-px* + *-bz* 'out-go' in (37a) add the comparative and the addition of the intensifier *-tx* (37b) makes it even more so. Then in (37c) the superlative is understood by the addition of *zlwz* 'very/much'.

(37) Bigger, much bigger, biggest

(a) *etu-**px-bz***	(b) *etu-**tx**-px-bz*	(c) *etu-tx-px-**zlwz**-bz*
be.big-GDIR.out-PDIR.yon	be.big-INTS-GDIR.out-PDIR.yon	be.big-INTS-GDIR.out-much-PDIR.yon
'bigger'	'much bigger'	'biggest'

To make comparisons more explicit, the verb *mya* 'miss, surpass' is used with a geometric directional (in, out, up, down) to say in what dimension the comparison is being made. The example in (38) is a long NP, part of a list of things people showed Prince Philip when he visited in 1959 and has a superlative sense, even with just *-px* + *-bz.* Part of the meaning, then, is from context.

(38) *Dalö nëelangö më nelâ, kâ tüngi nëelangö kämyapäbë möka Sada Krus.*

da-lr	nz-ela-ngr	mz	nelc	kc	tq-ngi=Ø
things-PCLF.ASSOC	NMLZ1-dance-NMLZ dance	PREP	nosepiece	DEM2.DIST	RL-be=3MINIS
nz-ela-ngr	kx-**mya**-**px-bz=Ø**			mr-ka	Sada Krus
NMLZ1-dance-NMLZ	SUBR-surpass-PDIR.out-PDIR.yon=3MINIS			LOC-DEM2.PROX	Santa Cruz

'Things for dancing with the nose shell, which is the most important dance here on Santa Cruz.' (62.11)

3.8 Basic Noun Phrase Structure

A Natqgu noun phrase (NP) is formed by a head noun and its following modifiers, if any. Simple nouns and free pronouns, plus the complex nominal forms from 3.3 can all function as NP heads. Relative pronouns can also be heads, and are formed with a pronominal relativizer plus a demonstrative. Some examples follow.

3.8.1 Nouns as NP heads

Simple nouns can function as NP heads. Sentence (39) illustrates this with three head nouns. The first NP is the complex one in square brackets, 'the child I was always a twosome with,' and the noun *doa* 'child' is its head. The second NP is headed by the noun *drtq* 'name' which is modified by the possessive enclitic 'his.' Lastly, the third NP in the sentence is headed by a bare noun, the proper name *Lrlvz*.

(39) *…këdü doa kä line-ëvëkö nâdö dötüde Lölvë.*

[kz-dq	**doa**	kx	li-ne-zvz=kr	ncdr]	**drtq**=de	**Lrlvz**.
AT- INDF.SG	child	SUBR	TWO-DSTR -always=1AUGI	COM.DU	name=3MINII	Lrlvz.

'…a kid I was always a twosome with is named Lrlvz.' (03.01)

3.8.2 Nominalizations as NP heads

Action nominalizations also function as heads. Sentence (40) illustrates two action nominalizations as NP heads. The first of these is 'believing' with no morphology other than the circumfix nominalizer and the middle indicating it is on-going. The other nominalization in square brackets, 'our trusting God,' is a complex construction and it is possessed. The idiom 'to make one's neck ripe' means 'to trust in.'

(40) *…ä ökatöpü bagö nëölängitingö ä nëabötö-köbëkö dötwögö më Gât.*

x	r-ka-tr-mq=Ø	ba=gr	**nz-r-lxngi-ti-ngr**
and	MID-give-GDIR.in-PDIR.hither=3MINIS	DAT=1AUGII	NMLZ1-MID-lean-TR-NMLZ
x	[**nz-a-br-tr-kr-bz=kr**	**drtwr=gr**	mz Gct]
and	NMLZ1-CAUS-ripe-GDIR.in-NMLZ.PCLF-PDIR.yon=1AUGI	neck=1AUGII	PREP God

'…and it caused our believing and our trusting in God.' (40.08)

Similarly, sentence (41) illustrates a participant nominal 'the sick' as the head of the bracketed NP 'the sick in our village.'

(41) *…, këdü ëbü Dâkta dötwöde vëtä ä yönitä kë, muöde nëmâ-köde känëyagoäng më mëtea nyëgö, a' töpnëngö medesin kä naokatö-ngöde nidö.*

kz-dq	zbq	dckta	drtwr=de	vz-tx=Ø	x
AT-INDF.SG	day	doctor	mind=3MINII	feel.sad-INTS=3MINIS	and
yrni-tx-kz=Ø		murde	nz-mc-kr=de		[**kx-nz-yagox=ngq**
cry-INTS-also=3MINIS		because	NMLZ1-see-NMLZ.PCLF=3MINII		SUBR-3AUG-sick=3AUGIS
mz	mztea	nyz=gr,]	a'	trpnzngr	medesin
PREP	village	PCLF.B&G=1AUGII,	but	none	medicine
kx	na-okatr-ngr=de	nidr			
SUBR	IRR-help-APPL=3MINII	be=3AUGII			

'…one day the doctor was very sad and cried intensely, because of his seeing the sick in our village, but having no medicine from which he might help them.' (20.04)

3.8.3 Free pronouns as NP heads

Sentence (42) shows the use of free pronouns (see Table 6) as heads, as shown by *ninge* 'I/me' and *nigr* 'we/us'.

(42) *Zbë këdü doa lö Isabel dötüde Daniel Dani ä ninge tüpipem Bisop bagö kä nigö kä navëbë më Mr Lore.*

zbz	kzdq	doa	lr	Isabel	drtq=de	Daniel	Dani	x
so.then	a	child	TPNYM	Isabel	name=3MINII	Daniel	Dani	and
ni=nge	tq-pi=pe-m			bisop	ba=gr	kx	**ni=gr**	
be=1MINII	RL-say=COS-2MINII			bishop	DAT=1AUGII	SUBR	be=1AUGII	
kx	na-vz-bz=Ø		mz	Mr	Lore			
SUBR	IRR-go-PDIR.yon=3MINIS		PREP	Mr	Lore			

'Then a guy from Isabel named Daniel Dani and I, the Bishop told us that we were the ones who should go to Mr. Lore.' (53.19)

3.8.4 Relative pronouns as NP heads

The prefix *kr-* combines with any of the simple demonstratives to form a relative pronoun, as illustrated by the form *krkc* 'that which' in sentence (43). It is the head of the clause 'that which the tsunami uprooted.'

(43) *Nëmnâng më ma ngö takes kämöna kä nëtekütöngö kökâ tüyöwilä dävo.*

nz-mnc=ngq	mz	ma	ngr	takes	kx-mrna	kx
3AUG-be=3AUGIS	PREP	house	GEN1A	tax	SUBR-new	SUBR
nz-tekqtr-ngr	**kr-kc**		tq-yrvi-lx			dxvo
NMLZ1-exchange-NMLZ	RPRN2-DEM2.DIST		RL-pull.out-out.away.from			tsunami

'They lived in the new tax house replacing that which the tsunami uprooted.' (19.17)

4. The Verb Complex and Verb Stem Creation

The Natqgu verb complex (Wurm 1992) is comprised of a verb core, defined as the simple root or complex stem, with a possible four pre-core and twenty-one post-core modifiers. It is defined as encompassing all material between and including the circumfix negator, as well as the aspect proclitic that precedes the first part of the negative circumfix. The core itself is composed minimally of a simple root, but can be modified by compounding to form a stem, as described in §4.2. The post-core ordered slots are comprised of four types of adverbs, two types of directionals, multiple valency changing suffixes, subject and object enclitics, a reflexive/reciprocals slot, a few miscellaneous slots, ending with the second part of the circumfix negative. A review of the data required to delineate and isolate these slot positions is beyond the scope of this work. It involved comparing the placement of affixes in relation to one another and finding labels to assign to morphemes which filling the same slot. Where possible, I identify the ProtoOceanic (POc) source for the morphemes under discussion, especially when considering the valency-changing morphology.

An individual word does not use every possible slot. Rather, all four pre-core slots can be filled, while the most post-core slots found filled to date is eight. For example, in the verb word of (44) the core *krlz* 'reach' has two pre-core morphemes and three post-core morphemes. The word is bounded by the circumfix negators.

(44) *…më dötwögö tönakölëpüleu Solomon.*

mz	drtwr=gr	**tr-na-krlz-mq=le-u**	Solomon
PREP	neck=1AUGII	NEG-IRR-reach-PDIR.hither=3MINIA-NEG	Solomon Islands

'…in our thinking it wouldn't reach the Solomons.' (35.21)

4.1 Pre-core slots

The four pre-core slots -4 proclitic aspect, -3 circumfix negative A, -2 mood, -1 causative or middle are shown in Table 9. Circumfix negation of slots -3 and +21 were illustrated by *tr>…<u*

of sentence (44). Proclitic aspect and mood are illustrated in sentence (45) where *sc*= 'perfective' fills the aspect slot and *tq*- 'realis' fills the mood slot. The orthographic convention is to write proclitic aspect as a single word. That practice is followed here so that orthographic first lines match up with the morphemes and glosses. It should be kept in mind though, that grammatically it is a clitic and might more accurately be attached to the following morpheme.

(45) *…akiokö dëu öde tü, ä sâ tüwäbu-ngalelvëpekö dëu kâng tü.*

aki-o=kr			dzu	r=de		tq
distribute-GDIR.down=1AUGI			portion	GEN1B=3MINII		three
x	**sc=**	**tq**-wxbu-ngale-lvz=pe=kr		dzu	kcng	tq
and	PFV=	RL-sit-around-APPL=COS=1AUGI		portion	those	three

'…we distributed them into three portions, and we sat around the three portions.' (45.05)

The final pre-core slot, is filled by the causative prefix *a*- or the middle prefix *r*-, which are mutually exclusive.[10] They are discussed in §5 and §6, with detailed examples in §7 on valency.

Table 9. Pre-core slots of the Natqgu verb complex

-4 aspect proclitic	-3 negation prefix	-2 mood	-1 causative or middle	0 verb root
sc= PFV	*tr*> NEG	*tq*- RL	*a*- CAUS	
sa= IPFV		*tz*- RL.3AUG	*r*- MID	
ma= 'lest'		*na*- IRR		
		nz- 3AUG		

4.2 The verb core

The Natqgu verb core is filled by a single verbal root (Vroot) morpheme in the zero slot, which may be either free or bound. Its simplest form is an imperative with no further morphology. The verbal root can become a stem by filling the +1 compounding slot, yielding {Vroot+x}. Nothing can intervene between the zero slot of the verb root and the +1 compounding slot. This formulation allows us to more clearly categorize full set of complex verb stems, as laid out in Table 10. This is similar to what François proposes for Mwotlap (2005:139-140).

The compounding slot +1 is distinct from the core applicative slot of +2 because such applicatives can follow a complex stem. That is, these two means of modification near the verb core cannot be felicitously combined into only one slot. If the slots were combined and multiple items from the compounding slot were allowed to modify a verb, then there would be nothing to constrain which of the elements could co-occur; keeping them separate provides this constraint.

Many of these stems presumably originated historically in serial verb constructions (Næss & Boerger 2008) of the type {V+V}. But synchronically, while the first slot in Natqgu is filled by either a free or bound verb root, the second slot shows variety, allowing bound and free verbs, as well as bound adverbs, and even a noun.

Example (a) shows a prototypical serial verb construction with two free verb morphemes. Examples (b), (c), and (d) referencing the SGM text, show variations on this where one or the other or both verbs in the V-V sequence is bound. Example (e) demonstrates a bound adverb in the +1 slot, which can be filled by a number of morphemes. The final form in (f) has a noun in the second slot, giving it an adverbial sense. It is uncommon, in that it tells how someone was speaking. Further verbal morphology attaches to the simple verb root or the complex stem.

[10] The seven or so verbs which appear to have causative + middle are actually the causative plus a verb root which begins with <r>.

Table 10. Natqgu core and verb stem creation

	0 Vroot	+1 compounders	examples	text reference
a	V	V	***lu-blc-****tr* 'pierce-jump in' pierce-jump-GDIR.in	ntu-011-2004-writ-nar-bhb-007[11]
b	V	Vbound	***lu-nge-****o-mq=le* 'it jabbed a hole in it' spear-make.hole-GDIR.down-DIR.hither=3MINIA	11.30
c	Vbound	V	***wx-bu-****o-ngr-mq ncblo* 'man sat on it' sit-fold-GDIR.down-PDIR.hither man	06.08
d	Vbound	Vbound	***pla-mri-****lz-mq=le* 'he breaks stick-like obj' break-stick-GDIR.up-PDIR.hither=3MINIA	11.25
e	V	ADVbound	***ka-dwzlr-****ngr-m* 'repay' give-back-APPL-PDIR.hither	Matthew 18:28
f	V	N	***ycmne-zngya'-****bz* 'speak angrily' speak-anger- PDIR.yon	Psalm 2:5

4.2.1 Core applicatives, slot +2

Nothing can come between the +2 core applicatives (CAPPL) and the verb root or stem, whichever is in play. These are in opposition to *-ngr*, which is the single peripheral applicative, occurring near the end of the verb complex. There are nine CAPPL forms, which in all my earlier work (see references) I labeled the +2 slot as 'unpaired directionals.' The only change here is that the label is different and 'applicative' acknowledges that the CAPPL forms can license an additional argument, even though they do not necessarily do so. This label also parallels the description of Nalögo by Alfarano (2021), making the two languages easier to compare. These forms are presented further in §7.3, giving examples of both their applicative and non-applicative functions.

4.3 Post-core slots

The post-core slots +2 through +21 are filled by the categories described next, and illustrated by Table 11. Forms in the table without a dash - or equals = are free morphemes which can occur outside the verb complex. For all categories except adverbs the full set of potential forms is listed. Forms listed twice, such as *-mi* in slots +2 and +10, along with *-ani* 'quickly' in slots +3 and +9, can be found in both positions. Though rare, *ani* 'be.quick' can also occur as an independent verb. I would posit then, that its +3 slot might actually be a +1 verb compounder and that otherwise it occurs in +9 telling to what degree something happened. Further study is needed. For a list of subject and object enclitics of +19 and +20, see Table 4.

Table 11. Natqgu post-core verb complex slots

+2 core APPL	+3 adv manner	+4 TR	+5 INTS	+6 DSTR	+7 GDIR	+8 RECP/REFL	+9 adv degree	+10 DPV B	+11 adv qualifier
-c 'across'	*-ani* 'quickly'	*-ti* TR	*-tx*	*-ne*	*-lz* 'up'	*-etr* RECP	*-ani* 'quickly'	*-mi*	*-alzu* 'instead'
-ki 'path'	*-kato* 'forcefully'	*-ti* PLCT			*-o* 'down'	*-lzbq* REFL	*-atwrnr* 'wholly'		*-zpwx* 'true'
-lvz 'about'	*-rbr* 'wrongly'				*-px* 'out'	*-lxblr* 'together'	*-rlru* 'far'		*-angidr* 'real'
-plx 'through	*-lrpi* 'softly'				*-tr* 'in'		*-beka* 'aside'		

[11] Example (a) comes from a text in the Natqgu corpus (Boerger & Boerger, In progress). It is entitled, *Mengalu nibq nrc* 'Mengalu is killed by a wave,' also written by Mr. Simon.

+12 adv quantifier	+13 aspect	+14 adv temporal	+15 also	+16 APPL	+17 PDIR	+18 restrictive	+19 subj	+20 obj	+21 NEG
zlwz 'very/much'	*=pe* COS	*mou* 'again'	*kz* 'also'	*-ngr*	*-bz* 'yon'	*=pwz* 'just'			*<u* NEG
zvz 'always'	*=pnz* CMPL	*kai* 'first'			*-mq* 'hither'				
-alo 'forever'	*=be* 'still'								
-nrbalq 'nothing'	*=ka* 'not yet'								

4.3.1 Directionals, slots +7 and +17

The rare sentence lacks a directional. The Natqgu directionals occur in two categories, the geometric directionals of slot +7 and the personal directionals of slot +17. The geometric directionals (GDIR) occur with the meanings up, down, in, and out (Lober & Boerger 2009).

The personal directional (PDIR) *-mq* orients the action of the verb as being toward 'hither' the person in focus in the discourse, that is, the deictic center. It is likely a reflex of POc *mai 'come.' The other PDIR *-bz* orients the action away from the deictic center, and may be related to either POc *lako 'go to' or *pano 'go away' (Lober & Boerger 2009). At the peak of a discourse, directional use can shift from third person omniscient narrator to the first person point of view of the main character (Boerger 2019).[12] Only one GDIR and one PDIR is allowed per verb. Both directional types are shown in sentence (46), with relevant forms in a bold font.

(46) *Kä mâpäm këdü lö kä mnâpäm më nâ nökö nâboi kâma, sâ lilvâtitäope-këpüle ä mawitäde.*

kx	mc-**px-mq**	kzdq	lr	kx		
SUBR	see-**GDIR.out-PDIR.hither**	a	sea.hawk	SUBR		
mnc-**px-mq**=Ø		mz	nc.nrkr	ncboi		kc-ma
be-**GDIR.out-PDIR.hither**=3MINIS		PREP	tree.kwila	needlefish		that.one
sc=	lilvcti-tx-**o**=pe-kz-**mq**=le			x	ma-wi-tx=de	
PFV=	swoop-INTS-**GDIR.down**=COS-also-**PDIR.hither**=3MINIA			and	bite-middle-INTS=3MINII	

'When a sea hawk which lived in a Pacific teak tree [*Intsia bijuga*] saw that needle fish, it also swooped right down and bit it in half.' (11.09)[13]

4.3.2 Depictive *-mi*, slots +2 and +10

The suffix *-mi* 'with' occurs in slot +2, as well as slot +10. It is one of two morphemes found to date which occurs in two slots. Unless there are numerous other post-core morphemes, it can be unclear which slot is in use. Natqgu *-mi* has two functions. The first, shown in (47) has the sense of 'together with each other' or even 'in unison.' These senses distinguish the first use of *-mi* from *-lxblr* 'together' in slot +8. This use does not increase valency.

A second meaning 'with' is in (48). It increases valency to indicate the object. For this use, the object being accompanied is inanimate or an animate participant who is subordinate to the agent. A dual comitative *ncdr* 'with' and a plural comitative *badr* 'with' are used to join

[12] I have not checked the 82 episodes of the SGM text to see if directional shift occurs in any of them. Since it is told mostly in the first person, the point-of-view shift from third to first person is less likely to happen. There are, however, several episodes in which he reports on activities of his friends where this could occur.

[13] The underlined forms in this sentence also shows that that *nc* 'tree' (a shortened form of *nounc* 'tree') and *nc* 'fish' are homonyms which serve as categories for types of trees and fish. The NLP team decided to write the tree names with a space between them and the fish names joined, but this is totally arbitrary to make reading easier. There is also at least one name *nc bq*, which could be an Alexandrian laurel tree [*Calophyllum inophyllum*] or a pompano fish [*Alectis ciliaris*] (Boerger et al 2019:122-23).

+animate NPs having equal social status (Næss et al. To appear.) Both uses of *-mi* are found in both possible slots on the verb. See discussion in §7.3.8. Further research could predict how slot assignments are made.

(47) *Këdu nidö nënemilö kä, "Lötëlvë kâ büpe döka'!"*

kz-du	nidr	nz-ne-**mi**=lr		kx
AT- INDF.PL	be=3AUGII	3AUG-scream-jointly=3AUGIA		SUBR
lrtzlvz	kc	bq=pe	drka'	
elder	DEM2.DIST	kill=COS	demon	

'Some of them screamed together, "That old man, the devil killed him!"' (11.28)

(48) *A' övëmim doa kä bletipä-läblöng më Sade kâng tüvë-ngömle.*

a'	r-vz-**mi**-mq=Ø		doa	kx	ble-ti-px-lxblr-ngq
but	MID-go-DPV-PDIR.hither=3MINIS		person	SUBR	be.different-TR-GDIR.out-each-PL
mz	Sade	kcng	tq-vz-ngr-mq=le		
PREP	Sunday	those	RL-go-APPL-PDIR.hither=3MINIA		

'But he brings a different student [person/child] on those Sundays he comes.' (30.03)

4.3.3 Adverbs, slots +3, +9, +11, +12, and +14

Manner adverbs fill slot +3, as in (49), where they precede the transitivizer *-ti* of slot +4. The remaining adverb slots follow the geometric directionals. The degree adverb of slot +9 is shown in (50). Qualifier adverbs as in (51) are in slot +11, and quantifier adverbs of slot +12 are shown in (52). The temporal adverbs of slot +14 follow the enclitic aspect of slot +13 and are illustrated in (53). Both temporal adverbs, *mou* 'further, again, more' and *kai* 'first' are independent morphemes which also occur outside the verb complex, modifying an entire sentence or clause.

(49) *Nëdwa-öbö-lë-ngöm Këpten badö kru nedeng Aijë nëalängitikö ebio le mëli kâ më öngalä.*

nz-dwalz-**rbr**-lz-ngr-mq			kzpten	badr	kru
3AUG-get.up-**wrong**-GDIR.up-APPL-PDIR.hither			captain	COM.PL	crew
ne=de-ngq	Aijz	nz-a-lxngi-ti-kr			ebio=le
PCLF.rsbl=3MINII-PL	*Hygeia*	NMLZ1-CAUS-lean-TR-NMLZ.PCLF			sea.swell=3MINIP
mzli	kc	mz	rngalx		
time	DEM2.DIST	PREP	dawn		

'The captain and his crew were rudely awoken on the *Hygeia* from the sea swell making it tilt in the early morning.' (19.02)

(50) *Sâ tüöpipebële badö kä, "Lolvëoamu waea la ä dwaâ-aniamu."*

sc=	tq-r-pi=pe-bz=le		ba=dr	kx
PFV=	RL-MID-say=COS-PDIR.yon=3MINIA		DAT=3AUGII	SUBR
lolvz-o=amu	waea	la	x	dwa-c-**ani**=amu
restrain-GDIR.down=2AUGI	wire	DEM1.PROX	and	jump-across-**quickl**y=2AUGI

'He said to them, "Hold that wire down and jump over it quickly."' (42.14)

(51) *Yëlumâ, sâ tüöpimle kä naobülvëti-ëpwää mökâ ä napinemâ kä nâblo tülvö kä mnâ mökâ.*

yzlu-mq=x		sc=	tq-r-pi-mq=le		kx
return-PDIR.hither=1MINI		PFV=	RL-MID-say-PDIR.hither=3MINIA		SUBR
na-obq-lvz-ti-**zpwx**=x		mr-kc	x	na-pi-ne-mq=x	
IRR-look-thruout-TR-**well**=1MINI		LOC-DEM2.DIST	and	IRR-say-DSTR-PDIR.hither=1MINI	
kx	ncblo	tqlvr	kx	mnc	mr-kc
SUBR	man	how.many	SUBR	be	LOC-DEM2.DIST

'I returned, then he said that I should look throughout there and I should say how many men stayed there.' (47.21)

(52) *Kä mwelö-ëlwëkö, sâ tüöpipem Käetu ö skul nadwapekö badö peto.*

kx	mwelr-**zlwz**=kr,	sc=	tq-r-pi=pe-mq	kxetu	r
SUBR	fear-**much**=1AUGI,	PFV=	RL-MID-say=COS-PDIR.hither	leader	GEN1A
skul	na-dwa=pe=kr	badr	peto		
school	IRR-jump=COS=1AUGI	COM.PL	bush		

'Since we were very frightened, the Head of the school said to us we should go with him to the bush.' (37.09)

(53) *Më nëvë-ködö kâ nëobü-moupüng mü, a' nâ nëlu kâ möböpe tötupeu mökâ.*

mz	nz-vz-kr=dr			kc	nz-obq-**mou**-mq=ng	
PREP	NMLZ1-GO-NMLZ.PCLF=3AUGII			DEM2.DIST	3AUG-look-**again**-PDIR.hither=3AUGIS	
mq,	a'	nc.nzlu	kc	mrbr=pe=Ø	tr-tu=pe=Ø-u	mr-kc
behind	but	tree.coconut	DEM2.DIST	lose=COS=3MINIS	NEG-stand=COS=3MINIS-NEG	LOC-DEM2.DIST

'In their going, they looked back again, but the coconut tree [*Cocos nucifera*] was gone, it was not standing there anymore.' (41.12)

4.3.4 Transitivizer *-ti* and Pluractional *-ti*, slot 5

The transitivizer *-ti* of slot 5 has been present in many example sentences to this point. The transitivizer increases the valency of an intransitive verb in order to license an object. Sentence (54) has two forms of *yrlz* 'marry'. The first tells the village Simon married into, and the verb has no added valency morphology, while the second verb licenses the object, that is, who he married, by use of *-ti*. The transitivizer is discussed in more detail in §7.4.

(54) *Yölëä Bënwë, yölëtiä këdü doa olvë dötüde Dora Yati.*

yrlz=x	Bznwz,	**yrlz-ti=x**	kzdq	doa	olvz
marry=1MINI	Bznwz.vil,	marry-TR=1MINI	a	youth	female
drtq=de	Dora	Yati			
name=3MINII	Dora	Yati			

'I married into Bznwz village; I married a young woman named Dora Yati.' (59.08)

There is a second morpheme *-ti* (§7.4.1) which fills the same verb complex slot, but with a different function. This second *-ti* indicates pluractionality of objects with transitive verbs; a multiplicity of objects are being acted on by the verb. In (55), *-ti* refers to the many things done.

(55) *…mâte da kä aletiköng...*

mc=te	da	kx	ale-**ti**=kr=ngq
see=3MINII	thing	SUBR	do-PLCT=1AUGI=3AUGIP

'…he saw the things we had done…' (06.13)

Since the two *-ti* forms fill the same slot and never co-occur, it can be difficult in places to identify which one is in use, without first investigating the verb root to determine whether it is transitive or intransitive. The second function has only been recently identified, so all occurrences of *-ti* in the SGM text were initially glossed as transitivizers. The text (forthcoming in four volumes in *TILP*) has been edited to mark pluractional *-ti* as PLCT where relevant, though some instances may still have been overlooked.

4.3.5 Intensifier *-tx* and distributive *-ne*, slots +5 and +6

The intensifier *-tx* and distributive *-ne* have been previously presented in multiple example sentences. Example (5), which has both and is repeated here with no numbering. The distributive, illustrated in (64), means that the action of the verb is not isolated, but in no specific place and even many random places. The *-ne* intensifier function is shown here; context determines the function.

Mëdealwä mwitä käpipëne ä sâ tümelëpe-moupü.

Mzdealwx	mwi-**tx**=Ø	kx-pipz-**ne**	x	sc=
Mzdealwx	sleep-INTS=3MINIS	SUBR-few-INTS	and	PFV=

tq-melz=pe-mou-mq=Ø
RL-awaken=COS-again-PDIR.hither=3MINIS
'Mzdealwx slept just a little while and he woke back up.' (23.13)

4.3.6 Reflexive, reciprocal, and 'together' slot +8

The reflexive *-lzbq* and reciprocal *-etr* can fill slot +8. There is not a perfect correspondence between English and Natqgu uses of the reflexive and reciprocal, and some speakers seem to use *-lzbq* for both meanings. A straightforward use is found in (56), where two soldiers split up.

(56) *A' lö Japan kâng sâ tëaki-lëbüpe, këdü vëkimle pöla ä këdü vëkipemle më löpëki.*

a'	lr	Japan	kcng	sc=	tz-aki-**lzbq**=pe
but	TPNYM	Japan	those	PFV=	RL.3AUG-divide-**REFL**=COS
kz-dq		vz-ki-mq=le			prla
AT-INDF.SG		go-path-PDIR.hither=3MINIA			sea
x	kz-dq	vz-ki=pe-mq=le		mz	lrpzki
and	AT-INDF.SG	go-path=COS-PDIR.hither=3MINIA		PREP	road

'But the Japanese split themselves up, one came along the sea and one came along the road.' (38.11)

An example of *-etr* 'reciprocal' is found in (57), in which the villagers of Nea and their shipwrecked guests take leave of each other. Example (58) shows the suffix *-lxblr* 'together.' See discussion at §4.3.3 regarding differences between *-lxblr* and *-mi*.

(57) *…yöni-etötäkö badö, ä sâ tëyapäpeng më lâsu tëvopeng.*

yrni-**etr**-tx=kr		badr	x	sc=	tz-ya-px=pe=ngq
CRY-**RECP**-INTS=1AUGI		COM.PL	and	PFV=	RL.3AUG-paddle-GDIR.out=COS=3AUGIS
mz	lcsu	tz-vo=pe=ngq			
PREP	ship	RL.3AUG-travel=COS=3AUGIS			

'…we cried with them for each other, and then they paddled out to the ship and left.' (21.11)

The suffix *-lxblr* 'together' also fills +8 slot in the verb complex.

(58) *Yölütö-läblöbële nigö Mama Frank Bolen Toke më Sen Tomas mökâ Bënwë.*

yrlq-tr-**lxblr**-bz=le				ni=gr	mama	
put-GDIR.in-**together**-PDIR.yon=3MINIA				be=1AUGII	priest	
Frank	Bolen	Toke	mz	Sen Tomas	mr-kc	Bznwz
Frank	Bolen	Toke	PREP	St. Thomas	LOC-DEM2.DIST	Bznwz.vil.

'Father Frank Bolen Toke joined us together at St. Thomas Church in Bznwz village.' (64.04)

4.3.7 Enclitic aspect, slot +13

In addition to the proclitic aspect of slot -4, Natqgu has enclitic aspect in slot +13, which is filled by four possible enclitics. The most frequent of these is *=pe* 'change of state,' which tracks the discourse and establishes at what point in a process the action of the verb has reached. With telic verbs, it reads as perfective, indicating a change of state from a previous negative state or the situation in which COS is the state which results following the endpoint of the event. With atelic verbs *=pe* indicates a completed event.

In combination with the imperfective it can express an ingressive meaning with stative and atelic verbs or an incipient meaning 'about to happen' with punctual verbs. The same marker can also express 'already'-related meanings and 'change of scene' at the discourse level.

A second aspectual enclitic in slot +13 is *=pnz* 'completive.' It indicates that the action of the verb has been done at some point in the past or prior to the action of another verb. Both *=pe* and *=pnz* occur in example (59).

(59) *A' glötipeng muöde ayëpötilë-pnë-kaiä dëbödö.*

a'	glr-ti=**pe**-ngq	murde	a-yzpr-ti-lz=**pnz**-kai=x	dzbr=dr
but	be.dry-TR=COS-PL	because	CAUS-cut.in.two-TR-GDIR.up=CMPL-first=1MINI	root=3AUGII

'But they were already dry because previously I had first cut them off at their roots.' (69.42)

The final two enclitics in slot +13 are *=be* 'yet' illustrated in (94) and *=ka* 'not yet' with three instances in (60). Note that *=ka* is the second part of a circumfix with *tr-* 'negative' being its first member, as seen previously in the negative circumfix *tr-…-u*. But the second parts of these two negative circumfixes occur in different slots, here in +13 and at in slot +21 for *-u*.

(60) *Mölämü lang etu tüpime bange tökölë-kakö nidö, töyâmne-kakö badö ä tövëne-kakö badö.*

mrlx=mq	la-ngq	etu	tq-pi=mq=q	ba=nge	
son=2MINII	DEM1.PROX-PL	big	RL-say-PDIR.hither=2MINI	DAT=1MINII	
tr-krlz=**ka**=kr		ni=dr	tr-ycmne=**ka**=kr		badr
NEG-know=not.yet=1AUGI		be=3AUGII	NEG-speak=not.yet=1AUGI		COM.PL
x	tr-vzne=**ka**=kr	badr			
and	NEG-walk=not.yet=1AUGI	COM.PL			

'Those big sons of yours you told me about we don't know them yet, we haven't spoken with them yet, and they have not traveled with us yet.' (27.03)

4.3.8 *Kz* 'also,' slot +15

Examples of *(-)kz* 'also' have been shown in sentences (6), (41), and (46). It is also an independent morpheme which can occur outside the verb complex to conjoin NPs and clauses. The latter is described in §8.

4.3.9 Applicative *-ngr*, slot +16

The applicative *-ngr* occurs near the end of the verb complex, i.e. on its periphery. It licenses the addition of an argument to the verb, often a reason or purpose, and is the only morpheme glossed as APPL. Other morphemes with applicative functions are glossed with either their meaning or a more specific function. The applicative is described more fully in §7.6 along with other valency-changing devices. Examples are found in (31), (33), (41), and (49).

4.3.10 Restrictive *=pwz* 'just, only', slot +18

The restrictive clitic *=pwz* is the only morpheme filling slot +18. It was previously mentioned in Table 5 of §3.4 about demonstratives, in relation to its role as part of a complex demonstrative. Another example is found in sentence (23). In combination with the intensifier *-tx*, the form *txpwz* can occur outside the verb word and modify predicates and NPs. It follows the elements it modifies.

4.3.11 Subject and object enclitics, slots +19 and +20

Regarding the pronominal enclitics of Table 4, column 1 fills the subject slot on the verb complex, and column 2 fills the object slot. The latter is illustrated by example (103), repeated here in part.

Twëkipälele më nâtü Nemya'

twz-ki-px=le=le	mz	nctq	Nemya'
take-path-GDIR.out=3MINIA=3MINP	PREP	point.of.land	Nemya'

'It took it out along the point of Nemya'…' (19.07)

5. Verb classes

Following Alfarano (2021:361-362) for Nalögo, the verbs of Natqgu can also be divided into four classes, yielding seven total types. These include three intransitive types §5.1, two transitive types §5.2, an inherent semitransitive §5.3, and an ambitransitive §5.4. Verb classes are defined based on:
(i) the valency-changing morphology a verb combines with, (ii) the semantic distinction between stative and dynamic verbs, and (iii) the semantic role of the intransitive subject (Evans 2003:22).

5.1 Intransitive verbs

Intransitive verbs are those which form a complete sentence or independent clause with only a verb and a subject. The three intransitive classes in Natqgu are: Class I, those with no transitive form; Class II, those transitivized by the causative prefix *a-*; and Class III those transitivized with the transitivizer *-ti.*

5.1.1 Class I intransitives with no transitive form

Alfarano (2021) identifies two Nalögo verbs in this category, 'die' and 'be.stinky' and Natqgu, *brtu* 'be.stinky' also belongs to this category. It does not occur in the SGM text and only a few times in the translated scriptures, as in (61), but never with causative or transitive morphemes. However, I posit that there are likely further Class I intransitives yet to be identified. One candidate is *pwxkqtu* 'be.ugly,' which occurs in the lexical database, but for which I have no example sentences.

(61) *Öpibë Mata bade kä, "Käetu, yöbütipäpemle möla ëbü pwäpe ä bötupe.*

r-pi-bz	Mata	ba=de	kx	kx-etu	
MID-say-PDIR.yon	Martha	DAT=3MINII	SUBR	SUBR-bigman	
yrbq-ti-px=pe-mq=le		mrla	zbq	pwx=pe	x
lay-TR-GDIR.out=COS-PDIR.hither=3MINIA		there	day	four=cos	and
brtu=pe=Ø					
be.stinky=COS=3MINIS					

'Martha said to him, "Master, he has already been lying there four days and he already stinks."' (John 11:39)

5.1.2 Class II intransitives—may have a causative

Class II intransitives are those which can be causativized by the addition of the causative prefix *a-*. These include many of the attributive verbs involving color and size, along with numerous others, as shown in (62) with nominalized forms of 'white' and 'black.'

(62) *Bëkü yölüü nëesalë-köm më naöm, muöde öbläbë bam nëapökingö ä nëabongö nünginaöm…*

bzkq	yrlq=q	nz-esalz-kr=mq	mz	nar=mq	murde
PROH	put=2MINI	NMLZ1-promise-NMLZ.POSS=2MINII	PREP	head=2MINII	because
rblx-bz	bam	**nz-a-prki-ngr**	x		
be.difficult-PDIR.yon	DAT=2MINII	NMLZ1-CAUS-white-NMLZ	and		

nz-a-bo-ngr	nqnginar=mq
NMLZ1-CAUS-dark.coloured-NMLZ	hair=2MINII

'Don't make promises by your head, because it is impossible for you to whiten or blacken your hairs...' (Matthew 5:36)

5.1.3 Class III intransitives—may co-occur with a causative, a transitivizer, or both

The third class of intransitives is comprised of those which may combine with a causative, a transitivizer, or both. Example (63) illustrates an intransitive transitivized with *-ti*. The verb *mwa* means to hunt or fish. The addition of *-ti* TRNS licenses what is caught, indicating that the hunting

or fishing was successful. In (63) the object caught, here the small needlefish, is fronted and not reiterated following the verb, which would be its normal position.

(63) *…këdü nâboi kätopwëne sâ mwatipe lika nede.*

kzdq	ncboi	kx-topwz-ne=Ø	sc=	mwa-**ti**=pe	lika	ne=de.
a	needlefish	SUBR-little-INTS=3MINIS	PFV=	fish-TR=COS	kite	PCLF.rsbl=3MINII.

'…a tiny needle fish, his kite caught [it].' (11.06)

The next three sentences use the intransitive verb *ngc* 'burn' to illustrate the remaining variations: a bare intransitive in (64), the addition of a causative in (65), and with both a causative and a transitivizer in (66).

(64) *Lâsukälvâ lâdeng tüngâneom ölwäkö, nëesë'mëng.*

lcsu-kx-lvc	lc=de-ng	tq-**ngc**-ne-o-mq	rlwx=kr
ship-SUBR-fly	DEM1.DIST=3MINII-PL	RL-burn-DSTR-GDIR.down-PDIR.hither	count=1AUGI
nz-esz'mz=ng			
3AUG-six=3AUGIS			

'We counted the planes burning down everywhere, there were six.' (51.15)

In (64) the planes are burning on their own with no causation indicated. In (65) the causative indicates who caused the burning. The hearts of the doves are removed in the first clause, but not repeated in the second, though they're understood. They do not require the addition of *-ti* TRNS. But in (66), the causative indicates someone caused the burning and *-ti* TRNS licenses the things burned.

(65) *Nëkapämlö dabukö bona kâng li sâ tëangâpebëlö më Nâbö.*

nz-kapx-mq=lr	dabu	ngr	bona	kc-ng	li	sc=
3AUG-remove-PDIR.hither=3AUGIA	heart	GEN1A	pigeon	DEM2.DIST-PL	two	PFV=
tz-**a-ngc**=pe-bz=lr	mz	ncbr				
RL.3AUG-CAUS-burn=COS-PDIR.yon=3AUGIA	PREP	cross				

'They removed the hearts of the two pigeons and burned them for the Cross.' (07.02)

(66) *Më nibö nëmu-kögö, nëtelvëlö më Menabë kâ nyö nëangâti-ngödö nâvö ngö bona, nâ, muli dakänëng kä yâtäo ä leu ödöng amölä.*

mz	nibr	nz-mu-kr=gr	nz-telvz=lr
PREP	back.part	NMLZ1-eat-NMLZ.POSS=1AUGII	3AUG-ignite=3AUGIA

mz	Menabz	kc	nyr	nz-**a-ngc-ti**-ngr=dr	ncvr
PREP	Menabz	DEM2.DIST	fire	3AUG-CAUS-burn-TR-APPL=3AUGII	meat

ngr	bona	nc	muli	dakxnzng	kx	yctxo	x	leu
GEN1A	pigeon	fish	piece	food	SUBR	left.over	and	leaf

r=dr-ngq	amrlx
GEN1A=3AUGII-PL	all

'After our eating, they [my father] with Menabz lit a fire for them to burn the flesh of the pigeon, fish, and any pieces of leftover food, and all their leaves.' (07.16)

5.2 Transitive verbs

For closely related Nalögo, Alfarano (2021:374ff) identifies a class of transitive verb forms which are inherently transitive. This class has two subclasses: Class I, transitive verbs with no intransitive or semitransitive derivation and Class II transitive verbs which allow semitransitive derivation. The same two classes occur in Natqgu, though the first class has few members.

5.2.1 Class I Transitives—no transitivity modification permitted

Class I transitives are those which cannot be made intransitive or semitransitive by the middle particle *-r*. One verb identified as belonging to this category is *ale* 'do',[14] illustrated in example (67). There are presumed to be other verbs in this category which have yet to be identified.

(67) *Ëbë sâ tüalepeä kâ da kä tömölëu kä napöpä-ngöne.*

zbz	sc=	**tq-ale=pe=x**	kc	da	kx	tr-mrlz-u
so.then	PFV=	RL-do=COS=1MINI	DEM2.DIST	thing	SUBR	NEG-be.good-NEG

kx	na-prpx-ngr=ne
SUBR	IRR-leave-APPL=1MINII

'Then I did something which was not good so I might leave because of it.' (70.15)

5.2.2 Transitive class II—take middle prefix *-r* forming semitransitives

Alfarano & Boerger (2022) discuss semitransitives and the middle prefix *ö-* in Nalögo and Natügu. Class II transitive verbs take the middle prefix *-r*, which decreases transitivity, leading to semitransitive and depatientive constructions. Semitransitive constructions express a focus on the action. They are syntactically transitive, but morphologically intransitive. That is, an object is present, but the person marking of third persons—the only place there is a distinction—is intransitive. The objects of semitransitives are more generic than those of transitive clauses. Depatientive constructions are similar to semitransitives, in that they also focus on the action, but they are both morphologically and syntactically intransitive. That is, the person and number marking is intransitive and the object is syntactically omitted, though semantically implied.

Examples (68)-(70) show the verb *nibq* 'kill' in transitive, semitransitive and depatientive constructions, respectively. In (68) the third person transitive enclitic *=le* is the subject of *nibq* and the object is *nim* 'you'. But in (69) and (70) the presence of the middle prefix *r-* changes the subject enclitic to the intransitive form. The semitransitive of (69) has a generic object 'people' while in the depatientive of (70) the object is implicit and not part of the syntax. It is part of a list of negative commands, this one being 'Thou shalt not kill.'

(68) *Öpi-moupüle kä, "Tönanibüleu nim nadü kâ, a' nabë-ngön katris."*

r-pi-mou-mq=le			kx	**tr-na-nibq=le-u**	nim
MID-say-again-PDIR.hither=3MINIA			SUBR	NEG-IRR-kill=3MINIA-NEG	be=2MINII
nadq	kc,	a'	na-bz-ngr=nq		katris
black.ant	DEM2.DIST,	but	IRR-die-APPL=2MINI		cartridge

'He said further, "It won't kill you, that black ant, but you can die from cartridges."' (47.38)

(69) *A' nâblo önibüpe leplë kä nëmâtäpwë.*

a'	ncblo	**r-nibq=pe=Ø**	leplz	kx	nz-mc-tx-pwz
but	man	MID-kill=COS=3MINIS	people	SUBR	PAS-see-INTS-just

'But a man only kills people that are seen.' (13.16)

(70) *…Öpibë Jisës kä, "Kölâde seleng: 'Bëkü kä naönibü.'…"*

r-pi-bz	Jiszs	kx	kr-lc=de		sele-ngq
MID-say-PDIR.yon	Jesus	SUBR	RPRN2-DEM1.DIST=3MINII		here-PL

bzkq	kx	**na-r-nibq**=Ø
PROH	SUBR	IRR-MID-kill

'…Jesus said, "These here: 'No one should kill.'…"' (Matthew 19:18)

[14] The verb *ale* 'do' can occur with *–ti*, in phrases like *da kcng tqaletile* 'the things he did.' But this is the pluractional *–ti*, not the transitivizer *–ti*.

5.3 Inherently semi-transitive verbs—

Again like Nalögo, Natqgu has a class of inherently semitransitive verbs, which in their basic, unmodified form occur in semitransitive and depatientive constructions. These semitransitive verbs require the transitivizer *-ti* for the object to become specific rather than generic.

A prototypical Natqgu semitransitive is the verb *pe* 'plant,' as shown in the discourse by Jesus in John 4:35-38. Examples (71) to (73) are not the full Bible verses, but only the parts which illustrate the semitransitive. Example (71) illustrates that the verb *pe* can take an object, making it syntactically transitive. The object 'seed' is implicit in the rest of the passage. Example (72) illustrates the depatientive, in that the object has been deleted and the subject is intransitive. Example (73) has two forms of *pe* 'plant'. The first of these is the nominalized form 'planting'. It does not require the middle prefix *-r* to make it generic, since the verb is already semitransitive. The second form shows *pe* with the transitivizer *-ti* (§7.4), indicating specific seeds were planted, that is, those by which people were told the news about God.

(71) *Mëbü ka peä ötü më nabë leplë kâng tëälölö natünge...*

mzbq	ka	**pe=x**	**rtq**	mz	nabz	leplz	kc-ngq
day	DEM2.PROX	plant=1MINI	seed	PREP	heart	people	DEM2.DIST-PL
tz-xlr=lr		natq=nge					
RL.3AUG-hear=3AUGIA		word=1MINII					

'Today I planted seeds in the hearts of people who heard my words…' (John 4:35)

(72) *…mölä kâ tüpe ä mölä kâ tüökülë nëabötëlvëlö doa kä ömâtile nëlungö käboi.*

mrlx	kc	**tq-pe=Ø**	x	mrlx	kc	tq-r-kq-lz=Ø
guy	DEM2.DIST	RL-plant=3MINIS	and	guy	DEM2.DIST	RL-MID-pick-GDIR.up=3MINIS
nz-abrtz-lvz=lr		doa	kx	r-mc-ti=le		nzlungr kxboi
3AUG-be.happy-about=3AUGIA		person	SUBR	MID-see-TR=3MINIA		eternal life

'The one who plants and the one who harvests are happy about the person who finds eternal life.' (John 4:36)

(73) *Tökäputöwamuu elö më nëpengö. A' nëpeti doa këbleng, më nëöpipä-köbëlö më leplë nöpa ngö Gât.*

Tr-kxpu-tr=amu-u		elr	mz	**nz-pe-ngr**				
NEG-toil-GDIR.in=2AUGI-NEG		therein	PREP	NMLZ1-plant-NMLZ				
a'	**nz-pe-ti**	doa	kzble-ngq	mz				
but	3AUG-plant-TR	person	different-PL	PREP				
nz-r-pipx-kr-bz=lr				mz	leplz	nrpa	ngr	Gct
NMLZ1- MID-declare-NMLZ.POSS-PDIR.yon=3AUGIA				PREP	people	news	GEN1A	God

'You do not toil therein by planting. But other people planted by their declaring to people the news about God.' (John 4:38)

5.4 Ambitransitive verbs

Alfarano (2021:375-77) classifies five Nalögo verbs as ambitransitive. Since the third person is the only place RSC languages distinguish between transitive and intransitive person marking, ambitransitive verbs can occur with either transitive or intransitive subjects in the third person without the addition of valency-changing morphology to make them more transitive or less so.

One of these five has a cognate ambitransitive in Natqgu, the verb *lvx* 'open.' It is the only one identified to date, but presumably there are more yet to be identified. Sentence (74) shows the verb in an intransitive clause and (75) in a transitive clause.

(74) *…naonöä nyë Gât sa nalväpäbë bade.*

naonrx	nyz	Gct	sa=	**na-lvx-px-bz=Ø**	ba=de
doorway	PCLF.B&G	God	IPFV	IRR-open-GDIR.out-PDIR.yon=3MINIS	DAT=3MINI

'…the door of God will be opened to him.' (Matthew 7:8)

(75) *Nâblo kâ tüaâlve naonöä, lväpäbële naonöä më käaâlve sip.*

ncblo	kc	tq-aclve=Ø	naonrx	**lvx-px-bz=le**
man	DEM2.DIST	RL-oversee=3MINIS	doorway	open-GDIR.out-PDIR.yon=3MINIA
naonrx	mz	kx-aclve=Ø	sip	
doorway	PREP	SUBR -oversee=3MINIS	sheep	

'The man who oversees the door, he opens the door to the shepherd.' (John 10:3)

5.5 Verbs with no specific class

A number of verbs are difficult to classify because they can combine with several applicative forms which seem to change the meaning in similar ways, making their functions and differences difficult to determine. These deserve future attention to discover if patterns can be identified, but are outside the scope of this sketch.

6. Simple clause structures

A clause is the smallest syntactic unit that can express a proposition and consists of a predicate plus obligatory 'core' arguments and optional 'peripheral' arguments. Dixon (2010b) takes core arguments to be of any of the types 'S', intransitive subject; 'A', transitive subject; 'O', transitive object. While the predicate is often a verb, it can also be filled by other word classes. A simple clause (or main clause), is one which constitutes a sentence[15] on its own. The sections below reflect the simple clause types of Natqgu.

6.1 Verbless Clauses

While there is a copula *ngini~ngi* 'be, become' in Natqgu (Table 4), it is not in frequent use in simple clauses. Instead, Natqgu creates verbless clauses in which non-verbal lexemes serve as predicates (or complements[16]). In these, the subject is juxtaposed to the second component. Relationships encoded in Natqgu verbless clauses are: identity, possession, and existence. See examples in (76) and (77).

(76) a. *Alex mölänge*.
Alex mrlx=nge
Alex son=1MINII
'Alex is my son.'
identity (equative)

b. *Böpi nange*.
brpi na=nge
banana PCLF.food=1MINII
'The banana is mine.'
possession

(77) *Këdü kâ nâblo dötüde Mewäbu*.

kz-dq	kc	ncblo	drtq=de	me-wxbu
AT-INDF.SG	DEM2.DIST	man	name=3MINII	male-sit

'There is a man named Mewxbu.'
existence

To encode location, Natqgu does not use a verbless clause, but like Engdewu (Vaa 2013: 377) employs one of two place-holder verbs meaning 'stay' which occur as the predicates of these clauses. These were illustrated by examples (13a) for animate subjects and (13b) for inanimate subjects in §3.2.3.

[15] A sentence consists of a main clause plus optionally a number of subordinate clauses (Dixon 2010b: 75). It is often a prosodic unit, and is for written languages traditionally seen as "what comes between two full stops (or periods)" (Dixon 2010b: 93).

[16] Dixon (2010a) analyses a verbless clause to consist of two core arguments, the Verbless Clause Subject and the Verbless Clause Complement, while there is no predicate in the clause.

6.1.1 Possessive clauses

In addition to verbless possessive clauses like (76b), Natqgu also has a bound verb *rngi*[17] 'have' which combines with the dative pronoun base *ba* as in example (78) and with possessive classifiers as in example (79); (see Table 8, §3.6.2). The Natqgu corpus includes such combinations with the first seven of the nine possessive classifiers. Note also the complex noun example in Table 8 with PCLF.hand.

(78) *Jon vë-nüblünepwële nümü sâ nâblo kä tö-öngibau.*

Jon	vz-nqblq-ne-pwz=le	nqmq	sc=	ncblo	kx	**tr-rngi-ba-u**
John	go-follow-INTS-just=3MINIA	way	PFV	man	SUBR	NEG-have-DAT-NEG

'John only followed the way of the man who does not have (things).' (Mark 1:6)

(79) *Këdü doa olvë kämnâ-kamelö naöngine doa nâblo, …*

Kz-dq	doa	olvz	kxmnckamelr	**na-rngi-ne**	doa	ncblo
AT-INDF.SG	child	female	virgin	IRR-have-PCLF.rsbl	child	man

'A young virgin girl will have a male child…' (Matthew 1:23)

6.2 Verbal Clauses: Core Arguments

Natqgu has a transitivity-based system with three main simple declarative clause types: intransitive, transitive and semitransitive, as illustrated in the following sections.

6.2.1 Basic Intransitive Clauses

The basic constituent order of an intransitive clause is SV when S is a noun or noun phrase. Other orders are ungrammatical, except that it is VS when S is a pronominal enclitic. See sentence (5) which contains two intransitive clauses joined by the conjunction 'and.' Attribution in Natqgu is expressed through intransitive clauses which have a stative verb as the predicate, as illustrated previously by the last clause in (61), *brtupe* 'he already stinks.'

Natqgu has two strategies for talking about weather, one involving a verbless clause and the other an intransitive clause, as illustrated with 'rain' in (80). In (80a) *tewa* 'rain' is a noun filling the S slot of the intransitive verbal predicate. In (80b) *tewa* 'rain' is the predicate, creating an avalent construction.

(80) a. *Tewa dâpe.*

tewa	dc=pe=Ø
rain	fall=COS=3MINIS

'It's raining.'

b. *Tewape.*

tewa=pe=Ø
rain=COS=3MINIS

'It's raining.'

6.2.2 Basic Transitive Clauses

A transitive clause has a transitive predicate with two core arguments, A and O. Transitive verbs were discussed in §5.2.2. Unmarked word order is VAO as in (81), but either A or O can be fronted for discourse purposes, as in (82), where *ninge* 'me' is fronted. But note, too, that there are grammatical options which are not common, but which do occur, as in (68) where the verb was marked with 3MIN1A *=le*, followed by *nim* 'you' as the object. Then immediately following *nim*, the subject of the sentence is rearticulated, 'that black ant.' More normally, 'that black ant' would be fronted.

(81) *Aelwapä Gât da kämule lâng…*

aelwa-px	Gct	da	kx-mu=le	lc-ng
show-GDIR.out	God	thing	SUBR-be.like=3MINIA	DEM1.DIST-PL

'God demonstrated such things…' (30.31)

[17] I frequently debate with myself whether *rngi* could be *r-* MID plus *ngi* 'be'. Then in combination with the possessive classifiers it would mean 'be belonging to.' This would avoid positing a bound verb 'have.' Alfarano (2021:411-412) analyzes the Nalögo cognate as 'a hybrid form, displaying both nominal and verbal properties.'

(82) *Ninge, mulëpekö badö pripekt më tebol nyëdö.*

ninge,	mu-lz=pe=kr	badr	pripekt	mz	tebol	nyz=dr
be=1MINII,	eat-GDIR.up=COS=1AUGI	COM.PL	prefect	PREP	tebol	PCLF.B&G=3AUGII

'As for me, I ate with the prefect up at their table.' (29.29)

6.2.3 Semitransitive Clauses

Semitransitive clauses are are those in which a transtive verb is detransitivized to participate in the semitransitive clause by the middle prefix *ö-*. This leads to intranstive morphological marking of the subject and the patient being generic or irrelevant, so that the focus is on the action. This contrasts with transitive objects which are specific. See examples (68) to (70) and §7.2.

6.2.4 Imperative Clauses

Imperative clauses express commands. The verb is stripped of its TAM distinctions. They have a second person as their subject, the marking of which in Natqgu is omitted in the minimal (83a) and present in the augmented (83b). Sometimes the final [u] in (83b) is deleted in the imperative.

(83)

a. Vëm!	*b. Mnâ-löpi-amu!*
vz-mq=___	mnc-lrpi=**amu**
go- PDIR.hither=___	stay-quiet=2AUGI
'Come!'	'Be quiet!' (11.16)

To form a negative imperative the prohibitive *bzkq* 'Don't!' is used. It can occur on its own as a single word command or it can precede what is forbidden. But unlike the positive imperative, the 2MIN form is maintained, rather than stripped off, as in (84).

(84)

a. Bëkü maletöü!		*b. Bëküpe dwatöamu më rum lâ.*				
bzkq	maletr=**q**	bzkq=pe	dwa-tr=**amu**	mz	rum	lc
do not	hold (in hand)=2MINI	do not=cos	jump-GDIR.in=2AUGI	PREP	room	DEM1.DIST
'Don't hold it!' (42.12)		'Don't enter that room!' (08.05)				

6.2.5 Hortatives

Clauses with irrealis marking and the non-second person forms can display a hortative function, yielding meanings like 'Let X do Y,' or 'X should~must do Y,' as in (85). Irrealis can also be used with second person forms to give more polite commands, 'You should do Y,' as in (86), where the force of the imperative depends on the socio-personal relationships. In (86), an American military officer is leading a group of students on a spying mission. The syntax of the sentence—'one of you go' vs. 'one of you must go' makes the polite form more probable, especially since he had no real authority over the student volunteers in their late teens and early twenties.

(85) *Nëyâmnetöng elö ä dötwödö esë'ti kä naölasëpelö mëtea nyëdö.*

nz-ycmne-tr=ng	elr	x	drtwr=dr	esz'-ti	kx
3AUG-speak-GDIR.in=3AUGIS	thereon	and	mind=3AUGII	one-TR	SUBR
na-rlasz=pe=lr	mztea	nyz=dr			
IRR-leave=COS=3AUGIA	village	PCLF.B&G=3AUGII			

'They talked about it and they were in agreement that they should leave their village.' (09.05)

(86) *Këdü nimu navë muöde ma tülawititäne nimu amölä!*

kz-dq	ni-mu	**na-vz=Ø**	murde	ma=	tq-lawi-ti-tx-ne=Ø
AT-INDF.SG	be=2AUGII	IRR-go=3MINIS	because	lest	RL-chop-PLCT-INTS-INTS=3MINIS
ni=mu	amrlx				
be=2AUGII	all!				

'One of you has to go lest you all be chopped to bits!' (47.18)

6.2.6 **Interrogative Clauses**

Questions can be asked in Natqgu in multiple ways: polar questions, content questions, and an 'or not' tag question.

6.2.6.1 Polar questions

Example (87) shows that polar questions in Natqgu are identical to declarative clauses morphologically. They are distinguished by their respective intonation contours,[18] with declaratives having a falling contour and polar questions a rising contour. Polar questions anticipate answers of either *eu* 'yes' or *trtingr* 'no.'

(87) a. *Kölëü.*
Krlz=q
know=2MINI
'You know.'

b. *Kölëü?*
krlz=q
know=2MINI
'Do you know?'

6.2.6.2 Content questions

Content questions anticipate answers addressing the information specified in the question word. They mark the clause as a question and minimally contain the question word and a predicate. Question words are clause initial in Natqgu. They also have rising intonation contours and often *nike* 'what' and '*neke*' 'who' function as pronouns and are core arguments. In their simplest forms, the Natqgu question words are: *neke* 'who' (88), *nike* 'what', '*drlve~myx'* 'where', *mzli kx* 'when' (14a), *memule* 'why' (89), *myx kxmu* 'how', and *tqlvr* 'how many~much' (51).

(88) *… Neke öyëkö tabao mölâ?*
neke r-yzkr=Ø tabao mr-lc
who MID-peel=3MINIS papaya place-DEM1.DIST
'Who peeled papaya there?' (06.05)

(89) *…Memule tölängiti-ngömamuu natünge?*
memule tr-lxngiti-ngr-mq=amu-u natq=nge
why NEG-obey-APPL-PDIR.hither=2AUGI-NEG word=1MINII
'…Why don't you obey my word(s)?' (47.16)

6.2.6.3 Tag questions

Alfarano (2021) reports on a sentence final tag particle *nge* in Nalögo, which does not exist in Natqgu. However, Natqgu does ask an 'or not' question, as in (90).

(90) *Pibë ena më Mëdealwä, nëmu suti dötwöde nëabë-köbëkö këdü da kä yâm bagö e tötingö?*
pi-bz ena mz Mzdealwx nzmu suti drtwr=de
say-PDIR.yon just PREP Mzdealwx if want mind=3MINII
nz-abz-kr-bz=kr kz-dq da kx
NMLZ1-try-NMLZ.POSS-PDIR.yon=1AUGI AT- INDF.SG thing SUBR
yc-mq=Ø ba=gr **e** **trtingr**
stay-PDIR.hither=3MINIS DAT=1AUGII or no
'Just ask Mzdealwx if he wants us to try something we have or not?' (23.07)

6.3 Negative Clauses

In Natqgu, standard negation (Payne 1985) is expressed by a circumfix negator involving the two negators *tr=* and *=u*, which define the bounds of the verb complex (§4). Among SC languages, Engdewu (Vaa 2013:315) and Nalögo (Alfarano 2021:527) have similar standard negation. Such

[18] See Vaa (2013) and Alfarano (2022) who include intonation contours in their respective grammars of other Santa Cruz languages, which can be taken as representative also of Natqgu.

negation applies to all basic and derived verb classes, as illustrated by examples (9) and (67) for stative verbs; (3), (53), and (73) for intransitive verbs; as well as (44) and (68) for transitives.

The precore negator *tr=* also forms a circumfix with the bound aspect marker *=ka* 'yet' of slot +13. When *=ka* is present, the occurrence of the postverbal negator *=u* is ungrammatical. This is illustrated by three instances in sentence (60). A separate morpheme *=be* 'still, yet' is the positive form of *=ka* and occurs in the same position in the verb complex.

6.4 Verbal Clauses: Peripheral Arguments

In general, exclamations, interjections, and greetings, which are not otherwise discussed in this sketch, occur first in an utterance, while oblique arguments and adjuncts follow the predicate they modify.

6.4.1 Prepositional Phrases

The only Natqgu preposition, *mz,* is likely from POc *ma, reconstructed both as a conjunction and a prepositional verb (Moyse-Faurie and Lynch 2004: 449). It encodes a wide range of peripheral roles and is cognate with Nalögo *mö* (Alfarano 2021: 397). The preposition *mz* does not take pronominal enclitic objects. Syntactically PPs introduced by *mz* normally occur after the predicate. However, they can start a sentence when referencing the previous sentence in a discourse. Examples of *mz* were previously illustrated by sentences (2), (3), (4), (34), (53), and (73) where the NP following the preposition can be headed by any of the free noun types described in 3.2.

6.4.2 Nominal adjuncts

Like PPs, local nouns referring to a location and temporal nouns expressing time can both serve as adjuncts in the clause. An example of a local noun is shown in (91), where in conjunction with *-tr* 'GDIR.in' for 'inside', *brma* 'house' expresses a location and functions as an adjunct.

(91) *Sâ tüöpipebo më Lölvë nadwatöpëkö böma…*

sc=	tq-r-pi=pe-bz=x	mz	Lrlvz	na-dwa-**tr**-bz=kr	**brma**
PFV=	RL-MID-say=COS-PDIR.yon=1MINI	PREP	Lrlvz	IRR-jump-GDIR.in-PDIR.yon=1AUGI	house

'I said to Lrlvz we should go inside the building…' (03.12)

Similarly, in (92), the temporal NP formed by the head noun *mzli* plus its modifier *kx esz'* 'one' also functions as an adjunct.

(92) *Suti dötwögö buk lâng pwä nëyököpä-köbëlö mëli käesë'.*

suti	drtwr=gr	buk	lc-ng	pwx	
want	neck=1AUGII	book	DEM1.DIST-PL	four	
nz-yrkrpx-kr-bz=lr				**mzli**	**kx-esz'**
NMLZ1-complete-NMLZ.POSS-PDIR.yon=3AUGIA				time	SUBR-one

'We wanted those four books to be finished at the same time.' (80.09)

6.4.3 Adverbial positions outside the verb complex

In §4.3.3. I described the five slots in the verb complex filled by adverbs: manner adverbs in slot +3, degree adverbs in slot +9, qualifier adverbs in slot +11, quantifier adverbs in slot +12, and temporal adverbs in slot +14. As already noted for the temporal adverbs, some of these other types can also modify the entire sentence and occur as adjuncts outside the verb complex, such as *mou* 'further, again, more' and *zvz* 'always'. As such they occur at the beginning of a sentence as in (93), before or after the verb word.

(93) *X mou, nëaelwa-kë-ngöbë dalö töau sâgu.*

x	**mou**	nz-aelwakz-ngr-bz	da-lr	trau	sc=gu
and	further	PAS-show-APPL-PDIR.yon	things-PCLF.assoc	money	PCLF.hand=12AUGII

'And furthermore, also shown were things regarding our [red feather] money.' (62.15)

7. Valency-changing morphemes

As Hill found in her discussion of Longgu (2011:458-459), I find also for Natqgu, that homophonous forms have multiple functions, which need to be pulled apart, and that these functions occur and intersect on both the syntactic and semantic planes. With this in mind, in this section, I discuss the valency-changing morphemes of Natqgu, which add or remove an argument to the verb they attach to. Some added arguments become core arguments and some are peripheral. These forms were referred to previously in §4, with Tables 9, 10, and 11 illustrating slots of the verb complex. With regard to the core applicatives in §7.3 and the transitivizer in §7.4, I also discuss homophonous and related forms which do not change valency.

7.1 Causative, a-

The Natqgu causative prefix *a-* occurs in slot -1 of the verb complex. It is a reflex of the POc causative *pa-. Use of the causative prefix adds a core argument to the verb, the causer. The causative prefix occurs with Natqgu intransitive verbs, such as:

- ***pq*** 'be.hot' and ***a-pq*** 'make s.t. hot' (stative),
- ***su*** 'cook and ***a-su*** 'cook s.t' (process),
- ***wz*** 'work' and ***a-wz*** 'cause to work' (activity).

The single ambitransitive identified to date for Natqgu in §5.4, *lvx* 'open' also occurs with a causative, as illustrated in (94).

(94) *Növö ngödö sa natwëbetäne më dötâ' më nëapu-ködö lödë kâng tüalvälë nöâ.*

nrvr	ngr=dr	sa=na-twz=be-tx-ne=Ø	mz	drtc'	mz	
bone	GEN1A=3AUGII	IPFV=IRR=take=still-INTS-DSTR=3MINIS	PREP	ground	PREP	
nz-apu-kr=dr		lrdz	kcng	**tq-a-lvx-lz**	nrc	
NMLZ1-be.like-NMLZ.POSS=3AUGII		coral	those	RL-CAUS-open-GDIR.up	wave	

'Their bones will still be all over the ground like the coral the waves cause to be brought up into the open.' (Psalm 141:7)

Causatives are found in examples (16), (21), (40), (49), (62), and (65) and can co-occur with *-ti* 'transitivizer' as illustrated by (59) and (66).

7.2 Middle, r-

The Natqgu middle morpheme *r-* also occurs in slot -1; it cannot co-occur with the causative. It is a reflex of the POc *paRi- (Alfarano & Boerger 2022: 31ff), reconstructed as encoding several meanings, including collective, associative, iterative, dispersive, and reciprocal (Pawley 1973:150-153). It is the primary valency-reducing device in Natqgu. It changes a transitive to a semitransitive, with intransitive person marking and a generic object, or it changes it to a depatientive with intransitive person marking and the object not present syntactically. Examples with the middle morpheme are: (1), (18), (40), (48), (50), (69), (70), and (72), with sentence (48) illustrating its co-occurrence with *-mi* 'depictive' (Næss et al, To appear).[19]

Speaking of the cognate morpheme *(v)e-* in Äiwoo, Næss (To appear) analyzes it as a pluractional, saying that pluractionals are seen as encompassing the repetition of an action, or an action being performed by multiple agents and/or on multiple objects. Another function of *r-* in both Natqgu and Nalögo is to indicate event-internal plurality, as described about sentence (95).

> *...the action of shooting is internally-plural, in that, it does not involve only one shot or burst by the machineguns, rather, the prefix (v)ö- signals that the subevents of shooting for each machinegun are repetitive.* (Alfarano & Boerger 2022: 52)

[19] Sentences (40) and (72) with *–ti* 'transitivizer' have the form, which could be divided: *r-mc-ti* MID-see-TR/PLCT which means 'find something'. I expect it is a fossilized form rather than having both detransitivizing and transitivizing morphemes on the same verb. The meaning changes from 'see' to 'find' and no other verbs combine the two morphemes.

(95) *Mëli kâpwë älöbëkö masingan käkülu öpnë'pe më nabë nâ nëlu kâ.*

mzli	kc-pwz	xlr-bz=kr			masingan	kx-kqlu	
time	DEM2.DIST-just	hear-PDIR.yon=1AUGI			machinegun	SUBR-many	
r-pnz'=pe=Ø	mz	nabz	nc		nzlu	kc	
MID-shoot=COS=3MINIS	PREP	area	tree		coconut	DEM2.DIST	

'At the same time we heard many machine guns shooting into the area of the coconut trees.' (47.31)

This event internal plurality contrasts with the pluractional *-ti*, which indicates plurality of objects, discussed in §7.4.1.

7.3 Core applicatives

The set of core applicatives (CAPPL) occurring in slot +2, immediately following the stem (comprised of the main verb root of slot 0 and any optional compounding morphology from slot +1) are described below. Recall from §4.2 that the compounding slot and the CAPPL slot were proposed as distinct slots because the CAPPLs can occur following a complex stem. Each CAPPL licenses a further nominal argument, with the role determined by the meaning of the applicative. Each of these is glossed with its unique meaning rather than a grammatical category, thereby reserving the label 'applicative' for the multi-functional peripheral applicative *-ngr* described in §7.6. The motivation for this comes from its being both more general and more frequent. Several CAPPLs have related non-applicative forms or uses which are also briefly discussed here.

7.3.1 **-lvz 'about'**

The Natqgu form *-lvz* 'about' allows the addition of a stimulus or content argument to an intransitive verb making it bivalent. It is cognate with the Nalögo applicative *ulë* (Alfarano 2021: 457-459), but while similar, their constraints and usages diverge.

For Natqgu, compare the three sentences in (96), (97), and (98). Example (96) illustrates that 'be.happy' is an intransitive verb, since the 3AUG person takes the intransitive marking *=ng*. The content of their happiness is in a prepositional phrase following the verb.

(96) *Leplë na-abötëng më nëokatö-köm nidö.*

leplz	**na-abrtz=ng**	mz	nz-okatr-kr=mq	nidr
people	IRR-be.happy=3AUGIS	PREP	NMLZ1-help-NMLZ.POSS=2MINII	be=3AUGII

'People will be happy in your helping them.' (Psalm 69:32)

But (97), on the other hand, shows the 3AUG person with the transitive pronominal enclitic *=lr*, indicating that *-lvz* has increased the valency of *abrtz* 'be.happy' to mean 'be happy about s.t.', in this case the nominalized object 'our living with them,' which does not require a preposition. Then in (98), the goal or stimulus licensed by *-lvz* is left implicit, being present in the previous context, but not reiterated following the verb. In spite of this, the pronominal marking on the verb is transitive due to the presence of *-lvz*.

(97) *Käbügöng nëabötëlvëlö nëmnâ-kögö badö.*

kxbq=gr-ngq	**nz-abrtz-lvz=lr**		nz-mnc-kr=gr	badr
cousin=1AUGII-PL	3AUG-be.happy-about=3AUGIA		NMLZ1-stay-NMLZ.POSS=1AUGII	COM.PL

'Our cousins were happy about our living there with them.' (15.04)

(98) *Kä nëälöbëlöle nëaolvëbëlö natüde ä nëabötëlvëlö.*

kx	nz-xlr-bz=lr=le		nz-aolvz-bz=lr
SUBR	3AUG-hear-PDIR.yon=3AUGIA=3MINP		3AUG1-accept-PDIR.yon=3AUGIA
natq=de	x	**nz-abrtz-lvz=lr**	
word=3MINII	and	3AUG-be.happy-about=3AUGIA	

'When they heard it they accepted his word and they were happy about it.' (14.08)

Note that the first verb of this sentence has both subject and object enclitics, which happens rarely.

7.3.1.1 Verb-compounder -lvz 'throughout' in slot +1

The Natqgu applicative *-lvz* 'about' has a homophonous form *-lvz* 'throughout' (shortened to 'thruout' for glossing), which does not increase valency. In the SGM text, there are ten instances of each of the two *-lvz* forms. The 'about' form occurs in the earlier example (51), as well as in the immediately prior (98). But note that in (99), it is not *-lvz* 'thruout' which triggers the 3AUG transitive enclitic *=lr*, but rather the presence of the transitivizer *-ti*, described in 7.4. In the context of (99), *-lvz* 'thruout' means 'everywhere'; that is, the ants were crawling all over him. Since slot +2 is reserved for CAPPL and slots +3 and +4 are not compatible categories, *-lvz* 'thruout' almost certainly belongs to the +1 verb-compounding slot. The two *-lvz* suffixes are distinct in meaning and function, making them two separate morphemes. See further confirming discussion in §7.3.3.1.

(99) *Kä kölëlëbo kâ mökâ tüplökütu, sâ tëngölalvëtipelö ninge bingaö.*

kx	krlz-lz-bz=x		kc	mr-kc	
SUBR	reach-GDIR.up-PDIR.yon=1MINI		DEM2.DIST	LOC-DEM2.DIST	
tq-plrkqtu=Ø	sc=	**tz-ngrla-lvz-ti=pe=lr**		ni=nge	bingar
RL-be.overgrown=3MINIS	PFV=	RL.3AUG-crawl-thruout-TR=COS=3AUGIA		be=1MINII	red.ant

'When I reached where it was overgrown, many red ants crawled all over me.' (69.44)

7.3.2 **-ba 'reverse'**

In (100), there are two potential +2 slot forms *-wi* 'middle' discussed in §7.3.3.1 and *-ba* 'reverse',[20] with *-ba* in focus here. Most of the verbs are in the imperative, with the 2MIN addressee deleted. The verb *ngq* 'eat' is transitive with the object 'something' being understood. Since it is already transitive *-ti* must be indicating a pluractional object, here, the supposedly plentiful water. The CAPPL *-ba* then licenses a locative 'your mouth'. Taken together, 'eat-reverse' means 'vomit.'

(100) *Otim ninge, ä malebë münge, e kä töpnë-ngöde malewi ninge ä glülë ninge wü, ä sâ tüngübatitöpebo naom, ä nim kâ tüömnüpeü lue.*

oti-mq=Ø	ni=nge	x	male-bz=Ø		mq=nge	e	kx
take-PDIR.hither=IMP	be=1MINII	and	hold-PDIR.yon=IMP		hand=1MINII	or	SUBR
tr=pnz-ngr=de	**male-wi=Ø**	ni=nge	x	glqlz=Ø	ninge		
NEG=CMPL-APPL=3MINII	hold-middle=IMP	be=1MINII	and	lift.up=IMP	be=1MINII		
wq	x	sc=	**tq-ngq-ba-ti-tr=pe-bz=x**		nao=mq		
high	and	PFV	RL-eat-reverse-PLCT -GDIR.in-COS-PDIR.yon=1MINI		mouth=2MINII		
x	ni=m	kc	tq-r-mnq=pe=q	lue			
and	be=2MINII	DEM2.DIST	RL-MID-drink=COS=2MINI	water			

'Take me, hold me by my handle, or if not that, hold me in the middle and lift me up, and I will vomit lots into your mouth, and you will drink water.' (ntu-072-2004-prim-sim-bhb-040)

7.3.3 **-c 'across'**

In (101) the verb *dwa* 'jump' is intransitive, so the CAPPL *-c* 'across' licenses the thing that's jumped across, i.e. 'the wire.' This holds even though 'wire' is not overtly present following 'jump,' but has been mentioned in the preceding context. Given this, then, *-c* licenses whatever is crossed. Note that there are two plural imperatives in (101) which are identical to the indicative *=amu* 2AUGI and disambiguated by context.

[20] This text is from a primer story by Kennedy Clq. In it a man and his personified cup have a conversation. The man is thirsty and this is part of the cup's response. The use of 'vomit' is unusual here and included for its humorous impact.

(101) *Sâ tüöpipebële badö kä, "Lolvëoamu waea la ä dwaâ-aniamu."*

sc=	tq-r-pi=pe-bz=le		ba=dr		kx
PFV=	RL-MID-say=COS-PDIR.yon=3MINIA		DAT=3AUGII		SUBR
lolvz-o=amu	waea		la	x	**dwa-c-ani=amu**
restrain-GDIR.down=2AUGI	wire		DEM1.PROX	and	jump-across-quickly=2AUGI

'He said to them, "Hold that wire down and jump across it quickly."' (42.14)

7.3.3.1 Verb-compounder -wi 'middle.of' in slot +1

Looking back at example (100) in §7.3.2 there was an example of *-wi* 'middle'. In it, since *male* 'hold' is transitive, *-wi* is not licensing the object *ninge* 'me' nor any other argument. However, in (102), *ka* 'swim' is intransitive. It shows *-wi* in combination with *-c* 'across,' a frequent pairing. In (102), *-c* licenses that which is crossed, as shown by (101), in this instance *lue* 'river.' Therefore, *-wi* 'middle' cannot also be licensing 'river' and there's nothing else for it to license. Taken together then, (100)-(102) demonstrate that the form *-wi* 'middle' is not applicative. Since it precedes the CAPPL form, it belongs to the +1 verb compounding slot, giving further credence to the proposition that non-applicative *-lvz* of §7.3.1.1, is distinct from its homophone and also belongs to slot +1.

(102) *Ëbë nigö kâ tükawicpekö lue ä tüvëtöpekö më lâlö nâ nëlu nyë skul.*

zbz	ni=gr	kc	tq-ka-wi-c=pe=kr				lue	x
so.then	be=1AUGII	DEM2.DIST	RL-swim-middle-across=COS=1AUGI				water	and
tq-vz-tr=pe=kr		mz	lclr	nc	nzlu	nyz	skul	
RL-go-GDIR.in=COS=1AUGI		PREP	field	tree	coconut	PCLF.B&G	school	

'Then we swam across the middle of the river and went into a coconut field belonging to the school.' (47.12)

7.3.4 -ki 'path'

The CAPPL *-ki* 'path' is cognate with the homophonous form in Nalögo (Alfarano 2021: 460-461). In (103), *twz* 'take' is transitive, yielding 'the storm took the ship' with the two nominals known from previous context. Here, the CAPPL *-ki* 'path' licenses a locative indicating where the storm took the ship. In (103) the locative is filled by a complex prepositional phrase.

(103) *Twëkipälele më nâtü Nemya' kâ tüpökilëm nepi, ä twëtöle më naötökla ngö këdü nölâ nëöpibë Nëo.*

twz-ki-px=le=le			mz	nctq	Nemya'		kc
take-path-GDIR.out=3MINIA=3MINP			PREP	point.of.land	Nemya'		DEM2.DIST
tq-prki-lz-mq		nepi	x	twz-tr=le		mz	nartrkla
RL-white-GDIR.up-PDIR.hither		sun	and	take-GDIR.in=3MINIA		PREP	headland
ngr	kzdq	nrlc	nz-r-pi-bz	Nzo			
GEN1A	a	place	PAS-MID-say-PDIR.yon	Nzo			

'It took it out along the point of Nemya' to the east, and took it into the headland of a place called Nzo.' (19.07)

7.3.5 -plx 'through'

In example (104), the verb 'crawl' is intransitive. The addition of the CAPPL *-plx* 'through' licenses the object gone through, here the corner of a fenced pasture.

(104) *…ngölapläpäkö bute' kâ …*

ngrla-plx-px=kr	bute'	kc
crawl-through-GDIR.out=1AUGI	corner.3D	DEM2.DIST

'… we crawled out through the corner, …' (47.39)

7.3.6 **-sz 'away from'**

Example (105) illustrates the CAPPL *-sz* 'away.from' which licenses the object left behind. The same particle is used in a complex term for 'widow' with the verb *bz* 'die,' in *olvz kxnzbzszng* 'women who were died away from.' In (105) the group travels away from a ship named, *Hygeia*.

(105) *Ä sâ tëvosëpelö Aijë tülvabetöpebë ölöu.*

x	SC=	**tz-vo-sz=pe=lr**	Aijz
and	PFV=	RL.3AUG-travel-away.from=COS=3AUGIA	*Hygeia*
tq-lvabe-tr=pe-bz=Ø		rlru	
RL-float-GDIR.in=COS-PDIR.yon=3MINIS		far	

'And they motored away from the *Hygeia*, [where] it floated far away.' (19.11)

7.3.7 **-sr 'thusly'**

The function and syntax of *-sr* 'thusly' are somewhat confusing. When combined with *apu* 'be.like' as in (106) it means 'treat as if' or 'treat thusly.' It would appear to license the object of 'treat like'. So in sentence (106), *-sr* would license 'worthless thing'. However, this analysis does not account for the function of the peripheral applicative *-ngr* in the same verb which has a similar function. There's nothing left for it to license.

In all my data to date *-sr* only occurs with two verbs *apu* 'be.like' and *wai* 'do', one of several verbs for 'do',[21] and it also always co-occurs with *-ngr*, except in reflexives where one is treating oneself like something else. See sentence (182) and this shorter example in (106).

(106) *A' leplë nëapusö-ngödö ninge bömöda.*

a'	leplz	nz-apu-sr-ngr=dr	ninge	brmr.da
but	people	3AUG-be.like-thusly-APPL=3AUGII	be=1MINII	worthless.thing

'But people, they treat me like something worthless.' (Psalm 22:6)

For now, I'm leaving *-sr* as a CAPPL while still wondering about the function of *-ngr* in these constructions. The other alternative would be to move *-sr* to the +1 verb-compounder slot and let *-ngr* be the only applicative. But that makes it difficult to assign a meaning to the compound *apu+sr* without the applicative, since they're paired in the data. The resolution is pending.

7.3.8 **-mi 'with'**

Comitative constructions expressing 'with' are generally understood to join two participants which are expressed separately, but participate in the event equally, for example: *My sister ran with her friend in the race.* In Natqgu, these are expressed by joining the participants with *badr* as in example (4) where the participants are more than two, or with *ncdr* as in (39) for two individual participants and both participants are encoded in the verb. A depictive, on the other hand, is when two participants are conjoined in a 'with' relationship, but they do not participate equally, such as: *My sister ran with the medicines*, where my sister ran, but the medicines did not (Maslova 2007, Arkipov 2009, Næss et al, To appear).

The Natqgu depictive *-mi* draws the line between true comitatives and depictives at a slightly different place. As introduced in §4.4.3, when two participants are joined by *-mi*, the participant following *-mi* is subordinate in some way to the participant preceding *-mi*. The participants differ in their responsibility or in who initiates the action and the verb encodes only the first participant.

The depictive *-mi* is formally identical to cognate comitative suffixes *-mi* in Engdewu (Vaa 2013: 137-138) and Nalögo. Its most likely source is the POc comitative *mai-i (or *me-i)

[21] The other Natqgu verbs which can be glossed 'do' are the transitive verb *ale* 'do, perform an action'; intransitive *rtrngz* 'do' and the intransitive *wz* 'do, make, work'. John 6:28 uses all three verbs.

Nike	na-rtrngz-ti-bz=kr	mz	nz-ale-kr=gr	nz-wz-kr	Gct
what	IRR-do-TR-PDIR.yon=1AUGI	PREP	NMLZ1-do-NMLZ.POSS=1AUGII	NMLZ1-work-NMLZ.POSS	God

What must we do (undertake) to do (accomplish) the deeds (works) of God?

(Alfarano 2021:453). The form adds an argument which undergoes the verbal action along with the agent. In Natqgu, it occurs in two slots on the verb—in slot +2 and +10. The added argument can be human (48), animate (107), inanimate (108), or instrumental (109).

In (107), the true comitative *badr* joins the narrator and his group with the crew, with both groups having equal status; the verb taking plural inclusory marking. But *-mi* has the combined group taking dogs with them for hunting, with the dogs being subordinate to the people.

(107) *X kru nedöng nëabötë-këng, muöde vë-ëvëkö badö më …nëövëmingö kuli,...*

x	kru	ne=dr-ngq		nz-abrtz-kz=ngq		murde
and	crew	PCLF.rsbl=3AUGII-PL		3AUG-be.happy-also=3AUGIS		because
vz-zvz=kr		**badr**	mz	nz-r-vz-**mi**-ngr	kuli	
go-always=1AUGI		COM.PL	PREP	NMLZ1-MID-go-DPV-NMLZ	dog	

'And their crew was also happy, because we kept going with them for…hunting with dogs, …' (20.02)

Similarly, in (108), the use of *-mi* means that the rain brings wind, lightning, and thunder with it, as if they're its subordinates and the verb takes a 3MIN enclitic. In (109), *-mi* has the narrator holding a branch along with a vine that runs along it.

(108) *… tewa käetu kâ tüdâpe, vëmimü nenü, bölöpâ, ä bölömei.*

tewa	kxetu	kc	tq-dc=pe=Ø,	vz-**mi**-mq=Ø	
rain	SUBRbig	DEM2.DIST	RL-fall=COS=3MINIS	go-DPV-PDIR.hither=3MINIS	
nenq,	brlrpc	x	brlrmei		
wind,	lightning	and	thunder		

'… the heavy which was falling, it came with wind, lightning, and thunder.' (51.07)

(109) *Nöla nâ bia kâ tümaleä, malemiäle kâ dëbö legou kälu esë'.*

nrla	nc.bia	kc	tq-male=x	male-**mi**=x=le	
branch	tree.breadfruit	DEM2.DIST	RL-hold=1MINI	hold-DPV=1MINI=3MINIP	
kc	dzbr	legou	kx-lu	esz'	
DEM2.DIST	root	creeper.climber	SUBR-live	one	

'That breadfruit branch I was holding, I held it with the root of a single living creeper vine.' (69.51)

7.3.8.1 Non-applicative –mi 'together'

The form *-mi* also has a non-applicative use. When the agent is plural and no argument is added, *-mi* indicates that the action is done together or in unison, as illustrated previously in (47). This use parallels a function of its cognate *mä(i)* in Äiwoo (Næss et al, To appear).

7.3.9 -neba 'to whom'

The final form to be discussed for the core applicatives is *-neba*, which occurs 13 times in the mixed-genre Natqgu scriptures (Meabr & Yrpusz 2008), but does not occur at all in the primarily narrative SGM text. In (110) *-neba* combines with the ditransitive *ka* 'give' yielding 'to whom God gives', the subject being 'God.' Note too that the 3AUG form *=ng* is an object enclitic, not a subject, since there is no 3AUG prefix accompanying it to make it a subject. See column 2 of Table 4. In (111), the verb modified by *-neba* is *pi* 'say', licensing the person to whom God spoke.

(110) *Ä leplë kä ka-nebang Gât ëmatü käetu, naölö-lëbü-ëvë-ngöbëng më nëwë-köde.*

x	leplz	kx	ka-**neba=ng**	Gct	zmatq	kx-etu
and	people	SUBR	give-to.whom=3AUGIP	God	power	SUBR-be.big
na-rlr-lzbq-zvz-ngr-bz=ng				mz	nz-wz-kr=de	
IRR-allow-REFL-always-APPL-PDIR.yon=3AUGIS				PREP	NMLZ1-work-NMLZ.POSS=3MINII	

‘And the people to whom God gives great power, must always offer themselves to his work.’ (Luke 12:48)

(111) *Muöde töpnëngö enjöl kä öpi-neba Gât natü kâ tüpibële më Möläde kä, “Nim Mölänge…”*

murde	trpnzngr	enjrl	kx	r-pi-**neba**		Gct	natq	kc
because	none	angel	SUBR	MID-say-to.whom		God	word	DEM2.DIST
tq-pi-bz=le		mz	mrlx=de	kx	ni=m		mrlx=nge	
RL-say-PDIR.yon=3MINIA		PREP	son=3MINII	SUBR	be=2MINII		son=1MINII	

‘Because there was no angel to whom God said the words which he said to his Son, “You are My Son…”’ (Hebrews 1:5)

The identical cognate form *-neba* occurs in Nalögo, where Alfarano (2021:454-457) also analyzes it as an applicative with similar functions. This form in both languages may have developed historically from two morphemes. That is, if *-neba* is analyzed diachronically as as *ne-* ‘who’ plus *ba-* ‘dative base’ their combined meanings ‘who to’ correspond exactly with the meaning of *-neba*. The indefinite pronominal form *ne-* is also attested in the forms *neke* ‘who’, *nelc*, and *nekc* discussed with regard to demonstratives in Table 6. In Natqgu, *ba-* ‘dative base’ is a prefix and does not occur as a free morpheme like its identical Nalögo cognate does. It is however incorporated in another verb in possessive clauses, as discussed in 6.1.1. Given these factors then, the *-neba* form may be a historical instance of pronoun incorporation, though it is not posited elsewhere for Natqgu.

7.4 Transitivizer, -ti

The Natqgu transitivizer *-ti* is cognate with the identical form in Nalögo, with similar functions (Alfarano 2021: 443-449). It is likely a reflex of POc *-i. My hypothesis for Natqgu is that a single instance of what have been called ‘thematic consonants’ in other Oceanic languages (Ashley 2012:131, 207-236)[22] has been frozen to just this one form. The *-ti* transitivizer occurs in slot +4 in the verb complex. It is in a different slot than the +2 core applicatives and the +16 peripheral applicative, so glossing it as TR transitivizer makes its labeling distinct and narrows its function to one which promotes something from a peripheral role, such as locative, goal, stimulus, content, or beneficiary, to having a core function. The subject marking, then, becomes transitive. In example (112), *-ti* licenses the goal *nigu* ‘us’ as what the devil wants to catch while fishing.

(112) *…napimle bagu kämu döka' lâ tümwatiomle nigu më nâ ninë….*

na-pi-mq=le	ba=gu	kxmu	drka'	lc	
IRR-say-PDIR.hither=3MINIA	DAT=12AUGII	how	demon	DEM1.DIST	
tq-mwa-ti-o-mq=le	**ni=gu**		mz	nc.ninz	lc
RL-fish-TR-GDIR.down-PDIR.hither=3MINIA	be=12AUGII		PREP	tree.ngalinut	DEM1.DIST

‘…he should tell us how the devil is fishing for us from the top of the ngalinut tree [*Canarium*]…’ (11.19)

Other examples with the *-ti* transitivizer occur throughout this sketch.

7.4.1 **Pluractional *-ti***

We saw previously in §7.2 that one function of *r-* MID is to indicate event internal plurality with a focus on the action. Here I show that *-ti* also has a second pluractional function, indicating plurality of objects on a transitive verb, often with a dispersive or scattering effect. The two functions of *-ti* are in complementary distribution—one occurs with intransitives and the other with transitives. Both occur in the same slot of the verb complex. They are analyzed as variants of

[22] Ashley (2012) shows that the purported ‘thematic’ consonants are misnamed and have predictable, consistent meanings for Sa'a [apb] which she demonstrates can also be applied to other Oceanic languages, both in Solomon Islands and beyond.

each other. Recall from §5.3 that inherently semitransitive verbs require the transitivizer *-ti* for the object to become specific rather than generic.

Compare the following sentences. Note that in (113), the verb takes a transitive subject *=le* but does not require the *-ti* transitivizer.

(113) *…plamöilëmle kâ nâ tabao…*

plamri-lz-mq=le	kc	nc.tabao
break-GDIR.up-PDIR.hither=3MINIA	DEM2.DIST	tree.papaya

'…it broke off the papaya tree [*Carica papaya*]…' (11.25)

(114) *Sa naplamöitibële popë' sâdö*.

sa=	**na-plamri-ti-bz=le**	popz'	sc=dr
IPFV	IRR-break-PLCT-PDIR.yon=3MINIA	bow	PCLF.hand=3AUGII

'He will break their bows to bits.' (Psalm 37:15)

Since *plamri* 'break a stick-like object'[23] is therefore transitive, the *-ti* in (114) with the same verb cannot be the transitivizer and it cannot be licensing the object, since the object is licensed by the verb's being transitive. Therefore, it must be the pluractional *-ti*, 'break their bows to bits.'

Sentences (115) and (116) below are two consecutive Bible translation sentences. Note that the *-ti* on all three verbs is analyzed as pluractional, rather than transitivizing, since the verbs are grammatically transitive. In (115) the verb *prlx* 'spread' occurs with the transitive 3AUG subject marker, *=lr*. A large crowd of people spread their second cloaks. The pluractional reading means that individual people in the crowd each spread his/her own cloak and the spreading was somewhat random. That is, multiple cloaks were spread around wherever people were standing.

(115) *Këdü ëbo ngö leplë käetu nëpölätiolö nëkü sâdö köali më löpëki mökâ navokipäle.*

kzdq	zbo	ngr	leplz	kx-etu	**nz-prlx-ti-o=lr**		nzkq
AT-INDF.SG	crowd	GEN1A	people	SUBR-big	3AUG-spread-PLCT-GDIR.down=3AUGIA		garment
sc=dr	kra-li	mz	lrpzki	mr-kc	na-vo-ki-px=le		
PCLF.hand=3AUGII	ORD-two	PREP	road	place-DEM2.DIST	IRR-travel-path-GDIR.out=3MINIA		

'A big crowd of people spread their second cloaks down on the road where Jesus would ride along.' (Matthew 21:8a)

Turning to (116), in the first verb we find both the detransitivizing middle particle *r-* along with *-ti* on *plamri* 'break a stick-like object,' and having the intransitive 3AUG subject marker *=ng*. The function of *r-* MID this instance is likely event internal plurality as seen in (95), meaning there were multiple instances of breaking the branches. The addition of pluractional *-ti* signals the plurality and random dispersal of the branches. Regarding the second verb of (116), 'spread,' they lay multiple branches in the road and each individual may have spread more than one branch. Note too, that the verb also has *-lvz* 'thruout' of §7.3.1, meaning the branches covered the road.

(116) *Ä këdung nëöplamöitipämüng nabä nâ-paam, nëpölälvëti-këlö löpëki.*

x	kz-du-ng	**nz-r-plamri-ti-px-mq=ng**		nabx
and	AT-QNT.PL-PL	3AUG-MID-break-PLCT-GDIR.out-PDIR.hither=3AUGIS		branch
nc.paam	**nz-prlx-lvz-ti-kz=lr**		lrpzki	
tree.palm	3AUG-spread-thruout-PLCT-also=3AUGIA		road	

'And some broke off palm branches, and also spread them all over the road.' (Matthew 21:8b)

[23] See Table 10, example d), which illustrates that the form *plamri* can be broken into two parts: a bound verb form *pla-* 'break' filling slot zero on the verb complex and *–mri* 'stick.like.obj' filling the +1 compounder slot. In combination, they refer to breaking long, thin objects, most normally sticks or bones.

Corbett (2000: 246-47) makes a distinction between 'event number' and 'participant number' which is useful here in describing the event internal plurality sometimes signaled by the middle *r-* and the plurality of objects indicated by *-ti*.

7.5 Reflexive, -lzbq, reciprocal –etr, and 'together' -lxblr

As noted in §4, two of the forms filling slot +8 of the Natqgu verb complex are the reflexive and reciprocal. In the two long texts at hand, there are 19 occurrences of the reflexive *-lzbq* in SGM and 901 in the Natqgu Bible translation, while there are only two occurrences of the reciprocal *-etr* in SGM and 61 in the Natqgu Bible.

I show below that *-lzbq* and *-etr* decrease valency when added to normally transitive (or bivalent) verbs. In this sense *-lzbq* and *-etr* exhibit syntactic constructions similar to the middle prefix *r-*. But when added to intransitives, person-marking remains transitive. Example (56) of §4.3.6 also illustrates *-lzbq*.

7.5.1 **-Lzbq 'reflexive'**

Alfarano (2021:475) considers the cognate Nalögo morpheme *=lëbu* to be a possible reflex of the POc verb *buli(ŋ) 'roll'. Compare sentences (117) and (118), where (117) demonstrates that *ka* 'give' and *tekqtr* 'exchange' are transitive because they take the 3MIN form *=le*; but example (118) with *tekztr-**lzbq*** takes the intransitive 3AUG form *=ng*, rather than the transitive *=lr*, that is, transitivity is reduced by *-lzbq*.

(117) *Kabële më Söpi natekütöle Nöpakämölë kâ tüyö Matiu.*

ka-bz=le		mz	Srpi	**na-tekqtr=le**	Nrpakxmrlz
give-PDIR.yon=3MINIA		PREP	Srpi	IRR-exchange=3MINIA	Good.News
kc	tq-yr	Matiu			
DEM2.DIST	RL-write	Matthew			

'He assigned Srpi to translate the Gospel which Matthew wrote.' (75.02)

(118) *Dëbede lâng li nëtekütö-lëbüng.*

dzbede	lc-ng	li	**nz-tekqtr-lzbq=ng**
group	DEM1.DIST-PL	two	3AUG-exchange-REFL=3AUGIS

'The two groups exchanged places, [lit. exchanged themselves].' (37.04)

A semantically related use of *-lzbq* modifies sibling and in-law nouns, indicating they are one's own relative or perhaps better, each other's relative. This is illustrated in example (119), where the first four *-lzbq* morphemes mean 'each other's' and the final one is reflexive.

(119) *Më nëmu-köde lâde, enümi ö doa sa navëpäm më ma nyëde. Kämule-esë' töte, o läe, o mölä, o inyä, o mële lëbü, o ile lëbü, o këdo lëbü, o lväbü lëbü, a' doa lâng amölä sa na-aki-lëbüng më nëölängitingö ninge.*

mz	nzmu-krde	lc=de			enqmi	r	doa	sa=			
PREP	this.way	DEM1.DIST=3MINII			enemy	GEN1A	person	IPFV			
na-vz-px-mq=Ø			mz	ma	nyz=de		Kxmule-esz'		trte	o	
IRR-go-GDIR.out-PDIR.hither=			PREP	house	PCLF.B&G=3MINII		even.though		father	or	
lxe	o	mrlx	o	inyx	o	mzle-**lzbq**	o	ile-**lzbq**		o	
mother	or	son	or	daughter	or	brother-own	or	sister-own		or	
kzdo-**lzbq**	o	lvxbq-**lzbq**				a'	doa	lc-ng	amrlx		
main.in-law-own	or	brideprice.in-law-own				but	person	DEM1.DIST-PL	all		
sa=	na-aki-**lzbq**=ng		mz	nz-r-lxngi-ti-ngr				ninge			
IPFV	IRR-divide-REFL=3AUGIS		PREP	NMLZ1-MID-believe-TR-NMLZ				be=1MINII			

'Therefore, someone's enemy will come from his house. Even though father, or mother, or son, or daughter, or one's own brother, or own sister, or own father in-law, or own mother in-law, yet all these people will divide themselves about believing in me.' (Matthew 10:35-36)

7.5.2 **-etr 'reciprocal'**

The reciprocal *-etr* has similar properties to *-lzbq*. Example (57) in §4.3.6 previously illustrated *-etr*. Recall, too, that example (117) demonstrated that *ka* 'give' is transitive, taking the 3MIN *=le* enclitic. Compare that to (120) which adds *-etr*. The verb is a semi-transitive due to *r-* MID, giving it a habitual reading. It also takes the 3AUG intransitive enclitic *=ng*, and the licensed object *da* 'thing' is generic.

(120) *Sa naötöngëbëng nëmungö ä naöka-etöng da…*

sa=	na-rtrngz-bz=ng	nz-mu-ngr	x	**na-r-ka-etr=ng**	da
IPFV	IRR-do-PDIR.yon=3AUGIS	NMLZ1-eat-NMLZ	and	IRR-MID-give-RECP=3AUGIS	thing

'They will make feasts and will give each other things…' (Revelation 11:10)

Sentence (121) illustrates *-lzbq* and *-etr* in the same sentence. The verb *aki* 'divide' is transitive. The addition of *-lzbq* decreases its valency and the intransitive ending *=Ø* is used instead of *=le*. The decrease in valency is not illustrated with *-etr* because *ota* 'fight' is intransitive.

(121) *Këdü kandre kënike akipä-lëbü më dëbede sâ tëota-etöpeng ä mëli käpipëne sa naodating.*

kz-dq	kandre	kz-nike	**aki-px-lzbq=Ø**		mz	dzbede
AT-INDF.SG	country	AT-what	divide-out-REFL=3MINIS		PREP	group
SC=	**tz-ota-etr=pe=ng**		x	mzli	kx	pipz-ne
PFV	RL.3AUG-fight-RECP=COS=3AUGIS		and	time	SUBR	little.bit-INTS
sa=	na-oda-ti=ng					
IPFV	IRR-destroy- TR=3AUGIS					

'Whatever country divides itself into groups, they fight each other, and shortly they will be destroyed.' (Matthew 12:25)

7.5.2.1 Lxblr 'together'

While *-lxblr* 'together' occurs in the same +8 slot on the verb complex, it does not change a verb's valency. It was discussed previously in 4.3.3 and 4.3.7 with numerous examples there.

7.6 Applicative, -ngr

For at least ten years I have been debating with myself about how many *-ngr* morphemes there are in Natqgu (Boerger 2013) and what their interrelationships might be. Like Hemmings (2013:167) encountered regarding Javanese, I also encounter here – the debate about form and function. Is it one form with multiple meanings and functions or are there separate homophonous forms and if so, how many?

My current understanding is that the Natqgu peripheral applicative *-ngr* could be a reflex of PMP locative voice *-an (or possibly circumstantial voice *-ani). It is formally identical to another reflex of *-an in Natqgu, the suffix of the circumfix action nominalization *nz-V-ngr*, but they have different distributional constraints.[24] In licensing a peripheral argument, *-ngr* is a plausible reflex of the locative or circumstantial voice, which would have turned a locative or circumstantial adjunct into the subject of the clause. This is supported by the semantic roles of Table 12.

[24] This *-ngr* form is also formally identical to the proprietive from §3.7.2. For the time being, I've analyzed the peripheral applicative, the second half of action nominalizations, and the proprietive as separate morphemes with distinct functions.

Table 12. Semantic Roles Licensed by the Applicative *-ngr*

Example	Role	*-ngr* clause	New argument
109	content	He taught	About way of good person.
110, 111	locative	He sends	People home / s.t. not explicitly stated
31	stimulus	We were shocked about	Our hearing the Japanese were at Tulagi
66	reason	They lit a fire for burning	Leftover food from sacrifice
68	instrument	But you can die from	Cartridges

The Natqgu applicative *-ngr* occurs with all verb classes: intransitive, semitransitive, transitive, and ambitransitive. Rather than being near the core of the verb complex like the core applicatives and several other valency-changing morphemes, the applicative *-ngr* occurs at the verb periphery, in slot +16.

The addition of *-ngr* in (122) and (123) correlates with a shift in enclitic subject from the first set 3MINI *=le* to the second set 3MINII *=de*. However, when another morpheme, such as one of the personal directionals, intervenes between *-ngr* and the pronominal enclitics, there is a shift back to the first set, as shown in (124) and (125). I have yet to determine whether the motivation for the shift back is syntactic or phonological or some combination thereof.

(122) *Alvëtöle nidö apule kääöngisâ ëmatü.*

alvztr**=le**	ni=dr	apu=le	kx-rngi-sc	zmatq
Teach=3MINIA	be=3AUGII	be.like=3MINIA	SUBR-have-PCLF.hand	power

'He taught them like someone having power.' (Matthew 13:54)

(123) *Alvëtö-ngöde nidö më nümü ngö doa kämölë.*

alvztr-**ngr=de**	ni=dr	mz	nqmq	ngr	doa	kx-mrlz
teach-APPL=3MINII	be=3AUGII	PREP	way	GEN1A	child	SUBR-be.good

'He taught them about the way of a good person.'

(124) *Sâ tüatwëlö-ngöde leplë kâng mö-nyë=dö.*

sc=	tq-atwzlr-**ngr=de**	leplz	kc-ng	mr-nyz=dr
PFV=	RL-dispatch-APPL=3MINII	people	DEM1.DIST-PL	place-PCLF.B&G=3AUGII

'He sent the people to their homes.' (Matthew 14:22)

(125) *Sa na-atwëlö-ngöbële badö.*

sa=	na-atwzlr-**ngr-bz=le**	ba=dr
IPFV	IRR-dispatch-APPL-PDIR.yon=3MINIA	DAT=3AUGII

'He will send (it) to them.'

In addition to (123)–(125), a number of *-ngr* (peripheral) applicatives have been illustrated previously. While much more could be said about the applicative *-ngr*, further details are left for future investigations. Readers are referred to chapter 13 of Alfarano (2021), with its significant detail about the form *-ngö* in Nalögo, which is cognate in form and most functions.

7.7 Passive, nz->V<=Ø

Based on data from Bola [bnp] and Natqgu, Van den Berg and Boerger (2011), argue for the presence of an agentless passive in POc of the form **-in-* ~ **ni-*. Natqgu *nz-* PAS contributed to that conclusion. In the discussion here I add new examples from the SGM text.

We've already seen two other functions of the verbal prefix *nz-*, the third person augmented prefix (Table 4) and the prefix of the circumfix action nominalizer (§3.3.2). The third function of *nz-* is as a passivizer when there is no third person augmented enclitic or subject; and for action nominalizations, when there is no 3AUG representation. So *nz-V-Ø* is the form of the agentless passive in Natqgu. The *na-* 'irrealis' and portmanteau prefix *tz-* 'realis 3AUG' can also indicate passive in the absence of a 3AUG enclitic.

These characteristic are illustrated in the next three sentences, all of which have agentless passives, with the original subject no longer being part of the construction. The missing agents are indicated by *=Ø* in these examples, but are normally left blank in glossing. Example (126) has two examples of *nz-* passive. In both of them, *nz-* does not co-occur with either a 3AUG subject or the nominalizing suffix, leaving passive as the only remaining analysis for the function of *nz-*.

(126) *…muöde nëwöde köali lâpe nëdwatö-kögö me nëatupä-ngöm müngö da kä nëangio.*

murde	nzwr=de	kra-li	lc=pe	nz-dwa-tr-kr=gr				me
because	time=3MINII	ORD-two	DEM1.DIST=COS	NMLZ1-jump-GDIR.in-NMLZ.POSS=1AUGII				place
nz-a-tu-px-ngr-mq**=Ø**				mqngr	da	kx	**nz**-angio**=Ø**	
PAS-CAUS-stand-GDIR.out-APPL-PDIR.hither=PAS				image	thing	SUBR	PAS-worship=PAS	

'…because that was the second time of our entering a place where images were erected that were worshipped.' (06.15)

Example (127) illustrates the passive with *tz-*, in the form *tz-amc-ti-ngr=Ø=de*. In Natqgu's agentless passives, the agent is deleted. So the *=de* which remains is the former object promoted to subject of the passive. It is from the set II enclitics (Table 4), due to its following *-ngr* 'applicative.' This illustrates Siewierska's (2005:434) third criterion for passives which is that the subject of the passive, if there is one, must correspond to the direct object of the active. Note also that *-ngr* licenses 'for' in the phrase 'be hired for' as discussed in §7.6.

(127) *…më nëbütö-köde dökü ngö këdung ma lâdeng tëamâti-ngöde, amwititäpwële nâ tea ngödö, töpeleu më nüvi.*

mz	nz-bq-tr-kr=de		drkq	ngr	kzdung	ma
PREP	NMLZ1-shut-GDIR.in-NMLZ.POSS=3MINII		wall	GEN1A	AT-QNT.PL-PL	house
lc=de-ng	**tz**-amc-ti-ngr**=de**			a-mwi-ti-tx-pwz=le		
DEM1.DIST=3MINII-PL	RL.PAS-hire-TR-APPL=3MINII			CAUS-connect-TR-INTS-just=3MINIA		
nc.tea	ngr=dr	tr-pe=le-u		mz	nqvi	
tree.fern	GEN1A=3AUGII	NEG-tie =3MINIA-NEG		PREP	rope	

'…in his shutting the walls of some of those houses he was hired for, he fitted together the fern trees [*Cyathea vittata*], rather than tying them with rope.' (10.06)

In (128), there are three passives, two signaled by *na-* IRR and one by *tz-*.

(128) *…älöbo nëöpi-köde kä naäpe nide ä nakabë bade töau kâ tëkabë Kirakira më temë käesë'.*

xlr-bz=x	nz-r-pi-kr=de			kx	**na**-xpe**=Ø**
hear-PDIR.yon=1MINI	NMLZ1-MID-say-NMLZ.POSS=3MINII			SUBR	IRR.PAS-pay=PAS
ni=de	x	**na**-ka-bz**=Ø**	ba=de	trau	kc
be=3MINII	and	IRR.PAS-give-PDIR.yon=PAS	DAT=3MINII	money	DEM2.DIST
tz-ka-bz**=Ø**	Kirakira	mz	temz	kx-esz'	
RL.PAS-give-PDIR.yon=PAS	Kirakira	PREP	moon	SUBR-one	

'…I heard him saying that he should be paid and he should be given the money that is given in Kirakira [capital of Makira province] for one month.' (75.12)

The next two agentless passive sentences contrast. In (129), which occurs as the section heading to episode 57, the free pronoun *ninge* 'I/me' is the object promoted to subject. But in first sentence of the episode, the same statement is reiterated with the enclitic *=nge* 3MINII serving the same role, illustrating that free pronouns and enclitics can both be promoted to subjects of passives.

(129) *Nëatwëlö Ninge Pawa Skul.*

nz-atwzlr**=Ø**	**ni=nge**	Pawa Skul
PAS-dispatch=PAS	be=1MINII	Pawa.school

'I am sent to Pawa School.' (57.00)

(130) *Nëatwëlönge Pawa Skul më temë Jenwëri 1944.*

nz-atwzlr=**Ø=nge**	Pawa skul	mz	temz	Jenwzri	1944.
PAS-dispatch=PAS=1MINII	Pawa.school	PREP	month	January	1944.

'I was sent to Pawa School in January 1944.' (57.01)

Example (131) is a recent discovery and the only one of its type identified to date. In it, the verb 'give' is in the passive form with *nz-* passive marker and *=Ø* marking subject, i.e. the expected agentless passive. However, the fronted NP 'those demons' has to be the passive agent. It is no longer the subject of 'give' because it does not follow the verb nor is there a 3AUG enclitic *=lr.* Furthermore, since fronting is marked for Natqgu's transitive VAO sentences, the role 'those demons' must be the only instance to date of a passive agent, hence the English translation 'by those demons'. Similarly, 'bad ways and bad thinking' is the former direct object now promoted to subject.

(131) *Döka' lâng nëökabë badö nümü kätöka ä dötwö kätöka.*

drka'	**lc-ng**		**nz**-r-ka-bz=**Ø**	ba=dr	nqmq
demon	DEM1.DIST-PL		PAS-MID-give-PDIR.yon=PAS	DAT=3AUGII	way
kx-trka	x	drtwr	kx-trka		
SUBR-bad	and	mind	SUBR-bad		

'Bad ways and bad thinking are given to them by those demons.' (13.10)

8. Tense, aspect, and mood

This section discusses Natqgu strategies for encoding tense, aspect, and mood. Since Natqgu does not have morphological tense, temporal reference is often indicated by temporal adverbs. As in §8.1. Aspect and mood markers occur in slots -4, -2, and +13 of the verb complex, as seen in §4.

8.1 Temporal expressions

Natqgu temporal reference is normally expressed by free temporal morphemes like *mzli ka* 'now', *bq* 'yesterday', *zbq ka* 'today,' *kalrla* 'tomorrow,' and similar adverbs or expressions, as illustrated by (132), or is understood by context once the temporal setting has been established.

(132) *Nepwëli këdü distrik ngö Tömâtu Nedö mëli kâ bünâ.*

Nepwzli	kz-dq	distrik	ngr	Nedr	**mzli**	**kc**	**bqnc**
Nepwzli.district	AT-INDF.SG	district	GEN1A	Santa Cruz	time	DEM2.DIST	long.ago.

''Nepwzli was a district of Santa Cruz long ago.' (01.08)

In addition, the enclitic aspect particle *=pnz* 'completive' can have the sense of a (distant) past tense because things which have already happened must have occurred in the past. See §8.4.

8.2 Proclitic Aspect

The -4 proclitic aspect slot is filled by one of three forms: *sa=* 'imperfective', *sc=* 'perfective' and *ma=* 'lest.' I look at *ma=* first, since the other two are more complex. Then, since the proclitic aspect forms always co-occur with a following mood prefix from slot -3, I first discuss the mood prefixes in §8.3 which can occur independently and do not require an aspect proclitic to be grammatical, before giving examples. Then in §8.4 I discuss the enclitic aspect of slot +13. Following the discussion of the all forms, in §8.5 I give extensive examples, discussing both the normal combinations of aspect and mood, as well as the less common combinations and what they mean.

8.2.1 **ma= 'lest'**

The apprehensive proclitic *ma=* 'lest' is illustrated by sentence (133). The reason *ma=* is considered part of the proclitic aspect category is that it usually follows *murde* 'because' and always precedes a realis mood prefix, normally in the fixed phrase *murde ma RL* 'because lest REALIS.' Out of ten total occurrences, only two *ma=* sentences in the SGM text, 22.07 and 51.04, do not include *murde*. This analysis as an aspect marker is somewhat tentative since there is little

variation in its use to unveil other possible hypotheses, but there is also no counter-evidence to the current hypothesis.

(133) *…mwelötä-ëlwëkö, muöde ma tüöpnalëm dü lâsu më newë kâ tümnâ-ngögö.*

mwelr-tx-zlwz=kr		**murde**	**ma=**	**tq**-rpna'-lz-mq	
fear-INTS-very=1AUGI		because	lest	RL-shoot-GDIR.up-PDIR.hither	
dq	lcsu	mz	newz	kc	tq-mnc-ngr=gr
INDF.SG	ship	PREP	mountain	DEM2.DIST	RL-stay-APPL=1AUGII

'…we were very frightened, lest a ship shoot up there into the mountain where we lived.' (39.12)

8.2.2 sa= 'imperfective' and sc= 'perfective'

The other two proclitic aspect forms are *sa*= 'imperfective,' meaning an activity has not yet occurred, which sometimes gives it a future sense, along with *sc*= 'perfective,' meaning an activity has begun. The state of completion indicated by *sc*= depends on other TAM particles, but it sometimes indicates a past event. These two occur more frequently than *ma*= and with more variation.

8.3 Prefixal mood, tq- 'realis' and na- 'irrealis'

Natqgu encodes both realis and irrealis moods in the -2 verb complex slot. Realis mood is indicated by either *tq-* as in example (1) or *tz-* its RL.3AUG portmanteau counterpart, in example (10). Realis mood indicates that the verbal action takes place in the real world in the present or past. It is not potential, but actual. In Natqgu, one function of realis mood is to track the story line in narrative texts, leaving stative verbs and any accompanying or background information unmarked for mood.

Irrealis mood can indicate future (74), hypothetical, intentional, hortative (91), imperative (51), conditional (21), and potential (41). Natqgu *na-* is derived from POc *na 'irrealis'.

8.4 Enclitic aspect

Slot +13 has four enclitics encoding aspect. Two of these are illustrated elsewhere, *=be* 'still' in (94) and *=ka* 'not yet' in (60). Of interest in the section that follows are the other two enclitics *=pe* 'change of state' and *=pnz* 'completive' were both illustrated in (59).

8.4.1 =pe 'change-of-state'

Tracking with Alfarano's discussion of Nalögo (2021:30), the meaning or sense of *=pe* COS in Natqgu is also determined by what verb class it combines with, as well as the temporal setting of a discourse. With perfective verbs it expresses either a change of state from a previous negative state to a positive one; or with telic verbs, the resulting state following the endpoint of the event causing it. But with atelic verbs, *=pe* indicates a completed event, giving the sense of 'already.' In combination with the imperfective the enclitic expresses an imminent meaning with telic punctual verbs. In negative contexts it has the sense of 'not anymore.' Negative uses are explored in §9, Table 14.

Also like Nalögo's cognate change-of-state marker *=p(m)e* (Alfarano 2021:341-42), Natqgu *=pe,* as well as *=pnz* 'completive' combine not only with verbs, but also form predicates through attachment to nouns in weather terms as in example (80b) and free pronouns as in (134) and (135), always recalling the 'be' or 'become' basis for these. Also paralleling Nalögo, *=pe* occurs on non-predicate forms, such as demonstratives. See Table 6 discussion in §3.4.

(134) *Ëbë sâ tüwaipele tünginipenge köaesë'më.*

zbz	sc=	tq-wai=pe=le	tq-ngi**ni=pe=nge**	kra-esz'mz.
so.then	PFV=	RL-do=COS=3MINIA	RL-become=COS=1MINII	sixth.

'So then that's how I became the sixth.' (47.06)

(135) *Ëbë sâ tüöpipem läede nanginipegö nâdö.*

zbz	sc=	tq-r-pi=pe-mq	lxe=de	na-ngini=**pe=gr**	ncdr
then	PFV=	RL-MID-say=COS-PDIR.hither	mother=3MINII	IRR-become=COS=1AUGII	COM.DU

'Then her mother told me the two of us should go together.' (69.08)

8.5 TAM particles in combination

8.5.1 Normal pairings: *sc= tq-* 'perfective+realis' and *sa= na-* 'imperfective+irrealis'

Note the uses of aspect and mood forms in (136). There is *sc=* from aspect slot -4, both *na-* and *tq-* from mood slot -2, as well as two of the four +13 enclitic aspect forms, *=be* and *=pe*. Sentences (136) and (137) illustrate the normal pairings of the most frequent aspect and mood particles occurring before the verb root, with (136) showing the *sc= tq-* pairing of perfective and realis, while (137) illustrates the *sa= na-* pairing of imperfective and irrealis. These pairings are semantically compatible based on real world logic. That is, one expects imperfective things to be under way, but not yet concluded and future things to not yet have happened.

(136) *Yâbepü lang ëbü tü, ä lâsu kâ naötwëm dëtu ami kâng na-aglüamu sâ tükaputöpem.*

Yc=**be**-mq	la-ngq	zbq	tq,	x	lcsu	kc
stay=still-PDIR.hither	DEM1.PROX-PL	day	three,	and	ship	DEM2.DIST
na-rtwz-mq	dztu	ami	kc-ng	**na**-a-glq=amu		**sc=**
IRR-take-PDIR.hither	things	army	DEM2.DIST-PL	IRR-CAUS-carry=2AUGI		PFV=
tq-kapu-tr=**pe**-mq=Ø						
RL-happened-GDIR.in=COS-PDIR.hither=3MINIS						

'There are still three days, and [then] the ship for taking the army supplies you must carry is arriving.' (51.01)

(137) *Sa naomimâ më nouöla, bea ä milëpü da kä nangünamu.*

sa	**na**-o-mi-mq=x		mz	nourla	bea	x
IPFV	IRR-go-DPV-PDIR.hither=1MINI		PREP	morning	midday	and
milzpq	da	kx	**na**-ngq=amu.			
evening	thing	SUBR	IRR-eat=2AUGI.			

'I will bring with me morning, noon, and night things for you to eat.' (51.05)

8.5.2 *sa= tq-* 'imperfective + realis'

A further twist to the TAM situation occurs when the normal pairings of aspect and mood are reversed. When the relative certainty of a future event in the future is high, the imperfective pairs with realis mood, *sa= tq-*. In the SGM text, there are only four examples of *sa= tq-* and they are all in the same speech act phrase, *"Sa tqmrlz"* meaning, 'It'll be alright,' one of which is given in (138). Here it occurs with *ye* 'anyway' a particle indicating contra-expectation.

(138) *Ä öpimle kä, "Sa tümölë ye."*

x	r-pi-mq=le	kx	**sa**	**tq**-mrlz	ye."
and	MID-say-PDIR.hither=3MINIA	SUBR	IPFV	RL-be.good	anyway."

'And he said to me, "It'll be alright anyway."' (29.09)

The same combination is used in the next two sentences, which come from books of the Bible translated by Mr. Simon. Such pairings are rare and occurred completely under his authorship, since I didn't know the contexts for switching the normal pairings or even that they could be switched. In (139) *=pe* COS adds the sense 'already.' But the same pairing in (140) does not require *=pe*, probably due to the presence of *mzli ka* 'now.'

(139) *Mëli ö nöpö ngö nöanâ sa tüesopem.*

mzli	r	nrpr	ngr	nranc	**sa=**	**tq**-eso=pe-mq=Ø
time	GEN1A	season	GEN1A	fruit	IPFV	RL-near=COS-PDIR.hither=3MINIS

'The time of the season of fruit is already approaching.' (Matthew 13:28)

(140) *Sa tüoliütile mëli ka nëangângö leplë më nyö ngö nëayöplapängö.*

sa=	**tq**-oliqti=le		mzli	ka	nz-angc-kr=de
IPFV	RL-prepare.for=3MINIA		time	DEM2.PROX	NMLZ1-burn-NMLZ.POSS=3MINII
leplz	mz	nyr	ngr	nz-a-yrplapx-ngr	
people	PREP	fire GEN1A		NMLZ1-CAUS-WISE-APPL	

'He is prepared now for burning people in the fire of punishment.' (Matthew 3:10)

8.5.1 *sc*= *na*- 'perfective + irrealis'

There were no contexts in SGM requiring the *sc*= *na*- pairing, so once again scripture texts he translated are used for illustration purposes. Perfective aspect pairs with irrealis mood, *sc*= *na*- in (141) and (142). These indicate that the action is so certain to happen in the immediate future that it might as well have already happened, leading to the 'about to' phrase in the English translations. Both sentences also have =*pe* COS. Example (141) is fairly straightforward, but the idioms in (142) warrant clarification. The idiom 'where one's neck shoots' means one's will or plan and 'to cause something to stand in' means to fulfill or accomplish it.

(141) *Inyänge yagoä ä sâ nabëpe.*

inyx=nge	yagox=Ø	x	**sc=**	**na**-bz**=pe**=Ø
daughter=1MINII	be.sick=3MINIS	and	PFV	IRR-die=COS=3MINIS

'My daughter is sick and she's about to die.' (Mark 5:23)

(142) *A' këdü ëbü mökâ tüpnë dötwö Herodiës më nënibü-köde Jon sâ natutöpe.*

a'	kz-dq	zbq	mr-kc	tq-pnz	neck	Herodizs	mz
but	AT-INDF.SG	day	place-DEM2.DIST	RL-shoot	mind	Herodias	PREP
nz-nibq-kr=de			Jon	**sc=**	**na**-tu-tr**=pe**=Ø		
NMLZ1-kill-NMLZ.POSS=3MINII			John	PFV	IRR-stand-GDIR.in=COS=3MINIS		

'But one day Herodias' plan to kill John was about to be fulfilled.' (Mark 6:23)

One final example closes §8. Normally only the first part of the negative circumfix, *tr*> comes between the aspect proclitc and mood prefix. Here we see the usual *sc*= *tq*- pairing, but with material between them. In fact, in (143) Mr. Simon has an entire fronted NP (underlined) between them. This is the only such occurrence in the data. I rechecked the hand-written manuscript and this accurately represents what he wrote. There was no crossing out or arrows, which he did when editing other parts. This is so unusual that for the illustrated, printed Natqgu book of Simon's story I edited it to be more natural, moving *sc*= to follow the underlined NP. This makes it easier for new and hesitant readers to process.

(143) *Kä yököpäbo kâ më Sosaeti, sâ doa lö Nepa' ä Pa'lë tëmâpäpelö ninge kä nanginibo käaonöwä më mëtea lâng li.*

kx	yrkrpx-bz=x				kc		mz	Sosaeti			
SUBR	complete-PDIR.yon=1MINI				DEM2.DIST		PREP	Society			
sc=	doa	lr	Nepa'	x	Pa'lz	**tz**-mcpx=pe=lr				ninge	
PFV=	person	TPNYM	Nepa'	and	Pa'lz	RL.3AUG-choose=COS=3AUGIA				be=1MINII	
kx	na-ngini-bz=x				kx-a-o-nrwx		mz	mztea	lc-ng		li
SUBR	IRR-become- PDIR.yon=1MINI				SUBR-CAUS-go-peace		PREP	village	DEM1.DIST-PL		two

'When I finished at Society, the people of Nepa' and Pa'lz villages chose me that I might become a peacemaker for those two villages.' (71.01)

9. Negation

Negation is variously represented, depending on what is negated. In Table 13, I summarize what has been said about negation to this point. Then I move on to complex negative existentials.

Table 13. Negative forms

Negation form	Meaning	Properties	Section
bzkq	‘ do not’	Negative imperative	6.2.4
tr>...<u	‘not...not’	Discountinuous negators occurring with simple verbal clauses; the most common form of negation	6.3
tr>...<ka	‘not...yet’	Combination of the negator *tr-* and aspect particle *=ka* ‘(not) yet’	6.3
trtingr	‘no’	Negator (with NPs and predicate nominals); Negative answer to Polar Questions	6.2.6

9.1 Negative existential predicates with tr-__-ngr

In addition to standard negation and the other morphemes of Table 13, Natqgu forms complex negative existential predicates by combining three morphemes: the negative prefix *tr-* of the -4 slot, plus an aspect form from slot +13, followed by the applicative *-ngr* of slot +16. I analyze these forms as having a zero copula in the verb root slot since otherwise a prefix is attaching to an enclitic, which does not happen elsewhere in the language.

Table 14. Complex negative existentials

English	Natqgu	-4	0	+13	+16
		NEG	verb	aspect	APPL
Not any __ /none	***trpnzngr***	*tr-*	Ø	*=pnz* ‘completive’	*-ngr*
Not any more __	***trpengr***	*tr-*	Ø	*=pe* ‘change-of-state’	*-ngr*
Not any __ yet	***trgalr***	*tr-*	Ø	*[=ga]* is */=ka/* ‘not yet’	*[-lr] is/-ngr/*

The third form in column +13 is *=ga* in *trgalr* ‘never.’ I propose that the underlying form of *trgalr* is */tr-=ka-ngr/*, where *=ga* as a voiced allomorph of *=ka* ‘(not) yet,’ which is already a slot +13 lexeme. The voicing is possibly motivated by making the first two syllables of this word maximally opposed to the common word *trka* ‘bad’. While voiced stops are optionally prenasalized in Natqgu, with the oldest generation always prenasalizing, the middle-aged group sometimes prenasalizing, and the youngest group rarely prenasalizing, in this word prenasalization is uniformly present.

I also posit that [*-lr*] is an allomorph of the applicative */-ngr/*. Voicing of the [k] to (prenasalized) [g] creates the environment for dissimilation to occur by morphophonemic rule #5, which disprefers two consecutive one-syllable morphemes starting with either two homorganic nasals or a nasal and its homorganic voiced stop, as previously illustrated in examples (5a) and (5b). The choice of [l] as the dissimilated sound is consistent with either [l] or [n] being inserted epenthetically between morphemes with same vowel conjunctions, as in morphophonemic rule #1, and is maximally opposed to [ŋg] because [l] is both non-nasal and non-velar.

These forms are illustrated by the following sentences. The function of the applicative forms in column +16 is to license the NP of which there is ‘none.’ So in (144) the *-ngr* of *trpnzngr* ‘none’ licenses ‘our knife.’

(144) *Nëvëne-kögö lâ töpnë'ngö sâgö toki.*

nz-vz-ne-kr=gr	lc	**trpnzngr**	sc=gr	toki
NMLZ1-GO- DSTR-NMLZ.POSS=1AUGII	DEM1.DIST	none	PCLF.hand=1AUGII	knife

‘On our trip we had no knife.’ (03.08)

Examples (145) and (146) occur at the end of a story about a severe cyclone. (145) has two examples of *trpengr* 'not.anymore', one as a single word which licenses 'fruit from trees.'

(145) *Më nëngi-töpengökö nounâ kä tuti, utâ ngö peto nëbëti-läblöng muöde töpengö nöa nounâ kä nangüdö.*

mz	nz-ngi-**trpengr**-kr	nounc	kx	tu-ti	utc	ngr	peto	
PREP	NMLZ1-be-not.anymore-NMLZ.POSS	tree	SUBR	stand-TR	bird	GEN1A	bush	
nz-bz-ti-lxblr=ngq	murde	**trpengr**	nra	nounc	kx	na-ngq=dr		
3AUG1-die-PLCT-together=3AUGIS	because	not.anymore	fruit	tree	SUBR	IRR-eat=3AUGII		

'From there being no trees standing anymore, the birds of the bush all died because there was not anymore fruit on the trees for them to eat.' (12.10)

The other *trpengr* of (145) is incorporated into an action nominalization, with this being the only example of such a form in the data. The nominalization is interesting because it requires the addition of *ngi* 'be' even though I've posited an underlying 'be' in *trpengr*. Furthermore, *-ngr* in *trpengr* and *-kr* in the nominalization both license the same thing, that is, 'trees that were standing'. This likely illustrates that speakers think of these forms as single grammaticalized units, rather than being synchronically composed of three (or four) morphemes. A similar process happened in English with 'not one' becoming 'none.'

Sentence (146) illustrates *trgalr* 'never' with the *-lr* (*-ngr*) applicative licensing the clause headed by 'cyclone.' So 'not any yet' or 'none to date' means it never happened in the past.

(146) *Abëo më nibö nounenü lâde, vë kölëmle mëli ka, tögalö nounenü käetu kä mâlä kä apule kölâde.*

abzo	mz	nibr	nounenq	lc=de	vz	krlz-mq=le			
start	PREP	after	cyclone	DEM1.DIST=3MINII	go	reach-PDIR.hither=3MINIA			
mzli	ka	**trgalr**	nounenq	kx-etu	kx	mc=x	kx		
time	DEM2.PROX	never	cyclone	SUBR-big	SUBR	see=1MINI	SUBR		
apu=le	kr-lc=de.								
be.like=3MINIA	RPRN2-DEM1.DIST=3MINII								

'From after that cyclone, going until now, there's never been a big cyclone that I've seen that was like that one.' (12.12)

Alfarano analyzes cognate forms as negative predicates in Nalögo (2021:530-532) and this negative predicate analysis is consistent with what Vaa says about Engdewu:

> *"Another way of expressing negation is by a morpheme* tobi*, which seems related to the* NEG1 *particle form* to*. It always appears first in the clause. Since* tobi *often appears preceding a noun, it may be a negative predicate meaning something like 'there is no'"* (Vaa 2013: 405).

10. Complex clause types

In §10 I discuss complex clauses, the three subordinate clause types of complements, relatives, and adverbials, as well as coordinate clauses. The syntax and constraints of Natqgu are very similar to Nalögo (Alfarano 2021), but Natqgu has only one particle *kx* which functions as a subordinator in both complement and relative clauses. This is unlike Nalögo which has *nge* and *kä*, both glossed as complementizers.

10.1 Complement clauses

Complement clauses in Natqgu can be finite or non-finite and are usually introduced by the subordinator *kx*. Finite complementation involves clause complements, while non-finite clauses involve nominalizations.

10.1.1 **Finite complement clauses**

In Natqgu, these finite sentence-like complement clauses follow the matrix clause. Verbal inflections on the matrix and complement predicates are independent from one another. Two predicate types which show finite clause complementation are illustrated in (147), that of the contents of utterances and knowledge. So, 'he said to him that…' introduces the direct quote which follows. Likewise, within the quote is the second complement clause, 'you can…' plus the complement clause 'healing me.'[25] Note that *krlz* can mean either 'know' or 'able,' and that the italicized phrase has a non-finite complement with *krlz* plus nominalization as in §10.1.2. Also noteworthy is the third *kx* which introduces the premise, 'If you are willing…' illustrating a different sense of subordinator *kx* which means 'if', 'whether', 'since' or 'when'.

(147) *…öpibële bade kä, "Kä tüsuti dötwöm le, kölëä kä kölëü nëamölëngö ninge!"*

r-pi-bz=le		**ba=de**	**kx**	kx	tq-suti	drtwr=mq=le
MID-say-PDIR.yon=3MINIA		DAT=3MINII	SUBR	SUBR	RL-want	neck=2MINII=3MINP
krlz=x	**kx**	***krlz=q***	***nz-a-mrlz-ngr***			***ni=nge***
know=1MINI	SUBR	be.able=2MINI	NMLZ1-CAUS-be.good-NMLZ			be=1MINII

'…he said to him, "If you want to, I know you can heal me!"' (Matthew 8:2)

Other complement clauses are found expressing propositional attitude 'it seemed' in (148), desire 'I decided' in (149), and perception 'we heard' in (150). Fear complements such as, 'I fear that…' occur, but are not illustrated. In (149), *aoti drtwr* is one of the plethora of idioms using 'neck' for the mind, here meaning to decide to do something.

(148) *Da kä kâtitäpää më tewa lâde etu, opäm kä dövö-ngögö kâ aböelë käetu.*

da	kx	kcti-tx-px=x	mz	tewa	lcde	etu	
thing	SUBR	marvel-INTS-GDIR.out=1MINI	PREP	rain	there	big	
opxm	**kx**	drvr-ngr=gr	kc		abrelz		kx-etu
seems	SUBR	cover.from.rain-APPL=1AUGII	DEM2.DIST		umbrella		SUBR-big

'What surprised me very much in that big rain, was it seemed that we were covered by a big umbrella.' (29.16)

(149) *… aoti dötwönge kä mölë nëöyö-köbo, më nëaopä-köbo bam da lâng amölä.*

ao-ti	**drtwr=nge**	**kx**	mrlz	nz-r-yr-kr-bz=x			mz
think-TR	mind=1MINII	SUBR	be.good	NMLZ1-MID-riteNMLZ.POSS-PDIR.yon=1MINI			PREP
nz-a-opx-kr-bz=x				ba=m	da	lc-ng	amrlx
NMLZ1-CAUS-clear-NMLZ.POSS-PDIR.yon=1MINI				DAT=2MINII	thing	DEM1.DIST-PL	all

'I decided that it'd be good for me to write to make all these things clear to you.' (Luke 1:3)

(150) *…älökö kä lö Japan nëokatöpelö Jëmëne ä lö Merikë ä Rasia nëokatöpelö Inglan.*

xlr=kr	**kx**	lr	Japan	nz-okatr=pe=lr		Jzmzne
hear=1AUGI	SUBR-	TPNYM	Japan	3AUG-help=COS=3AUGIA		Germany
x	lr	Merikz	x	Rasia	nz-okatr=pe=lr	Inglan
and	TPNYM	America	and	Russia	3AUG-help=COS=3AUGIA	England

'…we heard that the Japanese were helping Germany and the Americans and Russians were helping England.' (36.01)

The predicate of knowledge *krlz* 'know' can use interrogative complementizers instead of *kx* to introduce finite complement clauses, as illustrated in (151). Other types of predicates may also exhibit this type of complementation, but they have not yet been identified. In (151), Simon's father is instructing him about how to make sacrifices to a god and how to tell if the god has been appeased. The phrase with *krlz* 'know' is passive and *nike* 'what' introduces 'what is

[25] Actually *a-* CAUS plus *mrlz* 'good' can also have two meanings, either 'bless' or 'heal' depending on context and what is being 'caused good' to.

bad about his thinking.' The phrase *da kx* 'thing which' could be grammatically substituted for *nike* in this sentence.

(151) *Nëmu dötwöde kä tümölë-moule, nëkölëtöpë nike tütökangö dötwöde.*

nzmu	drtwr=de	kx	tq-mrlz-mou=le		
if	mind=3MINII	SUBR	RL-goodagain=3MINIA		
nz-krlz-tr-pz			**nike**	tq-trka-ngr	drtwr=de
PAS-know-GDIR.in-PDIR.yon			what	RL-bad-APPL	mind=3MINII

'If his thinking is good again, it will be known what is bad about his thinking.' (08.08)

10.1.2 Non-finite complement clauses

Instead of using the subordinator *kx*, non-finite complements involve nominalizations. Complements of phasal predicates occur exclusively as nominalizations. But of the predicate types discussed above, achievement, desiderative and fear predicates occur with both complementation types.

Phasal predicates focus on different phases of an action or a state, such as its inception, continuation or termination, such as 'begin', 'continue', 'finish.' Examples (152) and (153) illustrate phasal predicates with nominalization complements.

(152) *Yëutökö nësiklungö më temë Oktobë 1943.*

yzu-tr=kr	**nz-siklu-ngr**	mz	temz	Oktobz	1943
begin-GDIR.in=1AUGI	NMLZ1-be.schooled-NMLZ	PREP	moon	October	1943

'We began being schooled in the month of October 1943.' (56.06)

(153) *Yököpäbë nëköka'-köde…*

yrkr-px-bz=Ø	**nz-krka'-kr=de**
finish-GDIR.out-PDIR.yon=3MINIS	NMLZ1-pray-NMLZ.POSS=3MINII

'He finished his praying…' (23.12)

Example (155) illustrates an achievement predicate 'try' with a nominalized complement.

(154) *Daniel Boerger abë-kële këdu nëöyöngö më vaol lâdeng.*

Daniel Boerger	**abz-kz=le**	**kzdu**	**nzryrngr**	mz	vaol	lc=de-ng.
Daniel Boerger	try-also=3MINIA	some	writing	PREP	vowel	DEM1.DIST=3MINII-PL.

'Daniel Boerger also tried some writings [symbols] for those vowels.' (79.09)

10.2 Relative clauses

In this section I describe the characteristics of relative clauses (RC) in Natqgu with examples enclosed in various kinds of bracketing explained below and the relativizing particle in a bold font. Natqgu's RCs are introduced either by the subordinator *kx* or when the NP being modified is known in the discourse, by the demonstrative *kc*. RCs follow the NP they modify.

Sentences (155) and (156) are consecutive sentences in SGM episode 3. Recall from §3.7 that Natqgu lacks many true adjectives and relativizes stative verbs to express characteristics of referents. Such a simple relative clause is illustrated in (155) with the head noun *newz* 'hill' modified by 'very small.' In (156), there are three RCs and three levels of embedding. The largest in curly brackets tells what the house contained; the next two RCs describe the demon images, as indicated by the square brackets with two separate parenthetical RCs within it.

(155) *Nâ noli kâ tu-aepëtö më nou këdü newë kätopwëne.*

nc.noli	kc	tu-aepz-tr=Ø	mz	nou	kz-dq
tree.hogplum	DEM2.DIST	stand-near-GDIR.in=3MINIS	PREP	base	AT-INDF.SG
[newz	**kx**-topwz-ne]				
mountain	SUBR-little-INTS				

'The hog plum trees [*Spondias cythere*] were near the base of a very small hill.' (03.04)

(156) *Ä më naö newë lâde tuom elö ma kä tutipä-ngöm müngö döka' käkülu kä nëangiolö lö Mëdämingö.*

x	mz	nar	newz	lc=de	tu-o-mq		elr
and	PREP	head	mountain	DEM1.DIST=3MINII	stand-GDIR.down-PDIR.hither		therein
{ma	**kx**	tu-ti-px-ngr-mq=Ø			[(mqngr	drka'	**kx**-kqlu)
house	SUBR	stand-TR-GDIR.out-APPL-PDIR.hither=3MINIS			image	demon	SUBR-many
(**kx**	nz-angio=lr	lr	Mzdxmingr)]}				
SUBR	3AUG-worship=3AUGIA	TPNYM	Mzdxmingr.village				

'And at the top of that mountain there stood a building that contained many statues of demons in it, which the Mzdxmingr villagers worshiped.' (03.05)

A few sentences later in the same episode we find (157). I include the entire sentence here to demonstrate the complexity of the sentences composed by Mr. Simon, as well as to illustrate two RCs. The first of the two RCs is in square brackets and illustrates the demonstrative *kc* as the relativizing particle. This occurs because four sentences previously in the story, (example 155), the building standing on the top of the hill was introduced. Since it is a known entity, when it is relativized on here the demonstrative *kc* is used instead of *kx*. In Oceanic, relativizers and demonstratives often have similar or the same forms, as well as an overlap in functions (Lynch et al. 2002:53, Early 2009).

The second RC, also in parentheses, is the last clause of the sentence. The subordinator *kx* modifies 'knife,' introducing an irrealis purpose phrase telling what they want to use the knife for. In that phrase, the applicative *-ngr* adds the sense of 'with' or 'with which.'

(157) *Kä mâlëkö ma kâ tütuom më newë lâ, sâ tüöpipem Lölvë navëdëkö elö muöde naölätöpëkö toki kä naöyëkö-ngögö noli.*

(**kx**	mc-lz=kr		[ma	**kc**	tq-tu-o-mq=Ø		
SUBR	see-GDIR.up=1AUGI		house	DEM2.DIST	RL-stand-GDIR.down-PDIR.hither=3MINIS		
mz	newz	lc,])	sc=	tq-r-pi=pe-mq			
PREP	hill	DEM1.DIST	PFV=	RL-MID-say=COS-PDIR.hither			
Lrlvz	na-vz-dz=kr		elr	murde	na-rlx-tr-bz=kr		
Lrlvz	IRR-go-GDIR.up=1AUGI		therein	so.that	IRR-ask-GDIR.in-PDIR.yon=1AUGI		
(toki	**kx**	na-r-yzkr-ngr=gr		noli.)			
knife	SUBR	IRR-MID-peel-APPL=1AUGII		hog.plum.fruit.			

'When we saw the building standing up on the hill, Lrlvz said we should go up there in order to ask for a knife that we might peel the hog plum fruit with.' (03.09)

We saw previously in (147) that *kx* has both its main subordinator function, as well as another subordinating function meaning, 'if' or 'when'. The latter is also the function of the first *kx* in (157), introducing a temporal adverbial clause. Repeating information which has been introduced previously is part of good narrative discourse in Natqgu. It is not mandatory and it occurs less in written texts than oral ones, but it has a function similar to that of clause chaining in other languages by maintaining continuity between sentences.

In fact, this second use of *kx* still signals subordination, since the clause in parentheses is subordinate to the following main clause. Therefore, all occurrences of *kx* are glossed SUBR, no matter how they are translated. One indicator that it introduces a subordinate clause here is that *kx* introduces *mclzkr* 'we see' having no TAM marking, while the main clause, *sc tqrpipem*, has three TAM particles, once of which is *tq-* realis which, as stated before, tracks the story line in narratives.

Note also that the main clause of (157) indicates indirect reported discourse, in that there is no *kx* subordinator following 'Lrlvz said'. Direct discourse, though, normally has *kx* at the quote margin, as previously seen in (146).

10.2.1 **Depth of relativization possible**

Keenan and Comrie (1977) propose an Accessibility Hierarchy which has implications for RCs. If a specific position on the hierarchy is relativizable, then any position to its left also is. That hierarchy is repeated here: Subject>direct object>indirect object>oblique>genitive>object of comparative. Alfarano (2021:562-68) demonstrates with examples that Nalögo, like most Oceanic languages (Lynch et al 2002:43), allows relativization fairly deeply in the accessibility hierarchy. I assume this is also true for Natqgu, given the many other parallels, but space does not allow for extensive corroborative examples.

10.3 Adverbial clauses

In addition to complement and relative clauses of §10.1 and §10.2, the third type of subordinate clause to discuss is the adverbial clause. Like complement clauses, Natqgu adverbial clauses occur with both finite predicates with and without TAM markers, as well as non-finite nominalizations lacking TAM markers.

10.3.1 **Temporal clauses**

One way of encoding temporal adverbial clauses uses the phrase *mz nibr* 'after' followed by a nominalization, as in (158).

(158) *Më nibö nëmülöpi-könge tötenge sâ tüdwatöpe më rum kâ tüwäbupä-ngöm mgngö nâbö.*

mz	**nibr**	**nz-mqlrpi-kr=nge**			trte=nge	sc=		
PREP	back.part	NMLZ1-be.comforted-NMLZ.POSS=1MINII			father=1MINII	PFV=		
tq-dwatr=pe=Ø	mz	rum	kc	tq-wxbu-px-ngr-mq			mqngr	ncbr
RL-enter=COS=3AUGIS	PREP	room	DEM2.DIST	RL-sit-GDIR.out-APPL-PDIR.hither			image	cross

'After my being comforted, my father entered the room where the cross image sat.' (6.12)

Another way to encode temporal clauses is by the juxtaposition of two clauses, one of which contains a time word, as in (159). The first clause has 'a short time' and the second clause only states 'and our grandmother died,' implying that she died after they'd been there a short time. But the word 'after' which could connect them is missing and the clauses are only connected by 'and'. English functions similarly.

(159) *Mnâtikö badö mëli töboiu ä blökügö llëtökalö kâ tübëpe.*

mnc-ti=kr	badr	mzli	tr-bz=xi-u	x	blrkq=gr
be-PLCT=1AUGI	COM.PL	time	NEG-long-NEG	and	grandmother=1AUGII
llztrkalr	kc		tq-bz=pe		
llztrkalr	DEM2.DIST		RL-die=COS		

'We lived with them a short time and [then] our grandmother llztrkalr died.' (17.06)

A third strategy for encoding temporal adverbial clauses is by use of the subordinator *kx* having the sense of 'when' followed by finite verb. This strategy was referred to above in the first clause of (157) 'when we saw the building standing up on the hill'.

10.3.2 **Reason clauses**

Reason clauses are encoded in at least two ways: i) with the phrase *mz nzmu-krde lcde* 'from its being like that one' normally translated 'therefore', and ii) with *murde* 'because.'

The first way to encode a reason adverbial clause is illustrated by sentences (160) and (161). In (160) the other guy didn't want to work in translation. So in (161) *lcde* refers back to that statement and the addressee (Mr. Simon) is told that he has to go on to translate alone. This type of reason clause is introduced by a discourse level construction using the phrase *mz nzmu-*

krde lcde which literally means, 'from its being like that one',[26] where *lcde* 'that one' refers to a clause in the preceding sentence.

(160) *…Mölä lâ mwä' pä-ngöde nëtekütö-köde Nöpakämölë.*

mrlx	lc	mwx'	px-ngr=de	nz-tekqtr-kr=de	Nrpakxmrlz
guy	DEM1.DIST	I think	refuse-APPL=3MINII	NMLZ1-exchange-NMLZ.POSS=3MINII	Good.News.

'It seems that this guy doesn't want to translate the Good News.' (75.10)

(161) *Më nëmu-köde lâde, nipem esë'-köm kä natekütöpele Nöpakämölë.*

mz	nz-mu-kr=de		lc=de	ni=pe-m
PREP	NMLZ1-be.like-NMLZ.POSS=3MINII		DEM1.DIST=3MINII	ni=pe-m
esz'-krm	kx	na-tekqtr=pe=le	nrpa-kx-mrlz	
alone	SUBR	IRR-exchange=COS=3MINIA	news-SUBR-good	

'From its being like that one, it is you alone who must translate the Good News.' (75.11)

A second way to express reason clauses is in a clause starting with *murde* 'because/so that,' as in (162), where Mr. Simon describes the forest after a cyclone had hit. It means 'because' unless the following verb has irrealis mood, in which case it is a purpose clause meaning 'in order that,' shown in the following example (163) in §10.3.3.

(162) *Më nëvëne-kögö peto asa,* ***muöde*** *leplë tüpötë wü më nounâ, tüdwao, tüvëne wü më nounâ ä tëngölaplä nounâ.*

mz	nz-vz-ne-kr=gr				peto	asa	murde
PREP	NMLZ1-go-progressive-NMLZ.POSS=1AUGII				bush	be.slow	because
leplz	tq-pr-tz=Ø		wq	mz	nounc	tq-dwa-o=Ø	
people	RL-go-GDIR.up=3MINIS		high	PREP	tree	RL-jump-GDIR.down=3MINIS	
tq-vz-ne=Ø		wq	mz	nounc	x	tq-ngrla-plx=Ø	nounc
RL-go-INTS=3MINIS		high	PREP	tree	and	RL-crawl-through=3MINIS	tree

'In our going to the bush it was slow, because a person went up trees, went down, went up trees and they crawled through trees.' (12.07)

10.3.3 Purpose clauses

Natqgu purpose clauses are encoded in at least two ways: i) with *murde* 'so that' plus irrealis and ii) a prepositional phrase following the verb whose purpose it describes.

(163) *Öpibële kä nadwatitä mou dü ëbü lâsu sâde, muöde na-ale-kaipëng nëmungö më Dâkta ä dëbede nede, ä aolvëbë Këpten ngö Veronika.*

r-pi-bz=le			kx	na-dwa-ti-tx	mou	dq
MID-say-PDIR.yon=3MINIA			SUBR	IRR-jump-TR-INTS	again	INDF.SG
zbq	lcsu	sc=de,		**murde**	**na**-ale-kai-bz=ng	
day	ship	PCLF.hand=3MINII,		so that	IRR-do-first-PDIR.yon=3AUGIS	
nz-mu-ngr		mz	dckta	x	dzbede	ne=de
NMLZ1-eat-NMLZ		PREP	doctor	and	group	PCLF.rsbl=3MINII
x	aolvz-bz	kzpten	ngr	Veronika.		
and	accept-PDIR.yon	captain	GEN1A	Veronica.		

'He told him that his ship should anchor another day, so that they might make a feast for the doctor and his group and the captain of the [ship] Veronica agreed.' (21.03)

The purpose clause with *murde* 'in order that' plus irrealis, which was mentioned in 10.3.2, is illustrated in (163), where it introduces the purpose for which they want the ship *Veronica* to anchor an extra day before taking their guests away.

Nominalization is the other way that purpose clauses are encoded, as in (164). The Melanesian Brothers go out 'in their converting other villages,' encoding their purpose for going.

[26] I'm actually not sure whether this means 'from that thinking there' or 'from its being like that there' because *mu* means both 'think' and 'be.like' and both are equally felicitous in the phrase.

(164) *Ma nyëdö tësiu kä tupele kâ Bwëng, sâ tëpöpäpeng më në-ëpütö-ködö mëtea këbleng.*

ma	nyz=dr	tzsiu	kx	tu=pe=le	kc	Bwzng,	sc=
house	PCLF.B&G=3AUGII	monk	SUBR	stand=COS=3MINIA	DEM2.DIST	Bwzng,	PFV=
tz-prpx=pe=ngq	**mz**	**nz-zpqtr-kr=dr**				**mztea**	**kzble-ngq**
RL.3AUG-go.out=COS=3AUGIS	PREP	NMLZ1-convert S.O.-NMLZ.POSS=3AUGII				village	different-PL

'When the brothers' house was completed at Bwzng, they went out to convert other villages.' (25.01)

10.3.4 Conditional clauses

Conditional clauses are encoded in one of two ways: i) using *nzmu* 'if' and ii) using the subordinator *kx* meaning 'if' in context.

The first of these is illustrated by (165), where Mr. Simon discusses the vowel diacritics in the earlier orthography. Here, *nzmu* introduces 'if it was forgotten to spot the heads of the letters' and the sentence continues on to give the consequence that the speaking is bad, presumably when someone tried to read it.

(165) *Ä nëmu namöbötitö dötwö nëöläkütiongö naö letë lâdeng, nëyâmnengö kâ tütökape.*

x	**nzmu**	na-mrbr-ti-tr	drtwr	nz-r-lxkqti-o-ngr		nar
and	if	IRR.PAS-lose-TR-GDIR.in	mind	NMLZ1-MID-spotted-GDIR.down-APPL		head
letz	lc=deng	nz-ycmne-ngr		kc	tq-trka=pe=Ø	
letter	DEM1.DIST=3MINII-PL	NMLZ1-speak-APPL		DEM2.DIST	RL-bad=COS=3MINIS	

'And if it was forgotten to spot the heads of the letters, that speaking was bad.' (79.06)

We've seen already that the meaning of the subordinator *kx* is determined by context. One of its contexts yields the meaning 'if' or 'since' and it is less tentative than *nzmu*. In (166) then, where the variety to be chosen for Bible translation is discussed, the first clause with *kx* could equally felicitously be glossed 'or if there would be only one language, 'or since there might be only one language' and even 'or were there to be only one language'.

(166) *E kä nangi natü esë'täu, Bënwë täpwë kä mölë.*

e	**kx**	na-ngi	natq	esz'txu	Bznwz	txpwz	kx	mrlz
or	SUBR	IRR-be	language	only.one	Bznwz.vil	only	SUBR	be.good

'Or if there were to be one single language, only Bznwz [dialect] is good for that.' (73.14)

Finally, *nzmu* and *kx* can combine in sentences where *nzmu* carries the conditional meaning and *kx* subordinates the following proposition, yielding meanings like, 'if it is (true) that…' as illustrated in (167).

(167) *Öpile kä nëmu kä tüngi töpnëngö nagö dakänëng, navëbëkö Tëngarare muöde naokatöpülö nigö më nëmungö.*

r-pi=le	kx	**nzmu**	**kx**	tq-ngi	trpnzngr	na=gr
MID-say=3MINIA	SUBR	if	SUBR	RL-be	none	PCLF.food=1AUGII
dakxnzng,	na-vz-bz=kr		Tzngarare		murde	na-okatr-mq=lr
food,	IRR-go-PDIR.yon=1AUGI		Tangarare		because	IRR-help-PDIR.hither=3AUGIA
ni=gr	mz	nz-mu-ngr				
be=1AUGII	PREP	NMLZ1-eat-NMLZ				

'He said that if it was [the case] that we had no food, we should go to Tangarare [Catholic School] so that they might help us with eating.' (48.03)

10.3.5 Precautionary clauses

To my knowledge, there is only one way to encode precautionary clauses, and that is through the use of 'lest' *murde ma* plus realis on the following verb, which encodes that which is to be

avoided. This construction was illustrated previously in (86) and (133), with a third example here in (168).

(168) *A' öpimle kä nayatipää kökâng tüpetikö Däi, muöde ma tümibitätö.*
a' r-pi-mq=le kx na-ya-ti-px=x kr-kcng
but MID-say-PDIR.hither=3MINIA SUBR IRR-paddle-TR-GDIR.out=1MINI RPRN2-DEM4-PL
tq-pe-ti=kr Dxi **murde** **ma=** **tq**-mibi-tx-tr=Ø
RL-plant-TR=1AUGI Dxi because lest RL-rotten-INTS-GDIR.in=3MINIS
'But she told me I should paddle out to the ones [pineapples] we had planted at Dxi, lest it [the crop] rot on the vine.' (69.05)

10.3.6 Concessive clauses

Natqgu forms concessive clauses in two ways. The first is with the phrase *kxmule-esz'* 'that it is like one' introducing the concessive clause. To increase contrast, the main clause often starts with the conjunction *a'* 'but' as in (169), but that is not mandatory, as illustrated by (170).

(169) *Kämule-esë' nümü ngö skul äplö a' tömwelökru ä dötwögö tövëu, muöde da külu më skul kä ökatöpü bagö nëabötë-ëvëngö.*
kx-mu=le-esz' nqmq ngr skul xplr a' tr-mwelr=kr-u
SUBR-be.like=3MINIA-one rule GEN1A school strong but NEG-fear=1AUGI-NEG
x drtwr=gr tr-vz-u murde da kqlu mz skul kx
and neck=1AUGII NEG-feel.sad-NEG because thing many PREP school SUBR
r-ka-tr-mq=Ø ba=gr nz-abrtz-zvz-ngr
MID-give-GDIR.in-PDIR.hither=3MINIS DAT=1AUGII NMLZ1-be.happy-always-NMLZ
'Even though the rules of the school were strict, yet we were not afraid and we were not sad~discouraged, because there were many things at the school that gave us constant happiness.' (35.08)

Interestingly, two other Santa Cruz languages have constructions glossed identically with the same concessive meaning. Engdewu exhibits *ka ingwe ka öte* 'that it is like one' (Vaa 2013:420-21) and Nalögo has *kä i-ngâ=le öte* 'that it is like one' (Alfarano 2021:592). Given this, perhaps 'that it is like one' means both propositions are the same, i.e. 'like one', so it doesn't matter whether A or B. The phrase is fixed and speakers likely process it as a whole without awareness of its parts.

Example (170) shows Mr. Simon's translation of Psalm 23:4 set to a traditional quatrain melody (Boerger 2016:185-89). I include it here for two purposes. First, it illustrates that the concessive clause can occur before or after the main clause. Second, it also provides evidence that poetry and song are productive places to find constructions not otherwise attested.

(170) *Kämule-esë' vëtöä më nëlo, tömwälöwäu e;*
Yawe mnâme bange, kämule-esë' vëtöä më nëlo.
Kx-mu=le-esz' vz-tr=x mz nzlo tr-mwxlr=x-u e
SUBR-be.like=3MINIA-one go-GDIR.in=1MINI PREP dark NEG-fear=1MINI-NEG vocable
Yawe mnc-mq=q ba=nge **kx-mu=le-esz'** vz-tr=x mz nzlo
Yahweh be-PDIR.hither=2MINI) DAT=1MINII SUBR-be.like=3MINIA-one go-GDIR.in=1MINI PREP dark
'Even though I walk in the dark, I am not afraid o;
Yahweh you stay with me, even though I walk in the dark.' (Psalm 23:4)

Another use of the phrase *kxmule-esz'* means 'whether or not', but the 'or not' clause is not overt. See (171), where this sense is implied.

(171) *Muöde kämule-esë' Dan ä Brenda nëyëlung kalö, a' buk lâng pwä nayâpem bagu.*

murde		**kx-mule-esz'**		Dan	x	Brenda	nz-yzlu=ng	kalr
because		SUBR-be.like=3MINIA-one		Dan	and	Brenda	3AUG-return=3AUGIS	later
a'	buk	lc-ng	pwx	na-yc=pe-mq			ba=gu	
but	book	DEM1.DIST-PL	four	IRR-stay=COS-PDIR.hither			DAT=12AUGII	

'Because whether [or not] Dan and Brenda return later, yet these four books would remain with us.' (80.10)

10.4 Coordinate clauses

This section looks at coordination between clauses in Natqgu, both through the use of coordinate conjunctions and through the use of juxtaposition. Coordination between NPs has already been briefly covered in passing and the specific role of comitatives and depictives was covered in §4.3.3 and §7.3.8.

10.4.1 Conjunctive coordination 'and'

Natqgu has a coordinating conjunction *x* 'and' which can conjoin sentences, clauses and NPs as shown in (172). Let's look at these four *x* forms one at a time to illustrate what *x* can conjoin. At the beginning of the sentence 'x_1' is a discourse-level morpheme, conjoining this sentence to the previous sentence in the story line.

The remaining three *x* forms are inside the quoted speech. Of these, x_2 joins two clauses having the same subject, 'Your children will become sick and they will die.'

However, the subjects need not be identical as shown by x_3 which conjoins two reason clauses telling why they will get sick and die. Here *murde* 'because' has scope over both clauses. The two clauses are 'because of that bad thing how they treated the demon statues and [because] it is forbidden for children and lowly people to enter that building.' Note that 'the bad thing' and 'it is forbidden' differ in a number of ways and yet they are conjoined. The first 'because' clause focuses on their actions, while the second is in the passive voice discussing a rule.

Finally, x_4 conjoins two NPs, 'small children' and 'lowly men.' So, together these four x forms illustrate the various functions of Natqgu *x* 'and.'

(172) *Ä nëöpibë känëmnëtöng më tötegöng kä, "Doa nemung sa nayagoäng ä nabëng, muöde da kätömölëu kâ tëwaisö-ngödö müngö döka' kâng ä nëapä-ngöbë badö doa känëtopwë ä nâblo täne nëdwatö-ködö ma kâ."*

x_1	nz-r-pi-bz			kx-nz-mnztr=ng			mz	trte=gr-ngq
and	3AUG-MID-say-PDIR.yon			SUBR3AUG1-do.sorcery=3AUGIS			PREP	father=1AUGII-PL
kx	doa	ne=mu-ngq		sa	na-yagox=ng	**x_2**	na-bz=ng	
SUBR	child	PCLF.rsbl=2AUGII-PL		IPFV	IRR-sick=3AUGIS	and	IRR-die=3AUGIS	
murde		da	kx-tr-mrlz-u		kc	tz-wai-sr-ngr=dr		
so.that		thing	SUBR-NEG-be.good-NEG		DEM2.DIST	RL.3AUG-do-thusly-APPL=3AUGII		
mqngr		drka'	kc-ng	**x_3**	nz-apx-ngr-bz		ba=dr	doa
image		demon	DEM2.DIST-PL	and	PAS-restrict-APPL-PDIR.yon		DAT=3AUGII	child
kx-nz-topwz		**x_4**	ncblo	txne	nz-dwatr-kr=dr		ma	kc
SUBR-3AUG-little		and	man	lowly	NMLZ1-enter-NMLZ.POSS=3AUGII		house	DEM2.DIST

'And the sorcerers said to our fathers, "Your children will get sick and they will die, because of how badly they treated the demon statues and [because] it is forbidden for small children and lowly men to enter that building."' (04.02)

In fact, Natqgu also conjoins clauses without *x* 'and' as illustrated in (173). The first clause begins reporting a speech event indirectly with realis marking on 'ripe' and the immediately following word of the second clause continues the indirect quote with irrealis marking on 'we should go.' The idea 'and' or even 'and so' is implicit between the two clauses.

(173) *Öpimle bange nâ noli nyëdö sâ tüplâo, naopekö mügö ölilögö.*

r-pi-mq=le	ba=nge	nc.noli	nyz=dr	sc=
MID-say-PDIR.hither=3MINIA	DAT=1MINII	tree.hogplum	PCLF.B&G=3AUGII	PFV=
tq-plc-o=Ø	**na-o=pe=kr**	mq=gr	r-li-r=gr	
RL-ripe-GDIR.down=3MINIS	IRR-go=COS=1AUGI	PCLF.drink=1AUGII	GEN1B-two-GEN1B=1AUGII	

'He told me their hog plum trees [*Spondias cythere*] were ripe, [so] we should go get some for the two of us.' (03.02)

10.4.2 **Disjunctive coordination - 'or'**

Natqgu also has a disjunctive particle meaning 'or.' Historically the form was *e*, but it has been replaced in the past 30 to 50 years by *o*, a borrowing from Solomon Islands Pijin, which was in turn borrowed from English 'or.' As an older speaker, *e* 'or' is represented in the SGM text. The uses of 'or' do not directly parallel 'and.' Instead, it prefers combining NPs, as well as VPs having the same subject. In the SGM text, there are no examples of *e* 'or' conjoining VPs having different subjects.

Example (174) illustrates disjunctive VPs with the same subject.

(174) *Muöde më yië kang külu töpnëngö nâblo kâng tëetung më makätö kä apütöle e atubälële nëwëngö lâ.*

murde	mz	yiz	kang	kqlu	trpnzngr		ncblo	kcng
because	PREP	year	these	many	none		man	those
tz-etu=ng		mz	makxtr		kx	a-pq-tr=le		**e**
RL.3AUG-big=3AUGIS		PREP	church.building		SUBR	CAUS-hot-GDIR.in=3MINIA		or
a-tu-bx-lz=le			nz-wz-ngr			lc		
CAUS-stand-support-GDIR.up=3MINIA			NMLZ1-make-NMLZ			DEM1.DIST		

'Because for many years there was not one of the bigmen of the church who encouraged or who stood in support of this work.' (81.02)

However, the constraint above regarding disjunctive clauses with *e* 'or' does not fully hold in the scripture corpus, but such clauses are relatively rare. Only one, shown in (175), was found in the 28 chapters of Matthew where the subjects of the two clauses are different.

(175) *Sâ tëveapebëng bade kä, "Nim Känëmâpä kâ tëpi kä navëm, o na-aenëli-moukö këdü nâblo këble?"*

sc=	tz-vea=pe-bz=ng		ba=de	kx	nim	Kxnzmcpx
PFV	RL.3AUG-ask=COS-PDIR.yon=3AUGIS		DAT=3MINII	SUBR	be=2MINII	the.chosen
kc	tz-pi	kx	na-vz-mq=Ø	**o**	na-aenzli-mou=kr	
DEM2.DIST	RL.PAS-say	SUBR	IRR-go-PDIR.hither=3AUGIS	or	IRR-wait-again=1AUGI	
kzdq	ncblo	kzble				
a	man	different				

'Then they asked him, "Are you the Chosen who they say will come or should we-ex wait for a different man?"' (Matthew 11:03)

(176) *Kä töpnëngö kâ doa kä mâlä ä kä ayëlumle natünge, sâ tüaotipe dötwönge kä müngö kämölë dekâ tüyâmnem bange.*

kx	trpnzngr	kc	doa	kx	mc=x	**x**	kx
SUBR	none	DEM2.DIST	child	SUBR	see=1MINI	and	SUBR
a-yzlu-mq=le		natq=nge		sc=	tq-a-oti=pe		
CAUS-return-PDIR.hither=3MINIA		word=1MINII		PFV=	RL-CAUS-take=COS		
drtwr=nge	kx	mqngr	kxmrlz	dekc	tq-ycmne-mq	bange	
mind=1MINII	SUBR	spirit	good	this	RL-speak-PDIR.hither	DAT=1MINII	

'When there was no one who I saw **or** who answered me, it made me think that it was a good spirit that's who was speaking to me.' (31.16)

Compare (174) and (175) to (176) where two VPs are conjoined and the sense is disjunctive but the word used is *x* 'and.' There were several such constructions in the SGM text. Taken together, these sentences seems to indicate that there is a tendency in Natqgu to disprefer clauses with different subjects in disjunctive coordination, but that they are not ungrammatical.

10.4.3 Adversative coordination - 'but'

Natqgu also has an adversative conjunction *a'* 'but'. In the SGM text it only conjoins two clauses or two sentences, as in (177), but not NPs. There are two *a'* 'but' forms in (177). The first has a discourse-level function, connecting this sentence to the previous one in the discourse. The second one connects two clauses where the first clause has a non-verbal predicate.

(177) *A' da kä napitäpo, bëkü esë'ne, a' ötangötibë dü doa kä naling nâdö më nëo-köde."*

a'	da	kx	na-pi-tx-bz=x			bzkq	esz'-ne
but	thing	SUBR	IRR-say-INTS-PDIR.yon=1MINI			do not	one-DSTR
a'	rtangr-ti-bz		dq	doa	kx	na-li-ngq	ncdr
but	search-TR-PDIR.yon		INDF.SG	child	SUBR	IRR-two-PL	COM.DU
mz	nz-o-kr=de						
PREP	NMLZ1-go-NMLZ.POSS=3MINII						

'But the only thing I would say is, don't [take] only one, but look for someone else that there might be two of them together when he goes.' (27.08)

Adversative semantics can also be signaled by juxtaposed clauses. This is illustrated twice in (178). In the SGM text, this sentence immediately precedes the one in (176). The narrator looks around [and/but] sees no one; he calls out [and/but] no one answers. Since when one looks, one expects to see and when one calls out, one hopes for an answer, it seems that the most likely understood conjunction is the adversative 'but', rather than the conjunctive 'and'.

(178) *Tüobünene mökâ, töpnëngö kä mâlä, ä tüabânene, töpnëngö kë kä ayëlumle natünge.*

tq-obq-ne=ne	mr-kc	trpnzngr		kx	mc=x	x
RL-look-DSTR=1MINII	LOC-DEM2.DIST	none		SUBR	see=1MINI	and
tq-abc-ne=ne	trpnzngr	kz	kx	a-yzlu-mq=le		
RL-call.out-INTS=1MINII	none	also	SUBR	CAUS-return-PDIR.hither=3MINIA		
natq=nge						
word=1MINII						

'I looked around, [but] saw no one, and I called out all around, [but] no one answered me either.' (31.15)

Again, looking for further evidence from the book of Matthew, example (179) was found. Even here, where it might look like 'but' is contrasting two NPs 'Holy Spirit' and 'man,' both of them have explicit *ngi* 'be' verbs, so here again it is the clauses which contrast.[27]

(179) *doa la tüyö-ngöde ngi-batöpë Müngökätö, a' töngiu nâblo.*

doa	la	tq-yr-ngr=de	**ngi**-batrpz	Mqngrkxtr	
child	DEM1.PROX	RL-pregnant-APPL=3MINII	be-cause	Holy.Spirit	
a'	tr-**ngi**=Ø-u	ncblo			
but	NEG-be3MINIS-NEG	man			

'the child she is pregnant with the Holyspirit is the cause, but a man is not.' (Matthew 1:20)

[27] It is possible that the hortatory and expository content of the epistles will reveal other possibilities, but that investigation is left for the future.

11. Discourse genres: Narrative, procedural, and song

I have not analyzed the discourse of all genres of Natqgu, but I've done some work in three genres. Let this section serve as a report on what has been done to date and an invitation to readers to join in the description of Natqgu by helping fill in the remaining gaps.

11.1 Narrative

My work in discourse has primarily focused first person narratives, like the SGM text, in addition to a few folk narratives. In my early work, I found that realis aspect tracked the main story line and backgrounding verbs, which did not move the narrative forward, were normally unmarked for aspect.

Later, I analyzed a 39-line spoken personal narrative in more detail (Boerger 2019), looking at a shift in personal directionals at narrative peak. I showed that Natqgu narratives are comprised of proto-typical parts: setting, inciting incident, developing conflict, climax, denouement, and conclusion (2019:10). The narrative discussed there included a second, less complex mini-narrative within its conclusion (2019:12).

I also demonstrated that at the narrative discourse peak several other features co-occurred with the shift in personal directionals to form a zone of turbulence (Longacre 1985). These were: direct speech, short clauses with parallel structures, and sentence subjects and objects occurring in non-canonical positions (Boerger 2019:15).

In Episode 11 of the SGM text, 'The kite whose string broke', there are nine third person minimal referents in the first fifteen lines: man named Metalo, kite, wind, canoe, fish, kite string, hawk, and two kinds of tree. Rather than using simple demonstratives to refer to them, Mr. Simon tracks these participants with a complex demonstrative (Table 6) *kcma* 'that there.' Early in this episode, seven instances of *kcma* function to reintroduce or emphasize a participant. Its use may also be a stylized highlighting device for narratives. See (46) for one sentence from this episode.

11.2 Procedural

My work in procedural texts has been less protracted. However, the presence of a passive in Natqgu came to the forefront when analyzing two procedural texts—one on how to make pudding and one on how to make canoes. ProtoOceanic (POc) had not previously been analyzed as having a passive, so I wasn't expecting one. Then when my study of the procedural texts meant it could not be ignored any further, I initially assumed Natqgu had innovated it. But later, when discussing the passive with a colleague, we found that our two widely dispersed Oceanic languages had cognates for the passives, leading us to propose reconstruction of a passive for POc (van den Berg & Boerger 2011).

11.3 Traditional Songs

I have also studied and described the Natqgu traditional quatrain song form (Boerger 2015, 2016). One syntactic argument in this sketch was made based on the song form used in example (176). I agree wholeheartedly with Woodbury (2015) who exhorts that

> *"verbal art needs to play a more significant role in language documentation because it promotes grammatical and lexical investigation…and encourages deep inquiry to the nature and plasticity of speakers' knowledge of the grammar and lexicon."*

11.4 Implications for fieldwork

This experience of finding grammatically significant and unique features in three genres of Natqgu brings into focus the need to collect multiple genres, including song forms, during language and culture documentation activities, since they can exhibit constructions not otherwise attested (Boerger et al 2016:53-66, 143, 313-321). They need to be collected and subsequently analyzed—even more so when the languages studied are minority or endangered languages, like many in Melanesia.

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12. Appendix A: Abbreviations Used

1	first person
1+2	1st plus 2nd person
2	second person
3	third person
A	transitive agent
ACC	accusative base
APPL	applicative
ASS	associative
AT	attributor
AUG	augmented
CAPPL	core applicatives
CAUS	causative
CFL	classifier
COM	comitative
CMPL	completive
COS	change of state
DAT	dative base
DEIC	deictic
DEM	demonstrative
DPV	depictive
DER	derivational
DSTR	distributive
DIST	distal (far)
DU	dual
GEN1A	genitive
GEN1B	alternate gen form
GDIR.in	geometric directional
GDIR.out	geometric directional
GDIR.up	geometric directional
GDIR.down	geometric directional
I	set 1 enclitic nom prn
II	set 2 enclitic other prn
IMP	imperative
INDF	indefinite
INTJ	interjection
INTS	intensifier
IPFV	imperfect(ive)
IRR	irrealis
LOC	locative
MID	middle
MIN	minimal
NEG	negation
NMLZ	nominalizer
O	transitive object
ORD	ordinal
PAS	passive
PCLF.feel	feeling classifier
PCLF.hand	handheld classifier
PCLF.betel	betelnut classifier
PCLF.drink	drink classifier
PCLF.food	food classifier
PCLF.rsbl	responsibility classifier
PCLF.B&G	buildings & grounds classifier
PCLF.assoc	associative classifier
PCLF.fire	hearth & home classifier
PCLF	possessive classifier
PDIR.hither	personal directional
PDIR.yon	personal directional
P	patient, enclitic object
PFV	perfective
PLCT	pluractional
PL	plural
POSS	possessive
PN	proper name
PRN	pronoun base
PREP	preposition
PROH	prohibitive
PROP	proprietive
PROX	proximal
QNT	quantifier, quantity
RECP	reciprocal
REFL	reflexive
RL	realis
RPRN	relative pronoun base
S	intransitive subject
SG	singular
SUBR	subordinator
SPEC	specific, specifier
STR	semitransitive
TPNYM	toponymic
TR	transitivizer
V	verb

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