SULA: ITS LANGUAGE, LAND, AND PEOPLE

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DOCTOR OF PHILOSOPHY

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LINGUISTICS

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For my father, Joseph Neil Bloyd,

for his guidance and faith in me.

Bo Lea, aku nana fina.

A-ngau mon moya da, mai a-ngausu mon betia.

fate has fortuned me between you
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To the residents of the Sula community: this document belongs to you.

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Foremost among the books I referenced were Describing Morphosyntax: A Guide for Field Linguists by Thomas Edward Payne and Essentials of Language Documentation edited by Jost Gippert, Nikolaus P. Himmelmann, Ulrike Mosel. I do not cite either volume heavily in this dissertation, as I do not reference their specific points, but they were instrumental in enabling me to recognize challenging situations (both linguistically and socially) and provide me with frameworks to make plans accordingly. Hands down though, the most useful volume I had for the early stages of approaching an undocumented language is one that was not specifically written for that purpose: The Syntax Files is a document under perpetual revision and improvement in William O'Grady's endless pursuit of perfection and his passion for pedagogy. The volume is a course book for the second most difficult course I have ever taken. This volume is a collection of tests and proofs to identify syntactic patterns in languages, and it is arranged in an order that comprises a template for a syntactic grammar. As a beginning linguist with only one year of study under my belt when I first visited Sula, and with no Sula language learning materials to reference, this book and O'Grady's course gave me the skills to break apart the foreign utterances I was hearing, find the units of meaning, and then begin to decode their arrangement.

In short: Robert Blust helped me choose Sula as my research focus, and he gave me skills to analyze it within its language family. Yuko Otsuka taught me to find its words, and William O'Grady taught me to figure out how they go together to form sentences. Patricia Donegan and David Stampe gave me the skills to discern how Sula's sounds are grouped, and Victoria Anderson taught me to find those sounds in the first place. Katie Drager introduced many of the challenges facing endangered language communities and she showed me how to see language variation in terms of society. Ken Rehg made me think a lot about ethical topics surrounding fieldwork. Derek Bickerton gave me ways to think about language origin. And finally, Bob, Lyle, Gary, and Brad all showed me how to organize and compile my findings.

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1 The most difficult was also taught by William O'Grady.
ABSTRACT
This dissertation is a documentation of Sula [ISO-639-3 szn, mqc; Glottocode sula1245, mang1408]. Sula is a critically to severely endangered language of North Maluku in Indonesia. This dissertation includes: demographic and ethnographic information about the community, the first description of the language’s primary dialect division, a sizable lexicon, and the only available substantial grammatical sketch of a language native to the Sula archipelago (which includes a large dialect continuum spanning Taliabo island, the Sula dialects on Mangole and Sanana islands, and a still undocumented Sama–Bajau language/dialect on Sanana).

Although imperfect, the grammatical sketch covers commonly-expected categories of the core areas of linguistics, and the lexicon gathers the language’s basic vocabulary and additional vocabulary pertaining to travel in the archipelago.

Sula is spoken by up to 47,000 residents spread out across the Sula archipelago. The community has undergone a 40 year period of language attrition—particularly in the main population center, Sanana city. While language use remains strong in some remote communities, these areas are rapidly being connected to urban centers for the first time, both physically
via newly constructed coastal roads, and virtually, via efforts to expand cellular data coverage across the archipelago.

The Sula community consists of four tribes: Facei, Fagud (Fagudu), Faahu (Falahu, Fahahu), and Mangon (Mangoli, Mangole). Villages settled by the first three tribes speak a number of similar dialects that I identify as Sanana type, while villages settled by the fourth tribe speak a significantly different group of dialects that I identify as Mangon type.

Data for this dissertation was collected over a span of ten years (2010–2019), during which I made three, three month field trips to Indonesia along with several trips of three to six weeks to both Indonesia and Sweden (where my principal collaborator lives). Additionally, my principle collaborator made two trips to the US, and I maintained continual virtual contact with language consultants throughout the course of my research.
ABSTRAK


Sketsa tata bahasa ini tidak sempurna, tetapi sudah mencakup bidang inti linguistik. Daftar istilah yang disajikan sudah mencantumkan kosakata dasar dari bahasa Sula. Daftar istilah ini juga menambahkan kosakata yang berhubungan dengan wisata di kepulauan ini.

dan jaringan seluler yang menghubungkan komunitas-komunitas di kepulauan ini.

Sula memiliki empat suku: Facei, Fagud (Fagudu), Faahu (Falahu, Fahahu), dan Mangon (Mangoli, Mangole). Tiga suku pertama berbicara dalam beberapa dialek serupa. Saya menyebut dialek ini dialek Sanana. Suku keempat berbicara dalam dialek yang sangat berbeda. Saya menyebutnya sebagai dialek Mangon.

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GLOSSARY OF TERMS AND ABBREVIATIONS

.AGR: agreement in my Sula glosses, I use a framework that considers certain morphemes to be markers that index person on verbs. This is similar to the s on English verbs that indicates a third-person subject is performing the action (e.g. she takes vs. I take).

=: clitic some words attach to multi word phrases and are unstressed. These words are analyzed as clitics

1PL: first person plural (e.g. we)
1SG: first person singular (e.g. I)
2PL: second person plural (e.g. y’all)
2SG: second person singular (e.g. you)
3PL: third person plural (e.g. they)
3SG: third person singular (e.g. s/he)

ablative: a grammatical case that indicates motion away from a location (the meaning is similar to from in English).

active verb: Verbs capable of taking an actor subject, whereas the non-active category includes verbs that take only one core argument, and whose subjects must be in the role of undergoer. Active verbs are further split into transitive and intransitive, the intransitive of which have only one core argument and can optionally take an undergoer subject. The transitive active verbs have two core arguments, the subject of which being restricted to the actor role.

active–stative: also known as split intransitive is a system in which the subject of an intransitive can be marked the same way as the agent of an intransitive verb (Lucy runs) and other times they can be marked like the direct object of a transitive verb (Lucy hit Bob). This difference is often determined based on whether the subject has volition (intention) to do the action. So for instance, if English were active–stative, the grammar would look something like: I punch Sam. I ran. Me sneezed. Sam punched me.

adposition: In Sula, adpositions are words that situate phrases and objects in time and space (e.g. the spoon is in the cup).

agentive: agent and patient are grammatical roles that refer to the thing doing something and the thing that something is done to. So in the example Jane punched Kyle, Jane is doing the action (punch), so she is the agent and Kyle is having the action done to him (being punched), so he is the patient (or undergoer).
**allophone:** An allophone is a *phone* (sound) that belongs to a group of sounds in the same category. An English speaker pronounces the *t* differently in *talk* and *water*, but she perceives them to be *the same*. Likewise, she will consider the *a* in the words *a*, *an*, and *apple* to be the same and, even though these sounds are indeed quite different, she will likely have difficulty perceiving the difference unless they are played for her in isolation.

**alveolar:** The *alveolar ridge* is the firm bump of flesh behind the upper teeth. Consonants made with the tongue at this place of articulation are called *alveolar* consonants.

**ASPECT:** In grammar, aspect refers to how an action spreads across time—for example whether the action has only begun or already completed. Many languages that do not have grammatical tense instead have rich systems of aspect to help situate actions in time.

**bilabial:** Sounds made with both lips (e.g. *b*, *p*, *m*, *w*).

**bimoraic:** A way of analyzing syllables that works well for many languages includes the concept of *mora*. A *bimoraic* syllable is one that contains two mora.

**cardinal number:** Numbers that express a quantity rather than order or number of times.

**CAUS:** *causative morpheme* Sula has morphemes that indicate when a sentence subject brings about an action or affect either done or experienced by a predicate argument. For example, in *Sandy makes Kyle swim*, the word *make* indicates that Kyle was caused to swim by Sandy.

**CLF:** *classifier* a word that helps to measure or group objects.

**clause embedding:** A clause is a phrase that contains a verb. An embedded clause is a verb-containing phrase that cannot stand alone as a complete sentence but must depend on a higher level sentence clause to be in a complete sentence.

**COMP:** *complementizer* a type of conjunction that indicates a complement clause.

**complement:** part of a clause that specifies attributes that are necessary for completing the meaning of the clause.

**complex sentence:** a sentence that contains at least one dependent clause.

**complementary distribution:** when multiple items from the same set occur in a specific environment that the other members of the set cannot also occur in.

**conjunction:** a morpheme that links clauses, words, and phrases to each other.

**coordinating conjunction:** a conjunction that joins two coequally important parts within a sentence (e.g. *I run and swim*).
correlative conjunction: a pair of words that joins two parts within a sentence (e.g. *I'll either eat peanuts or soup*).

creolization: the process in which a creole language comes into existence. A creole language is a grammatically and phonologically simplified language made from parts of multiple source languages.

critical period: a theory that pre-teen youth have increased brain plasticity enabling them to learn (especially languages) more quickly and efficiently than adults.

degree (words): words or affixes that relate modification concept to an amount (e.g. *big* vs. *bigger* vs. *biggest*)

deictic: Deixis has to do with words that require context to understand. For example, the word *here* by itself does not have much meaning. Its definition exists in relation to the speaker, so if you know where the speaker is, it can convey a great deal of information.

digital footprints: data tracks left behind when somebody uses the Internet. In the context of minority languages, this refers to intentional and unintentional minority-language content that persists online that other users can encounter and which might prime them to communicate in the language for their own online interactions.

diphthong: a sequence of a vowel and glide within the same syllable that speakers consider to be a single phoneme.

direct object: the noun phrase that is affected by the verb (e.g. *the dog bit the man*).

epenthesis: the insertion of sounds within a word (see also *prothesis* and *paragoge*)

ergative–absolutive: This term refers to an alignment system where the subject of an intransitive verb—*he runs*—acts like the object of a transitive verb—*she bit him*. However, the agent of a transitive verb acts differently—*she bit him* (e.g. Comrie 1989). This relationship cannot be illustrated well with English examples, because English does not behave this way. If English were an ergative–absolutive language, the grammar might look like: *I punch Sam. Me ran. Me sneezed. Sam punched me.*

EXCL: exclusive

exclusive: In Sula (and many other languages) there are two different words meaning *we*. One is used when the speaker includes the listener and the other is used when the speaker tells the listener about something that does not include them: e.g. *we have been sitting in this lecture for a long time* (including you) vs. *we went to a movie last night* (without you).

EXPL: expletive
expletive: A syntactic expletive is a word, phrase, or sound that doesn’t add meaning to a sentence. In Latin, *expletivus*, means ‘to occupy space’. Sula has an expletive morpheme, *in-/N-* that frequently occurs with words spoken in isolation, and it seems also able to function as a dummy subject. An alternative approach might be to analyze this morpheme as an article, but I lack a rationale for doing so, as there would be few or no environments in which the article would be grammatically required. Additionally, demonstratives can sometimes function as expletives, such as in the greeting *bao goa neka* ‘how that’, and the particles *e* and *a* might be analyzed as expletives, as they seem to do no more than (at most) add emphasis.

.F: *formal pronoun* Sula uses a special pronoun, *kim*, when the person being addressed is older than the speaker. Additionally, some speakers report to using this pronoun for any subject who is older than the speaker.

.F.AGR: *formal pronoun agreement marker* This abbreviation indicates a word used to indicate a subject of a verb who is older than the speaker.

founder effects: the tendency for variation to decrease when communities are settled by a few individuals from a larger population.

founder population: the individuals who establish a new settlement.

genitive: the grammatical case that indicates that a word or phrase is modifying another word or phrase. In Sula, this is a relationship of possession.

gloss: a summary definition of a word, phrase, or sentence.

glottal sounds: sounds created by a partial or complete epiglottal closure.

idiolect: the characteristics of a unique individual’s manner of speech.

INCL: *inclusive (see exclusive)*

indirect object: a noun phrase that is affected by a transitive action. In *I gave Devin money*, the indirect object is *Devin* because he is the one affected by the transitive action when *I* (subject) gave *money* (direct object) to *Devin* (indirect object).

interdialect: language that combines attributes from more than one source dialect.

interlinear gloss: a morpheme-by-morpheme translation from one language to another across multiple lines of written text.

intransitive verb: Whereas a *transitive verb* takes an object (e.g. *the dog *bit* the bone*), an intransitive verb is a verb that stands on its own (e.g. *the dog *runs*).

labiodental: a speech sound made using the teeth and lips (e.g. *v, f*)

language inertia: Inertia relates to a tendency for things to remain unchanged when nothing is done to interrupt motion or lack of motion, *language inertia* is therefore
the tendency to *continue* communicating (or not communicating) in a given speech
variety.

**LOC:** *locative*

**locative:** a grammatical case expressing location. Sula does not have a system of case
inflection, but there is a morpheme, *bo*, that indicates both physical and intangible
location.

**marker:** a morpheme that indicates a syntactic action.

**Maximal Onset Principle:** a theory stating that when a consonant is between two
vowels, human language prefers for it to represent the onset (start) of the second
syllable rather than the coda (end) of the first syllable.

**mora/moraic:** a unit of syllabic weight. While the definition of *mora* can vary,
inasmuch as it is applicable to the Sula language, an open syllable (V or CV)
represents one mora unless the vowel is long (V̄ or CV̄). In that case it is two mora.
Closed syllables (VC, CVC) are also two mora.

**morpheme:** the smallest category of meaning in a language. In languages like Sula that
lack rich systems of morphology, most non-compound words are single morphemes.

**morphophonological process:** a grammatical operation that is determined partly by
phonological and partly by morphological conditions.

**motivation:** in linguistics, this is the concept that alternations, changes, and processes
are not arbitrary but rather they occur due to influences of situationally related
factors (e.g. you are more likely to make one sound than another if your tongue is
already moving in a particular direction based on the previous and subsequent
sounds).

**multiplicative:** numeral forms that indicate the number of times something happens.

**NEG:** *negation*

**Neogrammarians:** a group of German linguists in the 1800s who described principles
of sound change and historical reconstruction.

**NP:** noun phrase

**OBL:** *oblique* a tertiary grammatical case for noun phrases that tend to be difficult to
define syntactically but make sense semantically and which are not usually marked
for verbal agreement but are often indicated by an adposition.

**ordinal number:** a numerical form that describes the position within a sequence (e.g. *first, second, third*).

**orthography:** the symbols and conventions for writing a language.

**palatal:** sounds produced with the tongue at the hard palate (e.g. *j, ç, j*).
paradigm: a set of forms that display a typical series of relationships between its constituent members.
paragoge: addition of a sound to the end of a word.
penultimate: the second to last.
penultimate stress: when stress lands on the second to last syllable in a word.
periphrasis: periphrastic constructions use multiple free morphemes instead of derivation or inflectional affixation. That is, the grammar is conveyed with unbound words instead of by modifying words.
phoneme: the smallest category of sounds in a language that can change the meaning of a word and contrast with other sound categories.
phonetic: relating to human speech sounds.
phonological process: sound alternations and changes that are governed and constrained by each language’s phonological (sound distribution and relationship) rules.
phonotactic: a language’s allowable sequences of sounds.
phrase: a word or group of words that forms a conceptual notion but which lacks a subject–predicate relationship and therefore does not constitute a clause.
POSS: possessive
possessor: a noun to which something belongs.
post alveolar: sounds produced when the tongue is at the back of the alveolar ridge.
post-nominal: occurring after a noun.
postposition: a word or morpheme that follows a complement and helps to grammatically or semantically situate the complement with relation to another item in the same clause.
predicate: the part of a clause that contains a verb.
prefix: a morpheme that adjoins to the beginning of word.
preposition: an adposition that occurs before the complement it helps to grammatically situate.
prothesis: sounds added to the beginning of a word.
reflexive: a morpheme that refers the verb’s action back to the subject of a clause.
relativization: a relative clause is a type of dependent clause which describes something about the main sentence clause. In the example I like watching sports teams, whose players are rowdy, the second clause (whose players are rowdy) is a relative clause that describes the sports teams.

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sentence: Sentences and words are notoriously difficult to define, but for the purposes of this dissertation, a sentence is a complete, self-contained statement that does not require additional grammatical information to be parsable (made sense of).

speech accommodation: the tendency of a speaker to change her speech to be more like the variety of the person she is talking with.

subject-verb-object: one of the canonical word-order patterns available in language.

subordinating conjunction: a conjunction that links a subordinate (dependent) clause to the main sentence clause.

superlative: a morpheme that expresses the highest degree of a concept.

SVO: subject-verb-object

swamping effects: when a large population of speakers from one variety overwhelms the population of another speech variety and thus causes the language to change toward the direction of the larger population's variety.

syllable: This is another notoriously difficult term to define. For this dissertation, a syllable is a sound unit that contains a single phonemic vowel that is only capable of a single stress assignment (with or without a preceding or subsequent consonant).

syntax: the rules determining how lexemes and morphemes are organized into well-formed sentences.

temporal: describing situations in time.

transitive verb: verbs that take one or more objects (e.g. bite in The dog bit the bone, where bit is the transitive verb, the dog is the subject, and the bone is the object).

unaccusative verb: intransitive verbs with subjects that are not agentive—i.e. the action of the verb is not volitional (I sneezed).

unergative verb: intransitive verbs with subjects that are agentive—i.e. the action of the verb is volitional (e.g. I run). Unaccusative vs unergative verbs are not universal in all languages.

underlying: the prototypical form of each language unit that some linguists hypothesize exists at a subconscious level among all speakers.

velar: speech sounds resulting from the tongue at or near the soft palate.

verbal: ideas expressed using language.

voiced/voiceless: Voiced speech sounds are those made while the vocal folds vibrate. Voiceless speech sounds are those made while the vocal folds are relaxed and do not vibrate (e.g. whispered sounds).
Preface
I Opening statement

On March 8, 2002, while living in Osaka, Japan, I streamed an episode of National Public Radio Science Friday hosted by Ira Flatow that featured Steven Bird, Jerold Edmondson, and Lawrence Kaplan in a discussion on the topic of language endangerment. It was a topic that I had been tangentially aware of but never previously given much thought to. As a child and young adult I had a deep interest in language and had dabbled in learning several—usually learning more about languages than developing any reasonable degree of proficiency—but after many years of struggle and a year abroad at the Rheinische Friedrich-Wilhelms-Universität Bonn in Germany, I eventually attained a respectable degree of German language proficiency and having lived in Japan for nearly a year at that time, I had begun to develop basic Japanese skills as well. Although my successes were matched by a deep frustration about seemingly insurmountable obstacles I sensed in my post critical period language learning attempt.  

I recalled that as a small child living in a Zen Buddhist monastery outside of Woodstock New York, I had already known quite a bit of Japanese—the exact amount I am uncertain, as it was a process that came to me naturally from my surroundings. And while I have a memory of once being ushered into the prayer room and asked to lead the adults in a mantra, I did not likely understand much of what I was reciting (if it was even Japanese at all).

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2 The critical period is a hypothesis proposed in 1959 by the neurosurgeon Wilder Penfield (Penfield and Roberts 1959). In a nutshell, the hypothesis states that neuroplasticity enables children to quickly and effortlessly learn languages whereas it is much more of a labor for adults.

3 This was no doubt done on a whim for the amusement of the adults.
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The mantra aside, I had learned some amount of Japanese, and all those decades later I could vividly recall the feeling of having previously understood and spoken words through effortless absorption, yet the singular word from my childhood I could still draw to mind was the 'Buddhist name' I had chosen for myself when our elder priest, Daido, shaved my head, dressed me in a robe, and declared me the Zen Mountain Monastery’s youngest monk. Incidentally, in a characteristic display of humility, I chose for my name a Sanskrit word maha—a word that traces back to Proto-Indo-European *meǵ- meaning 'big, much, great, major, mega-‘.

To put it a different way, the experience of effortlessly learning a foreign language when I was five was followed by effortlessly forgetting it all the following year when I moved away, and it afforded my adult self no advantage when I began intentionally learning Japanese. Language learning had become a struggle and I realized that no matter how I might try, I would likely never reach a level approaching native proficiency.

The Science Friday conversation evoked a powerful emotional response as I considered the loneliness of being the last speaker of one’s own mother tongue. No matter how I might try, I would never reach native proficiency in another language—a level that would let me convey my deepest thoughts and feelings and represent my lived human experience. Realizing this overwhelmed me with a sense of sadness at the world’s irrevocable loss when a language ceases to exist.

In the years following, I often thought about the ongoing issues of language loss and wondered how I could help address the problem. I committed myself to pursuing linguistics, because I did not want to risk unconsciously exacerbating the problem, and I
gave myself the completely arbitrary goal of earning a footnote to mark the moment that I became linguistically ‘carbon neutral’. I decided that any work I completed beyond that point would constitute a net social contribution.

Although I wanted badly to help, I knew I was unlikely to become a revolutionary theoretical linguist; I was long out of college and did not have a background in the field, and to be honest, the back and forth game of theoretical academics does not bring me satisfaction or a sense of concrete contribution. I thought academia was probably not the most suitable path for me, but as I studied the topic of language loss, I kept hearing a common refrain from the field's preeminent linguists: languages are dying faster than they can be studied, and there are simply not enough linguists to gather even the most basic information about languages before they are gone. This was often followed by an impassioned plea for people to become linguists and work on an undocumented language. That was a contribution I could see myself making, something that did not require operating on the cutting edge of academic theory.

This dissertation represents the culmination of a dive deep into a little-known language in an effort to document and provide information about at least one more world tongue before it could become extinct. When I embarked on this study, so little was available about the language in the academic literature that even the most basic question could not be answered: is it a singular language, and if so, is it endangered?

Regardless of what findings I made, I reasoned that my work would at least help document a dying language indirectly, because my findings would let other linguists know to divert their attention toward languages with a more pressing need of attention even if my research tongue turned out to be vital. Essentially, even if my work did not
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itself amount to direct documentation of an endangered or dying language, it would at a minimum help to do so indirectly.

My first introduction to Sula came during volunteer work with the Language Documentation Training Center (LDTC) at the University of Hawai‘i at Mānoa. There I was partnered with Erwin Gay, a man originally from the village of Pohea on Sanana whose early life experiences took him to Ternate and eventually led to a university study abroad program in Hawai‘i. Erwin joined the LDTC to share a part of his language and culture with the world, and as I began to work with him and search for information on the language, it became clear that the Sula language was underrepresented in the academic literature and few of the answers to my questions were available.

As someone who does not easily accept his curiosity going unanswered, my initial introduction to the language and culture of Sula ignited an ever-lengthening chain of questions and a (sometimes obsessive) decade-long labor of passion which culminated in this dissertation: a summary of findings on the language and people of the Sula Archipelago. I hope that the information herein will assist with aid and development efforts in the region, facilitate language maintenance and revitalization efforts, kindle future in-depth linguistic and anthropological research, and provide data that could one day help to refine linguistic theories and improve our science’s understanding of language mechanics and its interface with the human mind.

Upon commencement of research it was unclear what the most interesting or theoretically poignant aspects of Sula life and language would be, but years of work, significant personal investment, and thoughtful guidance of my mentors, advisors, and collaborators, have helped me identify several such areas. This information directs
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experimental and documentary linguists toward important areas for subsequent in-depth studies so they can hit the ground running and tease out valuable answers. It also provides easily accessible, hard data for academics who themselves operate on the cutting edges to tests their theories and to identify further poignant topics that slipped past me.

The classical and modern giants in the field of linguistics established a firm footing for me to operate on, and they provided time-tested conventions and methods for people in my shoes to utilize. So although my work represents only the tip of a much bigger iceberg in understanding Sula (perhaps 'pumice island' would be a more regionally appropriate metaphor), and while this document certainly contains mistakes and analytical flaws, I can state confidently that the information herein is sound and useful, and that it *will* lead to meaningful contributions to our field in the years to come.

II Sociopolitical context during the time of research

I made my first fieldwork trip to Sula in Summer of 2010. It was a time of transition and optimism. Barak Obama had been inaugurated in the United States a year before, and he not only ended a perceived period of hostility toward Muslims worldwide, he had himself lived in Indonesia during a period of his childhood, has Indonesian family, and could at least pay lip service to the nation's official language. I enjoyed a good deal of favor by association as I was a researcher from the University of Hawai‘i—Obama's home state—and a student affiliate of the East West Center academic institution where Obama's parents had met, and I lived on the third floor of the Hale Mānoa building in a room where (according to plausible urban legend) Obama's parents lived and he was
himself said to have been conceived. I must admit that I used that tenuous connection to
grease wheels and get myself out of a bind on more than a few occasions, but this was
likely unnecessary, as people of Maluku tend to be extremely welcoming and generous.

A characteristic feature of my first summer in Sula was the 2010 World Cup—an
event that evoked a strong sense of positivity, hope, and international unity among
Moluccans. Indonesia is not known to be a football powerhouse on the world stage, and
they were by no means contenders for the competition, but Sanana residents were as
ferociously dedicated as any sports fans I have ever observed. Each neighborhood chose
a country to support—nations that were foreign in the purest sense, places where few if
any of Sanana's residents had ever set foot and whose languages and cultures were
largely unknown, yet places many of Sanana's young men would no doubt have taken up
arms and given their lives for.  

Several times a day throughout the duration of the competition, large makeshift
parades rallied down the main strip supporting the nations set to compete. Participants
would wave whatever flags and paraphernalia they could make or acquire, and blast out
sound from whatever noise-making devices they could render. During game times,
crowds gathered around public outdoor televisions powered by community generators
to watch, celebrate, and cheer on their adopted nations.

During the course of my research, the Islamic holy month of Ramadan spanned
the (northern hemisphere's) summer months—the season when my academic and work
schedules permitted most of my field work. The observance had a significant influence

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4 In fact during the competition, at least one death was reported due to a machete fight over a World Cup
competition.
on my research. On one side, it encourages a general feeling of positivity and love for one's brethren, but on the flip side, the fasting requirement greatly impacted my consultants' ability to focus on work. During the Holy Month, Muslims are encouraged to abstain from eating or drinking from sunup to sundown. The Sula Archipelago is stiflingly humid during that time of year, however, and the resulting dehydration can quickly cause lethargy. Additionally, the Sula population are intensely interested in others' comings and goings, and this led to a number of uncomfortable encounters even while working with consultants who were less severely affected by dehydration: frequently while walking to research appointments, bystanders who were gathered in public sitting areas would call out to my consultants and assistants with a passive aggressive (but unmistakably judgmental) accusation that they were not observing the fast.

The situation confused me and I asked my assistant whether she knew the bystanders and how they knew whether or not she was fasting. She said that she did not know them but explained to me the reasoning behind their accusation: since people who fast from water during Ramadan tend to become fatigued in the midday heat, most people remain sedentary unless it is absolutely necessary to go out. Because she was out, she said, their assumption was that she must not be observing the fast. This irritated her greatly because she was indeed observing the fast and, as she put it, even if she wasn't, they did not know whether she was menstruating (one of several reasons a person is permitted to skip fasting). She aggressively scolded the men for their intrusion into her business as we walked on.
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My male assistants also faced particularly aggressive 'nosiness' regarding comings and goings during Ramadan, but it was more common and far more aggressive when targeting my female assistants. The encounters greatly upset one assistant in particular who hinted that there were additional implications of their accusation, but she did not spell them out, so I can only speculate as to what they might have been. When such an encounter occasionally began to grow intense, I learned to diffuse the situation with a gentle reminder to the parties involved that it was the Holy Month and we are meant to reject negative thoughts that enter our minds.

Although my research began during a period of stability and optimism, it is important to note that it was a young stability coming out of tumultuous period marked by religious conflict and political reorganization. I took my first trip to Indonesia in the late 1990's while on a semester break from college. During that trip, I made a series of wrong decisions that resulted in my being lost somewhere in a seemingly evacuated district of Jakarta. There was not a soul to be seen other than groups of soldiers who were perched atop military vehicles at each intersection, intently scowling at me and clenching their rifles as I aimlessly wandered by. I grew nervous the longer I was lost, and then in the distance I saw a large group of protesters waving black signs and banners moving rapidly toward me. All of the US State Department travel advisories and international news stories about Islamic revolutionaries and rioters had me terrified and unsure whether to fall in with the protesters angrily approaching from my front or try to get past the heavily armed soldiers behind and to the sides of me. A healthy aversion toward approaching scowling people clutching weapons made me take my chances with the protesters. When they reached me, rather than attacking or hurling projectiles or
insults, they rushed me with smiling faces and asked to take photographs. To my surprise, several of them spoke excellent English, and they were eager to help me find my way. I would later learn that such student protests managed to topple a dictatorship and usher in a new era of democracy. Unfortunately though, upsetting the balance of power also led to violent regional flare-ups around the country. One of these flare-ups was a period of religious warfare in Maluku that continued until early 2002 when the Malino II Accord was signed, officially bringing an end to the conflict. Heavily damaged buildings in parts of Maluku bear witness to the strife to this day.

Although the violence was severe in several areas, it is unclear to what degree the islands of Sula were involved. News reports from the time mention two Christians on Sanana being burned to death (Mardai 1999), but few details are given about the incident and the sourcing is dubious. Rumors spread with abandon during and following the conflict, and for several years foreign visitors were allowed by permit only, hence international reporters had few means to gather information firsthand. Producing an accurate accounting of the scope of the violence remains no light task. I failed to find firsthand witnesses to the burnings or other related instances of sectarian violence in Sula, but it is safe to say that some degree of conflict happened there, though the situation was not as intense or widespread as in some other parts of the region.

All in all, I was lucky to conduct my research during an era of hope and optimism for a better political future in Indonesia and a window of time during which American politics were perceived to be of friendly engagement with a goal of fostering US–Indonesian partnerships. This was a blessing as the region had so recently been in a hostile state and closed off to visiting foreigners. I sincerely hope that my work will both
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support efforts by some in the Sula community to preserve its language and heritage and also that it will contribute to the body of knowledge about a geographically vast area that remains largely unknown to the linguistic and anthropological communities.

III Language challenges during fieldwork

On arrival in Sanana, many of the people in the port area are not ethnically Sula and do not speak or understand the language themselves, and since English becomes far less useful after leaving Bali, one quickly comes to realize it is not a practical intermediary language;⁵ to get anything done, one must know Bahasa.

Because of this, my first fieldwork experience was a crash course on both languages—luckily I am not shy and I had a lot of motivation to learn, since even activities that might have distracted me required me to communicate. When it was time for me to return to Hawai‘i at the end of my third month, I was not having philosophical conversations, but I had become functionally proficient in both tongues at a rudimentary level. Judging from memory, I estimate that I had developed a Novice High level of proficiency on the American Council on the Teaching of Foreign Languages (ACTFL) speaking scale (ACTFL 2012). That is, I could navigate my way through non-complex social tasks, and I had begun to sound deceptively fluent, because I had learned numerous phrases and sentences I could modify and repurpose for topics that I frequently encountered. This apparent fluency was shallow though, as I would find myself linguistically stranded as soon as conversations deviated from the expected course. Moreover, my proficiency was highly localized to Sula, as I had not yet learned to

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⁵ There are occasional people in Sanana city with rudimentary English skills, but they have to be sought out, and English speakers are far rarer outside of town.
differentiate Sula and Indonesian and I therefore spoke a mixture of words and phrases that I had memorized from both languages.

In addition to gaining a degree of local language proficiency, I had also collected a mountain of data that I have still not finished analyzing. After returning, I enrolled in my first Indonesian course and began combing through the data, decoding Sula, actively spending time participating in the East West Center's large Indonesian community, and frequently embarrassing myself as I learned to differentiate what was Sula, Bahasa, or local Moluccan Malay. While I will never be a great scholar of Bahasa, I did manage to learn enough to find answers I needed in news articles, government publications, and academic papers. And although not without communication challenges, my subsequent field trips were highly productive, and they went much smoother.
INTRODUCTION
1 Overview

This dissertation represents nearly a decade of graduate work geared at better understanding the Sula language and the pressures that might affect its vitality. Along with the accompanying archival materials, it includes information about the language's grammar and lexicon and the socio-context and demographics of the community along with descriptions of the major dialect division, and audio-visual materials recording grammar and vocabulary elicitations; interviews; and materials that feature the Sula language in culturally relevant discourse domains: casual conversations, public events, demonstrations of cultural practices with native-language explanations, free conversation and interviews, and performances of songs and stories that are connected to physical locations in the archipelago—and even examples of traditional environmental knowledge such as medicinal plants, and agricultural and fishing practices. The work does its best to explain both the inner mechanics of Sula and its external pressures alike.

2 Terminology

The choice to use the names, Mangon and Sanana, is intended to limit ambiguity. Mangon is a Sula endonym for the Mangon tribe and it is also the name of one of the oldest villages on the island and of the island itself. The island is also referred to both in speech and writing by the terms Mangole and Mangoli. Although these terms seemed at first to be exonyms, it is likely that they represent two variations of an early endonym. As the forms, Mangole and Mangoli were already recorded on numerous official records, the final vowel was dropped in some dialects and then that pronunciation, Mangon, spread.

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6 / later shifted to n and the final vowel was dropped in some dialects and then that pronunciation, Mangon, spread.
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those terms did not drop from usage entirely, and all three forms are now commonly used. It is unclear if the name Sanana is an exonym or endonym. It refers to the primary administrative town in the region as well as the island it is situated on. That island is also known by the name Sula/Sua. However “Sula/Sua” is too ambiguous a term to use when addressing the dialect, because it is also the name of the entire island group, the ethnicity of the entire speaker population, and the language as a whole. So without any intended social or political implications, the following definitions apply hence forth:

- Sula/Sua: the general name for the language, ethnic group, and island archipelago.
- Mangon: the northeasternmost island; the dialect and tribe that settled this island.
- Sanana: the southernmost island of the Sula archipelago; the city located on that island; the general dialect of the Falahu, Fagudu, Facei tribes that settled there.

3 Research Questions

In a broad sense, this dissertation answers the fundamental research questions:

- Where is Sula spoken and by whom? (Chapters 1 & 2)
- Is Sula endangered? (Chapter 1)
- Is Sula a singular language or multiple languages? (Chapter 2)
- What are Sula’s important geographic, and demographic factors? (Chapter 1)
- How are the dialects or languages historically related to one another? (Chapter 2)
- How is Sula’s grammar structured? (Chapter 3)
- What is Sula’s lexicon? (Chapter 4)
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4 Contents

Within the dissertation, the Grammar chapter covers fundamental topics of the core areas of linguistics; the Dialects chapter gives a description of the primary dialect groups and a historical reconstruction of the proto dialect; and the Land and People chapter discusses Sula’s physical and cultural context. The Lexicon chapter has over 3,500 entries, of which most also provide English and Indonesian translations. Words of the Sula language are collected through targeted vocabulary elicitation and examination of conversation samples, and the entries are compiled into an online Sula–Indonesian–English translator at http://www.bahasasula.com, where this dissertation research will continue to be updated and media files will continually be added. In addition, many media files including: targeted dialect comparison elicitations, songs, stories, free conversation, and video-response conversation and transcriptions (which were instrumental to writing this dissertation) are stored in Kaipuleohone, the University of Hawai’i Digital Ethnographic Archive.

5 Introduction to principal consultants, institutions, and their contributions

The descriptions herein reflect my own analyses, however they would not have been possible without the generosity, input, and support of many. Among those who have my heartfelt gratitude are the people of Sula and Ternate who have shown a vested interest in this research and who welcomed me into their communities with open arms—from the mehi-nana who walked through the jungle to track me down and verify that I had collected particular words they thought I should know, to the piamatua who shared their wisdom and went out of their way to keep me safe and comfortable (and incredibly
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well fed). Among all who in some way or other contributed to the success of this work, the following people stood out:

Ida Ryberg Tabona U mage of Göteborg, Sweden (from the U mage and Tabona families of Malbufa). Thanks also to your wonderful husband and my dear friend, Rolf Ryberg, and your two Viking sons of Sula, Hannes and Adam. I could never have completed this work without all of your help and support.

The wise and experienced, Ismael Duila of Waibau, and his incredible wife Sauda Suamole of Waitina. You found me bumbling aimlessly on your island, hardly able to speak a word of your language. You took me in and taught me the Sula way. I will always remember and appreciate you both.

To Beda U mage and Husain Tabona of Malbufa: may you both rest in peace. You raised a miracle, and your legacy continues in these pages.

Erwin Gay: you are my introduction to the Sula language and people, and it has been quite a journey.

Marlia Banapon of Facei, you are a dedicated assistant who worked tirelessly and kept your positive attitude even when I was demanding and moody. Sula is enriched by your dedication to revitalizing and maintaining your language.

And to my first assistant, Gina Zaychaunar of Waitina and Sanana, I cannot express my gratitude for your introducing yourself to me as I wandered lost in your unfamiliar town.

To the Tukuboya family of Mangoli, M. An'am Tukuboya, Ina Waisale, Ibrahim Tukuboya, Rahayu Tukuboya, and especially to their family on Ternate, Nurjani

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Tukuboya and Kurniati Sillia: thank you for opening your homes to a stranger and keeping me well looked after.

To my many other Sula friends and assistants (in no particular order): Ambrin Marsaoly (from the helpful BPMPD); Andi Umamith; Elem Fataruba; Hamka Kemhay; Ical and Putri Djafar; Kamaludin Drakel the head of Kantor Pariwisata, Ilo Soamole; Ismit; Isumu; Izulu; Jaka; Lela Paua; M Sofyan; Moslimen Napa; Rusli Sanaba (Head of city management); Sefe Deko; Sultia Rahantan (Headmaster of SMK2); Hanna Adianita Daulay; Nunki Herwanti; Farryanto Kusulistyuo; Bima Suryaatmaja; special thanks to Sahril Umagapi for giving us access to a room in MTS Pastina; and to my Sanana family Ikbal Mamang, Kurniawati Nonik, and Alif Mamang; and ak kak do fuk maana: Acoen Marsaoly, SugiYanto Marsaoly Biway, Bazkie Yuki, and Amayadori Asiri; and to the Sula community at large and the many other people whose names escape me: kim mua mua dahi ak sanohi bo Indonesia do ak a-matalin kim pernah moya.

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- Abdola Umanailo of Pastina
- Abdula Buamona of Umaloya
- Aca Lumbessi of Waitina
- Adnan Tukuboya of Waitulia
- Aisa Umasangaji of Ulfoa
- Ala Wambes of Sama
- Ali Umasangaji of Capuli
- Aman Sillia of Mangon, Mangon island
- Arfia Lampung of Waitina
- Arfin Umafagur of Umaloya
- Asamat Drakel of Fatkouyun
- Asmi Mafa of Capuli
- Ati Ani of Wai U
- Atina of Sama
- Ayu Sillia of Mangon, Mangon island
- Ayub Umasangadji of Sanana Island
- Baina Banapon of Pastina
- Beda Umage of Malbufa
- Darmi Sangaji of Wai U
- Dul Haji of Pastina
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Edy Ruslan Koroi of Fatkouyun
Eko Purwanto Seknun of Ulfoa
Em Ahada Umasangagi of Ulfoa
Fadli Sangaji of Capuli
Gina Zaychaunar of Waitina and Sanana
Hadija Buamonabot of Wailau
Hafid Saher of Bajo
Hafsa Amin of Bajo
Haji Ai of Wailau
Haji Ruslipora of Ulfoa
Hamajen of Pastina
Hamsa Pora of Wai U
Hamzah Samuda of Mangon Island
Hapipa Saleh of Bajo
Haryono Umalekho of Umaloya
Hasan Umasangadji of Sanana Island
Hasanudin Krui of Fatkouyun
Hasrina Umasangaji of Wai U
Hatia of Wai U
Hawa of Sama
Husain of Waitulia
Ibrahim Tukuboya of Mangon, Mangon
Idham Pora of Ulfoa
Ina Waisale of Mangon, Mangon
Jauna Teapon of Umaloya
Jubeda Umanailo of Pastina
Kalasun Kemhai of Capuli
Kamaludin Umagapi of Pastina
Kasim Pora of Ulfoa
Kurniati Sillia of Ternate and Mangon
M. An'am Tukuboya of Mangon, Mangon
Mansur Duwila, the Kepala Desa of Waibau
Mardani Umasangaji of Ulfoa
Mardono Murne of Wai U
Marni Duila of Waitina
Maryadi Borut of Sama
Mas Ud Hijafar of Fatkouyun
Mira Sanghlaisua of Pastina
Moce Umawaitina of Waitina
Modi Semodi of Bajo
Mohammed Ahda Umasangadji the Kepala Desa of Ulfoa
Muhamad Nur of Waitulia
Nasir Umasugi of Wailau
Nurjani Tukuboya of Ternate and Mangon
Orbo Faayai of Fatkouyun
Pino Umasanaji of Waitina
Rabiyati Umage of Malbufa
Rahayu Tukuboya of Mangon, Mangon
Ramli Gorantalo of Capuli
Ratna Sanghlaisua of Pastina
Ria Halim of Wai U
Rita Sanghlaisua of Pastina
Rudi Umagapi of Pastina
Sa'i Sapsuha of Wailau
Sabaria Sapsuha of Wailau
Sahwan Umalekhoa of Pastina
Sailan Umage of Malbufa
Sainudin Buamona of Umaloya
Salbia Umahuk of Fatkouyun
Salemu Umasangagi of Ulfoa
Salmin Siko of Waitina
Sarvan Buamona of Umaloya
Saurdi Sangkala of Bajo
Sidulang Sapsuha of Wailau
Suhai Mipora of Ulfoa
Sukna Sanghlaisua of Pastina
Sultia Rahantan of Sanana
Sula

Susi Lumbesi of Waitina       Umage family of Malbufa
Taman Umagapi of Wailau       Umpu of Bajo
Tasrin Umaternate of Wailau   Uni Umasangaji of Ulfoa
Tika Gorontalo of Capuli      Unique Umage of Malbufa
Tomas Bajo of Bajo            Yunus Wambes of Sama
Udin Basahona of Umaloya      Ismu Fabanyo of Ternate
Ulwani Umanailo of Umaloya    Others whose names I cannot recall...

6 Scope of doctoral work

Fieldwork for this dissertation was conducted in the Maluku region of Indonesia, primarily on the islands of Sanana and Mangon within the Sula Archipelago and also among diaspora communities on Ternate, Surabaya, and Jakarta. Research is based on data collected during a series of three summer, three-month fieldwork trips. These trips took place in 2010, 2014, and 2015. Several additional trips of three to six weeks took place in winter of 2014 and 2015 and in spring and fall of 2019. Along with the trips to Indonesia, I visited Gothenburg, Sweden for several weeks in summer of 2016 and six weeks in summer of 2019 to work with one of my most valuable research collaborators, Ida Ryberg (née Tabona Umage), she also came to the United States for over a month in summer of 2017 and for a shorter stay in spring of 2018. During the times that I was not carrying out face-to-face work, I made heavy use of Internet based collaboration methods, primarily Facebook messenger and video calls for collaborators and consultants in Indonesia and Skype and email with my collaborator in Sweden.

The dissertation’s lexical documentation will facilitate historical analysis, the grammatical sketch will further typological and syntactic research into the boundaries of what is possible in human language, and the dialect descriptions will make possible
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sociolinguistic research. These are lines of inquiry that the paucity of data has rendered thus far impossible to conduct.

The research also benefits the Sula community, some of whom have become increasingly concerned about the trend of language loss and hope to preserve their language heritage: the language vitality component provides information that will assist planning efforts, and documentation materials will assist language maintenance and revitalization programs and aid with the production of pedagogical materials. This work has already begun to mitigate absolute language loss from the standpoint of documentation, as I have trained three Sula speakers in methods of documentation, and I am in the process of training several more.

The Jere Feu project for local ecological knowledge in the modern era that I began with my colleague, Adita Agoes, works to preserve local regional languages through the framework of Jere, North Maluku’s traditional knowledge and conservation system (see Bloyd and Agoes 2015). This project has over fifteen partners including community elders, government officials, educators, and it even boasts support from the prestigious sultanate of Tidore and the late sultan of Ternate.

7 Language overview

The Sula language of Eastern Indonesia is an Austronesian language of the Central-Eastern Malayo-Polynesian sub-family (Eberhard et al. 2020) that is spoken (to varying degrees) by fewer than 47,000 people on the islands of Sanana and Mangon and (to a lesser degree) Taliabu, Buru, Bacan, Ternate, and in Surubaya and Jakarta, but linguists
have noted that work on the language is limited by a deficiency of descriptive data (e.g., Blust 1981, Collins 1981, 1983, Esser 1938, Grimes 1991, Bloyd 2015).

The language has twenty consonants and five vowels. It is a subject-verb-object (SVO) language with position indicated by a prepositional locative morpheme working in concert with meaning-bearing postpositional phrases. The genitive is possessor initial, and modifiers follow the noun—that is, mon nap nahu (you head long) 'your hair is long'. This is somewhat uncommon typologically, as languages with post-nominal modifiers tend to also have post-nominal possessors (e.g. Comrie 1989). Most Sula words are one or two syllables; however, word stems of up to four syllables are not uncommon, and can be much longer in compound words and words with reduplicated modifier suffixes. Canonical syllables are shaped (C)V in the Mangon dialects of Sula and (C)V(C) in the Sanana dialects—that is, the majority of Proto–Sula words were bisyllabic, but the Sanana dialect has deleted many final vowels that are still present in Mangon. This has resulted in many more monosyllabic words in the Sanana dialects and many syllable codas that are not present in Mangon dialects. Grammatical words tend to be monosyllabic, and disyllabic words carry stress on the penult if the final syllable is light but on the final syllable, if it is heavy. In a moraic analysis, stress could be said to be present on the syllable containing the penultimate mora.

Sula has a rich and complicated pronominal system; pronouns are frequently dropped, and they are indexed on verbs by a set of markers that are also used in some

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7 Mangon Island and dialects AKA: Mangoli, Mangole, Mongoli, Mongon, Xulla Mangola.
8 Sanana Island and dialects AKA: Sula Island, Xulla Bessi, Xullabessi, Sulabes.
9 For more on mora as a unit of syllabic weight, see Trubetzkoy (1939).
cases (by many if not all speakers) to indicate the progressive aspect and when reference
switching. As in Buru language (Grimes 1991), deictics are used to indicate definiteness
and reference tracking. Sula has a system of split alignment and animacy (at least
among many speakers): first-person subjects follow an Active–Stative classification in
which transitive verbs and agentive intransitives are marked for subject agreement.
Non-first-person, human subjects are marked on verbs along ergative–absolutive lines,
and verbs are not marked to agree with non-human subjects.

Sula does not have grammatical tense; however, there is a system of post-verbal
aspect markers. The language does not have a rich system of relativization or clause
embedding either, and where it is observed, it is unclear if it is native or calqued from
Malay.

8 Chapters

Chapter 1 provides basic socio-demographic information about Sula and it
continues on to investigate the state of technological infrastructure within the
archipelago through 2016: specifically the degree of access to Internet-capable digital
devices. The research considered the types of digital services provided in different areas,
areal bandwidth capabilities[^10], and the reach of access to digital communication (both in
terms of bandwidth coverage and economic access to hardware and electricity). Chapter
2 describes the primary branches of the Sula language from a comparative linguistic
perspective and it explores the emergence of a newer blended dialect. It also describes a
controlled series of parallel documentation efforts across many villages in the

[^10] That is: where cellular data is available, and how reliable it is in different locations.
archipelago that is balanced for age, gender, and tribal affiliation. This documentation will be provided to the academic community and serve as a basis for future projects on dialects and social variation. Chapter 3 provides a grammatical sketch of the language that covers the fundamental topics within the core areas of linguistics, and Chapter 4 is the largest compiled lexicon of the Sula language, containing over 3,500 entries, many trilingual. The appendix contains supporting materials and resources for others wishing to study the language. Additionally, there is a strong digital component to this dissertation; its most useful form will be its online version that hyperlinks between sections and the hours of supporting audiovisual content.

9 Why write this dissertation

Like most languages, Sula has a hidden record of humanity’s distant past woven throughout its vocabulary, and it is a tongue whose grammar at times challenges linguistic theories. Comparing languages can help to reveal still unknown connections between ancient civilizations, and sometimes results in redrawing parts of the map of human migration, and because of this, the quest for human knowledge is rewarded whenever a language is documented.

Where there is terra incognita, cartographers must first map the landscape before the geologist can know where to find the canyons and arêtes she studies, before the prospector can make an educated guess about where to sink his shovel, and before the ichthyologist can know where to find lakes and rivers. While the cartographer necessarily has a much shallower base of knowledge about each of those topics, and her work is arguably less glamorous than other pursuits, the initial mapping is vital, as those
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areas of research fundamentally depend on her groundwork. Likewise, theoretical and experimental linguists of today must rely on wordlists and analyses collected by previous fieldworkers in order to expand the base of knowledge. This dissertation is that contribution to linguistic knowledge: a modest but broad cultural (and sometimes physical) mapping of the landscape regarding Sula: its language, land, and people.

9.1 Status of existing research

Sula is one of a number of under-documented Austronesian and Papuan languages of the Maluku Utara province of Eastern Indonesia. The language is spoken in the Sula Archipelago, which includes the islands of Sanana, Taliabo, and Mangon. The archipelago has been frequently listed among the least studied regions in Indonesia (Collins 1981, 1982); Most of the work published on the language is based on wordlists collected by early explorers and missionaries (e.g., Wallace 1869, Holle c. 1900 via Stokhof et al. 1980, Fortgens 1921), and the precise number of Sula dialects remains unknown, but field interviews indicate that, as Collins (1981, 1982) suggested, and as I will demonstrate in Chapter 2, there is only one primary dialect division—this has been borne out by lexical comparison (list of Mangon, Sanana, and Proto forms in Appendix D). There are many additional subtle but definable dialect divisions spread throughout Sula, but it seems clear that the split described in Chapter 2 (referred to as Mangon, and Sanana) represents the oldest and most dramatic divergence that is still represented by modern Sula varieties.

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11 These three islands are referred to by numerous alternate names and spellings. They are situated near the following Google Maps searchable coordinates: -2, 125.40.

12 This is evident by Ethnologue’s multiple entries for Sula (ISO szn) and “Mangole” (ISO mqc) (Lewis et al. 2015).
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At the start of my work it could not be said with confidence what constituted the Sula language. Lewis et al. (2015) lists two ISO codes which both should fall under one language. The listings are szn for “Sula” and mqc for “Mangole.” My research has clarified that Sula is a language, and Mangole (Mangon) is one of its primary dialect branches. If we are to have a separate code for Mangon, there should also be a separate code for Sanana, which is a much larger primary dialect branch. Alternatively, the mqc code should be removed.

Figure 1. The Sula Archipelago
The Sula Archipelago is in the Maluku Utara province of Eastern Indonesia. It lies at the boundary of the Molucca Sea (north of Taliabu and Mangon) and the Banda and Ceram seas (to the west and east of Sanana Island).

During the course of my work I was the only linguist researching Sula, and I am the first to conduct in-depth research specific to the language. Previously, Sula language data was limited to two short wordlists that are over a century old (Holle c. 1900 via

\[13 \text{ This conclusion corroborates Collins’s (1981) impression of the situation.}\]
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Stokhof et al. 1980, Wallace 1869), a 35-year-old article on genetic grouping (Collins 1981), and a short, unpublished grammatical sketch written as an undergraduate thesis (Umaternate 2013). Even the most basic descriptive materials were lacking, such as a dictionary, grammar, or available texts. Although not 'undocumented' in the sense that no information whatsoever existed, when I began my research, Sula was and it still is unarguably an under-documented language (e.g., Blust 1981, Collins 1981, 1983, Esser 1938, Grimes 1991).

From a practical standpoint Sula was certainly undocumented in the sense that the academic literature did not contain enough basic information to help a researcher learn much prior to setting foot on the ground, and information was unavailable to answer even the most fundamental questions about the language’s typology, structure, or lexicon. The academic and non-academic literature alike was insufficient to even populate a basic Wikipedia entry for the language, as is shown in Figure 2.
The French entry for Sula also includes the following list of eight vocabulary items pulled from Collins 1981 (albeit with errors): 'house', 'egg', 'pig', 'hear', 'chicken', 'seven', 'two', and 'burn'.

The results of my research represent an imperfect but sizable first attempt at documenting the Sula language. Of the publications to date discussing the language, few contain any primary lexical data. Holton 1996 lists eight entries that mention Sula, and of them, only four contain primary lexical data (one of which remains unpublished). These entries are: Collins (1976, 1981) Holle (c. 1900) via Stokhof et al. (1980), and Wallace (1869). Although it has been noted that work on Sula has been limited by a deficiency of descriptive data, two neighboring languages have been partially described: Fortgens 1921 sketches Soboyo grammar on the neighboring island of Taliabu; and Devin (1989) and Grimes (1991) have described the main indigenous language of Buru.

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14 Taken 18 April, 2019.

15 Interestingly, no Indonesian language entry exists for Sula as of this writing.

16 Unpublished field notes
island immediately to the south, where incidentally, there is a sizable community of Sula diaspora in the village of Namlea.  

Sula’s precise genetic subgrouping remains unsettled. Based on the material available at the time, Blust (1981) and Collins (1981) argued for an Austronesian subgroup that includes Buru, Sula, and Taliabu (B-S-T). Donohue and Grimes (2008) challenge the Central Eastern subgrouping favored by Blust, and the Blust follow-up (2009) defends the grouping. No new data source was cited either as basis for the challenge or the follow-up. Unsettled matters in Austronesian linguistics such as this underscore the importance of accurate descriptive work of the kind presented in this dissertation.

9.2 Contributions

As the language had not previously been described, researchers have lacked data to discern how it was distinct from other tongues. Collins (1981) dips a toe in the water regarding the Buru–Sula–Taliabu subgroup’s divergence from its sister branches of CEMP, but the picture remained essentially blank on how the language had itself evolved over time to reflect its present context. Little was also known regarding the social and physical environment. These points are addressed by sketching Sula’s grammar (phonology, morphology, lexical categories, and syntax) and by looking at dialect variation and identifying contextual factors that affect linguistic viability, including: speaker numbers, intergenerational language transmission, cultural and political pressures, the regional economy, community attitudes about the language, and

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17 It is unclear to me to what degree the Sula language is still spoken in this village.
the effects of what Grenoble (2011) identifies as primary factors associated with language shift: urbanization, globalization, and social and cultural dislocation. For the purposes of this writing, globalization refers to government policies to foster international-scale business operations and other institutions where one of the results is that a few dominant markets’ economic (and cultural) products receive disproportionate world-wide exposure.

This doctoral work has the potential to benefit the Sula community in a number of ways. The language vitality assessment provides answers about the community that are badly needed for planning efforts, and the documentation items within could be of use to language maintenance and revitalization programs and aid with the production of pedagogical materials. The academic community should also benefit from my work, because there are few other sources for information.

The grammatical sketch will provide new data to typologists and syntacticians. The Dialects chapter provides a map of Sula’s dialect regions and a description of the phonological characteristics that differentiate each dialect along with a reconstruction of Sula’s ancestor language. This should aid with future sociolinguistic research on variation in the Sula language, and the reconstructed Proto–Sula forms should aid historical linguists in comparing Sula with its sister tongues to refine or verify its placement within the Austronesian language family.

The phonological description includes two apparently phonetically unmotivated sound changes that I discovered in Sula that are not known to have occurred in another language. The peculiarity of these changes led to their inclusion in a 2017 publication by Robert Blust. These changes pose a problem to the fundamental Neogrammariantarian
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hypothesis that sound changes are conditioned only by phonetic factors (e.g. Osthoff and Brugmann 1878, Hock 1991). They also identify a process of intervocalic fortition that is not only synchronically unattested in any other language but something that scholars have asserted to be so unnatural and contrary to universal human language tendencies that it can be assumed not to exist (e.g. Beguš 2015). This documented alternation lends synchronic corroboration to a contested instance of historical devoicing that Robert Blust discovered to have occurred in Kiput and Berawan (Blust 2002, 2005, 2013).

Although Sula belongs to the Austronesian language family, many of its words have unknown origins. Much of this vocabulary is gathered in the Chapter 4 and made available for comparison to other languages. It is my hope that comparisons could reveal yet unknown connections between Sula other nearby communities—or at a minimum, it could help answer some of the persistent questions about how and when humans settled in the region.

This research is valuable to the Sula community and it is a vital addition to the academic literature—both because it concerns an undocumented language and because it challenges some long-held assumptions about what is and what is not possible in human language. Without adequate research, Sula could cease to be spoken before it is documented. If the language contains yet undiscovered cognate words, grammatical patterns, or folk histories, its disappearance could mean the loss of part of our prehistorical record and, potentially, also loss of some of the keys necessary for

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18 Schütz (1968) discusses a similar bizarre voicing alternation, but it does not appear to be a productive phonological process.
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unlocking the mechanics of human language and cognition. I sincerely hope this will not be the case and that this dissertation will instead mark an early step on a long journey of Sula exploration within the academic community.
CHAPTER 1: SULA LANGUAGE IN CONTEXT
Travel from Hawai‘i to remote areas in Sula is not for the listless, but it is worth each of the five flights, the overnight sea voyage, and the longboat jaunts. The approaching horizon’s white sand and verdurous peaks are enough to mute stabbing rib cramps as the dugout longboat slams over every swell. And the growing aroma of nutmeg, cacao, and cloves drying on straw mats under the sun makes sitting between a cow and a bouquet of live chickens less noticeable. Crowds gather on the beach to greet arriving longboats. Villagers hope for news of loved ones who labor in distant parts, while laughing children leap into the sea from thick branches that twist out beyond the surf. Arrival is met with a cup of a freshly brewed drink; it is milky and sweet but also sharp. Coffee grounds, and chopped kenari nut dance in a medley of the very flavors that gave the Spice Islands their name. Each sip is a sensual history lesson that illustrates why these spices were once valued above gold. This traditional beverage fuels hours of jungle trekking to come for passengers en route to periphery communities—communities where Sula is spoken as it has been for generations, places that seem to exist out of time and whose inhabitants seem unconcerned by the global community at its doorstep.

The islands’ remoteness creates a partial buffer to outside forces, and documentation is still an attainable goal. But the buffer is rapidly eroding, and Sula’s uniqueness and unusual historical and geographical circumstance demand it be documented in its current context, as globalization has begun to connect Sula to the outside world, and the language community faces an uncertain future.
Chapter 1: land and people

1 Urban infrastructure

During my stays in Sula, I lived for periods of time with a number of families in Sanana city and in rural communities alike. While not modern by objective measures, Sanana city boasts limited urban infrastructure: including paved roads, and in many neighborhoods, intermittent electric power and cellular coverage with limited data access. Basic services are provided: there are at least two banks, several mom and pop shops where food staples and household goods can be purchased, schools for age ranges through high school, numerous mosques, around a half dozen one-room restaurants, administrative agency offices, a governor’s mansion, a police force, a large open-air market, and a very basic hospital staffed by competent medical professionals who are provided by Indonesia’s central government.

The city lacks recognizable business franchises and recreational destinations like movie theaters or malls. There is a small park next to the pier that is in disarray, and several vacant lots converted into makeshift soccer fields. The island’s sole ‘tourist attraction’ seems to be ruins of a Dutch era fort where, fittingly, the regional tourism office is located. The tourism office is a bare room with a desk, a guestbook, and a handful of government employees.

Although there is an airport (read 'landing strip') on Sanana island, it has been closed due to a land dispute for many years, and even when it was open, it served irregular and unpredictable—terrifying—flights on shaky small aircraft to a few other remote islands in Eastern Indonesia. During my first field trip, it took a full day in Bali

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19 During my fieldwork, restaurants were operated out of people's homes, but I am told local entrepreneurs have recently opened a few cafes that double as event venues.
to find a travel agent who was aware that a place called *Sula* existed. Getting there requires first going to Ambon or Ternate, and from there, even when the airport on Sanana was open, it was more reliable to travel by crowded passenger boat—a sea voyage that takes almost a full day, so in a practical sense, it should be recommended that one attempt to pick up at least rudimentary skills both in Malay and Sula prior to attempting conduct productive work on the ground in Sula, but depending on the nature of work, one could also get by with a high level of Malay proficiency and limited Sula knowledge.

2 Traditional diet and economy

The Sula Archipelago has been listed among the least studied regions in Indonesia (Collins 1981, 1982). It consists of three main islands: Mangon, Taliabu, and Sanana, located at the geographic center of Maluku, Indonesia. The combined land area is roughly 60% of the Hawaiian Islands, but Sula has less than 10% of Hawai‘i’s population, the largest portion of whom being recent, non-Sula speaking immigrants from Sulawesi. Since prehistory (at least since the arrival of Austronesians), the Sula are reported to have relied primarily on protein from the sea as well as chicken, pigs, cuscus, and deer, and their staple starches have been *sa* (sago palm starch), *nu* (coconut), *sisa* (sugarcane), *suk* (breadfruit), and *fia* (various banana varieties). I have seen *kat* (taro) growing wild around populated areas, but I’ve never seen it consumed, or heard it referred to as part of the local cuisine. When I pointed out a plant to an elderly

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20 Reported by a representative of the Sanana Badan Pemberdayaan Masyarakat dan Pemerintahan Desa (BPMPD, Community Empowerment and Village Government Agency).

21 Being predominantly Muslim community, pig is not commonly eaten today except on Taliabu.
consultant, Ismael Duila, I was told that ancient people might have eaten it, but that it wasn't eaten anymore. Descendants of a primitive dog breed, as, are also on the islands, but the introduction of Islam complicated people’s relationship to the animals. It is unclear whether they were a food source, companions, or both. Today they are useful to farmers for keeping wild animals away from fields, and some might still use dogs for hunting, as the term dol as ‘to hunt’ exists in the language, and it literally translates to ‘bring/invite’ + ‘dog’.

The early spice trade opened Indonesian islands to more traffic and trade, and that brought many other animals and plants to the island including goats, cows, buffalo, jackfruit, tea, and durian. The later spice trade and European expansion introduced many New World and African staples such as tomatoes, cassava (yuca), potatoes, chili peppers, peanuts, coffee beans, and maize. Traditional foods remain the staples of today, although imported rice, wheat, and refined sugar have largely taken the place of sago in larger villages.

Since the spice trade began, the economy of the Sula people has been based on tropical forest agriculture: cenke (clove), kemiri (candlenut), ipa (kenari nut), mina kau (cinnamon), paa fat (nutmeg), and paa ful (mace). Even today, this appears to be true for the ethnically Sula population; however, the Bajo (Sama-Bajau) population supplies to fishmongers from other areas of the country, and the northern Sula islands have remote mineral mines and logging operations. These are reportedly not locally owned ventures, and they do not primarily employ an ethnically Sula worker base.

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22 It is unclear if the cinnamon of Maluku is true cinnamon, but it is at least very similar.
3 Population and language

The Sula ethnic group consists of four tribes—Falahu, Fagudu, Facei, and Mangon. According to local lore, the first three originally settled on the island of Sanana, while the fourth, Mangon, settled on Mangon island. There is a Sanana–Mangon dialect division that will be detailed in the next chapter; the physical separation of the islands is likely the main reason for this division. Since original settlement, the Mangon tribe has settled two additional areas on Sanana Island: a neighborhood (also confusingly named Mangon) that has merged into the greater urban area of Sanana, and a large village named Malbufa, toward the northern part of the island’s west shore. The Malbufa dialect of Sula is significantly different from other Sanana dialect(s); however, speech of the Mangon neighborhood in Sanana seems to have leveled into a typical Sanana variety. Sanana tribes have also settled numerous villages throughout the islands, the oldest of the villages external to Sanana island might be the Facei tribe settlements of Capalulu, Wai U, and Orifola on the island of Mangon, where a dialect appears to have emerged that was heavily influenced by contact. Additional Falahu and Fagudu villages were also established on Taliabo Island and along the southern coast of Mangon.

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23 I do not know of any published histories of the region; however the broad demographic and historical information I present here seems to be agreed upon by all Sula groups.

24 My time spent in the village has given me the impression that it originally spoke a dialect of Mangon but it now more closely resembles Sanana dialects.

25 This was reported to me by a representative at the Sanana Badan Pemberdayaan Masyarakat dan Pemerintahan Desa (BPMPD, Community Empowerment and Village Government Agency).
Chapter 1: land and people

Figure 3. Sula archipelago
The Mangon tribe settled the northeastern island, and the Falahu, Fagudu, and Facei tribes settled the southern island.

4 Domains

Sula is an indisputably threatened language; however, the degree of threat is not yet determined. My research has identified the region with the most severe language attrition to be the town of Sanana, where over a quarter of the native Sula population resides. While it is rare in Sanana to hear young people conversing in Sula, in some of the less populous, remote villages throughout the islands, the language is still commonly used. And even in Sanana it is not uncommon to hear Sula spoken among older adults.

All Sula speakers are also native speakers of Malay, and this is not necessarily a new situation. It is probable that the community has had regular exposure to the

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26 I encountered a few elderly people who self-reported that they did not speak Malay, but this was most likely by choice, as observation led me to believe that they had no trouble understanding the language. In fact one centenarian woman residing in Capuli village reported to not speak Malay and then took part in a vocabulary elicitation session that used Malay language prompts with no apparent difficulty.
language for many centuries in a trade context as Malay has been an inter-ethnic lingua franca since Malays from the Sumatra-Riau-Johore began engaging in pan-archipelagic trade, but whereas Malay is a dominant world language with a rich, cross-media literary tradition, Sula has neither a formalized orthography nor a print literature, and the written language is found almost exclusively in graffiti, on handmade signs, and (occasionally) in political slogans. The language is increasingly pushed out of traditional communicative domains in favor of Malay, and it is not chosen as the primary medium of communication in newer domains like schooling, political meetings, text messaging, and social media.

Fieldwork has demonstrated Sula to be primarily transmitted orally and that it is not represented in the formal education system. As an orally transmitted language, work on it presents challenges to the researcher that I had not encountered with any languages I previously studied. Someone wishing to conduct research or work in Sula will find that there is very little available to study ahead of time to prepare to communicate in the Language, and even if one did happen to speak the language, getting to and from Sula is not always straightforward, and they would find Sula to be, unsurprisingly, an ineffective tongue for the rest of their tasks in Indonesia.

On the ground, one can get by most anywhere with Malay proficiency, and in the greater Sanana city area, that is likely all that is necessary for most domains of communication. In this area, many Sula words and short stock-phrases are woven into a

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27 Lip service is occasionally paid to local languages throughout the nation when it can be fit in to the two hours each week allocated for 'local studies'. To my knowledge no Sula language curricula are taught in schools, but I have spoken to teachers including Sultia Rahantan who reported having taught about the language in geographical terms. Rahantan also mentioned having once made an effort to develop Sula language materials, but that the project was not brought to fruition.
local Malay matrix, but once familiarized with the local conventions, it becomes clear that Malay rather than Sula is the primary language both for public interactions and even in private family domains. That is not to say that it is impossible (or even hard) to find a Sula speaker—only that it is not the dominant means of communication for the majority of the non-elderly population, and even the elderly population tends to speak Malay when addressing younger people. Though it is uncommon to hear youth in particular interacting in Sula in any spoken domain, use of the language is more vigorous in rural communities; however, children still frequently speak to each other in Malay in all but the most remote communities. Elderly language consultants even in many communities often remark that children ‘no longer speak the language well’.

Leaving the Sanana area toward less populated communities, one encounters a gradient of the language spreading across communicative domains. This begins in nearby villages where Sula is observed more in the home and among neighbors. Then in more remote villages, it can extend across all adult domains including trade and local civic affairs. In the most remote (and often smallest) villages, it is not uncommon to hear children speak Sula or, occasionally, even address an outsider first in Sula. Remote areas find themselves threatened by new infrastructure that is rapidly connecting the islands’ villages in ways that they have never been before (both physical and digital), but these locations remain the language’s strongholds.

5 The Past

There is a scarcity of archaeological work on the Maluku region and none at all on Sula specifically. However, there is a good deal of geographically peripheral data (Spriggs
1998), and while we might not yet be able to say precisely where Sula’s early inhabitants came from, it is certain they had to pass through peripheral regions en route to their destination.

5.1 The Past. Pre-Austronesians

Sula is a Malayo-Polynesian language within the greater Austronesian language family, and the Sula people bear the hallmark features of Austronesian culture. Much has been written on the Austronesian people and their routes of migration, and this dissertation will help to fill in some of the Austronesian picture in and around Sula, but it must be noted that (genetically speaking) half the story of Maluku’s habitation predates the arrival of Austronesians by tens of thousands of years. Nearby coastal New Guinea and island populations of Papua New Guinea (PNG) along with other Melanesians have in recent studies been shown to have a 50:50 genetic mixture of identifiable Austronesian and First Sundaland People (Chambers and Edinur 2015). Additionally, several studies have found significant percentages of Denisova DNA among populations in PNG, Melanesia, and Australia, and hypothesize that the admixture occurred in Indonesia prior to arrival on New Guinea (e.g. Harmon 2012, Pääbo 2014).

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28 It has been reported to me that the terms 'Negrito' and 'Papuan' have been known to convey offensive connotations. "First Sundaland People" is a term gaining recent popularity as a replacement for the diminutive term, 'Negrito'. It was coined by Jinam et al (2017). with good intention, though they incorrectly also attribute the term to the Andamanese and other groups that we have no reason to believe reached Sundaland. Out of respect I will attempt to avoid these terms except where they are part of quotes, or where I am referencing source material that does not have sufficient specificity for me to make the substitution (e.g. when an author uses the term 'Negrito' without making it clear whether it encompasses populations that did not inhabit or pass through Sundaland). I will also continue to use the term 'Papuan' in the context of the various languages and language families that predate the arrival of Austronesians and of the speakers of those languages where there is not an apt replacement term. I sincerely apologize if any clunky language results from this or if any usages slipped by me; it is not done out of intentional malice or insensitivity.

29 Denisovans are a group of early humans who, along with Neanderthals, are thought to have descend from a group of H. heidelbergensis who left Africa 300,000–400,000 years ago ("Why Am I Denisovan?" 2019).
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Stringer (2013) make a strong argument that Denisovan admixture happened east of the Wallace line, and that places the location of mixture right in Maluku. One of the most widely accepted migration routes to Sahul, proposed by Birdsell (1977), passes directly over Sula (Figure 4) (e.g. Cooper and Stringer 2013, Lourandos 1997).

**Figure 4. Migration routes**
The two main hypotheses for the route First Sundaland People took into New Guinea and Australia. Dark grey areas represent ice age land masses when sea levels were lower (redrawn after Lourandos 1997)

At a minimum, First Sundaland people inhabited Australia 40 thousand years ago (Hiscock 2008), and it is likely that this migration happened 50 to 70 thousand years ago when sea levels were especially low. Cane (2013) provides evidence that the

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30 More recent research by Sankararaman et al. (2016) has found much smaller percentages of Denisovan DNA in the genomes of many populations worldwide west of the Wallace Line, however they point out that their findings represent a smaller, much earlier Denisovan admixture event than the one that took place east of the Wallace line.

31 A prehistoric land mass that included Australia and New Guinea during the last ice age.
first wave of modern humans to reach Australia was 70,000 years ago, and that the
migration could have been triggered by the Toba supervolcano eruption. Although the
Sula are unmistakably Austronesian, many of their genetic ancestors were not, and their
habitation in the region goes very far back indeed. For a more in-depth discussion of
Sula’s connection to early humans, visit http://www.bahasasula.com.

Much can be speculated but little is known with certainty about the nature of
habitation in Sula’s deepest past. However, a more recent wave of immigration is
responsible for most of Sula’s languages and culture; and this was of course the
Austronesian expansion.

5.2 The Past. Austronesian expansion

European chronicling of Austronesian languages began as far back as the 1519–1522
Magellan expedition, during which Antonio Pigafetta collected vocabulary from many
languages along their circumnavigational route (Fox 2004). Much later, Hadrian
Reland32 (Relandus 1706–8) put forth a hypothesis for a common ‘Malayan’ language
that ranges from Madagascar through Indonesia and farther east.33 Fox also notes that a
link between Polynesian language numerals and Indonesian and Malagasy numerals
was later identified by a chronicler on Captain Cook’s second voyage, but it was Lorenzo
Hervás y Panduro in 1784 who first synthesized these observations into a cogent
hypothesis for a definable group encompassing all of the Malay and Polynesian
languages from Madagascar to Rapanui (Hervás y Panduro 1784). Franz Bopp was first


33 For a discussion of the nature of what Reland(er) claimed, see Campbell and Poser (2008, especially pp.
97-98). This also has a discussion of Bopp’s error in assuming Malayo-Polynesian was IE (pp. 61-66).
to use the term "Malayo-Polynesian" to specifically refer to a linguistic grouping, although Wilhelm von Humboldt (Humboldt and Buschmann 1836) is generally given credit (Fox 2004). 34

Fast forward another century for an attempt at a reconstruction of Proto-Austronesian by the Comparative Method. Dempwolff (1934–1938) first accomplished this feat analyzing just eleven Austronesian languages. However, as none were from Formosan branches of Austronesian, it is more appropriate to consider Dempwolff’s work to be a reconstruction of Proto-Malayo-Polynesian rather than of Proto-Austronesian.

Robert Blust (1978) took Dempwolff’s foundation and built an edifice on top of it, ushering in a modern era of Austronesian comparative linguistics. Blust recognized the Formosan languages as primary branches of Austronesian, and he provided the following structure for the Austronesian family tree:

**Figure 5.** Austronesian family tree as proposed by Blust (1978)

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Austronesian Family

<table>
<thead>
<tr>
<th>Formosan Language branches</th>
<th>Malayo-Polynesian Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Eastern Malayo-Polynesian</td>
<td>Western Malayo-Polynesian</td>
</tr>
<tr>
<td>Central Malayo-Polynesian</td>
<td>Eastern Malayo-Polynesian</td>
</tr>
<tr>
<td>South Halmahera–West New Guinea</td>
<td>Oceanic</td>
</tr>
</tbody>
</table>
```

34 Although as Lyle Campbell points out (p.c. 2019), Bopp mistakenly thought that the languages were related to Indo-European, and that could be why he is not credited for the term.
Blust has identified ten separate primary branches of the Austronesian family; nine of these are Formosan languages found only on Taiwan, while the tenth, the Malayo-Polynesian branch, exists primarily outside of Taiwan (e.g. Blust 1999, Blust 2013). One representative of Malayo-Polynesian is also found in Taiwan, Tao (Yami) (e.g. Blust 2013). It is spoken on Orchid Island and is thought to have been a back migration from the Philippines.

Blust used comparative linguistics to demonstrate what has come to be the prevailing theory of Austronesian expansion: the 'Out of Taiwan' model. Around 5,000 years ago, and probably coinciding with the invention of the outrigger canoe, which provided seaworthy stability, a group of Proto-Malayo-Polynesians exited Taiwan and settled the northern Philippines (e.g. Blust 1999, 2013:749). From there, they settled the rest of the Philippines and continued on to Borneo and the rest of Indonesia and Malaysia as well as in to Micronesia and Melanesia.

The linguistic and genetic evidence points to groups from Melanesia then branching off into Polynesia a few thousand years ago, and linguistic and genetic evidence shows that a group of Austronesians from Borneo sailed all the way to Madagascar, settling the island around 1,500 years ago (e.g. Ricaut et al. 2009). Along the way, Austronesians mixed with pre-Austronesian populations and by the time of European contact in the early 1500’s, Austronesians had spread across more than half the planet: from Madagascar to Easter Island. Sandwiched within those macro-level Austronesian migrations, a group of Central-Eastern Malayo-Polynesians moved into Central Maluku and some of them were the direct ancestors of the people who now
inhabit the islands of Buru, Taliabo, and Sula—where three sister languages have evolved.

5.3 The Past. Sultanate of Ternate to present

The Sultanate of Ternate (Kerajaan Gapi) traces back to 1257 and its first leader, King Baab Masyhur Mulamo. At the time, the region was the world supplier of cloves, and as such, the kingdom of Ternate and the neighboring kingdom of Tidore grew wealthy and powerful. Still today walking through rural areas, you will frequently encounter footpaths lined with woven mats where seeds, nuts and spices lay curing in the sun. Although Ternate and Tidore enjoyed great success, much of their wealth was used to fund ongoing wars with one another. During the mid fifteenth century, King Marhum converted to Islam and changed the royal title to Sultan. The religion spread throughout most of the region. Even in remote Sula villages where there are no established businesses or official buildings, there is often a mosque with an electric generator that broadcasts the call to prayer via cassette recording.

In 1512, Sultan Bayanullah welcomed a convoy of shipwrecked Portuguese sailors under Francisco Serrão, in an attempt to forge strong international ties, yet the alliance never grew strong, and by 1575, then Sultan Baabullah Datu Syah expelled the Portuguese. This period was the height of the sultanate's power at a time when the influence stretched from the southern Philippines to Ambon and from parts of Sulawesi to Papua.

Sula was within the sultanate's jurisdiction, but it is unclear precisely when it was incorporated or what the political situation was at the time. It has been reported to me
that Sula’s village heads were chosen by the sultanate during this period, and that vestiges of this legacy are still present in the family naming system practiced widely throughout Eastern Indonesia known as fam (referred to as marga outside of Maluku). Many fam in Sula are bi-morphemic, beginning with Uma-, and as such, I have been told by two consultants that the fam, Umaternate 'house-Ternate' does not necessarily indicate blood relations between people with that name but rather it represents descendants of any of the sultanate's hand-selected (village leaders).

In 1606, the Spanish captured the Portuguese fort on Ternate. The Spanish were allied with Ternate's rival Tidore Sultanate, and this gave an inroad for the Dutch to ally with Ternate. With Dutch help, the Spanish were pushed out by the 1660's, but Dutch allegiance came at great cost to the Ternate Sultanate, who had to cede control of much of its territory to the Dutch East India Company. By the late seventeenth century, Ternate was in a subordinate position to the Dutch, and in 1914, the territory was officially annexed by the Netherlands—all the while Sula remained under Ternate's administration. This all would change when the Dutch lost Indonesia to Japan during WWII. Following a brief stint under the Imperial Japanese Navy, Ternate was incorporated into Maluku province under a newly independent Indonesia, and in 1999, Maluku was split, and the province North Maluku was formed which included Sula and the Moluccan islands to the North. At that time, Ternate was made capital, and Sula

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35 fam is likely a reduced form of the Dutch loan ‘familie’.

36 This claim is plausible, but it is based on folk wisdom.
once again fell under its administration until 2010 when the capital was relocated to Sofifi on Halmahera.  

6 Sula vitality

6.1 Introduction

The reference publication, Ethnologue, lists a 1983 estimate of 20,000 native Sula speakers (Eberhard et al. 2020). This estimate is out of date, and it is not well explained. In an effort to capture more current data on language use, I conducted a survey from 2014–2015 that establishes an updated estimate of the current speaker base, age ranges, and geographic distributions. The study considers data from the Badan Pusat Statistik Kabupaten Kepulauan Sula (Central Statistics Agency of Sula Regency) and the results of a questionnaire implemented by myself and assistants in sample communities across the archipelago (Appendix A).

The Sanana Badan Pemberdayaan Masyarakat dan Pemerintahan Desa (BPMPD, ‘Community Empowerment and Village Government Agency’) was instrumental in helping to identify regional demographics and setting target survey locations based on where Sula populations do and do not primarily live throughout the archipelago. When possible, I visited communities myself and, in keeping with local customs, met with the kepala desa (KD, ‘village head’) who would either work with me directly or direct me to other suitable residents.  

37 For a brief summary of the Ternate Sultanate’s history, visit this website: https://histori.id/kerajaan-ternate/.  

38 In larger communities like Malbufa and the neighborhoods of the greater Sanana City area, it is not always necessary to first meet with the KD.
Sula

For regions that I could not personally visit, I relied on the creativity of connections I made during fieldwork. The BPMPD and other civil servants make regular check-ins around the archipelago, and some were willing to collect information on my behalf. I also befriended medical professionals who are stationed by the central government in remote hub communities. When all else failed, these resources facilitated collecting at least the basic quantitative survey answers, but extended family networks usually made it unnecessary to rely on them (especially for Taliabu and Northern Mangon regions which can be hard to reach); consultants from Sanana and southern Mangon connected me to their extended family members from remote areas when they came to larger communities to trade spices and stock up on supplies. Additionally, telephone interviews were possible for certain parts of southern Mangon and Taliabu with signal coverage. While on-site interviews have the bonus of visual observation and follow up questioning about what is observed, the remote interviews sufficed for gathering basic information. This extended network of assistants enabled me to gather all of the necessary survey information, as can be viewed in Appendix B.

Results from the survey demonstrate a forty-year-long period of communal language attrition, and yet over twice the number of speakers that were identified by Eberhard et al. This leads me to suspect the Ethnologue figure for 1983 is an undercount and that many more Sula speakers existed in 1983—likely over 40,000. If the population growth rate in Sula mirrors that of Indonesia, the number of ethnically Sula in 1983 would have been 48,067—sixty percent of what it is today. The rate of Sula

39 Considering population growth, even 40,000 or fewer speakers in 1983 would represent significant communal language attrition.
speakers over 50 years old today stands at 75% even in Sanana city (the area with the most attrition). In 1983, this demographic would have represented only about 25% of the total Sula population (most would have been children, as Sula have a low average lifespan).

Of the 50+ group today, only 25% do not speak the language. These individuals would have comprised about 6.25% of the population in 1983. Even if we assume today’s non-speakers are only-children whose parents also did not speak the language, the maximum non-speaker base of the Sula population in 1983 would have been 18.75%—i.e. the lowest speaker estimate would be 39,054. Additionally, the Ethnologue listing identifies the language as *vigorous* at 20,000 speakers. That number would have been among approximately 48,067 ethnically Sula residents, so it is not clear what is meant by “vigorous.” Ethnologue’s data lacks citation. Thus, I cannot comment specifically on what the number represents or its origin. The absence of critical explanatory factors (like an unrecorded mass-population die off followed by a subsequent boom) prevent reliance on the figure—i.e. it is most likely a simple undercount.

### 6.2 Determining vitality

Sula language vitality is determined using the UNESCO scale of language endangerment (Brenzinger et al. 2003). The UNESCO scale was chosen because of it’s realistic approach to vitality estimation.

Though some vitality estimates may appear impressive in their statistical garb, at heart they remain *thought exercises* conducted by language researchers. This remains

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40 A number of these individuals likely *can* speak the language but do not.
true regardless of an estimate’s generative framework. The UNESCO scale respects the limitations of vitality estimation and does not provide a one-size-fits-all algorithm for calculating vitality. Instead, the scale offers a list of topics that researchers should consider when deriving their impressionistic guess about vitality.

Even if factors correlated with vitality were uniform across all language communities (they are not), there would be no way to identify the correct percentages and values for making the following determinations: safe, unsafe, definitively endangered, severely endangered, and so on. We would need to bounce forward in time a century or so to find out how languages with various values for each vitality-factor will fare. Still, our time travel would only allow us to conclude that certain factor values suggest vitality levels, as there are many additional variables at play—including the estimates themselves, which might set revitalization efforts (or apathy) in motion.

Science is predicated on falsifiable hypotheses, yet topics of language vitality are largely non-falsifiable. Linguistics is a science, vitality estimates are not. Accordingly, vitality estimates should not be evaluated in the same way a scientific pursuit is. This is not to dismiss the validity or importance of vitality estimates; learning is replete with valuable non-scientific fields from law, to literature, to politics, to futures prognostication. Vitality estimates are a highly specialized, science-adjacent exercise that linguists also perform, and when conducted by knowledgeable field researchers, they represent the best data we have for triaging languages in terms of the existential risks they face; even though prognostication is not science, when guesswork is all that is available, it is prudent to base decisions on the most educated guesswork.
While far from exact, the results of this study fall within the broad, non-quantifiable margin of error that is inherent in all language vitality surveys. That is, since language-shift scenarios include a gradation of language gain, attrition, and varying proficiency levels that span age ranges and geographical ranges, numerical representations of multi-factorial, fluid situations are unreliable. This study does, however, establish an educated guess by the Sula language’s sole active researcher, and an *educated guess* is the most that a vitality assessment can hope to be. In what follows, I adopt the UNESCO framework (Brenzinger et al. 2003) for assessing language vitality in Sula.

### 6.3 UNESCO based language vitality estimate

The UNESCO scale provides nine factors to consider in evaluating language vitality:

- Factor 1. Intergenerational Language Transmission (scale)
- Factor 2. Absolute Number of Speakers (real numbers)
- Factor 3. Proportion of Speakers within the Total Population (scale)
- Factor 4. Trends in Existing Language Domains (scale)
- Factor 5. Response to New Domains and Media (scale)
- Factor 6. Materials for Language Education and Literacy (scale)
- Factor 7. Governmental and Institutional Language Attitudes and Policies, Including Official Status and Use: (scale)
- Factor 8. Community Members’ Attitudes toward Their Own Language (scale)
- Factor 9. Amount and Quality of Documentation (scale)

(Brenzinger et al. 2003)

These factors are meant to be evaluated in their own right, and Brenzinger et al. are careful to state: “Languages cannot be assessed simply by adding the numbers; we therefore suggest such simple addition *not be done*”, and in bold-italic, they add, “*The Factor descriptions given above are offered as guidelines.*”
Each user should adapt these guidelines to the local context and to the specific purpose sought” (2003:17).

The following estimate is faithful to UNESCO’s nine factors, and external information is considered only inasmuch as is necessary for answering the questions UNESCO poses.

6.3.1 UNESCO. Factor 1: Intergenerational Language Transmission

Sula's score: (3) “definitely endangered”

“The language is no longer being learned as the mother tongue by children in the home. The youngest speakers are thus of the parental generation. At this stage, parents may still speak their language to their children, but their children do not typically respond in the language.”

(Brenzinger et al. 2003:8)

Intergenerational transmission refers to the percentage of children who learn to speak a language. The above quote from Brenzinger et al. does not accurately represent each of Sula’s communities, as there is a language-attrition gradient in the archipelago. The UNESCO score values for each region (from 5 safe to 0 extinct) were weighted based on the region’s relative percentage of the ethnic-Sula population. Then, they were combined to determine the average value for the Sula community at large (Table 1). The determination for each region was derived from the following survey questions (see Appendix A):

1. Can most of the grandparent generation speak Sula?
2. Can most of the parent generation speak Sula?
3. Can most Children speak Sula?
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4. Does the grandparent generation speak in Sula when they talk to others their own age?
5. Does the grandparent generation speak in Sula when they talk to the parent generation?
6. Does the grandparent generation speak in Sula when they talk to children?
7. Does the parent generation speak in Sula when they talk to the grandparent generation?
8. Does the parent generation speak in Sula when they talk to others their own age?
9. Does the parent generation speak in Sula when they talk to children?
10. Do children speak Sula when talking to the grandparent generation and parent generation?
11. Do children speak Sula when talking to each other?

Sula’s overall intergenerational transmission average of 3.3 earns it the UNESCO grade 3, but it is on the cusp of grade 4. Being on the cusp of 4 conforms with my impression that to assign the blanket statement, (from grade 3) “The language is no longer being learned as the mother tongue by children in the home” is inaccurate and that it is also inaccurate to state, (from grade 4) that most children and families “speak their language as their first language” (Brenzinger et al. 2003:8). Based on the UNESCO scale’s available options, Sula does indeed seem to land between 3 and 4.
### TABLE 1. Transmission Estimates and Population Numbers by Region

<table>
<thead>
<tr>
<th>Sula region</th>
<th>score</th>
<th>population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mangoli Tengah</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>Mangoli Timur</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>Mangoli Utara Timur</td>
<td>5</td>
<td>x</td>
</tr>
<tr>
<td>Mangoli Barat</td>
<td>2</td>
<td>x</td>
</tr>
<tr>
<td>Mangoli Utara</td>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>Mangoli Selatan</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>Taliabu-Barat</td>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>Taliabu-Selatan</td>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>Tabona</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>Taliabu-Timur-Selatan</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>Sulabesi Barat</td>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>Sulabesi Selatan</td>
<td>5</td>
<td>x</td>
</tr>
<tr>
<td>Sanana</td>
<td>2</td>
<td>x</td>
</tr>
<tr>
<td>Sulabesi Tengah</td>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>Sulabesi Timur</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>Sanana Utara</td>
<td>4</td>
<td>x</td>
</tr>
</tbody>
</table>

**Ethnic Sula population:** 80,111  **sum:** 263,811  

**(sum ÷ ethnic Sula population = 3.3)**

**Intergenerational Transmission score for Sula at large: 3.3**

<table>
<thead>
<tr>
<th>UNESCO Scale score</th>
<th>corresponding value range</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.00-0.83</td>
</tr>
<tr>
<td>1</td>
<td>0.83+-1.67</td>
</tr>
<tr>
<td>2</td>
<td>1.67+-2.50</td>
</tr>
<tr>
<td>3</td>
<td>2.50+-3.33</td>
</tr>
<tr>
<td>4</td>
<td>3.33+-4.17</td>
</tr>
<tr>
<td>5</td>
<td>4.17+-5.00</td>
</tr>
</tbody>
</table>
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6.3.2 UNESCO. Factor 2: Absolute Number of Speakers

Sula’s score: 46,861

Determining the number of Sula speakers was a process that included these steps:

1. Determining the total population
2. Determining the percentage of population that is ethnically Sula
3. Reducing the total population figure to the ethnically Sula population
4. Determining population percentages by age range
5. Determining the percentage of speakers in each age range
6. Calculating speaker numbers by reducing the ethnically Sula population according to the percentage of speakers in each age range

The absolute number of speakers was determined starting with the estimated size of the ethnic Sula population in each region as shown in Table 1 above.

6.3.2.1 UNESCO. Factor 2. Step 1. Determining the total population

Census data from the Badan Pusat Statistik Kabupaten Kepulauan Sula provide population statistics for the archipelago by region.

6.3.2.2 UNESCO. Factor 2. Step 2. Determining the percentage of population that is ethnically Sula

Malay has been a regional lingua franca for generations, and newcomers to the area by and large have no cause to learn Sula; they speak their native languages with others from their region, and Malay is spoken with people from other populations—including the native Sula population. A historical example of this is seen in the Bajo (Sama–Bajau) community on Northern Sanana island. This group is recognized as a newcomer
population; however, they have resided in Sula for many generations. The Bajo are surrounded by Sula communities, and they interact with them on a daily basis. Many Bajo children even attend school with Sula children, yet Bajo language is spoken in Bajo village, and most of the population report to be unable to speak Sula. Excepting ethnically mixed families, interactions between Sula and Bajo are reportedly conducted in Malay. More recent migration waves from Java and Sulawesi show an even lesser degree of Sula language adoption in those communities.

Because island newcomers tend not to adopt the language, it is necessary to work from population numbers that represent only the ethnic Sula population. Census population figures, however, represent the regencies’ total populations (all communities, irrespective of ethnic background). Further complicating the problem, in 2013, Taliabu island was removed from the Sula Island Regency and a new regency was created for it, the Taliabu Island Regency. This administrative change presented a complication, because Sula groups have settled several communities along the southern coast of Taliabu, and data representing those communities was no longer available in parallel form to the Sula Regency statistics.

To find the extent of the ethnic Sula population's geographic range, I took a map of the archipelago to the regional development office in Sanana and inquired about the ethnic makeup of each village on the islands. The status of many of the villages was given without hesitation. Some other villages were determined based on the fam

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41 Although they are perhaps functionally unable to speak Sula, many do seem to possess enough rudimentary Sula language skills to conduct basic transactions and greetings with me before having to switch to Malay. Campbell (p.c. 2019) notes that it has been reported that speakers often are not motivated to learn or switch languages when both are closely related. This does not seem to be the explanation here, as Sula and Sama-Bajau are on separate primary branches of Malayo–Polynesian.
distributions for each village or folk histories. The consultation involved a half dozen representatives who discussed the topic until (a) agreeing that sixteen of the administrative districts contain significant Sula populations, and (b) reaching a consensus about each community’s makeup.

There are limitations to using the regional development office’s determinations to aid with estimating the ethnic-Sula population. For instance, this does not account for non-Sula residents who have married into the community or Sula residents who have married out of the community. Shy of surveying every village door-to-door, these figures are unknowable, so I proceed under the assumption that, roughly, they cancel each other out. Further, my approach lacks a means for estimating the number of speakers in diaspora communities on other islands, most notably the town of Namlea on the island of Buru, which is said to be a Sula settlement. A trip to Buru would be required to determine what percentage of Namlea’s population does in fact descend from Sula, and, of them, what percentage can indeed still speak the language. Hence, I am limiting this study to the primary range of Sula speakers, which fall within the sixteen political regions listed in Figure 6.

Speaker number estimates are limited by census granularity, which is available for districts but not available village by village (a matter of great frustration to me over the years). The census was conducted door-to-door, so a sub-specified dataset might exist, but the regional statistics department was unable to provide it for me.
6.3.2.3 UNESCO. Factor 2. Step 3. Reducing the total population figure to the ethnically Sula population

Sula is divided into numerous, sparsely populated communities that the regional government has grouped into 20 regions across the Sula Archipelago. These regions vary widely in population size, but sixteen of them were determined to have significant populations of ethnically Sula. Among these, an unspecified but sizable Sula population lives on Taliabu. They have primarily settled along the southern coast, with very few Sula living on the northern half of the island.

Figure 6. Political districts
Listed are the political districts within the Sula Island Archipelago where significant Sula populations reside. Mangon is written as “Mangoli” in the following graphic, as the official political division names are written that way. The district names also include directional terms from Bahasa Indonesia (timur ‘east’, barat ‘west’, utara ‘north’, selatan ‘south’, tengah ‘middle’). The striped area across northern Taliabu island indicates regions with low ethnic-Sula populations.

Contacts in the local government informed me that the Badan Pusat Statistik Kabupaten Kepulauan Sula (Sula Islands Regency Central Bureau of Statistics) does not tally people by ethnic background. Instead, I was told that "about half" of the people in the southern part of Taliabu are Sula.
In order to refine this estimate, I asked a network of civil servants and extended family members off-island to begin qualitatively inquiring with villagers in hard-to-reach regions, and after more than a year, I gathered enough responses from each region to extrapolate more precisely. The estimates of Sula population percentages gathered and those provided by the regional development office were used to reduce the total population census figures into estimates that represented only the ethnically-Sula population in each region.

6.3.2.4 UNESCO. Factor 2. Step 4. Determining population percentages by age range

Census data from the Badan Pusat Statistik Kabupaten Kepulauan Sula provide a population breakdown of Sula Regency by age (Indonesia 2016, 2018). From this data it was determined what percentage of the total population corresponded to each age range (Table 2).

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42 It is assumed that this breakdown is more appropriate to the present study than the breakdown for Taliabu island, as Taliabu is majority non-ethnically Sula, and the present study only considers the ethnically-Sula regions on Taliabu. The Sanana/Mangon breakdown is therefore generalized to the ethnically Sula population on Taliabu to reflect lifestyle differences between Sula and non-Sula populations.

43 The percentages of adults of particular age ranges who were counted as speakers varies somewhat, reflecting increases in the attrition rate affecting different communities at various times. This variation is correlated with urbanization.
TABLE 2. POPULATION BREAKDOWN BY AGE

<table>
<thead>
<tr>
<th>Age ranges</th>
<th>Population total</th>
<th>% of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>12150</td>
<td>12</td>
</tr>
<tr>
<td>5-9</td>
<td>12810</td>
<td>13</td>
</tr>
<tr>
<td>10-14</td>
<td>11393</td>
<td>11</td>
</tr>
<tr>
<td>15-19</td>
<td>9803</td>
<td>10</td>
</tr>
<tr>
<td>20-24</td>
<td>7951</td>
<td>8</td>
</tr>
<tr>
<td>25-29</td>
<td>7803</td>
<td>8</td>
</tr>
<tr>
<td>30-34</td>
<td>7747</td>
<td>8</td>
</tr>
<tr>
<td>35-39</td>
<td>7154</td>
<td>7</td>
</tr>
<tr>
<td>40-44</td>
<td>5649</td>
<td>6</td>
</tr>
<tr>
<td>45-49</td>
<td>4767</td>
<td>5</td>
</tr>
<tr>
<td>50-54</td>
<td>3923</td>
<td>4</td>
</tr>
<tr>
<td>55-59</td>
<td>2923</td>
<td>3</td>
</tr>
<tr>
<td>60-64</td>
<td>2174</td>
<td>2</td>
</tr>
<tr>
<td>65+</td>
<td>2949</td>
<td>3</td>
</tr>
</tbody>
</table>

Total pop. (incl. non-ethnically Sula): 99196

6.3.2.5 UNESCO. Factor 2. Step 5. Determining the percentage of speakers in each age range

Determining speaker numbers is notoriously challenging, because speaking a language is not a binary distinction. That is, language attrition results in a gradient of proficiency with no clear cutoff between who can be called a speaker and who cannot. I chose somewhat low speaker percentage estimates to reflect proficiency gradation and to help control for individuals listed among the census figures who are non speakers due to non-linguistic causes such as disability, dementia, or being of pre-speaking age.

The percentage of speakers in each age range is non-uniform in the archipelago, because urban areas began experiencing language attrition earlier than rural areas. The
degree of non-uniformity was found in the data (Appendix B) to correlate with intergenerational transmission scores, so the following speaker percentage by age ranges were applied to communities based on generational transmission scores:

**Communities with intergenerational transmission scores of 0:** N/A

**Communities with intergenerational transmission scores of 1:** N/A

The intergenerational transmission categories: (0) extinct: *None speak the language*, and (1) critically endangered: *Very few speak the language* could be excluded, as no Sula regions earned these scores.

**Communities with intergenerational transmission scores of 4:** These community scores correlated with Grade 4 of Factor 3 “Nearly all speak the language.” They were assigned a speaker percentage of 85.

**Communities with intergenerational transmission scores of 5:** These community scores correlated with Grade 5 of Factor 3 “All speak the language.” They were assigned a speaker percentage of 95.

Similarly, it was not difficult to assign an estimated average speaker percentage for communities graded 4 or 5. Field surveys and discussion with the regional development office led to the determinations of 85% and 95% respectively.

**Communities with intergenerational transmission scores of 2: 23%**

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44 This is a correlation where intergenerational transmission and speaker percentages by age range are likely both influenced by the same factors and thus fall in unison. This is not to suggest that either transmission or speaker percentages are causing the other.
For areas that earned an intergenerational transmission score of \textit{two}, the overall regional population figure is reduced to 23\% of the original figure. This estimate of 23\% is based on Sula’s age demographics and the following age to speaker ratios in more urban areas:

- 75\% of people aged 50 and older are speakers
- 25\% of people aged 30–49 are speakers\textsuperscript{45}
- 15\% of people aged 15–29 are speakers
- 10\% of people under 15 years old are speakers

The following calculation resulted in the 23\% figure:

\[
\frac{(11,969 \times .75) + (25,317 \times .25) + (25,557 \times .15) + (36,353 \times .1)}{99,196} = 23\% 
\]

11,969 is the number of people over fifty
25,317 is the number of people thirty to forty-nine
25,557 is the number of people fifteen to twenty-nine
36,353 is the number of people under fifteen
99,196 is the total Sanana and Mangon population

\textbf{Communities with intergenerational transmission scores of 3: 44.6\%}

For areas that earned an intergenerational transmission score of \textit{three}, the region’s population is reduced to 44.6\%. This estimation is again based on age demographics, however it is only broken down into three age ranges. This difference is due to the fact that areas marked as \textit{three} are less urban, and a higher percentage of middle aged people are speakers and the difference in ability to speak among different age ranges of young adults is not as pronounced. Also, many more children are able to speak in these

\textsuperscript{45} There is a sharp drop off between the 50+ group and the 30–49 group. This is mostly explainable, because the 30–49 group is over twice as large and it skews toward the lower end of the range. Also, something appears to have taken place sometime around 40 years ago that significantly lowered the rate of language acquisition. When I began researching Sula nearly ten years ago, I often heard, “people under 30 don’t speak the language (which isn’t strictly true, but was indicative of a troubling trend).
areas, so a granular divide between children and young adults was not necessary. The following age-to-speaker ratios represent communities marked with an intergenerational transmission rate of three:

<table>
<thead>
<tr>
<th>Age Range</th>
<th>% who are speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;45</td>
<td>95</td>
</tr>
<tr>
<td>20–44</td>
<td>40</td>
</tr>
<tr>
<td>&lt;20</td>
<td>30</td>
</tr>
</tbody>
</table>

The following calculation resulted in the 44.6% figure:

\[
\frac{(16,736 \times .95) + (36,304 \times .4) + (46,156 \times .3)}{99,196} = 44.6\%
\]

16,736 is the number of people over forty-five  
36,304 is the number of people twenty to forty-four  
46,156 is the number of people under 20  
99,196 is the total Sanana and Mangon population

6.3.2.6 UNESCO. Factor 2. Step 6. Calculating speaker numbers by reducing the ethnically Sula population according to the percentage of speakers in each age range

Once numbers of speakers were determined by age range and used to establish speaker population percentages, the percentages were multiplied to the estimated population of ethnic Sula in each of the sixteen regions. These sixteen reduced figures were tallied into an overall estimate of 46,861 Sula speakers in the archipelago.
**TABLE 3.** **SPEAKER NUMBERS BY REGION**

<table>
<thead>
<tr>
<th>Sula region</th>
<th>Factor 1 score &amp; (% who speak)</th>
<th>Population that is ethnically Sula</th>
<th>Estimated Sula speaker number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mangoli Tengah</td>
<td>4 (85%)</td>
<td>6,112</td>
<td>5,195</td>
</tr>
<tr>
<td>Mangoli Timur</td>
<td>4 (85%)</td>
<td>4,870</td>
<td>4,140</td>
</tr>
<tr>
<td>Mangoli Utara Timur</td>
<td>5 (95%)</td>
<td>4,311</td>
<td>4,095</td>
</tr>
<tr>
<td>Mangoli Barat</td>
<td>2 (23%)</td>
<td>401</td>
<td>92</td>
</tr>
<tr>
<td>Mangoli Utara</td>
<td>3 (44.6%)</td>
<td>1,123</td>
<td>501</td>
</tr>
<tr>
<td>Mangoli Selatan</td>
<td>4 (85%)</td>
<td>5,216</td>
<td>4,434</td>
</tr>
<tr>
<td>Taliabu-Barat</td>
<td>3 (44.6%)</td>
<td>3,000</td>
<td>1,338</td>
</tr>
<tr>
<td>Taliabu-Selatan</td>
<td>3 (44.6%)</td>
<td>3,000</td>
<td>1,338</td>
</tr>
<tr>
<td>Tabona</td>
<td>4 (85%)</td>
<td>1,500</td>
<td>1,275</td>
</tr>
<tr>
<td>Taliabu-Timur-Selatan</td>
<td>4 (85%)</td>
<td>2,000</td>
<td>1,700</td>
</tr>
<tr>
<td>Sulabesi Barat</td>
<td>3 (44.6%)</td>
<td>5,364</td>
<td>2,392</td>
</tr>
<tr>
<td>Sulabesi Selatan</td>
<td>5 (95%)</td>
<td>4,782</td>
<td>4,543</td>
</tr>
<tr>
<td>Sanana</td>
<td>2 (23%)</td>
<td>23,060</td>
<td>5,304</td>
</tr>
<tr>
<td>Sulabesi Tengah</td>
<td>3 (44.6%)</td>
<td>6,317</td>
<td>2,817</td>
</tr>
<tr>
<td>Sulabesi Timur</td>
<td>4 (85%)</td>
<td>3,522</td>
<td>2,994</td>
</tr>
<tr>
<td>Sanana Utara</td>
<td>4 (85%)</td>
<td>5,533</td>
<td>4,703</td>
</tr>
</tbody>
</table>

Estimated total number of Sula speakers in the archipelago: 46,861

6.3.3 UNESCO. **Factor 3: Proportion of Speakers within the Total Population**

**Sula's score:** (2) “severely endangered: A minority speak the language.”

Brenzinger et al. supposes that it is safest for a language to be a majority language in its range (2003:9). Factor 3 considers the number of speakers, 46,861, and the total population in the regions, 122,945 (the total population of course also includes non-Sula ethnic groups). Sula speakers make up 38% of the total population, making the speech
community a minority, which UNESCO’s guidelines indicate to correspond with severely endangered: A minority speak the language.

6.3.4 UNESCO. Factor 4: Trends in Existing Language Domains

Sula's score: (2) “Limited or formal domains”

The UNESCO scale states, “Where, with whom, and the range of topics for which a language is used directly affects whether or not it will be transmitted to the next generation.” (Brenzinger et al. 2003:9)

Accepting that, a language is safer when speakers expect it to be the speech code of numerous domains. This increases the frequency of language use and it keeps individual speakers primed and, thus, more likely to choose it for their subsequent communicative interactions. Furthermore, this helps make sure speakers use the language enough that the next generation is sufficiently exposed to learn it completely.

The degree of domain shift was determined using responses to the following survey questions and prompts (Appendix A, Appendix B):

13. What kinds of places do you hear Sula spoken?
14. What kinds of topics do you hear people discussing in Sula?
15. Are there places where you do NOT hear Sula spoken?
16. Are there topics that you hear people discussing in Bahasa instead of Sula?
17. (Discuss this more & ask specifically about digital domains)

Domain shift scores were estimated for each region and then weighted according to the region’s percentage of the total ethnic-Sula population and then combined and
averaged into a resulting score of (2) *Limited or formal domains*. According to Brenzinger et al. (2003:10):

“The non-dominant language is used only in highly formal domains, as especially in ritual and administration. The language may also still be used at the community centre, at festivals, and at ceremonial occasions where these older members of the community have a chance to meet. The limited domain may also include homes where grandparents and other older extended family members reside, and other traditional gathering places of the elderly. Many people can understand the language but cannot speak it.”

This passage describes Sanana city well, but it is not representative of the majority of Sula’s communities. Sanana city’s large population and comparatively drastic rate of domain shift brings the overall Sula average down further than one might expect by looking at domain shift geographically.

### 6.3.5 UNESCO. Factor 5: *Response to New Domains and Media*

**Sula's score:** (1) “minimal”

The UNESCO scale underscores an assumed importance of adapting to new communicative domains as they arise. Brenzinger et al. (2003:11) states:

“New areas for language use may emerge as community living conditions change. While some language communities do succeed in expanding their own language into the new domain, most do not. Schools, new work environments, new media, including broadcast media and the Internet, usually serve only to expand the scope and power of the dominant language at the expense of endangered languages. Although no existing domains of the endangered language may be lost, the use of the dominant language in the new domain has mesmerizing power, as with television.”
Chapter 1: land and people

If the communities do not meet the challenges of modernity with their language, it becomes increasingly irrelevant and stigmatized.”

The new domains of interest to the Sula community over the past decade and more have been electronic, and this is likely not unique to Sula. Of primary interest are efforts to supply cellular broadband Internet and upgrade the islands’ digital and electrical infrastructure so that its residents can take advantage of newer, fast connections when coverage reaches their communities.

Determining Sula’s response to new domains requires assessing the language’s compatibility with and access to new domains. Compatibility with new domains is clear: Sula is generally unwritten, but it is easily represented by the Indonesian orthography that the community is already familiar with. Therefore, the language is fully compatible with written digital domains.

Access to new domains is more complex. Broadband brings a flood of dominant global language content, but only to communities that can access it, so the degree to which content is (or will soon be) available to communities must be determined. In Sula, this means considering where (and what percentage of the day) electricity is available, the reach of broadcast television signals, the percentage of each community with access to television sets, the availability of cellular voice/SMS signals, the availability of cellular data signals, and the percentage of each community that has access to mobile devices.

Whether or not global media extends into the home affects how deeply it can pervade private communicative domains. Access to electricity varies among Sula communities, from remote villages with no power to neighborhoods with a reliable
Sula

public utility. The majority of Sula villages have locally maintained cooperative generators that many in the community are able to use as unofficial public power points for personal electronic devices. Where electricity does not enter the home, having power points in public spaces enables people to charge mobile devices and lights for in-home use.

Topics associated with access to interactive and non-interactive global media are multifaceted: basic cellular signals enable community members to make phone calls and send text messages, and data signal opens the door to global media content, but texting and making calls requires community members to at least have dumbphones and taking advantage of Internet content requires smart devices. To estimate how a community’s language vitality might be affected by new domains, mapping the range of both cellular voice and data signals as well as the proliferation of smart and dumb phones in each region was necessary (see Appendix A and B). Otherwise, we would not know which communities are most affected by UNESCO’s Factor 5.

The data tables in Appendix B demonstrate a positive correlation between communities with severe language attrition and access to new domains of communication, and considering community reach of, and access to, broadband and digital devices, Sula scores (1) minimal (“The language is used only in a few new domains”) on the UNESCO scale.
Chapter 1: land and people

6.3.6 UNESCO. Factor 6: Availability of Materials for Language Education and Literacy

Sula's score: (1) “A practical orthography is known to the community and some material is being written.”

“Education in the language is essential for language vitality. There are language communities that maintain strong oral traditions, and some do not wish their language to be written. In other communities, literacy in their language is a source of pride. In general, however, literacy is directly linked with social and economic development. Needed are books and materials on all topics for various ages and language abilities.”
Brenzinger et al. (2003:12)

The Sula language is largely unwritten, and there are neither pedagogical materials about the language nor print literature in the language.

6.3.7 UNESCO. Factor 7: Governmental and Institutional Language Attitudes And Policies, Including Official Status and Use

Sula's score: (1) “Forced assimilation”

Like the majority of languages in Indonesia, Sula does not enjoy an official status beyond acknowledgement of its existence as a regional language. Education as well as official and legal communications are all conducted exclusively in Indonesian.
6.3.8 UNESCO. Factor 8: Community Members’ Attitudes toward Their Own Language

Sula’s score: (1) “Only a few members support language maintenance; others are indifferent or may even support language loss.”

Community attitudes were determined from the following survey items (Appendix A):

18. Please tell me your feelings about the Sula language.
19. Do you think Sula is important? (if not answered by previous question)
24. Would it matter if people stopped speaking Sula and only spoke Bahasa?
21. Do you think people should try to protect Sula and encourage young people to speak it?
22. How do you think others feel about the Sula language?
23. Do others believe Sula is important? (if not answered by previous question)
24. Do you think others want to protect Sula and encourage young people to speak it?

6.3.9 UNESCO. Factor 9: Type and Quality of Documentation

Sula’s score: (1) “inadequate”

As explained in the Introduction, aside from my doctoral work, Sula has few publications that address it directly and only a few containing any primary data.

6.4 In sum

Sula’s UNESCO scale grades are:

Factor 1. Intergenerational Language Transmission (scale)

Sula’s score: (3) “definitely endangered”

Factor 2. Absolute Number of Speakers (real numbers)
Chapter 1: land and people

Sula’s score: 46,861

Factor 3. Proportion of Speakers within the Total Population (scale)

Sula's score: (2) “severely endangered: A minority speak the language.”

Factor 4. Trends in Existing Language Domains (scale)

Sula's score: (2) “Limited or formal domains”

Factor 5. Response to New Domains and Media (scale)

Sula's score: (1) “minimal”

Factor 6. Materials for Language Education and Literacy (scale)

Sula's score: (1) “A practical orthography is known to the community and some material is being written.”

Factor 7. Governmental and Institutional Language Attitudes and Policies, Including Official Status and Use: (scale)

Sula's score: (1) “Forced assimilation”

Factor 8. Community Members’ Attitudes toward Their Own Language (scale)

Sula's score: (1) “Only a few members support language maintenance; others are indifferent or may even support language loss.”

Factor 9. Amount and Quality of Documentation (scale)

Sula's score: (1) “inadequate”

As stated above, the UNESCO scale considers factors correlated with language health in minority language communities. It is my hope that returning to the question of

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Sula language vitality at regular intervals over the next ten to fifteen years—particularly factors regarding access to digital media—will help to reveal patterns that can be generalized to provide better forecasting abilities for language vitality in general.

The UNESCO scale does not provide a mechanism for combining its factors into an overall determination of language vitality. It instead helps researchers consider topics that they might otherwise overlook and more clearly explains the reasoning behind what are at heart qualitative, holistic determinations. This was a prudent decision by Brenzinger et al., because the validity of vitality frameworks cannot be verified, and therefore, no one-size-fits-all formulas can be falsifiable. The scale instead leaves it up to the researcher to make a holistic determination based on his or her understanding of how factors relate to each other in each specific language community. With this in mind, my impressionistic estimate is that Sula is at the safer end of the critically endangered category. The situation could be worse, but this is not a comforting category to be in.

While flawed, these vitality findings and the data in Appendices A and B establish a baseline of current Sula language use and the reach of digital communication in the region. Results cannot be taken as a definitive statement of language vitality, because the region has begun to undergo significant investments in public infrastructure (both ad hoc and formally sponsored). Further, it remains uncertain when and whether these projects will be completed, and if so, whether or not the community can secure resources to maintain them.
Chapter 1: land and people

Perhaps the two most significant infrastructure expansions in Sula’s modern history came about within the last few years. First, the creation of a coastal road now places remote villages that were historically reachable only by longboat within a couple hours of the town center by public car. Second, the proliferation of battery-powered, smart devices, and burgeoning access to cellular broadband Internet increasingly connects isolated communities to a flood of online interactive Indonesian language content.

What effect these changes will have on language vitality cannot be said, but there is cause for concern: when factors isolating a bilingual group from an economically privileged, dominant community are suddenly removed, it is not certain that the group will continue to perceive value in transmitting its native tongue to new generations. Each development project places the Sula language's rural strongholds in increasing daily contact with non-Sula speakers—both virtually and face-to-face. And remote villages have opened to migrations from non-Sula populations—groups who already outnumber the Sula population in parts of the archipelago. These changes will have unknowable but possibly profound impacts on the language and its future spoken domains.

7 Online presence and the effects of globalization

Sula currently has a limited online presence, but there has been in an informal project for the past several years to bolster it, particularly on social media. The goal of the project is to mitigate the language shift that is likely to accompany the coming digital transition, so that Sula’s communicative domains are not supplanted by Malay and
Sula

English. Content included in the digital footprint includes instructional videos, education videos, song and story performances, and videos of the location and environment. Going forward, minority-language maintenance models should incorporate creation of digital footprints within modern communication domains.

As of 2015, there were two Internet users from the developing world for every one in the developed world, yet four billion people in the developing world still do not have Internet access (ICT Data and Statistics Division 2015). Digital infrastructure development is rapidly underway in Eastern Indonesia though. This is a mixed blessing for Sula, whose communities find themselves on the precipice of a digital revolution. This revolution will be a significant one: it could be the death knell for a language on the verge of becoming moribund or a great democratizer that bolsters linguistic diversity.

Considering the challenges toward building an online Sula-language footprint, two stakeholders have worked with me to deliberately generate Sula discourse online. The first of the stakeholders is Ida Ryberg Umage, who is ethnically Sula but was raised in Surabaya. She now lives in Sweden and works with the children of Middle Eastern and African refuges. Ida's two children were raised in Sweden; they do not speak Sula and have never been there. But, Ida is passionate about connecting her children to their heritage from abroad, and she has been instrumental in helping translate difficult vocabulary and generate online discussions about Sula related media.

Facebook was chosen by default as the communication platform, as Sula is an impoverished region, and Facebook partnerships with Indosat and Telkomsel mobile providers have enabled most anyone in Indonesia to access Facebook content even without purchasing a cellular data plan. The service seems to be available pending
unallocated network bandwidth, so it can be slow and intermittent, but importantly, it is free and it works. Marlia Banapon, an English instructor and proponent of Sula maintenance and revitalization, is a Facei tribe member living in Sanana. Throttled behind Sanana's low-bandwidth data until recently, Marlia can only generate and upload still image and textual content, however she is able to view and comment on others' content and generate Sula language discussions (Figure 7).

Figure 7. Sample of Sula language conversation in a digital domain
This conversation centers around the question: who are the most famous people from Sula?

The low number of Sula speakers who have access to broadband Internet connections makes it challenging to generate online Sula-language content. In 2010, there were three known Sula speakers with broadband Internet access and a public online presence. Two were university students who have since returned to Maluku. By
2015 there were only Ida in Sweden and her sister, Sanna Tabona in Surabaya—neither of whom are first-language speakers.

Other Sula speakers with a known public online presence occasionally popped up online with cellular broadband access when they travelled to major Indonesian cities, and some—particularly diaspora living on Ternate and Ambon—had regular but slow/Intermittent non-broadband Internet access. But within the last few years, the number of Sula with broadband access has increased to where I can no longer count them. These are individuals living or traveling outside of the archipelago to regions whose wireless networks have been upgraded, and that network upgrade is getting closer to Sula by the day. I will not be surprised if the archipelago achieves reasonable broadband coverage by the time this dissertation goes to print.

So far, the community’s offline status has provided an opportunity to deliberately generate Sula media and discussions in advance of widespread broadband proliferation and the (likely) de facto establishment of a Malay language norm for digital communication. As of 2015, virtually all Sula residents with Facebook accounts were on each other's friend lists, and Ida, Marlia, and myself had positioned ourselves centrally within that group to give our content near universal exposure. Today this is no longer the case, and we can only hope that the online Sula language footprint we established prior to broadband Internet arrival will help to position the language as modern, relevant, and compatible with new domains of communication so that it can find a footing in the sea of global media. Our efforts have set in place a scenario that will, over the course of the coming decades, help test the question: *can language shift be*
Chapter 1: land and people

mitigated by establishing an endangered language footprint that sets in place a communicative-code inertia prior to the arrival of new information technology?

8 Chapter conclusion

The previous pages have established the context of the Sula language, place, and people in terms of history, geography, population numbers and distribution, and some of the external global pressures facing the community. These are pieces of Sula's puzzle that are necessary for future research into the language and for establishing strategies to bolster it against external pressures going forward.
Sula
CHAPTER 2: DIALECTS. PART 1
1 Where to begin?

When I took on the task of documenting Sula, naturally one of the fundamental questions was: *how many language varieties are spoken by the Sula people?* I set out boldly to answer that question. And I boldly failed.

My original research plan was predicated upon a local-folk-wisdom-derived hypothesis that is sensible at face value but which was flatly disproven: i.e. *there are four dialects of Sula, one for each tribe.* This notion is commonly accepted throughout Sula, and it may well have been true in the distant past, but it is demonstrably false today. Today there are many sub-dialects marked by sometimes subtle and other times abrupt isoglosses.

When the dust began to settle, and I had emotional distance from my failure, a more interesting and complex situation was revealed than anyone had anticipated, but it is a situation that I expect is not uncommon throughout the region (if not island communities the world over). It is, however, a situation that I unfortunately lacked sufficient time or resources to tackle head on. But, while this dissertation is unable to provide a detailed dialect map, my fieldwork did collect the linguistic data necessary to populate such a map, and that data is archived and available for future endeavors.

My original research plan fell short in anticipating the scrambled picture that would surface after analyzing the data, and although the data was carefully collected around the islands, I failed to anticipate potential problems and did not begin analyzing it during the collection process but waited until I returned. I was victim to hubris and believed my research plan was failsafe and it would be better to dedicate my limited
time exclusively to gathering dialect data from as many sites as I could. After returning home, it became evident that I had indeed collected more than enough language data, and it was indeed useful and well organized, but I had neglected key pieces of necessary non-linguistic information that would be necessary for describing the nonlinear structure of Sula’s complicated dialect continuum: *oral histories for the target communities studied*. As will be discussed further, a detailed dialect map of Sula is an attainable goal, and I am confident that a single, well organized research project could satisfactorily fill in the remaining blanks and unscramble the puzzle.

2 Sula dialect areas

*Figure 8.* Preliminary sketches of Sula dialect areas
An interactive version of this map is available from the Bahasa Sula web page:
http://www.bahasasula.com

1. Southwest Mangon Falahu
2. Central Mangon Dialect (CMD)
3. Mangon Island Mangon
4. Southern Mangon Fagudu
5. Southeast Mangon Falahu
6. Northern Fagudu Sanana
7. Western Sanana Mangon
8. West Fagudu Sanana
9. West Faceti Sanana
10. Southwest Fagudu Sanana
11. South Faceti Sanana
12. Southern Sanana Mixed Tribes Region
13. Southern Falahu Sanana
14. Southern Falahu and Fagudu Blend Sanana
15. Southern Fagudu Sanana
16. Standard Sanana Dialect
17. Bajo Language
As stated previously, I cannot provide a highly granular dialect map and explain all of the variations and innovations unique to each sula community. I can however provide a broad overview that identifies where dialects and languages (in the case of Bajo) are located. From Figure 8:

Southwest Mangon Falahu (1): This sparsely populated region is settled by Falahu tribe members. It is a mix of primary settlement communities from pioneers who left what is now Falahu village in Sanana city and of newer, second and third generation settlements. There also may be settlements or areas with significant influx of people from the Southeast Mangon Falahu region. The language here is of the Sanana dialect, but interrelationships between varieties spoken here are not known.

Central Mangon Dialect (CMD) (2): this region consists of three villages, and it was settled long ago by Facei Tribe settlers coming from Facei village, Sanana. In this region, a dialect has emerged via contact to the more populous Mangon tribe members who speak Mangon dialect. There is an east–west contact-influenced dialect continuum where the easternmost village is closest to the Mangon tribe and has taken on more features of Mangon dialect than the neighboring villages to the west.

Mangon Island Mangon (3): This region is the home settlement of the Mangon tribe, and it is where the Standard Mangon dialect is spoken.

Southern Mangon Fagudu (4): Villages here were settled by Fagudu tribe pioneers from Sanana. The area speaks a Sanana dialect that has also begun taking on several features of Mangon. Further study is required to determine whether Mangon
words and features have spread widely enough for the language to be considered another example of a contact-driven, distinct dialect.

Southeast Mangon Falahu (5): This sparsely populated region is settled by Falahu tribe members. It is a mix of primary settlement communities from pioneers who left what is now Falahu village in Sanana city and of newer, second and third generation settlements. There also may be settlements or areas with significant influx of people from the Southwest Mangon Falahu region. The language here is of the Sanana dialect, but interrelationships between varieties spoken here are not known.

Northern Fagudu Sanana (6): Fagudu is the primary tribe in this region. Sula spoken here is of the Sanana dialect type and it is quite similar to the language as spoken in Sanana city. Individual villages are said to have some unique characteristics, but it is unclear if any are different enough to constitute dialects in their own right.

Western Sanana Mangon (7): this region centers around the large town of Malbufa and its satellite neighborhoods. It was settled long ago by pioneers from Mangon island (Waitulia, Mangon, and Waitina villages). A dialect has emerged in Malbufa driven by contact to its more populous Sanana-tribe neighbors. This dialect was formed in a near opposite scenario to that of the Central Mangon Dialect on Mangon island. Side-by-side, the two dialects might help shed light on contact phenomena by revealing points of convergence and divergence.

West Fagudu Sanana (8): Fagudu is the primary settler tribe in this region. Sula spoken here is of the Sanana type, but it is recognizably different from the language as spoken in Sanana city. The language has some unique local words and sound
innovations. As a Sanana dialect, it shares the innovations that differentiate Sanana dialects from Mangon.

West Facei Sanana (9): Facei is the primary settler tribe in this region. Sula spoken here is of the Sanana type, but it is recognizably different from the language spoken in Sanana city. The language has a number of local words and unique innovations, but as a Sanana dialect, it shares the innovations that differentiate Sanana dialects from Mangon.

Southwest Fagudu Sanana (10): Fagudu is the primary settler tribe in this region. Sula spoken here is of the Sanana type though significantly different from the language spoken in Sanana city. The language has numerous local words and unique innovations, but as a Sanana dialect, it shares the innovations that differentiate Sanana dialects from Mangon. It is a mix of primary settlement communities from pioneers who left what is now Fagudu village in Sanana city and of newer, second and third generation settlements. There also may be settlements or areas with significant influx of people from the West Fagudu Sanana region. The number of definable dialects and interrelationships between varieties is not known.

South Facei Sanana (11): Facei is the primary settler tribe in this region. Sula spoken here is of the Sanana type though it is recognizably different from the language spoken in Sanana city. The variety spoken in Fatkouyun is perhaps the most divergent among Sanana varieties. There is said to be a significant number of unique lexical items and, by observation, there seem to have either been some vowel substitutions or a modification of the phonetic space assigned to certain vowels. Unfortunately I could only spend an evening in the village and did not have a chance to further explore the
topic. Several targeted recordings were made in the village and archived to assist future research. The language does appear to share all of the innovations that differentiate Sanana dialects from Mangon.

Southern Sanana Mixed Tribes Region (12): This area encompasses Manaf village and its surrounding areas. Residents report the settlement to have arisen as a crossroad between the Facei villages to the south, Falahu villages to the north, and Fagudu villages to the west, which are connected by the only easily navigable route across the island interior. Given my limited interaction in the village, I did not notice remarkable dialectic differences from the variety as spoken to the north, and it is unclear if the area has a distinct language variety, if it is similar to Bega village to the north, or if it is a hodgepodge of families with different language backgrounds, and I just happened to communicate with individuals who have a Southern Falahu Sanana linguistic heritage.

Southern Falahu Sanana (13): Falahu is the primary settler tribe in this region. Sula spoken here is of the Sanana type and it begins to deviate from the language spoken in Sanana city. The deviation is not strictly linear, indicating some settlement leapfrogging, some counterclockwise settling, and some later, intermediate settlements from Falahu village in Sanana in addition to the expected clockwise settlement expansion. Additionally, lateral borrowings further obfuscate the direction of migration in this region, so while a non-geographically linear dialect continuum likely does exist here, the varieties are quite similar to begin with, and the variations are clouded by lateral borrowings in this highly mobile area. As such, defining the linguistic
relationship between dialects here will require a dedicated study that leverages comparative linguistics, historical documents, and oral histories.

Southern Falahu and Fagudu Blend Sanana (14): This is a boundary region between Falahu and Fagudu areas. Sula spoken here is of the Sanana type and it deviates somewhat from the language spoken in Sanana city. The region has some identifiable characteristics, but it shares the innovations that differentiate Sanana dialects from Mangon.

Southern Fagudu Sanana (15): Fagudu is the primary settler tribe here. Sula spoken in this region is quite similar to the standard Sanana variety in Sanana city to the north. Individual villages have unique characteristics, but it is unclear if any of the communities here could be said to have their own dialects.

Standard Sanana Dialect (16): Sanana city formed over the historical home territories of the Fagudu, Falahu, and Facei tribes. The language spoken here is the most generic Sanana variety. That is, Sula as spoken here is seems most difficult for other Sanana speakers to place geographically, as it does not contain innovations that people might pick up on to identify a local variety. All of what is present in Sanana city is also present in many other communities, but those other communities also have unique features not found in the city.

Bajo Language (17): This region is a very old Bajo (Sama–Bajau) settlement that is built approximately a third over the coast and two thirds over water on stilt houses connected via a network of boardwalks. Additionally, some percentage of the extended community consists of aquatic nomads who live aboard ships and migrate between this
and other communities. The basic vocabulary of the community’s language variety is listed in this dissertation appendix, and recordings are archived along with other dissertation materials. Also archived are several targeted conversation recordings.

The Sama–Bajau people likely spread out from the Zamboanga-Basilan region of the southern Philippines, and the language has since diverged into eleven sub branches (Pallesen 1985). It is unclear which branch Sula’s Bajo community falls under. Unfortunately describing the tongue was outside of the purview of my research, but residents of the community are warm and welcoming; I highly encourage a future researcher to live among them for an extended period.

3 Overview of main dialect groups

Although a granular level dialect map of Sula remains elusive, great strides were made regarding Sula dialects at the macro level, and this chapter demystifies the most important parts of my original question: How many language varieties are spoken by the Sula people?

Broadly speaking, there are two main dialect groups and at least two additional newer dialect groups formed by contact, mixing, and leveling—one of which represents a Sanana population settlement region on Mangon Island that was heavily influenced by Mangon speakers, and the other represents a Mangon population settlement on Sanana that was heavily influenced by Sanana speakers. These dialects are discussed in Chapter 2: dialects. Part 2.

Sula’s two main dialect groups have similar but not identical phoneme inventories. Sanana dialects have a phonemic glottal stop and voiceless glottal fricative
that are both absent (or rare) in Mangon dialects, while Mangon dialects retain a voiced velar nasal that has been lost in Sanana (ŋ>n). Both dialects have five vowels (i, u, e, o, a), but Sanana dialects also retain several vowel clusters that have been reduced in Mangon (ei, oa, and ao). Field data provided the present day phoneme inventories, and the Proto–Sanana–Mangon (PSM) inventory was reconstructed using the Comparative Method. While the phoneme inventories are quite similar, not every phoneme corresponds perfectly to its counterpart in the other dialect group. Table 4 lists phoneme correspondences between the dialect groups alongside PSM, the progenitor.

**Table 4. Sanana–Mangon Phoneme Correspondences**

<table>
<thead>
<tr>
<th>Consonants:</th>
<th>Vowels:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanana</td>
<td>Mangon</td>
</tr>
<tr>
<td>p – p</td>
<td>*p</td>
</tr>
<tr>
<td>b – b</td>
<td>*b</td>
</tr>
<tr>
<td>t – t</td>
<td>*t</td>
</tr>
<tr>
<td>d – d</td>
<td>*d</td>
</tr>
<tr>
<td>r – d</td>
<td>*d</td>
</tr>
<tr>
<td>(intervocalic)</td>
<td></td>
</tr>
<tr>
<td>k – k</td>
<td>*k</td>
</tr>
<tr>
<td>g – g</td>
<td>*g</td>
</tr>
<tr>
<td>? – Ø</td>
<td>*?</td>
</tr>
<tr>
<td>m – m</td>
<td>*m</td>
</tr>
<tr>
<td>n – n</td>
<td>*n</td>
</tr>
<tr>
<td>n – ŋ</td>
<td>*ŋ</td>
</tr>
<tr>
<td>f – f</td>
<td>*f</td>
</tr>
<tr>
<td>s – s</td>
<td>*s</td>
</tr>
<tr>
<td>h – l</td>
<td>*l</td>
</tr>
<tr>
<td>y – y</td>
<td>*y</td>
</tr>
<tr>
<td>h – l</td>
<td>*l</td>
</tr>
<tr>
<td>c – c</td>
<td>*c</td>
</tr>
<tr>
<td>j – j</td>
<td>*j</td>
</tr>
<tr>
<td>w – w</td>
<td>*w</td>
</tr>
</tbody>
</table>
While this chapter describes the macro-level dialect division in Sula, the topic of dialect differentiation was complicated at the micro-level by an interplay between three factors: *time*, *tribe*, and *terrain*. If asked how many dialects of Sula there are, Sula residents answer without hesitation, “four: Fagudu, Falahu, Facei, and Mangon,” (the four tribes, recited in various orders). That response is so universal that when I designed a geographical study of dialects, I predicated my research plan upon an assumption that while these dialect divisions were no longer evident in Sanana city, they were likely still present in rural settlements. I still believe that is possibly the case, but once I began analyzing data, it became clear that the picture was not so simple.

The region’s only city, Sanana, is the ancestral home to three of the four tribes, and while there are widely accepted geographical delineations separating each tribe’s range, no such isoglosses can be drawn. In fact, I begrudgingly came to the conclusion that although there are a handful of deliberate identity-marking word variants used by tribal members, there is truly only one extant dialect that covers all of Sanana city. It does, however, appear that the tribes might have indeed had discernible dialects in the distant past, and that those dialects may yet be reconstructable by comparing modern Sula as spoken in outlying settlements. This is where the factors of *time* and *terrain* enter.

Beginning at some point in the distant past, community settlements branched out to distant (primarily) coastal locations around the islands, and many of those settlements then spread to form segments of dialect chains along the coast. But this did not happen in a geographically linear pattern. This fact makes sense in the context of an
Sula

island where groups prefer to settle along the coast. Costal conditions vary in Sula from swampy, to sandy, to steep cliffs, to large fertile plains, to dense jungle, to arid. The quality and reliability of rivers available to support settlements also varies, and because of all of these varying conditions it seems that it was frequently the case that the most preferable place to establish a new settlement was not necessarily an origin community’s directly neighboring river valley. New settlements were often established numerous rivers down, where superior conditions were present, and subsequently, the space in between was backfilled with new settlements from both directions—in a nonlinear manner. This way of settling new villages results in a situation where a grandchild or great-grandchild settlement can be geographically situated beside its grandparent settlement with the intermediate generation of settlements geographically leapfrogging on either side.

This geographic incongruity means that while describable dialect continua do exist in Sula, they are nonlinear and nearly impossible to arrange into a linear descent model without historical context for reference. Figure 9 illustrates Sula’s settlement tendency and why historical context is vital to help decode it.
Figure 9. Sula village settlement pattern
Illustration of geographically non-linear settlement patterns around the Sula Islands. A, B, and C parallel the original settlements of Sanana’s three tribes, and the sub versions represent generations of communities descended from the original tribes.

Figure 9 shows an example of a dialect continuum that is geographically influenced but not geographically determined. As complex as the figure looks, the actual situation on the ground is far more complex. This is because settlement periods happened at various time depths and in both directions on the islands, and because numerous interspersed settlements were established both from the four original tribes and simultaneously by descendants of the new settlement communities\(^\text{46}\) in both

\(^{46}\) And sometimes communities were settled by a mixture of original tribal community members and newer community members.
directions—and the language varieties were also influenced by lateral transfer from neighboring communities of non-corresponding settlement generations. It would therefore be a daunting if not impossible task to describe Sula’s dialect continua based on lexical comparison.

Setting foot on the lower half of the island in Figure 9 with no historical background, one would likely expect to find a dialect continuum that descends from left to right or from right to left, but in Sula’s case, a comparison of dialect features would not bear that out. That is, one might expect lexical comparison to reveal the following settlement pattern (or its clockwise counterpart): A1.2.1 > A1.2 > A1 > A1.1 > A1.1.1 > A1.1.1.1 > A1.1.2.1.1 > A1.1.2 > A1.1.2.2

Instead, however, the data would seem un-interpretable, because random noise and lateral features overwhelm the signal. The situation would not necessarily be a lost cause though. In Sula, as with most Austronesian communities, there are elders in every community who take on the sacred responsibility of accurately preserving oral histories, and I believe that gathering these histories and applying a comparative historical framework to their details should in most cases provide what is necessary to re-approach each community’s language data, correct it for lateral transfer and noise, and then construct the internal structures of Sula’s dialect continua and reveal the islands’ migration history along with it. In the case of Figure 10, the structure would thus turn out to be:
As explained, a fair amount of fieldwork time and effort went into collecting data at numerous locations around the islands, and rather than revealing the structure of Sula’s dialect map, subsequent research revealed that the lexical comparison in a vacuum is probably insufficient to unwind the complexity of the situation on the ground. Subsequent inquiries with elders like Ismael Duila, of Waibau, gleaned an intricate pattern of nonlinear settlement trends on the Archipelago and also revealed the degree of detailed knowledge that elders tend to possess about their communities’ histories and the histories of their neighbors. A revisiting of the communities to gather oral histories is needed to reveal the detailed relationships between Sula’s dialects, but the broad divisions in the language are unmistakable (i.e. Sanana vs. Mangon). Using the Comparative Method in this chapter, we can analyze Sanana and Mangon speech...
Sula

varieties and reconstruct the ancestor to Sula’s main dialect groups and demonstrate how it transformed into the varieties that are spoken today.

4 Previous research

As discussed in chapter one, few publications analyze the Sula language directly, and as a result of this lack of descriptive data, comparative linguistic work has been limited (e.g., Blust 1981, Collins 1983). Fortgens (1921) is an impressive description of Soboyo on the neighboring island of Taliabo using scant data, and Devin (1989) and Grimes (1991) are detailed descriptions of the main indigenous language of Buru island immediately to the south. Based on the material available at the time, Blust (1981) and Collins (1981) argued for an Austronesian subgroup of Buru–Sula–Taliabo under Proto–West–Central Maluku.

Blust (1981) also made use of the Soboyo data in Fortgens 1921 to show that PAN *S, which has disappeared in all other known languages of eastern Indonesia, is reflected consistently in Soboyo as h. The paper also argues for the inclusion of Soboyo in a subgroup alongside Sula and Buru. Collins (1989) picked up the analysis of Taliabo and explained that his field research showed the island to contain a single native language spreading over a long dialect continuum. The languages of the B-S-T subgroup were next taken up by Blust (1993), who disputed a claim in Esser 1938 proposing a subgroup containing Taliabo–Sula–Bacan. Blust demonstrates that Esser’s proposal is not based on linguistic reasoning.

At a higher level up the family tree, Mark Donohue and Charles Grimes (2008) challenge the Central Eastern subgrouping favored by Blust, and Blust’s 2009 follow-up
Chapter 2: dialects. part 1

defends the grouping. No new data source was cited either as basis for the challenge or
the follow-up.

There have been subsequent challenges to Collins’s and Blust’s early subgrouping
proposals, but to my knowledge none of them has included any new primary data, and
Collins’s work remains the most complete historical evaluation. In a 1982 publication,
Collins (1982:82) was first to suggest that there is one primary dialect division in Sula
and that it separates Mangon and Sanana. My research corroborates this hunch.
However, Collins’s analysis is mostly limited to consonants, and the data he uses is
mainly from the Mangon dialect of Sula. Collins writes that our knowledge about the
languages of Sula is in an elementary state, and this limits our ability to analyze the

Collins (1981:41) also notes that the Sanana dialect has “undergone a number of
obfuscating innovations.” By comparing Sanana and Mangon dialects, the present
chapter identifies these obfuscating innovations, and makes sense of Sula dialects’ vowel
correspondences. The research in this chapter augments Collins’ findings and provides a
more complete dataset for Austronesianists to use in refining higher-level subgroupings.
Prior to these findings, Sula could appear to group more closely at times with Buru and
at other times with Taliabo, depending on the dialect that words were pulled from. The
findings in this chapter remove that ambiguity by establishing a higher level Proto–Sula
that should instead be used for comparative work with neighboring languages—a task I
am eager to take on once I or another scholar conducts more thorough fieldwork on
Taliabo and uses the island’s numerous present dialects to similarly reconstruct Proto
Taliabo.
This chapter helps to develop the academic literature in an area of Austronesian linguistics where there remains significant debate and little data available, and it provides new, more-comprehensive primary data that should be used to help settle ongoing disputes that have thus far been based on weak foundations.

5 Methods

Data used in this study was gathered in North Maluku during three three-month long trips between 2010 and 2015. Language consultants were chosen as described below to help ensure that data would be reliable for comparative work. Elicitations were conducted at seventeen sites on Mangon and Sanana, where the majority of Sula speakers reside. Before choosing sites, I consulted with the regional development office, the bureau of statistics, and community elders. I inquired about the settlement history for each village to learn which tribe settled the area and which of the (then hypothesized) four dialects it was reported to speak. A minimum of ten sessions were conducted for each targeted dialect. Sessions included a series of three videos that were watched by speakers, two at a time, within three age ranges as well as elicitation of a 230-word basic vocabulary list adapted from Greenhill et al.’s (2008) Austronesian Basic Vocabulary Database (see Table 5). Typically, various other data collection and documentation sessions were also conducted. These ranged from ethnographic interviews to performance recordings; demonstrations of traditional medicine and farming/hunting/fishing methods; and topical vocabulary elicitation.
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### Table 5. Elicitation Sessions by Tribe

Sessions were conducted to determine whether there is tribe-based variation. To control for geographic variation, research did not cross village boundaries. In addition to the four Sula tribes, the same elicitation materials were used with Sanana’s Bajo community, and also the Facei tribe community settled on Mangon’s southern coast (CMD).

<table>
<thead>
<tr>
<th>Dialect</th>
<th>Video 1</th>
<th>Video 2</th>
<th>Video 3</th>
<th>Swadesh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falahu</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fagudu</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Facei</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mangon</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CMD</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bajo</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

At least two speakers participated in all vocabulary elicitation sessions. This helped to counter code switching effects, because participants are also fluent Malay speakers, and Malay was the language of elicitation. Sessions had three or more participants in situations when there was a group dynamic that facilitated thoughtful responses. All sessions—vocabulary and video alike—were conducted in the target geographical area. For example, an elicitation session for Facei could not be conducted in a Fagudu village, even if the consultants were native Facei speakers, and the two main participants for each targeted elicitation session were required to have been born and raised in the particular village where the session was being conducted (i.e. they could...

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47 Central Mangon Dialect is a dialect found on Mangon island’s southern coast that has undergone significant contact-induced leveling.
not come from another village even if that village reported to be of the same tribe or the same dialect). During vocabulary elicitation sessions, dialect-external participants were invited to join as tertiary observer-consultants when available. Their task was to listen and identify when unexpected or interesting dialect differences were encountered. These participants did not tend to contribute a large quantity of material; however, their occasional observations were thought provoking.

Three videos were created and used to elicit conversations that would roughly parallel each other. Videos were produced locally to (a) keep discussion from centering on any foreign elements rather than scenes and actions being depicted and (b) contextually prime participants to speak Sula rather than Malay, which is the language that typically accompanies media content depicting the outside world. The videos include a movie with no audio track that shows a hungry young man earning money to buy a bread roll (Video 1)\footnote{This video is titled “Want To Eat Bread” (VEB)} and two compilation videos consisting of various scenes filmed around the island (Video 2 and Video 3)\footnote{These videos are titled “Various Scenes” (VS) one and two.}. Each video was presented in the same manner to two participants at a time. Videos were filmed and presented in HD 1080 on an iPad with Retina display.

Nine sessions were conducted for each target dialect. During each session, a video was watched and responded to twice by two participants who were: (a) born and raised in the community where the session took place, and (b) within a given age range (either 18–29, 30–49, 50+). It became clear that broad age ranges were needed, because many
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participants were unsure of their chronological age. To correct for age uncertainty, a reported age was recorded alongside an age estimate made by the researcher. A small number of elicitation sessions were excluded from the study and repeated with different participants. This happened when either a reported or observed age was outside the target range. The study included men and women; however it was impractical to balance for gender due to population availability.

A video was watched by only one participant during the first viewing. The viewer described what was seen to the second participant, who would ask questions to clarify and gather additional information. Instructions were provided primarily in the Sula language. After the first viewing of video 1, the non-viewer recounted what was remembered from the story. The video was then played a second time as participants watched it together and discussed freely. Videos were shown in this way to help collect conversational language data from which vocabulary was later extracted and used for comparative analysis.

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50 The custom of keeping track of age is widespread only among the young.
6 Proto–Sanana–Mangon

TABLE 6. PHONEME INVENTORY

The Proto–Sanana–Mangon phoneme inventory consists of 24 phonemes—nineteen consonants and five vowels

<table>
<thead>
<tr>
<th>Consonants</th>
<th>Vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td>p b t d (e),(j) kg ?</td>
<td>i u</td>
</tr>
<tr>
<td>m n r</td>
<td>e o</td>
</tr>
<tr>
<td>f s l</td>
<td>h a</td>
</tr>
<tr>
<td>w y</td>
<td></td>
</tr>
</tbody>
</table>

6.1 Clusters

Many Mangon forms seem to have prenasalized word-initial onset consonant sequences, but it is not clear whether they are Prenasalized consonants or consonant clusters (i.e. whether they are phonemically one or two segments). At least some do however appear to reflect a fossil morpheme N-. It is uncertain whether they arose in Mangon after the dialect split (likely from the possessive marker -in), or if they reflect an earlier affix and were reduced in Sanana. If the morpheme existed in PSM, the following clusters would have been present word-initially: Ny, Nb, Nl, Nc, Np

Various vowel sequences are also present, but their phonemic status is uncertain. These segments are: ia, ui, ua, ei, eu, oi, ou, ai, au, ae, ao

6.2 Changes in Proto–Sula\textsuperscript{51}, prior to PSM

During fieldwork, an unexpected vowel correspondence kept conspicuously popping up between Sula and Malay, the language of elicitation. This marked an interesting finding in reconstructing the Proto–Sanana–Mangon dialect: the process revealed two early

\textsuperscript{51} Proto–Sula is a hypothesized stage of the language further back in time than PSM.
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synchronic snapshots of the language instead of one. That is, whereas the structure of PSM was reconstructable, it necessitated that at least one important change must have occurred at a level higher than PSM but lower than Buru-Sula-Taliabo, if what we know of the sibling languages is complete enough52. I refer to this intermediate stage as Proto–Sula. The change in question is: PAN *uCi,u > oCi,u. Here, *u became o when followed in the next syllable by a high vowel (*u>o/i,uσ#).

Malay cognates containing uCu such as kutu ‘louse’, bulu ‘fur’, and sepuluh ‘ten’, corresponded to oCu in Proto–Sula (oCu in Mangon; oCa in Sanana). This correspondence appeared to reflect a change from PAN *u to Proto–Sula *o in syllables preceding *u. Comparison to other Austronesian language data from the Austronesian Comparative Dictionary (Blust and Trussel on-going: 2010-), the Austronesian Basic Vocabulary Database (Greenhill et al. 2008), and personal communication with Robert Blust, revealed this correspondence to be a change to PAN *u in the penult when the ultimate vowel is [+high].53 That is, *u became o in the penultimate syllable only where the final vowel was *i or *u. This is corroborated by the fact that uCV[+high] sequences do not violate the phonotactics of either dialect, and also by reconstructed PSM forms like *kuli ‘right’, *duki ‘come’, *jubi ‘shoot’.54 The modern forms for these words are, kuli (M), kul (S); duki (M), duk (S); and jubi (M), jub (S), but if the change had happened lower than the level of PSM, these forms would instead be, koli (M), kol (S); doki (M), dok (S); and jobi (M), job (S). The *u > o change is demonstrated in the

52 This oddity highlights the need for a more comprehensive survey of Taliabo languages.

53 This change appears to be connected to a subsequent and equally bizarre *u > a change that occurred to the same lexical items in Sanana (discussed in section 6.3.2.1).

54 The modern forms would reflect as koli (M) kol (S), doki (M) dok (S), and jobi (M) job (S) if the change occurred after PSM.
following table, and many more examples are found in Appendix D and in the Chapter 4 vocabulary list.

**Table 7. *u > o Examples**
The following table lists a few typical examples of the u > o change.

<table>
<thead>
<tr>
<th>PMP</th>
<th>PSM</th>
<th>Mangon</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*kulit</td>
<td>*koli</td>
<td>koli</td>
<td>kol</td>
<td>’skin’</td>
</tr>
<tr>
<td>*ma-putiq</td>
<td>*boti</td>
<td>boti</td>
<td>bot</td>
<td>’white’</td>
</tr>
<tr>
<td>*duRi</td>
<td>*loi</td>
<td>loi</td>
<td>hoi</td>
<td>’thorn’/’bone’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PMP</th>
<th>PSM</th>
<th>Mangon</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*bubu</td>
<td>*fofu</td>
<td>fofu</td>
<td>fofa</td>
<td>’bamboo fish/eel trap’</td>
</tr>
<tr>
<td>*buku</td>
<td>*foku</td>
<td>foku</td>
<td>foka</td>
<td>’joint, e.g. finger’</td>
</tr>
<tr>
<td>*bulu</td>
<td>*fou</td>
<td>fo:</td>
<td>foa</td>
<td>’hair, feathers’</td>
</tr>
</tbody>
</table>

Comparing words like *ma-tua ‘old’ (people) from *tuqa, *uha ‘shrimp, lobster’ from *qudaŋ, *uma ‘house’ from *Rumaq, *uya ‘rain’ from *quzan, and *fua ‘fruit’ from *buaq, we see *u changed only before high vowels. Furthermore, we can see that the change did not affect other vowels in the same environment by comparing forms like *ga-pitu ‘seven’ from *pitu, *nihi ‘tooth’ from *ŋisi, *nui ‘coconut’ from *niuR (< met.), *timu ‘cucumber’ from *qatimun, and *winu ‘to drink’ from *inum.

This sound change poses a problem to the Neogrammarian hypothesis that sound change can be conditioned only by phonetic factors (e.g. Osthoff and Brugmann 1878, Hock 1991). Mechanistic change to phonetic factors is thought to be an unconscious result of speakers slightly missing their targets when attempting to recreate a mental representation of a sound. These repeated mistakes over time are thought to cause
modifications to the underlying mental representation of the sound (Blust n.d.); however, there is no identifiable biological reason why repeatedly missing a *u target in the environment of / _Ci,u would move a speaker’s prototypical mental representation of the segment closer to o. As it stands, the data at hand are most in keeping with the Neolinguist assertion that change is possible in the absence of a generalizable underlying phonetic motivation (Bartoli 1925). Blust (2017) further discusses Sula’s PAN *u > o change in an expanded discussion on the theoretical implications of sound changes that are not phonetically conditioned and why they are odd.

### 6.3 Sound changes from PSM to Sanana

To help describe the structure of PSM, the subsequent sections illustrate changes that occurred as the language split and evolved into modern Sanana and Mangon dialects. Let us first chart the path of evolution from PSM to the present-day Sanana dialect group.

#### 6.3.1.1 Sound changes from PSM to Sanana. Consonants.

*d>r /V_V

Intervocalic *d became a trill in Sanana (usually produced as a flap)\(^{55}\)

Sometimes historical sound changes stand on their own without affecting other phonological processes or sound changes, but often they can only be understood diachronically as stages in a sequence of processes. The *d>r /V_V sound change is one such instance; we can see that it must have occurred before a final-vowel reduction

\(^{55}\) Lyle Campbell (p.c. 2020) suggests that it is more natural for a d to become a flap than a trill. This likely was the route in Sanana as well, however the data do not reveal the specific path this change followed, and either way the end result was the same: intervocalic instances of PSM *d are today included among the trill phoneme.
event that took place in Sanana, otherwise some of Sanana’s modern words would have been different. Take for example *tar ‘horn’\(^{56}\). If Sanana’s final vowel deletion had not followed the intervocalic *d>r change, the target environment would not have been present, and rather than the modern word having followed the path *tadu > taru > tar, the process of events would have truncated with the final vowel deletion and there would have been no opportunity for *d to change to r. That is, we would expect to see a reflex of *tad instead of *tar.

**Table 8. PSM to Sanana. *d>r /V_V**

<table>
<thead>
<tr>
<th>PSM</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*badagana</td>
<td>baragana</td>
<td>‘to dream’</td>
</tr>
<tr>
<td>*gad(i,e)ha</td>
<td>gareha</td>
<td>‘four’</td>
</tr>
<tr>
<td>*padomu</td>
<td>paroma</td>
<td>‘knee’</td>
</tr>
<tr>
<td>*tadu</td>
<td>tar</td>
<td>‘horn’</td>
</tr>
</tbody>
</table>

**6.3.1.2 Sound changes from PSM to Sanana. Consonants. *l>h/[V_V], [#_]**

There are many instances of *l in Sanana basic vocabulary; however PSM *l became *h in intervocalic and onset positions in the words of the following list. This appears to be a regular sound change that was interrupted across a subset of the vocabulary. Regular sound changes apply across the board, but they can be interrupted by other factors such as analogy, dialect borrowing, avoidance of homophony, etc., and this can sometimes

\(^{56}\) During personal communication, Robert Blust questioned whether ‘horn’ might in fact be a Malay loan, as there are no horned animals native to Maluku. It is noteworthy though that the mammals evolving east of the Wallace line are not the only animals present on Sula—even during early human settlement. Sula was a casual swim’s distance from Sulawesi during the height of the Ice Age, and anoa and Javan rusa (and possibly rhinoceros beetles) all likely made their own way east of the Wallace line along with babi rusa which have upward incisors akin to ‘horns’. Additionally, humans introduced other horned animals to the region like buffalo and goats. Sula’s retention of outrigger technology and close proximity to Sulawesi (only a few hours by sail even at present sea levels) suggest that the population was also never entirely cutoff from communities and animals West of the Wallace line, so *tar remains a likely valid form.
cause sound change to appear irregular when there are non-phonetic explanations. For a thorough treatment of how non-phonetic factors can affect sound change, see Campbell (2004).

<table>
<thead>
<tr>
<th>Table 9. *[l]&gt;h/[V_V], [#_]</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSM</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>*geli</td>
</tr>
<tr>
<td>*lai</td>
</tr>
<tr>
<td>*lama</td>
</tr>
<tr>
<td>*lani</td>
</tr>
<tr>
<td>*loi</td>
</tr>
<tr>
<td>*(N-)losa</td>
</tr>
</tbody>
</table>

Collins (1981, 1982) speculates that PAN *d/D became h in Sanana and l on Mangon. He provides the following evidence:

PAN *(dD)uRi ‘thorn’ > loi
PAN *dakep ‘embrace’ > hakYkotY
PAN *DuSa ‘two’ > guu
PAN *ke(dD)en ‘stand’ > keli
PCM *dama ‘eye’ > lama

I cannot account for all of Collins’ reconstructions; however the forms themselves are mostly consistent with my data for the Mangon dialect. One difference concerns the form, hakYkotY ‘embrace’, which he identifies as having a Fagudu origin; his use of Y represents “an unspecified devoiced vowel” (1981:42). During my fieldwork, I heard closures and geminates rather than devoiced vowels and recorded both hak and hakkot ‘to hug’ from a Fagudu tribe member in Waibau village. As for the word itself, I am unconvinced that it is in fact a reflex of PAN *dakep: first, neither Collins nor myself
collected an l onset variant for Mangon, and furthermore Collins does not account for *p > t / in Sula57 nor *e > o. In fact, other higher level forms listed by Collins containing *e do not become o in Sula. Take for instance, PCM **seget > segi ‘high tide’ and PAN *ke(dD)eŋ > keli ‘to stand (Collins 1981:32).58

The form, guu from PAN *DuSa is also problematic: Collins (1981:42) analyzes PAN *d and *D merging to **d in B-S-T and then **d subsequently becoming l in Sula but h in “Falahu and Fagudu dialects.”59 he further states that the loss of l from d is regular in Sula but that there is an unexpected loss of final -a and that there is an unexpected appearance of u for a in the numeral prefix ga-. Presumably the **d > l that Collins describes occurred at the Proto–Sula stage, as I am able to reconstruct the PSM form *gahu ‘two’. In the Mangon dialect, PSM *h is deleted, resulting in *gau and **au is then reduced to u (and lengthened for syllabic weight). Thus:

PSM *gahu >

\[ \text{gahu (Sanana)} \]

\[ \text{gaØu} > \text{gØØu} > \text{guu}^{60} \text{ (Mangon)} \]

6.3.1.3 Sound changes from PSM to Sanana. Consonants. *l – l

This is not a sound change but rather, a peculiar and notable example of what appears to be the halting of a sound change across a particular stratum of words. I hypothesize that

57 It is twice identified as a change applying only to Buru (pp. 32, 33).

58 About the inability to account for Sula’s vowels, Collins writes, “Given the elementary state of our knowledge of these languages, a thorough consideration of the reflexes of PAN vowels must wait.” (Collins 1981:35)

59 Presumably he means the segment first became l and then subsequently became h in some but not all dialects.

60 My explanation is not optimal, however, as there is no generalized rule for reducing **au to u.
as a bilingual population, Sula speakers unconsciously interrupted (or perhaps even reversed) a sound change in this part of the lexicon because of the words' similarity to cognates in Malay—the speakers’ other ‘first language’. In other words: PSM *l > h was a regular change, but bilingualism in Malay either blocked it on some words or put it back.

Whatever the cause, the /l/ phoneme was apparently retained in a number of words. It is not clear that all additional forms I collected with an l–h correspondence reflect PAN *d/D; however, the forms with an l–l correspondence do appear to reflect PSM *l.

One explanation for why some instances of *l did not become h, could be that l was retained in intervocalic and onset position in early loans and forms that are very similar to Malay cognates or false cognates. These forms might have been ‘protected’ from the spread of *l > h. That is, most Sula speakers have been bilingual in Malay for many generations, and they would thus have frequently produced l in these cognate (and false cognate) forms while conversing in Malay. This fact might have halted the spread of *l > h in these particular Sula forms. The subset of vocabulary in question is demonstrated in the following examples.

---

61 This has been reported to me by centenarians whom I worked with in remote villages. Additionally, Dutch annual reports indicate a high degree of interaction, and even the Sula wordlist collected by Wallace’s assistant imply an ability to interact in a lingua franca, as the stay on the island was not long, and the terms collected would have been complicated to gather through only gestures or trial and error.
The similar-word hypothesis is not fully satisfactory though, because the following forms are not transparently similar to Malay. In these particular words, perhaps a more plausible explanation is a usage frequency hypothesis; however, as Lyle Campbell points out, usage frequency has not been adequately shown to be a mechanism for halting the spread of sound change (p.c. 2020).

<table>
<thead>
<tr>
<th>PSM</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*bahali</td>
<td>bahal</td>
<td>(cf. Malay <em>malu</em>) ‘shy, ashamed’</td>
</tr>
<tr>
<td>*bet pila</td>
<td>bet pila</td>
<td>(cf. Malay <em>bila</em>) ‘when?’</td>
</tr>
<tr>
<td>*galima</td>
<td>galima</td>
<td>(cf. Malay <em>lima</em>) ‘five’</td>
</tr>
<tr>
<td>*kalo</td>
<td>kalo</td>
<td>(cf. Malay <em>kalau</em>) ‘if’</td>
</tr>
<tr>
<td>*koli</td>
<td>kol</td>
<td>(cf. Malay <em>kulit</em>) ‘skin’</td>
</tr>
<tr>
<td>*la</td>
<td>la</td>
<td>(cf. Malay <em>layang</em>) ‘to float, fly’</td>
</tr>
<tr>
<td>*laka</td>
<td>laka</td>
<td>(cf. regional Malay <em>laka</em>) ‘to walk’</td>
</tr>
<tr>
<td>*lajji</td>
<td>lan</td>
<td>(cf. Malay <em>langit</em>) ‘sky’</td>
</tr>
<tr>
<td>*lawa</td>
<td>lawa</td>
<td>(cf. Malay <em>labah-labah</em>) ‘spider’</td>
</tr>
<tr>
<td>*lika</td>
<td>lika</td>
<td>(cf. Malay <em>milih</em>) ‘to choose’</td>
</tr>
<tr>
<td>*lima</td>
<td>lima</td>
<td>(cf. Malay <em>lima</em>) ‘hand’</td>
</tr>
<tr>
<td>*(manu)telu</td>
<td>(man)tel</td>
<td>(cf. Malay <em>telur</em>) ‘egg’</td>
</tr>
<tr>
<td>*tilu</td>
<td>til</td>
<td>(cf. Malay <em>telinga</em>) ‘ear’</td>
</tr>
</tbody>
</table>
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**Table 11. PSM to Sanana. *l–l Counter Examples**
The following words have no obvious, common Malay counterpart with *l.

<table>
<thead>
<tr>
<th>PSM</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*nonu boli</td>
<td>nona bol</td>
<td>(cf. Malay *goler?) 'to lie down'</td>
</tr>
<tr>
<td>*sagila(?at)</td>
<td>sagilaʔat</td>
<td>(cf. Malay *halilintar?) 'lightning'</td>
</tr>
<tr>
<td>*dalena</td>
<td>dalena</td>
<td>(cf. Malay *lebar?) 'wide'</td>
</tr>
<tr>
<td>*balela</td>
<td>balela</td>
<td>(cf. Malay ?) 'to laugh’/'smile’er</td>
</tr>
<tr>
<td>*gatelu</td>
<td>gatel</td>
<td>(cf. Malay ?) 'three'</td>
</tr>
<tr>
<td>*kila</td>
<td>kila</td>
<td>(cf. Malay ?) 'liver'</td>
</tr>
<tr>
<td>*lepa</td>
<td>lepa</td>
<td>(cf. Malay ?) 'above'</td>
</tr>
<tr>
<td>*lifi</td>
<td>lif</td>
<td>(cf. Malay ?) 'to turn'</td>
</tr>
</tbody>
</table>

The inability to reconcile the *l–l counter examples underlines the fact that there are multiple sources for Sula *l: one that descends from PAN *D/d and at least one that is more mysterious. Unfortunately my data do not reveal more about this source, and I can only speculate that the words entered the language subsequent to *l>*h/[V_V], [#_] and spread to both dialects.

**6.3.1.4 Sound changes from PSM to Sanana. Consonants. *ŋ>n**

**Table 12. PSM to Sanana. *ŋ>n**
PSM *ŋ became n in Sanana without exception.

<table>
<thead>
<tr>
<th>PSM</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*baifoŋi</td>
<td>baifon</td>
<td>‘to hide’</td>
</tr>
<tr>
<td>*dauvoŋi</td>
<td>daʔufon</td>
<td>‘to hide’</td>
</tr>
<tr>
<td>*laŋi</td>
<td>lan</td>
<td>‘sky’</td>
</tr>
<tr>
<td>*maŋa</td>
<td>mana</td>
<td>‘sharp’</td>
</tr>
<tr>
<td>*maŋa pau</td>
<td>mana pau</td>
<td>‘beat, pound’</td>
</tr>
<tr>
<td>*meŋa</td>
<td>mena</td>
<td>‘to cry’</td>
</tr>
<tr>
<td>*(N-)saŋa</td>
<td>sana</td>
<td>‘branch’</td>
</tr>
<tr>
<td>*naŋu</td>
<td>nan</td>
<td>‘to swim’</td>
</tr>
<tr>
<td>*ŋa</td>
<td>na</td>
<td>‘name’</td>
</tr>
</tbody>
</table>
Sula

<table>
<thead>
<tr>
<th>*ŋapu</th>
<th>nap</th>
<th>‘head’</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ŋihi</td>
<td>nihi</td>
<td>‘tooth’</td>
</tr>
<tr>
<td>*saŋa-petu</td>
<td>sanapet</td>
<td>‘thatch/roof’</td>
</tr>
<tr>
<td>*yaŋa</td>
<td>yana</td>
<td>‘to see’</td>
</tr>
</tbody>
</table>

### 6.3.2 Sound changes from PSM to Sanana. Vowels

#### 6.3.2.1 Sound changes from PSM to Sanana. Vowels. *u>a/o\sigma_#

Lowering of *u to a where the preceding syllable contains a mid back vowel is another particularly interesting sound change which has no apparent phonetic motivation, similar to the lowering of PAN *u before high vowels described in the previous section. In an o\sigma_u environment, the tongue raises between the first and second vowel. A change from PSM *o\sigma_u > o\sigma_a requires the tongue to lower between the first and second vowel, so this change not only lacks an obvious phonetic motivation, it appears to behave in opposite manner to phonetic expectation and provide even more corroboration to the Neolinguist assertion that change is possible in the absence of a generalizable underlying phonetic motivation. Again, see Blust (2017) for more on this and an expanded discussion on the theoretical implications of sound changes that are not phonetically conditioned.

This is another change within an ordered sequence: it must have occurred prior to a final high vowel deletion that will be discussed. If it had not, forms like ‘to suck’, ‘to burn’, and ‘to hit’ would have ended up as bos, don, and dot instead of bosa, dona, and dota, because the final vowel deletion would have prevented the change occurring in those items.
Table 13. PSM to Sanana. Vowels. *u>a/oσ#

Lowering of *u to a where the preceding syllable contains a mid back vowel (full table in Appendix D)

<table>
<thead>
<tr>
<th>PSM</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*bagou</td>
<td>bagoa</td>
<td>‘cold’</td>
</tr>
<tr>
<td>*bosu</td>
<td>bosa</td>
<td>‘to suck’</td>
</tr>
<tr>
<td>*donu</td>
<td>dona</td>
<td>‘to burn’</td>
</tr>
<tr>
<td>*dotu</td>
<td>dota</td>
<td>‘to hit’</td>
</tr>
</tbody>
</table>

6.3.2.2 Sound changes from PSM to Sanana. Vowels. *i,u>Ø

*i,u>Ø / [-glottal] _#*

Sanana deleted word final high vowels following non-glottal consonants. Presence of forms like *tapa* ‘left’ and *laka* ‘walk’ demonstrate that this change occurred only to high vowels (i and u). The vowels remain in words where they follow other vowels and glottal consonants (e.g., *tui* ‘snake’, *yau* ‘far’, *behi* ‘to throw’, *gahu* ‘two’). They may also remain following affricates; however there are too few examples to state this conclusively (e.g., *gaji* ‘grease’, which could be a loan).
### Table 14. PSM to Sanana. *i,u>*Ø
Word final high vowel deletion following non-glottal consonants. (Full table in Appendix D.)

<table>
<thead>
<tr>
<th>PSM</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*(t,d)ufi</td>
<td>duf</td>
<td>‘to stab’</td>
</tr>
<tr>
<td>*aku</td>
<td>ak</td>
<td>‘1SG’</td>
</tr>
<tr>
<td>*api</td>
<td>ap</td>
<td>‘fire’</td>
</tr>
<tr>
<td>*asu</td>
<td>as</td>
<td>‘dog’</td>
</tr>
<tr>
<td>*bagu</td>
<td>bag</td>
<td>‘thick’</td>
</tr>
<tr>
<td>*bahali</td>
<td>bahal</td>
<td>‘shy’</td>
</tr>
<tr>
<td>*baifonj</td>
<td>baifon</td>
<td>‘to hide’</td>
</tr>
<tr>
<td>*bamapu</td>
<td>bamap</td>
<td>‘to cook’</td>
</tr>
</tbody>
</table>

### 6.3.3 Sound changes from PSM to Sanana. Non-generalizable

In addition to what is described above, there are also a handful of changes that cannot be generalized or adequately accounted for. Pending further data collection, these instances have to be written off as evidence of the inconvenient fact that language is a messy, organic, organism with occasional peculiarities that are hard to characterize, when their explanations have been obfuscated by time.

#### 6.3.3.1 Sound changes from PSM to Sanana. Non-generalizable.

-1- epenthesis occurred in ‘to steal’.

PSM *biØnaka >

biInaka ‘to steal’ (Sanana)

binaka ‘to steal’ (Mangon)

This l could not have been present in PSM, or it would still exist in the Mangon dialect. That said, there is also another Sanana variant of this word with a geminate n
Chapter 2: dialects. part 1

(binnaka). These three forms reflect a mysterious history and they are difficult to reconcile.

6.3.3.2 Sound changes from PSM to Sanana. Non-generalizable.
The numeral prefix ga- was dropped in the morpheme for ‘one’ and all ordinal derivatives.

While less problematic in that it does not involve sound change, this occurrence is nevertheless interesting, because the prefix is retained in the lexical item, gahia which means ‘alone’. In the Mangon form, the h was also deleted and reduced from gaia to gØia. No analogous items have been identified. Examples:

PSM *fatu-ga-hia >

**fat-ga-hia > fat-Ø-hia ‘one unit’ (Sanana)

**fatu-ga-ia > fat-gØ-ia ‘one unit’ (Mangon)

PSM *ga-hia >

Ø-hia ‘one’ (Sanana)

**ga-Øia > gØ-ia ‘one’ (Mangon)

PSM *ca-ga-hia >

c-a-Ø-hia ‘one thousand’ (Sanana)

c-a-ga-ia > ca-gØ-ia ‘one thousand’ (Mangon)

6.3.3.3 Sound changes from PSM to Sanana. Non-generalizable.
*g deletion in two words.
PSM *gami >

**gam > Øam ‘to squeeze’ (Sanana)


gami ‘to squeeze’ (Mangon)

PSM *gifu >

**gif > Øif ‘to open’ / ‘to uncover’ (Sanana)

gifu ‘to open’ / ‘to uncover’ (Mangon)

Proto *g was deleted in two Sanana forms. Problematically, it does exist in onset position elsewhere in the dialects.

6.3.3.4 Sound changes from PSM to Sanana. Non-generalizable.

*mf to /f/ reduction

PSM *mamVfai >

maØfai ‘to swell’ (Sanana)

mamfai ‘to swell’ (Mangon)

If *mf was a consonant cluster, it was reduced to f in ‘to swell’. No analogous forms are present.

6.3.3.5 Sound changes from PSM to Sanana. Non-generalizable.

Final ŋ deletion

PSM *rekiŋ (L) >

**rekiØ > rekØØ ‘to count’ (Sanana)

rekiŋ ‘to count’ (Mangon)
Final η was deleted in the Dutch loan meaning ‘to count’. This either occurred prior to final vowel deletion, or Sanana and Mangon each independently borrowed this from Dutch, Sanana in the form of reki and deleted the final i, and as reking in Mangon. While the second scenario is possible, there did not seem to be a lot of direct interaction with Dutch people in Sula during the colonial period. It is more likely that Dutch loans entered by way of intermediary languages: Malay, the regional lingua franca, and Ternate, the administrative tongue.

Later Malay loanwords are more likely to be from Standard Indonesian due to its national-language status (official documents, education curricula, mass-media, etc.), but Sula’s early Malay loans most likely entered from Ambonese/Moluccan Malay, which was eastern Indonesia’s lingua franca during the centuries of trade prior to formation of the modern nation state. As Robert Blust notes (p.c. 2020), we can tell that forms like reking, were borrowed from Moluccan Malay, because that dialect underwent final nasal velarization while Standard Indonesian did not.

6.3.3.6 Sound changes from PSM to Sanana. Non-generalizable.

PSM *s > h in ‘flesh’

PSM *(N-)isi >

ihi ‘meat/flesh’ (Sanana)
nisi ‘meat/flesh’ (Mangon)

PSM *s likely became h in the Sanana form for ‘flesh’ as it would be improbable for *h to have become s in Mangon.
6.3.3.7 Sound changes from PSM to Sanana. Non-generalizable.
Proto *y > ?

PSM *fayata >

faʔata ‘heavy’ (Sanana)

fayata ‘heavy’ (Mangon)

Proto *y became a glottal stop in the form meaning ‘heavy’. The reverse is not possible, because the Mangon form would have deleted the segment if the proto form had contained a glottal stop.

6.4 Sound changes from PSM to Mangon

This section illustrates changes that occurred as the proto language split and evolved into the modern Mangon dialect group.

6.4.1.1 PSM to Mangon. Consonants. *h>Ø

With few exceptions, PSM *h was lost in Mangon in all positions.
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**Table 15. PSM to Mangon: *h>*Ø**
The following forms demonstrate *h deletion.

<table>
<thead>
<tr>
<th>PSM</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*baha</td>
<td>baː</td>
<td>‘to buy’</td>
</tr>
<tr>
<td>*bahali</td>
<td>bali</td>
<td>‘shy’</td>
</tr>
<tr>
<td>*behi</td>
<td>beː</td>
<td>‘to throw’</td>
</tr>
<tr>
<td>*gad(i,e)ha</td>
<td>gadia</td>
<td>‘four’</td>
</tr>
<tr>
<td>*gahu</td>
<td>guː</td>
<td>‘two’</td>
</tr>
<tr>
<td>*gatahua</td>
<td>gatua</td>
<td>‘eight’</td>
</tr>
<tr>
<td>*han</td>
<td>an</td>
<td>‘who?’</td>
</tr>
<tr>
<td>*kahiku</td>
<td>kaiku62</td>
<td>‘grass’</td>
</tr>
<tr>
<td>*mahi</td>
<td>mai</td>
<td>‘sea’</td>
</tr>
<tr>
<td>*nahu</td>
<td>nau</td>
<td>‘long’</td>
</tr>
<tr>
<td>*ŋihi</td>
<td>ŋiː</td>
<td>‘tooth’</td>
</tr>
<tr>
<td>*pougahu</td>
<td>pogu(:)</td>
<td>‘twenty’</td>
</tr>
<tr>
<td>*sahafa</td>
<td>fafa</td>
<td>‘rat’</td>
</tr>
<tr>
<td>*samohu</td>
<td>samo</td>
<td>‘needle’</td>
</tr>
<tr>
<td>*tahaga63</td>
<td>taga</td>
<td>‘lake’</td>
</tr>
<tr>
<td>*tahun</td>
<td>taun</td>
<td>‘year’</td>
</tr>
</tbody>
</table>

A few counterexamples have been recorded in which forms are produced optionally with h. All are high frequency words, and all also have variants without h. These forms could either be back borrowings from Sanana, examples of *h retention, or indication that the change has not been fully adopted by all speech communities.

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62 This term is difficult to reconcile, as many variants were collected—often within the same community. These variants include: kahik (S), ka’ik (S), kaik (S), hik (S), kahiku (M), ka’iku (M) (c. 1900), kiku (M), kahik (CMD, keku (CMD), kiku (CMD).

63 This is a Malay/Sanskrit loan, but taga – tahaga show expected sound correspondences, so it is likely that the borrowing occurred prior to the separation of Mangon and Sanana dialects.
### TABLE 16. PSM TO MANGON: *h>Ø EXCEPTIONS
The following forms are produced optionally with *h.*

<table>
<thead>
<tr>
<th>PSM</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*dahi</td>
<td>dahia</td>
<td>‘true’</td>
</tr>
<tr>
<td>*deha</td>
<td>deha</td>
<td>‘be located’</td>
</tr>
<tr>
<td>*hapa</td>
<td>hapa</td>
<td>‘what’</td>
</tr>
</tbody>
</table>

### 6.4.1.2 PSM to Mangon. Consonants. *ʔ > Ø*

Surface glottal stops are produced in Mangon (e.g., [faʔ.ko] ‘dog’, [saʔ.ka.fi] ‘to hold, as a baby’); however, these do not appear to be phonemic, as no minimal pairs have been found, and hypothetical pronunciations with and without surface glottal stops have been judged equally correct. The following forms demonstrate *ʔ* deletion.

### TABLE 17. PSM TO MANGON: *ʔ > Ø
Instances of *ʔ* deletion

<table>
<thead>
<tr>
<th>PSM</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*daʔufoŋi</td>
<td>daufoŋi</td>
<td>‘to hide’</td>
</tr>
<tr>
<td>*faʔoki</td>
<td>faoki</td>
<td>‘forest’</td>
</tr>
<tr>
<td>*kiʔi</td>
<td>kiː</td>
<td>3SG</td>
</tr>
<tr>
<td>*maʔana</td>
<td>mana</td>
<td>‘man’</td>
</tr>
</tbody>
</table>

### 6.4.1.3 PSM to Mangon. Consonants. /N-/ prefix

Many Mangon forms have word-initial prenasalized consonant sequences. It is common in Sula to frame nouns in isolation using the morpheme in,\(^\text{64}\) and this might be related. It is unclear whether the nasal segment in Mangon’s nasal-initial clusters reflect a fossilized morpheme that was lost in Sanana, or whether they arose in Mangon

---

\(^{64}\) *in* is used to indicate possession, and it also frequently serves an expletive-like function.
subsequent to the dialect split—possibly derived from the *in* morpheme. If the segments in Mangon do derive from *in*, it is not clear by what process. The syllable Maximal Onset Principle often explains similar phenomena, but it would be inadequate here, as Mangon shows initial nasals on words with vocalic initial stems and consonant initial stems alike.

Whatever the origin, the result is a series of prenasalized consonants or nasal-initial clusters whose phonemic status is debatable, as tends to be the case with prenasalized consonant sequences (e.g. Herbert 1975). An odd if not eerie coincidence, is that nasal clusters existed in an earlier stage in the language family. It is tempting to speculate that the prenasalized consonant sequences in Mangon could reflect earlier segments, but they do not seem to be reconstructable, and furthermore, that would require convergent loss of those segments in sibling languages and also the sister Sula dialects. The following forms demonstrate word initial prenasalized clusters present in Mangon but not in Sanana. Many additional examples can be found in the Chapter 4 vocabulary list.

<table>
<thead>
<tr>
<th>PSM</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*(N-)saŋa</td>
<td>ncaŋa</td>
<td>‘branch’</td>
</tr>
<tr>
<td>*(N-)losa</td>
<td>nlosa</td>
<td>‘leaf’</td>
</tr>
<tr>
<td>*(N-)yai</td>
<td>nyai</td>
<td>‘leg/foot’</td>
</tr>
<tr>
<td>*(N-)boyu</td>
<td>mboyu</td>
<td>‘tail’</td>
</tr>
</tbody>
</table>

There are several exceptional forms as well: *manpani* ‘wing’ contains a prenasalized cluster internally. The form ‘wing’ is also produced as, *npani*. The form
manpani is a clear contraction of the compound word, *manu-(n)pani* ‘bird wing’. What’s not certain is whether the *np* onset in *npangi* is original or if the *u* was contracted and the *n* coda was rebracketed to the onset of *pani*. The form *fantui* ‘star’, which also contains an internal prenasalized consonant, belongs to a class of environment nouns that all include a non-analyzable morpheme, *fa-/pa*. Evidence that the nasal segment in these clusters likely derives from a separate morpheme is seen in the fact that it also occurs on otherwise vocalic syllables such as * nisi* ‘meat’.

6.4.1.4 PSM to Mangon. Consonants. *s > c* /#N_

PSM *(N-)sana >

sana ‘branch’ (Sanana)

ncaña ‘branch’ (Mangon)

*c* is so infrequent that this sound was originally seen as a likely loan phoneme. Interestingly, the Malay form *cabang* ‘branch’ also contains the affricate; however these forms are not transparently similar to one another. Robert Blust and Lyle Campbell both noted that the *c* in *ncaña* and *s* in *sana* may be only an apparent difference, because transition between *n* and *s* in various other languages frequently causes an *excrecent* [t] in between *n* and *s* to ease articulation of the segments. Campbell provided English examples *prince* [prIn(t)s], *dance* [daen(t)s], and *incense* [InsEn(t)s], and Blust explained that in fact the eastern Indonesian language, Bimanese, has a very similar situation where *sana* means ‘a branch’ and *ncaña* means ‘to branch, bifurcate’. I have

---

65 Other nouns in this set are *fasina* ‘moon’, *faoki* ‘forest’, and *(p,f)aŋara* ‘cloud’
not found there to be a similar noun–verb contrast in Sula, but this should be investigated.

It may be sufficient to state that (at least for some speakers), /n-s/ is realized as [nts]. Some other words that appear to have also gained c via ns are: ence ‘half’, kaminca ‘butterflyfish’, monca ‘green jobfish’, and nceli ‘fruit’. More investigation is needed to determine whether other analogous forms exist in the language and whether *c is indeed reconstructable at all.

6.4.2 PSM to Mangon. Vowels

Many vowel clusters are reduced in Mangon; however, it is difficult to find a single phonetic condition to account for all of the changes. In instances of *V₁V₁>V₁, what happens is the two like vowels are reduced to a single long vowel. The result is phonetically identical to a double vowel in the same syllable, because these reductions land on stressed syllables and stress in Sula is largely realized by vowel length, but Sula does not permit multiple vowels in the same syllable, so in regions where this reduction is far along, the resulting long vowel is not an instance of a double vowel; Sula’s stress pattern already explains the vowel lengthening. It must be noted that there are regions where this change is somewhat ambiguous, and speakers do occasionally accept the word reanalyzed with the long vowel split across syllables (two vowels), but where this change is far along, speakers strictly permit only a long vowel within a single syllable.

With *ei>e and *ou>o, the second vowel is deleted, and it is a higher vowel. But in *ao>o, the first vowel is deleted, and it is a lower, less back vowel.
6.4.2.1 PSM to Mangon. Vowels. *V1V1>V1

Sequences of like vowels are reduced to a single vowel with length determined by a minimal word requirement.

**TABLE 19. PSM to Mangon: *V1V1>V1**

<table>
<thead>
<tr>
<th>PSM</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*baha&gt;baa&gt;</td>
<td>baː</td>
<td>to buy’</td>
</tr>
<tr>
<td>*bahali&gt;baali&gt;</td>
<td>baːli</td>
<td>‘shy’</td>
</tr>
<tr>
<td>*ki’i&gt;kii&gt;</td>
<td>ki:</td>
<td>‘3SG’</td>
</tr>
<tr>
<td>*maʔana&gt;maana&gt;</td>
<td>maːna</td>
<td>‘man’</td>
</tr>
<tr>
<td>*ŋihi&gt;ŋii&gt;</td>
<td>ŋi:</td>
<td>‘tooth’</td>
</tr>
<tr>
<td>*sahafa&gt;saafa&gt;</td>
<td>faːfa</td>
<td>‘rat’</td>
</tr>
<tr>
<td>*tahaga&gt;taaga&gt;</td>
<td>taːga</td>
<td>‘lake’</td>
</tr>
</tbody>
</table>

6.4.2.2 PSM to Mangon. Vowels. *ei>e, *ou>o

Sequences of *ei and *ou were reduced to the vocoid with the most prominence, e and o respectively, and this reduction can leave a mark on the word’s stress pattern. Where a CVCV word typically has a stressed first syllable in Sula, the reduction can result in a bimoraic (heavy) ultimate syllable when the ultimate syllable was previously a stressed penultimate syllable (e.g. [ap'fe.i] > [ap'feː]). These vowel-length diacritics are indicated in parentheses, because the stress pattern in these words is inconsistent among speakers—perhaps an indication that it is shifting to the more expected penultimate location for
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CVCV words. In this reduction, the vowel that is retained is both first in sequence and lower than the vowel that is deleted.

TABLE 20. PSM to Mangon: *ei>e, *ou>o
Examples of *ei to e and *ou to o reduction.

<table>
<thead>
<tr>
<th>PSM</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*apfei</td>
<td>apfe(ː)</td>
<td>‘smoke’ (fire)</td>
</tr>
<tr>
<td>*bafei</td>
<td>bafe(ː)</td>
<td>‘smoke, fog’ (general)</td>
</tr>
<tr>
<td>*bagou</td>
<td>bago:</td>
<td>‘cold’</td>
</tr>
<tr>
<td>*behí&gt;bei&gt;</td>
<td>be:</td>
<td>‘to throw’</td>
</tr>
<tr>
<td>*fou</td>
<td>fo:</td>
<td>‘hair, feather’</td>
</tr>
<tr>
<td>*ganei</td>
<td>gane(ː)</td>
<td>‘six’</td>
</tr>
<tr>
<td>*pou</td>
<td>po:</td>
<td>‘blood’</td>
</tr>
<tr>
<td>*pou</td>
<td>po:</td>
<td>‘ten’</td>
</tr>
<tr>
<td>*pouga hu</td>
<td>pogu:</td>
<td>‘twenty’</td>
</tr>
<tr>
<td>*pougal ima</td>
<td>pogalima</td>
<td>‘fifty’</td>
</tr>
<tr>
<td>*samohu&gt;samou&gt;</td>
<td>samo</td>
<td>‘needle’</td>
</tr>
</tbody>
</table>

6.4.3 Non-generalizable

6.4.3.1 PSM to Mangon. Non-generalizable.
*a lost from *au sequence

In forms containing the number ‘two’ only, *a from the sequence *au was lost, and the remaining u was lengthened to meet syllabic weight requirements.

PSM *gahu>gaØu>gu: ‘two’

---

66 It must also be noted that in spite of the reasons for concluding these vowel sequences are reduced to single segments, they could of course also be analyzed as double vowels. And in fact, for the sake of pronunciation clarity, they are sometimes transcribed as double vowels in other sections of this dissertation.

67 As mentioned in the previous footnote, this form is an example of a word that is written with a double vowel elsewhere in the dissertation to better represent the pronunciation.
Sula

PSM *gatahua>gataØua>gatau ‘eight’ (from ‘minus two’)

PSM *pouguhu>pougaØu>pogu: ‘twenty’

6.4.3.2 PSM to Mangon. Non-generalizable
balfoŋi

If derived from PSM *baifoŋi, this peculiar word undergoes both -l- epenthesis and a vowel cluster reduction from *ai to /a/. This is not mirrored elsewhere in the lexicon and cannot be explained. It might make more sense to consider the Sanana form baifon and the Mangon form balfoŋi as similar but separate forms with the same meaning. If they are in fact both descended from the same PSM form, however, a possible explanation for balfoŋi could be that it is a compound of the active auxiliary bal and the abbreviated (or possibly back-formed) variant, fongi. If it is indeed directly derived from PSM *baifoŋi, the derivation followed the following path: *baifoŋi>baaŋfoŋi>balfoŋi ‘to hide’

6.4.3.3 PSM to Mangon. Non-generalizable. *s > f

In the form fafa ‘rat’, *s became /f/. It is not likely that the proto form was *safafa, because sahafa, saafa, and safu all occur in Sanana, where intervocalic h deletion appears to have begun but is still optional and limited mostly to rapid, non-deliberate speech. Example: PSM *sahafa>saØafa>saØØfa>fafa ‘rat’

6.4.3.4 PSM to Mangon. Non-generalizable. *ao>o

Two PSM words are present with *ao sequences that were reduced to o. That is, the vowel that was retained is both higher and it is the second in the sequence, whereas in
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*ou sequences above, the opposite occurs, $u$ was deleted: the retained vowel is lower and it is the first in the sequence. Because of the conflicting phonological motivations, these similar reduction processes seemingly must be taken as independent instances of change. Examples: PSM *baoni>boni ‘mouth’; PSM *saotu>sotu ‘dry’

7 Proto–Sula–Mangon in summation

In Proto–Sula (before the Sanana–Mangon split), PAN *u was lowered in words where the following syllable contained a high vowel.

In the Sanana dialect:

A.  *d became an alveolar trill.

B.  *l became $h$ in intervocalic and onset position in native vocabulary, but it appears that a subset of the lexicon with surface similarity to Malay was shielded from this change, and there also appears to be an unidentified source for some other instances of $l$ in the language.

C.  *ŋ became $n$ in Sanana in all environments.

D.  peculiarly, $u$ was lowered to $a$ where the preceding syllable contains a mid back vowel—a change that seems at face value to display the opposite of phonetic motivation. This is an order dependent scenario where the lowering must have proceeded the following in E.

E.  word-final high vowels were deleted following non-glottal consonants but not following vowels and glottals.

In the Mangon dialect:

A.  *h was lost in all positions (with a few exceptional lexemes).

B.  *ʔ was deleted.
C. Initial nasals, which might reflect an expletive (possibly genitive) marker, were fused to many nouns. These often resulted in either prenasalized segments or nasal-initial consonant clusters (in a dialect that otherwise avoids clusters).

D. Sequences of like vowels were reduced to long vowels.

E. *ei was reduced to e.

F. *ou was reduced to o.

The study of the Sula language is still very much in its infancy; however, this section has built upon the groundbreaking work begun by Robert Blust and James T. Collins nearly four decades ago, and it helps to narrow the academic literature gap. It provides a more complete picture of the inner structure of Sula—especially with regard to the confusing vowel correspondences, and it provides data from which hypotheses about higher branches of the Austronesian language family can be evaluated.

Sula is indeed a single language with a clear primary division between two dialect groups. Speakers across this dialect divide can at times strain for mutual intelligibility, but the patterns of divergence are mostly regular and speakers are able to quickly adapt to the differences. The previous pages have provided an account of the dialect differences that describe correspondences and the sound changes responsible for Sula’s synchronic variation. They can also be read as an algorithmic workflow that can compare a word from either Sula or Mangon and generate the corresponding Proto–Sanana–Mangon form in nearly all cases where cognates are present. The data provided will aid in refining Sula’s position within the Austronesian family as well as helping to understand Sula’s place in its local subfamily of languages.
CHAPTER 2: DIALECTS. PART 2
1 Contact influenced dialects. Introduction

Long after the four Sula tribes settled the archipelago and their dialects diverged, several villages were established on Mangon by settlers from Sanana Island. In three of these villages; Capalulu, Wai U, and Orifola, a definable mixed dialect region developed beside its larger Mangon speaking neighbors. The new region’s early settlers spoke mutually intelligible Sanana language varieties (primarily of the Facei tribe), but generations of contact and intermarriage resulted in significant leveling and the development of a definable distinct dialect. The most apparent characteristic that sets apart the new settlement’s dialect from Sanana Island dialects is the presence of final epenthetic vowels. This epenthesis results in forms that are superficially similar to the neighboring Mangon-dialect's vowel-final forms, but this region's word stems also maintain innovations that are unique to Sanana.

Dialect-forming changes were found to include phonological and lexical leveling: a phonological preference against word-final consonants was introduced from Mangon, and Mangon words that were phonologically simpler tended to get borrowed. In addition, some innovative lexical items were present, as were some interdialect forms that retain characteristics of both source dialects.


2 Contact influenced dialects. Dialect Leveling

Multiple Sula dialects and sub-dialects are considered in this study. Over the past several generations, Facei tribe members from the island of Sanana have established three settlements on the neighboring island of Mangon: Capalulu, Wai U, and Orifola (see Figure 11). These settlements are roughly at the center of the island's southern shore, just west of its southernmost point and in close proximity to the much more populous Mangon tribe's ancestral homeland. The Facei newcomers still speak a sub-dialect of the Sanana variety of Sula, but it shares surface similarities to the Mangon variety of Sula. That is, generalizable innovations characterizing Sanana are still present in their speech, and importantly, while a number of unique Mangon lexemes have been borrowed, numerous forms are identical to those found on Sanana. A process of dialect leveling appears to be underway, resulting in a dialect on the island of Mangon that is distinct from and in some ways intermediate to its Sanana progenitor and its Mangon neighbor. For the purposes of this study I refer to the region and dialect as Central Mangon Dialect (CMD). 

---

68 Facei is the name of a tribe and also a neighborhood of Sanana town on Sanana Island (where the tribe is said to have first settled). Although community members sometimes refer to 'Facei language', they say it is the same as 'Fagudu language' and almost the same as 'Falahu language'. These determinations are based on a few culturally poignant identity marking words: most prominently giya/gaya 'to eat'. It is uncertain but doubtful that a tribe-specific dialect division is still definable among Fagudu, Falahu, and Facei; these tribes are however represented by numerous regional dialects in the various communities they have settled. The Mangon tribe was originally settled on the neighboring island to the north, and while there is minor regional variation within Mangon, the previous section demonstrated that broad generalizable differences between Mangon and the other three tribes can be clearly defined.

69 Mangon is the present day endonym. The island and dialect are also referred to as Mangole and Mangoli, and less commonly Mongole, and Mongoli.

70 I use CMD to reference the region that includes Orifola, Wai U, and Capalulu towns and also to the dialect spoken in that region.
The four Sula tribes are Fagudu, Falahu, Fecei, and Mangon. They traditionally inhabit the Sanana and Mangon islands of the Sula Archipelago (North Maluku, Indonesia). The Mangon tribe originally settled Mangon Island, and it traditionally speaks closely related, "Mangon" dialects. The Fagudu, Falahu, and Fecei tribes originally settled Sanana Island, and they traditionally speak closely related, "Sanana" dialects.

This section analyzes data from basic vocabulary elicitation, and it addresses the questions: Do the new communities speak a Sula variety that is demonstrably different from other regions? and if so, what are the differences, and how did they arise? I argue that CMD is indeed different, that it resulted from sociolinguistic processes, and that a prestige scenario likely led to a regular practice of speech accommodation among the new community's early settlers. As no previous research has addressed Sula dialects, it is expected that this study will help our overall understanding of the language and to what degree the processes observed for European languages like English and Norwegian are generalizable to non-European, endangered language scenarios. By developing our understanding of dialect formation processes in under-documented and endangered language communities, linguists will be in a better position to prioritize research when facing populations with dwindling speaker bases.
As discussed earlier, the Sula Archipelago consists of three main islands: Mangon (aka Mangole, Mangoli), Taliabu (Taliabo), and Sanana (Sula) (see Figure 3). The town of Sanana on the island of Sanana is the main population center, but it is also the region with the most pronounced language attrition: all Sanana residents are native speakers of Malay, and it is uncommon to observe young people there communicating in the native tongue. However, language use remains vigorous in the less populous villages throughout the islands.

According to local knowledge, Sanana-based Facei tribe members began to establish new settlements roughly at the center of Mangon island's southern shore beginning around 300 years ago. These settlements were in addition to the Mangon tribe's several villages already on the island.

According to local knowledge, Sanana-based Facei tribe members began to establish new settlements roughly at the center of Mangon island's southern shore beginning around 300 years ago. These settlements were in addition to the Mangon tribe's several villages already on the island.71 There are numerous additional Fagudu, Falahu, and Facei tribal settlements along the southern coasts of Mangon and Taliabo islands, but they are reported to be more recent and they have not been included in this study.

**Figure 12.** Facei tribe migration to Mangon
Facei tribe settlers first left the Facei neighborhood of Sanana city on Sanana Island to establish the CMD region approximately 300 years ago.

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71 These settlements were in addition to the Mangon tribe’s several villages already on the island.
Sula

It is unclear how many dialects (or even separate languages) might be under the umbrella of what is loosely referred to as Sula; for example Lewis et al. (2015) lists Sanana and Mangon as separate languages, however Collins (1982) considers them to be dialects of the same language. The main barrier to research has been lack of data from which to paint a more concise portrait of the language. No work to date has addressed Sula's region-to-dialect mappings; the present study addresses this through targeted wordlist elicitation and analysis.

The sub-dialects of Sanana share definable characteristics, but they are yet to be thoroughly described. For the purpose of the comparisons in this section, "Sanana" forms are the forms received by Facei tribe members on the island of Sanana unless otherwise noted. Collins (1982: 83) infers that there might be a dialect division in the geographical region covered in this section. He remarks, "the status of Capalulu and Urifola [sic], also Sula dialects, is not clear." My field research corroborates this inference, revealing CMD Sula to be demonstrably different from both Mangon Sula and Sanana Sula, and the present chapter demonstrates that it groups more closely genetically with varieties of Sanana and has undergone dialect leveling due to contact with Mangon (see Figure 13).

Interviews conducted with Sula speakers in 2010 and 2014 indicated that there are not any additional primary dialect divisions in Sanana, though it is not out of the question that more could be found. As discussed in the previous section, the island’s dialect map is complex, and there are certainly a number of additional sub-dialects to be

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72 Sanana and Mangon are referred to as "Sula" and "Mangole". They correspond to ISO szn and mqc respectively
defined. One such example is the Sula variety spoken in the town of Malbufa. That town represents an opposite scenario to what is described in this section: Malbufa is a Mangon tribe settlement on Sanana Island rather than a Sanana tribe settlement on Mangon Island. My short time spent in Malbufa left me with the impression that it too has developed a unique dialect. If that variety is indeed also a contact driven dialect, a comparison between Malbufa and CMD could make a significant contribution to our understanding of dialect formation processes in general, and because the contact scenarios are nearly opposite, so a side-by-side comparison could help us differentiate universal tendencies in dialect-leveling from changes that are specific to a given contact scenario.

3 Contact influenced dialects. Dialect forming

**Figure 13.** Genetic relationship of Sula's dialects. CMD Sula genetically groups under Sanana, but it has likely undergone dialect leveling due to contact with Mangon.

Dialect-forming processes include phonological leveling that disfavors word-final consonants, and lexical leveling including (a) a tendency for the dialect to borrow
unmarked words that are phonologically simpler, (b) a handful of innovative lexical items, and (c) forms that are intermediate to the source dialects. The most readily apparent change found that characterizes the speech of this region is the re-emergence of word-final high vowels, where they were previously lost in Sanana dialects (discussed in Chapter 2: dialects. part 1). That is, Sanana deleted word final high vowels following non-glottal consonants, but they remain following vowels and glottal consonants (e.g. *tui 'snake', *yau 'far', *behi 'to throw', *gahu 'two') (Table 21). That change and other levelings plus evidence of interdialect formation to be discussed, have set CMD apart from its progenitor.

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73 Some Sanana–Mangon cognates show final a rather than Ø due to a change occurring prior to final u,i deletion in which final u became a if the preceding syllable contained an o (u>া/ু/#). Examples include: *sosu>sosa 'breast'; *bosu>bosa 'to suck'; *nonu>nona 'to sleep'; *yotu>yota 'to hunt'; *dotu>dota 'to hit'; *momu>moma 'to hit'. See Chapter 2: Part one for more on this.
TABLE 21. LOSS AND RETENTION OF FINAL HIGH VOWELS IN SANANA DIALECTS

i, u > Ø / [-cont, -glottal] _

These data demonstrate the deletion of word-final high vowels following non-glottal consonants in Sanana dialects, and by comparison, help to demonstrate that CMD is a unique dialect that has undergone contact induced changes.

<table>
<thead>
<tr>
<th>PSM</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*waki dabu</td>
<td>wak dab</td>
<td>'to think'</td>
</tr>
<tr>
<td>*saŋa-petu</td>
<td>sanapet</td>
<td>'thatch/roof'</td>
</tr>
<tr>
<td>*samamu</td>
<td>samam</td>
<td>'to chew'</td>
</tr>
<tr>
<td>*nibu</td>
<td>nib</td>
<td>'to sit'</td>
</tr>
<tr>
<td>*saku</td>
<td>sak</td>
<td>'to pierce'</td>
</tr>
<tr>
<td>*afu-tuka</td>
<td>aftuka</td>
<td>'ash'</td>
</tr>
<tr>
<td>*gasi</td>
<td>gas</td>
<td>'salt'</td>
</tr>
<tr>
<td>*kabaresi</td>
<td>kabares</td>
<td>'evil'</td>
</tr>
</tbody>
</table>

Dialects can emerge through leveling processes when speakers of one dialect settle in a region with an established, mutually intelligible dialect, and when a community that is comprised of speakers of mutually intelligible dialects is established in new territory—this being the New Town (immigrant) model (e.g. Kerswill 2002, Kerswill and Williams 2005). The case in this study describes the first scenario: Facei tribe members settled communities adjacent to established Mangon communities, and contact-induced changes took place. These changes included both phonological and
lexical leveling and interdialect formation wherein characteristics from both source dialects were retained in the resulting forms (e.g. Britain and Trudgill 2005).74

3.1 CMD background

Collins (1982) notes that most Sanana settlements on the island of Mangon are quite recent with the exception of those in the CMD dialect region (Figure 14). My own fieldwork consultants in the three CMD communities have self-reported to speaking the same dialect as one another. Personal observation suggests that these three communities do indeed speak dialects of the same type, but that there appears to be a gradation of contact feature adoption where the community closest to the Mangon neighbors speaks a sub-dialect that has taken on more Mangon features than the furthest village. This was also corroborated by observation from a Sanana-speaking assistant. As Collins suspected, the language variety of the CMD region is indeed different from both the Mangon variety and the Sanana varieties. Divergent features are phonological and lexical, as will be demonstrated in the following pages.

74 It must be noted that Trudgill’s model has been harshly criticized, and this document is agnostic on the topic. It is only being noted that the CMD situation seems to reflect what Trudgill describes. For more on the criticisms of Trudgill’s work, see Elizabeth Gordon et al. (2004).
Figure 14. CMD–Mangon–Sanana community and dialect regions
This map shows the border between CMD dialect communities and Mangon dialect communities on the island of Mangon. The island of Sanana is primarily home to Sanana communities (including the traditional home of Fagudu, Falahu, and Facei tribes).

CMD is a distinct Sanana dialect separated from other Sanana varieties. All of the generalizable innovations that define the Sanana dialect group from its proto–ancestor are present in CMD (i.e. *ŋ>n; *d>r /V_V; *l>h/[V_V], [#_]; u>a/oO_#)—including Sanana's loss of final high vowels following non-glottal consonants (Table 21). The latter innovation can be observed in variant forms like gas 'salt' (< *gasi) and gatel 'three' (< *gatelu) as well as in compound words like napOfoa 'hair' (< *napufou). That said, ongoing leveling in CMD results in a dialect that is distinguishable from both sources.

The language change processes appear to be unconscious, as community members indicate a high degree of pride in their Facei heritage and many are under the

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75 For more on the specific sound changes differentiating the Sanana and Mangon dialects, see Bloyd (2015).
impression that they speak a typical Sanana dialect, declaring either that they speak *li Sanana* 'Sanana language' (the Sanana variety) or *li Facei* 'Facei tribe language' (which is then clarified as being essentially the same as Fagudu and Falahu). A few linguistically astute consultants reported speaking *li campur* (mixed language), or *li Orifola/Wai U/ Capuli* (the names of the village they reside in). The vast majority of people questioned self-reported speaking a dialect corresponding to their tribal affiliation. One crucial point to note is that no CMD speakers reported speaking *li Mangon* 'Mangon dialect', and during sessions, if asked whether particular Mangon forms were also acceptable, CMD consultants commonly respond that the forms were only acceptable in *li Mangon*. In essence, CMD residents know they're not speaking Mangon, and they can perceive a difference between their dialect and what is spoken on Sanana island, yet due to tribal affiliation, they still identify as Sanana speakers.

### 3.2 Sula dialect contact

A symphony of phonological and social processes are at work when dialects emerge. Some of the social processes pertinent to the data at hand are founder population effects, swamping effects, and to a limited degree, even early stage creolization.

A newly-settled region's founder population has been theorized to limit the amount that subsequent waves of immigrants can affect dialectal change (Gordon et al. 2004). On the island of Mangon, the Mangon tribe is the original founder population and has been established in the area since long before recorded history. True to Gordon’s hypothesis, the Facei settlers who began arriving ~300 years ago do not appear to have significantly affected the Mangon dialect. While it does not appear that
the introduction of Facei settlements resulted in significant changes to the Mangon dialect, the reverse did occur: the Facei immigrants Sanana dialect was largely modified by contact with Mangon speakers.

Swamping effects, as discussed in Gordon et al. (2004), have to do with cases where the larger population’s variety overwhelms the minority’s variety. Thus, in the case of Mangon island, either (a) minority CMD forms would be pushed out in favor of majority Mangon forms or (b) Mangon forms could have been pushed out if the Facei immigrant population had been enormous. Neither of those effects occurred, however: (a) although contact with the Mangon dialect resulted in significant changes, CMD retained many lexical items, and it has retained all of the innovations that define the Sanana dialects as distinct from Mangon. The second form of swamping (b) was not applicable, because the Facei settlers never approached the population numbers of the Mangon tribe.

The changes that took place in CMD are not indicative of a creolization process, because the source language varieties were closely related. In a traditional view of creolization, a generation of speakers does not receive the previous generation's languages to competence. Children instead receive a pidgin from multiple source strata and use it as the basis for a full-fledged language—the creole (e.g. Bickerton 1977, 1981). Although CMD underwent changes, the two sources were closely related, and the result does not approach new language formation; Mangon and Sanana dialects themselves are by many accounts mutually intelligible (at least among speakers who maintain a modest amount of contact), and CMD is still mutually intelligible with both. Additionally, intergenerational transmission was never interrupted, and modern CMD is
a dialect that shares features with both its Mangon neighbor and also with Sanana dialects.

Dialect leveling occurs when there are two or more original varieties, and at least one of the marked forms is no longer transmitted the original way. This can be associated with highly mobile majority and minority communities settled in a small geographical range where minority forms are replaced (or modified) by their majority counterparts (Kerswill 2003). This scenario can explain the numerous Mangon borrowings present in CMD, and it fits the physical and social layout of the central southern coastal communities of Mangon Island. While the island of Mangon is large and mostly uninhabited, it is reported that the CMD communities have engaged in daily social interaction and trade with their Mangon-speaking neighbors since initial settlement. The communities straddling the CMD–Mangon boundary are less than three kilometers apart (Orifola and Waitulia), and the length between the furthest CMD-speaking community, Capalulu, and the furthest Mangon-speaking community, Waitina, is less than 20 kilometers—a journey that can be covered on foot within a day under most weather conditions.76

3.3 Accommodation and change

Speech accommodation is a probable trigger of much of the leveling that took place in CMD. This phenomenon is known to happen when mutually intelligible dialects share cooperative communicative intent (Kerswill 2003), and that was the likely early contact scenario between CMD and Mangon. Mangon and Facei tribes consider

76 A follow-up study will address the question of whether the village of Orifola shows a higher degree of leveling than Capalulu due to Orifola’s closer proximity to Mangon speakers.
themselves to be siblings within the Sula ethnic community, and the groups do not have a history of hostility or warfare. The island of Mangon is still mostly uninhabited, and it is rich in resources, so competition was not necessary. CMD language consultants do indicate a level of prestige assigned to Mangon though, and early CMD speakers could have accommodated to Mangon speakers because of this, and because Mangon is a much larger population group.

Regular accommodation to Mangon speakers is a plausible hypothetical origin for CMD’s preference against word-final consonants; it would match Mangon’s near word-final consonant prohibition. This is in contrast to typical Sanana dialects where final vowels after non-glottal consonants were deleted. But since Mangon and Sanana each have unique lexical items, and since even the cognate forms often have differences beyond the word-final segment, CMD could not simply borrow the word-final vowel from Mangon. Instead a process of vowel epenthesis seems to be in place to fill the gap. This final consonant prohibition—possibly rooted in early hypercorrection—was overgeneralized and applied to some final liquids and nasals, even where they are not prohibited in Mangon dialects.

Hypercorrection tends to coincide with a prestige imbalance between two varieties of a language, and it has also been demonstrated between a first and second language when an L2 speaker is aware of a partial mismatch between a phonological constraint or grammatical rule, but s/he over applies a correction to contexts where there is no mismatch (e.g. Eckman et al. 2013). Corroborating evidence for a phonological dispreference is seen with CMD words whose primary semantic form is

\[\text{77 The prestige observation could be limited to the CMD region.}\]
Sula

non-cognate to the Mangon counterpart: e.g. *tilu* 'ear' (where *til* is found in Sanana but *talinga* is commonly found in Mangon). These examples indicate that speakers were not simply borrowing Mangon forms into their dialect but instead perceiving a gap and applying epenthesis to fill that gap—even when the epenthesis does not actually result in a match to the Mangon form.78

4 Contact influenced dialects. Data examination

This section examines elicitation data to answer the questions:

1. Do CMD speakers speak a Sula variety that is demonstrably different from others?
2. What are the differences, and how did they arise?

Epenthesis of final [i] and [u] on CMD forms was considered, because there is a near complete correspondence between word-final high vowels following non-glottal consonants in Mangon and final consonants in Sanana. CMD speech displays many instances of final [i] and [u], and that is unexpected considering that the innovations (to be described) genetically group the CMD dialect with Sanana dialects.

The paragogic high vowels given to words with final consonants appears to satisfy the previously postulated phonological preference against word-final consonants introduced from Mangon. In the analysis of CMD, presence or absence of final vowels was determined through targeted elicitation, and sessions were recorded to verify transcription accuracy. In the Mangon dialect, final [i] and [u] is determined by historical retention. In CMD, the presence of final [i] and [u] usually matches the final vowel in Mangon in cognate pairs, but there is no identifiable phonological condition

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78 This is similar to the El Spanish O trope of English speakers mock-speaking Spanish for comic effect or out of desperation by over applying the Spanish masculine o on non-cognate English forms, several comical examples of which are listed on the All The Tropes website article, (“El Spanish-O” n.d.)
determining how [i] or [u] is selected in CMD forms that do not share a Mangon cognate. This topic should be further explored in future studies.

### 4.1 Methods

The CMD data in this study were gathered during a two-week lexical documentation project conducted during the summer of 2014 and during a two week followup during summer 2015. Comparison data was collected on the islands of Sanana and Mangon during three three-month stays in Indonesia and several shorter duration trips. A total of 17 Sula-speaking sites were sampled on Sanana and Mangon islands for this project (Figure 15). Data was collected for the three dialects being compared at 11 Sanana sites,\(^79\) 3 Mangon sites, and 3 CMD sites.

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\(^79\) Not counting Malbufa, which was excluded, because as noted previously, it is a Mangon stock dialect on Sanana island.
Sula

As with other studies carried out during my doctoral research, sites were chosen after consulting with the regional development office, the bureau of statistics, and community elders to find out, (1) which tribe settled each of the islands' villages, and (2) which tribe's dialect each village was reported to speak. A 230-word basic vocabulary list was elicited for each proposed tribal dialect. The list was adapted from the Austronesian Basic Vocabulary Database (Greenhill et al. 2008). Recordings were made on a Zoom H4n solid state recorder at 24bit/96kHz in WAV format. Recordings will be archived in Kaipuleohone, the University of Hawai‘i Digital Ethnographic Archive. Each elicitation session had a minimum of two speakers (often 3–4) to help keep participants primed in Sula and to counteract interference that could arise due to Malay as the elicitation language. Sessions occurred onsite in the village whose dialect was being elicited to further maintain production of local word forms. The two primary speakers of each session were also born and raised in the village, but whenever possible, an additional speaker from another dialect was invited to sit in during word-list elicitation and interject where they could provide comparative observations that might otherwise go unnoticed. Having an external dialect representative present could lead to well-known speech accommodation (e.g. Giles et al. 1991) and audience design (Bell, 1984) effects. This should be explored in followup studies. The CMD participants consisted of three women and three men ranging in age from early 40's to mid-late 50's.

After field data collection, CMD data was compared side-by-side in spreadsheet format to Sula data representing Falahu, Fagudu, and Facei tribe speakers on Sanana island and to Mangon tribe speakers on Mangon island. Forty-one Sanana words from the 230 item elicitation list were identified as containing an environment for word-final /i/ or /u/ epenthesis (Appendix E), and the tokens produced by each CMD
participant were tallied both with and without the variant. Additionally, all of the items found to be non-Sanana vocabulary on the Mangon-dialect elicitation list (i.e. Mangon forms) were identified and compared to the CMD data to discover which had been borrowed by CMD and whether anything is generalizable about them. Speakers did not produce every word, nor did they each produce the same number of tokens, so there is insufficient data to determine which if any of the words might behave differently or what conditions might explain intra-speaker variation. Those topics should be explored in followup studies.

5 Contact influenced dialects. Results

Data comparison revealed CMD to be significantly different from the other speech varieties. The historical loss of word-final vowels in Sanana resulted in final consonants that are prohibited in Mangon, which allows only [+sonorant] consonants word finally (liquids and nasals), yet Mangon's prohibition against word-final consonants has mostly transferred to CMD where it is in some cases even overgeneralized (resulting in epenthesis on some [+sonorant] final consonants), but the prohibition has not been borrowed completely, and forms with final consonants are sometimes produced without any identified condition triggering production or absence of the segments.

5.1 Phonological leveling

Forty-nine words were identified as containing a target environment for word-final /i/ or /u/ epenthesis. These include both (a) words that are cognate with Sanana forms ending in non-glottal consonants and (b) words corresponding to Mangon forms that end in CV[+high] (including liquids and nasals which are not always followed by
vowels). Nine of the 49 forms were not produced with a final vowel. Seven of the nine end in liquid or nasal consonants, and two have a final /t/. A total of 183 tokens were present in session recordings and tallied by speaker. An additional 46 tokens were identified in which a target environment was only present in the first word of a compound, but these were excluded in the analysis because CMD retains Sanana's deletion of high-vowels in that environment.

The average of all speakers' final /i/ and /u/ production across lexical items was 75% of the tokens representing words that are consonant final in the Sanana dialect. Percentages varied from speaker to speaker, ranging from 60% (Man 2) to 85% (Man 3). Figure 16 displays the frequency with which each speaker produced a token with a final vowel (either /i/ or /u/). Vocalic paragoge appears to be a change in progress, as there is intra-speaker variation without discernible conditioning: i.e. no other factors (e.g. word or phonological) were found to correlate with the variation. It appears the change is regular and unconditioned but still incomplete; however, followup studies should specifically test more factors.

Final epenthesis has progressed further with /i/ than /u/: all speakers but one produced a final /i/ a majority of the time, and none did so less than half the time. At least one final /i/ token was produced for all but three of the 22 forms where it was expected, and the remaining three forms all end in [+sonorant] consonants (Table 22)—which are not prohibited by Mangon dialect even though those particular Mangon cognates do happen to have final vowels. That is: the Mangon forms nonu boli 'to lie

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81 I anticipate a followup study will reveal final-vowel variants of these forms.

82 This is evidence for CMD diverging from Sanana subsequent to final high vowel deletion.
Chapter 2: dialects. part 2

down', *koli* 'skin' and *kafini* 'mosquito' end in a final vowel, and the CMD counterpart was not produced with one; however, Mangon does not entirely forbid [+sonorant] consonants, so the preference against final consonants that was borrowed from Mangon might not phonologically prevent CMD from retaining the sonorant-final Sanana forms, *bol*, *kol*, and *kafin*. A followup study should examine whether final /i/ variants exist for these forms that were not produced during data collection. Appendix E also lists the percentage of times each form was produced with or without the final vowel.

**Figure 16.** Percentage of tokens produced with final /i/ & /u/ in CMD
Total number of tokens produced by each speaker indicated in parentheses.
Final /u/ paragoge is also frequent in CMD. All but one speaker produced a final /u/ variant in the majority of instances, and the speaker who did not was
underrepresented in the sample, producing only four tokens, so it is inconclusive whether his speech actually deviates from the norm. It is however worth noting that he produced a low percentage for /i/ as well.

Altogether, the final vowel variants were produced for thirteen of nineteen candidate forms where final /u/ was expected (Table 23). Of the six forms that were not produced with final /u/ variants, four end in a liquid or nasal, which as explained above, is not prohibited in the Mangon dialect. The remaining two forms, gapit ‘seven’ and sanapet ‘roof thatch’ were more problematic, but follow-up research showed a preference for vowel-final forms, gapitu and sanapetu in the village closest to Mangon speakers, and that preference fades moving westward away from Mangon speakers (reference data in Appendix H).
TABLE 23. WORDS WITH FINAL /u/ TARGET ENVIRONMENTS.

Final /u/ epenthesis attested in the data:

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>nib</td>
<td>nibu</td>
<td>nibu</td>
<td>'to sit'</td>
</tr>
<tr>
<td>bamap</td>
<td>baumapu</td>
<td>bamapu</td>
<td>'to cook'</td>
</tr>
<tr>
<td>fat</td>
<td>fatu</td>
<td>fatu</td>
<td>'stone'</td>
</tr>
<tr>
<td>bag</td>
<td>bagu</td>
<td>bagu</td>
<td>'thick'</td>
</tr>
<tr>
<td>til</td>
<td>tilu</td>
<td>talinga</td>
<td>'ear'</td>
</tr>
<tr>
<td>nan</td>
<td>nanu</td>
<td>naŋu</td>
<td>'bathe'</td>
</tr>
<tr>
<td>nap</td>
<td>napu</td>
<td>naŋapu</td>
<td>'head'</td>
</tr>
<tr>
<td>as</td>
<td>asu</td>
<td>fako:</td>
<td>'dog'</td>
</tr>
<tr>
<td>nib</td>
<td>nibu</td>
<td>nibu</td>
<td>'sit'</td>
</tr>
<tr>
<td>sak</td>
<td>saku</td>
<td>saku</td>
<td>'to pierce'</td>
</tr>
<tr>
<td>ak</td>
<td>aku</td>
<td>aku</td>
<td>'1SG'</td>
</tr>
</tbody>
</table>

No final /u/ epenthesis attested:

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>samam</td>
<td>samam</td>
<td>samamu</td>
<td>'to chew'</td>
</tr>
<tr>
<td>win</td>
<td>win</td>
<td>winu</td>
<td>'to drink'</td>
</tr>
<tr>
<td>mantel</td>
<td>mantel</td>
<td>man(u)telu</td>
<td>'egg'</td>
</tr>
<tr>
<td>gatel</td>
<td>gatel</td>
<td>gatelu</td>
<td>'three'</td>
</tr>
<tr>
<td>gapit</td>
<td>gapit</td>
<td>gapitu</td>
<td>'seven'</td>
</tr>
<tr>
<td>sanapet</td>
<td>sanapet</td>
<td>saŋapetu</td>
<td>'roof thatch'</td>
</tr>
</tbody>
</table>

5.2 Lexical leveling

Although CMD has borrowed several lexical items from Mangon, most words are descended from Sanana forms. Forty forms in the elicitation data was found to be unique to the Mangon dialect\(^85\) (i.e. not produced by speakers on Sanana island), and

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\(^{84}\) The Sanana form for 'to eat' was also maintained, so it is not surprising that 'drink' would remain stable; they frequently co-occur as a set phrase like 'eat and drink'.

\(^{85}\) Unique forms refer to lexemes whose shapes are markedly different from their Sanana counterparts, regardless of cognition.
ten of these forms were also present in CMD, indicating borrowing. Kerswill and Williams (2000) propose that geographically and socially marked forms tend to be lost. However, Britain and Trudgill (2005) describe lexical simplification as a process that might help shed light on why some of the 40 were borrowed while others were not. That is, it is claimed that where there are competing dialects, simpler forms win out (e.g. Trudgill 1986:104, Britain and Trudgill 2005:184). In this situation, the minority CMD forms that were retained tend to be linguistically simpler than the majority Mangon counterparts. It is unclear to me precisely how Britain and Trudgill define the term simplification, but in the context of this study, it refers to forms containing fewer segments and/or lacking consonant clusters.

Tables 30 and 31 represent all forms from the elicitation list where Mangon speakers produced a variant that was not found in Sanana. Some of these are borrowed into CMD while others are not. Campbell (p.c. 2015) proposed that ordinary dialect borrowing without regard to simplification might be able to account for the Mangon forms in CMD, and this should be further investigated in a followup study. However, given the available data, it would seem remarkable that such a strong pattern is present: only two of the non-borrowed forms are simpler than their Sanana counterparts. Conversely, of the ten Mangon forms that were borrowed, six are simpler than the minority counterpart (Table 24).

---

86 Lyle Campbell (p.c. 2020) points out that this claim did not hold up in New Zealand English. Refer to Gordon et al. (2004) for more.

87 It should be noted that there is not universal consensus on Trudgill’s view that simplification should favor the retention of any minority forms. Some of the challenges for Trudgill’s model to address are touched upon in Chapter 7 of New Zealand English: Its Origins and Evolution— particularly with regard to the determination of markedness and unmarkedness (Gordon et al., 2004).
Table 24. Lexemes Borrowed From Mangon

Simplification principles favor borrowing of the majority word (Mangon) rather than retention of the minority word (Sanana):

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>baked</td>
<td>gena</td>
<td>gena</td>
<td>'to hear'</td>
</tr>
<tr>
<td>makariu</td>
<td>bama</td>
<td>bama</td>
<td>'to split'</td>
</tr>
<tr>
<td>behifon</td>
<td>kila</td>
<td>kila</td>
<td>'liver'</td>
</tr>
<tr>
<td>bisloi</td>
<td>lika</td>
<td>lika</td>
<td>'to choose'</td>
</tr>
<tr>
<td>sagilaʔat</td>
<td>sagila</td>
<td>sagila</td>
<td>'lightning'</td>
</tr>
<tr>
<td>tahun(^88)</td>
<td>taun</td>
<td>taun</td>
<td>'year'</td>
</tr>
</tbody>
</table>

*Equal complexity:*

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>gahu</td>
<td>gama</td>
<td>gama</td>
<td>'to scratch'</td>
</tr>
</tbody>
</table>

Simplification would favor retaining the minority word (Sanana) rather than borrowing the majority word (Mangon):

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>gada(^89)</td>
<td>sakeu</td>
<td>sakeu</td>
<td>'to scratch an itch'</td>
</tr>
<tr>
<td>kaf</td>
<td>manakem</td>
<td>manakem</td>
<td>'to hold'</td>
</tr>
<tr>
<td>sana</td>
<td>daeti</td>
<td>badaeti</td>
<td>'branch'</td>
</tr>
</tbody>
</table>

Thirty Mangon forms were not borrowed. However in 28 instances, the Sanana forms that were retained are either simpler or of equal complexity to the Mangon counterparts. Followup research will probe deeper to determine to what degree the items (listed in Table 25) might indicate simple data gaps—that is, instances where both the Sanana and Mangon form exist in CMD but only the Sanana form was recorded.

\(^88\) This may be a later Malay borrowing into the Sanana island dialect rather than an instance of CMD borrowing from Mangon.

\(^89\) *gama* is also sometimes recorded in Sanana, but it was not received or accepted by Facei tribe members.
**Table 25. Lexemes Not Borrowed from Mangon**

*Forms where simplification would favor the minority form (Sanana):*

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>ihi</td>
<td>ihi</td>
<td>nisi</td>
<td>'flesh'</td>
</tr>
<tr>
<td>suba</td>
<td>suba</td>
<td>patfo</td>
<td>'rotten'</td>
</tr>
<tr>
<td>fua</td>
<td>fua</td>
<td>nceli</td>
<td>'fruit'</td>
</tr>
<tr>
<td>kakon</td>
<td>kakon</td>
<td>maŋkuni</td>
<td>'yellow'</td>
</tr>
<tr>
<td>aya</td>
<td>aya</td>
<td>fanini</td>
<td>'big'</td>
</tr>
<tr>
<td>lal</td>
<td>lal</td>
<td>tuka</td>
<td>'in'</td>
</tr>
<tr>
<td>neʔu</td>
<td>neʔu</td>
<td>bulela</td>
<td>'below'</td>
</tr>
<tr>
<td>ota</td>
<td>ota</td>
<td>saka</td>
<td>'hundred'</td>
</tr>
<tr>
<td>neʔi</td>
<td>neʔe⁹⁰</td>
<td>ncumi</td>
<td>'nose'</td>
</tr>
<tr>
<td>ana-(nana)</td>
<td>ana-(nana)</td>
<td>gama-(nana)⁹¹</td>
<td>'child'</td>
</tr>
<tr>
<td>yai</td>
<td>yai</td>
<td>sanafa</td>
<td>'road/path'</td>
</tr>
<tr>
<td>putar</td>
<td>putar</td>
<td>dagalili</td>
<td>'to turn'</td>
</tr>
<tr>
<td>hoi</td>
<td>hoi</td>
<td>gifu</td>
<td>'to open'</td>
</tr>
<tr>
<td>uka</td>
<td>uka</td>
<td>ɲasi</td>
<td>'to bite'</td>
</tr>
<tr>
<td>as</td>
<td>asu</td>
<td>fako:</td>
<td>'dog'</td>
</tr>
<tr>
<td>tena (kau)</td>
<td>tena (kau)⁹²</td>
<td>takau</td>
<td>'belly'</td>
</tr>
<tr>
<td>til</td>
<td>tilu</td>
<td>taliŋa</td>
<td>'ear'</td>
</tr>
<tr>
<td>ul</td>
<td>uli</td>
<td>mankawai⁹³</td>
<td>'worm'</td>
</tr>
</tbody>
</table>

*Forms where Sanana and Mangon forms are of equal complexity:*

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>hia</td>
<td>hia</td>
<td>gia</td>
<td>'one'</td>
</tr>
<tr>
<td>saf a</td>
<td>saf a</td>
<td>saf a</td>
<td>'rat'</td>
</tr>
</tbody>
</table>

---

⁹⁰ While neʔi was recorded for Facei and Fagudu in Sanana, ne: (perhaps, nee) was recorded for Falahu. The phonemic status of ʔ seems to vary across speakers, but its presence often reflects an h deletion (as in so'a ~ sahoa 'where'). The proto Sanana form for 'nose' was likely neh(i,e). It therefore appears the consonant deletion is furthest advanced in Falahu, but it is uncertain whether Falahu and CMD converged on e# or Fagudu and Sanana Facei converged on i#.

⁹¹ PSM *nana is still visible in this compound but replaced by male in the general lexicon

⁹² kau is optionally produced in this form, and tena is CVCV compared to CVCVV for takau

⁹³ Although it was not collected from my consultants, Mangon might also possess uli. On Sanana there are two forms, ul and maka(h)or, indicating 'small worm' and 'large worm' respectively.
Sula

buha    buha   boli   'to blow'
apfei    apfei   bafei   'smoke'
nana    nana    male    'small'
yota    yota    togi    'short'
do     do   di   'and'
gareha    gareha   gadia   'four'
gaya    gaya   giya   'to eat'
basel95   baseli   batani   'to plant'

Forms where simplification would favor the majority form (Mangon):

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>buakeu</td>
<td>buakeu</td>
<td>safe</td>
<td>'to spit'</td>
</tr>
<tr>
<td>gahu</td>
<td>gahu</td>
<td>gai</td>
<td>'to dig'</td>
</tr>
</tbody>
</table>

5.3 Other lexical leveling

In addition to borrowings from Mangon, there are a handful of forms in CMD that appear to be unique among Sula dialects in that they are not found in Sanana or Mangon. Some examples are CMD nuba96 'mouth' for Sanana bayon and Mangon boni; CMD haku 'to cook (rice)' for which Sanana and Mangon did not report to have a special form;97 CMD buhi 'night' for Sanana bauhi and Mangon bedi; and CMD so 'where' for Sanana s(ah)oa and Mangon sibo. Some possible sources of these differences could be

94 Presence of gaya 'eat' is highly indicative that CMD is experiencing change below the level of consciousness. The giya / gaya contrast is probably the strongest identity marker in the Sula lexicon. It has become a shorthand dialect identifier; e.g. asked What dialect is spoken here? One might answer, We're a giya town. If CMD speakers were consciously attempting to adopt the Mangon dialect, giya would likely have been among the first changes. Some additional identity marking, 'special' words include, bit/mau 'to want', and s(ah)oa/so/sibo 'where'.

95 Although this form has an additional segment as compared to the Mangon counterpart, they are of equal complexity after final vowel epenthesis.

96 Interestingly, the Holle lists (c. 1900) via Stokhof et al. (1980) include the form lubayon 'mouth'. This suggests a possible regional change of l>n that did not spread far (perhaps somehow connected to the mysterious l in the form bilnaka which has also been recorded with a geminate nn (discussed in Chapter 2: dialects. part 1). If nuba is cognate with bayon, that would mean the correct PSM form should be either *nubaon or *lubaoni.

97 In other dialects, haku means 'to pound rice', so this might be an error on the part of the consultant.
spontaneous changes, borrowing from unknown source languages, retentions that were subsequently lost in other dialects, and taboo word replacement. Collins (1989) identifies replacement of taboo vocabulary among Taliabo speakers on the neighboring island, and my consultants have reported that a similar system previously existed in Sula but has fallen out of use.

5.4 Other dialect-forming processes

Interdialect formation can cause forms to change in ways that are intermediate between the minority and majority parent forms (Britain and Trudgill 2005). CMD displays a number of such examples, such as those in Table 26. One possibility suggested by Campbell (p.c. 2015) is that CMD underwent its own normal sound changes that caused these words to appear halfway between Sanana and Mangon. This seems unlikely though, because the changes are not generalizable by phonological environment. For instance, if CMD were to have undergone a vowel paragoge process independently, we would expect a conditioned distribution between /i/ and /u/. Instead we see instances of both, for example: ami 'to squeeze' with a high front vowel following a nasal but nanu 'to swim' with a high back vowel following a nasal; uli 'worm' with /i/ following a liquid but also tilu 'ear' with /u/ following a liquid.
TABLE 26. INTERDIALECT FORMS

Words with Sanana bases and epenthetic final vowels matching Mangon's preference against word-final consonants:

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>am</td>
<td>ami</td>
<td>gami</td>
<td>'to squeeze'</td>
</tr>
<tr>
<td>bal</td>
<td>bali</td>
<td>baali</td>
<td>'shy'</td>
</tr>
<tr>
<td>basel</td>
<td>baseli</td>
<td>batani</td>
<td>'to plant'</td>
</tr>
<tr>
<td>pan</td>
<td>mpani/pani</td>
<td>manpani</td>
<td>'wing'</td>
</tr>
<tr>
<td>batut</td>
<td>batutu</td>
<td>dotu</td>
<td>'to grow'</td>
</tr>
<tr>
<td>nan</td>
<td>nanu</td>
<td>naŋu</td>
<td>'to swim'</td>
</tr>
<tr>
<td>nap</td>
<td>napu</td>
<td>naŋpu</td>
<td>'head'</td>
</tr>
</tbody>
</table>

Glottal stop reduced in CMD, but vowel length (which is not a phonotactic violation in Mangon) is retained:

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>maʔana</td>
<td>maana</td>
<td>mana</td>
<td>'man'</td>
</tr>
</tbody>
</table>

Words whose Sanana bases differ markedly from their Mangon counterparts but take epenthetic final vowels in CMD to match Mangon's preference against word-final consonants:

<table>
<thead>
<tr>
<th>Sanana</th>
<th>CMD</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>as</td>
<td>asu</td>
<td>fako:</td>
<td>'dog'</td>
</tr>
<tr>
<td>saik</td>
<td>siku</td>
<td>isuka</td>
<td>'here'</td>
</tr>
<tr>
<td>til</td>
<td>tilu</td>
<td>talinga</td>
<td>'ear'</td>
</tr>
<tr>
<td>ul</td>
<td>uli</td>
<td>mankawai</td>
<td>'worm'</td>
</tr>
</tbody>
</table>

Interdialect forms are a result of change and not a mechanism of change. Some of the forms in Table 26 are also in the previous tables demonstrating paragoscopic epenthesis, if the epenthesis they underwent resulted in interdialect forms rather than a form that matches the Mangon counterpart. The forms found on both lists are

---

98 baseli shares the basel base and the final /i/ from batani.

99 Some of these forms could have Mangon cognates yet to be collected.
additional evidence that words with final high vowels in CMD result from epenthesis rather than lexical borrowing (i.e. they result from dialect evolution rather than dialect shift). These forms help make CMD recognizable as a distinct dialect.

Weak constraints in CMD—for instance constraints avoiding matching vowels or for lexical distinctiveness—could also be mechanisms responsible for forms like these, however there is no evidence for this in the data. These possibilities should be investigated in followup studies. Regardless of the mechanism(s) behind the changes, the result is 12 forms that are intermediate between the two input dialects, and these forms help to distinguish CMD as a dialect in its own right.

6 Contact influenced dialects. Future work

Some of the findings presented in this section were not recognized at the time of the data collection and were not tested during the course of fieldwork. Moreover, the number of participants was small and not adequately balanced, and data available is insufficient for making solid conclusions. Nevertheless, tendencies surfaced during analysis of field data corroborating that changes in the CDM region have caused it to become a recognizable dialect that is distinct from both Mangon and Sanana. The shortcomings will be addressed in future research. In fact, additional fieldwork is not necessarily needed to improve upon the findings of this section, as Appendix H includes newer data that time constraints prevented analyzing against these preliminary findings.
7 Contact influenced dialects. Conclusion

It is clear that CMD has undergone considerable language change in the generations since the community departed from Sanana to settle on Mangon, and ample evidence is presented indicating that CMD has developed into a distinct Sula dialect. However, the evidence is insufficient for making conclusive declarations about some of the specific mechanisms for these changes.

This research has found that (1) dialect leveling has occurred and may still be underway in CMD, (2) the changes were largely in the form of borrowing simpler lexical forms from Mangon and of borrowing Mangon’s phonological preference against word-final consonants, and (3) that the changes in CMD likely occurred due to a regular practice among early settlers of accommodating to Mangon speakers, who were more numerous and more established (both in terms of physical infrastructure and human resources/skilled labor).

The most apparent characteristic setting CMD apart from other Sanana dialects is its final epenthetic vowels. These final vowels resulted in forms that resemble their Mangon neighbors; however, Sanana-specific innovations are still visible within word stems, so it can be shown that these forms are not borrowings from Mangon but rather Sanana derived items that were subsequently modified because of final consonant disfavoring. Evidence for this is (a) that epenthesis is also applied to the Sanana forms (making them unique to CMD), and (b) that the process was overgeneralized to include some words with final [+sonorant] consonants (which are not prohibited in Mangon).
Chapter 2: dialects. part 2

Forty forms were found in the elicitation data that were unique to the Mangon dialect. Ten of those forms appear to have been borrowed into CMD. Of the 30 for which borrowing was not found, all but two were of equal or greater complexity to the minority Sanana forms. In other words, of 40 available Mangon forms, only two of those not borrowed are simpler than the Sanana counterparts. The other 38 are either borrowed or simplification would not necessarily predict them to be. Additionally, a number of lexical items appear to be unique to CMD, further positioning it as separate from both its Mangon and Sanana cousins.

Lastly, this study also presents several interdialect forms that contain components from both of the source dialects. Any of the observations presented in this study might be speculated to result from numerous causes; however, when considered together, they are indicative of CMD as a distinct, newer variety of Sula that is likely still undergoing leveling processes.
CHAPTER 3: GRAMMAR
Sula

This grammatical sketch gives an introduction to the Sula language. While the sketch contains ample interlinearly glossed example sentences and, in several places, statements written to the linguist, I have done my best to write these pages in a way that they will also be accessible to the non-linguist language learner. I write this document in the process of earning my PhD in linguistics, but it is my sincere hope that it will not take a PhD in linguistics to understand and make use of it; with luck, even the lowly aerospace engineer or intellectually impoverished neuroscientist will be equipped to divine meaning from these pages. I also hope that these pages might be accessible enough assist Sula community members with establishing language programs as the tongue is increasingly threatened by external pressures.

The sections included in the following sketch were chosen in an attempt to represent as many of the topics considered standard to linguistic descriptions as I could. In effect this means I am including some sections that are essentially negative results—i.e. sections looking for something that does not appear to be present in Sula (e.g. correlative conjunctions). In these cases, rather than omitting a section and leaving readers to wonder if it exists in the language, I instead opt to provide a Sula construction that conveys an equivalent meaning in the hopes that doing so might help language learners develop their communication tools and strategies.

By and large language learners should feel free to skip past theoretical discussions and focus on the descriptions of what each structure means in practice and the examples demonstrating how to use the structures. When possible, I try to briefly explain important linguistic terminology and concepts inline, and in case you trip up on a bit of terminology, the dissertation’s glossary includes definitions for most of the
grammatical jargon used throughout. While this sketch does not pretend to be a pedagogical grammar, it is my hope that by making it as accessible as possible, it might be of use for aid workers, language planners, and other researchers and interested individuals who may no have formal linguistic backgrounds. Ample excerpts from Sula language texts and interlinearly glossed sentences are available at http://www.bahasasula.com and in Kaipuleohone, the University of Hawai‘i Digital Ethnographic Archive.

1 Phonology

Every spoken language is built from sounds, but languages all differ in which sounds they use and which are treated as unique versus part of a group that share the same function. That is: phonemes are the smallest sounds in a language that can alter the meaning of a word, and many of a language’s phonemes will be grouped into subconscious categories that the speaker population consider to be in some sense ‘the same’ as one another. The different sounds in these groups are known as allophones.

This section describes the basic sounds of the Sula language and how they are grouped. If you are reading this as a non-linguist Sula language learner, it might be helpful to only briefly skim it, as this section necessitates using the International Phonetic Alphabet to differentiate similar sounds, whereas subsequent sections use the Roman alphabet with pronunciations based on the Indonesian practical orthography. Also, as a language learner, it is probably easiest to absorb much of a language’s phonology at a subconscious level through speech interaction, as can be quite a lot to try to memorize a language’s phonological rules and structures.
1.1 Identification of phonemes and allophones

**TABLE 27. CONSONANTS**

<table>
<thead>
<tr>
<th></th>
<th>labial</th>
<th>alveolar</th>
<th>palatal</th>
<th>velar</th>
<th>labiovelar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>plosive</td>
<td>p, b</td>
<td>t, d</td>
<td>tf, dz</td>
<td>k, g</td>
<td></td>
<td>' (?)</td>
</tr>
<tr>
<td>nasal</td>
<td>m</td>
<td>n</td>
<td></td>
<td>η</td>
<td></td>
<td></td>
</tr>
<tr>
<td>trill</td>
<td></td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fricative</td>
<td>f</td>
<td>s</td>
<td>(f)</td>
<td>h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>glide</td>
<td></td>
<td></td>
<td>y (j)</td>
<td>w</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lat. approx.</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 28. VOWELS**

<table>
<thead>
<tr>
<th></th>
<th>front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td></td>
<td>u</td>
<td>high</td>
</tr>
<tr>
<td>e</td>
<td></td>
<td>o</td>
<td>mid</td>
</tr>
<tr>
<td>a</td>
<td></td>
<td></td>
<td>low</td>
</tr>
</tbody>
</table>

Sula has a five vowel system like many other Austronesian languages and even nearby varieties of Malay (e.g. Litamahuputty 2012:12), but Sula o was introduced independently during a process described in the previous chapter. During that change, words that had two u vowels separated by a consonant, or a u and i separated by a consonant, evolved such that the first u became an o. Introduction of o paved the way for additional instances of the vowel to be borrowed into Sula from other languages. The word “Oreo” for example—now a perfectly acceptable Sula word—was borrowed in the original without needing to delete the o sounds or substitute a native Sula phoneme in their place.

In languages with small vowel inventories, there is often a broad range of pronunciations that still count as the same vowel, and this is also true of Sula’s five
vowels; the language’s five phonemic vowels each cover broader phonetic spaces than the vowels in languages with larger vowel inventories. In spite of that, four of the five vowels, \( i, u, o, \alpha \), are usually fairly easily identified. The fifth vowel could be written as \( e \), or \( \varepsilon \), and when in unstressed position, it can be somewhat reduced or even seem to be deleted (though a phonetic analysis would need to confirm this). Although \( e \) can at times seem like \([e]\) and at other times seem like \([\varepsilon]\), \( e \) was chosen in the other sections of this dissertation simply for the sake of simplicity. Similarly, \( \alpha \) is written as \( a \) in subsequent sections.

1.2 Phonemic tally

To determine the approximate frequency of each phoneme across the lexicon, a phonemic tally was conducted on a sample of 1711 unique word instances. Words represent natural Sula language as spoken today on Sanana\(^{100}\)—this sample includes loanwords from Indonesian and a few other languages. This sampling excluded repeated word instances (e.g. those found in compound words). In the sample, 8,040 total phoneme instances were found, and they break down as follows:

\(^{100}\)Vowel totals would be higher on Mangon island where more word-final vowels are retained.
TABLE 29. INSTANCES OF EACH PHONEME
Out of 8,040 total phoneme instances found in a 1,711 word sample.

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>a:</td>
<td>2001</td>
</tr>
<tr>
<td>i:</td>
<td>731</td>
</tr>
<tr>
<td>u:</td>
<td>465</td>
</tr>
<tr>
<td>n:</td>
<td>434</td>
</tr>
<tr>
<td>o:</td>
<td>403</td>
</tr>
<tr>
<td>b:</td>
<td>377</td>
</tr>
<tr>
<td>k:</td>
<td>373</td>
</tr>
<tr>
<td>m:</td>
<td>370</td>
</tr>
<tr>
<td>t̪:</td>
<td>355</td>
</tr>
<tr>
<td>s:</td>
<td>307</td>
</tr>
<tr>
<td>e:</td>
<td>295</td>
</tr>
<tr>
<td>l:</td>
<td>287</td>
</tr>
<tr>
<td>p:</td>
<td>250</td>
</tr>
<tr>
<td>h:</td>
<td>215</td>
</tr>
<tr>
<td>d̪:</td>
<td>193</td>
</tr>
<tr>
<td>g:</td>
<td>181</td>
</tr>
<tr>
<td>r:</td>
<td>165</td>
</tr>
<tr>
<td>f:</td>
<td>160</td>
</tr>
<tr>
<td>ŋ:</td>
<td>120</td>
</tr>
<tr>
<td>j:</td>
<td>113</td>
</tr>
<tr>
<td>?:</td>
<td>92</td>
</tr>
<tr>
<td>w:</td>
<td>83</td>
</tr>
<tr>
<td>tf:</td>
<td>38</td>
</tr>
<tr>
<td>dʒ:</td>
<td>30</td>
</tr>
<tr>
<td>j:</td>
<td>2</td>
</tr>
</tbody>
</table>
| 1.2.1 vowel clusters (some might be diphthongs)

As Sula has a five vowel phoneme inventory, there are twenty possible two-vowel combinations: ae, ai, ao, au, ea, ei, eo, eu, ia, ie, io, iu, oa, oe, oi, ou, ua, ue, ui, uo. A 1,994 item list of non-duplicated entries was referenced in searching for these possible combinations. The instances found were then corrected so that only one instance would be represented for each unique morpheme. This was necessary as some frequently occurring morphemes contained otherwise rare vowel combinations.

Of the twenty possible combinations, ie, oe, ue, and uo were not found to occur at all, while the combinations, ae, ao, eo, io, iu, and ou were found to occur only four, nine, one, two, eight, and two times respectively. Of those, eo was only found in the word baeo ‘bad’ which is a sporadic version of baeu that was only produced by a handful of speakers, and they were together in the same room.
Only ten of the possible combinations were found to occur at least ten unique times across the vocabulary set. These are: ai (50), au (30), ea (14), ei (11), eu (14), ia (47), oa (17), oi (26), ua (35), and ui (12).

**Table 30.** Possible Vowel Clusters in the Sula Language

<table>
<thead>
<tr>
<th></th>
<th>front</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>ia, io*, ui*</td>
<td>ua, ui</td>
</tr>
<tr>
<td>mid</td>
<td>ea, ei, eo*, eu</td>
<td>oa, oi, ou*</td>
</tr>
<tr>
<td>low</td>
<td>ae*, ai, ao*, au</td>
<td></td>
</tr>
</tbody>
</table>

Because of pronunciation variation among speakers (and sometimes even within the same speaker), it is difficult to determine which if any of the double vowels are phonemic sequences in a single syllable (i.e. diphthongs). Further complicating the issue is the fact that many of the vowel sequences are the result of historical and ongoing deletion of intermediate consonants, and these deletions are not uniform across all geographic regions or speaker demographics.

Sula has both closing and opening vowel sequences that can sometimes be pronounced in the same syllable (phonetically). The phonemic status is unclear though, because even if some of these VV sequences might have been inherited as diphthongs from higher levels in the language family, the younger series of intervocalic consonant deletion in many Sula words has muddied the situation synchronically. These deletions create clusters of vowels that were previously in adjacent syllables, and this enables them to run together and obfuscate the syllable boundary.
In the VV sequences that result from C deletion, I suspect that the syllable boundary between a sequence of vowels that corresponds to a diphthong in some other words could have thrown the status of V₁σV₂ (split across syllables) and V₁V̯₂ (in the same syllable) both in flux.

The above table is an identification of the locations where one might want to search for diphthongs in various words at sites across the Sula language community. That said, if the language does indeed possess phonemic diphthongs, it is unlikely that any speaker’s idiolect would represent all of them. A confident determination regarding the diphthong status of Sula’s vowel clusters and their distribution will require a focused study that takes geographical and sociolinguistic variation into consideration.

1.3 Possible consonant clusters

Sula phonology does not permit consonant clusters except (1) in borrowings, (2) at compound-word or reduplication boundaries, (3) in cases of prenasalized consonant sequences, and (4) at morpheme boundaries following the prefixes man-, mat-, bis-, bal-, and mak-. This is especially the case in the Sanana dialect, where many final vowels were deleted.
### Table 31. Consonant Clusters Present in Sula Words

<table>
<thead>
<tr>
<th>cluster</th>
<th>no. of instances</th>
<th>Sula example</th>
<th>loan</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḏy</td>
<td>(1)</td>
<td>pad-yaŋa</td>
<td></td>
<td>‘attic’ (under the roof)</td>
</tr>
<tr>
<td>fm</td>
<td>(1)</td>
<td>af-mai</td>
<td></td>
<td>‘ashes’</td>
</tr>
<tr>
<td>fʔ</td>
<td>(1)</td>
<td>af-tuka</td>
<td></td>
<td>‘ashes’</td>
</tr>
<tr>
<td>gl</td>
<td>(3)</td>
<td>sug-lela</td>
<td></td>
<td>‘play’</td>
</tr>
<tr>
<td>gy</td>
<td>(1)</td>
<td>yog-yog</td>
<td></td>
<td>‘almost’</td>
</tr>
<tr>
<td>hn</td>
<td>(1)</td>
<td>basahn</td>
<td></td>
<td>‘angry’ (general)</td>
</tr>
<tr>
<td>(This form was received from only one speaker)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kh</td>
<td>(1)</td>
<td>dak-han</td>
<td></td>
<td>‘to paddle’</td>
</tr>
<tr>
<td>kdʒ</td>
<td>(1)</td>
<td>[mak-dʒad bakai]</td>
<td></td>
<td>‘betrothal’</td>
</tr>
<tr>
<td>kk</td>
<td>(1)</td>
<td>hakkot</td>
<td></td>
<td>‘hug’</td>
</tr>
<tr>
<td>kl</td>
<td>(1)</td>
<td>soklat</td>
<td>(L)</td>
<td>‘brown’, ‘chocolate’</td>
</tr>
<tr>
<td>kr</td>
<td>(1)</td>
<td>kramat</td>
<td>(L)</td>
<td>‘holy place’</td>
</tr>
<tr>
<td>(the original Indonesian form contains an /e/, so it is a safe bet that there is a whispered vowel in this form, as it would be the only instance of /kr/ in Sula)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ks</td>
<td>(1)</td>
<td>saksi</td>
<td>(L)</td>
<td>‘witness’</td>
</tr>
<tr>
<td>kt̪</td>
<td>(2)</td>
<td>pak-tatoto</td>
<td></td>
<td>‘pounder’</td>
</tr>
<tr>
<td>lb</td>
<td>(3)</td>
<td>pamasi kakolbi</td>
<td>(L?)</td>
<td>‘harvested rice’</td>
</tr>
<tr>
<td>lf</td>
<td>(2)</td>
<td>bau bal-faa</td>
<td></td>
<td>‘produce’ (make)</td>
</tr>
<tr>
<td>lm</td>
<td>(1)</td>
<td>almanak</td>
<td>(L)</td>
<td>‘calendar’</td>
</tr>
<tr>
<td>ln</td>
<td>(1)</td>
<td>bilnaka</td>
<td></td>
<td>‘steal’</td>
</tr>
<tr>
<td>mb</td>
<td>(14)</td>
<td>mboya</td>
<td></td>
<td>‘tail’ (prosthetic /m/)</td>
</tr>
<tr>
<td>mtf</td>
<td>(1)</td>
<td>[pohi limfui] (partial loan?)</td>
<td></td>
<td>‘lemon’</td>
</tr>
<tr>
<td>mf</td>
<td>(1)</td>
<td>mam-fuwa</td>
<td></td>
<td>‘young’</td>
</tr>
<tr>
<td>mp</td>
<td>(15)</td>
<td>mam-pai</td>
<td></td>
<td>‘bitter’</td>
</tr>
<tr>
<td>mpr</td>
<td>(1)</td>
<td>pampres</td>
<td>(L)</td>
<td>‘diaper’ (‘nappy’)</td>
</tr>
<tr>
<td>ms</td>
<td>(1)</td>
<td>samsi beu</td>
<td>(L?)</td>
<td>‘headcloth’ (for men)</td>
</tr>
<tr>
<td>nb</td>
<td>(3)</td>
<td>wai nboni tuka</td>
<td></td>
<td>‘saliva’ (prosthetic /n/)</td>
</tr>
<tr>
<td>ntʃ</td>
<td>(8)</td>
<td>[tʃin-tʃin]</td>
<td></td>
<td>‘a small parakeet’</td>
</tr>
<tr>
<td>nd̪</td>
<td>(19)</td>
<td>ponda</td>
<td>(L?)</td>
<td>‘pandanus’</td>
</tr>
<tr>
<td>nf</td>
<td>(5)</td>
<td>nfat</td>
<td></td>
<td>‘stone’ (prosthetic /n/)</td>
</tr>
</tbody>
</table>
### Sula

<table>
<thead>
<tr>
<th>Code</th>
<th>Note</th>
<th>Example</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>nh</td>
<td>1</td>
<td>kau nhal</td>
<td>‘flower’ (prosthetic /n/)</td>
</tr>
<tr>
<td>ndʒ</td>
<td>3</td>
<td>[berdʒandʒi] (L)</td>
<td>‘promise’</td>
</tr>
<tr>
<td>nk</td>
<td>5</td>
<td>man-kau</td>
<td>‘bird’</td>
</tr>
<tr>
<td>nl</td>
<td>1</td>
<td>genli</td>
<td>‘like’ (‘in the manner of’)</td>
</tr>
<tr>
<td>nn</td>
<td>1</td>
<td>binnaka (L?)</td>
<td>‘steal’ (variant of bilnaka)</td>
</tr>
<tr>
<td>np</td>
<td>3</td>
<td>man-parika</td>
<td>‘to divorce’ (to divorce)</td>
</tr>
<tr>
<td>ns</td>
<td>2</td>
<td>sinsara (L?)</td>
<td>‘difficult’</td>
</tr>
<tr>
<td>ntʃ</td>
<td>27</td>
<td>baku bantu</td>
<td>‘to help’</td>
</tr>
<tr>
<td>nj</td>
<td>10</td>
<td>[menjanji] (L)</td>
<td>‘to sing’</td>
</tr>
<tr>
<td>ŋg</td>
<td>9</td>
<td>[jingoji] (L)</td>
<td>‘beard’</td>
</tr>
<tr>
<td>ŋk</td>
<td>8</td>
<td>[ŋkoli]</td>
<td>‘skin’ (prosthetic /ŋ/)</td>
</tr>
<tr>
<td>ŋl</td>
<td>1</td>
<td>[panlu] (L?)</td>
<td>‘bullet’</td>
</tr>
<tr>
<td>ŋm</td>
<td>1</td>
<td>[noŋmarur]</td>
<td>‘embers’</td>
</tr>
<tr>
<td>ŋs</td>
<td>1</td>
<td>[baŋsa]</td>
<td>‘tribe’</td>
</tr>
<tr>
<td>pf</td>
<td>1</td>
<td>ap-fe</td>
<td>‘smoke’</td>
</tr>
<tr>
<td>rb</td>
<td>1</td>
<td>arbab (L)</td>
<td>‘Arbab’</td>
</tr>
<tr>
<td>rtʃ</td>
<td>2</td>
<td>[pertʃa faa basah]</td>
<td>‘superstition’</td>
</tr>
<tr>
<td>rg</td>
<td>1</td>
<td>sorga (L)</td>
<td>‘the upper-world’</td>
</tr>
<tr>
<td>rdʒ</td>
<td>2</td>
<td>e.g.[hardʒa]</td>
<td>‘to knit’</td>
</tr>
<tr>
<td>rk</td>
<td>1</td>
<td>laka berkema (L)</td>
<td>‘to go camping’</td>
</tr>
<tr>
<td>rl</td>
<td>2</td>
<td>perlu (L)</td>
<td>‘to need’</td>
</tr>
<tr>
<td>rp</td>
<td>1</td>
<td>harp (L?)</td>
<td>‘to want (something)’</td>
</tr>
<tr>
<td>rt</td>
<td>4</td>
<td>martel (L)</td>
<td>‘hammer’</td>
</tr>
<tr>
<td>sl</td>
<td>3</td>
<td>bis-loi</td>
<td>‘to look for’</td>
</tr>
<tr>
<td>sn</td>
<td>2</td>
<td>bis-nau</td>
<td>‘sew’</td>
</tr>
<tr>
<td>sp</td>
<td>2</td>
<td>despat</td>
<td>‘break (bone)’</td>
</tr>
<tr>
<td>st</td>
<td>4</td>
<td>pastina</td>
<td>‘coral reef’</td>
</tr>
<tr>
<td>tf</td>
<td>1</td>
<td>bit-fua keu</td>
<td>‘to spit’</td>
</tr>
<tr>
<td>tn</td>
<td>1</td>
<td>mat-nana</td>
<td>‘old person’</td>
</tr>
<tr>
<td>tr</td>
<td>1</td>
<td>trus (L)</td>
<td>‘continue’</td>
</tr>
<tr>
<td>†ʔ</td>
<td>1</td>
<td>[putʔana]</td>
<td>‘ghost’</td>
</tr>
</tbody>
</table>
### Table 32. Phonotactic Environments of Each Phoneme

<table>
<thead>
<tr>
<th>phoneme</th>
<th>examples</th>
</tr>
</thead>
</table>
| **/p/** | **Initial:** ['poa'] 'blood'  
**Final:** [nap] 'head/hair', [ba'map] 'to cook', [ba'nap] 'to shoot', ['ʔap] 'fire', [hi'dup] 'to live'  
**Intervocalic (syllable initial or final):** [sa.na'pau] 'shoulder', [ma.ta'pia] 'human', ['ta.pa] 'left', [ba.pi'kir] 'to think' |
| **/b/** | **Initial:** [ba.ca'lɛŋ] 'to lie down', [ba'wɛl] 'to climb', ['bɛu] 'to tie', [bis'nau] 'to sew', [ba'nap] 'to shoot' 'to shoot', ['bau] 'to hit', ['bag] 'thick', ['bot] 'white', ['buak'ɛu] 'to spit'  
**Final:** ['nib] 'to sit'  
**Intervocalic (syllable initial or final):** ['ba.ba] 'father', ['so.ba] 'wing' |
| **/t/\101** | **Initial:** ['til] 'ear', ['tua] 'husband', ['toŋ.ka] 'stick', [man'tɛl] 'egg'  
**Final:** ['fat] 'stone', ['bɛt] 'day', ['ʔi.star.ʔat] 'road'  
**Intervocalic (syllable initial or final):** [ma.ta'pia] 'person', ['fa.ta] 'wife' ['jo.ta.hai,wan] 'to hunt' ['bau,ma.ta] 'to kill' |
| **/d/** | **Initial:** [da'gat] 'narrow', [da'ɛ.na] 'wide'  
**Final:** [ba'kɛd] 'to hear'  
**Intervocalic (syllable initial or final):** [hi'dup] 'to live' |
| **/k/** | **Initial:** ['kul] 'right', ['kol] 'skin', ['kag] 'to fear'  
**Final:** ['ʔɛk] 'neck', ['mak] 'tongue', ['sak] 'to pierce'  
**Intervocalic (syllable initial or final):** ['buak,ɛu] 'to spit', ['ʔuka] 'to bite', [ba'kɛd] 'to hear', [ba.ka.faʔo.ja] 'to yawn', ['la.ka] 'to walk' |

---

101 the Sula t is always dental, but for simplicity it shall be transcribed as simply t
/g/

**Initial:** ['ɡɛ.hi] 'to stand', ['ɡa'wai] 'to scratch', ['ɡɛm] 'to hold', ['ɡɛ.ka] 'to dig', ['ɡas] 'salt'

**Final:** ['baɡ] 'thick',


/ʔ/\(^{102}\)


**Final:** X

**Intervocalic (syllable initial or final):** [ba.ka.faʔo.ja] 'to yawn', [maʔa.na] 'man', ['ma.n,ku'go.ɡaʔin.foa] 'feather'

/m/


**Final:** ['ɡɛm] 'to hold', [sa'mam] 'to chew'

**Intervocalic (syllable initial or final):** ['ha.ma] 'eye', [sa'mam] 'to chew', ['wa.ma] 'to breathe'

/n/

**Initial:** ['na.na] 'child', ['na.hu] 'long'


**Intervocalic (syllable initial or final):** [hai'wan] 'animal', ['kɛ.na] 'fish', ['kau.sa.na] 'branch', ['si.na], 'moon', [ma'nip] 'thin'

/ŋ/\(^{103}\)

**Initial:** [ŋan] 'to boil'

**Final:** [ba.ka'leŋ] 'to lie down', ['toŋ.ka] 'stick', [da'ɡiŋ] 'meat'

**Intervocalic (syllable initial or final):** [fanʃ?] 'ara] 'cloud'

\(^{102}\) written as ' in subsequent sections

\(^{103}\) written as ng in subsequent sections
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/r/

**Initial:** [rasa] 'emotional', [rek] 'to count'

**Final:** [bɛ_hi'for] 'lungs', [ba.pi'kir] 'to think', [ma.ka'hor] 'worm'

**Intervocalic (syllable initial or final):**

[faŋʔara] ['mo.ra] 'cloud', [ba'ra.sa], 'thin', [bau.mu,na.ɾa] 'to work', [ʔi.'sta.ɾat] 'road'

/f/


**Final:** [kof] 'coffee', [ba'tif] 'steep' (e.g. a hill)


/s/

**Initial:** ['so.ba] 'wing', [saʔa.fa] 'rat', ['si.na] 'moon', ['sa.ʔoa] 'thunder'

**Final:** ['gas] 'salt'

**Intervocalic (syllable initial or final):** ['kau,sa.na] 'branch', ['ho.sa] 'leaf', [ka.sa'fo.hi] 'grass', [ba'ra.sa] 'thin'

/h/


**Final:** [besah] 'off' (Also: [basah]. e.g. spoiled food), [be'dah] 'powder'


---

104 Intervocalic [ɾ] is flapped.
\[/j/\]

**Initial:** ['jo.ta] 'short', ['ja.na] 'to see' ['jo.ta.hai,wan] 'to hunt'

**Final (non-intervocalic):** X


**Cluster:** ['nj.a.ja] 'mother'

\[/l/\]


\[/w/\]

**Initial:** ['wa.ma] 'breathe', ['win] 'drink', ['wa.ka] 'root', ['wai] 'water'

**Final (non-intervocalic):**

**Intervocalic (syllable initial or final):** [baˈweɬ] 'to climb', ['jo.ta.hai,wan] 'to hunt', [gaˈwai] 'to scratch', [haiˈwan] 'animal', ['la.wa] 'spider', [ku ˈmaˈwai] 'sand'

---

105 voiced palatal approximant, written as y in subsequent sections

106 Syllable-final /l/ is velarized following mid and high vowels
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/tʃ/

This phoneme is quite rare in the language. I initially concluded it to be a borrowed phoneme, but I have since recorded a number of words that I cannot explain as loans, including:

**Initial:** [tʃa’pu.li] ‘village name’, [’ca] ‘thousand’

**Intervocalic (syllable initial or final):** [Fa’tʃe.i] ‘tribe name’,
[ka’ri.tʃa] ‘parakeet’ (from Holle), [li.mu’tʃu.i] ‘lemon’, [’mon.tʃa] ‘green
jobfish (aprion virescens)’, [’ntʃe.li] ‘fruit’ and several others.¹⁰⁷

/ʃ/

Just two instances of this phoneme were encountered, and both were
within the same, reduplicated word: *nish-nish* which is a synonym of
*yota-yota* ‘piece’. This is unexplained, likely onomatopoeia or a
borrowing.

/dʒ/

Like /tʃ/, this phoneme is incredibly rare except in loanwords. A near
exhaustive list is: [dʒ’a.o] ‘god’ and [’dʒoh] ‘god’ (likely from Ternate *jou
‘high-ranking person’?), [ma.na’ba.dʒa] ‘to chat up’, [’o.dʒo] ‘scramble/
mix’, [’har.dʒa] ‘to knit’ (interestingly, the Indonesian form, *merajut*, also
contains /dʒ/), [’dʒa.hi] ‘curtain’ (possibly a Ternate loan), [’dʒe.r(e,i)]
‘sacred place’ (Ternate loan), [mak’dʒad ba’kai] ‘betrothal’. A couple
possible native sources are: [dʒub] ‘bow and arrow’, and [dʒa] ‘net’, but
these too could be loans from Ternate or elsewhere.

1.3.1 Phonological Processes

Aside from an apparently ‘unnatural’ morphophonological intervocalic devoicing rule,
Sula’s phonological processes are quite straightforward. That said, I suspect there are
interesting processes of prothesis, epenthesis, paragoge, and vowel harmony yet to be

¹⁰⁷ Interestingly, Sula speakers often substitute /tʃ/ in place of interdental fricatives when saying English words.
Sula

discovered, but these must await future, targeted research efforts. Following is a breakdown of processes so far identified:

### 1.3.1.1 Final Devoicing

Syllable final plosives are often devoiced. This process varies among speakers.

\[-\text{continuant}] \rightarrow \text{[-voice]} / _\#\

1. (1) \([ba\.\k\hat{\epsilon}]\) 'to hear' (in isolation)
   compare: \([ba'ked\.ha'bar]\) 'to hear the news'

2. (2) \([k\hat{a}g]\) 'to fear' (in isolation)
   compare: [ʔak 'kag a ʔas.ne.ka] 'I fear that dog'

3. (3) \([n\hat{ib}]\) 'to sit' (in isolation)
   compare: [ʔak 'nib a 'kau.sa.na ʔik.ki] 'I sit on this branch.'

### 1.3.1.2 Morphophonologically conditioned intervocalic fortition

The subject of *naturalness* is widely discussed in the field of phonology, but the term does not yet have a consensus for a definition. Herein I use the term in the manner of the Neogrammarians, i.e. that language change is an unconscious process that results from speakers falling short of their target when trying to reproduce a sound. An analogy to the Neogrammarian view on naturalness is a child learning to throw a ball. The child sees a ball thrown and attempts to reproduce the throw. S/he likely won’t be successful at first, but the result of the attempts will be *natural* in that they are a result of the physical motions of attempting the throw. It would be natural for the ball to go straight ahead but not far enough. It would be natural for it to go far enough but a bit to the left or the right. It would be natural for the ball to go too far ahead. But, it would be
unnatural for a ball to go directly backwards or straight to the left or right, because those
directions wouldn’t result from the child’s kinesthesia and attempted reproduction of a
typical ball throw.

Similarly with language, your tongue, lips, jaw, palate, and vocal folds all move in
particular directions and sequences when we say words. Sometimes we move these parts
too much, too little, or in a mixed up sequence, and when that happens, the word
pronunciation changes in a natural way. An example of this could be a word with an /n/
after a long vowel. The /n/ sound requires opening the passageway to the nose and
sinus, but the vowel sound requires keeping it closed. When speakers mix up the order
and open the nasal passageway while still saying the vowels, a different vowel sound is
made, and over time this new vowel sound can become a second accepted version of that
vowel. So a hypothetical word, [aon] could become [ãõn] and then the phonemes, [a]
and [o] would each add an allophone and become [a, ā] and [o, ō]. This sort of change
would be very natural, but it would be totally unnatural for the word [aon] to change
into [abn], because there is nothing about the speech movements needed for [aon] that
could even accidentally end up as a [b] sound.

Many linguists debate whether unnatural sound changes or phonological
processes exist and how and why they would come to pass, so apparent examples of
unnatural changes and processes tend to be of particular interest when they are
identified. To that: there is a strange and apparently unmotivated morphophonological
process present in all dialects of Sula: b, d, g in onset position optionally become
voiceless when morphology puts them in intervocalic position—i.e. following
prefixation, serialization, or compounding (initial b, d, g > [-voice] / V_V). This
Sula

alternation is productive in all documented dialects of Sula, and it is verified by acoustic phonetic analysis.

An important note in reading this grammatical sketch: this is a phonetic alternation whereas the working orthography is phonemic. Outside of this section, the alternation is not usually discernible in the example glosses, because speakers don't always perceive the segments as underlyingly voiceless even when they are produced that way.

1.3.1.2.1 Observed conditions

One point to note at the beginning is that Sula has many minimal pairs demonstrating an unambiguous voicing contrast among the languages stops. This is important, as it means that the alternation to be described cannot be dismissed as a backward representation of a voiceless→voiced process rather than a voiced→voiceless process: this is an optional alternation that occurs only to plosives that are underlyingly voiced. Some examples of the alternation follow:

In conversation, dona ~ tona

A young female speaker produced morpheme-initial /d/ as [d] even in a V_V environment (i.e. she does not always produce the devoicing):

(4) ba-dona.  kit  kata  soya  ba-dona
    CAUS-burn  1PL.INCL word  say  CAUS-burn

    bo  ak  bahasa
in  1SG  language

“Ignite’. In my language, we say ‘ignite’.”
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An older male speaker seems to *always* devoice morpheme-initial b, d, g when it is put in a V_V environment:

(5) dona, dona, ba-tona, a a ba-tona...
    burn, burn CAUS-burn, yeah yeah CAUS-bur

**g ~ k**

(6) *gahu* ‘to scratch’: ak a-kahu mon ‘I scratch you’

(7) *geka* ‘ill’, ‘hurt’ (compounds):

   a. kalea-keka
      ‘kidney disease’

   b. nap-geka
      ‘headache’

(8) *gem* ‘to hold’: mana-kem ‘to hold (in the manner of firmly grasping another’s arm)’

(9) *gaya* ‘to eat’: a-kaya ‘I eat’

**In conversation, gaya ~ kaya**

A young female speaker produces both [g] and [k] variants in an identical phonetic environment in adjacent sentences

(10) ak bit a- gaya fi-sinaŋa hia
    I want 1SG.AGR eat banana-fried one
    ‘I want to eat a fried banana.’
(11) ak a-
    kaya fia-sinanga hia
    I 1SG.AGR eat banana-fried one
    ‘I eat a fried banana.’

**TABLE 33. VOICING ALTERNATION EXAMPLES**

<table>
<thead>
<tr>
<th>Underlying</th>
<th>Alternation</th>
<th>example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>b/p</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(12) basel</td>
<td></td>
<td>basel fia-kau neka ‘plant that tree’</td>
</tr>
<tr>
<td></td>
<td>‘to plant’</td>
<td>i-pasel fia-kau neka ‘3SG plants that tree’</td>
</tr>
<tr>
<td><strong>d/t</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(13) det</td>
<td></td>
<td>det moya kau neka ‘don’t cut that tree’</td>
</tr>
<tr>
<td></td>
<td>‘to cut’</td>
<td>a-tet kau neka ‘I cut that tree’</td>
</tr>
<tr>
<td><strong>g/k</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(14) gaya</td>
<td></td>
<td>gaya moya pel ‘don’t eat anymore’</td>
</tr>
<tr>
<td></td>
<td>‘to eat’</td>
<td>a-kaya ‘I eat’</td>
</tr>
<tr>
<td><strong>b ~ p</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(15) baked</td>
<td></td>
<td>a-paked ‘I hear’</td>
</tr>
<tr>
<td>(16) bama</td>
<td></td>
<td>a-pama ‘I split’</td>
</tr>
<tr>
<td>(17) basel</td>
<td></td>
<td>a-pasel ‘I plant’</td>
</tr>
<tr>
<td>(18) bis</td>
<td></td>
<td>ak a-kaya moya, sebab a-pis pel</td>
</tr>
<tr>
<td></td>
<td>‘full, satisfied’</td>
<td>‘I don’t want to eat because I’m full’</td>
</tr>
<tr>
<td>(19) bisloi</td>
<td></td>
<td>a-pisloi ‘I look for’</td>
</tr>
<tr>
<td>(20) bisnau</td>
<td></td>
<td>a-pisnau ‘I sew’</td>
</tr>
<tr>
<td>(21) bisnoya</td>
<td></td>
<td>ta-pisnoya ‘1PL.INCL.AGR says’</td>
</tr>
<tr>
<td><strong>d ~ t</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(22) det</td>
<td></td>
<td>a-tet ‘I cut’</td>
</tr>
<tr>
<td>(23) donu</td>
<td></td>
<td>ba-tonu ‘to ignite’ (Mangon)</td>
</tr>
<tr>
<td>(24) duf</td>
<td></td>
<td>bau-tuf ‘make a hole’</td>
</tr>
<tr>
<td>(25) dona</td>
<td></td>
<td>ba-tona ‘to ignite’ (Sanana)</td>
</tr>
<tr>
<td><strong>g ~ k</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(26) gahu</td>
<td></td>
<td>ak a-kahu mon ‘I scratch you’</td>
</tr>
<tr>
<td>(27) geka</td>
<td></td>
<td>kalea-keka ‘kidney disease’</td>
</tr>
<tr>
<td>(28) gem</td>
<td></td>
<td>mana-kem ‘to grab’</td>
</tr>
<tr>
<td>(29) gaya</td>
<td></td>
<td>a-kaya ‘I eat’</td>
</tr>
</tbody>
</table>
1.3.1.2.2.1 Devoicing in compound words

The word *geka* ‘ill, injured’ becomes [keka] when compounding places the initial segment in intervocalic position. That is, *kalea* 'kidney' plus *geka* 'ill' is often if not typically produced as, *kalea-keka* ‘kidney disease’. Compare this to the Sanana dialect form of the compound word meaning 'headache'. In this form, the initial segment of the same word, *geka*, is placed in non-intervocalic position. In this case the resulting form is *nap-geka* ‘headache’, and it is seldom if ever produced with a voiceless segment. The Mangon dialect of Sula still retains many final vowels that were dropped in Sanana, including a final *u* on the form *napu* 'head'. This gives corroborating evidence of the alternation, because the Mangon variant of the same compound causes an intervocalic environment, and expectedly, the resulting form is devoiced, *napu-keka* ‘headache’.

1.3.1.2.2.2 Devoicing with pronominal prefixes

Verbs that begin with a *b, d, or g* undergo the same alternation due to agreement morphology. The alternation has been observed with several of the pronominal prefixes, but there may be differences in the frequency of occurrence across the different markers. Complete paradigms will be needed to fully explain the phenomenon, and that will require a well-planned study of numerous speakers that considers speaker demographics, speech context, and broader phonetic environment considerations.

**1st person singular:**

*det* ‘to cut’: *(ak) a-tet* ‘I cut’.

Compare this example to *ted* ‘to hold, carry’ which begins with a voiceless segment and which shows no alternation following prefixation: *(ak) a-ted* Sua ‘I carry Sula’.
1st person plural:

*bisnoya* ‘to say, talk’: *(kit)* ta-*pisnoya* ‘(we) 1PL.INCL-say’

Compare this example to *pahu* ‘to appear’ which begins with a voiceless segment and which shows no alternation following prefixation: *(kit)* ta-*pahu* gan gatel para bo uma *bet ik* ‘we seem to be just three at home today’.

3rd person singular:

*basel* ‘to plant’: *i-pasel fia-kau neka* ‘3SG-plant that tree’

Compare this example to *pia* ‘to live’ which begins with a voiceless segment and which shows no alternation following prefixation: *i-pia moya* ‘s/he is not alive’.

1.3.1.2.2.3 Devoicing with verbal prefixes

Verbal prefixes can also result in intervocalic environments that trigger the alternation.

(30) *baked* ‘to hear’: *baka*paked ‘to message’ (direct digital messaging or conveying a message on another's behalf)

(31) *ban* ‘intercourse’: *mana*pan ‘to initiate sex’

(32) *donu* ‘to burn’: *ba-tonu* ‘to ignite’ (Mangon)

(33) *duf* ‘hole’: *bau-tuf* ‘make a hole’

(34) *gem* ‘to hold’: *mana-kem* ‘to grab’

(35) *gehi* ‘to stand’: *baka-kehi* ‘to erect, construct’
Compare these forms to forms made with the prefix, *mak*-, which does not result in an intervocalic environment. The *mak*- prefix therefore does not trigger a voicing alternation: for example, *mak-bobai* ‘dating (courtship)’ and *mak-dahi* ‘to meet’.

1.3.1.2.2.4 Devoicing in auxiliary (serial verb?) constructions

It is unclear whether Sula’s *laka* constructions should be called auxiliary or serial constructions, but regardless, they trigger the voicing alternation as do the more clear-cut instances of serialization.

(36)  *gaya* ‘to eat’: *laka kaya* ‘go eat’

(37)  *basel* ‘to plant’: *laka pasel* ‘to go planting’

(38)  *bisloi* ‘look for’: *laka pisloi* ‘to go searching’

(39)  *gega* ‘to awaken’: *nona-gega* ‘the routine of going to bed and getting up’

1.3.1.2.2.5 Devoicing in reduplicated forms

Although it doesn’t seem to be as frequent as with other triggers, the alternation can also be triggered by reduplication.

(40)  *dota* ‘to hit’: *dota-tota* ‘keep hitting’

(41)  *bahu* ‘quick’: *bahu-pahu* ‘quick’ (with emphasis)

Compare the underlyingly voiceless *p* in *pia* ‘safe’: *pia-pia* ‘safe’ (with emphasis).
1.3.1.2.6 Devoicing in numeral prefixes?

This is the only instance of the voicing alternation that appears to be mandatory rather than optional. This is intriguing in that the forms have been shown to trace back to Proto-Austronesian (ref. Blust and Trussel ongoing: 2010-). This might be coincidental, but the pattern matches perfectly with the other, still productive, alternations present in the language. In concert with the historical changes Blust (2005) identified in Kiput and Berawan, and the reconstructable PAN numeral prefixes, Sula’s still-productive alternation shows that intervocalic devoicing is, indeed, a possible synchronic phonological rule.

<table>
<thead>
<tr>
<th>Table 3.4. Devoicing of numeral prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ga^- ) &gt; ( ka^- )</td>
</tr>
<tr>
<td>( ga^- ) ‘cardinal prefix’</td>
</tr>
<tr>
<td>( ga-hu ) ‘two’</td>
</tr>
<tr>
<td>( ga-tel ) ‘three’</td>
</tr>
<tr>
<td>( ga-reha ) ‘four’</td>
</tr>
<tr>
<td>( ga-lima ) ‘five’</td>
</tr>
<tr>
<td>( pa-ka^- ) ‘ordinal prefix’</td>
</tr>
<tr>
<td>( pa-ka-hu ) ‘second’</td>
</tr>
<tr>
<td>( pa-ka-tel ) ‘third’</td>
</tr>
<tr>
<td>( pa-ka-reha ) ‘fourth’</td>
</tr>
<tr>
<td>( pa-ka-lima ) ‘fifth’</td>
</tr>
</tbody>
</table>

1.3.1.2.3 Evidence

1.3.1.2.3.1 Acoustic evidence

Spectrograms often show quite clearly that the \( b, d, g \) variants are completely voiced and the devoiced variants are completely voiceless, but the difference is not always binary; often the intervocalic segments are just less voiced. This suggests either a sound change in progress and/or a tug-of-war between the intervocalic devoicing process and the more natural, universal tendency to voice intervocalic segments. The following spectra illustrate the clearest difference between voiced and voiceless variants:
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Figure 17. Spectrogram of voiced segment.
A young, female speaker in Capuli village did not produce the alternation in the word dona following prefixation.

\[ \text{ba-dona} \]

Figure 18. Spectrogram of voiceless segment.
An older, male speaker in Capuli village did produce the alternation in the same word following prefixation.

\[ \text{ba-tona} \]
1.3.1.2.3.2 Minimal pair evidence

A voicing contrast in the language prevents analysis of the alternating segments as underlyingly voiceless. If a phonological voicing process were in place that caused initial voiceless segments to become voiced in citation form, Sula would not have other words that begin with p, t, k; but there are many. For example, words like kag ‘to fear’ would be *[gag] when no prefix is applied, but they are not: (1) a-kag 'I'm afraid' (2) kag moya pel ‘don't be afraid again/anymore’

b/p

(42)  a. basa ‘bad’
     b. pasa ‘before’

(43)  a. bahu ‘quick’
     b. pahu ‘to appear’

(44)  a. bia ‘from’
     b. pia ‘life’

(45)  a. baka- ‘CAUS’
     b. paka- ‘MULTIPLICATIVE’

(46)  a. bo ‘LOC’
     b. po ‘ten’

d/t

(47)  a. dena ‘aboard’
     b. tena ‘stomach’
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(48)  a. \textit{dad} ‘can’
    b. \textit{tadu} ‘horn’\textsuperscript{108}

(49)  a. \textit{da} ‘bye’
    b. \textit{ta} 1PL.INCL

(50)  a. \textit{dua} ‘to push’
    b. \textit{tua} ‘old’

(51)  a. \textit{duk} ‘to come’
    b. \textit{tuka} ‘intestines’\textsuperscript{109}

\textbf{g/k}

(52)  a. \textit{goi} ‘buttocks’
    b. \textit{koi} ‘don’t’

(53)  a. \textit{gena} ‘to hear’
    b. \textit{kena} ‘fish’

(54)  a. \textit{gan} ‘in the manner of’
    b. \textit{kan} ‘injury’

(55)  a. \textit{gaya} ‘to eat’
    b. \textit{kaya} ‘wealthy’

(56)  a. \textit{gau} ‘two’
    b. \textit{kau} ‘tree’

1.3.1.2.4 Peculiarities: A more natural, intervocalic voicing process

Some speakers frequently voice word-final stops when the following segment is [+voiced] or [+continuant]. This is never mandatory and it is certainly much more

\textsuperscript{108} Near minimal pair.

\textsuperscript{109} Near minimal pair.
natural than the previously discussed alternation. For example, *ak 'I' is frequently produced as [ag] when followed by a voiced or continuant segment. Examples:

(57)  
\begin{align*} 
\text{dok} & \quad \text{ag} & \quad \text{gon} & \quad \text{camera} \\
\text{give} & \quad \text{I} & \quad \text{belong} & \quad \text{camera} \\
\text{‘give me MY camera’} & 
\end{align*}

(58)  
\begin{align*} 
\text{ag} & \quad \text{na} & \quad \text{Ismael} \\
\text{I} & \quad \text{name} & \quad \text{Ismael} \\
\text{‘my name is Ismael’} & 
\end{align*}

(59)  
\begin{align*} 
\text{ki‘i} & \quad \text{bo} & \quad \text{a(k,g)} & \quad \text{lug} \\
\text{s/he} & \quad \text{LOC I} & \quad \text{front} \\
\text{‘he is in front of me’} & 
\end{align*}

(60)  
\begin{align*} 
\text{ki‘i} & \quad \text{bo} & \quad \text{ag} & \quad \text{gehi} \\
\text{s/he} & \quad \text{LOC I} & \quad \text{back} \\
\text{‘he is behind me’} & 
\end{align*}

(61)  
\begin{align*} 
\text{ki‘i} & \quad \text{bo} & \quad \text{ag} & \quad \text{ila-pon} \\
\text{s/he} & \quad \text{LOC I} & \quad \text{beside} \\
\text{‘he is beside me’} & 
\end{align*}

1.3.1.2.5 An exception?

*duf* ‘hole’ seems to sometimes be produced with [t] even when not V_V, e.g. *sak (d,t)uf til ‘pierce ear’. It could be that the one of the phonemic forms is actually /tuf/ or /saku/.

Incomplete, pronoun-specific inflection systems that are superficially similar have been proposed for some Central Maluku languages (e.g., the neighboring Soboyo; Fortgens 1921:20-22). A similar analysis could not explain the Sula data for several reasons. (1) The proposed systems do not describe alternations in intervocalic position that are exclusively limited to voicing. (2) The hypothetically inflected forms do not
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occur in constructions without overt pronouns (where V_V is not present). (3) The alternation is also sometimes present in affixed forms and intervocalic environments in compound words independent of person-inflection. (4) The alternation appears to be exceptionless in Sula; initial-segment devoicing is available to all words beginning with voiced stops when a target environment is present, and not, as inflection proposals describe, a system which affects only some words.

An intervocalic environment is the only apparent condition that is consistent in all situations, and this makes an active phonological process the most likely explanation for the alternation. The data show a process occurring in all dialects of Sula I have worked with so far, and this universal distribution suggests the process has been productive for several generations at least.

1.4 Word stress

Where words have light final syllables, Sula has penultimate stress (e.g. ['gɛ.hi] 'back'), but stress is final in words with heavy final syllables (e.g. [ba.pi'kir] 'to think'). A moraic analysis (e.g. Trubetzkoy 1939) fits the Sula data well. In this analysis, closed syllables and open syllables with a diphthong or long vowel would be bimoraic, and stress would predictably fall on whichever syllable contains the penultimate mora.

(62) [ba.'jon] 'mouth' compared to ['ba.ma] 'to split/chop'
(63) [sa.'mam] 'to chew' compared to ['sa.ma] 'same'
(64) [ba.ka.'lɛŋ] 'to lie down' compared to ['po.hi 'ka.ya] 'grapefruit'
(65) [da.'gis] 'pain' compared to ['da.et] 'branch'
In compound words, primary stress is located on the stressed syllable of the first stem, and subsequent stems are assigned secondary stress.

(66) ['t=ɛ.naˌlal] 'intestines' (lit. ‘stomach’ + ‘inside’)

(67) ['i.pəˌkau] 'kenari nut tree' (lit. ‘stomach’ + ‘inside’)

2 Description of orthography

This section provides a description of the Sula orthography and the phonetic value of the characters used in this grammatical sketch.

Virtually all Sula speakers are bilingual Malay speakers, and most are already literate in Malay. Because of this, it makes most sense to stick with what people already know and use rather than inventing a new orthography that is completely foreign to speakers. The Sula language can be represented well with Indonesian orthographical conventions and with only a few small differences from standard Bahasa; these differences are shown below.

2.1 How words are pronounced

<table>
<thead>
<tr>
<th>Sula letter</th>
<th>Indonesian Example</th>
<th>English Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>p [p]</td>
<td>apa</td>
<td>apple</td>
</tr>
<tr>
<td>b [b]</td>
<td>lebih</td>
<td>scuba</td>
</tr>
<tr>
<td>m [m]</td>
<td>umur</td>
<td>name</td>
</tr>
<tr>
<td>f [f]</td>
<td>–</td>
<td>wifi</td>
</tr>
</tbody>
</table>

110 English vowels are represented using the Wells Standard Lexical Sets for UK and US English (Wells 1982).
3 Greetings and introductions

As is common in the region, Sula speakers tend to call out greetings to any unexpected passerby. At first, I assumed this to be the curiosity of a few bored strangers, but to my surprise, it turned out to be a widespread and surprisingly nuanced greeting formality.

---

111 Similar to the *t* in Indonesian and English but with the tip of the tongue just behind the teeth.

112 This sound is usually present in English prior to all words that begin with a vowel. English speakers do not tend to think about this sound, since there is no letter for it in the alphabet, but if you say the word, *apple* and pay attention to your throat, this sound is the small burst of air and motion you feel just as the word begins.

113 Similar to the “*ch*” in *choose* but beginning with the tip of the tongue just behind the teeth.

114 Similar to the “*j*” in *jump* but beginning with the tip of the tongue just behind the teeth.
Sula greetings are structured around (a) where one is going, and (b) what one is doing. One is generally expected to omit locational details except when they contradict what would otherwise be assumed, and this holds for greetings as well (see section 9, directional system and space). Unfortunately for outsiders, there is no general assumption about one’s actions or destination, so there is an expectation of specificity, and this can make an otherwise ten minute walk turn into an all-day affair if specific, detailed answers are given to each bystander while walking through town.

Out of fatigue and a need to get from point A to point B within a reasonable amount of time, I started experimenting with ways to interrupt the expected pattern of greeting. Doing so revealed an intricate etiquette that parallels the specificity defaults in the language’s positional grammar. There are two basic greeting formats for situations in which there is an implicit assumption as to the other’s goings on. One exchange (a) is used when two people meet and at least one of them is en route to a destination. The other (b) is used when people meet who are not en route to a destination (e.g. bumping into each other at a location or event).

3.1 Exchange type a (when both participants are en route)

(68) Person 1:
\[ laka \quad s(a(h))oa \quad (neka) \]
walk where (that)
‘where are you going?’ (‘where is it you’re going?’)

(69) Person 2:
\[ laka \quad s(a(h))oa \quad (neka) \]
walk where (that)
‘where are you going?’ (‘where is it you’re going?’)
In this exchange, neither participant need answer the question. This is much like the English greeting exchange of *Hiya doin’?* answered with *Hiya doin’?* in that neither question is interpreted as a literal request for information. However, like in English, it is perfectly acceptable for the Sula speaker to answer the question literally if s/he desires to engage in conversation.

### 3.2 Exchange type a (*when only Person 2 is en route*)

(70) **Person 1:**

```
laka   s(a(h))oa   (neka)
walk   where   (that)
‘where are you going?’ (‘where is it you’re going?’)
```

(71) **Person 2:**

```
a-     laka   (direction)
1SG.AGR   walk   (direction)
‘I’m going that way’
```

In this exchange, person 2 does not respond by repeating *Where are you going?* back to Person 1, since s/he is not en route anywhere. In this case, the most common response is for Person 2 to reply in the most general terms by stating the direction toward which s/he is walking. Again though, it is perfectly acceptable for Speaker 2 to answer the question more specifically if s/he desires to engage in a conversation.

### 3.3 Exchange type b (*when neither person is en route*)

(72) **Person 1:**

```
bau   hapa   (neka)
do   what   (that)
‘what are you doing?’
```
Like in exchange type (a) above, in this exchange, neither participant need answer the question, but it is perfectly acceptable to do so if a speaker desires to engage in conversation.

There is also a secondary greeting (c) which translates roughly to ‘how are you’. Like exchange type (b) this tends to be directed at a person who is not en route to a destination.

### 3.4 Exchange type c

(74) Person 1:

\[
\text{baug}(a(h))oa \ (\text{neka}) \\
\text{do} \ \text{how} \ (\text{that})
\]

‘how are you’

Replies to this question vary more, but a common reply is:

(75) Person 2:

\[
(a-) \ \text{pia-pia} \ \text{para} \\
(1\text{SG.AGR}) \ \text{safe/good} \ \text{just}
\]

‘I’m just fine’

The greeting etiquette’s complexity begins to surface when one of the participants is unexpected at the location or time of the exchange. In these situations, there is an ongoing back-and-forth between information requests and evasion strategies—ways to vaguely answer while remaining within discourse boundaries.
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My assistant, Marlia, was often aggravated at people’s nosiness as we walked back and forth to our various consultants’ houses. At first I suggested she just ignore people and walk on, but that was not an option for her, because ignoring greetings from bystanders is itself a rude and aggressive action. Marlia had a clever (if somewhat passive aggressive) strategy of dealing with unwelcome greeting questions.

The basic discourse expectation for a greeting is one round of exchange. If that exchange begins with a ‘where are you going’, the reply, ‘where are you going’ is only available if the first asker is also en route. However many people in Sula spend significant portions of every day sitting in front of homes or on public sitting platforms. And that means that for passers by, they cannot simply respond back with, ‘where are you going’; I have made that mistake numerous times, and it leads the conversation initiators to look at me as though I am either mentally deficient or incredibly discourteous before replying in a stern, deliberate tone: *ak nib. laka sahoa?* ‘I’m sitting. Where are you going?’

When prompted, ‘where are you going’, by a person who is not in motion, the generally expected answer is, ‘I’m going that way’, where “that way” is substituted for one of Sula’s four directions (tema ‘inland’, fai ‘seaward’, lepa ‘up’, neu ‘down’). If the answerer desires, s/he can instead respond with a general statement of intention, e.g. *a-laka bihu* ‘I’m returning’. More specific answers are sometimes provided when the action or destination is already obvious. For example, someone walking toward a water source carrying a wash basin and soap might say *a-laka nan* ‘I’m going to bathe’, or someone walking toward their home might answer *a-laka bo uma* ‘I’m going home’. Although such replies might seem passive-aggressively evasive, they suffice the
discourse expectation. However, for outsiders, and even insiders in unexpected situations (e.g. someone walking in the heat of the day during Ramadan, someone dressed funny, or someone carrying a bizarre item as they walk by), the expectation is that they provide a specific answer, and a reply of ‘I’m going (that way)’ will generally be met with a repeat of ‘where are you going’ in an assertive tone.

As walking with me, an outsider, was inherently an unexpected action of my assistant, Marlia began to preempt the question in order to avoid having to explain our goings on to everyone we passed. This proved tricky though, because the sitters and the passers by see each other from far away, and if one speaks while there is still too much distance, the other party can ignore the question as though it were not heard and then proceed to reinitiate the discourse when they get closer. When Marlia timed it right (i.e. before the other spoke but close enough that the other couldn’t feign not hearing her question), the sitters would be locked into a greeting exchange initiated by Marlia, and the bystander would not be able as easily able to then ask us where we were on our way to, since the discourse parameters defaulted to just one round of greeting exchange. This could cause unmistakable frustration on the faces of bystanders as we passed by. Such an exchange tends to go as follows:

3.5 Preempted exchange

(76) Marlia:

\[ \text{bau hapa neka?} \]

\[ \text{do what there} \]

‘what are you doing?’
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(77) bystander:

nib-nib (para)
sit-sit (just)
‘I’m (just) sitting.’

The single-round discourse expectation is evident both by the frustration on the faces of bystander who were unable to inquire as to our destination and also by Marlia’s reaction to the occasional brash individual who would follow up the exchange with, laka sahoa? ‘where are you going’. In those circumstances, the ever-polite Marlia would begrudgingly answer the question, and then turn to me red faced as we walked on and proclaim, “he is so rude!”

To further nuance the art of greeting in Sula, all of the above interactions can be substituted with anticipated answers. For example, as one walks inland, a bystander might call out, laka tema? ‘walking inland?’ which is the expected answer to laka sahoa? To this question, the passer by can either repeat, laka tema. ‘walking inland.’ or answer, iyo. nib-nib para? ‘Yeah. (Are you) just sitting?’ at which point the bystander can either say ‘yes’ or let the conversation fade. Likewise, this entire transaction could be reversed with the passerby first inquiring, nib-nib? ‘are you sitting’.

And to condense the interaction even further, either party can preemptively declare what the other is doing with declarative intonation. For instance, when passing by, Marlia frequently called out to bystanders, nib-nib. ‘sitting’ in declarative intonation. This effectively cancelled the entire discourse and answered for the bystander what s/he is doing. To this, the polite options are (a) for the sitting party to say, ‘yes’, (b) to say, ‘walking.’ (as in, ‘you are walking’) or, (c) say, ‘Yes. Walking.’ (as in, ‘Yes I am sitting, and you are walking’).
Sula’s greeting formalities might seem like a lot to remember, but they are straightforward. It could take awhile to fully master the etiquette, but one learns to function politely in short order.

4 Counting

The language of everyday trade and commerce in the Sanana markets is a mix. People coming from the remote villages tend to speak Sula when communicating with other Sula trade partners. Those who are from Sanana city proper are fully able to understand basic transactional Sula, but they are more likely to code switch and reply in a mix of Sula and local Malay. They are more likely to count in Malay (even though most are able to count in Sula), while many older people from the villages will tend to count in Sula. Financial transactions and money counting on the other hand are almost exclusively in Malay. It seems as though the currency bill denominations are named by their Malay numerical values, and they are spoken of more than counted as such.\footnote{For instance I have rarely seen counting out of change aloud. Most items are inexpensive, and shoppers usually shop with small denomination bills. Big ticket items are purchased from shops near the dock or off island, and these transactions take place in Malay language.} In small villages there are no markets as such, but Sula is much more likely to be spoken throughout trade and financial interactions there than in the city.\footnote{I have often witnessed fishermen paddle to shore and count out fish as they lay them on the beach for prospective traders. Likewise I have witnessed similar scenarios with farmers bundling spices for transport off island.}
### TABLE 36. CARDINAL NUMBERS

<table>
<thead>
<tr>
<th>Sanana</th>
<th>Mangon</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>hia</td>
<td>gia</td>
<td>‘one’</td>
</tr>
<tr>
<td>gahu, ga’u, g’u, gu</td>
<td>guu</td>
<td>‘two’</td>
</tr>
<tr>
<td>gatel</td>
<td>gatelu</td>
<td>‘three’</td>
</tr>
<tr>
<td>gareha</td>
<td>gadia</td>
<td>‘four’</td>
</tr>
<tr>
<td>galima</td>
<td>galima</td>
<td>‘five’</td>
</tr>
<tr>
<td>gane</td>
<td>ganei</td>
<td>‘six’</td>
</tr>
<tr>
<td>gapit</td>
<td>gapitu</td>
<td>‘seven’</td>
</tr>
<tr>
<td>gatahua</td>
<td>gaatu</td>
<td>‘eight’</td>
</tr>
<tr>
<td>gatasia</td>
<td>gatasia</td>
<td>‘nine’</td>
</tr>
<tr>
<td>poa</td>
<td>po</td>
<td>‘ten’</td>
</tr>
<tr>
<td>poadohia</td>
<td>podigia</td>
<td>‘eleven’</td>
</tr>
<tr>
<td>poadoga’u</td>
<td>podiguu</td>
<td>‘twelve’</td>
</tr>
<tr>
<td>po(a)gatel</td>
<td>podigatelu</td>
<td>‘thirteen’</td>
</tr>
<tr>
<td>po(a)ga’u</td>
<td>poguu</td>
<td>‘twenty’</td>
</tr>
<tr>
<td>po(a)gatel</td>
<td>pogatelu</td>
<td>‘thirty’</td>
</tr>
<tr>
<td>po(a)gatel do hia</td>
<td>pogatelu di gia</td>
<td>‘thirty-one’</td>
</tr>
<tr>
<td>po(a)gatel do gahu</td>
<td>pogatelu di guu</td>
<td>‘thirty-two’</td>
</tr>
<tr>
<td>po(a)gatel do gatel</td>
<td>pogatelu di gatelu</td>
<td>‘thirty-three’</td>
</tr>
<tr>
<td>po(a)galima</td>
<td>pogalima</td>
<td>‘fifty’</td>
</tr>
<tr>
<td>ota</td>
<td>saka</td>
<td>‘hundred’</td>
</tr>
<tr>
<td>ca</td>
<td>ca</td>
<td>‘thousand’</td>
</tr>
<tr>
<td>cahia</td>
<td>cagia</td>
<td>‘one thousand’</td>
</tr>
<tr>
<td>caga’u</td>
<td>caguuu</td>
<td>‘two thousand’</td>
</tr>
</tbody>
</table>

#### 4.1 Counting Objects

Sula has a common, general classifier (counting word), *fat* (*fatu* in Mangon), which has a meaning similar to ‘pieces’ in its numeral sense. *fat* also means ‘stone’ when not used in counting. The following pattern is used to count objects: *fat hia, fat gahu, fat gatel* (‘one piece’, ‘two pieces’, ‘three pieces’). *fat* is also used to state numbers of items. For example:
4.2 Multiplicatives and ordinals

When items are numbered in order, numerical instances are formed with the multiplicative and ordinal prefix *pa-. The *ka on the word *pakahia ‘first’/‘once’ indicates that the *ga- cardinal number prefix may indeed still be an active prefix rather than a fossil from Proto–Buru–Sula–Taliabo as is speculated in Collins (1981). Evidence for this is found in the Sanana word *hia ‘one’—on cardinal numbers two through nine, *ga- is present, but *hia lacks this prefix. The form *gahia does, however, exist with the meaning ‘alone’. The prefix also shows up on *ga-pila ‘how much’/‘how many’. Because the multiplicative/possibly-ordinal form for the number ‘one’ is not *pa-hia, and because the form for ‘two’ is not *paka-ga-hu (and likewise for three–nine), it seems likely that *pa- is the ordinal and multiplicative prefix, and *ga- is a still somewhat productive cardinal prefix—a prefix whose *g is devoiced to *k due to the language’s bizarre process of intervocalic devoicing discussed in the phonology section. It must be noted for historical linguists, that *paka- corresponds exactly to a similar prefix that marked multiplicative numerals in Proto-Malayo-Polynesian and in several other Austronesian languages. It is likely that *pa- and *ka-/ga- in Sula are derived directly from *paka- but that the syllables were either reanalyzed as separate morphemes in Sula or that Sula preserves an earlier ordinal/multiplicative prefix relationship that was lost in other Austronesian languages who reanalyzed their cardinal prefix as part of the multiplicative prefix.

---

### Table 37. Multiplicative (and Ordinal) Counting

<table>
<thead>
<tr>
<th>Sanana</th>
<th>Ordinal</th>
<th>Multiplicative</th>
</tr>
</thead>
<tbody>
<tr>
<td>pa-ka-hia</td>
<td>'first'</td>
<td>once</td>
</tr>
<tr>
<td>pa-ka-hu</td>
<td>'second'</td>
<td>twice</td>
</tr>
<tr>
<td>pa-ka-tel</td>
<td>'third'</td>
<td>thrice</td>
</tr>
<tr>
<td>pa-ka-reha</td>
<td>'fourth'</td>
<td>four times</td>
</tr>
<tr>
<td>pa-ka-lima</td>
<td>'fifth'</td>
<td>five times</td>
</tr>
<tr>
<td>pa-ka-ne</td>
<td>'sixth'</td>
<td>six times</td>
</tr>
<tr>
<td>pa-ka-pit</td>
<td>'seventh'</td>
<td>seven times</td>
</tr>
<tr>
<td>pa-ka-tahua</td>
<td>'eighth'</td>
<td>eight times</td>
</tr>
<tr>
<td>pa-ka-tsia</td>
<td>'ninth'</td>
<td>nine times</td>
</tr>
<tr>
<td>pa-ka-poa</td>
<td>'tenth'</td>
<td>ten times</td>
</tr>
<tr>
<td>pa-ka-poadohia</td>
<td>'eleventh'</td>
<td>eleven times</td>
</tr>
<tr>
<td>pa-ka-poadoga'</td>
<td>'twelfth'</td>
<td>twelve times</td>
</tr>
<tr>
<td>pa-ka-pogatel</td>
<td>'thirteenth'</td>
<td>thirteen times</td>
</tr>
<tr>
<td>pa-ka-poga'</td>
<td>'twentieth'</td>
<td>twenty times</td>
</tr>
<tr>
<td>pa-ka-pogatel</td>
<td>'thirtieth'</td>
<td>thirty times</td>
</tr>
<tr>
<td>pa-ka-pogatel do hia</td>
<td>'thirty-first'</td>
<td>thirty-one times</td>
</tr>
<tr>
<td>pa-ka-pogatel do gahu</td>
<td>'thirty-second'</td>
<td>thirty-two times</td>
</tr>
<tr>
<td>pa-ka-pogatel do gatel</td>
<td>'thirty-third'</td>
<td>thirty-three times</td>
</tr>
<tr>
<td>pa-ka-pogalima</td>
<td>'fiftieth'</td>
<td>fifty times</td>
</tr>
<tr>
<td>pa-ka-ota</td>
<td>'hundredth'</td>
<td>hundred times</td>
</tr>
<tr>
<td>pa-ka-cahia</td>
<td>'one thousandth'</td>
<td>one thousand times</td>
</tr>
<tr>
<td>pa-ka-caga'</td>
<td>'two thousandth'</td>
<td>two thousand times</td>
</tr>
</tbody>
</table>

It is unclear whether paka- is or was ever used for ordinal counting, however a few elderly consultants translated Malay *ke-* ordinals that way. Most younger (and some older) speakers borrow Malay *ke-* into Sula and apply it in front of the native cardinal prefix *ga-*.

(79) **Ordinal with paka-**

```
Ak    dahi    matnana    fat    gareha    pel,
1SG   exist    spouse    CLF gareha    finished
```
ma i a- ngasu moya
but 1SG.AGR love NEG

matnana paka- reha
spouse ordinal- four
‘I have had four husbands, but I did not love the fourth.’

(80) **ordinal with ke- (1)**
Ak cinta ak tua yang
1SG love 1SG husband REL

ke- gareha moya pel
ordinal- four NEG finished
‘I don’t love my fourth husband.’

(81) **ordinal with ke- (2)**
Ak tua yang ke- gareha,
1SG husband REL ordinal- four

a- cinta ki moya pel
1SG.AGR love 3SG NEG finished
‘My fourth husband, I don’t love him.’

(82) **multiplicative:**
paka- pila pel gu-
multiplicative- how many finished 2SG.AGR

duk bo Sua?
come LOC Sula
‘How many times have you visited Sula?’
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5 Word order

A limited number of discourse strategies like topicalization can produce sentences with non-Subject-Verb-Object word order, but Sula is for the most part an SVO language. The language’s optional pronominal prefixes help to limit ambiguity—allowing noun phrases to be reordered—but this occurs infrequently during non-elicited speech.

5.1 Left-dislocation and word order

5.1.1 Transitive verbs

(83) Non-topicalized transitive

\[ \text{ak} \ a- \ dota \ mon \]
\[ 1\text{SG} \ 1\text{SG.AGR-} \ strike \ you \]
'I punched you.'

(84) Topicalized transitive with pronoun

\[ \text{mon, ak a- dota} \]
\[ \text{you, 1SG 1SG.AGR- strike} \]
'It's you I punched.'

(85) Topicalized transitive without pronoun

\[ \text{mon, a- dota} \]
\[ \text{you, 1SG.AGR- strike} \]
'It's you I punched.'

5.1.2 Intransitive verbs

Sula’s transitive verbs behave the same regardless of type.

(86) Non-topicalized unergative verbs

\[ \text{ak} \ a- \ laka bo Waitebi \]
\[ 1\text{SG} \ 1\text{SG.AGR-} \ walk LOC Waitebi \]
'I go to Waitebi.'
(87) **Topicalized unergative verbs**

*bo Waitebi, ak a- laka*

LOC Waitebi, 1SG 1SG.AGR- walk

'To Waitebi I go.'

(88) **Non-topicalized unaccusative verbs**

*ak nib bo Waitebi*

1SG sit LOC Waitebi

'I live in Waitebi.'

(89) **Topicalized unaccusative verbs**

*bo Waitebi ak nib*

LOC Waitebi 1SG sit

'In Waitebi I live.'

### 5.2 Double objects (ditransitives) and word order

Sula permits optional double-object constructions. In non-double-object constructions, the oblique NP and the direct object can be optionally reordered. In double-object constructions; however, the NP order is obligatorily.

(90) **Non-double-object construction with 'give'. The indirect object is linked by a locative rather than word order or pronominal prefix.**

*Ikbal i- dok bunga bo Fatima*

Ikbal 3SG.AGR- give flower OBL Fatima

'Ikbal gave a flower to Fatima.'

(91) **Non-double-object construction with 'give' and reordered NPs**

*ki'i i- dok bo ak kastela*

3SG 3SG.AGR- give OBL 1SG potato

'He gave to me potato.'
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(92)  **Double-object construction with 'give': DO1, DO2**

\[
\begin{align*}
Ikbal & \quad i- \quad dok \quad Fatima \quad bunga \\
& \quad 3SG.AGR- \quad give \quad Fatima \quad flower \\
\text{‘Ikbal gave Fatima a flower.’}
\end{align*}
\]

(93)  ***Double-object construction with 'give': DO2, DO1**

\[
\begin{align*}
*Ikbal & \quad i- \quad dok \quad bunga \quad Fatima \\
& \quad 3SG.AGR- \quad give \quad flower \quad Fatima \\
\text{‘Ikbal gave a Fatima a flower.’}
\end{align*}
\]

Sula permits alternate word orders to some degree, but it is apparently forbidden in double-object constructions.

(94)  **Non-double-object construction with 'show'**

\[
\begin{align*}
a- & \quad bakatoya \quad ak \quad handfon \quad bo \quad mon \\
& \quad 1SG.AGR- \quad show \quad 1SG \quad phone \quad LOC \quad you \\
\text{‘I showed you my mobile.’}
\end{align*}
\]

(95)  **Non-double-object construction with 'show'**

\[
\begin{align*}
a- & \quad bakatoya \quad mon \quad ak \quad handfon \\
& \quad 1SG.AGR- \quad show \quad you \quad 1SG \quad mobile \\
\text{‘I showed you my mobile.’}
\end{align*}
\]

(96)  **Non-double-object construction with 'show'**

\[
\begin{align*}
a- & \quad bakatoya \quad bo \quad mon \quad ak \quad handfon \\
& \quad 1SG.AGR- \quad show \quad LOC \quad you \quad 1SG \quad mobile \\
\text{‘I showed you my mobile.’ (increased emphasis compared to (f))}
\end{align*}
\]

(97)  ***Double-object construction with 'show'**
Sula possesses a pronominal indexing system in which persons may be optionally indexed on the verb via a prefix. There is optional dropping of pronouns and pronominal prefixes—and even both simultaneously. The conditions on pronominal indexing are not well understood, but may include (a) increased signal robustness or emphasis (when both pronoun and pronominal prefixes are used), (b) indication of reference disambiguation and reference switching, (c) indication of aspectual information. These topics are discussed further in the word order and verbs sections.

The overlapping functions of the pronominal prefixes along with intra-speaker variation and disagreement regarding grammatical judgment tests make it difficult to decipher the system with a great deal of specificity, and indeed Gary Holton (p.c. 2015, 2020) suggested that it might be a case of an incomplete verbal agreement system such as that found in the Lamaholot language of Flores—a language that has intransitive subject enclitic agreement and also a set of agreement prefixes that obligatorily mark person and number on some verbs (Nagaya 2011:103).

I cannot rule this possibility out for Sula without a significant amount of additional fieldwork, but so far it does not seem to be the case that verbal agreement is lexically determined. It could take an entire dissertation unto itself to unravel the nuances of Sula’s system of agreement, but some broad generalities can be made and are presented in the aforementioned sections.
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The high frequency of pronoun omission and pronominal prefix omission make acquiring a full paradigm from the speech of any one speaker difficult, so this section will present the pronominal indexing syntax as it was agreed upon and presented to me by a group of around a half dozen, middle-aged Sanana speakers (a mix of men and women) from the Fagudu and Falahu tribes who worked with me for about an hour in Pasar Bamboo to come up with a paradigm they could all agree on. It is important to note that there is a lot of geographical variation even among Sanana speakers regarding the pronunciation of pronouns and pronoun indexing prefixes, but none of the variants encountered were different enough to obscure meaning, so the following paradigm should suffice for a beginning Sula learner hoping to communicate anywhere on the island of Sanana.

<table>
<thead>
<tr>
<th>Pronoun</th>
<th>Pronominal prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-person singular</td>
<td>ak</td>
</tr>
<tr>
<td>Second-person singular</td>
<td>mon</td>
</tr>
<tr>
<td>Third singular (human)</td>
<td>ki'i/ki</td>
</tr>
<tr>
<td>Third singular (nonhuman)</td>
<td>name of thing</td>
</tr>
<tr>
<td>First plural (exclusive)</td>
<td>kam</td>
</tr>
<tr>
<td>First plural (inclusive)</td>
<td>kit</td>
</tr>
<tr>
<td>Second-person plural</td>
<td>kim</td>
</tr>
<tr>
<td>Third-person plural</td>
<td>ihi</td>
</tr>
<tr>
<td>2nd-person sg. &amp; pl. (Formal)</td>
<td>kim</td>
</tr>
</tbody>
</table>

118 I suspect the first-person plural exclusive could be an Indonesian calque, as I have seldom encountered it in unprompted speech. It is, however, present in orature and verse.

119 It is difficult to reach consensus on the second-person plural pronominal prefix, and it seems to typically be omitted in speech.

120 Speakers report variation regarding whether the formal pronoun is available only for the second person, for the second and third person, or for all persons (other than first singular) if a referenced individual is older than the speaker.
6.1 Example sentences:

(98) First-person singular

\[
\begin{array}{lll}
\text{ak} & \text{a-} & \text{dota} \\
1\text{SG} & 1\text{SG.AGR} & \text{strike} \\
\end{array}
\] 
Bob.

'I struck Bob.'

(99) Second-person singular

\[
\begin{array}{lll}
\text{mon} & \text{gu-} & \text{dota} \\
2\text{SG} & 2\text{SG.AGR} & \text{strike} \\
\end{array}
\] 
Bob.

'You struck Bob.'

(100) Third singular (human)

\[
\begin{array}{lll}
\text{ki'i} & \text{i-} & \text{dota} \\
3\text{SG} & 3\text{SG.AGR} & \text{strike} \\
\end{array}
\] 
Bob.

'S/he struck Bob.'

(101) Third singular (nonhuman)

\[
\begin{array}{lll}
\text{as} & \text{neka i-} & \text{dota} \\
\text{dog} & \text{that} & 3\text{SG.AGR} \\
\end{array}
\] 
Bob.

'\text{That dog struck Bob}.'

(102) First plural (exclusive)

\[
\begin{array}{lll}
\text{kam} & \text{ka-} & \text{dota} \\
1\text{PL.EXCL} & 1\text{PL.EXCL.AGR} & \text{strike} \\
\end{array}
\] 
Bob.

'We (without you) struck Bob.'

(103) First plural (inclusive)

\[
\begin{array}{lll}
\text{kit} & \text{ta-} & \text{dota} \\
1\text{PL.INC} & 1\text{PL.INC.AGR} & \text{strike} \\
\end{array}
\] 
Bob.

'We (including you) struck Bob.'

(104) Second-person plural

\[
\begin{array}{lll}
\text{kim} & \text{gu-} & \text{dota} \\
2\text{PL} & 2\text{PL.AGR} & \text{strike} \\
\end{array}
\] 
Bob.

'Y'all struck Bob.'
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(105) Third-person plural

\[
\text{ihi} \quad i- \quad dota \quad \text{Bob.}
\]

3PL 3PL.AGR strike Bob
‘They struck Bob.’

(106) Formal

\[
kim \quad \text{gi-} \quad dota \quad \text{Bob.}
\]

2SG.F. 2SG.F.AGR strike Bob
‘You struck Bob.’

7 Affirmative statements

7.1 Confirmations

Confirmation statements in Sula can be formed with the particle, \textit{iyo} ‘yes’. If questioned, for example:

(107) \textit{kena neka mon gon te?}
fish that 2SG.INF belong or
‘Does that fish belong to you?’

One might answer:

(108) \textit{iyo, (kena) neka ak gon}
yes (fish) that 1SG belong
‘yes, that (fish) is mine’,

(109) \textit{iyo, ak gon}
yes 1SG belong
‘yes, mine’

Or commonly, people simply answer: \textit{iyo} ‘yes’ or \textit{ak gon} ‘mine’. The following examples demonstrate an additional question and confirmation variation.
(110) \textit{neka} \textit{kim} \textit{kena} \textit{te}?
that 2SG.F fish Q?
‘Is that your fish?’

(111) Person 2 confirmation variations

a. \textit{iyo}, \textit{(neka)} \textit{ak} -gon.
yes (that) 1SG belong
‘Yes, (that) belongs to me.’

b. \textit{iyo}, \textit{neka} \textit{ak} \textit{kena}.
yes that 1SG fish
‘Yes, that’s my fish.’

c. \textit{iyo}, \textit{ak} \textit{kena}.
yes 1SG fish
‘Yes, my fish.’

d. \textit{iyo}
yes
‘Yes.’

e. \textit{ak} \textit{kena}
1SG fish
‘My fish.’

f. \textit{ak} -gon
1SG belong
‘Mine.’

Yes/no questions with verbs are answered similarly.

(112) Person 1
\textit{gu-} \textit{laka} \textit{bo} \textit{uma} \textit{te}?
2SG.AGR walk LOC home Q?
‘Are you going home?’
(113) Person 2 (a)
*iyo a- laka bo uma.*
yes 1SG.AGR walk LOC home
‘Yes, I’m walking home’

Person 2 (b)
*laka bo uma.*
walk LOC home
‘Walking home’

Person 2 (c)
iyo.
yes
‘Yes.’

(114) Person 1
*mon gu- nan bet-ik te?*
2SG 2SG.AGR bathe now Q?
‘Are you bathing now?’

(115) Person 2 (a)
iyo a- nan.
yes 1SG.AGR bathe
‘Yes, I’m bathing’

Person 2 (b)
iyo nan.
yes bathing
‘Yes, bathing.’

Person 2 (c)
nan.
bathing
‘Bathing.’

Person 2 (d)
7.2 "Seems to be"

Affirmative statements with less certainty use the *pahu gan* construction. These statements have a meaning similar to *it seems* in English.

(116) *pahu gan* *gatel*
appear with three
'there seem to be three'

(117) *pahu gan* *baba duk moya bet’ik*
appear with father come NEG today
'It seems that father will not come home today.'

(118) *bet’ik pahu gan* *baba duk moya*
today appear with father come NEG
'It seems that father will not come home today.'

8 Negative statements

Non-imperative\(^{121}\) negative statements are formed with the word *moya* ‘no’/‘not’.

(119) *dad dad moya*
‘can’ ‘can not’

(120) *pia pia moya*
‘good’ ‘not good’

8.1 Negating verb phrases

*Moya* must come after the entire verb phrase in order to negate the action's occurrence.

\(^{121}\) Negation of imperatives is discussed in the following section on commands.
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(121) a- laka bihu.
1SG.AGR walk return
‘I’m returning’

(122) a- laka bihu moya.
1SG.AGR walk return NEG
‘I’m not returning’

(123) a- laka moya bihu (a- bena sapeda).
1SG.AGR walk NEG return 1SG.AGR climb bicycle
‘I’m not returning on foot (I’m riding a bicycle)’

(124) Yanto baha kena damet (neka).
Yanto buy fish yesterday (that)
‘Yanto bought a fish yesterday.’

(125) Yanto baha kena moya damet (neka).
Yanto buy fish NEG yesterday (that)
‘Yanto did not buy a fish yesterday.’

(126) *Yanto baha moya kena damet (neka).
Yanto buy NEG fish yesterday (that)
‘Yanto did not buy a fish yesterday.’

(127) *Yanto baha kena damet moya (neka).
Yanto buy fish yesterday NEG (that)
‘Yanto did not buy a fish yesterday.’

The first asterisked example above is indeed a grammatical sentence, but it has a different meaning than expected. Placing moya immediately after the verb negates the verb alone. So in the first asterisked example above, it would mean, 'It was not PURCHASING that Yanto did with a fish yesterday' (e.g. 'he CAUGHT one'). Likewise, the second asterisked example is grammatical, but here moya negates the time word
Sula

immediately preceding it. This sentence means 'YESTERDAY is not when Yanto bought the fish' (e.g. 'he bought it TODAY').

Moja directly follows the sentence element to be negated, so negating preferences is just like negating active verbs.

(128)  
\[
\text{ak lal- suka suglela bal.} \\
\text{1SG inner like play ball} \\
\text{‘I like to play ball.’}
\]

(129)  
\[
\text{ak lal- suka moja suglela bal.} \\
\text{1SG inner like NEG play ball} \\
\text{‘I don’t like to play ball.’}
\]

Placing moja between suglela and bal negates only the verb, suglela, rather than the entire verb phrase.

(130)  
\[
\text{ak lal- suka suglela moja bal.} \\
\text{1SG inner like play NEG ball} \\
\text{‘It is not playing that I like to do with balls.’}
\]

To negate a noun, moja occurs directly after the noun being negated, so by placing moja after bal, the example sentence becomes, *It’s not ball that I like to play.*

(131)  
\[
\text{ak lal- suka suglela bal moja.} \\
\text{1SG inner like play ball NEG} \\
\text{‘It’s not ball that I like to play.’}
\]

In predicate nominatives, the noun is negated that is on the same side of the equation as moja.
9 Commands

As in English, Sula has second-person imperative constructions where the subject is implied.

*Imperative with null subject*

(132) $\emptyset$ gayamuamua
   you eat everything
   'Eat everything'

(133) $\emptyset$ gu- gaya muamua
   you 2SG.AGR-eat everything
   'Eat everything’ (the “gu” emphasizes “you”)

(134) $\emptyset$ gayachoklat muamua
   you eat chocolate everything
   'Eat all the chocolate'

Imperatives do not typically cooccur with pronominal prefixation on verbs in the affirmative. Negative commands can mark progressive with pronominal prefixation though.

*Negative imperative with null subject and null pronominal prefix*

(135) $\emptyset$ koi gayamuamua
   you NEG eat everything
   'Don't eat everything.'

*Negative imperative with null subject and pronominal prefix*

(136) $\emptyset$ koi gu- gayamuamua
   you NEG 2SG.AGR-eat everything
   'Stop eating everything.'

Additionally, Sula permits a null direct object in double-object constructions.
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*Imperative with double object*

(137) Ø dok ak pip
you give me money
'Give me money.'

*Imperative with null subject and null DO₁*

(138) Ø dok Ø pip
you give me money
'Give me money.'

*Imperative with null subject and null DO₂*

(139) Ø dok ak Ø
you give me it
'Give it to me.'

10 Orientation system and space

As in English, Sula speakers make use of multiple frames of reference. Intrinsic and relative descriptions pull from the following vocabulary:

**Table 39. Orientation terminology**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>tapa</td>
<td>‘left’</td>
</tr>
<tr>
<td>kul</td>
<td>‘right’</td>
</tr>
<tr>
<td>samana</td>
<td>‘there (near addressee)’</td>
</tr>
<tr>
<td>saik / isuna / isuka</td>
<td>‘here’</td>
</tr>
<tr>
<td>bangana</td>
<td>'there (distant)'</td>
</tr>
<tr>
<td>(mak) han, (baka)han</td>
<td>‘by’ / ‘near’</td>
</tr>
<tr>
<td>yau</td>
<td>‘far’</td>
</tr>
<tr>
<td>bo</td>
<td>‘at’</td>
</tr>
<tr>
<td>goga</td>
<td>‘on’</td>
</tr>
<tr>
<td>tina</td>
<td>‘on’</td>
</tr>
<tr>
<td>lepa</td>
<td>'on' / ‘over’</td>
</tr>
<tr>
<td>heha</td>
<td>‘under’</td>
</tr>
</tbody>
</table>
Additionally, there are two words *hifa* and *hafa/hata* that function as directions, but seem to be un-mapable to any constant bearing or direction. They seem to function similarly to the English terms *to and fro* and, similarly, they seem to occur only in figurative or poetic speech, such as in the folk song, *Hai Sua*:

(140) lif (hifa hata) mai -a pil hia moya e  
    turn (to and fro) but 1SG.AGR see one NEG emphasis  
    ‘I look both directions, but I’m unable to see anybody’

### 10.1 Intrinsic frame of reference

Object location can be described in relation to a part of another object. Intrinsic frames of reference can be used to locate objects in relation to other objects perceived as having intrinsic sides.

(141) kii bo uma lug  
    3SG LOC house front  
    ‘He is in front of the house.’

---

122 This is a peculiar word which functions as an adverbial intensifier and an adposition. Unlike other modifiers, it is preverbal when modifying a verb (e.g. *lal suka* ‘inner like’), but it comes post nominal like other adpositions when functioning as an adposition (e.g. *bo piga lal* ‘in the bowl’).
(142) *komodo bo mon gehi*

monitor lizard LOC 2SG back

‘The monitor lizard is behind you.’

10.2 Absolute frame of reference

Sula has a robust vocabulary of fixed bearings. The basic terms are *tema* ‘inland’, *fai* ‘seaward’, *lepa* ‘up’, *neu* ‘down’. The terms *tema* and *fai* do not appear to reflect PAN *daya* ‘toward the interior’ and *lahud* ‘toward the sea’, but they do seem to reflect an ancient directional concept that is present in a multitude of Austronesian languages (e.g. Blust 2013:311). The language also uses the Malay cardinal directions, *timur* ‘east’, *barat* ‘west’, *utara* ‘north’, *selatan* ‘south’.

The words *lepa* 'up' and *neu* 'down' also have horizontal directional associations; however, the cardinal direction mapped to 'up' and 'down' varies depending where on the islands one is discussing. On the island of Sanana, *laka neu* corresponds to walking counterclockwise around the island, and *laka lepa* corresponds to walking clockwise around the island. This means that in the town of Sanana on the Eastern coast, heading *neu* is north whereas the opposite of this is true across the island in the town of Malbufa. However, along the inhabited southern coast of Mangon island to the north, *laka lepa* corresponds to walking counterclockwise around the island while *laka neu* corresponds to walking clockwise around the island, and the cardinal directions they map to are east and west respectively. Unlike in some languages where these would function as relative directions based on the orientation of the speaker while talking, *lepa*, and *neu* are fixed directions in Sula, but the meaning of the directions is opposite depending whether one is talking about locations on Mangon or Sanana.
Blust (1997) discusses the widespread prevalence of ‘up’ and ‘down’ directional systems in the Austronesian world, and he refers to this as *macro-orientation*. Some examples Blust gives are ‘down/below’ equating to *south* in Chamorro (Mariana Islands), *west* in Komodo and Kambera (Lesser Sundas, East Nusa Tenggara), *south* in Fordata and Yamdena (Tanimbar Islands, Maluku), and *north* in Kei (Kei archipelago, Maluku Tenggara).

Additionally, Holton (2017:159) explains that a similar system is present throughout much of Northern Maluku and there is a remarkable consistency on Halmahera where, irrespective of location or language spoken, ‘up’ refers to the counterclockwise direction. This is remarkable, because Halmahera is an enormous, irregularly-shaped island with many languages from multiple language families.
The island of Mangon shares the directional mapping from Halmahera—I have personally observed it along its southern coast, and it has been reported to me that the directions remain consistent across the island. Yet oddly, this is reversed on Sanana. The nearby island of Selayar interestingly also uses ‘up’ and ‘down’ terminology, but it does so without a circular system, i.e. the meanings of ‘up’ and ‘down’ are reversed on opposite sides of the island (Holton and Pappas in print:22).

Holton and Pappas speculate this could be a means to facilitate communication between island inhabitants who tend to cross over the interior of the island rather than circumnavigating it (in print:23). If this is the case, ‘up’ and ‘down’ have become fixed, absolute directions that are mapped to south and north. Another possible explanation resulting in the same outcome could be that early settlers to the East coast swapped the direction of ‘down’ and ‘up’ because they were conceptualizing the meaning not as ‘clockwise’ vs. ‘counterclockwise’ but rather as (from my home) toward or away from location X (say for example, Makasar).

This explanation would fit with my experiences in Sula where no consultant remarked on ‘up’ and ‘down’ as being clockwise or counterclockwise and seldom even remarked that they were left and right. Rather, people remarked that directions were toward or away from some specific location. These statements of course reflect a system that is circular, but they do not necessarily reflect an ingrained psychological conceptualization to that effect.

Selayar is a long, narrow island just off the coast of Sulawesi, and it is offset at such an angle that its tip points back toward the mainland. If the island’s first settlers had migrated there from Sulawesi with the understanding, for example, that Makassar...
is ‘down’ from them, then it might have been natural for east-coast settlers and west-coast settlers both to have retained that relationship to ‘down’ rather than retaining a connection between ‘down’ and clockwise-ness. And rather than it being a conscious decision regarding a particular salient location (e.g. Makassar), it could have simply carried over from an unconscious desire among east-coast settlers to maintain all of their verbalized spacial relationships instead of suddenly having to remember to switch words whenever they referenced familiar locations that mostly still retained the same cardinal direction relationships that they had prior to migrating to the new island.

Either way that the switch happened, the result is that settlers on the east and west coasts now both point northward as ‘down’ and, unexpectedly for the region, the island’s ‘up’ and ‘down’ directions are no longer relative to the ocean.

10.3 Relative frame of reference

Relative frames of reference can be used for any situation (even with objects that are perceived as having intrinsic sides).

(143) kii \(\text{bo}\) kau lug
3SG LOC tree front
‘He is in front of the tree.’

(144) mankau \(\text{neka}\) la bo lida lepa
bird that fly LOC mountain over
‘The bird flies over the mountain.’


10.4 Directions of motion

There are a handful of directional phrases that enable even a novice speaker to navigate her way around the islands. While these terms are by no means exhaustive, they will be sufficient for most situations one is likely to find oneself in.

(145) *sai mane ha neh a / laka terus*  ‘go straight ahead’

(146) *lif (ila) tapa*  ‘turn left’

(147) *lif (ila) kul*  ‘turn right’

(148) *lif gehi*  ‘turn around’

(149) *sai gabalil*  ‘go around’ (‘circumnavigate’)

(150) *sai lepa*  ‘go up’ (e.g. a an inclined route)

(151) *bena lepa*  ‘climb up’ (e.g. a ladder)

(152) *sai neu*  ‘go down’ (e.g. a an inclined road)

(153) *bua neu*  ‘fall down’ (e.g. from a tree)

(154) *sai bo _ / laka bo _*  ‘go to (location)’

10.5 Adpositions & spatial relationships

Positional information is structured parallel to Mandarin: locative particle + location NP + adposition. Unlike in Mandarin however, Sula drops position words—adpositions are typically only present for emphasis, in situations where the location contradicts situational expectation, and in situations where there is no corresponding expectation.

For example, to express that a pair of shoes is by the door, the statement would be *shoes LOC door Ø*, while in the less-common scenario that a pair of shoes were atop a door
(e.g. hanging by the laces to dry), the construction would be, shoes LOC door on, and in a scenario where, say a new organism was found living on the bottom surface of leaves, an adposition following the NP would also be required, because there would be no prior expectation of the organism's location. Typically, the locative particle in Sula is situated to the left of the noun phrase and positional information is situated to the right.

The most common positional word is the locative particle bo. It is used to mean roughly at, to, on, or in when there is no inherent ambiguity in the sentence's meaning; bo is always situated before the NP.

(155) tasoya ‘banana’ bo basa Sua
say banana (Eng.) in language Sula
‘How do you say “banana” in Sula?’

(156) Bahasa hapa yang gu- pak bo hai Mangon
Language what REL 2SG speak on island Mangoli
‘Which languages are spoken on Mangole island?’

(157) da’i kof bo meja
exist coffee on table
‘There is a coffee on the table.’

(158) kastela deha bo piga lal bo meja
potato stay LOC bowl in LOC table
‘There are potatoes in the bowl on the table.’

(159) piga deha bo meja
bowl stay LOC table
‘There is a bowl on the table.’
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(160) *kastela deha bo piga* *(lal)*

potato stay LOC bowl (in)

‘There are potatoes in the bowl.’

Sula has very few prepositions, but the lexeme, *bia* might be one. It serves an ablative function similar to ‘from’ in English, and it is situated before the NP.

(161) *bia sahoa*

from where

Where (are you) from?

(162) *a-laka bia uma*

1SG- go from home

I'm coming from home. (e.g. presently)

(163) *koi bihu bia Waibao*

don’t return from Waibao

Don't come back from Waibao.

Where there is no contextually-expected location for an object or where the object's actual location differs from expectation, the spatial information is provided after the noun phrase. In the following examples, *he is in front of me*, and *he is behind me* are both plausible, and there is no default expectation as to the location. As such, the post nominal position morpheme is necessary.

(164) *ki’i bo ak lug*

He LOC 1SG front

‘He is in front of me.’

(165) *ki’i bo ak gehi*

He LOC 1SG back

‘He is behind me.’
Complicating Sula locational system is at least one positional morpheme which can occur in the absence of bo and which interestingly, can come either pre or post nominally. Fittingly, this all-around morpheme means 'around'.

(166) \textit{ak a- laka hai Sua gabalil}

\begin{tabular}{l}
I 1SG.AGR- walk island Sula around \\
‘I walk around Sanana Island.’
\end{tabular}

(167) \textit{ak a- laka gabalil hai Sua}

I 1SG.ARG- walk around island Sula

I walk around Sanana Island.

11 Question formation

Yes/no questions are formed using the sentence-final question particle \textit{te}. \textit{te} also functions as the conjunction, ‘or’, and when functioning as a question particle, it is an abbreviation of the phrase, \textit{te moya} ‘or not’.

(168) \textit{mon gu- laka bo Wai Ipa te-moya}

\begin{tabular}{l}
You 2SG.AGR walk LOC Wai Ipa or-not \\
‘Will you go to Wai Ipa or not?’
\end{tabular}

(169) \textit{mon gu- laka bo Wai Ipa te}

\begin{tabular}{l}
You 2SG.AGR walk LOC Wai Ipa or \\
‘Are you going to Wai Ipa?’
\end{tabular}

11.1 “Wh” words

Generally “wh” question words are in situ, that is they are left in the place of the word being substituted. For example, instead of \textit{what are you eating?} as English speakers

\begin{tabular}{l}
123 there is some indication of a slight preference for the pre nominal position
\end{tabular}
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say, Sula speakers say, *You are eating what?* which parallels the statement, *You are eating (bananas)*.

As in English, the question word can sometimes change places to alternate focus.

e.g.: *hapa neka* ‘whats that’ vs *neka hapa* ‘that’s WHAT”

### 11.1.1 ‘What’ *hapa*

(170) gaya hapa

    eat what

‘What are you eating?’

### 11.1.2 ‘When’ *bet pila*

(171) bet-pila gu laka nan

    time-how.much 2SG.AGR walk bathe

‘When will you go bathe?”

(172) gu laka nan bet-pila

    2SG.AGR walk bathe time-how.much

‘You will go bathe when?”

### 11.1.3 ‘Who’ *han*

(173) han matnana fina neka

    who elder/spouse woman that

Whose mother is that? 124

### 11.1.4 ‘Where’ *sahoa*

Also, *saoa, soa*, and *sibo* (Mangon)

---

124 At its most literal, *matnana* means ‘elder’, but it has also come to mean ‘husband’ or, when modified by *fina*, ‘wife’. This is analogous to ‘my old man/old lady’ in English. Like in Bahasa Indonesia where all women are honored as *ibu* ‘mother’ because they are in theory *somebody’s* mother even if not the speaker’s own mother, this Sula speaker is honoring the mother as ‘somebody’s wife’. 

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(174) laka sahoa neka
walk where that
‘Where is it that you are going?’

11.1.5 ‘Why’ / ‘how’ bagahoa

Also bagaoa, bagoa, goa bal, and ganoa and ganoki in Mangon.

(175) bagahoa gu- bau- munara bet-ik
why 2SG.ARG CAUS work today
‘Why/how are you working today?’

11.1.6 ‘How many/much’ ga pila

Also eb gahooa, eb gaoa, and eb goa.

(176) matapia ga-pila nib bo mon uma
people how many sit LOC 2SG home
‘How many people live in your home?’

11.1.7 ‘Which’ bahoa

Also, baoa, boa, (hia baoa ‘which one’).

(177) es bahoa lal-suka neka
cold drink which inside-like that
‘Which cold drink is it that you like?’

12 Requests and offers

Most commonly, requests are made as imperatives (commands) where the request is implied though not explicitly stated. For example, dok pip ‘give money’ is received as, ‘Can I have some money?’ More polite requests can be formed with dad ‘can’ / ‘may’ and
Sula

heka which means ‘to want’ in the context of requests (*bit* and *mau* are the common forms of ‘to want’ in other contexts).

12.1 Requests with *dad*

(178)  
\begin{align*}
\text{1SG.AGR} & \quad \text{borrow} & \quad \text{2SG.F} & \quad \text{money} & \quad \text{can} & \quad \text{Q} \\
\text{a-} & \quad \text{pinjam}^{125} & \quad \text{kim} & \quad \text{pip} & \quad \text{dad} & \quad \text{te}
\end{align*}

‘Can I borrow your money?’

12.1.1 Agree

(179)  
\begin{align*}
\text{1SG.AGR} & \quad \text{borrow} & \quad \text{2SG.F} & \quad \text{money} & \quad \text{can} & \quad \text{Q} \\
iyo, & \quad \text{dad} & \quad \text{yes} & \quad \text{can}
\end{align*}

‘Yes, you can.’

12.1.2 Refuse

(180)  
\begin{align*}
\text{1SG.AGR} & \quad \text{borrow} & \quad \text{2SG.F} & \quad \text{money} & \quad \text{can} & \quad \text{Q} \\
dad & \quad \text{moya} & \quad \text{can} & \quad \text{NEG}
\end{align*}

‘No, you can’t.’

12.2 Requests with *heka*

(181)  
\begin{align*}
\text{2SG.F} & \quad \text{want} & \quad \text{AUX} & \quad \text{walk} & \quad \text{with} & \quad \text{1SG} \\
\text{kim} & \quad \text{gi-} & \quad \text{heka} & \quad \text{bit} & \quad \text{laka} & \quad \text{do} & \quad \text{ak}
\end{align*}

‘Would you like to walk with me?’

12.2.1 Agree

(182)  
\begin{align*}
\text{1SG.AGR} & \quad \text{want} & \quad \text{1SG.AGR} & \quad \text{heka} & \quad \text{bit} & \quad \text{laka} & \quad \text{do} & \quad \text{ak}
\end{align*}

‘Yes, I’d like to.’

12.2.2 Refuse

---

*pinjam* is a Malay loan, a Sula native term is *pak pai*, but this is less commonly used, at least among speakers in and around Sanana city.
13 Modifying

Sula modifiers occur after the word being modified. They can modify nouns, verbs, and other modifiers. And, complementation is attributive and does not make use of a copula—that is, speakers say, you tall rather than having to say, you ARE tall.

13.1 Nominal modification

In Sula, modifiers follow the nouns they modify. This is somewhat unexpected though, as the genitive is possessor initial, and languages in which modifiers follow nouns also tend to have possessors follow their noun (e.g. Comrie 1989).

Multiple modifiers can be stacked in succession as in the following example. There are expectations regarding the order in which modifiers should appear, but the present data is insufficient for determining ordering rules.

13.2 Verbal modification

Verbal modification parallels that of nominal modification; modifiers follow the verbs they modify, and multiple modifiers can be stacked in succession.
Further modification of modifiers (adverbial type modification) also takes a modifier that follows the word or phrase it is modifying.

13.3 Modifier modification

The second example above exemplifies ambiguity in the language as, isolated from context, it could also mean ‘My father is seriously scared’.

Although not displayed in the previous examples, modifiers themselves can be modified through successive modification (e.g. *nahu eb kadiga* ‘long very strong’), and there does not seem to be a limit to the number of successive modifiers.

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126 Language learners: ignore the equal sign in the example above. This just means that I am analyzing the form as a special kind of word called a clitic—a fact that would probably only be of interest to linguists.

127 Most commonly people say *nap* ‘head’ instead of *nap foa* ‘head hair’. It is typical for the name of the more important body part to represent the less important body part. Other examples of this are *yai* ‘leg’ for *paroma/padomu* ‘knee’, *lima* ‘hand’ for *wana/wanga* ‘finger’.
13.4 Stacked modifier constraints

As mentioned above, there are phrase structuring constraints regarding the ordering of modifiers, but I lack data to parse these constraints. Some such examples can be seen in the following:

(190) ak bit win kof mit mota
1SG want drink coffee black hot
‘I want to drink hot black coffee.’

(191) *ak bit win kof mota mit
1SG want drink coffee hot black
‘I want to drink hot black coffee.’

(192) matapia aya baeo
person big bad
‘big bad person’

(193) *matapia baeo aya
person bad big
‘big bad person’

(194) matapia bakatai aya baeo
person dirty big bad
‘big bad dirty person’

(195) *matapia aya bakatai baeo
person big dirty bad
‘big bad dirty person’
14 Expressing time

14.1 Telling time

Most Sula speakers tell time in Malay, or at least a mixture of Sula and Malay. This is likely because clocks and the concept of a 24-hour day were borrowed from external sources. That said, when elicited, there is a straightforward system of telling time that multiple people have independently produced for me. Sula people use both 12-hour and 24-hour time, and as in English, 12-hour time is ambiguous as to the time of day unless a qualifying word accompanies the time.

**Table 40. Time Telling Vocabulary**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>befa</td>
<td>'time' / 'o'clock'</td>
</tr>
<tr>
<td>menit</td>
<td>'minute'</td>
</tr>
<tr>
<td>dunnis, donnis</td>
<td>'half'</td>
</tr>
<tr>
<td>subur</td>
<td>'morning' / AM</td>
</tr>
<tr>
<td>lea neu</td>
<td>'afternoon' / PM</td>
</tr>
<tr>
<td>ba'uhi</td>
<td>'night'</td>
</tr>
<tr>
<td>sabatena</td>
<td>'midnight'</td>
</tr>
</tbody>
</table>

14.1.1 Examples

Swapping *lea neu* / *subur* flips the time of day.

1:00 (a.m. or p.m.)

(196) befa       hia
    o'clock     one
    'one o'clock'
1:30 (a.m. or p.m.)

(197) befa hia dunnis
      o'clock one half
      'one thirty'

4:00 (a.m.)

(198) befa gareha subur
      o'clock four morning
      'four a.m.'

4:00 (p.m.)

(199) befa gareha lea (neu)
      o'clock four sun down
      'four p.m.'

4:01 (p.m.)

(200) befa gareha do menit pakahia lea (neu)
      o'clock four and minute first sun down
      'a minute past four p.m.'

4:15 (p.m.)

(201) befa gareha do menit pakapoa do galima lea (neu)
      o'clock four and minute tenth and five sun down
      'fifteen minutes past four p.m.'

4:30 (p.m.)

(202) befa gareha do menit pakapoa gatel lea (neu)
      o'clock four and minute tenth three sun down
      'thirty minutes past four p.m.'
(203) *befa gareha dunnis lea neu*
o'clock four half sun down
'four thirty p.m.'

4:45 (p.m.)

(204) *befa gareha do menit pakapoа*
o'clock four and minute tenth

*gareha do galima lea neu*
four and five sun down
'four forty-five p.m.'

(205) *befa galima kurang menit pakapoа*
o'clock five minus minute tenth

*do galima lea neu*
and five sun down
'fifteen to five p.m.'

4:54 (p.m.)

(206) *befa gareha do menit pakapoа*
o'clock four and minute tenth

*galima do gareha lea neu*
five and four sun down
'four fifty-four p.m.'

(207) *befa galima kurang menit ganei lea neu*
o'clock five minus minute six sun down
'six minutes to five p.m.'
14.2 Saying the date

Sula borrowed the Malay names for the twelve months, but Sula uses its words for 'moon', *fashina*, and 'day', *bet*, to mean, 'month' and 'day'. A prototypical date statement is formed, 'day' + NUMBER + 'month' + MONTH-NAME.

\[(208)\]  
\[
\begin{array}{cccc}
\text{bet} & \text{gapit} & \text{fashina} & \text{Juni} \\
\text{day} & \text{seven} & \text{moon} & \text{June} \\
\text{'June seventh'}
\end{array}
\]

In practice the above structure comes across as terribly specific, so people normally just say: *gapit Juni* 'June seventh'.

**Table 41. The Sula/Malay Months**

<table>
<thead>
<tr>
<th>Sula/Malay</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Januari</td>
<td>January</td>
</tr>
<tr>
<td>Februari</td>
<td>February</td>
</tr>
<tr>
<td>Maret</td>
<td>March</td>
</tr>
<tr>
<td>April</td>
<td>April</td>
</tr>
<tr>
<td>Mei</td>
<td>May</td>
</tr>
<tr>
<td>Juni</td>
<td>June</td>
</tr>
<tr>
<td>Juli</td>
<td>July</td>
</tr>
<tr>
<td>Agustus</td>
<td>August</td>
</tr>
<tr>
<td>September</td>
<td>September</td>
</tr>
<tr>
<td>Oktober</td>
<td>October</td>
</tr>
<tr>
<td>November</td>
<td>November</td>
</tr>
<tr>
<td>Desember</td>
<td>December</td>
</tr>
</tbody>
</table>
14.3 Talking about the past and future

Sula does not obligatorily mark past or future tense. A simple sentence like, *a-laka bo uma* (1SG.AGR-walk LOC house) ‘I walk home’ is ambiguous with respect to tense; it can mean 'I walked home', 'I walk home', or 'I will walk home'. This is not as confusing as it might seem though, since context almost always makes it clear when an action takes place, and for the occasions where context does not make it clear, Sula speakers just add the necessary information to the sentence to clear up the ambiguity. For instance, if it is not evident from context that the walking home happened yesterday, a speaker will say, *a-laka bo uma dabet* 'I walked home yesterday'.

The temporal word can occur at the beginning or end of the phrase as in the following example.

\[(209) \ (dabet) \ [ak]^{128} \ (dabet) \ [[a- \ dok] \ [in \ hal]] \]
\( \text{(yesterday) 1SG (yesterday) 1SG.AGR give POSS flower} \)
\( \text{S V OBJ} \)

\[(dabet) \ [bo \ [ak \ nyaya]] \ (dabet) \]
\( \text{(yesterday) to 1SG mother (yesterday)} \)
\( \text{OBL} \)

'I gave a flower to my mother yesterday.'

When used as a modifier, a temporal word can go almost anywhere within the phrase as long as it does not split a compound word, an affix, or break up a sub-phrase, such as the negation phrase in the following example.

---

128 it is likely that the subject is topicalized, if a temporal word is inserted between it and the verb
14.3.1 Future auxiliary construction

English speakers use the auxiliary verb, *will*, to talk about events in the future. Like in English, Sula can also use an auxiliary to talk about events in the future without specifying precisely when they happen. Sula's future auxiliary is a secondary function of the verb 'to want', *bit* (or *mau* in Mangon dialects). Being a close parallel to English, this is a simple construction to learn. However, unlike in English, only context can differentiate whether a sentence is a future auxiliary construction and means something *will* happen or whether the speaker is *wanting* something.

(211)  
ak  bit  a-   laka  bo  sekolah  
1SG  AUX/want 1SG.AGR walk to school  
'I want to go to school.' / 'I will go to school.'

(212)  
mit  gamam  bit/mau  uya  
black darken  AUX  rain  
'It has gotten dark, and it is going to rain.'

14.4 Aspect

Sula uses aspectual particles to describe how an event or state is carried out over time. Aspect is similar to tense except instead of describing *when* something happened, it specifies the completeness of an action or the speakers temporal view of a situation. Aspect places focus on the endpoint of an action, on the carrying out of an action, on the
beginning of an action, or on the event as a whole. For example, in English there is an aspect difference between the following sentences even though they are all in the present tense:

Present tense (no aspect): You eat.

Present tense (progressive aspect): You are eating.

Present tense (perfect aspect): You have eaten.

Present tense (perfect & progressive aspect): You have been eating.

Although it it can take a bit to wrap one's head around the theoretical differences between aspect and tense, the good news is that it is not necessary to completely understand the difference, because aspect in Sula is easy to master. The speaker just needs to put an aspect word at the end of a sentence clause with a verb. Here are a few examples of well-formed sentences with pel 'already' / ‘finished’.

(213) a- laka pel
1SG.AGR walk finished
'I finished walking.'

(214) a- laka pel dabet
1SG.AGR walk finished yesterday
'I finished walking yesterday.'

(215) a- laka pel dawika
1SG.AGR walk finished tomorrow
'I will finish walking tomorrow.'
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(216)  
gaya  mua  pel  
et  all  finished  
'eat it all up'

(217)  
gaya  mua  pel  dawika  
et  all  finished  tomorrow  
'eat it all up tomorrow'

14.4.1 Completive aspect

*pel* 'already' / ‘finished'

Whereas the completive aspect simply marks completion of an event, *perfect* aspect tends to characterize things that are complete though still situationally pertinent (e.g. Payne 2007:239). Sula grammar does not mark this distinction, and the word *pel* is used to describe all situations where an action is complete, and it is therefore more accurate to consider *pel* a completive aspect marker.

(218)  
ak  win  pel  
1SG  drink  finished  
'I'm finished drinking.’ / ‘I have drunk.’

14.4.2 Inceptive aspect

The inceptive aspect marks when an activity commences regardless how far along an activity is from the moment it began. Sula is interesting for having two separate inceptive markers that appear to be determined based on whether one is referring to an action conducted by oneself or by others.

*pai* 'from now’ (commonly directed toward oneself)
Sula

\[(219) \text{ak win pai} \]
\[1SG \text{ drink from.now} \]
'I'll start drinking.'

\textit{ol} 'from now' (commonly directed toward others)

\[(220) \text{mon win ol} \]
\[2SG \text{ drink from.now} \]
'Start drinking.' / ‘Drink already.’

14.4.3 Habitual inceptive aspect

\textit{son, bihu/pihu} ‘again from now’

The habitual aspect represents activities and actions that are regularly reoccurring but it does not require that the event be underway at the moment of speech (Payne 2007:241). In the case of Sula, the word \textit{son} seems to contain both a habitual and also an inceptive notion, where it is reportedly used to describe the commencement of regularly occurring actions.

\[(221) \text{gaya son} \]
\[\text{eat again.from.now} \]
'Start eating.'

\[(222) a- laka bau- munara son \]
\[1SG.AGR \text{ walk CAUS- work again.from.now} \]
'T'm off to work.'

note: the previous example is also fully grammatical choosing \textit{pai} instead of \textit{son}.

It would be contextually inappropriate though, for example, to use \textit{son} when departing to work for the first time ever.
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(223) a- laka pihu
    1SG.AGR walk return.from.now
‘I shall return now’

It is not clear that bihu/pihu marks either habitual or inceptive aspect syntactically, but it appears to do so pragmatically. Evidence against it being syntactically inceptive comes when the completive marker, pel, is added. Doing so forms a sentence that is both habitual and completive (i.e. ‘completed again’).

(224) a- laka pihu pel
    1SG.AGR walk return.from.now finished
‘I have returned already’

14.4.4 Non-completive aspect

moya da ‘not yet’

In contrast to the completive marker, pel, moya da indicates that an action has not occurred. Although moya is a negation word, it isn’t clear from independent evidence that da means ‘yet’. Instances of da collected thus far include ‘bye’ and ‘chest’ (body).

(225) ak ana-mehi-nana sai bo Ternate moya da129
    1SG baby go LOC Ternate not.yet
‘My baby hasn’t been to Ternate yet.’

Negation structures would place moya alone after sai. The sentence-final position indicates that the phrase moya da is functioning a non-completive aspect marker.

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14.5 Time situating words

Sula also has non-aspect terms that help situate events in time. The form *pernah moya* ‘never’ is one such term. *Pernah* is borrowed from a Malay term meaning ‘ever’ that is not used for recent events (Sneddon 1996:199). Although *pernah* is an aspect marker in Malay, I hesitate to classify *pernah moya* as such in Sula, as it occurs in sentence positions that the language’s other aspect markers do not. The following example shows it used in final position in a declarative sentence.

\[(226)\]  
ak a- gaya faf ihi **pernah moya**  
1SG 1SG.AGR eat pig meat ever not  
'I never eat pork'

It is also found in other sentence positions as in the following imperative example.

\[(227)\] **pernah moya** gaya faf ihi  
ever not eat pig meat  
'Never eat pork'

*Sonlulu* ‘after’ is another frequent time-situating term. It appears to be a compound of the habitual inceptive aspect marker *son* and *lulu* meaning ‘small in quantity’. It is unclear how a compound ostensibly translating as ‘a little again from now’ would come to mean ‘after’, so it is likely that *son* did not originally function as a habitual inceptive aspect marker.

\[(228)\] **sonlulu** jam hia, Telkomsel Internet dad  
after hour one Telkomsel Internet can  
'In an hour, Telkomsel Internet will work.'
sonlulu pai ‘later’ (Adding the aspect marker, pai to sonlulu forms a phrase meaning ‘later’.)

(229) ak baba i- duk bihu sonlulu pai
1SG father 3.SG.AGR come return later
‘My father will return later.

**Table 42. Vocabulary for orienting days**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>bet</td>
<td>‘day’ / ‘time’</td>
</tr>
<tr>
<td>bet’ik</td>
<td>‘today’</td>
</tr>
<tr>
<td>dawika</td>
<td>‘tomorrow’</td>
</tr>
<tr>
<td>dabet / damet</td>
<td>‘yesterday’</td>
</tr>
<tr>
<td>dabet hia tuna</td>
<td>‘the day before yesterday’ (yesterday one before)</td>
</tr>
<tr>
<td>banai</td>
<td>‘the day after tomorrow’</td>
</tr>
<tr>
<td>sonlulu bet gatel</td>
<td>‘in three days’ (after day three)</td>
</tr>
</tbody>
</table>

**Table 43. Vocabulary for orienting weeks**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>ahat</td>
<td>‘week’</td>
</tr>
<tr>
<td>ahat’ik</td>
<td>‘this week’</td>
</tr>
<tr>
<td>ahat dawika</td>
<td>‘next week’</td>
</tr>
<tr>
<td>ahat banai/ ahat pihu</td>
<td>‘the week after next’</td>
</tr>
<tr>
<td>ahat gatel (‘week three’)</td>
<td>‘three weeks from now’</td>
</tr>
<tr>
<td>da ahat</td>
<td>‘last week’</td>
</tr>
<tr>
<td>(da ahat) hia tuna</td>
<td>‘(last week) one before’</td>
</tr>
<tr>
<td></td>
<td>‘the week before last’</td>
</tr>
</tbody>
</table>

**Table 44. Vocabulary for orienting months**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>fasina</td>
<td>‘month’</td>
</tr>
<tr>
<td>fasina’ik</td>
<td>‘this month’</td>
</tr>
<tr>
<td>fasina pihu</td>
<td>‘next month’</td>
</tr>
<tr>
<td>fasina gatel</td>
<td>‘three months from now’</td>
</tr>
</tbody>
</table>
da fasina  
'last month' 
fasina hia tuna  
'the month before last' 

**Table 45. Vocabulary for Orienting Years**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>taun</td>
<td>'year'</td>
</tr>
<tr>
<td>tahun’ik</td>
<td>'this year'</td>
</tr>
<tr>
<td>tahun pihu</td>
<td>'next year'</td>
</tr>
<tr>
<td>tahun dabet</td>
<td>'last year'</td>
</tr>
</tbody>
</table>

**Table 46. Additional Time Vocabulary**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>befa</td>
<td>'time'</td>
</tr>
<tr>
<td>befa ga pila(^{30})</td>
<td>'at what time?'</td>
</tr>
<tr>
<td>dawika(^{31})</td>
<td>'future'</td>
</tr>
<tr>
<td>pasa</td>
<td>'past'</td>
</tr>
<tr>
<td>sering</td>
<td>'often'</td>
</tr>
<tr>
<td>manen manen</td>
<td>'seldom'</td>
</tr>
<tr>
<td>tahun paka-poa(^{32})</td>
<td>'decade'</td>
</tr>
</tbody>
</table>

**15 Reflexives**

Reflexive constructions describe someone or something doing an action to themselves.

For example, *Bob hits Bill*, is not reflexive, because Bob is doing something to another person. *Bob hits himself* is a reflexive sentence though, because the action reflects back to Bob. Reflexive constructions in Sula are made using a reflexive pronoun, *dit*.\(^{133}\) There

---

\(^{30}\) lit. 'time + how much'.

\(^{31}\) Lit. ‘daylight’, this also means ‘tomorrow’ (as does *hai dewika* lit. ‘land + tomorrow’) and often ‘future’ in a general sense.

\(^{32}\) lit. ‘year + ten times’.

\(^{133}\) The reflexive pronoun might be *ta* in some dialects.
is also an auxiliary verb, *bal*, that is often included. The precise function of the auxiliary is still unknown, but it seems to only be present in active sentences and carry no semantic content.

\[(230) \text{ki’i } (\textit{bal}) \textit{i-} \textit{dota} \textit{dit} \]
\[
\begin{array}{llll}
3SG & AUX & 3SG.AGR & hit \\
\end{array}
\]

‘He hit himself’

\[(231) \text{ki’i } (\textit{bal}) \textit{i-} \textit{dota} \textit{ki’i} \textit{dit} \]
\[
\begin{array}{llll}
3SG & (AUX) & 3SG.AGR & hit \\
\end{array}
\]

‘He hit himself’

As shown in the second example above, the pronoun can be repeated, but some speakers claim it must come immediately prior to the reflexive pronoun. In conversation, I have recorded instances of the reverse, but it is unclear if that was speech error, or a strategy (such as topicalization) that the speakers who reported it as ungrammatical did not have in mind.

\[(232) \text{ (grammatical)} \]
\[
\begin{array}{llll}
ak & (\textit{bal}) & a- & \textit{dota} & \textit{dit} \\
1SG & (AUX) & 1SG.AGR & hit & self \\
\end{array}
\]

‘I hit myself.’

\[(233) \text{ (grammatical)} \]
\[
\begin{array}{llll}
ak & (\textit{bal}) & a- & \textit{dota} & ak & \textit{dit} \\
1SG & (AUX) & 1SG.AGR & hit & 1SG & self \\
\end{array}
\]

‘I hit myself.’

\[(234) \text{ (grammaticality unclear)} \]
\[
\begin{array}{llll}
*? ak & (\textit{bal}) & a- & \textit{dota} & \textit{dit} & ak \\
1SG & (AUX) & 1SG.AGR & hit & self & 1SG \\
\end{array}
\]

‘I hit myself.’
Like in most (if not all) languages, it is not grammatical for a pronoun to come before an antecedent. That is, you can say, *he* hit *himself* but not *himself* hit *he*.

(235) (grammatical)
\[ Aamira \textbf{(bal)} \ i- \ dota \ ki’i \ \textbf{dit} \]
Aamira (AUX) 3SG.AGR hit 3SG self

'Aamira hit herself'

(236) (grammatical)
\[ Aamira \textbf{(bal)} \ i- \ dota \ Aamira \ \textbf{dit} \]
Aamira (AUX) 3SG.AGR hit Aamira self

'Aamira hit herself'

(237) (grammatical)
\[ Aamira \textbf{(bal)} \ i- \ dota \ Aamira \]
Aamira (AUX) 3SG.AGR hit Aamira

'Aamira hit herself'

(238) (grammaticality unclear)
\[ *ki’i \textbf{(bal)} \ i- \ dota \ Aamira \ \textbf{dit} \]
3SG (AUX) 3SG.AGR hit Aamira self

'herself hit Aamira.'

When there is another direct object, it must come before the reflexive pronoun.

(239) (grammatical)
\[ ak \textbf{(bal)} \ a- \ gut \ ak \ nap \ foa \ (ak) \ \textbf{dit} \]
1SG (AUX) 1SG.AGR scissors 1SG head hair (1SG) self

'I cut my hair myself.'

(240) (grammaticality unclear)
\[ *ak \textbf{(bal)} \ a- \ gut \ (ak) \ \textbf{dit} \ ak \ nap \ foa \]
1SG (AUX) 1SG.AGR scissors (1SG) self 1SG head hair

'I cut my hair myself.'
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Alternatively, the reflexive pronoun can come directly after the subject to emphasize that an action was done alone.

(241) Yanto  bau  fota (ki’i)  (in)  cahana  yota
Yanto  CAUS  tear (3SG)  (POSS)  pants  short
‘Yanto tore his shorts’

(242) Yanto  dit  bau  fota (ki’i)  (in)  cahana  yota
Yanto  self  CAUS  tear (3SG)  (POSS)  pants  short
‘Yanto himself tore his shorts’

(243) *ki’i  (dit)  bau  fota (Yanto)  (in)  cahana  yota
3SG  self  CAUS  tear (Yanto)  (POSS)  pants  short
‘He himself tore Yanto’s shorts’¹³⁴

¹³⁴ This is a grammatical sentence, but it would mean that a person other than Yanto tore Yanto's shorts.

¹³⁵ Sama gan is very likely a borrowing from Indonesian, 'sama dengan'

16 Comparative constructions and degree

Degree words or phrases are what we use to rate things in relation to other things. A comparative construction is a phrase that measures the similarity or dissimilarity between (usually) two things. A superlative construction identifies the greatest extreme between multiple things. For example, I might say that tap water is colder than tea (comparative), but ice water is the coldest (superlative).

The Sula phrase sama gan¹³⁵ is used when saying one thing is ‘the same as’ another thing. The following example compares two brands of cookies.

(244) O’riorio  cap  biskuit (dahi)  sama
O’riorio  brand  cookie (exist)  same
Another, likely native, phrase *sama do* can also be used with an essentially identical effect. The following example can either state that two people share the same mother or that both people’s mothers are similar in trait to one another.

(245) *ak nyaya sama do ki’i in nyaya*
1SG mother same with 3SG POSS mother
'My mother is the same as her/his mother.'

**16.1 Comparisons**

The separated phrase, *foloi ~ bia*, can be used to compare two things. In these constructions, (1) the thing that possesses a comparative trait beyond another is named before the phrase, (2) the trait being used for the comparison is inserted within the phrase, and (3) the thing that possesses a comparative trait to a lesser degree is named after the phrase.

(246) *pang ik foloi aya bia pang neka*
pot this much big of pot that
'This pot is bigger than that pot.'

**16.2 Preferences (more)**

Maximal preferences are constructed using a two word separated phrase, *(pasa) ~ bia*, similar to how comparisons are formed, but in the case of preferences, the first word, *pasa*, is optional and often if not typically omitted.
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(247) ak lal suka (pasa\(^{36}\)) kof bia teh
1SG inside like (pasa) coffee of tea
'I prefer coffee to tea.'

16.3 Preferences (less)

Minimal preferences use the same phrase, (pasa) ~ bia, but add the indonesian loan, 
kurang 'less' in front of bia—i.e. (pasa) ~ kurang bia.

(248) ak lal suka (pasa) teh kurang bia kof
1SG inside like (pasa) tea less of coffee
'I like tea less than coffee.'

16.4 Degree / amount

Sula has several words that can form degree statements. Some of these like eb, foloi, and 
totoya which mean, 'much' / 'many', are adverbial. They are different from verbs, 
because they cannot take the subject prefixes, and they are different from adjectives in 
meaning. Whereas adjectives describe properties of nouns, these words only identify the 
amount of a noun, verb, or adjective. There is no distinction between countable and 
mass nouns in Sula, so these words have a meaning including both 'much' and 'many'.
The most frequent of these words is eb, which can also be reduplicated as eb-eb.

(249) dahii\(^{37}\) pip eb(-eb)
EXPL money much
'Look there, it's a lot of money.'

\(^{36}\) This is possibly a loan from or cognate with pas from Bahasa which means 'precise' or 'just right'.

\(^{37}\) This is a hard word to gloss. With stress on the second syllable, dahii, it functions as a syntactic 
expletive like *it seems* or *there is* in English, but primarily in situations when commenting on something 
unexpected or discovered. When the stress is on the first syllable though, dahi, it is used for existential 
sentences. So while, dahii pip, means something like, 'I found money', dahi pip, means more like, 'money 
exists' / 'I have money'.
Additionally, there are words like *kadiga* 'strong' which can function as adjectives, or adverbs. The following example expresses an adjectival function of *kadiga*.

(251) *as* *neka*  *kadiga*
dog that strong
'That dog is strong!'

Whereas the following example expresses an adverbial function of *kadiga*.

(252) *as* *neka*  *lewa*  *kadiga*
dog that run strong
'That dog sure runs!'

When *kadiga* is repeated, the resulting *kadiga* *kadiga* could be analyzed as having sequential adverbial and adjectival functions, where the second instance of *kadiga* is modifying the first instance, which in turn is modifying the noun phrase.

(253) *as* *neka*  *kadiga*  *kadiga*
dog that ADJ ADV
'That dog is very strong!'

It must be noted that this is only a possible interpretation for what is happening in the example, as one could just as easily postulate that a new, adjectival lexeme was derived from the reduplicated form. Sometimes reduplication also indicates degree, but this does not seem to be grammatically predictable, and the words that are reduplicated and their manner of reduplication must be learned on a word-for-word basis.
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(254) *baha* 'spicy' (spicy)

(255) *baha-ha* 'spicy' (more)

(256) *baha-ha*  *kadiga*
    spicy  strong
    'very spicy'

For added emphasis, the reduplicated adjective can be used with one or more degree words. (See the section on reduplication for more.)

(257) *baha-ha*  *foloi*
    hot  much
    'very hot'

(258) *baha-ha*  *eb*
    hot  very
    'very hot'

(259) *baha-ha*  *eb*  *kadiga*
    hot  very  strong
    'very very hot'

Even degree words can be reduplicated for emphasis.

(260) *baha-ha*  *kadiga-diga*
    hot-hot  strong-strong
    'very very very hot'

(261) *baha-ha*  *eb-eb*
    hot-hot  very-very
    'very very very hot'
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(262) *baha-ha eb kadiga-diga
hot-hot very strong-strong
‘very very very very hot’

(263) baha-haeb-eb kadiga
hot-hot very-very strong
‘very very very very hot’

Speakers reported it to be ungrammatical to reduplicate both degree words.

(264) *baha-ha eb-eb kadiga-diga
hot-hot very-very strong-strong
‘very very very very very hot’

Although eb before kadiga is acceptable, kadiga before eb is not.138

(265) *baha-ha kadiga eb
hot strong very
‘very very hot’

16.5 None, some, all

To indicate a lack of quantity, the general negation morpheme, moya, is added after the element to be negated.

(266) (ak) a- gaya biskuit moya
(1SG) 1SG.AGR eat cookies NEG
‘I do/did not eat (the) cookie(s).’

(267) aku gahia, a- yanga hia moya
1SG alone 1SG.AGR see one NEG
‘I’m alone, I don’t see anyone.’

138 kadiga eb is acceptable where kadiga is used to literally mean ‘strong’, e.g. the person is very strong.
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The question-forming word, *gapila*, meaning ‘how much’ / ‘how many’ is also used in non-questions to indicate a non-specific quantity, ‘some’. I first assumed that consultants were misunderstanding my grammatical elicitation and asking me ‘how many’ of an item I was talking about, but I eventually observed the usage in spoken conversation.

(268) (ak) a- gaya biskuit *gapila* (para)
   (1SG) 1SG.AGR eat cookies some (just)
   ‘I ate some of the cookies.’

The reduplicated form, *mua-mua* which is likely either borrowed from or cognate with *semua* ‘all’ from Indonesian, forms statements of entirety or completeness of quantity and degree. The term is placed immediately after the item being quantified.

(269) (ak) a- gaya biskuit *mua-mua* (pel)
   (1SG) 1SG.AGR eat cookies all-all (ASPECT)
   ‘I ate all the cookies.’

17 Listing: events, directions, instructions

Listing is typically expressed with a pitch raise, vowel lengthening, and a pause between items. The last item in the list takes a lowered intonation, indicating it is the final item. If however a speaker wants to imply that the list is ongoing, s/he will not lower intonation on the final item. The following example shows the intonation pattern for a closed list.

(270) *ak lal suka fua gatel*
   1SG inner like fruit three
only mango banana durian
‘I only like three fruits: mangoes, bananas, and durian.’

The next example illustrates that the final-item retains rising intonation in truncated lists.

\[(271) \text{ak } \text{ lal } \text{suka } \text{ fua } \text{ mua-mua:}\]
\[1\text{SG inner like fruit every}\]

\[\text{weuw} \uparrow \text{apel} \uparrow \text{fia} \uparrow \text{dahia} \uparrow\]
\[\text{mango apple banana durian}\]
‘I like all fruit: mangoes, apples, bananas, durian (etc.)’

It is grammatical to insert \textit{do} ‘and’ between any or all of the list items, but this is not typically done.

18 Indicating possession

18.1 Word order determined

Although Sula does have a possessive marker, it is hard to come up with a rule for how and when to use it. Most of the time, possession is indicated by word order: the possessor comes before the object of possession. This is also the primary pattern for English but the opposite of the Indonesian pattern. In fact, English and Sula are both somewhat atypical in this regard, because it is more common for languages whose verbs (V) come before noun phrases (NP) to have possessors (P) come after the possessed noun phrase (e.g. Comrie 1989).\(^{139}\)

\(^{139}\) Sula, like many Austronesian languages of Maluku, has likely borrowed the preposed possessor construction from non-AN langs.
verbs come before objects:

(Sula)

(272)  *Ak a- sepa kau*

\[
\text{S V NP}
\]

I kicked the tree.

(Indonesian)

(273)  *Aku menendang pohon*

\[
\text{1SG kick tree S V NP}
\]

I kicked the tree.

(English)

(274)  *I kicked the tree.*

\[
\text{S V NP}
\]

I kicked the tree.

possessed objects come after possessors:

(Sula)

(275)  *ak baba*

\[
\text{P NP}
\]

my father

(Indonesian)

(276)  *bapak saya*

\[
\text{NP P}
\]

my father

(English)
18.2 Possessive marker =in

Sula has a linker, =in, which often functions to indicate possession. The rules determining when this marker is or is not used have been difficult to pin down and will require more data and analyses. I have been able to determine from various consultants’ contributions that the =in marker is used primarily (or exclusively) with third-person possessors. That is, first-person possessors do not commonly take =in.

(278) (good)

ak nyaya
1SG mother
'my mother'

(279) (ungrammatical)

*ak =in nyaya
1SG =POSS mother
'my mother'

Second-person informal possessors also do not commonly permit =in.

(280) (good)

mon nyaya
2SG mother
'your mother'

(281) (ungrammatical)

*mon =in nyaya
2SG =POSS mother
'your mother'
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Likewise, second-person formal possessors do not not seem to permit =in\textsuperscript{140}, however these situations are difficult to elicit reliable grammaticality judgements for, and natural-language data will be necessary to know with confidence.

(282) (good)
\[
\text{kim} \quad \text{nyaya}
\]
2SG.F mother
‘your mother’

(283) (ungrammatical)
\[
*?\text{kim} \quad =\text{in} \quad \text{nyaya}
\]
2SG.F =POSS mother
‘your mother’

As for third-person possessors, third-person singular possessors sometimes seem to require =in as shown in the following singular examples.

(284) Pronoun (ungrammatical)
\[
*\text{ki’i} \quad \text{nyaya}
\]
3SG mother
‘her/his mother’

(285) Pronoun (good)
\[
\text{ki’i} \quad =\text{in} \quad \text{nyaya}
\]
3SG =POSS mother
‘her/his mother’

(286) Name (ungrammatical)
\[
*\text{Mustafa} \quad \text{nyaya}
\]
Mustafa mother
‘Mustafa’s mother’

\textsuperscript{140} It is unknown if speakers who also use kim as a third-person pronoun would permit =in. This might be the reason not all speakers agree that Kim in nyaya is ungrammatical.
As for third-person possessors, third-person plural possessors also sometimes seem to require =in as in the following singular examples.

It appears that second-person plural possessors also probably do not permit =in, but some speakers do not determine it ungrammatical.

Whether an inclusivity contrast is still productive in modern Sula is questionable. Examples can be found in song lyrics, however.
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(293) Exclusive (ungrammatical) *?kam =in nyaya

(294) Inclusive (good) kit nyaya

(295) Inclusive (ungrammatical) *?kit =in nyaya

Many related languages have an alienability contrast in their possessive grammar, where items (such as body parts and family members) are indicated differently from items whose possession can be easily transferred. Some degree of an alienability contrast is likely present in Sula too, but it has been elusive if so, because speakers vary with regard to the boundary between alienable and inalienable. The following examples show that distribution of =in probably does not relate to alienability.

(296) ak pip
    1SG money
    'my money'

(297) *ak =in pip
    1SG =POSS money
    'my money'

(298) ak a- gawai ak tena bag
    1SG 1SG.AGR scratch 1SG stomach thick
    'I scratch my fat stomach.'

(299) *ak a- gawai ak =in tena bag
    1SG 1SG.AGR scratch 1SG =POSS stomach thick
    'I scratch my fat stomach.'

(300) a- laka do ak yai bal bit laka
    1SG.AGR walk and 1SG leg AUX want walk
    'I go where my legs take me.'
Sula

(301) *a- laka do ak =in yai bal bit laka
1SG.AGR walk and 1SG =POSS leg AUX want walk
'I go where my legs take me.'

(302) mon pip
2SG money
'your money'

(303) *mon =in pip
2SG =POSS money
'your money'

(304) *ki'i pip
3SG money
'my money'

(305) ki'i =in pip
3SG =POSS money
'her/his money'

Possession in general is seldom used figuratively (i.e. with non-concrete possessors).

(306) *ika bet'ik lab
this today shirt
'this is today's shirt'

(307) *ika bet'ik =in lab
this today =POSS shirt
'this is today's shirt'

These same concepts are instead expressed without possessive constructions.
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(308) *dabet* lab sama moya gan (lab) bet’ik
  yesterday shirt same NEG with (shirt) today
  'Yesterday, the shirt is different from today.'

The concept can also be expressed using the non-concrete possessor as a modifier.

(309) ika lab bet’ik
  this shirt today
  'this shirt today.'

(310) lab dabet sama moya gan lab bet’ik
  shirt yesterday same NEG with shirt today
  'The yesterday shirt is different from the today shirt.'

Some consultants indicate that *in* is acceptable between 'yesterday' and 'shirt' in the next example, but they explain that *in* does not indicate 'belonging' in this situation. Rather, it seems to be functioning in its other role—as a syntactic expletive prefix (EXPL) that is empty in meaning but sets focus in the sentence.

(311) *?dabet in- lab sama moya gan lab bet’ik
  yesterday EXPL shirt same NEG with shirt today
  'Yesterday, the shirt is different from the today shirt.'

Likewise, the same expletive function of *in-* is occasionally used in possessive constructions with non-third-person possessors, but these sentences are judged as less correct, and they usually include a pause before *in*-

first person
It seems likely that the =in marker is a vestige from a genitive system that had been present at an earlier time. In present day Sula, possessive use seems to have disappeared from the language for all but third-person possessors. In other words, Sula only sometimes allows the =in marker: it is used with the he/she/it possessors, and only when referring to non-abstract items. In such cases, =in marks a possessor.

=\[\text{fina neka} =\text{in}] \text{uma} \]

‘that woman’s house’

=\text{in} cannot be used to mark an agent.
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(318) *fina neka =in bau munara
woman that =POSS CAUS work
‘that woman’s working’

=in cannot be used to mark a theme.

(319) *fina neka =in bal mata
woman that =POSS AUX die
‘that woman’s death’

=in cannot be used to mark a time.

(320) *dabet =in uya
yesterday =POSS rain
‘yesterday’s rain’

For the above examples, Sula instead uses simple sentences:

(321) fina neka bau munara ‘that woman is working’

(322) fina neka bal mata ‘that woman dies’

(323) dabet uya ‘yesterday rained’

18.3 "Of" possessive

There is a possessive in both Sula and English that makes use of the word, of. Think of the sentence, you are not the boss of me. As compared to my boss, the possessor has been demoted to an oblique phrase. Whereas some consider this sort of periphrastic passive nonstandard in English, the construction is accepted in Sula.

(324) [[ana-mehi neka] [bia ak]]
child-small that of 1SG
OBL

'That child is mine.'

### 18.4 Possessive questions

Possessive questions can be formed three ways: with rising intonation; by substituting *han* 'who' in place of a human possessor; or by adding the question phrase, *te* (*moya*) 'or (not)' at the end of the sentence.

(325)  

<table>
<thead>
<tr>
<th>Kim</th>
<th>pena†?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2SG.F pen</td>
<td>'Is it your pen?'  (formal)</td>
</tr>
</tbody>
</table>

(326)  

<table>
<thead>
<tr>
<th>Han</th>
<th>pena?</th>
</tr>
</thead>
<tbody>
<tr>
<td>who pen</td>
<td>'Whose pen is it?’</td>
</tr>
</tbody>
</table>

(327)  

<table>
<thead>
<tr>
<th>Alif</th>
<th>=in pena te (moya)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alif =POSS pen or (NEG)</td>
<td></td>
</tr>
</tbody>
</table>

'Is it Alif's pen?’

To form a question, *han* can be substituted in place of any human possessor in a statement—both subject and object alike.

**non-question, first person**

(328)  

<table>
<thead>
<tr>
<th>ak</th>
<th>[a- gawai [ak tena]].</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>1SG.AGR scratch 1SG stomach</td>
</tr>
<tr>
<td>S</td>
<td>V OBJ</td>
</tr>
</tbody>
</table>

'I scratched my stomach.’

**non-question, third person**
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(329) \[ki'\ i \ [i-\ gawai \ [ki'\ i\ =in\ \ tena]]].
\[1SG \ [1SG.AGR\ scratch \ [1SG\ =POSS\ stomach]]\]
\[S\ V\ OBJ\]
's/he scratched her/his stomach.'

question, subject (null prefix)

(330) \[han\ [\emptyset-\ gawai\ [ki'\ i\ =in\ \ tena]]]\?
[who \ [\ scratch \ [1SG\ =POSS\ stomach]]]
'Who scratched her/his stomach?'

question, object (null possessive marker)

(331) \[ak\ [a-\ gawai\ [han\ =\emptyset\ tena]]]\?
\[1SG\ [1SG.AGR\ scratch\ [who\ stomach]]\]
'I scratched whose stomach?'

question, subject and object (null prefix and possessive markers)

(332) \[han\ [\emptyset-\ gawai\ [han\ =\emptyset\ tena]]]\?
[who 1SG.AGR scratch who stomach]
'Who scratched whose stomach?'

18.5 Constructions with \(=gon\)

Sula speakers can also express possession with statements of belonging. These are formed with a word meaning 'belong' that has two forms, \(=gon\) and \(=non\). \(=gon\) is used with first-person possessors, and \(=non\) is used with all others. \(=non\) is probably cognate with the Buru possessive forms, \(nang / nan / nam\), but Sula lacks the complex pattern of inflection found in Buru.

(333) \(ak\ tonka\ neka\)
\[1SG\ stick\ that\]
'That is my stick.'
ak =gon, tonka neka
1SG =belong stick that
'It is my belonging, that stick.'

tonka neka ak =gon
stick that 1SG =belong
'That stick belongs to me.'

dok ak patu
give 1SG hoe
'Give me my hoe.'

dok ak =gon patu
give 1SG =belong hoe
'Give me the hoe that belongs to me.'

dok mon =non patu
give 2SG =belong hoe
'Give me the hoe that belongs to you.'

patu iki ak =gon
hoe this 1SG =belong
'This hoe belongs to me.'

When forming questions, han precedes =gon/=non. Either =gon or =non is reportedly grammatical, but, =non always seems to be produced in questions. This is likely because from a logical standpoint, asking with =gon would be answering the question within the question (i.e. I cannot be asking who something belongs to, if I am identifying the notion of belonging with a word that assigns the object to myself).

han =non tongka neka?
who =belong,1SG stick that
'It is whose belonging, that stick.'
19 Reference switching through pronouns and pronominal prefixes

Sula does not have a full switch-reference system, but verbal prefixes are used to disambiguate and switch reference. The mechanics of reference switching are not yet fully understood, but it is clear that a pronominal prefix in the absence of a pronoun can indicate a change in subject.

There are two basic structures for transitive sentences. The prototypical citation form is SUBJECT + PREFIX + VERB + OBJECT

(344) \textit{ki'i} \ \textit{i-} \ \textit{dota} \ \textit{ak}
\begin{tabular}{llll}
3SG & 3SG.AGR- & strike & 1SG \\
SUBJECT & PREFIX & VERB & OBJECT \\
\end{tabular}

'He hits me.'

(345) \textit{ak} \ \textit{a-} \ \textit{dota} \ \textit{ki'i}
\begin{tabular}{llll}
1SG & 1SG.AGR- & strike & 3SG \\
SUBJECT & PREFIX & VERB & OBJECT \\
\end{tabular}

'I hit him.'
Sula

In the first structure, the subject is overt, and the verb is marked to agree with the subject. This prototypical structure is typically chosen to introduce or transition between subjects. Thereafter, pronoun omission is common, as in the following examples.

(346) \(\emptyset\)\( \ i-\)\( \ gaya\) \( fia\)
\(\emptyset\)\( \ 3SG.AGR-\) eat banana
SUBJECT PREFIX VERB OBJECT
'He eats bananas.'

(347) \(\emptyset\)\( a-\)\( \ gaya\) \( fia\)
\(\emptyset\)\( 1SG.AGR-\) eat banana
SUBJECT PREFIX VERB OBJECT
'I eat bananas.'

Since the pronominal prefix inherently carries subject information, switching pronominal prefixes indicates a change in subject even without restating an overt subject (proper noun or pronoun). In the following sentence, the third person's verbal prefix \(i-\) is present in the absence of the third-person pronoun. This indicates a switch to a third-person subject. This sentence would take place in a conversation where the third person was previously overtly identified (i.e. "he" had already been named).

(348) \(ak\) \( pusi^{142}\)\( moya\)\( bahwa\) \(i-\) \( mata\)
1SG headache NEG COMP 3SG.AGR- die
'It doesn’t concern me that he died.'

Similarly in the following example, the first-person' verbal prefix, \(a-\) is present in the absence of the first-person pronoun, indicating a shift to a first-person subject.

\(^{142} pusi\) is a borrowing from, Indonesian, \(puising\) ‘headache’. The Sula form, \(nap geka\) also works in the sentence.
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(349) ki‘i i- mata mai a- pusi moya
3SG 3SG.AGR die but 1SG.AGR headache NEG

‘He died, but it doesn’t concern me.’

In the following example, the subject alternates from third person to first person and back to third person, and switching is indicated by marking first-person or third-person pronouns on verbs.

(350) Yanto nau, bahwa a- duk, tapi
Yanto know COMP 1SG.AGR come but

‘Yanto knows, that I’m coming, but

a- nau moya, (bahwa)
1SG.AGR know NEG (COMP)
I don’t know whether

i- duk atau moya
3SG.AGR come or  NEG
he will come or not.’

20 Determiners

Sula possesses the demonstrative determiners iki/ika and neka which are roughly equivalent to 'this' and 'that' respectively. Determiners come to the right of NPs.

20.1 Demonstrative determiner iki/ika

(351) ki‘i i- gaya man ika
3SG 3SG.AGR eat chicken this

‘He is eating this chicken.’

\(^{143}\text{bahwa} is Indonesian borrowing\)

\(^{144}\text{atau} is an Indonesian borrowing interchangeable with te\)
20.2 Demonstrative determiner neka

(352)  Ikbal  i-      gaya      man      moya      neka
       3SG.AGR  eat       chicken  not       that
'Ikbal won't eat that chicken.'

20.3 Determiner word order

(353)  Ikbal  i-      gaya      man      ika
       3SG.AGR  eat       chicken  this
'Ikbal is eating this chicken.'

(354)  *Ikbal  i-      gaya      ika    man
       3SG.AGR  eat       this       chicken
'Ikbal is eating this chicken.'

Additionally, iki/ika and neka have a discourse-marking function. In these constructions, the words bear little to no semantic weight but rather serve to bind a statement contextually. Instances of discourse deixis are syntactically optional.

20.4 Discourse marking

(355)  Yanto  baha    kena    moya    damet   (neka).
       buy       fish     NEG    yesterday (that).
‘Yanto did not buy a fish yesterday (is what it is).’

21 Passives

Sula appears to make use of a periphrastic passive construction in which the subject is demoted to oblique and the direct object becomes the new subject. However while oblique agents can often be omitted, they appear to be mandatory in Sula.

21.1 Passive construction with 'punish'
(356) (active)
Yanto =in baba naha ki‘i
Yanto =POSS father punish him
‘Yanto’s father punished him.’

(357) (passive)
Yanto dahi naha bia =in baba
Yanto exist punish OBL =POSS father
‘Yanto was punished by his father.’

21.2 Passive with 'punish' & null oblique?

(358) *?Yanto dahi naha Ø
Yanto exist punish Ø
‘Yanto was punished.’ (by his father)

22 Morpheme and word classes

22.1 Verbs & nouns

While there are generally clear semantic differences between verbal and nominal words, there is no good evidence that a grammatical distinction exists defining separate classes for each. This statement seems to fly in the face of common sense as the vast majority of languages do seem to differentiate between the categories, and in terms of meaning, Sula speakers themselves are fully aware of the difference between actions and objects. Many words almost always function as verbs while many others almost always function as nouns, but things get tricky when it comes to defining nouns and verbs as separate classes based on syntactic operations or morphological and phonological processes that might be available to only one category or the other.

145 I received conflicting grammaticality judgments for this structure
Here is where an N/V division becomes difficult to reveal: (1) where logical, any semantically nominal or verbal word can accept person marking or take a verbal prefix (i.e. function as a verb). (2) No stress contrast exists between action and person/place/thing words, nor (3) are affixes or morphological processes necessary to change semantic verbs into gerunds—i.e. semantic verbs can already function in nominal position as they are wherever it makes sense for them to do so.

In the section on reflexives, we had an example that used the 'scissors' as a verb. The word gut 'scissors' is semantically nominal (most likely a loan from the Indonesian noun, gunting). However, when functioning as a verb, it can take pronominal prefixes.

(359) ak a- gut ak nap foa dit
1SG 1SG.AGR scissors 1SG head hair self
'I cut my hair myself.'

Likewise, words that are semantically verbal can function seamlessly as nouns without any derivational morphology.

(360) (verbal) a- mata moya
1SG.AGR die NEG
'I won't die.’

(361) (nominal) a- kag ak mata
1SG.AGR fear 1SG death
'I fear my death.’

(362) (verbal) kalo dahi moya, Alif i-
if exist NEG Alif 3SG.AGR

noi tabak bia (ki'i) =in ponoida
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request tobacco from (3SG) =POSS friend
'If Alif doesn't have any tobacco, he requests it from his friends.'

(363) (nominal)  
Alif =in noi bau naha
Alif =POSS request CAUS anger

(ki'i) =in ponoida
(3SG) =POSS friend
'Alif's asking irritates his friends.'

The ease by which semantically nominal and verbal words can function in either role removes the utility of analyzing nouns and verbs as independent word classes in Sula. Grammatically speaking, these words appear not to be inherently nominal or verbal but rather both.

Semantically speaking, though, a distinction is often clear. That is: it is not to say that Sula does not have nouns and verbs but rather that the distinction is not manifested by obvious overt grammatical contrasts—a fact that might cause the Sula language learner to rejoice. Languages that do not show clear grammatical evidence of separate nouns and verbs are not common, but they are not unheard of, as for example in Riau Malay (Gil 1994). That said, this chapter is a first-attempt grammatical sketch, and I did not have the resources to give the full grammatical treatment that Sula deserved, so I suspect that a future in-depth exploration of the topic could reveal weak evidence for a grammatical distinction that has thus far slipped by me.
22.2 Modifiers

Sula has both *adjectival* modifiers and *adverbial* modifiers. Adverbial modifiers are distinct from adjectival modifiers in that they cannot take pronominal prefixes. (see section 16 comparative constructions and degree for a description)

22.3 Pronouns

Pronouns (listed in Table 38) are surprisingly difficult to pin down in Sula. There seems to be some pronoun, but it is unclear if this is due to community variation or individuals overthinking elicitation questions and confusing themselves. The precise meaning and usage of the formal pronoun *kim* is especially tricky as some speakers claim it to be only a second-person singular or plural pronoun, some claim it to be used for second and third-person singular or plural, and others claim it to be person independent—i.e. available for second and third-person pronouns, singular and plural, and, in the case of one consultant, even first-person plural pronouns as long as the group includes a member older than the speaker. As a practical matter, I did not observe the pronoun used in this way, but the possibility exists that (at least for some speakers), this is the case. There is also significant variation in pronoun pronunciation, particularly with the third-person singular pronoun *ki‘i*.

It is also difficult to independently elicit an identical paradigm from any two people. That said, I elicited the pronouns and what appear to be agreement marker prefixes from numerous people, compared the lists, and used trial and error during targeted elicitations. Of course I also carefully observed natural conversation samples to parse the paradigm that I used as the basis for a fairly intensive elicitation and
grammaticality judgment session with a group of consultants who evaluated my determinations (as mentioned in a previous section). There is likely more to this story, but I am fairly confident that Table 38 represents the pronouns and their verbal prefixes as they are most widely used on Sanana.

Although I analyze the language under the assumption that I am indeed observing agreement marking prefixes, it should be noted that I have not yet done a thorough study that looks into all of the possible ways to consider the forms and decide if agreement marking prefixes is the most fitting analysis. It has been postulated that such morphemes could be a secondary set of bound pronouns (along with the main free pronouns) and that they might even be clitics. In fact, a number of languages in the region have been analyzed as utilizing proclitics to mark the pronominal (e.g. Blust 1993).

I did not choose to analyze these morphemes as clitics for two reasons. First, they appear able to be marked with stress—particularly when used contrastively in signaling a subject switch, and second I have not seen instances where they are unambiguously attached to both words and phrases. This could be another story though if one chooses to consider phrases like laka nan ‘go bathe’ (i.e. ‘walk bathe’) as serial verbs rather than auxiliary constructions.

In sum: there are two kinds of Sula morphemes that reference sentence arguments. The morphemes I identify as agreement are bound to verbs in particular instances. The morphemes I identify as pronouns are independent NPs that can co-occur in the same clause with a bound morpheme or independent of the bound
morpheme depending on the situation, but a more confident determination will require thorough scrutiny of all the possible analytical approaches.

### 22.4 Demonstratives

Demonstratives are deictic words whose meanings cannot be separated from the speech context—usually the physical or metaphorical location of the speaker.

\[
\begin{align*}
    ik, iki, ika & \quad \text{‘this’} \\
    neka & \quad \text{‘that’} \\
    ikina, nika & \quad \text{‘yonder’}
\end{align*}
\]

### 22.5 Locatives

Locative is a grammatical case that describes locations. Although Sula does not display any complex case morphology or syntax, there are at least two locative morphemes with distinct meanings—one of which doubles as a general locative with no specific meanings.

\[
\begin{align*}
    bia & \quad \text{ablative (‘from’)} \\
    bo & \quad \text{dative (‘to’) / general locative}
\end{align*}
\]

### 22.6 Spacial deixis

As with the demonstratives above, spacial deictic words have meanings that cannot be separated from the physical or metaphorical location of the speaker.

\[
\begin{align*}
    isuka, isuna, saiki, saik & \quad \text{‘here’} \\
    bangana, neka & \quad \text{‘there (near addressee)’}
\end{align*}
\]
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samana

'over yonder'

22.7 Interrogatives

Sula has several interrogatives with a great many word form variants. These are words that result in questioning formation.

han, ani

'who'

hapa, opa

'what'

sahoa, sa’oa, soa, sibo

'where'

bagahoa, bahoa,

baga’oa, bagoa, bagano

'why' / 'how'

bit pila, betu pila,

bet pila, bet pila hoa

‘when' / ‘how much' / ‘how many'

tiba, hia bahoa,

hia baoa, hia boa

‘which'

te

general question word

22.8 Numeral classifier (counting word)

Sula seems to have just one counting word, fat(u), which derived from the word 'stone'. As there is just one, it would be incorrect to call this word a classifier, but grammatically it functions similar to a classifier in other languages. fat is used whenever a quantity of objects is stated unless it can be replaced with a more specific term. For instance, one cannot say (a) one cooked rice, but one can say, (b) one fat of cooked rice, or (c) one plate of cooked rice. Although plate replaces fat in the third option, it is not a counting word; the word plate itself must be counted using fat (d).
(364) *bira hia
   rice one
   'one cooked rice'

(365) bira fat hia
   rice CLF one
   'one portion of cooked rice'

(366) bira piga hia
   rice plate one
   'one plate of cooked rice'

(367) piga fat hia
   plae CLF one
   'one plate'

**Table 47. Locational Adpositions (Postpositions)**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>gehi</td>
<td>'behind'</td>
</tr>
<tr>
<td>goga</td>
<td>'on (e.g. a tree)'</td>
</tr>
<tr>
<td>tina</td>
<td>'on (e.g. the floor)'</td>
</tr>
<tr>
<td>lepa</td>
<td>'over' / 'up'</td>
</tr>
<tr>
<td>neu</td>
<td>'down'</td>
</tr>
<tr>
<td>heha</td>
<td>'under'</td>
</tr>
<tr>
<td>lal</td>
<td>'in'</td>
</tr>
<tr>
<td>tuka</td>
<td>'in'</td>
</tr>
<tr>
<td>muka</td>
<td>'in front of'</td>
</tr>
<tr>
<td>lug</td>
<td>'across from' / 'opposite'</td>
</tr>
</tbody>
</table>

**Table 48. Conjunctions**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>do</td>
<td>'and'</td>
</tr>
<tr>
<td>te</td>
<td>'or'</td>
</tr>
<tr>
<td>mai</td>
<td>'but'</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>tapi</th>
<th>'but'</th>
</tr>
</thead>
<tbody>
<tr>
<td>son</td>
<td>'because'</td>
</tr>
</tbody>
</table>

**Table 49. Aspectual Particles**

Sula uses aspectual particles to describe how an event or state is carried out over time. Aspect specifies the *completeness* of an action or the speaker's temporal view of a situation.

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>pel</td>
<td>'already' / 'finished'</td>
</tr>
<tr>
<td>pai</td>
<td>'from now' (said about oneself)</td>
</tr>
<tr>
<td>ol</td>
<td>'from now' (said about others)</td>
</tr>
</tbody>
</table>

**Table 50. Clitics**

I list the following forms as clitics, as they attach to both words and phrases, and they do not seem to carry primary stress when serving in this function. This analysis could be wrong, as I have not yet done a thorough study that looks into all of the possible ways to analyze the form and decide if clitic is the best option.

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>=in</td>
<td>POSSESSIVE</td>
</tr>
<tr>
<td>=gon</td>
<td>'belongs to' (first-person possessors)</td>
</tr>
<tr>
<td>=non</td>
<td>'belongs to' (non-first-person possessors)</td>
</tr>
</tbody>
</table>

**22.9 Causative prefixes**

Sula has three common (apparent) causative prefixes. While they are in complementary distribution, I have been unable to identify any rule to describe the conditions for when one is chosen over the others.

Although I analyze these morphemes under an assumption that they are prefixes, it should be noted that I have not yet done a thorough study that looks into all of the possible ways to consider the forms and determine with confidence that this is indeed
the most fitting way to represent them. I would hesitate to analyze them as clitics though, because they seem able to carry stress. Followup work should be done on this topic.

**Table 51. Causative Prefixes and Examples**

<table>
<thead>
<tr>
<th>prefix</th>
<th>example word</th>
<th>gloss</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>bau-</td>
<td>bau-mata</td>
<td>make-die</td>
<td>to kill</td>
</tr>
<tr>
<td></td>
<td>bau-munara</td>
<td>make-labor</td>
<td>to work</td>
</tr>
<tr>
<td></td>
<td>bau-pia</td>
<td>make-safe</td>
<td>to make peace</td>
</tr>
<tr>
<td>baka-</td>
<td>baka-nau</td>
<td>make-know</td>
<td>to message</td>
</tr>
<tr>
<td></td>
<td>baka-baret</td>
<td>make-stop</td>
<td>to stop</td>
</tr>
<tr>
<td></td>
<td>baka-toya</td>
<td>make-tell</td>
<td>to point, to show</td>
</tr>
<tr>
<td>mak-</td>
<td>mak-dahi</td>
<td>make-exist</td>
<td>to meet</td>
</tr>
<tr>
<td></td>
<td>mak-bobai</td>
<td>make-significant other</td>
<td>to date</td>
</tr>
</tbody>
</table>

### 22.10 Other prefixes (some likely fossilized)

As with the causative prefixes, I have been unable to discover any semantic or phonological conditions that explain the difference in how Sula’s prefixes are used. Whereas I suspect some of the causative prefixes could be fossilized onto their forms, I am inclined to believe interesting but elusive grammatical processes are at play among the other prefixes. This topic should be a high priority for future study.

---

146 I am not highly confident that baka- is a causative prefix, as some baka- forms cannot be glossed as independent morphemes (e.g. baka-go ‘dumb’, baka-han ‘nearby’). It is likely related to the reciprocal prefix baku- that Voorhoeve (1983) identifies as the sole productive verbal prefix in North Moluccan Malay. This might be a reciprocal prefix with a few outlier forms. Litamahuputty (2012:128) postulates a “multiple meaning” and collective function in Ternate Malay.

147 To send a message either electronic or face-to-face via an intermediary person.

148 I am also not highly confident that mak- is a causative prefix. There are not many mak- words in the lexican, and some do not easily gloss as causatives (e.g. mak-han ‘nearby’, mak-sud ‘destination’). At any rate, baka- and mak- often seem to be interchangeable, so it is likely that both prefixes have a synonymous semantic function.
Table 52. Other Verbal Prefixes and Examples

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Example Word</th>
<th>Gloss</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>ba-149</td>
<td>ba-lea dit</td>
<td>-dry self</td>
<td>to dry oneself</td>
</tr>
<tr>
<td></td>
<td>ba-map</td>
<td>-?</td>
<td>to cook</td>
</tr>
<tr>
<td></td>
<td>ba-lela</td>
<td>-?</td>
<td>to laugh</td>
</tr>
<tr>
<td>ta-150</td>
<td>ta-pisnoya</td>
<td>-speak</td>
<td>to speak</td>
</tr>
<tr>
<td></td>
<td>ta-bicara</td>
<td>-speak</td>
<td>to speak</td>
</tr>
<tr>
<td></td>
<td>ta-toya</td>
<td>-say</td>
<td>truth</td>
</tr>
<tr>
<td></td>
<td>ta-linga</td>
<td>-ear</td>
<td>to listen</td>
</tr>
<tr>
<td>ma-</td>
<td>ma-lia</td>
<td>-?</td>
<td>to swallow</td>
</tr>
<tr>
<td></td>
<td>ma-hara</td>
<td>-hate</td>
<td>to hate</td>
</tr>
<tr>
<td></td>
<td>ma-hoka</td>
<td>-dull</td>
<td>dull</td>
</tr>
<tr>
<td>pa-</td>
<td>pa-laka</td>
<td>-walk</td>
<td>journey</td>
</tr>
<tr>
<td></td>
<td>pa-nau</td>
<td>-know</td>
<td>funeral</td>
</tr>
<tr>
<td></td>
<td>pa-masi151</td>
<td>-(nasi ID)</td>
<td>rice</td>
</tr>
<tr>
<td>mana-</td>
<td>mana-yop</td>
<td>-kiss</td>
<td>kiss</td>
</tr>
<tr>
<td></td>
<td>mana-pan</td>
<td>-intercourse</td>
<td>sex</td>
</tr>
<tr>
<td></td>
<td>mana-tota</td>
<td>-hit</td>
<td>fight</td>
</tr>
</tbody>
</table>

22.11 Auxiliaries and modality

Auxiliary verbs in Sula can occur independently as verbs in their own right, and they can work in concert with other verbs to help indicate the amount that an action is certain,

---

149 This prefix seems to correspond with Bahasa Indonesia ber-. Taylor (1983) also identifies a homophonous prefix with this same function in a dialect of North Moluccan Malay. Litamahuputty (2012:125) analyzes ber- in Ternate Malay as likely indicating habitual actions. This is a fascinating idea, but I do not have contrastively prefixed verb pairs that could test it in Sula, and it is hard to come up with verbs that are not at least arguably habitual. An unambiguously non-habitual verb would be mata ‘to die’, and expectedly, it does not have a ba- prefix. Perhaps a devised elicitation scenario in which a character repeatedly dies and comes back to life could help reveal whether ba- is a productive habitual prefix in Sula.

150 There is a high likelihood that this ta- is in fact just the first-person plural subject agreement marker. This question needs further investigation. Litamahuputty (2012:133) identifies ta- in Ternate Malay as conveying an involuntary meaning to verbs. If ta- is indeed a productive verbal prefix in Sula, it does not appear to share that function.

151 This is a confusing form, as the meaning is not semantically verbal (e.g. awa pamasi ‘rice field’). I would write it off as incidental similarity if masi did not appear to be either cognate with or borrowed from nasi (ID), thus indicating pa- is indeed a prefix on this form.
permitted, or desired. Additionally, modality helps to differentiate statements of conviction from measured claims (e.g. Cameron 2007). Further research will likely reveal more specific syntactic classifications for the words in the following table, but at this early stage in Sula language research, it suffices to simply treat these words as auxiliaries.

**Table 53. Auxiliary Verbs and Modals**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>awa</td>
<td>still</td>
</tr>
<tr>
<td>bal</td>
<td>must</td>
</tr>
<tr>
<td>bit</td>
<td>want, shall, will, should</td>
</tr>
<tr>
<td>dad</td>
<td>can</td>
</tr>
<tr>
<td>lela</td>
<td>enjoy</td>
</tr>
<tr>
<td>mai dad</td>
<td>could, may, might</td>
</tr>
<tr>
<td>mau, mot mau</td>
<td>want, shall, will, should</td>
</tr>
<tr>
<td>mot</td>
<td>follow</td>
</tr>
<tr>
<td>musti</td>
<td>must</td>
</tr>
<tr>
<td>suka</td>
<td>like</td>
</tr>
</tbody>
</table>

**Table 54. Other, Non-Modal Auxiliary Verbs**

<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>bit</td>
<td>future AUX (Sanana)</td>
</tr>
<tr>
<td>mau</td>
<td>future AUX (Mangon)</td>
</tr>
<tr>
<td>dahi</td>
<td>existential verb or AUX</td>
</tr>
<tr>
<td>bal</td>
<td>active sentence AUX</td>
</tr>
<tr>
<td>mat</td>
<td>possible active sentence AUX</td>
</tr>
<tr>
<td></td>
<td>(also a contraction of matua 'old' as in matnana 'elder')</td>
</tr>
<tr>
<td>paka /</td>
<td></td>
</tr>
<tr>
<td>pake /</td>
<td></td>
</tr>
<tr>
<td>pakai</td>
<td>AUX meaning ‘to use’</td>
</tr>
</tbody>
</table>

152 Likely loan from Dutch *moest* ‘must’.
23 Noun phrases

As was shown in section 2.1.1, modifiers follow the head noun in Sula. This is the expected pattern in SVO languages. One way to differentiate noun modification from compound words, is that the order of stems (conjuncts) in compounds is the opposite of this order. For example, a Sula speaker would describe a tree as large with the phrase, \textit{kau aya} ['tree big'], but the word for banana tree is, \textit{fia kau} ['banana tree'] rather than *\textit{kau fia}. Likewise, one would describe long fur as, \textit{foa nahu} ['fur long'], but the word for a person’s hair is, \textit{nap foa} ['head hair'] rather than *\textit{foa nap}.

Noun phrases can be grouped into \textit{attributively modified} nouns, \textit{descriptively modified} nouns, \textit{verbally modified} nouns, \textit{quantifier modified} nouns. The following examples show the basic structure.

\begin{itemize}
\item \textbf{(368)} \textit{matapia }\textit{gatel }\textit{nib bo nika}  \\
\quad [person three] sit LOC there  \\
\quad ‘Three people are sitting over there.’
\item \textbf{(369)} \textit{ak }\textit{bau }\textit{mata }\textit{ak sap aya bet-ik}  \\
\quad 1SG make dead 1SG [cow large] today  \\
\quad ‘I’ll kill my large cow today.’
\end{itemize}

Attributively modified nouns are modified by words that are semantically adjectival (these words can take pronominal prefixation morphology).

\begin{itemize}
\item \textbf{(370)} \textit{maana }\textit{birahi}  \\
\quad man handsome  \\
\quad ‘handsome man’
\end{itemize}
Descriptively modified nouns are modified by words that are semantically nominal (these words do not take pronominal prefixation morphology).

Verbally modified nouns are followed by a verb without pronominal prefixation morphology.

Quantifier modified nouns are followed by a degree word or a quantifier.
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(377) ak bit win teh eb
1SG want drink tea much
‘I want to drink a lot of tea’

(378) (generalized quantifier)
nui galima para
cocnut five only
‘only five coconuts’

24 Verbs

24.1 Alignment

There is significant intra-speaker variation, and it will require a targeted study to confidently and comprehensively determine the rules governing verbal alignment in Sula. For the purpose of this section, I primarily analyzed the speech of an individual consultant, Ismael Duila, of Waibau village. The analysis is based primarily on Mithun (2008), O’Grady (2010), and also referenced for areal comparisons was Holton (2008).

The data show Sula to have a split pronominal prefixation system: first-person subjects follow an Active–Stative classification like that proposed by Dixon (1979), but intransitive verbal marking is split along agentive lines rather than strictly along unergative/unaccusative lines. non-first-person, human arguments follow an Ergative–absolutive system, and non-first-person, non-human arguments trigger no pronominal prefixation. Evidence of this split is revealed in the presence/non-presence of pronominal prefixes.

In its basic, non-aspect-marked form, the first-person subject's verbal marker is present in all transitive constructions. Its presence or non-presence in intransitive constructions however depends whether the verb takes an agentive subject (one that is
volitional); stative verbs are not marked. Precisely pinpointing how the system works is complicated because Sula's pronominal prefixes serve alternative functions as well: along with indexing pronouns on verbs, the markers can indicate progressive aspect, as well as disambiguating and changing of reference.

The consultant produces a consistent pattern of alignment, and it seems to conform with the patterns of many other Sula speakers. Whether this pattern represents the language as a whole is an open question. The pattern shows a system of split alignment and animacy, where first-person subjects follow an Active–Stative classification in which transitive verbs and agentive intransitive verbs are marked for pronominal prefixation. Non-first-person, human subjects are marked along ergative–absolutive lines, and verbs are not marked to agree with non-human subjects.

<table>
<thead>
<tr>
<th>TABLE 55. SUBJECT AND AGREEMENT MARKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>basic alignment, with no aspectual or reference functions$^{153}$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject of transitive verb</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>Non-Human</th>
</tr>
</thead>
<tbody>
<tr>
<td>a- gu- i- Ø-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject of agentive intransitive verb</td>
<td>a- Ø- Ø- Ø-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject of non-agentive intransitive verb</td>
<td>Ø- Ø- Ø- Ø-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Object</td>
<td>Ø-  Ø-  Ø-  Ø-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24.2 Transitive verbs are marked to agree with human subjects

In basic, non-aspect-marked form, the **first-person** subject's verbal marker is present in transitive constructions. Its presence or non-presence in intransitive constructions depends on whether the verb takes an agentive subject; stative verbs are not marked for prefixation. Precisely pinpointing how the system works is complicated because Sula's

$^{153}$ As will be demonstrated below, prefixes can sometimes be used for aspecual or reference functions.
pronominal prefixes serve alternative functions: markers are used both to indicate progressive aspect and to disambiguate reference.

**First person**

(379) **ak a-** *dota* *mon*

I 1SG.AGR- strike you

'I hit you.'

**Non-first person**

(380) **mon** **gu-** *dota* *Ak*

You 2SG.AGR- strike I

'You strike me.'

**Non-human**

(381) **as** **uka** *Yanto*

dog bite Yanto

'The dog bites Yanto.'

Intransitive verbs are marked to agree with agentive first-person subjects but not with non-first-person subjects (except when indicating progressive aspect or disambiguating reference in discourse when an overt pronoun is not present)

**First person**

(382) **ak a-** *laka-nan* *bo* *wai-ewa*

I 1SG.AGR- walk-bathe to water-flow

'I go to the river to bathe.'

**Non-first person**
(383) **mon**  *laka-nan*  *bo*  *wai-ewa*\(^{154}\)
You walk-bathe to water-flow
'You go to the river to bathe.'

**Non-human**

(384) **as**  *lewa*  *bo*  *wai-ewa*\(^{155}\)
dog run to river
'The dog runs to the river.'

Intransitive verbs are typically not marked to agree with non-agentic subjects.

**First person**

(385) **ak**  *bua bia kau*
I fall LOC tree
'I fall from the tree.'

**Non-first person**

(386) **mon**  *bua bia kau*
You fall LOC tree
'You fall from the tree.'

**Non-human**

(387) **as**  *bua bia kau*
dog fall LOC tree
'The dog falls from the tree.'

\(^{154}\) *gu-laka nan* would be acceptable in discourse to reenforce or disambiguate reference, but *mon gu-laka nan* would be quite rare.

\(^{155}\) *i-lewa bo wai-ewa* is reportedly never accepted with non-human subjects. It is possibly permitted with anthropomorphized non-human subjects—I observed children use it while watching a cartoon on my iPad—but the correctness of this was not verified with adult speakers.
Objects are grammatically linked by word order; there is no object marking on verbs.

**First person**

(388) mon gu- dota ak
You 2SG.AGR strike me
'You hit me.'

**Non-first person**

(389) ak a- dota mon
I 1SG.AGR strike you
'I hit you.'

**Non-human**

(390) mon gu- dota as
You 2SG.AGR strike dog
'You hit the dog.'

### 24.3 Aspectual function of pronominal prefixes

As discussed in section 13 Expressing time, Sula has aspect markers that indicate the completeness of an action.

**unmarked**

(391) ki’i i- bamap kena
3SG 3SG.AGR cook fish
'He cooks fish.'

**completive**
In addition to marking aspect with overt aspect markers, progressive aspect can be conveyed with a secondary function of the language’s subject prefixes. This aspectual function of pronominal prefixation complicates deciphering Sula’s alignment system, because when marking progressive aspect, non-first-person subjects are also marked on intransitive verbs. This occurs across verb classes.

Transitive verbs with overt objects are reportedly most grammatical with pronominal prefixes:

**Direct object, pronominal prefix:**

(393) Ikbal i- gaya man ika

Ikbal 3SG.AGR- eat chicken this

'Ikbal eats this chicken.'/'Ikbal is eating this chicken.'

Pronominal prefixes are optional when direct objects are not overt. In these sentences, subject-marked verbs convey progressive aspect:

**Without prefixes, no aspectual information is conveyed:**

(394) Ikbal gaya

Ikbal eat

'Ikbal eats.'

**With prefixes, progressive aspectual information is conveyed:**
(395) *Ikbal i- gaya*

Ikbal 3SG.AGR- eat
'Ikbal is eating.'

Intransitive, unergative verbs with non-first-person subjects:

**Without prefixes, no aspectual information is conveyed:**

Yanto nona (tetapi) matapia-basa baumunara.
Yanto sleep (but) people-other work
'Yanto sleeps while others work.'

**With prefixes, progressive aspectual information is conveyed:**

(396) *ki'i i- nona lu-lu*

He 3SG.AGR- sleep half
'He is sleeping lightly.'

Intransitive, unaccusative verbs with non-first-person subjects:

**Without prefixes, no aspectual information is conveyed:**

(397) *mon bua neu bia kau*

You fall down LOC tree
'You fall down from the tree.'

**With prefixes, progressive aspectual information is conveyed:**

(398) *mon gu- bua neu bia kau*

You 2SG.AGR- fall down LOC tree
'You are falling down from the tree.'
25 Causatives

Causatives are formed with the prefixes bau-, baka-, and mak- (see also section 22.9). There is no predictable difference in distribution between the prefixes, and in fact sometimes multiple prefixes can be chosen to form words with different meanings. No subtle semantic differences have thus far been identified, but there are definite word-specific differences in distribution. bau- is found in the most forms and seems to be most productive:

(399) bau-mata 'kill, murder' (lit. 'make dead')

(400) *baka-mata 'kill, murder' (lit. 'make dead')

(401) *mak-mata 'kill, murder' (lit. 'make dead')

(402) bau-munara 'to work'

(403) *baka-munara 'to work'

(404) *mak-munara 'to work'

(405) baka-toya 'point, show'

(406) *bau-toya 'point, show'

(407) *mak-toya 'point, show'

Some words are able to accept multiple prefixes to affect the same meaning:

(408) bau-gehi 'construction' (lit. 'make standing')

(409) baka-gehi 'construction' (lit. 'make standing')
Some words are able accept multiple prefixes to affect the different meanings:

(411) *baka-nau 'to message' (direct digital messaging or conveying a message on another's behalf) (lit. 'make known')

(412) *bau-nau 'to message' (direct digital messaging or conveying a message on another's behalf) (lit. 'make known')

(413) mak-nau 'to introduce' (lit. 'make known')

Causative constructions are straightforward, simple sentences with a causative prefix on the verb where subject prefixes would otherwise go. The following example shows a basic, non-causative construction.

(414) ana-mehi-nana mena
child-small-small cry
‘The baby cried.’

Causative constructions can be formed with the morpheme *bau- as in the following examples.

(415) nyaya bau- mena ana-mehi-nana
mother make cry child-small-small
‘The mother made the baby cry.’

(416) Yanto bau- nona ana-mehi-nana
Yanto make sleep child-small-small
‘Yanto made the baby sleep.’

Causative constructions can also be formed with the morpheme *baka- as in the following examples.
Additionally there are some semantic causatives—constructions whose verb is inherently causative and thus do not require a causative prefix. This is demonstrated in the following example.

(419) **Yanto soya** ana-mehi-maana moma as
Yanto tell child-small-male hit dog
‘Yanto told the boy to hit the dog.’

The next example demonstrates that the same verb can also be used in sentences that are not inherently causative.

(420) **Yanto soya,** ana-mehi-maana i- moma as
Yanto tell child-small-male 3SG.AGR hit dog
‘Yanto said that the boy hit the dog.’

### 26 Reduplication

This section is a preliminary investigation into Sula’s system of reduplication. Reduplication is a process in which a word or part of a word is repeated in succession. While this section is not comprehensive or conclusive, it provides groundwork for future studies into the topic at greater depth. I was unable to conduct a detailed survey of the language’s reduplication patterns, but by comparing field notes against Charles Grimes's
(1991) thorough analysis of the related Buru language, it was still possible to identify several patterns in Sula and their likely functions.

### 26.1 Types of reduplication present in Buru

Grimes (1991) identifies the following reduplication types in Buru: (1) phrasal duplication, (2) multiple repetition, (3) full reduplication of stem, (4) reduplication of root, (5) reduplication of first CVC, (6) reduplication of the first CV, (7) reduplication of the first C. Grimes also states that phrasal question words become indefinite when reduplicated. (Grimes 1991:130)

### 26.2 Phrasal reduplication

Although a handful of instances were identified where a phrase is successively repeated, there is no evidence as to the grammatical effect in Sula.

(421) *nona-gega nona-gega wakdab hia para*

sleep-wake sleep-wake, miss one just

‘I sleep and wake and sleep and wake; I just miss someone.’

### 26.3 Reduplication of Verbs

Grimes draws a distinction between *active* and *non-active* verbs in his analysis of Buru. The active category includes verbs capable of taking an actor subject, whereas the non-active category includes verbs that take only one core argument, and whose subjects must be in the role of undergoer. Active verbs are further split into transitive and intransitive, the intransitive of which have only one core argument and can optionally take an undergoer subject.
The transitive active verbs have two core arguments, with subjects restricted to the actor role. According to Grimes, Buru has no canonical adjectives, and all attributive modifiers are derived from verbs. Although this grammatical sketch does not analyze Sula verbs the same way, for the purposes of making a parallel comparison, this section follows Grimes's analysis.

### 26.4 Reduplication of active verbs

As for *multiple repetition*: Grimes (1991) describes reduplication of active verbs as producing an iterative aspect wherein the duration of the aspectual quality is contextually based. Though far from conclusive, this analysis appears to apply to reduplicated active verbs in Sula as well as can be seen in the following examples.

(422) (active intransitive)

```
i-   laka
3SG.AGR   walk
'S/he walks.'
```

(423) (active intransitive)

```
i-   laka-laka
3SG.AGR   walk-walk
'S/he keeps walking.' ('S/he is on a journey.')
```

(424) (active intransitive)

```
i-   noi
3SG.AGR   ask
'S/he asks.'
```

(425) (active intransitive)

```
i-   noi-noi
```
3SG.AGR ask-ask
'S/he keeps asking.' ('s/he is a beggar.')

(426) (active transitive)
mon gu- dota ak bib
2SG 2SG.AGR strike 1SG goat
'You hit my goat.'

(427) (active transitive)
mon gu- dota-dota ak bib
2SG 2SG.AGR strike-strike 1SG goat
'You keep hitting my goat.'

26.5 Reduplicated modifying, non-active verbs (adverbs of manner)

Grimes analyzes Buru adverbs as derivational products of underlyingly non-active verbs. Sula does not have derivational morphology for adverbs, but Sula adverbs can be reduplicated, as shown below in the modification: verb2 ➞ verb example. The following example might represent an instance of verbal modification by a reduplicated noun, but this is uncertain. lea-lea has been translated as 'slowly'/'leisurely'/'calmly', but the non-reduplicated form, lea is translated as a nominal 'sun' and 'place' (in dialects that have dropped the intervocalic h in leha). It is unknown whether lea-lea is derived from either noun or if it is an independent lexeme. The modification: noun2 ➞ verb example below represents verbal modification by a reduplicated base that seems to already function as a modifier prior to reduplication, and which seems unable to function as a main sentence verb (further data collection will be necessary to verify these observations).

[modification: verb2 ➞ verb]:

325
(428) mon bena pia-pia para
2SG ride safe-safe just
'Ride safely.'

**[modification: noun2 → verb]:**

(429) wai ewa lea-lea
water flow placid\(^{156}\)
'The water flows slowly.'

**modification:**

**[modifier → verb]**

(430) koi bisnoya bahu
NEG.IMP talk fast
'Don't talk quickly.'

**[modifier2 → verb]**

(431) koi bisnoya bahu-bahu
NEG.IMP talk fast-fast
'Don't talk so quickly.'

**[without verb]**

(432) *koi bahu
NEG.IMP fast
'Don't be quick.'

### 26.6 Reduplicated non-modifying, non-active main verbs

According to Grimes, when non-active verbs are not modifying another verb but are themselves the main sentence verb, a reduplication process "indicates intensity." When

\(^{156}\) lea-lea (reduplicated) means 'placid', especially of water, but lea (non-reduplicated) means 'sun'. It is unclear if lea-lea is indeed a reduplicated form of lea or incidentally similar.
the reduplicated word is the sentence's main verb, the intensity is intrinsic, whereas the intensity is transferred to the main verb when the reduplicated word is in modifier rather than primary-verbal position. The following is re-glossed from Grimes ex. 129 (1991:76).

**Buru intensity**

(433)  *haa-haa* 'really big (big-big)'

(434)  *em-pei=em-pei* 'really sick (sick-sick)'

It is unlikely that Sula's verbal categories are an exact parallel to Buru, but it does appear that descriptive words in Sula are intensified through reduplication, and when a receiver (nominal or main verb) is present to the left, the descriptive feature as well as the reduplication's added intensity transfers to the receiver as an *adjectival* or *adverbial* quality. In the example below, *mota-mota* describes the 'sagu' as 'hot' and *bahaha* describes the 'chili sauce' as 'quite-spicy', but *dab-dab* is received as a nominal, 'chili sauce,' even though the only recorded translation of *dab* is at least semantically adjectival, 'dizzy' or 'drunk'.

(435)  *gaya* sa *mota-mota* do *dab-dab* *baha-ha*

   eat sagu hot-hot with chili.sauce spicy-spicy

'Eat hot sagu-palm starch with chili sauce that's quite-spicy.'

**Additional-Descriptors**

The following example represents the type of sentences needing grammaticality judgements and accurate translations to determine how to correctly parse reduplicated modifiers and reveal their syntactic implications (e.g. description-transfer hierarchies,
and/or stacking-limitations on reduplicated modifiers). In the example, *bahu-bahu* has been introduced to modify *gaya*, resulting in: 'very-quickly eat,' however after this point, it is unclear how to proceed in mapping the sentence's descriptive features. Is the [[very-white sagu] very-hot], or is the [sagu very, very [white-hot]]? *ponoida-ponoida* indicates that more than one 'friend' (perhaps 'each friend') is present, but if 'friends' are modified by *dabu-dabu*, the result would be: [quite-spicy [very-drunk friends]], but if *bahaha* modifies *dabu-dabu*, the result will be [[very-spicy 'chili-sauce'] friends] (which is rather nonsensical). At present, insufficient data has been analyzed to determine how to parse reduplicated modifiers that have been stacked.

(436) *?gaya bahu-bahu sa bot-bot mota-mota do eat fast-fast sagu white-white hot-hot with ponoida-ponoida dab-dab baha-ha friend-friend spicychili.sauce spicy-’...

### 26.7 Distributive Noun Reduplication

Of the reduplication types described in Buru, the distributive nominal is the most readily observable in Sula. However, while this process in Buru results in a semantic value close to 'each noun' rather than 'nouns', the process seems to result in a value closer to plurality in Sula.

In the next example, *everyone* is derived from the lexeme *mua* ('complete'/ 'all'). However while *sanohi-sanohi* represents more than one individual in the following example, my data provide no indication that the reduplicated form references all members distributed across the category of 'family'; that is, it seems more likely that the
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speaker plans to buy coto Makassar for some plurality of family members rather than for everyone who is in the speaker's family (the category of 'family' in Sula encompasses a great many individuals).

(437) sai yau bia hai Sua bakareha yaya do baba
go far from land Sula separate mother and father
'I went far from Sanana island and was separated from my mother and father,
sanohi ponoida bubai do mua-mua bo hai Sua
family friend darling and everyone LOC land Sua
'my family and friends, my darling, and everyone else on Sula.'

Plural effect?

(438) bo Falahu ak baha gaya coto
LOC Falahu 1SG buy eat stew

Makassar buat sanohi-sanohi
Makassar for family-family
'I buy Makassar-style stew in Falahu for my family.'

26.8 Native vs. loan reduplication

Two patterns emerge among reduplicated loanwords. Following the pattern of native Sula vocabulary, we would expect uang-uang ('money-money') in the next example to mean either 'monetary bills' or 'each monetary bill', but in the following example, we see that it instead means 'money' just as in the source language.

26.8.1 Reduplicated loan [reduplicated prior to import]

(439) uang-uang duk saik ak
money-money come here 1SG
Sula

bit  bihu  bo  Sua  pai
want  return  LOC  Sula  ASPECT
'Money, come my way! I want to return to Sula.'

On the other hand, sedikit-sedikit in Indonesian means 'a little bit', whereas in the next example it intensifies the smallness of pip ('money'), resulting in 'very little money'. This raises an interesting possibility that loanwords introduced in reduplicated form import the semantic effect of reduplication in the source language with them, while loanwords that are reduplicated after introduction follow the native-Sula model. Though this is a reasonable hypothesis, a much broader survey of the phenomenon is needed.

26.18.2 Reduplicated loan [reduplicated following import]

(440)  
ak  bit  faa  moya  sebab
1SG  want  thing  NEG  because

ak  pip  dahi  sedikit-sedikit
1SG  money  exist  little-little
'I don't want (to buy) anything, because I have very little money.'

26.8 Reduplication in sum

Comparing Sula reduplication to Grimes's (1991) Buru description, it is clear that while there are some similarities, significant differences exist between the two languages regarding principle reduplication classes and their syntactic and semantic functions. With regard to the principal classes of reduplication and the corresponding syntactic and semantic functions; unambiguous examples were found of Sula reduplication for three of the structures identified in Buru: (1) full reduplication of stem, (2) reduplication
of root, and (3) reduplication of the first CV. There is also a possible additional structure in Sula: reduplication of final CV (e.g. baha 'spicy' → baha-ha 'quite spicy').

Sula and Buru share properties associated with reduplication of active verbs and non-active, modifying verbs (adverbs of manner). Likewise, Sula shares the intensity transfer associated with reduplicated non-active main verbs in Buru, but this may extend beyond the verbal category in Sula. Lastly, Sula was found to share the distributive-noun reduplication process of Buru.

Regarding native versus loan reduplicated forms, there is some indication that loanwords can optionally enter Sula in their matrix form or in an already reduplicated form—in which case the reduplicated forms retain the semantic functions associated with reduplication in the source language. Based on this information, it is likely direct transference of Malay reduplications is permitted, because Malay has become the dominant language of most day-to-day speech domains for much of the Sula population, and the modern Sula population has been raised as bilingual Malay speakers (and this has likely been the case for many generations).

27 Complex sentences

It is hard to come upon a definition of sentence that satisfies all linguists, but for the purposes of sketching this grammar, I am working with the following definition: a sentence is the basic verbal unit representing a complete thought. A sentence is a structural element that, in practice, usually includes (or at least implies) a subject and a verb and often direct or indirect objects and other complements. A complex sentence is a sentence with at least one subordinate clause.
27.1 Relative clauses

Sula relative clauses mirror noun modification. That is, the head noun is followed by the clause that modifies it. Typically either a pronoun, pronominal prefix, or the borrowed Indonesian relativizer, *yang* is employed, but the same effect can also be achieved with a pause in speech. Because restrictive relative clauses seem to be formed only with *yang*, it is likely that Sula did not possess a native relative clause construction. The following examples demonstrate the types of relative clauses documented in Sula thus far.

(441) (non-restrictive, possible RC with pronoun)

ak suka moya kapala-desa
1SG like NEG village-head

ik kii babua kadiga
DET 3SG crazy strong

‘I don’t like the village leader, who is totally nuts.’

(442) (non-restrictive, possible RC with pronominal prefix)

ana fina bo hai Mangon i-
child female LOC island Mangon 3SG.AGR

laka nan bo Wai-tebi
walk bathe LOC Wai-tebi

‘A girl from Mangoli Island, she goes to bathe in the Waitebi river.’

(443) (restrictive RC with yang)

kau neka kau yang aya te?
tree that tree which big Q

‘Is that the tree which is big?’

(444) (possible RC with pause)

a- bamap sa (pause) bot do mina
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1SG cook sagu (pause) white and tasty
‘I cook the sagu paste that’s white and tasty.’

27.2 Complements

Sula complements can be formed without an overt complementizer as in the following examples.

(445) (without overt complementizer)

\[
\text{ak \ nap-geka moya \ mai \ i- \ mata}
\]

1SG headache NEG but 3SG.AGR- die

'It doesn’t surprise me that he died.’

(446) (without overt complementizer)

\[
\text{ki’i \ i- \ mata \ mai \ a- \ pusi \ moya}
\]

He 3SG.AGR- die but 1SG.AGR- headache NEG

'That he died, doesn’t surprise me.’

Complements can also be formed with the borrowed Indonesian complementizer, *bahwa*, as in the next example.

(447) (with overt complementizer)

\[
\text{Yanto \ nau \ bahwa \ a- \ duk,}
\]

Yanto know COMP 1SG.AGR- come

\[
\text{tapi \ a- \ nau \ moya}
\]

but 1SG.AGR- know NEG

\[
\text{bahwa \ i- \ duk \ atau \ moya}
\]

COMP 3SG.AGR- come or NEG

'Yanto knows that I’m coming, but I don’t know whether Yanto will come or not.’
27.3 Conjunctions

Conjunctions in Sula closely mirror English: words, phrases, and clauses can all be conjoined; coordinating conjunctions (when present) are situated between connected parts of a sentence; subordinating conjunctions introduce the subordinate clause; and when there is a dependent and independent clause, the independent clause comes first in a prototypical subordinately conjoined sentence. The three most common conjunctions are *do* 'and', *te* 'or', and *mai* 'but'.

(448) (conjoined words using *do* ‘and’)

`ak lal suka fia do nui`

1SG inside like banana and coconut

'I like bananas AND coconut.'

(449) (conjoined words using *te* ‘or’)

`mon lal eya fia te wew?`

2SG inside ? banana or mango

'Do you want banana or mango?'

(450) (conjoined clauses using *mai* ‘but’)

`ak lal suka wew moya mai`

1SG inside like mango NEG but

`ak lal suka fia`

1SG inside like banana

'I don't much like mangoes, but I like bananas a lot.'

The following lists includes additional common conjunctions (some are borrowed from Indonesian):
<table>
<thead>
<tr>
<th>Sula</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>do</td>
<td>'and'</td>
</tr>
<tr>
<td>te</td>
<td>'or'</td>
</tr>
<tr>
<td>mai</td>
<td>'but'</td>
</tr>
<tr>
<td>dan</td>
<td>'and'</td>
</tr>
<tr>
<td>atau</td>
<td>'or'</td>
</tr>
<tr>
<td>tapi</td>
<td>'but'</td>
</tr>
<tr>
<td>tetap</td>
<td>'but'</td>
</tr>
<tr>
<td>tetapi</td>
<td>'but'</td>
</tr>
<tr>
<td>kalo</td>
<td>'if'</td>
</tr>
<tr>
<td>son</td>
<td>'because'</td>
</tr>
<tr>
<td>bia</td>
<td>'of' / 'more than'</td>
</tr>
</tbody>
</table>

The next example is of two simple, non-conjoined sentences.

(451) *ak lal suka kof. ak lal suka teh.*

1SG inside like coffee 1SG inside like tea

'I really like coffee. I really like tea.'

### 27.3.1 Coordinating conjunctions

A coordinating conjunction is one that joins two coequally important parts within a sentence (e.g. *I run and swim*). The Sula words *te* ‘or’, *do* ‘and’, *mai* ‘but’, and *tapi* ‘but’ are used for forming coordinating conjunctions.

(452) (coordinating conjunction with *te*)

* laka *te* moya?  
  walk or not

'to go or not?'

(453) (coordinating conjunction with *te*)

* (mon) *(gu-)* *laka te* moya?

335
You (2SG.AGR-) walk or not

'Will you go or not?'

(454) (coordinating conjunction with te)

kim bit (gi)- win
2SG.F want (2SG.F.AGR)- drink

kof te (gi)- win teh?
coffee or (2SG.F.AGR)- drink tea
‘Do you want to drink coffee or to drink tea?’

(455) (coordinating conjunction with do)

ak lal suka kof do teh
1SG inside like coffee and tea
‘I really like coffee and tea.’

(456) (coordinating conjunction with do)

ak lal suka kof do lal suka teh
1SG inside like coffee and inside like tea
‘I really like coffee and really like tea.’

(457) (coordinating conjunction with do)

ak lal suka kof do ak
1SG inside like coffee and 1SG

lal suka teh moya
inside like tea not
‘I really like coffee and I don’t really like tea.’

(458) (coordinating conjunction with mai)

i- mata mai a- pusi moya
3SG.AGR- die but 1SG.AGR- headache NEG
‘He died, but it doesn’t surprise me.’ (doesn’t cause me headache)

(459) (coordinating conjunction with tetapi)

ak a- laka gaya du mon
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1SG 1SG.AGR- walk eat with you

(tetapi) a- gaya kena moya
(but) 1SG.AGR- eat fish NEG
'I will go to dinner with you, but I don’t want to eat fish.’

Yanto nona (tetap) matapia basa bau-munara
Yanto sleep (but) person other CAUS-work
‘Yanto slept, but the others worked.’

ak lal suka kof tapi
1SG inside like coffee but

ak lal suka teh moya
1SG inside like tea not
'I really like coffee but I don’t really like tea.’

27.3.2 Subordinating conjunctions

A subordinating conjunction is a conjunction that links a subordinate (dependent) clause to the main sentence clause. A subordinating conjunction can be linked with the words son ‘because’, sebab ‘because’, and kalo (kalau) ‘if’.

koi nib bo nui-kau,
don’t sit LOC coconut-tree

son nui bona mon
because coconut fall you
'Don’t sit under a coconut tree, because a coconut will fall on you.’

ak a- gaya moya
(462) (subordinating conjunction with son)
(463) (subordinating conjunction with sebab)
Sula

1SG 1SG.AGR- eat NEG

**sebab** a- *bis* *pel*
because 1SG.AGR satisfied ASP
'I don’t want to eat, because I’m full.'

(464) (subordinating conjunction with **sebab**)

koi *laka* kaka-hoi **sebab** uya
NEG.IMP walk outside because rain
'Don’t go outside, because it’s raining.'

(465) (subordinating conjunction with **kalo**)

a- *laka* yota- haiwan
1SG.AGR walk hunt- animal

bo awa **kalo** faf uka kasbi
LOC field if pig bite cassava
'I go hunting in the fields, if pigs eat the cassava.'

(466) (subordinating conjunction with **kalau**)

a- baha *fa’a* moya
1SG.AGR- buy thing NEG

**kalau** ak pip dahi moya
if 1SG money exist NEG
'I don’t buy things, if I have no money.’

### 27.3.3 Correlative conjunctions

Sula does not seem to have correlative conjunctions that consist of conjunction pairs joining *alternative* phrases together—for example *either... or* in *I'd like either coffee or tea*. Sula speakers form similar statements using a single conjunction.
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(467)  
\( \text{ak} \quad \text{bit} \quad \text{win} \quad \text{kof} \quad \text{te} \quad \text{teh} \)  
1SG want drink coffee or teh  
'I'd like to drink coffee or tea.'

(468)  
\( \text{ak} \quad \text{lal} \quad \text{suka} \quad \text{kof} \quad \text{bia} \quad \text{teh} \)  
1SG inside like coffee of tea  
'I like coffee more than tea.'

28 Conclusion

While far from comprehensive, the previous pages have identified many basic grammatical structures in the previously undocumented Sula language. It is my hope that these pages will be of use to future researchers and aid workers desiring to learn the language's fundamentals in advance of their projects. It will be an added bonus if these pages also provide answers to other linguists and a foundation for future exploration and documentation of the language.
Sula
CHAPTER 4: LEXICON
The following lexicon includes many of the words collected during my research into the Sula language. It is by no means exhaustive, but it has ample basic vocabulary for a beginning Sula learner. Where possible, entries record the location and year that items were collected. All items (except where noted otherwise) were provided or verified by more than one speaker.

Many of the lexical entries include the name of a community where a form was gathered, and all at least indicate the island the form was collected on (Sanana or Mangon)—this does not necessarily indicate that a form is of Sanana or Mangon type though, as there are Sanana dialect communities on Mangon and vice versa. Refer to part one of Chapter 2 for a description of the language's main dialect division. For the language learner: that chapter teaches how to convert words from one of the main dialects branches to another in many cases.

This list should not be used to determine correct dialect forms, as it includes data from elicitations that began prior to my ability to differentiate dialects. Moreover, logistical constraints often prevented establishment of controls to ensure vocabulary could be confidently attributed to various dialects. For instance, elicitation sessions were often carried out in Sula, where I would speak a mishmash of the language including words learned in various locations and from various speaker demographics. When this was not the case, I spoke a mixed form of Indonesian that blended regional Malay with standard Bahasa, and I often worked with assistants from villages other than the one where I was eliciting. As such, my consultants were not always primed to first produce their own dialect's preferred forms.
Chapter 4: lexicon

In contrast, the wordlists and dialogue samples compiled in Appendices F, G, & H were controlled and should be used for comparative work. List populations were balanced for age, gender, and location, and they included multiple speakers from the same dialects to help keep consultants primed.

This list pulls from various elicitations conducted over the past ten years and terms that were collected during natural and guided conversations. The primary list sources are: Swadesh lists for basic vocabulary (Swadesh 1952:456-457, 1971); the Austronesian Comparative Dictionary (Blust and Trussel ongoing: 2010-) and the Holle list vocabulary set via Stokhof et al. (1980) for expanded basic vocabulary items and for seeing language change over time; the Lonely Planet Indonesian edition's glossary for modern, practical travel-language (Berkmoes et al. 2010); and various other topicalized word lists. Except where otherwise noted, each entry was produced independently by at least two speakers or produced by one speaker and independently verified by at least one more. The list is overly inclusive for lexicographic standards, but since there are so few sources of Sula vocabulary available, I determined it better to be overly inclusive than to omit potentially useful words. Notations often indicate where items are suspect.

ENGLISH–SULA FINDER LIST AT END OF SECTION
LEXICON TERMS

BI: Bahasa Indonesia

Collected on: the island where an entry was gathered. Caution: this does not always correspond to the dialect a form belongs to. Some forms additionally list specific locations where the entry was collected. These entries are much more likely to represent the dialect form, but there are exceptions.

(CMD): Central Mangon Dialect Region (see Ch 2: Part 2)
(M): Mangon island

(M), Mangon village: The large village on Mangon Island named “Mangon.”
(S): Sanana island

(S), Mangon village: The neighborhood of Sanana city named “Mangon.”

Source: This can represent which research project a term was gathered during, the approximate number of consultants a term was gathered from, the specific name or location of a consultant or village. The tribe a consultant belongs to,

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a- first person singular agreement marker | source: natural speech samples. 2010-2019.
abu 'dust' | BI: debu | collected on: (M) source: numerous 2010. note: loan from Malay.

abu tuka 'bush' | BI: semak? gurun? | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this entry is present in the Holle list, but I was unable to independently verify it. If bush means ‘medium size plant’, I suspect this form results from a misunderstanding, as tuka is the Mangon term for lal 'inside'. The interviewer might have pointed at a bush, and the interviewee understood the question to be the location of the bush rather than the general word for ‘bush’. On the other hand, if bush means ‘wilderness’, Robert Blust (1989) points out that several other languages have parallels to using ‘inside’ in terms meaning ‘wilderness’ e.g.: Maranao (Mindanao) dalem a kaio ‘forest’ (dalem = ‘inside’, a = ‘ligature’), Masiwang (Seram) ai lalan ‘forest’ (‘tree’ + LOC), Soboyo (Taliabu) kayu lian (tree + LOC), Chamorro

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halom tano? ‘forest’ (LOC + ‘land’). This might make sense then in Sula as, literally: ‘in the dust’ [abu ‘dust’ + tuka ‘inside’].

**adat** 'ritual' / 'custom' / 'ceremony' | BI: upacara | collected on: (S) source: numerous 2010. note: loan from Malay.

**aduk** 'to arrive' | BI: datang | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: this entry is a common error from the Holle lists. Rather than 'to arrive', the interviewee responded 'I arrive'. It is common in Sula to frame responses this way rather than provide root forms of words. In this case, duk is the base form for 'come' and 'arrive'. Interestingly, the Holle list collected aduk on Mangon, where a final vowel would be expected. Since aduki was also gathered in Mangon, I suspect an interviewee either provided an additional form based on knowledge of other dialects, or the interviewee was a Sanana transplant.

**aduki** 'to arrive' | BI: datang | collected on: (M) source: numerous 2010-2019. note: as above, this form glosses as 'I come', and it is the expected form of the word for Mangon.

**af(u)mai** 'ash' | BI: abu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**afan** 'to work' | BI: bekerja | collected on: (S) source: two to three consultants 2010-2019. note: verified from Holle as an archaic synonym of baumnara.

**afmai** 'ashes' | BI: abu | collected on: (M) source: numerous 2010-2019.

**afmuka** 'ash' / 'inner fire' | BI: abu | collected on: (S) source: numerous 2010–2019.

**afumai** 'ash' | BI: abu | collected on: (M) source: natural speech samples. 2010-2019.


**ahad** 'week' | BI: minggu | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019. note: loan from Malay.

**ahad mua** 'weekend' | BI: akhir minggu | collected on: (S) source: numerous 2010–2019. note: ahad is a loan from Malay.

**ahat** 'week' | BI: minggu | source: natural speech samples. 2010-2019.

**ahat banai, ahat pihu** 'the week after next' | BI: minggu berikutnya | source: natural speech samples. 2010-2019.

**ahat dawika** 'next week' | BI: minggu depan | source: natural speech samples. 2010-2019.

**ahat gatel ('week three')** 'three weeks from now' | BI: tiga minggu dari sekarang | source: natural speech samples. 2010-2019.
ahat'ik | 'this week' | BI: minggu ini | source: natural speech samples. 2010-2019.


aji mat | 'amulet' | BI: jimat | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: the term was understood but said to be archaic.

ak | first person singular pronoun | BI: saya | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

ak fa | 'my things' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

ak gahia ak | 'myself' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: This Holle list item is likely the result of a miscommunication. The phrase translates as 'I alone I'. Although semantically similar, it is not grammatically reflexive. The reflexive form is ak dit 'I myself'.

ak ngenau | 'I love you' | BI: Aku cinta kamu | collected on: (S), Malbufa village source: numerous 2019. note: it is more common to proclaim strong 'like' than 'love'.

ak(u) | 'I' (1st person singular pronoun) | BI: saya | collected on: (M), (S) source: numerous 2010-2019. note: a- is the corresponding agreement marker.


akafoi | 'drinking bowl' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: archaic.

aku | first person singular pronoun (no formality distinction) | BI: saya | collected on: (M) source: (tribe-based variation elicitations) Mangon tribe 2014.

aku nungga aku | 'I myself' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I was unable to verify this Holle list form, It could be dialect specific.

alam | 'universe' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I received this form as 'the world'. It is likely a loan from Malay meaning 'nature', 'realm', 'world'.

**Chapter 4: lexicon**


**am**  'to squeeze' / 'pinch' | BI: memeras | collected on: (S), (M) source: numerous 2010–2019. note: this form is abbreviation of *gami* / *gam* 'squeeze'.


**amehinana**  'child' | BI: anak | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**ami**  'to squeeze' | BI: memeras | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**an**  'who?' | BI: siapa | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**an samali, an samoli**  'last (temporal)' | collected on: (M) source: single consultant 2014. note: Holle lists both forms, and they do both exist as alternate pronunciations, but I'm not convinced it is dialectic. I have heard the same speakers alternate between *a* and *o* in several words, and while it could be an either/either situation, I suspect there might be an elusive phonological process at work.

**ana (1)**  'child' / 'youngest child' | BI: anak | collected on: (S) source: numerous 2014.

**ana (2)**  'who?' | BI: siapa | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**ana fina**  'daughter' / 'girl' (preteen and up) | BI: anak perempuan, cewek | collected on: (S) source: numerous 2010–2019. note: 'child' + 'female'.

**ana fina me ihi**  'girl' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: *me ihi* is likely an archaic form of *mehi*.

**ana fina nana**  'girl' | collected on: (M) source: numerous 2010–2019.

**ana fini**  'daughter' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: all of my contacts produced *fina* regardless of location.

**ana koha**  'child' / 'youngest child' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: *koha/koa* also indicates virginity.
**ana ma'ana**  'son' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: This Holle list form was likely used to indicate one's son, but at its most basic, it simply means 'a man'.

**ana ma'ana me'ihi**  'boy' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: this form is understandable and said to be perfectly acceptable, but my consultants consistently produced **ana mehi maana** (disregard presence of glottal stops).

**ana ma'uwa**  'stepdaughter' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**ana maana**  'son' | BI: anak laki-laki | collected on: (S) source: numerous 2010–2019. note: 'child' + 'male'.

**ana mahua**  'stepdaughter' | collected on: (S) source: numerous 2010-2019.

**ana mana nana**  'boy' | collected on: (M) source: numerous 2010-2019.

**ana mehi**  'child' / 'children' | BI: anak-anak | collected on: (S) source: numerous 2010-2019. note: it is unclear what the mehi morpheme means.

**ana mehi fina**  'girl' / 'young girl' | BI: anak perempuan | collected on: (S) source: numerous 2010–2019.

**ana mehi maana**  'boy' / 'young boy' | BI: anak laki-laki | collected on: (S) source: numerous 2010.

**ana mehi nana (1)**  'baby' / 'small child' | BI: balita, bayi | collected on: (S) source: numerous 2010. note: usually used for toddler-aged children (it is unclear what the mehi morpheme means.).

**ana mehi nana (2)**  'baby' | source: natural speech samples. 2010-2019.

**ana nana (1)**  'child' | BI: anak | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**ana nana (2)**  'baby' | BI: bayi | collected on: (S) source: numerous 2010–2019. note: 'child' + 'small' When not used figuratively, this is limited to infants.

**ana nopa**  'grandchild' | collected on: (S) source: numerous 2010–2019.

**ana opu**  'grandchild' | collected on: (M) source: three to five consultants 2010–2019.

**ana piara**  'adopted child' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**ana sil**  'adopted child' | collected on: (S) source: numerous 2010–2019.

**ana ta(ha)i**  'baby' | BI: anak | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.
**ana tiba** 'child' / 'oldest child' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**anak** 'child' | BI: anak | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**angi** 'wind' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: likely loan from Malay.

**ani** 'who' | BI: siapa | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**ap dawika** 'light' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: the form is correct, but it better translates to 'daylight'.

**ap, 'ap** 'fire' / 'light' | BI: api, lampu, cahaya | collected on: (S) source: numerous 2010. note: ranges from 'light' in general to modern electric lighting.

**apa, hapa** 'what?' | collected on: (M) source: natural speech samples. 2010-2019.

**apakid** 'to hear' | BI: mendengar | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: this Holle list entry is poorly translated, as it misses the consultant's framing of the term. What the consultant actually said was *a-paked* 'I hear' (*a- + baked* with intervocalic devoicing).

**apel** 'apple' | BI: apel | collected on: (S) source: numerous 2010–2019. note: loan from Dutch *appel* by way of Malay *apel*.


**apfee** 'smoke' | BI: asap | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**api** 'fire' | BI: api | collected on: (M) source: numerous 2010. note: loan from Malay.

**apifei** 'smoke' | BI: asap | collected on: (M) source: three to five consultants 2010.

**apleha** 'ashtray' | collected on: (S) source: numerous 2010. note: literally 'fire location'.

**April** 'April' | source: natural speech samples. 2010-2019.

**apu** 'fire' | collected on: (M), CMD region source: natural speech samples. 2010-2019.
*Sula*

**arbab (1)**  'violin' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I am skeptical of this Holle list item. Arab does also mean Arab in Sula, so it seems likely that the consultant was shown a picture of a violin and responded *arab* meaning, 'that's something the Arabs have'. At that time, and to a degree now, Arabs were considered worldly travelers. My fieldwork also collected *arbab* as 'arbab' / 'boss'.

**arbab (2)**  'arbab' / 'boss' | BI: arbab | collected on: (S), Pohea source: single speaker (Fagudu tribe) 2010. note: loan from Arabic arbab.

**as**  'dog' | BI: anjing | collected on: (S) source: numerous 2010. note: see also *fako*.

**as li**  'to bark' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: lit. 'dog' + 'speech'.

**asli**  'original' / 'indigenous' | BI: asli | collected on: (S) source: numerous 2010–2019. note: loan from Malay.

**asu**  'dog' | BI: anjing | collected on: (M) source: natural speech samples. 2015.

**at**  'tongs' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**ata bau**  'grasshopper' e.g. *atabau eb* 'locust swarm' | collected on: (S) source: numerous 2010.

**atau**  'or' | source: natural speech samples. 2010-2019.

**atuf akfa**  'to ransom' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**aturan**  'rule' / 'law' | collected on: (S) source: numerous 2010.

**atut**  'to grow' | BI: tumbuh | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015. note: the word-initial *a* might just be a first-person agreement marker.

**au**  'bamboo' | collected on: (S) source: numerous 2010.

**au foku**  'joint in bamboo' | BI: sambungan bambu | collected on: (M), Waitulia village source: numerous 2014.

**au lewa**  'bamboo sections between joints' | BI: bagian bambu di antara sendi | collected on: (M), Waitulia village source: two to three consultants 2014.

**au ponta**  'bamboo' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I was unable to verify this form, It could be dialect or a part of the bamboo plant.

**au sanga**  'bamboo branch' | BI: cabang bambu | collected on: (M), Waitulia village source: two to three consultants 2014.
awa (1) 'farm, field, garden' | BI: kebun | collected on: (S) source: numerous 2010–2019.
awa (2) AUX / 'still' / 'yet' | BI: masih | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.
awa bira 'rice-field (dry)' | collected on: (S) source: numerous 2010.
awa pamasi 'rice-field (dry)' | collected on: (M) source: three to five consultants 2010.
awan 'cloud' | collected on: (M) source: three to five consultants 2010.
aya kadigadiga 'biggest' | BI: terbessar | collected on: (S) source: numerous (Fagudu Tribe Pohea village) 2010–2019.
ba (1) 'follower' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
ba (2) 'to buy' | BI: membeli | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
ba gahowa 'why' / 'how' | BI: kenapa | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.
ba leu 'in, inside' | BI: [di] dalam | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
ba ne'u 'underneath' | BI: di bawah | collected on: (M), Capuli village source: three to five consultants 2015. note: there is significant phonetic overlap between o and a in Sula. Many words are produced with one or the other depending on the speaker (regional variation), but all dialects do seem to maintain both o and a as distinct phonemes. Compounding the difficulty in explaining their overlap, some speakers seem to alternate within the same word with no clear contextual trigger. For example a Capuli speaker provided bo heha 'underneath' and ba neu 'underneath'. She did not have a reason for the alternation, but said that they had to be that way (other speakers I worked with did not all agree with her). I suspect an elusive phonological condition exists that causes phonetic vowels to overlap or be substituted, but much regional and speaker variation renders the condition unclear. It will take a long-term, onsite study of the language to sufficiently explain the phenomenon.

ba'aha 'warm (things)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

ba'ata 'tightly fitted' | collected on: (S) source: numerous 2010–2019.

ba'ipi mboni 'to smile' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: boni/mboni is mouth in Mangon dialect, but I could not confirm the meaning of the Holle list entry, ba'ipi. For 'smile' I only collected balela, bara em, and the Malay loan, senyum.

ba'itu 'to flatulate' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

ba'sa (pel) 'broken' | collected on: (S) source: numerous 2010.

ba'tuh kadiga 'explode strong' | collected on: (S) source: numerous 2010.

ba'uba 'warm (things)' | collected on: (S) source: numerous 2010–2019.

ba'uhii 'night' | BI: malam | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu tribe 2014.

ba(ha) 'to buy' / 'to purchase' / 'to shop' | BI: membeli | collected on: (S) source: numerous 2010.

ba(u) ma'i (kena) 'to fish' | collected on: (S) source: numerous 2010.

ba: 'to buy' | collected on: (M) source: natural speech samples. 2010-2019.


baba kaka 'uncle FB' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this Holle list entry simply translates to 'father's sibling'. It contains no relative age distinction.

baba ma'ujuva 'stepparents' | collected on: (M) source: three to five consultants 2010–2019.


baba tina 'mute' / 'uncle FB' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this Holle list entry is confusing. As I understand these morphemes, this should mean 'father hear/listen'.

baba tinga, baba koko 'uncle MB' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
**babahu** 'uncle' | collected on: (S) source: numerous 2010.

**baben** 'turtle' | BI: penyu | collected on: (S), Malbufa village source: single consultant 2019.

**babenu** 'tortoise' | BI: kura-kura darat | collected on: (M), Waitulia village source: numerous 2014.

**babiku** 'big' / 'fat' | BI: gemuk | collected on: (M) source: three to five consultants 2010.

**babinu** 'tortoise' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**babir (1)** 'blue' | BI: biru | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

**babir (2)** 'green' | BI: hijau | collected on: (S) Kampung Umaloya, Kampung Sama source: (tribe-based variation elicitations) Fagudu, Facei tribes 2014.

**babiru kaulosa** 'green leaf' | BI: hijau | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**babisa** 'poison' / 'poisonous' | BI: beracun | collected on: (S) source: numerous 2010–2019.

**babua (1)** 'to bear fruit' | BI: berbuah | collected on: (S) source: natural speech samples. 2010–2019. note: bua is a loan from Malay. This form is a calque of berbua.

**babua (2)** 'crazy' / 'delirious' | BI: gila | collected on: (S) source: numerous 2010–2019.

**babuk** 'bent' / 'crooked' | collected on: (S) source: numerous 2010–2019.

**babunu** 'langsat fruit' | collected on: (M) source: three to five consultants 2010–2019.

**bacarita** 'story' | collected on: (S) source: numerous 2010–2019. note: likely Sula morphology on a Malay loan, cerita.

**badaeti (1)** 'grass' | BI: barumput | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


**badafu** 'straight' | collected on: (M) source: three to five consultants 2010–2019.

**badagana** 'to dream' | BI: bermimpi | collected on: (M) source: numerous 2014. note: see also dagana.

**badandu** 'thunder' | BI: guntur | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
Sula

badasa 'thin' / 'skinny' | collected on: (M) source: three to five consultants 2010–2019.
badona 'to burn' | BI: membakar | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
badu 'jacket (for men)' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
baeha 'to wash' (especially laundry) | BI: cucian | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.
baeo, baeu 'bad (not good)' | BI: jelek | collected on: (S) source: numerous 2010–2019.
bafa 'to carry on the shoulder or back' | BI: memikul | collected on: (S) source: numerous 2010–2019.
bafai 'to sneeze' | BI: bersin | collected on: (M), Ulfoa village source: numerous 2015.
bafe 'sleek unicornfish' (naso hexacanthus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.
bafee (1) 'fog' | BI: kabut | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
bafee (2) 'smoke' | BI: asap | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
bafee (3) 'green' | BI: hijau | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.
bafei (1) 'gray color' / 'fog' / 'smoke' | BI: kabut | collected on: (M) all regions source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
bafei (2) 'green' | BI: hijau | collected on: (S) source: natural speech samples. 2010-2019.
bafel 'fog' | BI: kabut | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for
number of consultants producing this form. 2015. note: this form might be a
typo or (l~i) transcription error.

**bafoi pa**  'old' / 'a long time' | BI: sudah lama | collected on: (M), Waitulia village
source: numerous 2014.


**baga'oa, bagoa, bagano**  'why' / 'how' | source: natural speech samples. 2010-2019.

**bagahoia**  'why' / 'how' | source: natural speech samples. 2010-2019.

**bagahoa, bagaoa, bagoa**  'why' / 'how' | BI: kenapa | collected on: (S) source:
numerous 2010–2019. note: variation in words with intervocalic h indicate
different stages of a language change across various dialect communities.

**bagamai**  'salty' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**bagano**  'why' / 'how' | BI: kenapa | collected on: (M) source: three to five consultants 2014.

**baganoki**  'how?' | BI: bagaimana | collected on: (M) Kampung Waitina source: (tribe-
based variation elicitations) Mangon tribe 2014.

**bagau**  'lie (not tell truth), impossible (thing)' | BI: bohong | collected on: (S) source:

**bagawagi**  'fat' | BI: gemuk | collected on: (M) source: three to five consultants 2010.

**bagila**  'pure' / 'perfect' / 'clean' e.g. *bagila gan in lal* 'pure as her/his soul' | BI: bersih |

**bago(ː)**  'cold' | collected on: (M) source: natural speech samples. 2010-2019.

**bagoa**  'cold (temp)' / 'the cool season' / 'fresh' | BI: dingin | collected on: (S) source:

**bagoo**  'cold' | BI: dingin | collected on: (M) Kampung Waitina source: (tribe-based

**bagu**  'thick' / 'fat' | BI: tebal | collected on: (M) source: three to five consultants 2010–
2019.

**bagu lia**  'shy' / 'timid' | BI: malu | collected on: (M) source: entry from Holle List;
unable to verify c. 1900.

**baha (1)**  'to blow' e.g. the wind | collected on: (M), Capuli village source: numerous 2015.

**baha (2)**  'to buy' | BI: membeli | collected on: (S) Kampung Umaloya, Kampung
Wailau, Kampung Sama source: natural speech samples. 2014.

**baha (3)**  'spice' | source: natural speech samples. 2010-2019.
baha(ha), ba'a(ha) (1)  'spicy (hot food)' | BI: pedas | collected on: (S) source: numerous 2010.

baha(ha), ba'a(ha) (2)  'warm' | BI: panas | collected on: (S) Kampung Sama source: (tribe-based variation elicitation) Facei tribe 2014. note: it is unclear how widespread this usage is.

bahaka  'to give birth' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

bahakur  'morinda atrocarpus' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I think these are closely related to the noni fruit tree (榯樹).

bahal (1)  'embarrassed' / 'shy' | BI: malu | collected on: (S) source: numerous 2010–2019. note: possibly reddening in the face is a metaphor for blossoming (also bahal).

bahal (2)  'to blossom' e.g. kau bahal 'blossoming tree' | BI: mekar | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: see also hal.

bahal, kau bahal  'flower' | collected on: (S), Kampung Umaloya source: natural speech samples. 2010-2019.

bahas  'to cheat' | BI: menipu | collected on: (S) source: numerous 2010–2019. note: see also tipu.


baheha  'to wash' (especially to launder clothes) | BI: cucian | collected on: (S) source: numerous 2010. note: see also baeha. Variation in words with intervocalic h indicate different stages of a language change across various dialect communities.

bahiu  'blue' | collected on: (S) source: numerous 2010.

bahoa  'which' / 'why' / 'how' e.g. hia baoa 'which one' | collected on: (S) source: numerous 2010.


bahu (2)  'back' | BI: punggung | collected on: (S) Kampung Wailau source: (tribe-based variation elicitation) Falahu tribe 2014.


bahu bahu  'fast, quick, in a hurry, soon, urgent' | BI: cepat | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.
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**bahu pama** 'fragile (easy break)' | BI: gampang pecah | collected on: (S) source: numerous 2010–2019. note: 'quick' + 'break'.

**bahu-pahu** 'quick' (with emphasis) | source: natural speech samples. 2010-2019.

**bahuol** 'quick' / 'fast' | collected on: (S) source: numerous 2010.

**baifon** 'to hide' (hide oneself) | BI: sembunyi | collected on: (S) source: numerous 2010. note: see also fongi, dori fon, dau fon.

**baina** 'share' / 'part' | BI: bagi | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

**baka** 'to give birth' | BI: penyu | collected on: (S), Malbufa village source: single consultant 2019. note: likely euphemism.


**baka-baret** 'stop' / 'prevent' / 'lay off' / 'fire' | BI: menghentikan | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

**baka-digapa** 'freeze' | collected on: (M) source: single consultant 2010. note: *kadiga* 'strong' + *pa* intervocalic devoicing from the first syllable of *bamoda* 'cold'.

**baka-faaya** 'to yawn' | BI: menguap | collected on: (S) source: numerous 2010–2019.

**baka-gehi** 'construction' | source: natural speech samples. 2010-2019. note: literally 'make standing'.

**baka-han** 'near' | BI: dekat | collected on: (S) source: numerous 2010.

**baka-han han (1)** 'to prepare' | collected on: (S) source: numerous 2010.

**baka-han han (2)** 'several' | BI: beberapa orang | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

**baka-han maha, baka-han mahus** 'rare' e.g. a steak | BI: setengah masak | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019. note: this translation is uncertain, the consultant might have been saying what to do with undercooked meat rather than translating.

**baka-has** 'to touch' | BI: menyentuh, sentuh | collected on: (S) source: numerous 2010–2019.

**baka-kehi** 'construction' / 'to erect, construct' | BI: pembangunan | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

**baka-kili yai** 'sit (with the knees bent to one side)' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**baka-leng** 'to lie down' | BI: berbaring | collected on: (S) source: numerous 2010–2019.
baka-nau  'to message' / 'to translate' / 'introduce' (direct digital messaging or conveying a message on another's behalf) | BI: pesan, menerjemahkan, terjemahkan | collected on: (S) source: numerous 2010–2019. note: 'make' + 'know' (see also baka paked 'make' + 'heard').

baka-neu  'to offer' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

baka-paked  'to message' (direct digital messaging or conveying a message on another's behalf) | BI: pesan | collected on: (S) source: numerous 2010–2019. note: 'make' + 'know' (see also baka nau 'make' + 'known').

baka-pihu  'return something' e.g. mon saf baka pihu 'return your drinking bowl' | collected on: (S) source: three to five consultants 2010. note: the p from pihu is an example of intervocalic devoicing.

baka-ran  'purple' | BI: ungu | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.


baka-tab  'muddy ground' | collected on: (S) source: numerous 2010.


baka-tin tui, baka-tini, baka-tui  'to point' | BI: menunjuk | collected on: (M), Waitulia village source: numerous 2014.

baka-toya  'show' / 'to point' / 'convey' / 'teach' e.g. baka'toya bo bahasa Sua 'teaching Sula lang' | BI: menunjukan, tunjuk, memberitahu, mengajar, ajar | collected on: (S) source: numerous 2010–2019.

baka-toya bayata  'to stutter' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

baka-toya pakasi  'to mumble' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.


baka-wosa  'fill' | BI: mengisi [isi] | collected on: (S) source: numerous 2010–2019. note: I am unsure the phonemic status of this intervocalic w.


bakafa  'to yawn' | BI: menguap | collected on: (M) source: numerous 2014.
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**bakafa (eya)**  'to yawn' | BI: menguap | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**bakagi**  'to fall' | BI: jatuh | collected on: (M), Waitulia village source: two to three consultants 2014. note: see also bua.

**bakago**  'dumb' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**bakai**  'to marry' | collected on: (S), (M) source: numerous 2010.

**bake**  'build' | BI: membangun | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

**baked**  'hear' / 'listen' / 'loud' | BI: mendengar, keras | collected on: (M) source: numerous 2010–2019.

**bakef**  'cough' / 'cold (illness)' | BI: batuk, pilek | collected on: (S) source: numerous 2010–2019. note: likely antiquated. See also sangihi, sanihi.


**bakiru**  'blue' | BI: biru | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**bakosa**  'big' / 'fat' | BI: gemuk | collected on: (S) source: numerous 2010–2019.

**bakosa bag**  'fat' / 'grease' | BI: lemak | collected on: (S) source: numerous 2010–2019.

**baku**  'to flatulate' | BI: kentut | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**baku bantu**  'to help' | BI: menolong, bantu | collected on: (S) source: numerous 2010–2019. note: likely loan from Malay. See also mungkuriu.

**bakumur**  'to chew' | BI: mengunyah | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**bal (1)**  ACTIVE SENTENCE AUXILIARY | collected on: (S) source: natural speech samples. 2010–2019. note: in auxiliary function, bal can replace verbal agreement marker when a pronoun is also present.


**bal (3)**  'hit' | BI: memukul | collected on: (S) source: numerous 2010.

**bal (4)**  'must' | BI: harus | collected on: (S) source: single consultant 2014.
bal (5) 'shy' / 'ashamed' | BI: malu | collected on: all (S) regions source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

bala 'freeman' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

balahai 'worm eggs' | BI: telur cacing | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I could not verify this Holle list item, but the morphemes are likely 'ball' + 'dirt'.

balea 'to dry' / 'to hang' e.g. clothes | BI: jemur | collected on: (S) source: numerous 2010–2019. note: literally 'do sun'.

balea dit 'to bask' / 'dry oneself' | BI: berjemur | collected on: (S) source: numerous 2010–2019.

baleha 'village' / 'community location' | BI: kampung | collected on: (S), Umahoya village Source: Fagudu tribe 2014. note: in some communities, this is a minimal pair with balela 'laugh'.

balela 'to laugh' | BI: tertawa | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.

balela, baheha 'laugh' / 'smile' | BI: tertawa, senyum | collected on: (S) source: numerous 2010–2019. note: in some communities, this is a minimal pair with baleha 'village'.


baleu (1) 'deep' e.g. a deep dish | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: This is likely the result of a miscommunication in the Holle list, as I gathered the form to simply mean 'within'.

baleu (2) 'shy' / 'timid' | BI: malu | collected on: (M) source: numerous 2014-2015.

bafongi 'to hide oneself' | BI: bersembunyi | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

bali (1) 'ring' e.g. a phone | BI: membunyikan, bunyi | collected on: (S) source: numerous 2010–2019.

bali (2) 'shy' / 'timid' | BI: malu | collected on: (M) source: numerous 2014-2015.

bali'ap 'to make a fire' | collected on: (M) source: three to five consultants 2010–2019.
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*baliu* 'hatchet' / 'axe' / 'pickaxe' | BI: beliung | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

*bama* 'to split' / 'to chop' | BI: membelah | collected on: (M) source: numerous 2010, 2014.


*bama* (2) 'to cut, to hack' | BI: memotong | collected on: all regions source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

*bama* (3) 'to split' | BI: membelah | collected on: all regions source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

*bama(ha)* 'to sell' | collected on: (S) source: numerous 2010.

*bama(pu)* 'cook' | BI: masak | collected on: (S), (M) source: numerous 2010–2019.

*bamap* 'to cook' | BI: memasak | collected on: all regions source: natural speech samples. 2010-2019.

*bamap (bira)* 'to cook' | BI: menanak | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu, Falahu tribes 2014.

*bamap bira* 'to cook' | BI: menanak | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

*bamapi* 'to cook' | BI: memasak | collected on: (M) source: natural speech samples. 2010-2019.

*bamapi pamasi* 'to cook' | BI: menanak | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

*bamata* (1) 'cramp' / 'gone to sleep' (limbs) | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

*bamata* (2) 'raw' e.g. *soklat bamata* 'raw chocolate' | BI: mentah | collected on: (M), Capuli village source: numerous 2015.

*bamin* 'a cold' / 'flu' | BI: flu, punya pilek | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

*bamoda* 'cold (things)' | collected on: (M) source: three to five consultants 2010–2019.

*bamok leha* 'sacred place' | BI: (tempat) keramat | collected on: (S) source: numerous 2010–2019.

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**bamppa** 'warm' | BI: hangat | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**bam** 'tame' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**ban** 'sexual intercourse' (vulgar) | BI: Bersetubuh | collected on: (M), Ulfoa village source: numerous 2015. note: be careful with this word. Using it incorrectly can instigate violence.

**ban makata sigadu pia** 'cured' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**ban mapai ap** 'to extinguish a fire' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**bana** 'war' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: when asked, a consultant said the form sounds old fashioned. *mana pau* and *mana fau* are the common forms today. Other *b~m* correspondences between Holle list words and modern vocabulary should be considered for a sound change in progress.

**bana au** 'flathead grey mullet' (mugil cephalus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**bana kanoufo** 'bag (made from rope)' | collected on: (M) source: three to five consultants 2010–2019.

**banahi** 'to love' | collected on: (S) source: numerous 2010–2019.

**banai** 'the day after tomorrow' | collected on: (S) source: natural speech samples. 2010-2019. note: probably literally means 'two from now', as it is also used in *ahat banai* 'the week after next'.

**banap (1)** 'to hunt' | BI: berburu | collected on: all (S) regions source: numerous 2010. note: Sanana form. See also *banapi*.

**banap (2)** 'to shoot' e.g. shoot a gun | BI: menémbak | collected on: all (S) regions source: numerous 2015.

**banapi (1)** 'to shoot' e.g. shoot a gun | BI: menémbak | collected on: all (M) regions source: numerous 2014. note: Mangon form. See also *banap*.

**banapi (2)** 'to hunt' | BI: berburu | collected on: all (M) regions source: numerous 2015.

**bangal** 'maybe' | collected on: (S) source: two to three consultants 2010-2019. note: this seems to by mostly replaced by barankali and munkin from Malay.

**bangana** 'there (distant)' | source: natural speech samples. 2010-2019.
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**bangana, isuna** 'there (near addressee)' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**bangana, neka** 'there (near addressee)' | source: natural speech samples. 2010-2019.

**bangsa** 'tribe' / 'people' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**banoi** 'prayer' / 'blessing' | BI: doa | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

**banta** 'argue' | BI: membantah | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

**bao bot** 'garlic' | collected on: (S) source: numerous 2010.

**bao repot** 'inconvenient' | collected on: (S) source: numerous 2010.

**baoa** 'which' (hia baoa 'which one') | collected on: (S) source: numerous 2010.

**bapana** 'to shoot' (especially with a bow and arrow) | BI: menembak | collected on: all regions source: numerous 2010.


**bapili** 'to choose' | BI: memilih | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**bapompu** 'dull' / 'blunt' | BI: tumpul | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**bara em** 'smile' | collected on: (S) source: numerous 2010.

**baragana** 'to dream' | BI: bermimpi | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.


**barasa (1)** 'sexually aroused' | BI: terangsang | collected on: (S) source: numerous 2010–2019.

**barasa (2)** 'thin' / 'skinny' e.g. a thin person | collected on: (S) source: numerous 2010.

**baret** 'quit' / 'stop' (cease) e.g. *ba'ret sui tabak* 'to quit smoking' | BI: berhenti | collected on: (S) source: numerous 2010–2019. note: see also *beret, baka*
baret/beret. Multiple forms of this word likely result from confusion over reduced vowels in non-stressed syllables.


baru 'warrior' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

barua 'a case for fabric' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

basa 'moldy' / 'stale' / 'old' / 'stagnant' / 'still' (milk, water) | collected on: (S), (M) source: numerous 2010.

basa 'ungi 'to love' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

basa (1) 'language' | collected on: (S) source: numerous 2010. note: reduced loan from Malay Bahasa.

basa (2) 'breast' / 'milk' | collected on: (S) source: three to five consultants 2010. note: uncommon. See susa / sosa.

basa (3) 'another' / 'other' | BI: yang lain | collected on: (S) source: numerous 2010–2019.


basa (6) 'rotten' | BI: busuk | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

basa (7) 'bad' e.g. basa kadiga 'terrible' | BI: buruk (sekali) | collected on: all regions source: natural speech samples. 2010-2019.

basa nohi 'related' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.


basana 'to answer' | collected on: (S) source: numerous 2010–2019.

basanasi 'related' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

basehu 'to weave' | collected on: (S) source: numerous 2010–2019.
basel 'to plant' | BI: menanam | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

basel(i) 'to plant' / 'a plant' | BI: menanam | collected on: (S), (M) source: numerous 2014. note: see also sel / sil.

baseli 'to plant' | BI: menanam | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

baso soso 'to nurse at the breast' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

bata 'wait' / 'later' / 'shortly' e.g. wait a moment | BI: menunggu | collected on: (S) source: numerous 2010–2019.

bata mila 'stupid' / 'idiot' | BI: bodoh | collected on: (S) source: numerous 2010–2019.

bataboli 'to turn' | BI: berputar | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


batani 'to plant' | BI: menanam | collected on: (M) Mangon tribe 2014.


bate 'to shatter' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

bati 'branch' | BI: dahan | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


batina 'shallow' | collected on: (S) source: numerous 2010-2019.

batona, batonu 'to burn' / 'to ignite' | BI: membakar | collected on: (S), (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015. note: batonu is the Mangon form.

batu (1) 'thunder' | BI: guntur | collected on: (M), Wai U village source: single consultant 2014. note: this is a questionable entry.
**Sula**

*batu (2)*  'to grow' | collected on: (M), CMD region source: natural speech samples. 2010-2019.

*batuka (1)*  'empty' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I suspect this Holle list entry is due to an interviewee misunderstanding.

*batuka (2)*  'bay' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

*batuka (3)*  'inside' / 'in' | BI: di | collected on: (M) source: three to five consultants 2010–2019.

*batut*  'to plant' | collected on: (S), Kampung Umaloya source: natural speech samples. 2010-2019.

*batut (bira)*  'to pound' / 'beat' | BI: menumbuk | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

*batutu*  'to grow plants' / 'to pound/unhusk rice' | BI: tumbuh | collected on: (M), Ulfoa village source: numerous 2014. note: I find it somewhat implausible that this form means both 'to grow (nonspecific) plants' and also 'to pound rice'. The form was given for both *tumbuh* and *menumbuk* by the same group of people just seven words apart on an elicitation sheet. This needs to be investigated further.


*bau (2)*  'to hit' / 'to strike' | collected on: (S) source: numerous 2010. note: I am doubtful that *bau* itself can mean 'hit'. It is more likely that it acts as a causative morpheme and speakers drop the complement when the meaning is contextually clear.

*bau (3)*  'back' (body) | BI: punggung | collected on: (M), Ulfoa village source: numerous 2014. note: derived from *bahu*. See also *sanapahu*.

*bau gahoa*  'why' / 'how' | BI: bagaimana | collected on: (S) source: numerous 2010.

*bau ganoa*  'how?' | BI: bagaimana | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

*bau gaoa*  'why' / 'how' | BI: bagaimana | collected on: (S) source: numerous 2010. note: see also *bau gahoa*.

*bau goa*  'why' / 'how' | BI: bagaimana | collected on: (S) source: numerous 2010. note: see also *bau gahoa*.
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**bau-bal faa**  'produce' (make) | BI: memproduksi | collected on: (S) source: numerous 2010–2019. note: literally 'make' + active AUX + 'thing'.

**bau-bena**  'rising tide' | BI: arus naik | collected on: (M), Waitulia village source: Waitulia fishermen 2014. note: literally 'make go up'. In Waitulia, rising tides are said to be accompanied by a strong, fast eastward current. The reverse for falling tides.

**bau-faa sel**  'to grow' | collected on: (S) source: numerous 2010.


**bau-gehi**  'construction' | source: natural speech samples. 2010-2019. note: literally 'make standing'.

**bau-lal suka (dit)**  'to enjoy (oneself)' | BI: menikmati | collected on: (S) source: numerous 2010–2019.

**bau-lela**  'have fun' / 'humorous' / 'fun, joke' | BI: bersenang-senang | collected on: (S) source: numerous 2010–2019.

**bau-leu**  'to dig' | collected on: (S) source: numerous 2010. note: see also geka, gika, gahu.

**bau-makata bihu pia**  'cured' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: these morphemes are 'make' + 'medicine' + 'return' + 'safe/good/person'.

**bau-maneha**  'true, right (correct)'/ 'repair' | BI: benar | collected on: (S) source: numerous 2010–2019.

**bau-mata**  'kill' / 'murder' (lit. 'make dead') | BI: membunuh [bunhu] | collected on: (S) source: numerous 2010.

**bau-mata ap(i)**  'to turn off' / 'to extinguish' e.g. to kill the lights | collected on: (M) source: numerous 2010. note: lit. kill' + 'fire'.


**bau-meneha hal**  'recommend' | BI: rekomendasikan | collected on: (S) source: numerous 2010–2019.

**bau-mua**  'to finish' | collected on: (S) source: numerous 2010–2019. note: intransitive.


**bau-munara**  'to work' | BI: bekerja | collected on: (S) source: numerous 2010–2019.
**Sula**

**bau-neu** 'falling tide' | BI: arus kurun | collected on: (M), Waitulia village source: Waitulia fishermen 2014. note: literally 'make go down'. In Waitulia, falling tides are said to be accompanied by a strong, fast westward current. The reverse for rising tides.


**bau-pai ap** 'to turn off a light' | collected on: (S) source: numerous 2010-2019. note: literally 'make' + 'finished' + 'fire'.


**bau-pelajar** 'study' | BI: belajar | collected on: (S) source: numerous 2010. note: loan from Malay.

**bau-perinta joh** 'worship' | BI: ibadat | collected on: (S) source: single consultant 2010–2019. note: see also sabeya, sabia.

**bau-pia** 'peace' / 'to make peace' | collected on: (S) source: numerous 2010.

**bau-sala** 'fault (guilt)' / 'mistake' bau sala fa 'feel guilty about something' | BI: salah | collected on: (S) source: numerous 2010–2019.

**bau-senang senang** 'have fun' / 'humorous' / 'fun' | BI: bersenang-senang | collected on: (S) source: numerous 2010–2019. note: loan from Malay.

**bau-sin** 'to get revenge' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**bau-tuf** 'make a hole' | source: natural speech samples. 2010-2019.

**bau-tufi talinga** 'pierce ear' | BI: menusuk | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**baubagila** 'rub' | collected on: (M) source: three to five consultants 2010.

**bauhi** 'late evening' / 'night' | BI: malam | collected on: (S) source: numerous 2010–2019. note: see also buhi, bo uhi.

**bauhi yau** 'midnight' | BI: tengah malam | collected on: (S) source: numerous 2010–2019.

**bauhi'ik** 'tonight' | BI: malam ini | collected on: (S) source: numerous 2010–2019. note: literally 'night this'.

**baumanara** 'job' | collected on: (S) source: numerous 2010.

**baumapu** 'to cook' | collected on: (M), CMD region source: natural speech samples. 2010-2019.
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**bawa** 'onion' / 'shallot' / 'garlic' | collected on: (M) source: three to five consultants 2010.

**bawamia** 'red onion' / 'shallot' | collected on: (S) source: single consultant 2010. note: calque from Malay bawang merah.


**bawel (2)** 'to climb' | BI: naik | collected on: (S) source: numerous 2010.

**bawiti** 'fishing with a line & pole' | collected on: (M), Waitulia village source: two to three consultants 2014.

**bawowu** 'to shout' | BI: berteriak [teriak] | collected on: (S) source: single consultant 2010–2019. note: I am unsure the phonemic status of the intervocalic w's.

**bayata** 'tightly fitted' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.


**bayu** 'hungry' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see **boya** The Holle form has implications on the phonetically unmotivated sound change in Proto-Sula described in chapter 2.

**be (1)** 'to throw' | BI: melémparkan | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**be (2)** 'day' | BI: hari | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**be'ina waris** 'to inherit' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**be'u** 'to tie up, fasten' | BI: mengikat | collected on: (S) source: numerous 2010.

**be(hi)for** 'liver' | BI: hati | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014. note: I am fairly sure this is 'lungs'.


**beb** 'duck' | BI: bebek | collected on: (S) source: numerous 2010–2019.

**beda** 'different' | BI: berbeda | collected on: (S) source: numerous 2010–2019. note: loan from Malay.

**bedagang** 'to trade' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**bedi** 'night' | BI: malam | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**bee** 'to throw' | collected on: (M) source: natural speech samples. 2010-2019.

**befa (1)** 'to hit' | BI: memalu | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**befa (2)** 'time' / 'o’clock' | source: natural speech samples. 2010-2019.

**befa ga pila** 'at what time?' | source: natural speech samples. 2010-2019.

**bega** 'tuna' e.g. *kena bega* 'tuna fish' | collected on: (M) source: three to five consultants 2010.

**behi** 'to throw' / 'toss' | BI: melemparkan | collected on: (S), (M) source: numerous 2010.

**behi dagati** 'hard to breath' | collected on: (S) source: numerous 2010.

**behi(tan)** 'breast' / 'chest' | BI: dada | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu, Falahu tribes 2014.

**behifon** 'liver' | BI: hati | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**behifor (1)** 'lungs' | collected on: (S) source: numerous 2010–2019.

**behifor (2)** 'liver' | BI: hati | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014. note: several speakers produced this form for 'liver' though I expect it is either another example of body-part metonymy or speech error and the more specific term is *kila*.

**ben ben** 'wall' (inside or outside wall) | BI: dinding | collected on: (S) source: numerous 2010–2019.

**bena, ben (1)** 'to climb' / 'to ascend' e.g. (1) *bena lepa* 'climb up' (e.g. a ladder) e.g. (2) *bena kau* 'to climb as one climbs a tree' e.g. (3) *bena lida* 'to climb as one ascends a slope' | BI: memanjat, mendaki | collected on: (S) source: numerous 2010–2019. note: once recorded as *ben* in Fatkouyun village.

**bena, ben (2)** 'ride a vehicle or an animal' (e.g. bike or horse) | BI: naik | collected on: (S) source: numerous 2010–2019.

**bena, ben (3)** 'to board a vehicle' e.g. *bena lota* 'to board a boat' | BI: naik | collected on: (S) source: numerous 2010–2019.

**benai** 'day after tomorrow' | BI: lusa | collected on: (S) source: numerous 2010–2019.

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*ber sukur* 'grateful' e.g. *sukur eb-eb* 'thanks very much' | BI: berterima kasih | collected on: (S) source: numerous 2010–2019. note: loan from Malay. and Arabic.

*beran* 'daring' / 'brave' | collected on: (S) source: two to three consultants 2010-2019. note: possible loan from Malay. See also *baran*.

*berbeda* 'other' | BI: lain | collected on: (S) source: numerous 2010. note: loan from Malay.

*berbisa berbahaya* 'danger poisonous' | collected on: (S) source: numerous 2010. note: loan from Malay.

*beret, bret* 'stop' / 'prevent' e.g. (1) *bret pai* 'stop a moment' (2) *bret saik pai* 'stop here a moment' | BI: berhenti | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019. note: see also *baret*. Multiple forms of this word likely result from confusion over reduced vowels in non-stressed syllables.

*berjanji* 'promise' e.g. *a-berjanji* 'I promise' | BI: berjanji [janji] | collected on: (S) source: numerous 2010–2019. note: loan from Malay.

*berua* 'case for cloth' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

*beruwi* 'to burn' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

*besa* 'ugly (things)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.


*bet* 'day' | BI: hari | collected on: (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Fagudu, Falahu, Facei tribes 2014.

*bet genei pihu* 'in (six) days' | BI: dalam (enam) hari lagi | collected on: (S) source: numerous 2010–2019.

*bet hia bet hia* 'per day, everyday' | BI: per hari | collected on: (S) source: numerous 2010–2019.

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bet ik (1)  'now' / 'the present' (temporal) | BI: sekarang | collected on: (S) source: numerous 2010–2019. note: CMD dialect has bet iku, an interdialect form between Sanana and Mangon.

bet ik (2)  'today' | BI: hari | collected on: (S) source: numerous 2010–2019. note: CMD dialect has bet iku, an interdialect form between Sanana and Mangon.

bet pila (1)  'anytime' | BI: kapan saja | collected on: (S) source: numerous 2010–2019. note: also bet pila (ho), bet pi, betu pila. See also bit pila.

bet pila (2)  'when?' | BI: kapan | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014. note: also bet pila (ho), bet pi, betu pila. See also bit pila.

bet’ik  'today' | source: natural speech samples. 2010-2019.

bet(u)  'day' / 'time' | BI: hari | collected on: (S) source: numerous 2010–2019.

beti (1)  'to say' | BI: berkata | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

beti (2)  'day' | BI: hari | collected on: (M), CMD region source: natural speech samples. 2010-2019.


betik  'now' / 'today' | source: natural speech samples. 2010-2019.

betu  'day' | BI: hari | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

betu pila  'when?' | collected on: (M) source: natural speech samples. 2010-2019.

betuka  'today' | BI: hari | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

beu (1)  'tight, fast' / 'to fasten' / 'to tie up' e.g. a tight knot | BI: sempit | collected on: all regions source: numerous 2010–2019.

beu (2)  'to tie up, fasten' | BI: mengikat | collected on: (M) Kampung Waitina, (S) Kampung Wailau source: (tribe-based variation elicitations) Mangon, Falahu 2010–2019.

beya  'tax' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

bi  'comb' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

bi-naka  'steal' | BI: mencuri | collected on: (M) Collins 1981. note: see also bilnaka.

bia (1)  'from' | BI: dari | collected on: (S) source: numerous 2010–2019.

bia (2)  'since' (temporal) | BI: sejak | collected on: (S) source: numerous 2010–2019.

bia (3)  'of' / 'more than' | source: natural speech samples. 2010-2019.
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bib 'goat' | BI: kambing | collected on: (S) source: numerous 2010.
bib gamei 'to bleat' / 'moo' (goat & cow sounds) | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I was unable to verify this Holle list entry, but I am confident that it does not mean 'cow sounds' as bib means goat. My consultants provided bib li 'bleat'. I suspect gamei is an onomatopoeia, and that bib gamei glosses as 'goat's gamei'.
bicara 'to say' | BI: berkata | collected on: (M), Ulfoa village source: numerous 2014.
bihai 'until' / 'in' (time) | BI: sampai | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I was unable to verify this term. The common word for 'until' is bis. There are also no known compound words or phrases retaining bihai. It is a possible dialect form, and there is a distant possibility that it could have been a since-lost cousin form to bis that has since dropped from the language (e.g. *bisai > bihai in one dialect and *bisai > bis in other dialects). Instances of s>h are found in Sula, but it would be a stretch to conclude this from a single, century-old form without knowing more about the speaker, region, or the speaker's other word pronunciations—and unfortunately the Holle lists do not provide any of this. It is unfortunately even unclear how many speakers were consulted for each list.
bihifor 'heart' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: This Holle list item is either metonymy or a misunderstanding caused by pointing to the chest. I have collected behifor countless times for 'lungs', and this is corroborated in phrases like behi dagati 'hard to breathe' (literally 'lung narrow').
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**bihoa**  'when?'  |  BI: bila  |  collected on: (S) Kampung Wailau  |  source: (tribe-based variation elicitations) Falahu tribe 2014.

**bihu (1)**  HABITUAL INCEPTIVE ASPECT MARKER ('again from now')  |  source: numerous 2010–2019.  note: see also pihu, gaf.

**bihu (2)**  'to return' / 'embarking on a return'  |  BI: pulang  |  collected on: (S)  |  source: natural speech samples. 2010–2019.  note: see also pihu (intervocalic devoicing).


**bil**  'to see'  (not volitional)  |  BI: melihat  |  collected on: (S) Kampung Umaloya  |  (tribe-based variation elicitations) Fagudu tribe 2014.

**bilnaka, binnaka**  'steal' / 'rob' e.g. (1) bin'naka fa.a hia 'steal something' (2) pip binnaka 'stolen money'  |  BI: mencuri [curi]  |  collected on: (S)  |  source: numerous 2010–2019.

**binabo lida**  'to climb'  |  BI: naik  |  collected on: (S)  |  source: entry from Holle List; unable to verify c. 1900.  note: this Holle list entry is a valid form, but it means 'climb on a mountain' rather than 'climb'. In modern Sula (or correctly transcribed Sula) the phrase is bena bo lida ('climb LOC mountain').

**binkaf**  'to hold under the arm at side'  |  collected on: (M), Kampung Kou  |  source: natural speech samples. 2010–2019.  note: Sanana dialect speakers of Fagudu tribe.

**bintang**  'star'  |  BI: bintang  |  collected on: (M) source: numerous 2010.  note: loan from Malay.

**bira**  'rice' (cooked and uncooked, husked and unhusked)  |  BI: beras  |  collected on: (S)  |  source: numerous 2010–2019.

**bira ka kol**  'harvested rice'  |  collected on: (S)  |  source: entry from Holle List; unable to verify c. 1900.  note: I do not think this Holle list form has a harvest distinction unless perhaps ka kol is ke kol ‘to skin’ / ‘to chaff’, in which case the phrase would be 'rice to chaff' and perhaps it was a description of what people were doing rather than a general term for harvested rice as opposed to unharvested rice. In general, Sula does not seem to have many if any examples of change of state words for food products.

**bira kan**  'rice stalk'  |  collected on: (S) source: numerous 2010–2019.


**bira pin**  'ear of corn' / 'tuft of rice'  |  collected on: (S)  |  source: entry from Holle List; unable to verify c. 1900.  note: this term only means 'tuft of rice'. ‘Ear of corn’ (maize) is gar pin.
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**bira'hi** 'rice' (prepared rice for eating) | collected on: (S) source: numerous 2010.

**birahi (1)** 'beautiful' / 'cute' / 'interesting' / also (rarely) 'delicious' (scenery, thing, person) | BI: cantik | collected on: (S) source: numerous 2010–2019. note: loan or cognate with Malay berahi 'lust'?

**birahi (2)** 'good (for things)' | BI: bagus | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


**birahi bisa** 'quite handsome' / 'quite beautiful' | collected on: (S) source: numerous 2010. note: literally 'attractive good'.

**bis** 'full (satisfied)' | BI: kenyang | collected on: (S) source: numerous 2010–2019.

**bis loi (1)** 'search' (to search for something) | BI: mencari [cari] | collected on: (S) source: numerous 2010–2019.

**bis loi (2)** 'to choose' | BI: memilih | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**bis loi senang senang** 'go out in search of a good time' | BI: mencari [cari] hiburan | collected on: (S) source: numerous 2010–2019.

**bis noya ba'ata** 'to stutter' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**bis pel** 'full' / 'satisfied' | collected on: (S) source: numerous 2010.

**bisa (1)** 'beautiful' (scenery, thing, person) | BI: cantik | collected on: (S) source: numerous 2010–2019. note: literally 'good' but frequently used to mean 'beautiful'.

**bisa (2)** 'good' (general term of things) | BI: bagus | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.


**bisa moya (1)** 'ugly' | BI: jelek | collected on: (S) source: numerous 2010–2019. note: 'not good' but frequently used to mean 'ugly'. see also: bisa.

**bisa moya (2)** 'bad' | BI: jelek | collected on: (S) source: numerous 2010–2019. note: literally 'not' + 'good'.

**biskuit** 'cookie' | source: natural speech samples. 2010-2019. note: loan.


**bisnau** 'to sew' | BI: menjahit | collected on: (S) source: numerous 2010.
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bisnoya  'story' / 'to speak' / 'talk' / 'say' | BI: cerita | collected on: (S) source: numerous 2010–2019. note: the action of talking. Use pak instead when indicating speech ability e.g. to speak a language. See also pisnoya.

bisnoya toka hau  'to mumble' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

bit iki  'today' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also bet ik.

bit pila  'when' | collected on: (S); (M), Ulfoa village source: two to three consultants 2014. note: see also bet bila.


bit, bet (2)  'want' / 'shall' / 'will' / 'should' | source: natural speech samples. 2010–2019.

bita  'night fishing with a lamp' | collected on: (M), Waitulia village source: two to three consultants 2014.

bitfua keu  'to spit' | BI: meludah | collected on: (S) source: numerous 2014. note: bua keu is an abbreviation of this older (uncommon) form? Interesting if so, as bua means 'to fall'. See also sape‘i keu.

bitu  'day' | BI: hari | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also bet, betu.

bitu ika  'today' | collected on: (M) source: single consultant 2014. note: Mangon form. See also betu ika. For Sanana form, see also bet ik.

bo (1)  LOCATIVE MORPHEME e.g. 'at' / 'on' / 'in' | BI: di | collected on: (S) source: numerous 2010–2019.

bo (2)  'with' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I do not recall encountering a meaning of 'with'. I suspect this Holle list entry was a transcription error for do 'and' / 'with'.

bo (mina)  'formerly' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

bo fai  'seaward' / 'to go downstream' | collected on: (S) source: numerous 2010–2019. note: directions: lepa 'up' and neu 'down' correspond to clockwise and counterclockwise depending on the island. Directions: tema 'inland' and fai 'seaward' are universal in Sula.

bo gehe  'back (body)' | BI: punggung | collected on: (S) source: numerous 2010–2019.

bo gehi  'behind' / 'back (body)' | BI: di belakang | collected on: (S) source: numerous 2010–2019.
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**bo heha** 'underneath' / 'below' | BI: di bawah | collected on: (M), Capuli village source: numerous 2015. note: there is significant phonetic overlap between o and a in Sula. Many words are produced with one or the other depending on the speaker (regional variation), but all dialects do seem to maintain both o and a as distinct phonemes. Compounding the difficulty in explaining their overlap, some speakers seem to alternate within the same word with no clear contextual trigger. For example a Capuli speaker provided *bo heha* 'underneath' and *ba neu* 'underneath'. She did not have a reason for the alternation, but said that they had to be that way (other speakers I worked with did not agree with her). I suspect an elusive phonological condition exists that causes phonetic vowels to overlap or be substituted, but much regional and speaker variation renders the condition unclear. It will take a long-term, onsite study of the language to sufficiently explain the phenomenon.

**bo lal** 'inside' / 'in' | BI: dalam | collected on: (S) source: numerous 2010–2019. note: see also tuka.

**bo lali** 'in, inside' | BI: [di] dalam | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**bo leha** 'in that place' | source: natural speech samples. 2010-2019.

**bo mena (1)** 'next (temporal)' | BI: depan | collected on: (S) source: numerous 2010–2019. note: see also bumena for discussion or spacial representation of time.

**bo mena (2)** 'ago' / 'before (temporal)' | BI: yang lalu | collected on: (S), Mangon village source: numerous 2010–2019. note: this form was received in elicitation from several consultants. I suspect it is either erroneous, or that it represents a shift in temporal spacial mapping, where part of the community perceives the future to be *behind us* and part perceives it to be *before us*.


**bo mina** 'ago' / 'before (temporal)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I gathered the opposite meaning. Either there has been a semantic change, dialect variation, or one of us is in error.

**bo soa** 'where?' | BI: dimana | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**bo tuka** 'in, inside' | BI: [di] dalam | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
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**bo uhi** 'night' | BI: malam | collected on: (S) source: numerous 2010–2019. note: see also buhi, bauhi.


**boa** 'which' (hia baoa 'which one') | collected on: (S) source: numerous 2010.

**bob** 'spoon' | collected on: (S) source: numerous 2010.

**bobai** 'boyfriend' / 'girlfriend' | BI: pacar | collected on: (S) source: numerous 2010–2019. note: a loan from 'baby' (or '寶貝')?

**bobai fina** 'girlfriend' | BI: pacar perempuan | collected on: (S) source: numerous 2010–2019.


**boban** 'harbor' / 'port' | BI: pelabuhan | collected on: (S) source: numerous 2010–2019.

**bobo (1)** 'roof' | collected on: (M) Collins 1981.

**bobo (2)** 'rhythm' / 'music' | BI: irama | collected on: (S) source: numerous 2010–2019.

**bobos** 'taboo' / 'forbidden' | collected on: (S) source: numerous 2014. note: definite loan from Ternate boboso.

**boboso** 'taboo' / 'forbidden' | collected on: (M) source: numerous 2014. note: definite loan from Ternate boboso.

**bobus fat** 'lazy' | collected on: (S) source: numerous 2014.

**bodi** 'boat' | collected on: (S) source: numerous 2010. note: possible loan from 'boat'.

See also *lota, jonson*.

**bokatan** 'breast' | BI: i.e. 'chest' | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**bole** 'permission' / 'permit' | BI: ijin | collected on: (S) source: numerous 2010–2019.

**boli** 'to blow from the mouth' / 'to blow as the wind' | BI: meniup | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


**bon gihi fat** 'to carry (on the back)' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: archaic.

**bon lal** 'within' | BI: dalam | collected on: (S) source: numerous 2010–2019.

**bona (1)** 'to stab, pierce' | BI: menikam | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference
Appendix data for number of consultants producing this form. 2015. note: this is said to be an overhead stab ('Psycho' type).

**bona (2)** 'to fall' | source: natural speech samples. 2010-2019.

**bona (3)** 'to throw or shoot a spear' | collected on: (S), Kampung Wailau source: natural speech samples. 2010-2019.

**boni** 'mouth' | BI: mulut | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**borat** 'west' | BI: barat | collected on: (S), Waibau village source: numerous 2015. note: lack of native words suggests ancient Sula had a non-cardinal direction system.

**bosa** 'to suck' e.g. *bosa* *sosa* 'to nurse at the breast' | collected on: (S) source: numerous 2014.

**bosu (1)** 'to suck' e.g. *bosu* *sosu* 'to nurse at the breast' | collected on: (M) source: three to five consultants 2014.

**bosu (2)** 'heart' | collected on: (M) source: three to five consultants 2010.

**bosu tabaku** 'smoke' | BI: merokok | collected on: (M), Waitina village source: Mangon tribe 2014.

**bot** 'white' | BI: putih | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**bot(i)** 'white' | BI: putih | collected on: (S), (M) source: numerous 2010–2019.


**botol (2)** 'device for measuring liquids' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: possible loan from 'bottle'.

**botu** 'cut' | collected on: (M) source: three to five consultants 2010.

**botu peda** 'fishing with a machete' | collected on: (M), Waitulia village source: two to three consultants 2014.

**bowai nap** 'to go upstream' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this literally means 'toward the head of the water'.

**bowel** 'to call' (e.g. call someone over) | collected on: (S) source: numerous 2010.

**boya (1)** 'tail' (animal) | BI: ekor | collected on: (S) source: numerous 2010–2019. note: compare also (Mangon) *mboyu, nboyu, boyu*, collected on: Sanana *mboyu, nboyu.*
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**boyá nahu** 'long tail' | BI: ekor panjang | collected on: (S) source: numerous 2010. note: compare also (Mangon) mboyu, nboyu, boyu, collected on: Sanana mboyu, nboyu, boyu.

**boyá yota** 'short tail' | BI: ekor pendek | collected on: (S) source: numerous 2010. note: compare also (Mangon) mboyu, nboyu, boyu, collected on: Sanana mboyu, nboyu, boyu.

**boyakis** 'cashew fruit' | BI: jambu menteh | collected on: (S) source: numerous 2015. note: bua yakis was recorded in Malbufa. boyakis was recorded on Eastern Sanana. For cashew nut meat, see also yakis ihi. image 2199.

**bu** 'to defecate' | BI: kotoran | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: onomatopoeia?


**bua keu** 'to spit' | BI: meludah | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**bua (1)** 'to fall' | BI: jatuh | collected on: (S) source: numerous 2010–2019. note: see also bakagi.

**bua (2)** 'fruit' | BI: buah | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015. note: loan from Malay, buah.

**bua keu** 'to spit' | collected on: (S) source: numerous 2010. note: literally 'fall saliva'. See also bitfua keu, sape’i keu.

**bua neu** 'fall down' (e.g. from a tree) | source: natural speech samples. 2010-2019.

**bua yakis** 'cashew fruit' | BI: jambu menteh | collected on: (S), Malbufa village source: numerous 2015. note: bua yakis was recorded in Malbufa. boyakis was recorded on Eastern Sanana. For cashew nut meat, see also yakis ihi. image 2199.

**buat** 'for' | source: natural speech samples. 2010-2019.

**buba** 'warm' | BI: panas | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**bubai** 'lover' / 'darling' (my dear) | BI: berpacaran | collected on: (S) source: two to three consultants 2010–2019. note: see also bobai.

bubara  a fish that is either the same as or similar to an island jack (carangoides orthogammus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

bubir  'green' e.g. kau hosa bubir 'the tree leaves are green' | BI: hijau | collected on: (S) source: numerous 2010–2019. note: possible loan from Malay biru 'blue'.

bufa (1)  'to blow with the mouth' | BI: meniup | collected on: (M) (CMD region), Kampung Ufoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

bufa (2)  'to blow as the wind' | BI: bertiup | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu, Falahu tribes 2014.

bufai mai  'dust storm' | BI: badai debu | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

buha (1)  'wind' / 'to blow' | BI: angin | collected on: (M), Wai U village source: numerous 2014.

buha (2)  'to blow with the mouth' | BI: meniup | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

buhi  'late evening' / 'night' | BI: malam | collected on: (M), Ufoa village source: numerous 2015. note: see also bauhi, bo uhi.


buk  'magic book' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I am unsure the meaning of 'magic book', so this Holle list item was too difficult to verify. Certainly books are a relatively recent introduction to Sula. At its most basic, buk does not literally mean 'magic book'. It means 'book'.

buku  'node in bamboo, sugarcane' | BI: buku | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

bul  'squeeze' / 'wind' / 'roll' (to wring, as with wet laundry; to wind, as with a rope; to squeeze, as with a lemon) | collected on: (S) source: numerous 2010.

bulela  'below' | BI: di bawah | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

bumanga  'short-nosed unicornfish' / 'paletail unicornfish' (naso brevirostris) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.
bumena (1) 'past' / 'past events' | BI: masa lalu | collected on: (S) source: two to three consultants 2010–2019. note: the overlap between 'in front of' and 'past', implies that Sula (at least historically) had a conception of time similar to the ancient Greeks, where the future is behind us where we cannot see it, and the past is in front of us where we can see it. Altering this conception could also explain a process of semantic reversal seen in bo mena (which is essentially just another pronunciation of the same term).


bumohi '(fall) behind' e.g. walking | collected on: (S) source: numerous 2010.

bun 'brow' | collected on: (S) source: numerous 2010.

bun taka' u fata 'to carry (on the back)' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: archaic.

bunfoa 'eyebrow' | collected on: (S) source: numerous 2014.

bunga 'flower' | BI: bunga | collected on: (S) source: numerous 2010. note: loan from Malay.


busufat 'lazy' | collected on: (M) source: numerous 2014. note: see also pamalas.

butu 'market' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: Holle postulates this as a loan.

c a 'thousand' | BI: ribu | collected on: (S) source: numerous 2014.

c a ga(h)iya 'one thousand' | BI: seribu | collected on: (M) source: three to five consultants 2010.

c a ota 'one hundred' | BI: seratus | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

c a po(a) 'ten thousand' | BI: sepuluh ribu | source: numerous 2014. note: ca po is the Mangon form, ca poa is the Sanana form.

c a'ana 'trousers' | BI: celana | collected on: (S) source: numerous 2014. note: see also cahana. Likely early loan from Malay where l > h > ?.

cacing 'earthworm' | BI: cacing | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

caga' u 'two thousand' | collected on: (S) source: natural speech samples. 2010-2019.
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cagia 'one thousand' | BI: seribu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
caguu 'two thousand' | collected on: (M) source: natural speech samples. 2010-2019.
cahana 'pants (trousers)' e.g. (1) ca’hana nahu 'long pants' (2) ca’hana yota 'shorts' | BI: celana | collected on: (S) source: numerous 2010–2019. note: likely early loan from Malay where l > h and then ? (in ca’ana).
cahana yota 'shorts' | source: natural speech samples. 2010-2019.
cahia 'one thousand' | BI: seribu | collected on: (S) Kampung Umaloya, Kampung Sama source: (tribe-based variation elicitations) Fagudu, Facei tribes 2014.
cangkul 'hoe' | collected on: (S) source: numerous 2014.
cap tikus 'palm wine moonshine' | BI: cap tikus (regional word) | collected on: (S), (M), Ternate, Halmahera source: numerous 2015.
capalong 'top' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
Capuli 'Capalulu Village' | BI: Kampung Capalulu | collected on: (M), Capuli village source: numerous 2015.
cato 'a gift' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: traditionally a gift from the sultan.
cincin 'a small parakeet' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
cinta 'to love' | BI: cinta | collected on: (S) source: numerous 2010-2019. note: loan from Malay.
cup-cup 'to kiss' | BI: mencium | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
**da (1)** 'chest (body)' | BI: dada | collected on: (M), Ulfoa village source: numerous 2014. note: likely abbreviated loan from Malay, dada. See also behitan.


**da ahat** 'last week' | source: natural speech samples. 2010-2019.

**da ahat hia tuna** 'the week before last' | source: natural speech samples. 2010-2019. note: literally 'last week' + 'one before'.


**da fasina** 'last month' | source: natural speech samples. 2010-2019.

**da'a** 'to split as one splits a coconut' | BI: membelah | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**da'hi dota** 'fighting' | collected on: (S) source: numerous 2010. note: literally 'there's punching'.

**da'i** 'to urinate' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this form puts into question whether *dayu* 'to urinate' is correct or rather whether it should be daiu.

**da'ofa** 'broad' / 'wide' | collected on: (M) source: three to five consultants 2014.

**da'ufon** 'to hide an item' | BI: bersembunyi | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu, Falahu tribes 2014.

**da(h)i moyo** 'shortage' | BI: kekurangan | collected on: (S) source: numerous 2010–2019.

**dab** 'drunk' (intoxicated) | collected on: (S) source: numerous 2010.

**dab(u)-dab(u)** 'chili sauce' | source: natural speech samples. 2010-2019.

**dabet** 'yesterday' | BI: kemarin | collected on: (S) source: natural speech samples. 2010–2019. note: see also damet.

**dabet hia tuna** 'the day before yesterday' (yesterday one before) | source: natural speech samples. 2010-2019.


**dad (1)** 'can' (ability) / 'can' (permission) e.g. *dad nan* 'can swim' | BI: bisa | collected on: (S) source: numerous 2010–2019.


**dad bal pai** 'useful' | BI: berguna | collected on: (S) source: numerous 2010–2019.
**dad fahia moya** 'never mind' / 'no worries' e.g. *dau sala mai dad fahia moya* 'don't worry about putting it in the wrong place' | BI: lupakan | collected on: (S), Waibau village source: numerous 2014.

**dad ine** 'can' (permission) | BI: boleh | collected on: (M), Mangon village source: single consultant 2014. note: this entry was only received once, and I suspect it has a more specific meaning or that *ine* is an emphatic particle.

**dad moya (1)** 'cannot' | BI: tidak bisa | collected on: (S) source: numerous 2010–2019. note: literally 'can not'.


**dad pel** 'enough' / 'already' | BI: cukup | collected on: (S) source: numerous 2010–2019.

**dadab** 'only' | BI: hanya | location: unknown source: Umaternate 2013.

**daduba (1)** 'to float' / 'fishing float' | BI: pengapung | collected on: (S) source: numerous 2010.

**daduba (2)** 'to sink' e.g. a boat | collected on: (M), Ulfoa village source: numerous 2015. note: it is unclear whether this is an auto-antonym, speech error, or possibly a term meaning simply 'state of buoyancy'.

**daet** 'branch' | BI: dahan | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**daeta (yeba)** 'mince' / 'ground meat' | BI: daging cincang | collected on: (S) source: numerous 2010–2019.

**daeti** 'branch' | BI: cabang | collected on: (M), Ulfoa village source: numerous 2015. note: branch on the ground. See also *sanapet*.

**dafai** 'to sneeze' | BI: bersin | collected on: (S) source: numerous 2014.

**dafoma** 'provisions' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**dagai** 'narrow' | BI: sempit | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**dagalil** 'around' / 'surrounding' | collected on: (M) source: three to five consultants 2014.

**dagalili, lif dagalili** 'to turn completely, 180 degrees' | BI: berputar | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
dagana 'to dream' | BI: bermimpi | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014. note: see also dagama and badagana.
dagat 'narrow' | BI: sempit | collected on: (S) source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
dagat(i) 'tight' / 'narrow' | BI: sempit | collected on: (S), (M) source: numerous 2010.
dagati 'narrow' | BI: sempit | collected on: (M) all regions source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
dagigi 'dig' | collected on: (M) source: three to five consultants 2010.
daging 'meat' / 'flesh' | BI: daging | collected on: (M) source: numerous 2010. note: loan from Malay.
dagis 'painful' / 'sick' / 'fever' | collected on: (S) source: numerous 2010.
dahafa 'wide' | BI: lébar | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.
dahi (1) EXISTENTIAL AUXILIARY e.g. dahi te dahi moy, dahi panika ik 'to be or not to be, that is the question' | BI: menjadi | collected on: (S) source: numerous 2010–2019. note: this existential morpheme is similar in function to a 'be' verb.
dahi (2) 'correct, TRUE' | BI: benar | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.
dahi aya 'cannon' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
dahi nau 'to know, be knowledgeable' | BI: tahu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
dahi, da'i (1) 'correct' / 'true' / 'get' / 'to find' / 'to be able to' / 'to touch' / 'to hit' | BI: benar | collected on: (S), (M) source: numerous 2010–2019. note: at its most basic, dahi is an existential verb, but it is used to cover a broad semantic range. The da'i pronunciation was recorded in Wai U village (CMD region of Mangon). See also pita.
dahi, da'i (2) 'to exist' / 'to be' | source: natural speech samples. 2010-2019.
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**dahia** 'durian' | collected on: (S) source: numerous 2010.

**dahii** expletive word | source: natural speech samples. 2010-2019.

**dahina** 'moment ago, a' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**dahoi** 'loosely fitting' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**dai** 'there is/are' | BI: ada | collected on: (S) source: numerous 2010–2019.


**dai'oa** 'to turn' | BI: berputar | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**dakhan** 'to paddle' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**daki mayu** 'to refuse' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**dakoku (1)** a fish that is either the same as or similar to the blackspot sergeant (abudefduf sordidus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**dakoku (2)** a fish that is either the same as or similar to the flame anglefish (loriculus) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

**daku lanu** 'to paddle' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**dalena** 'wide' / 'loose' | BI: lebar | collected on: (S) source: numerous 2010.

**dalina** 'wide' | collected on: (S) source: numerous 2014. note: see also dalena.


**damet** 'yesterday' | source: natural speech samples. 2010-2019. note: see also dabet.

**damit** 'yesterday' | collected on: (S) source: two to three consultants 2014. note: see also damet.

**damitu** 'day before yesterday' | collected on: (M) source: three to five consultants 2014.

**damu** 'and' | BI: dan | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**dan** 'and' | source: natural speech samples. 2010-2019.
dan sohangi  'to pawn' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
dana (1) 'to pay' / 'a fine' | BI: membayar [bayar] | collected on: (S) source: numerous 2010–2019. note: like in German where 'lend' and 'borrow' are the same word, dana covers both a fine and the action of paying the fine.
dana (2) 'to drip' | BI: menetes | collected on: (M), Waitulia village source: numerous 2014.
danas 'pineapple' | BI: nanas | collected on: (S), Waibau village source: numerous 2015. note: loan. See also nanas.
daneta 'to cut, hack' | BI: menetak | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.
dang 'rice-kettle (copper)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.
danu bu api uki 'to roast (in the coals)' | collected on: (M) source: two to three consultants 2014. note: Mangon form. For Sanana form, see also dona bo ap ok.
dapuya 'less' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
dasoi 'loosely fitting' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.
dau 'put' / 'place' / 'set' e.g. domino on table | BI: taru | collected on: (S) source: numerous 2010–2019. note: mimimal pair with nau.
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*dau sala* 'to put something in the wrong place' | BI: untuk meletakkan sesuatu di tempat yang salah | collected on: (S), Waibau village source: single consultant 2014.

*daufon, da’ufon* 'to hide' (hide an item) | BI: sembunyi | collected on: (S), Malbufa village; (M), Wai U village source: numerous 2014, 2015. note: see also baifon, fongi, dori fon.

*daufongi* 'to hide an item' | BI: bersembunyi | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


*dawika (1)* 'sunny' | BI: cerah | collected on: (S) source: numerous 2010–2019.


*dawika (3)* 'tomorrow' | source: natural speech samples. 2010-2019.

*dayas* 'broad' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

*dayu (1)* 'boat paddle' / 'to paddle' | collected on: (S) source: numerous 2010–2019.

*dayu (2)* 'to pull' | collected on: (S) source: numerous 2014.

*dayu (3)* 'to urinate' e.g. kera i-dayu pita yai 'the monkey peed on (your) leg' | BI: kencing | collected on: (M), Waitulia village source: numerous 2014.

*de lani* 'near' | BI: dekat | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

*de sibo* 'where?' | BI: dimana | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

*de yau* 'far' | BI: jauh | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

*ded pon* 'back' | BI: punggung | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.


*deha (1)* 'leave' / 'left' | BI: ketinggalan | collected on: (S) source: numerous 2010–2019.

*deha (2)* 'live somewhere' / 'stay or remain' | BI: tinggal | collected on: (S) source: numerous 2010–2019.

*deha lepa* 'above' | BI: [di] atas | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

*deha ne'u* 'below' | BI: di bawah | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.
**deha sahoa, deha so** 'where' | BI: dimana | collected on: (M), Ulfoa village; (M), Wai U village source: numerous 2014. note: see also sahoa, sa’oa, soa.

**deha saik** 'here' | BI: di sini | collected on: (M), Ulfoa village source: numerous 2014. note: see also siku, isuka, saik, sai, saiya, sit iki.

**dehat** 'forgotten' | collected on: (S) source: numerous 2010–2019.

**demet** 'before' | BI: sebelum | collected on: (S) source: numerous 2010–2019.

**dena (1)** 'aboard' e.g. *dena bo lota lal* 'aboard a ship' | BI: atas | collected on: (S) source: numerous 2010–2019.


**Desember** 'December' | source: natural speech samples. 2010-2019.

**despat** 'break (bone)' | BI: patah | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

**det** 'to cut, to hack' | BI: memotong | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**det(i)** 'to cut' / 'to hack' / 'karate chop' | BI: memotong | collected on: (S), (M) source: numerous 2010, 2014.

**deti** 'to cut, to hack' | BI: memotong | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**dewika** 'tomorrow' | collected on: (S) source: numerous 2014. note: see also *hai dewika, hai dawika*.

**di** 'and' | BI: dan | collected on: (M) source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


**di moya pel** 'end' | BI: akhir | collected on: (S) source: numerous 2010–2019.

**diangku** 'beard’ | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
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dika 'to open' / 'uncover' | BI: membuka | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
dinga 'moment ago, a' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
dini fa 'wealthy' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
dit (1) 'real' / 'actual' e.g. baba dit 'real father' | BI: nyata | collected on: (S), Waibau village source: numerous 2015.
dit (2) REFLEXIVE ('self') | collected on: (S) source: numerous 2010–2019.
do (1) 'and' / 'also' | BI: antara | collected on: (S) source: numerous 2010–2019.
do (2) 'between' | BI: dan | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
do (3) 'with' | source: natural speech samples. 2010-2019.
do (4) 'sleepy' | collected on: (S) source: numerous 2010.
doa 'sleepy' | collected on: (S) source: numerous 2010.
dodok(u) 'bridge' | BI: jembatan | collected on: (S) source: numerous 2010–2019.
dof 'floor' e.g. dof tina 'upon the floor' | BI: lantai | collected on: (S) source: numerous 2010–2019.
dog (1) 'couch' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: sofas are uncommon in mot parts of Sula today. It is difficult to imagine they were common enough to have a term a hundred years ago when the Holle list was compiled.
dog (2) 'to grow' | BI: tumbuh | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
dog / dogi 'to grow' | BI: tumbuh | collected on: (S), (M) source: numerous 2010–2019.
dogi 'to grow' | BI: tumbuh | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
dohi nana 'cannon' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
doi 'to puncture' / 'to stab' / 'pierce' (e.g. fish) | BI: tusuk | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

dok 'gift' / 'to give' | BI: hadiah | collected on: (S) source: numerous 2010–2019.


dok moya 'to refuse' (refuse to take something) | BI: menolak | collected on: (S) source: numerous 2014.


dok wai 'to fetch water' | collected on: (S) source: numerous 2014. note: literally 'bring water'.

doki 'to give' | collected on: (S) source: numerous 2010. note: see also dok.

dokter 'doctor' (modern medicine) | collected on: (S) source: numerous 2010. note: loan.

dol (1) 'bring' | BI: membawa | collected on: (S) source: numerous 2010–2019.

dol (2) 'deliver' | BI: membawa | collected on: (S) source: numerous 2010–2019.


dol as 'to hunt' | BI: berburu | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014. note: literally 'bring dog'.

doma a fish that is either the same as or similar to the Heller's barracuda (sphyraena helleri) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

don fa(lihi), donin falihi 'valuable' / 'wealthy' / 'quality' | BI: berharga | collected on: (S) source: numerous 2010–2019.


dona bo ap ok 'to roast (in the coals)' | collected on: (S) source: two to three consultants 2014. note: Sanana form. For Mangon form, see also danu bu api uki.

dona, (ap) dona 'to burn' / 'burnt' (general) | BI: membakar | collected on: (S) source: numerous 2010–2019. note: intransitive. Possibly cognate with dena 'torch' from Hindi. See also donu, sara.

**donga (2)** 'node in bamboo, sugarcane' | BI: buku | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**donis** 'half' | source: numerous 2014.

**donnis** 'half' | source: natural speech samples. 2010-2019. note: see also dunnis.

**donu** 'to burn' | collected on: (M) source: numerous 2010. note: intransitive. Possibly cognate with *dena* 'torch' from Hindi. See also *dona*, *sara*.

**donu, batonu** 'to burn' | BI: membakar | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


**dori fon** 'to hide' (something) | BI: sembunyi | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: likely archaic. It is currently reported as *daufon* and *baifon*. See also *baifon*, *fongi*, *daufon*.

**dos** 'box' / 'container' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**dosa [fa='a besa]** 'sin' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**dota (1)** 'to grow' | BI: tumbuh | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**dota (2)** 'to hit' / 'to pound' / 'to beat' / 'to punch' | BI: memukul | collected on: (S) Kampung Umaloya, Kampung Wailau source: numerous 2010-2019.


**dota, mana tota** 'to pound' | BI: memukul | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**dotu** 'to hit' / 'to pound' / 'to beat' / 'to punch' | BI: memukul | collected on: (S), (M) source: numerous 2010-2019. note: see also *dota*.

**dotu pamasi** 'to pound' / 'beat rice' | BI: menumbuk | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**du, di** 'and' | BI: dan | collected on: (S), (M) source: numerous 2010-2019. note: see also do.

**dua (1)** 'smithy' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

**Sula**


**dud** 'roll' / 'fold' e.g. dud tabak 'roll a cigarette' | collected on: (S) source: numerous 2010.

**dudes** 'snare' / 'to snare' | collected on: (S), Kampung Wailau source: natural speech samples. 2010-2019.

**duf (1)** 'hole' e.g. duf til 'pierced ear' (lit. 'ear hole') | collected on: (M), Ulfoa village source: numerous 2015. note: see also tuf.

**duf (2)** 'to stab' | collected on: (S) source: natural speech samples. 2010-2019.

**duk(i)** 'to come' / 'to arrive' | BI: datang | collected on: (S) source: numerous 2010–2019.

**duki (1)** 'until' / 'in' (distance) | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this Holle entry is a likely error, as duki means 'to come'.

**duki (2)** 'to come' | BI: datang | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**dundu bo ngapu** 'to carry (on the head)' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: see also Sanana form dundu bongapu.

**dunia** 'earth (globe)' / 'nature' / 'land' | BI: dunia | collected on: (M) source: numerous 2010. note: loan from Malay.

**dunis** 'half' | source: numerous 2014.

**dunnis** 'half' | source: natural speech samples. 2010-2019. note: see also donnis.

**dunya tiamat** 'natural disaster' | collected on: (S) source: numerous 2010.

**dur bo nap** 'to carry (on the head)' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: see also Sanana form dundu bongapu.

**dutu** 'to cover something' (e.g. a container) | BI: menutupi | collected on: (M), Waitulia village source: single consultant 2014. note: this entry is uncertain. It might not be Sula.

**e (1)** 'that' (e.g. gaika e 'like that') | BI: itu | location: unknown source: Umaternate 2013.

**e (2)** EMPHATIC PARTICLE | source: natural speech samples. 2010-2019.
**ea mata sup** 'exit' | BI: pintu keluar | collected on: (S) source: numerous 2010–2019.


**eb** 'very' / 'many' / 'much' / 'a lot' | BI: sangat | collected on: (S) source: numerous 2010–2019.

**eb gahoa** 'how many' / 'much' | collected on: (S) source: numerous 2010.

**eb gaoa** 'how many' / 'much' | collected on: (S) source: numerous 2010.

**eb goa** 'how many' / 'much' | collected on: (S) source: numerous 2010.

**eb kim** 'they' | BI: meréka | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**eb talal** 'an extraordinary amount' | BI: banyak sekali | collected on: (S), Malbufo village source: numerous 2015. note: see also eb, ib, ibu, foloi, kadiga, ta lal.

**ebat** 'great (fantastic)' | BI: jago | collected on: (S) source: numerous 2010–2019.

**ebu** 'many' | collected on: (M) source: three to five consultants 2010.

**ek** 'neck' | BI: léhér | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**ek (waka)** 'neck' | BI: léhér | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**ek lawa** 'neck' | BI: léhér | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**eka (1)** 'garbage' | BI: sampah | collected on: (S) source: numerous 2010–2019.

**eka (2)** 'grass' | BI: rumput | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**eki** 'neck' | BI: léhér | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**eki (wai)** 'neck' | BI: léhér | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**ekilawa** 'neck' | collected on: (M) source: three to five consultants 2010.

**el** 'areca catechu Linn.' (beetlenut) | collected on: (S) source: numerous 2010. note: Sanana form. For Mangon form, see also elu.
elu 'areca catechu Linn.' (beetlenut) | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also el.

em 'chicken coop' | BI: kandang ayam | collected on: (S) source: single consultant 2014.

en'em 'nest' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.


ence 'half, a' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

ence piu 'quarter, a' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

enci 'half, a' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

enci piu 'quarter, a' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

engka 'grass or grass mats on the floor of a home' | BI: rumput | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

er 'to shake' | BI: mengguncang | collected on: (S) source: single consultant 2014.

es 'ice' | collected on: (M) source: three to five consultants 2010.

es (1) 'to rub' | BI: menggosok | collected on: (S) source: single consultant 2014.

es (2) 'cold drink' | source: natural speech samples. 2010-2019. note: likely loan from Dutch ijs.

etwama 'to sniff, smell' | BI: menghiru | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

ewa, wai ewa 'flow' / 'river' | BI: mengalir | collected on: (M), (S) source: numerous 2010-2019.

eya 'big' | BI: besar | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

eya mata 'door' | collected on: (S) source: numerous 2014.

fa bama 'merchandise' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

fa bau mane ha 'tool' | collected on: (S) source: numerous 2010. note: 'thing' + 'repair'.


fa munara sam 'weft' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

fa pamaha 'items for sale' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

fa pasia ban doa 'incantation' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

fa'a (mehi) 'goods' / 'things' | BI: barang | collected on: (M), Ulfoa village source: numerous 2015. note: see also tuf.

fa'a bumena 'a relic' | BI: peninggalan | collected on: (S) source: two to three consultants 2010–2019. note: literally 'past thing'.

fa'a oki 'woods' / 'forest' | collected on: (M), CMD region source: natural speech samples. 2010-2019.

fa'a sil 'plant' / 'vegetation' | collected on: (S) source: single consultant 2014. note: see also fasel.

fa'a tani 'vegetation' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this Holle entry could be an error as the morphemes mean 'farmer thing' and farmer is a Malay loan.

fa'afa 'mouse' | collected on: (M) source: three to five consultants 2010.

fa'angapu 'mask' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I think this Holle form was an elicitation misunderstanding. It literally means 'head thing' and is not exclusive to masks.

fa'apia 'virtue' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this Holle form could be an error as the morphemes can mean 'something about a person', indicating that the consultant might not have understood what concept was being described.

fa'ara 'sky' | BI: langit | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

fa'ata 'heavy' | BI: berat | collected on: (S) source: numerous 2010. note: see also fayata.

fa'ko 'dog' | BI: anjing | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

fa'oi 'price' | collected on: (M) source: two to three consultants 2010. note: see also falihi.
fa'ok  'woods' / 'forest' | BI: hutan | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

fa'oki  'woods' / 'forest' | BI: hutan | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

faa (1)  'shop' | BI: belanja | collected on: (S) source: single speaker (Fagudu tribe) 2010–2019.

faa (2)  'thing' | source: natural speech samples. 2010-2019.


faa ok, fa'a oki  'forest' | BI: hutan | collected on: (S); (M), Waitina village source: numerous 2010–2019.


faf  'pig' (wild or domesticated) | BI: babi | collected on: (S) source: numerous 2010–2019.


fafa  'rat' | BI: tikus | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

fafi  'pig' | collected on: (M) source: numerous 2010-2019. note: see faf.


fai  'seaward direction' | collected on: (S) source: numerous 2010–2019. note: the direction toward the sea/seacoast when standing inland.
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**faioa fat** 'stomach' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**fakea** 'lime (fruit)' | BI: kapur | collected on: (S) source: numerous 2010–2019.

**fakeya** 'lime' | collected on: (S) source: numerous 2014. note: see also fakea.

**fakia** 'lime' | collected on: (M) source: two to three consultants 2014. note: see also fakea.

**fako** 'dog' | BI: anjing | collected on: (M) source: numerous 2010–2019. note: see also as.

**fako sipa** 'to bark' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also as li.

**fal** 'rainbow' | collected on: (S) source: numerous 2010.

**Falahu, Fahahu, Fahu** 'Falahu tribe' | BI: Suku Falahu | collected on: (S), (M) source: numerous 2010–2019. note: l > h > Ø is an advanced sound change in Umaloya. Only the h is optionally deleted in uma(h)oya but entire ha syllable can be dropped in fa(ha)hu. Could this be because there is a lexical item, suha blocking it? Also, kalau is only kalo and never *kaho, *kao, or *ka. Is this because it is a loanword, or because it is not a medial syllable? See also Umahoya, kalo, Sua, Saloa, Sahoo.

**falai** 'drunk' (intoxicated) | collected on: (S) source: numerous 2010.

**falihi** 'cost (thing)' / 'price (goods)' e.g. falihi eb goa 'how much does it cost'? CMD dialect | BI: harga | collected on: (S) source: numerous 2010–2019.

**falihi mura** 'cheap (price)' | collected on: (S) source: numerous 2010.

**faloj** 'more' / 'too' / 'most' | BI: lebih | collected on: (S) source: numerous 2010–2019.

**falom** 'slave' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**famaka** 'gold' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also mas.


**famehi bumena mena** 'old things' | BI: kuno | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019. note: I See also fabumena mena 'relic'.

**fanana** 'small child' | BI: anak kecil | collected on: (S), Waibau village source: three to five consultants 2014.

**fangara** 'cloud' / 'fog' / 'foggy' | BI: awan | collected on: (S) source: numerous 2010–2019. note: see also fengara.
fanini 'big' / 'fat' | BI: gemuk | collected on: (M) source: three to five consultants 2010.
fantui 'star' | BI: bintang | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
faoki 'woods' / 'forest' | BI: hutan | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.
fapa sia 'spirit' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
fasina (1) 'moon' | BI: bulan | collected on: (S) source: numerous 2010.
fasina (2) 'month' | source: natural speech samples. 2010-2019.
fasina bena 'rising moon' | BI: bulan terbit | collected on: (M), Waitina village source: Mangon tribe 2014.
fasina gate'el 'three months from now' | source: natural speech samples. 2010-2019.
fasina hia tuna 'the month before last' | source: natural speech samples. 2010-2019.
fasina'ik 'this month' | source: natural speech samples. 2010-2019.
fat (1) 'rock' / 'stone' | BI: batu | collected on: (S) source: numerous 2010. note: see also fatu.
fat (2) 'pit of fruit' / 'seed' | BI: batu | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
fat poa 'ten' | BI: sepuluh | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
fatel 'testicals' | collected on: (S) source: numerous 2010.
fathia 'piece of~' | collected on: (S) source: natural speech samples. 2010-2019.
fatu 'rock' / 'stone' / 'pit' / 'stone of fruit' / 'seed' | BI: batu | collected on: (M) source: three to five consultants 2010. note: see also fat.
fatugia 'piece of~' | collected on: (M) source: natural speech samples. 2010-2019.
fatui 'star' / 'planet' | BI: bintang | collected on: (S), (M) source: numerous 2010–2019. note: see also fentui.
fatui dai 'shooting starr' | collected on: (S) source: numerous 2010.
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**fau** 'hit' | collected on: (M) source: three to five consultants 2010.

**faumata** 'kill' | collected on: (M) source: three to five consultants 2010.

**fayata** 'heavy' | BI: berat | collected on: (M) source: two to three consultants 2010. note: see also *fa’ata*.

**fe’i** 'smoke' | BI: asap | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**fe’u** 'new' | BI: baru | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**fea** 'gum (mouth)' | BI: gusi | collected on: (S) source: numerous 2010–2019.

**Februari** 'February' | source: natural speech samples. 2010-2019.

**fei** 'smoke' | BI: asap | collected on: (S) source: numerous 2010.

**felbok** 'cliff' | BI: tebing | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

**fengara** 'cloud' / 'fog' / 'foggy' | BI: awan | collected on: (S) source: numerous 2010–2019. note: see also *fangara*.


**fenin** 'large' | BI: besar | collected on: (S) source: two to three consultants 2010-2019. note: this word was encountered in Malbufa.

**fentui** 'star' | BI: bintang | collected on: (M) source: numerous 2010. note: see also *fatui*.

**feta** 'sister' | collected on: (M) Collins 1981.

**feu (1)** 'first (in time)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: the ordinal form for the number one is *pakahia*. I suspect this Holle list entry is erroneous.

**feu (2)** 'new' / 'just (recently)' / 'to begin' | BI: baru | collected on: (S) source: numerous 2010.

**fia** 'banana' | collected on: (M) source: three to five consultants 2010.

**fia hosa** 'banana leaf' | BI: daun pisang | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.

**fia ihi** 'banana meat' | collected on: (S) source: numerous 2010.

**fia jarum** 'small banana cultivar' | collected on: (M), Capuli village source: two to three consultants 2015.

**fia kaeda** 'large banana cultivar' | collected on: (M), Capuli village source: two to three consultants 2015.
**Fia kau** 'banana tree' | collected on: (S) source: numerous 2010.

**Fia manafu** 'kind of banana' | collected on: (S) source: numerous 2014.

**Fia po** 'banana inflorescence' | BI: jantung pisang | collected on: (M), Waitulia village source: numerous 2014.

**Fia poha** 'banana inflorescence' | BI: jantung pisang | collected on: (M), Capuli village source: numerous 2015.

**Fia pohu** 'banana inflorescence' | BI: jantung pisang | collected on: (M) source: numerous 2015.

**Fia raja** 'large banana cultivar' | collected on: (M), Capuli village source: two to three consultants 2015.

**Fia wata** 'kind of banana' | collected on: (S) source: numerous 2014.

**Fia-sinanga** 'fried banana' | source: natural speech samples. 2010-2019. note: a regional staple food.

**Fif** 'boil' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also *ngan.*

**Filut [u]** 'flute' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: loan from Dutch 'fluit'?

**Fin** 'seed' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**Fina** 'woman' / 'female' (human or animal) | BI: perempuan | collected on: (S) source: numerous 2010.

**Fina ko(a)** 'virginity' / 'girl' / 'single woman' | collected on: (S) source: numerous 2014.

**Fina muya, finga muya** 'fly (insect)' | BI: lalat | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019. note: The Sanana form is fina muya and *finga muya* is a Mangon form.

**Finot** 'shrew' | collected on: (S) source: numerous 2014.

**Fo** 'hair' / 'feather' | collected on: (M) source: numerous 2010. note: this is an abbreviated form of *foa,* the nonspecific form for 'hair', 'fur', and 'feathers'. See also *manfoa.*

**Fo'aha yai** 'anklet' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**Fo'loi** 'more' e.g. (1) *yao fo'loi* 'longer', (2) *mina fo'loi* 'sweeter' | collected on: (S) source: numerous 2010. note: comparative morpheme.

**Fo'oha** 'fruit' | BI: buah | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also *fua.*

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fo: 'hair' / 'feather' | collected on: (M) source: natural speech samples. 2010-2019.

foa 'body hair' / 'feather' (human and animal) | collected on: (S) source: numerous 2010. note: this is the nonspecific form for 'hair', 'fur', and 'feathers'. See also manfoa, fo.

fofa 'plaited rattan fish trap' (for catching fish and eels) | BI: keranjang memancing bambu | collected on: (S) source: numerous 2014. note: see also fofu.

fofu 'plaited rattan fish trap' (for catching fish and eels) | BI: keranjang memancing bambu | collected on: (M), Waitulia village source: numerous 2014. note: see also fofa.


foka (2) 'node in bamboo, sugarcane' | BI: buku | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

foka (3) 'joint in finger' | collected on: (S) source: natural speech samples. 2010-2019.

foka nana 'hill' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this Holle entry is likely correct, but the meaning of foka is unclear. It is also in the term for 'skull' nap foka ('head' + '?'). Alone foka is also given as 'corner'.

foku (1) 'ankle' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I suspect this is erroneous, as foku is a general term for 'joint'.

foku (2) 'mountain' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this Holle list entry is likely false. It is possible that someone was pointing at a mountain pass between peaks and that might be referred to as a 'joint', foku, between 'mountains', lida.

foku (3) 'node in bamboo, sugarcane' | collected on: (M) source: natural speech samples. 2010-2019.

foku (4) 'joint in finger' | collected on: (M) source: natural speech samples. 2010-2019.


foloi (2) 'much' | BI: sangat | source: natural speech samples. 2010-2019.

fongi 'to hide' | BI: sembunyi | collected on: (M) source: numerous 2014. note: see also baifon, dori fon, dau fon.

fonu, pin sanisi 'turtle' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
for 'fork' | collected on: (S) source: numerous 2010.

foro 'bracelet' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.


fota (2) 'to tear' | source: natural speech samples. 2010-2019.

foya 'crocodile' | collected on: (M) source: three to five consultants 2014.

fua (1) 'fruit' | BI: buah | collected on: (S) source: numerous 2010–2019.

fua (2) 'feathers' | BI: bulu | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

fua hia, kau fua hia 'a piece of fruit' | BI: sebiji buah | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

fua yakis 'cashew fruit' | BI: jambu menteh | collected on: (M), Capuli village source: numerous 2015. note: bua yakis was recorded in Malbufa. boyakis was recorded on Eastern Sanana. For cashew nut meat, see also yakis ihi. image 2199.

fua, kau fua 'fruit' | BI: buah-buahan | collected on: (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitation) Fagudu, Falahu, Facei tribes 2014.

fua(ng) kol 'rind' / 'peel' / 'skin' | collected on: (S) source: numerous 2010. note: Sanana forms. For Mangon form, see also nceli ngkoli. (fuang kol is archaic).

fuaya 'crocodile' | collected on: (S) source: numerous 2014.


fuki 'younger sibling' | collected on: (M) source: numerous 2014. note: Holle incorrectly lists this form as 'younger sister'.

g'u 'two' | BI: dua | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitation) Fagudu tribe 2014.

gai 'a few' / 'some' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

ga- 'cardinal number prefix' | source: natural speech samples. 2010-2019.
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**ga'iya** 'one' | BI: satu | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: it would be interesting if this is an accurate transcription and not just logical extension of a pattern. If this is correct, it would mean that, on Mangon, the contraction of *ga-hia* to *gia/giya* completed only within the past century.

**ga'u** 'cardinal number two' | BI: dua | collected on: (S) source: numerous 2010.

**gaama** 'to scratch for the purpose of hurting' | BI: mencakar | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gaatua** 'eight' | BI: delapan | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**gabalil** 'around' / 'surrounding' / 'turn' / 'circumnavigate' | collected on: (S) source: numerous 2014.

**gabalili** 'to turn' | BI: berputar | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gabat** 'break' / 'broken' / 'cracked' / 'to shatter' (object or bone fracture) | BI: patah | collected on: (S) source: numerous 2010–2019.

**gada** 'to scratch (an itch)' / 'to scratch (for the purpose of hurting)' | BI: menggaruk | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gadia** 'cardinal number four' | BI: empat | collected on: (M) source: numerous 2010. note: Mangon form. See also *gareha*.

**gaf** 'to return' / 'embarking on a return' | BI: pulang | collected on: (S), Malbufa village source: single consultant 2015. note: see also *bihu, pihu*.


**gahiya moyu, gahiya moya** 'none (not one)' | BI: tak satupun | collected on: (S) source: numerous 2010–2019. note: *moyu* is a Mangon form, and *moya* is a Sanana form.

**gahoa** 'why' / 'how' | BI: bagaimana | collected on: (S) source: numerous 2010.

**gahu** 'two' | source: natural speech samples. 2010-2019.

**gahu (1)** 'cardinal number two' | BI: dua | collected on: (S) source: numerous 2010. note: Sanana form. See also *guu*.
gahu (2) 'to dig' | BI: menggali | collected on: (M), Ulfoa village source: numerous 2014. note: see also geka, gika, bau leu.
gahu (3) 'to scratch (an itch)' / 'to scratch (for the purpose of hurting)' | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
gahu, ga'u, g'u, gu 'two' | collected on: (S) source: natural speech samples. 2010-2019.


gai 'to dig' | BI: menggali | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

gai 'as' / 'like' | BI: seperti | location: unknown source: Umaternate 2013.
gaji 'fat' / 'grease' | BI: lemak | collected on: (M) Kampung Waitina, (S) Kampung Wailau source: (tribe-based variation elicitations) Mangon, Falahu 2014.
gajigat 'fat' / 'grease' | BI: lemak | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.
galas(i) 'glass' / 'cup' | BI: gelas | collected on: (S) source: numerous 2010. note: loan.
galema a fish that is either the same as or similar to the spotted eagle ray (aetobatus narinari) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.
galima 'cardinal number five' | BI: lima | collected on: (S) source: numerous 2010-2019.
gam 'betel leaf' | BI: daun sirih | collected on: (S) source: numerous 2010.
gam(i) 'to squeeze' / 'pinch' | BI: memeras | collected on: (M), (S) source: numerous 2014. note: see also ami / am.
gama 'to scratch for the purpose of hurting' / 'to injure' | BI: mencakar | collected on: (M), Ulfoa village source: numerous 2014.
gama (nana) 'child' | BI: anak | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
gamahi 'salty' | BI: asin | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
gamana 'onward' / 'forward' | BI: kedepan | collected on: (S), Pastina village source: single consultant 2014.
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**gamat putar**  'to turn'  |  BI: berputar  |  collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gambir**  'uncaria gambir'  |  BI: gambir  |  collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: likely loan.

**gami**  'squeeze'  |  BI: memeras  |  collected on: (M) source: three to five consultants 2010.

**gami (1)**  'to squeeze'  |  BI: memeras  |  collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**gami (2)**  'to hold in hands'  |  collected on: (M), Kampung Waitina source: natural speech samples. 2010-2019.

**gamiha**  'pure, clean, smooth' e.g. a clean room  |  BI: bersih  |  collected on: (S) source: numerous 2010–2019.


**gampang para**  'easy'  |  BI: gampang  |  collected on: (S) source: two to three consultants 2010–2019. note: loan from Malay.

**gamuda**  'to grunt'  |  BI: mendengus  |  collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**gamuli**  'pinktail triggerfish' (Melichthys vidua)  |  collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**gan (1)**  'in the manner of' / 'such as'  |  BI: seperti  |  location: unknown source: Umaternate 2013.

**gan (2)**  'with'  |  source: natural speech samples. 2010-2019.

**ganao**  'what'  |  BI: apa  |  collected on: (M) source: numerous 2010. note: see also hapa, opa.

**gandu**  'corn (maize)'  |  collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**gane(ː)**  'cardinal number six'  |  BI: enam  |  collected on: (S) source: numerous 2010.

**ganei**  'cardinal number six'  |  BI: enam  |  collected on: (M) source: three to five consultants 2010.

**ganeka**  'oh, I see'  |  BI: Oh begitu  |  collected on: (M), Ulfoa village source: numerous 2015.

**ganika, ga'i ki**  'like (in the manner of)'  |  collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.
**ganoa**  'why' / 'how' | BI: kenapa | collected on: (M) source: three to five consultants 2010.

**ganoki**  'why' / 'how' | BI: kenapa | collected on: (M) source: three to five consultants 2010.

**gaoa**  'why' / 'how' | BI: bagaimana | collected on: (S) source: numerous 2010. note: derived from gahoa.

**gapila (1)**  'how many' / 'much' | BI: berapa | collected on: (S) source: numerous 2010–2019.

**gapila (2)**  'some' | source: natural speech samples. 2010-2019.

**gapila gapila**  'some' | BI: beberapa | collected on: (S) source: numerous 2010–2019.

**gapilaapa**  'some' | BI: beberapa | collected on: (M) source: three to five consultants 2010.

**gapit**  'cardinal number seven' | BI: tujuh | collected on: (S) source: numerous 2010. note: Sanana form. See also gapitu.

**gapitu**  'cardinal number seven' | BI: tujuh | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gar**  'corn' (maize) | BI: jagung | collected on: (S) source: numerous 2010–2019.

**garea**  'four' | BI: empat | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gareha**  'cardinal number four' | BI: empat | collected on: (S) source: numerous 2010.

**garum**  'shade' / 'shadow' | BI: bayangan | collected on: (S) source: numerous 2010–2019.

**gas**  'salt' | BI: garam | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gas(i)**  'salt' | BI: garam | collected on: (S), (M) source: numerous 2010–2019. note: Sanana form. (Ternate loan?).

**gasi**  'salt' | BI: garam | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gasu**  'ebb' (tidal movement) | BI: surut | collected on: (M) source: numerous 2010. note: see also it.
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**gat**  'to choke' | BI: tersedak | collected on: (S) source: two to three consultants 2010-2019. note: Sanana form. See also gati.

**gata** 'tongs' | BI: penjepit | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**gatahua, gata'ua, gatauwa, gatua**  'cardinal number eight' | BI: delapan | collected on: (S) source: numerous 2010. note: literally 'minus two' (from ten).

**gatasia, gatasiya**  'cardinal number nine' | BI: sembilan | collected on: (S) source: numerous 2010. note: literally 'minus one' (from ten).

**gatel**  'three' | source: natural speech samples. 2010-2019.

**gatelu, gatelo**  'cardinal number three' | BI: tiga | collected on: (S) source: numerous 2010-2019. note: gatel is the standard Sanana form. The standard Mangon form is gatelu. Gatelo is a non-standard pronunciation.

**gati (1)**  'to choke' | BI: tersedak | collected on: (M) source: numerous 2010–2019. note: Mangon form. See also gat.

**gati (2)**  'narrow' | BI: sempit | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitation for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gatilu**  'cardinal number three' | BI: tiga | collected on: (M) source: numerous 2010. note: Mangon form. See also gatel.

**gatsia**  'cardinal number nine' | BI: sembilan | collected on: (S) source: numerous 2010.

**gatua**  'cardinal number eight' | BI: delapan | collected on: (M) source: three to five consultants 2010.

**gatua, gat-hua, gatahua**  'eight' | BI: delapan | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitation) Fagudu tribe 2014.

**gau**  'cardinal number two' | BI: dua | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitation) Fagudu tribe 2014.

**gawai**  'to scratch for the purpose of hurting' | BI: mencakar | collected on: (S) Kampung Umaloya, Kampung Wailau; (M) Kampung Kou source: (tribe-based variation elicitation) Fagudu, Falahu tribes 2014.

**gawak**  'to hold' | BI: menggenggam | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitation for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gaya (1)**  'win' / 'score points' | BI: mendapat angka | collected on: (S) source: numerous 2010–2019. note: literally 'consume' (points).
gaya (2) 'to eat' | BI: makan | collected on: (S) source: numerous 2010–2019. note: See also giya. The distribution and selection of gaya / giya could practically be a dissertation in its own right. This term has come to embody a social identity marker for the Sula tribes. When asked what dialect is spoken, it is common to respond, 'we're a giya (or gaya) village'.

gaya (3) 'food' | BI: makan | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

gaya hok 'breakfast' | BI: sarapan | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

gaya tulungu 'credit bondsman' | BI: bondman kredit | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

gayai 'to yell' (neutral, not necessarily angry) | BI: berteriak | collected on: (S) source: numerous 2010.

gayai (1) 'to stand' | BI: berdiri | collected on: (M) source: numerous 2010. note: see also geli.

gayai (2) 'back' (back part of body or object) | BI: belakang | collected on: (S) source: numerous 2010–2019.

gayai (3) 'behind' | source: natural speech samples. 2010-2019.

gayai fat 'back' | BI: punggung | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

gek, geki 'striped squirrel' | BI: tupai | collected on: (S), (M) source: numerous 2015.


geka (2) 'pain' / 'painful' / 'ill' / 'sick' / 'sore' / 'hurt' | BI: perasaan | collected on: (S) source: numerous 2010–2019.


gela 'stand' | BI: berdiri | collected on: (M) source: numerous 2010. note: see also gehi.

gem 'to hold' / 'to grab' | BI: menggenggam | collected on: (S) source: numerous 2010–2019.
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**gem (kati)** ‘to hold’ | BI: menggenggam | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gem kat** ‘to hold’ | BI: menggenggam | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gem lima** ‘to shake hands’ / ‘to hold hands’ | BI: berjabat | collected on: (S) source: numerous 2010.


**gemu** ‘to hold’ | BI: menggenggam | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gena (1)** ‘to hear’ | BI: mendengar | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**gena (2)** ‘echo’ | BI: gema | collected on: (M), Waitulia village source: numerous consultants during same session 2014. note: I was skeptical of this translation, as *gema* means ‘echo’ in Malay, and *gena* also means simply ‘to hear’ in Sula, but the consultants reassured that they understood what I was asking.

**geni** ‘to hear’ | BI: mendengar | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**genli** ‘like’ / ‘in the manner of’ | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**gi** ‘they (male)’ | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: *gi-* is a pre-verbal pronominal agreement marker.


**gia** ‘cardinal number one’ | BI: satu | collected on: (M) source: numerous 2010. note: Mangon form. See also *hia*.

**gia, giya** ‘to eat’ / ‘food’ | collected on: (S) source: numerous 2010. note: See also *gaya*. The distribution and selection of *gaya* / *giya* could practically be a dissertation in its own right. This term has come to embody a social identity marker for the Sula tribes. When asked what dialect is spoken, it is common to respond, ‘we’re a giya (or gaya) village’.

**Sula**

**gifu** 'to open' / 'uncover' | BI: membuka | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**gigi (1)** 'to carry something that hangs from the hand' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**gigi (2)** 'to bite (human)' | BI: gigit | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**gihi fat** 'back' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted 2014.

**gika** 'to dig' | collected on: (S) source: single consultant 2014. note: see also geka, gahu, bau leu.

**gili, gihi** 'to stand' | collected on: (M) source: two to three consultants 2014. note: see also gehi, geli.

**gim barin** 'to carry in the hand' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**gin ba dini** 'to carry in the hand' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**gina** 'to hear' | collected on: (M) source: two to three consultants 2014. note: variant of gena.

**gingga matua** 'brown' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**ginggi** 'to carry something that hangs from the hand' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**giya (1)** 'to eat' | BI: makan | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**giya (2)** 'cardinal number one' | BI: satu | collected on: (M) Kampung Waitina, (S) Kampung Wailau source: (tribe-based variation elicitations) Mangon, Falahu 2014.

**go'a neka** 'how?' | BI: bagaimana | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**goa** 'why' / 'how' | BI: bagaimana | collected on: (S) source: numerous 2010. note: derived from gahoa.

**goa bal** 'why' / 'how' | BI: kenapa | collected on: (S) source: numerous 2010.

**gocifa** 'raft' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.
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**gofata** 'wife' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: *fata* is 'wife'. It is unclear what *go-* means.

**goga** 'on' e.g. on a tree | source: natural speech samples. 2010-2019.

**goha (1)** 'sacred place' | collected on: (S) source: numerous 2010–2019. note: likely loan.


**goi** 'bottom (posterior)' | BI: pantat | collected on: (S), (M) source: numerous 2010–2019. note: also collected as 'vulva' (vulgar) in Ulfoa village.

**goi foka** 'posterior' / 'buttock' | collected on: (S) source: numerous 2010. note: Sanana form. For Mangon form, see also *ngoi foku*.

**goi fur** 'tail bone' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**goiyon** 'bottom (posterior)' | BI: pantat | collected on: (S) source: numerous 2010–2019.

**=gon** 'belongs to' (first-person possessors) e.g. *as neka ak gon* 'that dog is mine' | BI: milik | collected on: (S), (M) source: numerous 2010–2019. note: Possessive morpheme. See also *non*.

**gora** 'Malay apple' / 'mountain apple' / 'rose apple' / 'syzygium malaccense' | BI: jambu bol | collected on: (S), Waibau village, (M), Capuli village source: numerous 2015.

**got** 'to pinch' | BI: mencubit | collected on: (S) source: Mangon Tribe, Mangon village on Sanana 2015.

**gu-** second-person singular and second-person plural agreement marker | source: natural speech samples. 2010-2019. note: It is difficult to reach consensus on the second-person plural pronominal prefix, and it seems to typically be omitted in speech.

**gu:** 'cardinal number two' | BI: dua | collected on: (M) source: numerous 2010. note: Mangon form. See also *gahu* and *gau*.

**gua** 'sugar' / 'syrup' | collected on: (S) source: numerous 2010.

**gua mia** 'palm sugar' | BI: gula aren | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: literally 'red' + 'sugar'.

**gub** 'full' (both location full of people and container full of a substance) | BI: penuh | collected on: (S) source: numerous 2010–2019.

**guifa** 'sister-in-law WBW' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
**Gul(i)** 'porridge' | collected on: (M) source: numerous 2010. note: possibly borrowed from a cognate of 'gruel'? Mangon form gul. Sanana form gul.

**Gumamoro** 'daughter-in-law' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**Gunama mata mihi** 'son-in-law' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**Guntami mama** 'respective parents of the married couple' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**Guntua** 'husband' | collected on: (M) source: three to five consultants 2014.

**Guntur** 'thunder' | BI: guntur | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**Gut** 'cut' / 'scissors' e.g. cutting hair | BI: luka | collected on: (S) source: numerous 2010–2019.


**Guu** 'cardinal number two' | BI: dua | collected on: (M) Kampung Waiteina source: (tribe-based variation elicitations) Mangon tribe 2014.

**Ha'i** 'earth' / 'soil' / 'sand' | BI: tanah | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**Hafa** 'north' | BI: utara | collected on: (S), Waibau village source: single consultant 2015. note: it is likely that hifa and hafa originally meant something akin to north and south, but only one consultant provided this definition. For most speakers the terms have come to represent non-specific opposing directions like 'to and fro'. They are often translated as 'left and right' (kiri/kanan) but when asked which is kiri or which is kanan, the answer is 'neither'.

**Hai** 'Earth' / 'island' / 'land' / 'country' / 'soil' / 'sand' e.g. (country) (1) Hai Africa, (2) Hai Sua, (3) Hai Europa | BI: bumi | collected on: (S) source: numerous 2010–2019.

**Hai bopa** 'dust cloud' / 'plume' (e.g. drop something onto dusty soil) | collected on: (S) source: numerous 2010.

**Hai dewika, hai dawika** 'tomorrow' | collected on: (S) source: numerous 2010.


**Hai lib** 'plain' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**Hai mai (1)** 'dust' | BI: debu | collected on: (M), Ulfoa village source: numerous 2014.
**Chapter 4: lexicon**

*hai mai (2)*  'ash'  | BI: abu  | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

*hai Mangon, hai Mangoni*  'Mangole Island'  | BI: Pulau Mangole, Pulau Mangoli, Pulau Mongole, Pulau Mongoli  | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: also, less commonly, *lai Mangon.*

*hai mota*  'forest fire'  | collected on: (S) source: numerous 2010. note: literally 'island hot'.

*hai Sua*  'the Sula Islands' / 'Sanana Island' / 'Sula lands'  | BI: Sula  | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: also, less commonly, *lai Sua.*

*hai Taliab, hai Taliabu*  'Taliabu Island'  | BI: Pulau Taliabu  | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: also, less commonly, *lai Taliabu.*

*hai yon*  'countryside'  | BI: daerah luar kota  | collected on: (S) source: numerous 2010–2019.

*haiwan*  'bird'  | BI: burung  | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

*haiwan foa*  'feather'  | BI: bulu  | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

*haiwan ihi*  'meat' / 'flesh'  | BI: daging  | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

*haiwan kao goga*  'bird'  | BI: burung  | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

*haiwan pakiaki*  'to hunt'  | collected on: (S), Kampung Umaloya source: natural speech samples. 2010–2019.

*haiwan, haiwani*  'animal'  | BI: binatang  | collected on: (S), (M) source: numerous 2010–2019. note: loan from Arabic, hayawan.


*haka*  'to grill'  | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

*hakim*  'judge'  | collected on: (S) source: entry from Holle List; unable to verify c. 1900.


*hakkot (2)*  'to hold'  | BI: menggenggam  | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.
haku  'to cook rice' | collected on: (M), CMD region source: natural speech samples. 2010-2019.

haku (bira) 'to cook' / 'boil' (particularly rice) | BI: menanak | collected on: (M), Ulfoa village source: numerous 2014.

hal (1) 'to blossom' / 'flower' e.g. kau bahal 'blossoming tree' | BI: mekar | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: see also bahal.

hal (2) 'problem' e.g. hal eb 'big problem' | BI: masalah | collected on: (S) source: numerous 2010–2019.


hama ba sagil 'squinting' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

hama ka'ok 'visually impaired' | BI: gangguan penglihatan permanen | collected on: (S) source: numerous 2010–2019.

hama kaok 'blind' e.g. hama ka'ok 'eyes blind' | BI: buta | collected on: (S) source: numerous 2010–2019. note: Sanana form. For Mangon form, see also (lama) ka'oki.


han (1) 'near' / 'almost' | BI: dekat | collected on: (S) source: numerous 2010–2019.


han, baka han 'by' / 'near' | source: natural speech samples. 2010-2019.

han, mak han 'by' / 'near' | source: natural speech samples. 2010-2019.

hana 'angry' | collected on: (S) source: numerous 2010.


hapa 'what' | BI: apa | collected on: (S) source: numerous 2014. note: see also ganao, opa.

hapa da 'what else' | BI: apa lagi | collected on: (M), Ulfoa village source: numerous 2015.


haram 'forbidden' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: loan from Arabic.
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**harja**  'to knit' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**harp**  'to want (something)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**hasi**  'to tell a lie' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

**hasoya**  'answer' | BI: menjawab | collected on: (S) source: numerous 2010–2019.

**hebat (1)**  'serious' / 'severe' | BI: serius | collected on: (S) source: numerous 2010–2019. note: loan from Malay.


**hebat pel**  'special' | BI: istimewa | collected on: (S) source: numerous 2010–2019.

**hebat totoya**  'very serious' | collected on: (S) source: numerous 2010–2019.

**heha**  'under' | collected on: (S) source: natural speech samples. 2010-2019.

**heka**  'want' | collected on: (S) source: numerous 2010.

**hen**  'to carry' (when carrying something in a basket that is worn as a backpack) | collected on: (S), Umahoya village Source: Fagudu tribe 2014.

**hi**  'main posts' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I don't understand the Holle gloss.

**hia (1)**  'cardinal number one' | BI: satu | collected on: (S) source: numerous 2010. note: Sanana form. See also gia.

**hia (2)**  'a few' / 'some' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this is almost certainly erroneous.

**hia bahoa**  'which' | BI: yang mana | collected on: (S) source: numerous 2010–2019.

**hia bahoa**  'which' | source: natural speech samples. 2010-2019.

**hia baoa**  'which' | BI: yang mana | collected on: (S) source: numerous 2010–2019.

**hia baoa, hia boa**  'which' | source: natural speech samples. 2010-2019.

**hia da**  'once again' / 'once more' | BI: satu lagi | collected on: (M), Ulfoa village source: numerous 2015.

**hia moya**  'none' / 'no one' | collected on: (S) source: numerous 2010.

**hia tuna**  'one before' | source: natural speech samples. 2010-2019.

**hidup**  'live' | collected on: (M) source: three to five consultants 2010.

**hidup susa**  'miserable life' | collected on: (S) source: two to three consultants 2010. note: literally 'impoverished life'.

**hifa**  'south' e.g. **hifa hafa**  'to and fro' | BI: selatan | collected on: (S), Waibau village source: single consultant 2015. note: it is likely that hifa and hafa originally
meant something akin to north and south, but only one consultant provided this definition. For most speakers the terms have come to represent non-specific opposing directions like 'to and fro'. They are often translated as 'left and right' (kiri/kanan) but when asked which is kiri or which is kanan, the answer is 'neither'.

**hifa hata** 'to and fro' | source: natural speech samples. 2010-2019.

**hik, kau hik** 'grass' | BI: rumput | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**hika** 'to confess' | collected on: (S) source: single consultant 2014. note: see also **niki**.


**hisa** 'fence' / 'hedge' | BI: pagar | collected on: (S) source: two to three consultants 2010–2019. note: Holle postulates this as a Ternate loan.

**hit** 'fire place' / 'hearth' | collected on: (S) source: numerous 2014.

**hitam** 'fog' | BI: kabut | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**hitu** 'fire place' / 'hearth' | collected on: (M) source: three to five consultants 2014.

**ho'i** 'bone' | BI: tulang | collected on: (S) Kampung Umaloya, Kampung Sama source: (tribe-based variation elicitations) Fagudu, Facei tribes 2014.

**ho(')i** 'bone' | collected on: (M), (S) source: numerous 2010–2019. note: glottal stop depends on speaker and village.

**hoba** 'sprout' / 'shoot' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**hoi (1)** 'to open' (e.g. a business) | BI: membuka | collected on: (S) source: numerous 2010-2019. note: Holle postulates this as a Ternate loan.

**hoi (2)** 'to uncover' (e.g. a container) | BI: membuka | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**hoi (3)** 'bone' | BI: tulang | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**hoi (4)** 'thorn' | collected on: (S) source: natural speech samples. 2010-2019.

**hoi min** 'hankerchief' | collected on: (S) source: numerous 2010.


**hosa babir** 'decorative plant commonly found in front of Sula homes' | collected on: (M), Capuli village source: numerous 2015. note: image 2197.
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**hosa, kau hosa**  'leaf' | BI: daun | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu, Falahu tribes 2014.

**hua**  'vein' | BI: urat darah | collected on: (S) source: numerous 2010–2019. note: see also *ua*.

**hui**  'to scrape' e.g. scrape young coconut flesh from shell | collected on: (M), Capuli village source: numerous 2015.

**hukuman**  'to punish' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**huruf**  'letter' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**hut ap**  'to make a fire' | collected on: (S) source: numerous 2014.

**i (1)**  'yes' | BI: ya | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also *io*.

**i- (2)**  third singular agreement marker (human & nonhuman) | source: natural speech samples. 2010-2019.

**i- (3)**  third-person plural agreement marker | source: natural speech samples. 2010-2019.

**i, 'i (4)**  'this' | BI: ini | collected on: (S) source: numerous 2010. note: possible abbreviation of *iki*.

**ia**  'Street' | collected on: (S) source: numerous 2010.

**ia fai**  'country' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**ia fai aya**  'town (capital)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**ia fai lal**  'population' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**ianga kau, tanu**  'to spy' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**iayu**  'a type of grass' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**ib**  'much' / 'many' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: unclear if this represents a sound change or just different vowel perception in the interviewer. The modern form is *eb*.

**ibu**  'much' / 'many' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: unclear if this represents a sound change or just different vowel perception in the interviewer. The modern form is *ebu*.
Sula

if  'to open' / 'uncover' | BI: membuka | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

ihi (1) third-person plural pronoun | BI: mereka | collected on: (S) source: numerous 2010–2019. note: takes preverbal agreement marker i-.

ihi (2) 'meat' / 'flesh' | BI: daging | collected on: (S) source: numerous 2010–2019.


ihi fata  'body' | collected on: (S) source: numerous 2014.

iju  'green' | BI: hijau | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: likely loan from Malay hijau.

ik (1) 'now' | BI: sekarang | collected on: (S) source: numerous 2010–2019. note: There are multiple Sanana and Mangon forms. See also ika, iki.

ik (3) 'neck' | collected on: (S) source: numerous 2010–2019.

ik, iki, ika (2) 'here' / 'this' / 'it' | BI: ini | collected on: (S) source: numerous 2010–2019. note: There are multiple Sanana and Mangon forms. See also ika, iki, isuka, saik, saiki, saiya, sit iki, deha saik, siku.

ika (1) 'now' | BI: sekarang | collected on: (M) source: numerous 2010–2019. note: There are multiple Sanana and Mangon forms. See also ik, iki.

ika (2) 'here' / 'this' / 'it' | BI: ini | collected on: (S) source: numerous 2010–2019. note: There are multiple Sanana and Mangon forms. See also ik, iki, isuka, saik, saiki, saiya, sit iki, deha saik, siku.

iki (1) 'now' | BI: sekarang | collected on: (S) source: numerous 2010–2019. note: final i likely comes from paragogic echo or linking vowels that seem to be found in some Sanana forms. There are multiple Sanana and Mangon forms. See also ika, ik, isuka, saik, saiki, saiya, sit iki, deha saik, siku.

iki (2) 'here' / 'this' / 'it' | BI: ini | collected on: (S) source: numerous 2010–2019. note: final i likely comes from paragogic echo or linking vowels that seem to be found in some Sanana forms. There are multiple Sanana and Mangon forms. See also ika, ik, isuka, saik, saiki, saiya, sit iki, deha saik, siku.

iki wai  'neck' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

ikina  'yonder' | collected on: (M) source: natural speech samples. 2010-2019.

ikinfa  'their things' | BI: barangnya | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: The Holle entry is in error. This term means 'this thing' / 'these things'.

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iku 'here' / 'this' / 'it' | BI: ini | collected on: (M), Ulfoa village source: numerous 2014. note: CMD form. In accommodating to Mangon speakers, CMD speakers (especially in Ulfoa village) would re-add final vowels that were dropped in Sanana. The chosen vowel did not always match the Mangon target though. This is not unlike speakers of British dialects that have dropped initial \( h \) attempting to re-add it to words beginning with vowels when talking to speakers of other English dialects but sometimes missing the targets (I'll ave an happle please). See also isuka, saik, saiki, saiya, sit iki, deha saik, siku.

ila 'beside' / 'side' (e.g. side of street) | BI: di samping | collected on: (S) source: numerous 2010–2019.


ila kul(i) 'right side' | BI: kanan | collected on: (S) source: single consultant 2010–2019. note: is ila a synonym of lima (perhaps metathesis?).

ila neu 'below' | BI: di bawah | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

ila tapa 'left side' | BI: kiri | collected on: (S) source: single consultant 2010–2019. note: is ila a synonym of lima (perhaps metathesis?).

ila-pon 'side' / 'beside' | source: natural speech samples. 2010-2019.


ili 's/he' | collected on: (M) source: two to three consultants 2010-2019. note: third-person human pronoun (antiquated). See also ki'i.

ilinifa 'their things' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

ima 'eel' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

imut 'cute' | BI: imut | collected on: (M), Capuli village source: three to five consultants 2015. note: loan from Malay.


in sana 'branch' | BI: dahan | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
**Sula**

**in-pani**  'wing' | collected on: (M), CMD region source: natural speech samples. 2010-2019.

**ina**  'that' | BI: itu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**ing kina**  'like' / 'in the manner of' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**inpan**  'wing' | BI: sayap | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


**ipa**  'kenari nut' (canarium) | BI: kenari | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: see also kam.

**ipa fua**  'kenari fruit'(canarium) | BI: buah kenari | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: see also kam.

**ipa hal**  'kenari blossom'(canarium) | BI: mekar kenari | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: see also kam.

**ipa kau**  'kenari tree' (canarium) | BI: pohon kenari | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: see also kam.

**iru oka**  'ladle' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**iru ongku**  'ladle' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.


**istarat**  'straights' e.g. between islands | collected on: (S) source: numerous 2010–2019.

**isuka**  'here' | BI: ini | collected on: (M) source: numerous 2010. note: see also saik, saiki, saiya, sit iki, deha saik, siku.

**isuna**  'there' | collected on: (M) source: numerous 2010. note: see also semana.

**it**  'border' / 'boundary' | collected on: (S) source: numerous 2010.

**it wama**  'to breath' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**it, it**  'ebb tide' | BI: air surut | collected on: (S) source: numerous 2010. note: see also gasu.

**iti**  'border' / 'boundary' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**iya**  'this' | BI: ini | location: unknown source: Umaternate 2013.
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**iya fai tuka** 'population' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**iyo** 'yes' | source: natural speech samples. 2010-2019.


**ja soma** 'net' | collected on: (S) source: numerous 2010.

**jaga** 'to watch' / 'to guard' | BI: jaga | collected on: (S) source: numerous 2010–2019. note: loan from Malay. See also kapita.


**jahi** 'curtain' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.


**Januari** 'January' | source: natural speech samples. 2010-2019. note: loan.

**jao** 'a god' (nonspecific) | BI: dewa | collected on: (S) source: two to three consultants 2014. note: Holle postulates this as a Ternate loan.

**japat tatoya** 'speed (velocity), rapid' | BI: kecepatan | collected on: (S) source: numerous 2010–2019. note: probable loan from Malay, but initial voicing is not explained.

**jara** 'horse' | collected on: (S) source: numerous 2014. note: loan from Malay.

**jara ban li** 'to neigh (horse sound)' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: loan from Malay.

**jawab** 'answer' | BI: jawaban | collected on: (S) source: two to three consultants 2010–2019. note: loan from Malay.

**jengela** 'window' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: loan from Malay.

**jepat pama** 'fragile (easy break)' | BI: gampang pecah | collected on: (S) source: numerous 2010–2019. note: loan from Malay pecah?

**jere** 'sacred place' | BI: (tempat) keramat | collected on: (S) source: numerous 2010–2019. note: This is likely a loan from Ternate.

**jeri** 'sacred place' | BI: (tempat) keramat | collected on: (S) source: numerous 2010–2019. note: This was likely borrowed as jere from Ternate.

**jinggo** 'beard' | collected on: (S) source: numerous 2010–2019. note: loan from Malay.

**jo** 'The God (specific)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan. See also jao.

**jonson** 'dugout canoe with a motor attached' | collected on: (S), Umahoya village Source: Fagudu tribe 2014. note: loan from defunct 'Johnson Brothers Motor Company' maker of outboard boat motors beginning in the early 1900s. See also *lota, bodi*.

**jub (1)** 'bow' | collected on: (S) source: natural speech samples. 2010-2019.

**jub (2)** 'to shoot with bow' | BI: memanah | collected on: (M) (CMD region), Kampung Wai U, Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**jub (3)** 'quiver' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I am skeptical of this Holle entry. This term likely means 'bow' and only represents a 'quiver' through metonymy.

**jubi (1)** 'shooting a bow and arrow' | BI: memanah | collected on: (M), Waitulia village source: numerous 2014.

**jubi (2)** 'fishing with a spear gun' | collected on: (M) source: natural speech samples. 2010-2019.

**jubi, bapana** 'to shoot a bow' | BI: memanah | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


**ka fin** 'mosquito' | BI: nyamuk | collected on: (S) source: numerous 2010.

**ka-** first plural (exclusive) agreement marker | source: natural speech samples. 2010-2019.

**ka, 'ka** 'bite' | collected on: (S) source: numerous 2010. note: abbreviation or derived from *uka*.

**ka'ik** 'grass' / 'weeds' | BI: rumput | collected on: (S) source: numerous 2010–2019. note: Sanana form. See also Mangon forms *kahiku* and *ka'iku*.

**ka'iku** 'grass' / 'weeds' | BI: rumput | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted 2014. note: antiquatted Mangon form. This was accepted by Mangon speakers when prompted, but it
was never recorded produced with a glottal stop. See also Sanana forms *kahik*, and *ka’ik*.

**ka’ipa** 'steps' / 'stairs' | BI: tangga | collected on: (S) source: numerous 2014. note: see also *kahepa*.

**ka’imi.a** 'sand' | BI: pasir | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**ka’odi** 'nail' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**ka’oki** 'blind' | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also *(hama) kaok*.

**ka’opa** 'octopus' | BI: gurita | collected on: Ternate source: Mangon tribe member living on Ternate 2010-2019.

**ka’or** 'nail' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**kabares** 'bad' / 'evil' | BI: jahat | collected on: (M), Wai U village source: numerous 2014.

**kabaresi** 'bad' / 'evil' | BI: jahat | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


**kabu** 'lagoon triggerfish' / 'humuhumunukunukuāpua’a' (rhinecanthus aculeatus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**kabures** 'bad, evil' | BI: jahat | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**kabut** 'fog' | collected on: (M) source: three to five consultants 2010.

**kachan ihi** 'peanut meat' | collected on: (S) source: numerous 2010.

**kadaan** 'weather' e.g. *hai dewika kadaan bisa/birahi* 'tomorrow will be good/pretty weather' | BI: cuaca | collected on: numerous 2010–2019.

**kadal** 'lizard' | collected on: (S) source: numerous 2014. note: loan from Malay.

**kadiga (1)** 'hard' / 'stale' e.g. stale bread | BI: keras | collected on: (S) source: numerous 2010.

**Kadiga (2)** 'strong' | BI: kuat | collected on: (S) source: numerous 2010.

**kadiga (3)** 'very' / 'extremely' | BI: sekali | source: natural speech samples. 2010-2019.
kaf  'to hold as one would a baby' | BI: menggenggam | collected on: (S) Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Falahu, Facei tribes 2014.

kafi  'to carry in front of oneself' | collected on: (M), (S) source: numerous 2010–2019.

kafi  'to hold' | BI: menggenggam | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


kafin (1)  'mosquito' | BI: nyamuk | collected on: (S) source: numerous 2010–2019. note: said to be used by Facei and Fagudu tribe members. See also samab and kafini.

kafin (2)  'butterfly' | BI: kupu-kupu | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014. note: produced by only one speaker. See also lapa lapa, la’apa, ma’apa.

kafini  'mosquito' | BI: nyamuk | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


kag  'to fear' | BI: takut | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

kagi  'afraid' / 'fear' / 'awful' e.g. (1) kag moy pey pel 'don't be afraid anymore' (2) kag kadiga 'extreme fear' | BI: takut | collected on: (S), (M) source: numerous 2010–2019. note: see also Mangon form kagi.

kagi  'to fear' | BI: takut | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015. note: see also Sanana form kagi.

kaha  'rafter' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

kahepa  'stairs' / 'ladder' e.g. (1) bena lepa do kahepa 'climb up with the ladder' (2) bena do kahepa lepa 'climb with the ladder up' (3) yawa ney do kahepa 'go down with the ladder' | BI: tangga | collected on: (S) source: numerous 2010–2019.

kahik  'grass' | BI: rumput | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
kahik, kahiku  'grass' | BI: rumput | collected on: (S), (M) source: numerous 2010-2019. note: see also ka’ik, ka’iku.

kahor  'claw' / 'tallon' / 'fingernail' | BI: kuku | collected on: (S) source: numerous 2010-2019. note: see also kodi for Mangon form.

kahu 'to scratch an itch' | BI: menggaruk | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

kai fa’oii 'bride price' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

kai falihi 'bride price' | collected on: (S) source: numerous 2014.

kai iti 'sap' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.


kaik 'grass' (alive outside) | BI: rumput | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

kailupa 'kapok tree' | BI: kapok | collected on: (S), Malbufa village and East Sanana source: numerous 2010-2019. note: this is a very large tree, closely related to but somewhat smaller than the kapok tree of south America and West Africa. The silk from its seed pods is used as stuffing for pillows and mattresses. It is also highly flammable and used for fire tinder.

kak(a) 'older sibling' | collected on: (S) source: numerous 2010–2019. note: see also fuk.

kak(a) fina 'older sister' | BI: kakak perempuan | collected on: (S) source: numerous 2010–2019. note: see also fuk fina.

kak(a) maana 'older brother' | BI: kakak laki-laki | collected on: (S) source: numerous 2010–2019. note: see also fuk maana.

kaka'al 'attic (under the roof)' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

kakahoi 'outside' | BI: luar | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019.

kakatua 'parrot' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

kaki 'older sibling' | collected on: (M) source: three to five consultants 2010.
Sula

**kakon** 'yellow' | BI: kuning | collected on: (S) source: numerous 2010–2019. note: also used by some for 'pink', but I'm not sure this is standard.

**kakoni** 'yellow' | BI: kuning | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


**kakui bina** 'ant' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**kal** 'woven basket backpack' | collected on: (M), Capuli village source: two to three consultants 2015. note: see also saloi. image 2201.

**kalea** 'kidney' / 'waist' e.g. *kalea geka* 'kidney disease' | BI: ginjal | collected on: (S) source: numerous 2010–2019.


**kalebasa** 'gourd' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**kaleo** a fish that is either the same as or similar to the soldierfish (myripristis) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

**kaleofua** a fish that is either the same as or similar to the bigeye (heteropriacanthus cruentatus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**kaleu** a fish that is either the same as or similar to the blotcheye soldierfish (myripristis berndti) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**kalibas** 'gourd' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**kalo** 'if' | BI: kalau | collected on: (S) source: numerous 2010–2019.

**kalu, kalo** 'if' | BI: kalau | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**kam (1)** first plural (inclusive) pronoun | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I am not sure whether this Holle entry is erroneous. There is considerable semantic drift among pronouns at various remote locations. Interestingly, this does not seem to cause problems. The pronouns as I present them include *kam* as exclusive, and that also agrees with Collins (1981). My pronoun presentation *seems* to be the most widespread
usage, although this is harder to quantify than it might seem, as people tend to use pronouns a certain way but then get confused when they are asked to think about and report how they are using them. Also compounding the confusion: an exclusivity contrast does not commonly exist in practice, and that tends to confuse speakers when asked to report correct usage. This phenomenon is similar to asking most English speakers to explain correct usage of *thou, thee,* and *thine* (or even *whom* for that matter).

**kam (2)** 'large type of kenari nut / canarium' | BI: kacang kenari | collected on: (M), Ulfoa village source: two to three consultants 2015. note: see also *ipa.*

**kam (3)** first plural (exclusive) pronoun | collected on: (M) source: natural speech samples. 2010-2019.

**kam kam** 'seven' | BI: tujuh | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**kam(i)** 'we' (exclusive) | collected on: (S) source: numerous 2010-2019.

**kamatua** 'woods' / 'forest' | BI: hutan | collected on: (S) Kampung Wailau, Kampung Sama source: (tribe-based variation elicitions) Falahu, Facei tribes 2014.

**kamera** 'camera' | source: natural speech samples. 2010-2019.

**kami** 'we' | BI: kami | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitions) Fagudu tribe 2014.

**kami tina** 'beach' | collected on: (M) source: three to five consultants 2014.

**kamia mayoki** 'sandbank' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**kaminca** a fish that is either the same as or similar to the threadfin butterflyfish (chaetodon auriga) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**kamiya** 'sand' | collected on: (M) source: three to five consultants 2010.

**kamiya miti** 'black sand' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: the contemporary form is *kuma wai miti.*


**kamu kau** 'loin cloth' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this has likely fallen out of the language.

**kan hosa** 'leaf' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: kan is archaic. kau is more common.

**kan hut** 'fire wood' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also kau tona.

**kan leha** 'rash (general)' | BI: ruam | collected on: (S) source: numerous 2010–2019.

**kan liha** 'scar' | collected on: (S) source: two to three consultants 2010. note: Sanana form. For Mangon form, see also kani lia.


**kana** 'jar' | BI: kendi | collected on: (S) source: numerous 2010–2019.

**kani lia** 'scar' | collected on: (M) source: two to three consultants 2010. note: Sanana form. For Mangon form, see also kan liha.

**kanou** 'sugar palm' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**kanum** 'dibble' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**kao** 'tree' | collected on: (M) source: three to five consultants 2010.

**kao fua** 'fruit' | BI: buah | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**kaopet** 'branch' | BI: dahan | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


**kapahaba au** 'wall (bamboo)' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**kapal** 'ship' | BI: kapal | collected on: (S) source: numerous 2010–2019. note: used for larger ships than lota. Loan from Malay.

**kapal ap** 'steamboat' | collected on: (S) source: numerous 2014. note: loan from Malay.

**kapal udara** 'airplane' | collected on: (S) source: numerous 2010.


**kapatut** 'mortar (culinary)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**kapatut nana** 'pounder' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this would mean 'little pounder'.

**kapita** 'guard' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**karabu** 'ear-clip' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**karan** 'kite bird' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**karica** 'parakeet' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**kartas** 'paper' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**kasa** 'sprout' / 'shoot' | collected on: (M) source: three to five consultants 2014.

**kasafo(h)i** 'grass' / 'ground' / 'floor' | BI: rumput | collected on: (S); (M), Wai U village source: numerous 2010–2019. note: 'grass' is the literal meaning. 'floor' and 'ground' are metonymy.

**kasafoi** 'woven grass mat' (on floor of house) | BI: rumput | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**kasawari** 'cassowary' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**kasbi** 'casava' | collected on: (S) source: numerous 2010.

**kasbi ihi** 'casava meat' | collected on: (S) source: numerous 2010.

**kastela** 'sweet potato' (also sometimes 'potato' / 'cassava root') | BI: ubi jalar | collected on: (S), Malbufa village source: natural speech samples. 2010-2019.


**kat** 'taro' | BI: talas | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.

**kata (1)** 'different' | collected on: (S) source: two to three consultants 2010. note: uncommonly used.

**kata (2)** 'word' | collected on: (S) source: numerous 2010.
**kata** (3)  'say' | source: natural speech samples. 2010-2019.

**kata niga**  'ceiling beams' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.


**kati**  'device for weighing and measuring a malleable substance' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**katim**  'cucumber' | BI: ketimun | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**katimu**  'cucumber' | BI: ketimun | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**katimun**  'cucumber' | BI: ketimun | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**katinggu**  'crow' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.


**kau (2)**  'stick' / 'wood' / 'stalk' / 'post' | BI: kayu | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.

**kau (3)**  'to cut, hack' | collected on: (M) source: natural speech samples. 2010-2019.

**kau (4)**  'to cut, hack' | collected on: (S) source: natural speech samples. 2010-2019. note: this entry is likely analogy.

**kau (n)tubi**  'tree seedling' | collected on: (S) source: numerous 2014.


**kau bakunu**  'morinda atrocarpus' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I think these are closely related to the noni fruit tree (非樹).

**kau fua fatia**  'a piece of fruit' | BI: sebiji buah | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu, Falahu tribes 2014.

**kau hal**  'flower' | BI: bunga | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.
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**kau kol** 'bark' | collected on: (S) source: numerous 2014. note: Snana form. See kau koli/kau kuli for Mangon form.

**kau koli, kau kuli** 'bark' | collected on: (M) source: numerous 2010. note: Mangon form. See kau kol for Sanana form.

**kau ladu** 'heart of the tree' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**kau losa** 'leaf' | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also kau hosa.

**kau mai** 'the dust left from mui insects after eating wood' | collected on: (M), Waitulia village source: numerous 2014.

**kau nfat** 'heart of the tree' | collected on: (S) source: numerous 2014.

**kau nhal** 'flower' | collected on: (S) source: numerous 2014. note: lit. 'tree' + 'blossom'.

**kau ni'it** 'sap' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**kau nona** 'banyan tree' | BI: pohon beringin | collected on: (S) source: single consultant 2014.

**kau patsuba** 'medicinal plant used to treat cuts and scrapes' | collected on: (M), Capuli village source: numerous 2015. note: image 2196.

**kau sana** 'twig' / 'branch' | BI: cabang | collected on: (S) source: numerous 2010–2019.

**kau sumba** 'flower' | collected on: (M) source: three to five consultants 2014.

**kau tafi** 'base of tree' | collected on: (M), Waitulia village source: numerous 2014.

**kau tonu** 'fire wood' | collected on: (M) source: numerous 2014. note: dona becomes tona due to Sula's intervocalic devoicing.

**kau waka** 'tree root' | BI: akar | collected on: (S) source: numerous 2014.

**kau yon** 'tree' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: kau alone means 'tree', and (y)on is a mysterious morpheme. It is recorded as 'corner' in isolation, but it also appears in final position in various terms that have no apparent relationship to one another. Some examples are: bayon 'mouth' (ba alone is from the form nuba 'mouth'), goiyon 'buttocks' (goi alone means 'buttocks'), haiyon 'countryside' (hai alone means 'land'). If these forms do indeed all reflect a distinct morpheme, it serves an elusive function.
*Sula*

**kaufua saota** 'dried fruit' | BI: buahan kering | collected on: (S) source: numerous 2010–2019.

**kauumi** 'dibble' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**kauwana** 'steak (food)' | BI: bistik | collected on: (S) source: numerous 2010–2019.


**kawana** 'stick' | collected on: (S) source: numerous 2010.

**kaya** 'wealthy' | source: natural speech samples. 2010-2019.

**ke adahan mora** 'temperature (weather)' | BI: suhu udara | collected on: (S) source: numerous 2010–2019.

**kebal** 'Lizard' | collected on: (S) source: numerous 2010.

**kecap** 'sauce' | BI: kecap | collected on: (S), (M) source: numerous 2010–2019. note: regional term.

**kekku** 'grass' | BI: rumput | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**keku (1)** 'grass' | BI: rumput | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**keku (2)** 'hair' | BI: rambut | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**kelambur** 'bed curtain' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**keli** 'stand' | collected on: (M) Collins 1981. note: See also geli. Collins lists this form with a k, but I am certain it was produced that way due to Sula's bizarre intervocalic devoicing process (discussed in chapter 3). Sula consultants frequently frame their responses with a verbal agreement marker, so it is likely that a consultant responded a-keli 'I stand' and Collins omitted the a-, as he understood it to be a pronominal agreement marker.

**kena** 'fish' | BI: ikan | collected on: (S) source: numerous 2010.

kena bubara  a fish that is either the same as or similar to the giant trevally (caranx ignobilis) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

kena fia bega  a fish that is either the same as or similar to the spotted puffer (arothron meleagris) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

kena gamuli  a fish that is either the same as or similar to the surge wrasse (thalassoma purpureum) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

kena gawan  'whale' | collected on: (S) source: numerous 2010.

kena gurara  a fish that is either the same as or similar to the bluestripe snapper (lutjanus kasmira) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

kena kaleo fua  a fish that is either the same as or similar to the bigeye fish (heteropriacanthus) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

kena katip sai  a fish that is either the same as or similar to the scrawled filefish (aluterus scriptus) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

kena kawahi  'dried small whole fish' | collected on: (S) source: numerous 2010.

kena kombo  'type of edible fish similar to skipjack' | collected on: (S), Pastina village source: Falahu tribe farmers 2014.

kena langpama  a fish that is either the same as or similar to the convict tang (acanthurus triostegus) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

kena maki  'small edible silver fish' | BI: ikan kira (maybe local dialect) | collected on: (M), Wai U village source: numerous 2015.

kena mami  a fish that is either the same as or similar to the parrotfish (scarinae) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

kena pali  a fish that is either the same as or similar to the surgeonfish (acanthurus) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.
**kena Saguu** a fish that is either the same as or similar to the goatfish (parupeneus) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.


**kena Sambali** a fish that is either the same as or similar to the great baracuda | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

**kena songu** a fish that is either the same as or similar to the pinktail triggerfish (Melichthys vidua) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

**kena tubi** a fish that is either the same as or similar to the blackside razor wrasse (iniistius umbrilatus) | collected on: (M), Mangon village source: Mangon tribal members who are (non-fishermen) 2014.

**kera** 'monkey' | collected on: (M), Capuli village source: two to three consultants 2015.

**kertas** 'paper' | collected on: (S) source: numerous 2010.

**ketim** 'cucumber' | BI: ketimun | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**ketimu** 'cucumber' | collected on: (M) source: numerous 2014. note: loan from Malay. See also tim.

**ketimun** 'cucumber' | BI: ketimun | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**keu** 'phlegm'/ 'saliva'/'spit' | BI: meludah | collected on: (S) source: numerous 2010.

**ki, ki'i, kiː** third singular (human) pronoun | BI: [d]ia | collected on: (S), (M) source: numerous 2010–2019. note: third-person singular (human) pronoun. Preverbal agreement marker: i-.

**kiku** 'grass' (living grass, not grass on floor) | BI: rumput | collected on: (M) source: three to five consultants 2010.

**kila (1)** 'liver' | BI: hati | collected on: (S) source: numerous 2010–2019.

**kila (2)** 'lightning' | BI: kilat | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
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**kila (3)** 'breast' | BI: susu | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014. note: I am fairly sure this is 'liver' and not 'breast'.

**kim (1)** second-person plural pronoun (informal) | BI: meréka | collected on: (S) source: numerous 2014. note: second-person plural pronoun. Preverbal agreement marker: *gu-*.  

**kim (2)** second-person formal pronoun (singular and plural) | BI: anda | collected on: (S) source: numerous 2014. note: second-person singular and plural formal pronoun. Preverbal agreement marker: *gi-* (interestingly, some report that this also functions as a third-person plural formal pronoun).

**kim fa** 'your things' (used with plural and formal) | BI: barang anda | collected on: (S) source: numerous 2014.

**kim kim (1)** 'you' | BI: kalian | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014. note: nonstandard.

**kim kim (2)** 'we' | BI: kami | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014. note: nonstandard.

**kim mua-mua** 'you all' | BI: kalian | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**kima** 'shell' | BI: tempurung | collected on: (S) source: numerous 2010.

**kios** 'kiosk' / 'stall for buying small items' | BI: kios | collected on: (S), (M) source: numerous 2010–2019. note: loan from Malay.

**kipa** 'thigh' | BI: paha | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**kipu** 'smith' | BI: pndai besi | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**kira-kira ga(h)oa** 'suggestion' | BI: saran | collected on: (S) source: numerous 2010.


**kitab** 'book' | BI: buku | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**kiti** first plural (inclusive) pronoun | BI: kita | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


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**kob(i)** 'knife' | BI: pisau | collected on: (S) source: numerous 2010.

**kodi** 'claw' / 'tallon' / 'fingernail' | BI: kuku | collected on: (M) source: numerous 2010–2019. note: see also *kahor* for Sanana form.

**kof** 'coffee' | BI: kopi | collected on: (S) source: numerous 2010. note: usually said with a long [f] sound. Unclear if this is an affectation or something phonemic. Loan.

**kofi** 'coffee' | BI: kopi | collected on: (S) source: numerous 2014. note: loan.

**koha** 'shade' / 'shadow' | BI: teduh | collected on: (S) source: numerous 2010–2019.

**koi** 'no' / 'don't' | BI: jangan | collected on: (S) source: numerous 2010. note: used in commands.

**koi sui tabak** 'nonsmoking' | BI: dilarang merokok | collected on: (S) source: numerous 2010–2019.

**kokon** 'yellow' | BI: kuning | collected on: (S) source: two to three consultants 2010. note: see also *kakon*.

**kol (1)** 'skin' | BI: kulit | collected on: (S) source: numerous 2010–2019. note: likely metonymy of 'skin' to 'body'.


**kol (3)** 'peel' | BI: kulit | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**kol (4)** 'chaff' | BI: sekam | collected on: (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Fagudu, Falahu, Facei tribes 2014.

**kol foa** 'feathers' | BI: bulu | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**kol sanang** 'comfortable' e.g. comfortable temperature | BI: nyaman | collected on: (M), Capuli village source: numerous 2015. note: literally 'skin' + 'happy'.

**kol yaha** 'tired' | BI: cape | collected on: (S), Malbufa, East Sanana source: numerous 2010. note: literally 'skin' + 'tired'. See also *yaha*.

**kolan** 'king' (Malay?) | BI: raja | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**kolano** 'king' | BI: raja | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
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koli  'skin' | BI: kulit | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

koma  'loin cloth' | BI: cawat | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this has likely fallen out of the language.


kon (1)  'curcuma domestica' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

kon (2)  'yellow' | BI: kuning | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

kon (2)  'yellow' | BI: kuning | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

kop  'cup' | BI: mangkuk | collected on: (S) source: numerous 2014.


kota til  'nit' | BI: telur kutu | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

kotu  'flea' / 'louse' | BI: kutu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

kramat  'holy place' | BI: keramat | collected on: (S) source: numerous 2014. note: loan from Malay.


kub (1)  'gather together' / 'arrange' e.g. da’u kub fa’a mehi 'pack a bag with things' | BI: berkumpul | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.


kuda  'trowel (a small trowel)' | BI: sekop | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

kufini  'mosquito' | BI: nyamuk | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

kukusan liha  'rice-kettle (earthenware)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

kul, lima kul  'right' | BI: kanan | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu, Falahu tribes 2014.

kuli (1)  'skin' | BI: kulit | collected on: (S) source: numerous 2010. note: possible loan from Malay kulit.

kuli (2)  'right' (direction) | collected on: (M), CMD region source: natural speech samples. 2010-2019.

kuli, lima kuli  'right' | BI: kanan | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

kum(a) hai  'sand' | BI: pasir | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

kum(a) wai  'sand' | BI: pasir | collected on: (S) source: numerous 2010–2019.

kuma wai mahi oki  'sandbank' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.


kuma wai tina  'beach' | collected on: (S) source: numerous 2014.

kumpulan  'tribe' / 'clan' | collected on: (S) source: numerous 2010.

kuni  'curcuma domestica' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

kunong  'firefly' | collected on: (S) source: numerous 2010.

kurang  'less' | source: natural speech samples. 2010-2019. note: loan from Malay.

kutig  'crow' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

kuwa  'device for weighing and measuring rice' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

la (1)  'so that' | BI: agar | location: unknown source: Umaternate 2013.

la (2)  'to fly' | BI: terbang | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.

la dad moya  'impossible' / 'untrue' / 'bluff' | BI: tidak mungkin | collected on: (S) source: numerous 2010–2019.

la eya  'midday' / 'noon' | BI: siang | collected on: (M), Ulfoa village source: numerous 2015. note: see also mum.

la'oka  'to give birth' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

la  'to fly' | collected on: (M) source: natural speech samples. 2010-2019.
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**laa** 'to fly' | BI: terbang | collected on: (S) source: numerous 2010–2019.

**lab** 'dress' / 'shirt' / 'jacket' / 'clothing' | BI: baju | collected on: (S) source: numerous 2010–2019.

**labahu** 'to become' | BI: menjadi | collected on: (M), Mangon village source: two to three consultants 2014.

**ladu** 'to weave' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**laf** 'fog' | BI: kabut | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu, Falahu tribes 2014.

**lagu** 'song' | collected on: (S) source: numerous 2014.

**lai (1)** 'earth' / 'soil' | BI: tanah | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014. note: *lai* is perfectly acceptable in some dialects, but *hai* appears to be the common standard. There are many other words with l~h variation.

**lai (2)** 'cotton' / 'thread' | collected on: (S) source: numerous 2014.

**lai mai** 'dust' | BI: debu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**laka** 'to walk' / 'to go' | BI: jalan | collected on: (S) source: numerous 2010–2019.


**laka bisloi** 'to hunt' | BI: berburu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014. note: literally 'walk' + 'search for'.

**laka hibar-hibar** 'stroll along looking for a good time' | BI: pergi hiburan | collected on: (M), Waitulia village source: single consultant 2014.

**laka kaya** 'go eat' | source: natural speech samples. 2010-2019.


**laka mot** 'follow' / 'join' e.g. laka mot do ak 'go with me' | collected on: (S) source: numerous 2010.

**laka pasel** 'to go planting' | source: natural speech samples. 2010-2019.

**laka pisloi** 'to go searching' | source: natural speech samples. 2010-2019.
laka soi 'to hunt' | BI: berburu | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

laka terus 'go straight ahead' | source: natural speech samples. 2010-2019.

laka tima bo wai ngapu 'to go upstream' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this literally means 'walk inland toward the head of the water'.

laka yai 'walk' | BI: jalan kaki | collected on: (S) source: numerous 2010–2019. note: literally 'walk leg'.

laka-laka 'road' / 'path' | BI: jalanan | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

lakafa 'to yawn' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this form is likely an alternate pronunciation of 'breathe' / 'inhale' bakafa. See also bakafa aya.

lal (1) 'inside' ('heart' in the symbolic sense and perhaps the literal sense as well depending on village.) | BI: dalam | collected on: (S) source: numerous 2010–2019. note: see also tuka.

lal (2) 'heart' | BI: jantung | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

lal (3) 'liver' | BI: hati | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

lal (4) 'intestines' | BI: usus | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu, Falahu tribes 2014.

lal basah 'angry' | collected on: (S) source: numerous 2010. note: literally 'inside anger.

lal basahn 'angry' (general) | BI: marah | collected on: (S) source: three to five consultants 2010–2019. note: there is quite likely a whispered a breaking apart the hn cluster, as hana is another form for 'angry'.

lal bena 'jealous anger' e.g. ak lal bena 'I'm filled with jealousy' | BI: iri hati | collected on: (S) source: numerous 2010–2019.


lal gika 'jealous' | collected on: (S) source: numerous 2014.
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_lal kangelo_ 'sad' / 'heart break' / 'emotional' | BI: emosionil | collected on: (S) source: numerous 2010.

_lal masusa_ 'sad' / 'heart break' | collected on: (S) source: numerous 2010.

_lal senang_ 'happy' / 'comfortable' | collected on: (S) source: numerous 2010.

_lal suka (1)_ 'glad' / 'like' / 'happy' / 'celebrate' / 'surprise' | BI: senang | collected on: (S) source: numerous 2010–2019. note: literally 'inner like'.

_lal suka (2)_ 'to like a lot' / 'to love' | source: natural speech samples. 2010-2019.

_lal sukasuka_ 'favorite' | collected on: (S) source: numerous 2010.


_lali_ 'liver' | BI: hati | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

_lama_ 'eye' | collected on: (M) source: numerous 2014. note: see also _hama_.

_lama ka'oki_ 'blind' | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also _hama_ kaok.

_lama pasang gili_ 'squinting' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

_lama tina_ 'forehead' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

_lamatuka_ 'face' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also _lug_.

_lamida lila_ 'chin' | collected on: (M) source: three to five consultants 2014.

_lamper_ 'lamp' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: loan from Malay.

_lamua_ 'so' / 'in order to' | BI: untuk | collected on: (M), Mangon village source: two to three consultants 2014.

_lan_ 'sky' | BI: langit | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


_langpama_ 'Moorish idol' (zanclus cornutus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.
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**lani (1)** 'almost' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**lani (2)** 'sky' | BI: langit | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**lani (3)** 'near' | BI: dekat | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**lap** 'slap' | BI: tempeleng | collected on: (M), Ulfoa village source: two to three consultants 2015. note: see also *sapa*.

**lapa lapa, la'apa** 'butterfly' | BI: kupu-kupu | collected on: (M), (S), Malbufa village source: three to five consultants 2010–2019.

**lapi (lapi-lapi)** 'parrotfish' (scaridae) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**las ot(i)** 'foreskin' (vulgar) | BI: kulup | collected on: (S), (M) source: numerous 2015. note: be careful with this word. Directing it at a person is a severe insult, and can instigate violence.

**lasa** 'langsat fruit' (lansium parasiticum) | collected on: (S) source: numerous 2010.

**lat pel** 'late' (late for an event) | BI: terlambat | collected on: (S) source: numerous 2010–2019.


**lawai saota** 'thirsty' | collected on: (S) source: numerous 2010. note: literally 'throat' + 'dry'.

**lawi** 'cotton' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**lawoi sa'ota** 'thirsty' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also *saota, lawai saota*.

**lay tuka gika** 'rheumatism' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**layu** 'scorpionfish' (scorpaenidae) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**le** 'to dive' / 'to swim' | BI: selam | collected on: (S) source: single consultant 2014.

**le(h)a** 'main road' / 'local' / 'location' / 'place' / 'spot' | BI: jalan raya | collected on: (S) source: numerous 2010–2019.
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**lea bena** 'sunrise' | BI: matahari terbit | collected on: (S) source: numerous 2010–2019. note: **lea pefa bo timur do seb bo barat** 'the sun rises to the east and sets to the west'. See also **lea pefa**.

**lea kadiga** 'drought' / 'summer' / 'heatwave' | collected on: (S) source: numerous 2010. note: literally 'strong sun'.

**lea kadiga bal da bol** 'sunstroke' | BI: kelangar matahari | collected on: (S) source: single consultant 2010–2019. note: **da bol** 'sick'.

**lea lea** 'calmly' / 'placid' e.g. **wai ewa lea lea** 'the water flows gently' | BI: pelan | collected on: (S) source: numerous 2010–2019.

**lea neu** 'afternoon' / PM e.g. **hai dewika lea neu** 'tomorrow afternoon/early evening' | BI: sore | collected on: (S) source: numerous 2010–2019.

**lea ngada** 'door' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also **eamata**.

**lea nonu** 'sleeping place' | collected on: (M) source: numerous 2014. note: see also (Mangon) **liha nonu**, **leha nonu** collected on: Sanana **lea nona**, **leha nona**.

**lea pefa** 'sunrise' | BI: matahari terbit | collected on: (S) source: numerous 2010–2019. note: **lea pefa bo timur do seb bo barat** 'the sun rises to the east and sets to the west'. See also **lea bena**.

**leakau** 'steps' / 'stairs' | BI: tangga | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this is certainly false. This term means 'wood place' and is in no way specific to stairs.


**leba** 'to carry' (when carrying an item that is tied to a stick over your shoulder) | collected on: (S), Umahoya village Source: Fagudu tribe 2014.

**lef** 'to write' | BI: tulis | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.

**leha** 'space' / 'without' / 'local' / 'location' / 'place' e.g. an open space | BI: tempat | collected on: (S) source: numerous 2010–2019.

**leha bamap** 'kitchen' | BI: pohon dapur | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: Mango form is likely **lea bamapu**.
leha gaya  'dining place' | BI: ruang makan | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: change to giya in for villages that do not use gaya. Change to lea for Mangon.


leha nib  'accommodation' / 'chair' | BI: tempat menginap | collected on: (S) source: numerous 2010. note: nib means both 'to sit' and 'to reside'.

leha nib bo sahoa  'address' | BI: alamat | collected on: (S) source: numerous 2010–2019. note: literally 'place reside at where'.


lei  'to swim' | collected on: (S) source: numerous 2010.


lela fatu (1)  'back' | collected on: (M) source: three to five consultants 2010.

lela fatu (2)  'breast' | BI: i.e. 'chest' | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

lemak  'grease' | BI: lemak | collected on: (M), Wai U village source: numerous 2014. note: loan from Malay.

lepa (1)  DIRECTION either clockwise or counterclockwise around island depending on village | BI: di atas | collected on: (S) source: numerous 2010–2019. note: directions: lepa 'up' and neu 'down' correspond to clockwise and counterclockwise depending on the village. Directions: tema 'inland' and fai 'seaward' are universal in Sula.

lepa (2)  'above' / 'on top of' | BI: di atas | collected on: (S) source: numerous 2010–2019.


lepa (4)  'on' / 'over' / 'up' | source: natural speech samples. 2010-2019.

lepa, la lepa  'above' | BI: [di] atas | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

lepayau  'high' / 'hight' / 'tall' | BI: tinggi | collected on: (S), Pastina village source: numerous 2010–2019.

leu  'hole' | collected on: (S) source: numerous 2010.

leya bira pit 'suneclipse' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

li 'voice' / 'word' / 'sound' / 'language' / 'speech' | BI: suara | collected on: (S) source: numerous 2010–2019.

li sei 'hoarse' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

li'i, lii, li 'language' | collected on: (S) source: numerous 2010.

lia 'sun' | collected on: (M) source: three to five consultants 2010.

lia buba 'warm' | BI: matahari panas | collected on: (M) Kampung Waitina source: (tribe-based variation elicitions) Mangon tribe 2014.

liangada 'to knock' (consecutive strikes) e.g. knock at the door | BI: mengetuk | collected on: (M), Waitulia village source: single consultant 2014.

lida 'mountain' / 'hill' | BI: gunung | collected on: (S) source: numerous 2010–2019. note: literally 'mountain up far'.

lida duku 'volcano' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also lida ap.

lida lepayau 'plateau' | BI: dataran tinggi | collected on: (S) source: two to three consultants 2010–2019. note: literally 'mountain up far'.

lida ma'ihī 'hill' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

lida'ap 'volcano' | BI: gunung api | collected on: (S) source: numerous 2010–2019. note: literally 'mountain fire'.

lif (1) 'writing' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.


lif (3) 'to turn halfway, 90 degrees' e.g. (1) lif hifa 'turn to' (2) lif hafa 'turn fro' | BI: belok | collected on: (S) source: numerous 2010–2019.

lif (ila) kul 'turn right' | source: natural speech samples. 2010-2019.

lif (ila) tapa 'turn left' | source: natural speech samples. 2010-2019.

lif gehi 'turn around' | source: natural speech samples. 2010-2019.

lif puta 'to turn completely, 180 degrees' | BI: berputar | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
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lifi 'to turn halfway, 90 degrees' | BI: bélok | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

liha nona 'sleeping place' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also (Mangon) lea nonu, leha nonu collected on: Sanana lea nona, leha nona.

lika 'to choose' | BI: memilih [pilih] | collected on: (S) source: numerous 2010.

lil 'to weave' / 'to braid' | BI: tenuhan | collected on: (S) source: numerous 2010–2019.

lila tembaga 'cannon' | BI: meriam | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

lili siyo 'to weave' / 'to braid' | BI: menenun | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

lima 'hand' | BI: tangan | collected on: (S) source: numerous 2010.

lima al 'palm of the hand' | BI: telapak tangan | collected on: (S) source: numerous 2010.

lima foku, lima foka 'knuckle' | BI: buku | collected on: (M), (S) source: numerous 2010–2019. note: lima foku is the Mangon form. The Sanana form is lima foka.

lima kaku (wangga) 'finger' | BI: jari | collected on: (M) source: three to five consultants 2014.

lima kaku wango nini 'thumb' | BI: ibu jari | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: Mangon form. For Sanana form, see also lima koka wana aya.

lima kau 'arm' | BI: lengan | collected on: (S) source: numerous 2014.

lima koka (wana) 'finger' | BI: jari | collected on: (S) source: numerous 2014.

lima koka wana aya 'thumb' | BI: ibu jari | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Sanana form. For Mangon form, see also lima kaku wango nini.

lima koka wana istinja 'ring finger' | BI: jari manis | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I collected 'ring finger' as limawana mina.

lima koku (wangga) 'finger' | BI: jari | collected on: (M) source: three to five consultants 2014.

lima lafa 'hand' | BI: tangan | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
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**lima tuka**  'palm of the hand' | BI: telapak tangan | collected on: (M) source: three to five consultants 2010.

**lima wana meihi**  'little finger' | BI: jari kecil | collected on: (S) source: numerous 2014.

**lima wana patub**  'indexfinger' | BI: jari telunjuk | collected on: (S) source: numerous 2014.

**lima wana tena, lima wanga tenga**  'middle finger' | BI: jari tengah | collected on: (S), (M) source: numerous 2010. note: Mangon form has ng, Sanana form does not.

**lima wanga, lima wana**  'finger' | BI: jari | collected on: (M), (S) source: three to five consultants 2014. note: lima wanga is the Mangon form, and lima wana is the Sanana form.

**lima wango nana**  'little finger' | BI: jari kecil | collected on: (M) source: three to five consultants 2014.

**limpa**  'debt' | BI: hutang | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**limu cui**  'lemon' | BI: lemon | collected on: (M) source: three to five consultants 2014.

**limu kia**  'grapefruit' | BI: jeruk bali | collected on: (M) source: three to five consultants 2014.

**lin**  'flare up' / 'inflammation' | BI: peradangan | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**ling**  'slant' / 'slope' | BI: miring | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**lipa (1)**  'above' / 'upper' | BI: di atas | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: archaic. See also lepa.

**lipa (2)**  'debt' | BI: hutang | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**lipa yau**  'high' | BI: tinggi | collected on: (S) source: numerous 2014.

**lira**  'mountain' | BI: gunung | collected on: (S) source: from a Facei tribe member 2010. note: see also lida.

**lispeu**  'headcloth' (for men) | BI: kain kepala | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**liya bakampu**  'suneclipse' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
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**loda** 'to scatter seeds' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**lofi** 'to grill' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**lohi** 'to commit adultery' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**loi** 'bone' | collected on: (M) source: three to five consultants 2010.

**loi (1)** 'triggerfish spine' | collected on: (M), Waitulia village source: Waitulia fishermen 2014. note: *loi/hoi* means 'bone', so I'm uncertain if this is also a specific term for a triggerfish spine.

**loi (2)** 'bone' | collected on: (M) source: numerous 2014. note: see also *hoi* collected on: Sanana.

**loi (3)** 'earth' (ground) | BI: tanah | collected on: (M) source: three to five consultants 2014.

**loi (4)** 'bone' | BI: tulang | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**loi (5)** 'thorn' | collected on: (M) source: natural speech samples. 2010-2019.

**loiu** 'back' | BI: punggung | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**loleu** 'harbor' | collected on: (S) source: two to three consultants 2014. note: Holle postulates this as a Ternate loan.

**lopa (1)** 'to gather' | collected on: (S) source: numerous 2014. note: Sanana form. For Mangon form, see also *lopu*.


**lopu** 'to gather' | collected on: (M) source: two to three consultants 2014. note: Mangon form. For Sanana form, see also *lopa*.

**losi-losi, los-los** 'few' / 'little (quantity)' | collected on: (M), (S) source: numerous 2010.

**lota** 'boat' e.g. (1) *lota (don) soba* 'sailboat' (2) *lota aya* 'large boat' | BI: perahu layar | collected on: (S) source: numerous 2010–2019. note: see also *bodi, jonson*.

**lu** 'a little' / 'few' | collected on: (S) source: numerous 2014.

**lu-lu (1)** 'half' | BI: setengah | collected on: (S) source: numerous 2010–2019.

**lu-lu (2)** 'half' | source: natural speech samples. 2010-2019.

**lu'u** 'few' | collected on: (S) source: numerous 2010.
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lua 'to vomit' / 'to throw up' | BI: muntah | collected on: (M) Kampung Waitina, (S) Kampung Umalo, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.

lua(h) 'vomit' | BI: muntah | collected on: (M) source: three to five consultants 2010.


luba 'spill' | collected on: (S) source: numerous 2010.

lubayon 'mouth' | collected on: (S) source: numerous 2010.

lubayon foa 'mustache' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

lug (1) 'face' | BI: wajah | collected on: (S) source: numerous 2010–2019.

lug (2) 'across from' / 'opposite' / 'in front of' | source: natural speech samples. 2010-2019.

lug (3) 'forward' / 'front' | BI: muka | source: natural speech samples. 2010-2019.

lug de lug 'opposite' (face to face) | source: natural speech samples. 2010-2019.

luk 'to hold' | BI: menggenggam | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

luku 'to hold' | BI: menggenggam | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

lulu 'few' / 'little (quantity)' | BI: sedikit | collected on: (S) source: numerous 2010–2019.


lut foya 'smallpox' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: thanks to vaccines, this word is no longer necessary.

luti foya 'smallpox' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: thanks to vaccines, this word is no longer exists.

ma ga'a 'relax' | BI: bersantai | collected on: (S), Fatkouyun village Facei tribe 2014.

ma lia 'to swallow' | collected on: (S) source: two to three consultants 2014. note: abbreviated form of man sumbulia.


ma- lia 'to swallow' | source: natural speech samples. 2010-2019.

ma'af 'excuse me (ice breaker)' | collected on: (S) source: numerous 2010. note: loan from Malay.
ma'ana, maana, mana 'man' (human and animal) | BI: pria | collected on: (S), (M) source: numerous 2010.

ma'angu 'drunk' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

ma'apa 'butterfly' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

ma'oma 'weak' | collected on: (S) source: single consultant 2014. note: see also ma'uta.

ma'untu 'ripe' | collected on: (M) source: three to five consultants 2010.

ma'uta 'paralyzed' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.


maana 'man' / 'male' | BI: laki-laki | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

maanama'ana 'man' / 'male' | BI: laki-laki | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

macan 'tiger' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.


mada 'to be awake' | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also mara. Holle postulates this as a Ternate loan.


mafai 'to swell' / 'inflammation' | BI: membengkak | collected on: (S); (M), Ulfoa village source: numerous 2010–2019. note: see also maufai.

magaa (1) 'silent' | BI: diam | collected on: (S) source: single consultant 2014.

magaa (2) 'until' e.g. (1) maga.a aduk pihu 'until I come back again' (2) uya maga bauhi 'it will rain until night' | BI: sampai | collected on: (S) source: numerous 2010–2019.

maha 'ripe' | BI: matang | collected on: (S) source: numerous 2010–2019. note: see also bamata 'unripe'.

maha'aya 'light' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
mahak  'sick' | BI: sakti | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.
mahal 'expensive' | collected on: (S) source: numerous 2010. note: loan from Malay.
mahara 'to scream' / 'to hate' | BI: berteriak, benci | collected on: (S) source: two to three consultants 2010. note: Holle postulates this as a Ternate loan.
mahi (1) 'sea' | BI: laut | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
mahi (2) 'soup broth' | BI: kaldu | collected on: (S), (M) source: numerous 2010–2019.
mahi (bo) lal 'bay' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: lit. ocean' + LOC + 'inside'.
mahi bena 'tsunami' | collected on: (S) source: numerous 2010. note: literally 'ocean climb'.
mahi, ma'i, mai 'ocean' / 'sea' | BI: samudera | collected on: (S) source: numerous 2010.
mahisa 'chili pepper' | collected on: (S) source: single consultant 2010. note: see also rica.
mahoka 'dull' / 'blunt' | BI: tumpul | collected on: (S) Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Falahu, Facei tribes 2014.
mahuba 'hurricane' / 'typhoon' | collected on: (S) source: numerous 2010.
mahubo 'storm' | collected on: (S) source: numerous 2014. note: Mangon form. For Sanana form, see also mahuba.
mai (1) 'but' | BI: tetapi | collected on: (S) source: numerous 2010–2019.
mai (2) 'even' | BI: pun | location: unknown source: Umaternate 2013.
mai (3) 'let's' e.g. (1) mai ol 'let's begin' (2) mai bosu tabaku 'let's smoke' | BI: mari | collected on: (S), (M) source: numerous 2010–2019.
mai (4) 'side-dish' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
mai (dad) ol 'let’s start' | collected on: (S), Umahoya village Source: Fagudu tribe 2014.
mai babiru 'blue' | BI: hijau | collected on: (M) Kampung Waitina source: (tribe-based variation elicitation) Mangon tribe 2014. note: literally 'ocean green'.
mai dad 'could' / 'may' / 'might' / AUX | source: natural speech samples. 2010-2019.
mai-mai 'dust' | BI: debu | collected on: (S) Kampung Wailau source: (tribe-based variation elicitation) Falahu tribe 2014.
maisa 'chili pepper' | BI: cabai | collected on: (M), Capuli village source: single consultant 2015. note: Mangon dialect as reported by Ulfoa speaker.
mak bobai 'dating (courtship)' | BI: berpacaran | collected on: (S) source: numerous 2010–2019. note: literally 'meet' + 'romantic partner'.
mak dahi 'to meet up' | BI: bertemu | collected on: (S) source: numerous 2010–2019.
mak nau 'to introduce' | BI: kenalkan | collected on: (S) source: numerous 2010–2019.
mak-bobai 'to date' | source: natural speech samples. 2010-2019.
mak-dahi 'to meet' | source: natural speech samples. 2010-2019.
mak-nau 'to introduce' | source: natural speech samples. 2010-2019. note: literally 'make known'.
maka boa 'tired' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: see also maroya, makaba, makabo.
maka didi 'fever' / 'cold (illness)' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also dagis, degis.
**maka'ita** 'to be wrecked' e.g. shipwreck | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**makaba** 'tired' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: see also maroya, makabo, maka boa.

**makabo** 'tired' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: see also maroya, makaba, maka boa.

**makahor** 'earthworm' / 'intestinal worms' | BI: cacing | collected on: (S) source: numerous 2010.

**makan** 'wound' / 'injury' / 'cut' / 'infection' / 'pain' | BI: infeksi | collected on: (S) source: numerous 2010–2019.

**makaor** 'worm' | BI: earthworm | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**makariu** 'to split' | BI: membelah | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**makata** 'medicine' / 'herbs' / 'magic' | BI: jamu | collected on: (S) source: numerous 2010–2019.

**makata geka dahi bakatai** 'menstrual pain medicine' | collected on: (S) source: numerous 2010–2019.

**maki** 'tongue' | BI: lidah | collected on: (M) source: numerous 2010–2019. note: Mangon form. For Sanana form, see also mak.

**maki dahi** 'to meet' | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also mak dahi.


**makjad bakai** 'betrothal' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**makodi** 'earthworm' | BI: cacing | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**makodn** 'worm' | BI: earthworm | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014. note: final n seems to be non-phonemic.

**makoha** 'cool (temp)' | BI: sejuk | collected on: (S) source: numerous 2010–2019.

**makosa** 'big' | collected on: (S) source: numerous 2010.
maku  'wave' | collected on: (M) source: three to five consultants 2014. note: see also mok.
maku lawa  'enemy' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
malawanan  'defeat' e.g. Jerman malawan Spanyol 'Germany beat Spain' | BI: kekalahan | collected on: (S) source: numerous 2010–2019.
male  'small' | BI: kecil | collected on: (M) source: three to five consultants 2010.
malee  'small' | BI: kecil | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
malel pel (less common)  'after' | BI: sesudah | collected on: (S) source: numerous 2010–2019.
malil  'empty' | collected on: (S) source: numerous 2014.
mama (2)  'to chew' | BI: mengunyah | collected on: (M) (CMD region), Kampung Wa i U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
mama kaka  'uncle' / 'mother's older brother' | collected on: (S) source: numerous 2014.
mama tiba  'MBo' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
mamanto  'cramp' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
mamei  'shy' / 'ashamed' | BI: malu | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also mahal.
mamfai  'to swell' | BI: membengkak | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
mamfuwa  'young' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
mamihi  'shy' / 'ashamed' | BI: malu | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan. See also mahal.
mampai  'bitter' | collected on: (M) source: numerous 2014. note: see also mpai.
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**mamu** 'iron' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**mamui** 'laugh' | collected on: (M) source: three to five consultants 2010.

**man** 'bird' / 'chicken' | BI: burung | collected on: (S) source: numerous 2010-2019. note: Sanana form. See also manu for Mangon form.

**man camo** 'heron' | collected on: (M) source: two to three consultants 2014. note: see also tayoya.

**man fina** 'hen' | collected on: (S) source: numerous 2014. note: literally 'female chicken'.

**man in yai koku** 'bird's foot' | BI: kaki burung | collected on: (M), Waitulia village source: single consultant 2014.

**man kau (goga)** 'bird' (other than chicken) | BI: burung | collected on: (S) source: numerous 2010–2019.

**man kau (goga) in foa** 'feather' | BI: bulu | collected on: (S) source: numerous 2010–2019. note: literally 'bird' + 'tree' + 'on' + POSS + 'feather'.

**man ma'ana** 'rooster' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: this isn't so much a word for rooster as an explanation 'male chicken'. The consultant likely translated the interviewer's description directly.

**man nana tahai** 'chicken' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**man pani** 'wing' | BI: sayap | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**man sumbulia** 'to swallow' | collected on: (M) source: single consultant 2014. note: see also ma lia.

**man'ei** 'ray' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**man(u)fo** 'feather' | BI: bulu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**man(u)telu** 'egg' | BI: telur | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


**mana (2)** 'sharp' | BI: tajam | collected on: (S) source: numerous 2010.

**mana (3)** 'toward' e.g. *laka mana* 'walk toward' | BI: menuju | collected on: (S) source: numerous 2010–2019.
**mana (4)**  'that' | BI: itu | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**mana (5)**  'man' | collected on: (M) source: natural speech samples. 2010-2019.

**mana afoya**  'centipede' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**mana dok**  'trade' | collected on: (S) source: numerous 2010. note: due to Sula's bizarre intervocalic devoicing process, the d in dok usually sounds like t.

**mana fau, mana pau**  'assault' / 'fight' / 'war' / 'beat with a stick' / 'hit a drum with a stick' | BI: serangan | collected on: (S) source: numerous 2010–2019.

**mana pau**  'to pound' | BI: memukul | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.


**mana, pia mana**  'man' / 'male' | BI: laki-laki | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**manabaja**  'hit on' / 'chat up' | BI: merayu | collected on: (S) source: numerous 2010–2019.

**manakem (1)**  'to hold' / 'to grasp' | BI: menggenggam | collected on: (M), Ulfoa village source: numerous 2014. note: see also *gem*.

**manakem (2)**  'to grab' (in the manner of firmly grasping another's arm) (e.g. grasping one's arm with your hand) | BI: menggenggam | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**manam**  'to kiss' | BI: mencium | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**manamumi**  'to sniff' / 'to smell' | BI: mencium | collected on: (M), Ulfoa village source: two to three consultants 2014.

**manan**  'old (for things)' | BI: lama | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.


**manapareha**  'separate' | BI: terpisah | collected on: (S) source: two to three consultants 2010–2019. note: *manapareha* is *mana + bareha*. The b becomes p due to Sula's intervocalic devoicing process described in chapter two.

manasak  'to stab, pierce' | BI: menikam | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

manat (1)  'prostitute' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this Holle list form might be correct as a euphemism, or it might simply be a near-miss concept explanation, as the basic meaning of manat is 'sensual'.


manau (1)  'occasionally' / 'sometimes' | collected on: (M) source: three to five consultants 2010. note: see also paka hia hia.

manau (2)  'old (for things)' | BI: lama | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


mandi  a fish that is either the same as or similar to the spotted puffer (guentheridia formosa) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

mandia doki  'hiccups' | collected on: (M) source: two to three consultants 2014. note: manga is 'sharp'. Mangon form. For Sanana form see also mari’a doki.

mandokahu  'predawn morning' / 'when the rooster crows' | collected on: (S) source: single consultant 2010–2019. note: lit. 'chicken' + 'and' + onomatopoeia.

maneha  'ready' e.g. maneha pel  'already ready' | BI: siap | collected on: (S) source: numerous 2010–2019.

maneha neha (1)  'straight (line)' | BI: lurus | collected on: (S) source: numerous 2010–2019.


manen (1)  'long (temporal), old (object)' | BI: lama | collected on: (S) source: numerous 2010–2019.

manen (2)  'old (for things)' | BI: lama | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahau tribe 2014.
<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
<th>Language</th>
<th>Collection Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>manen manen</td>
<td>'seldom' / 'rare' / 'uncommon'</td>
<td>BI: jarang</td>
<td>(S) source: numerous 2010-2019.</td>
</tr>
<tr>
<td>maneu</td>
<td>'old (for things)'</td>
<td>BI: lama</td>
<td>(S) Kampung Sama source: tribe-based variation elicitations Facei tribe 2014.</td>
</tr>
<tr>
<td>manfoa</td>
<td>'feather'</td>
<td>BI: bulu</td>
<td>(M), Ulfoa village source: numerous 2014. note: see also man kau (goga) in foa.</td>
</tr>
<tr>
<td>manga</td>
<td>'sharp'</td>
<td></td>
<td>(M) source: numerous 2014. note: see also mana, monga, wa, waha.</td>
</tr>
<tr>
<td>mangafau</td>
<td>'to hit'</td>
<td>BI: memukul</td>
<td>(M) Kampung Waitina source: tribe-based variation elicitations Mangon tribe 2014.</td>
</tr>
<tr>
<td>mangapadila</td>
<td>'to divorce'</td>
<td></td>
<td>(M) source: two to three consultants 2014. note: manga is 'sharp'. Mangon form. For Sanana form see also mapareha (regular correspondences).</td>
</tr>
<tr>
<td>mangati</td>
<td>'prostitute'</td>
<td></td>
<td>(M) source: entry from Holle List; unable to verify c. 1900. note: see also mahat.</td>
</tr>
<tr>
<td>mangilu</td>
<td>'sour'</td>
<td></td>
<td>(M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: archaic. See also manil.</td>
</tr>
<tr>
<td>mangis</td>
<td>'mangostene'</td>
<td>BI: mongustan</td>
<td>(S), Pastina village source: Falahu tribe farmers 2014.</td>
</tr>
<tr>
<td>mangkayo</td>
<td>'light'</td>
<td></td>
<td>(M) source: entry from Holle List; unable to verify c. 1900.</td>
</tr>
<tr>
<td>mangkuni</td>
<td>'yellow'</td>
<td></td>
<td>(M) source: entry from Holle List; unable to verify c. 1900. note: loan from Malay. See also kakon, and kokon.</td>
</tr>
<tr>
<td>manin (1)</td>
<td>'occasionally' / 'sometimes'</td>
<td></td>
<td>(S) source: entry from Holle List; unable to verify c. 1900. note: this Holle list entry is unverified, and seems dubious.</td>
</tr>
<tr>
<td>manin (2)</td>
<td>'long time'</td>
<td></td>
<td>(S) source: numerous 2010–2019.</td>
</tr>
<tr>
<td>manin moya</td>
<td>'short time'</td>
<td></td>
<td>(S) source: numerous 2010.</td>
</tr>
<tr>
<td>manip</td>
<td>'thin'</td>
<td>BI: tipis</td>
<td>(M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.</td>
</tr>
<tr>
<td>manip, manipi</td>
<td>'thin' (e.g. a thin book)</td>
<td>BI: tipis</td>
<td>(S), (M) source: numerous 2010. note: not synonymous with dagati 'narrow'.</td>
</tr>
</tbody>
</table>
manipi  'thin' | BI: tipis | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

manjanga thi  'venison' | collected on: (S) source: numerous 2010.

mankau  'bird' (term for all birds) | BI: burung | collected on: (S) source: numerous 2010–2019.


mankina a fish that is either the same as or similar to the achilles tang (acanthurus achilles) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

manparika  'to divorce' | collected on: (S) source: single consultant 2014. note: see also mapareha.

manta manu 'to have forgotten (something)' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

mantel  'egg' | BI: telur | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

mantelu, mantel  'egg' | BI: telur | collected on: (M), (S) source: numerous 2010–2019.


mantelu  'egg' | BI: telur | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

mantimiu  'cucumber' | BI: ketimun | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

mantina  'male (n&a) (person)' | BI: laki-laki | collected on: (S) source: numerous 2010–2019.

mantua  'male (n&a) (animal)' | BI: jantan | collected on: (S) source: numerous 2010–2019.

manu  'fighting cock' | BI: ayam | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this Holle entry is an error. manu is a general Mangon term for 'chicken' and 'bird'. See also man.
manu kaupetuw  'bird' | BI: burung | collected on: (M) source: three to five consultants 2010.
manu panda  'chicken' | BI: burung | collected on: (M) Kampung Waitina source: (tribe-based variation elicitation) Mangon tribe 2014.
manutelu  'egg' | collected on: (M) source: three to five consultants 2010.
manyanyi  'sing' | collected on: (M) source: three to five consultants 2010.
maota  'old' | BI: object | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitation for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
map(a)reha  'divorce' | BI: cerai | collected on: (S) source: numerous 2010–2019.
mapa  'sweat' | collected on: (S) source: numerous 2010.
mapana  'warm' | BI: hangat | collected on: (M), Capuli village source: numerous 2015.
mapo  'sweat' | collected on: (S) source: numerous 2014.
mar a  'stairs' | BI: tangga | collected on: (S) source: single consultant 2014.
mara (mara)  'awake' | collected on: (S) source: numerous 2010–2019. note: Sanana form. For Mangon form, see also mada. Holle postulates this as a Ternate loan.
Maret  'March' | source: natural speech samples. 2010-2019.
mari'a  'belch' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
mari'a doki  'hiccups' | collected on: (S) source: numerous 2014. note: Sanana form. For Mangon form, see also mandia doki.
mariu  'aid' / 'assistance' / 'assist' / 'to help' | BI: bantuan | collected on: (S) source: numerous 2010–2019.
mariu matapia  'care for, look after' e.g. mariu matapia  'care for someone' | BI: memelihara | collected on: (S) source: numerous 2010–2019.
maryu  'ally' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
marofa  'straight' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
maroya (1)  'paralysed' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I am skeptical of this Holle list form. maroya means 'tired', and so it is easy to imagine a miscommunication when miming paralysis.
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maroya (2)  'tired' | BI: capek | collected on: (S) source: two to three consultants 2010–2019. note: see also makaba, makabo, maka boa.

martel  'hammer' | BI: palu | collected on: (S) source: single consultant 2010–2019. note: I hope this is not a Dutch loan from 'torture'. See also martil.

martil  'hammer' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I hope this is not a Dutch loan from 'torture'. See also martel.

marui  'live' / 'to be alive' / 'on' (as with a lightbulb) | BI: hidup (give example) | collected on: (S) source: numerous 2010–2019.


masusa  'unfortunate' / 'poor' | collected on: (S) source: numerous 2010.

mat  possible active sentence AUX / contraction of matua 'old' as in matnana 'elder' | source: natural speech samples. 2010-2019.

mat nana fina  'older woman' | collected on: (S) source: numerous 2010.

mata (1)  'death' / 'dead' / 'to die' / 'to be dead' | BI: kematian | collected on: (S) source: numerous 2010–2019.

mata (2)  'off' (as with a lightbulb) | BI: mati | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.


mata pia bau awa  'farmer' | BI: petani | collected on: (S) source: numerous 2014. note: literally 'person who does farm field'.

mata pia buwa mata pia  'kidnapper' | BI: penculik | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

mata pia duduku  'midwife' | BI: bidan | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this literally means 'person who comes'.

mata pia duki, mata pia hai bosa  'guest' / 'stranger' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

mata pia fa pasia  'sorcerer' | BI: tukang sihir | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

mata pia fina  'woman' | BI: wanita | collected on: (S) source: numerous 2014.

mata pia matua nkol  'dwarf' | BI: kerdil | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

mata pia nau makata  'traditional medicine practitioner' | BI: dukun | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise not noted c. 1900.
Sula

noted c. 1900. note: this entry from Holle is not in fact a lexical item. It is no doubt a phrasal translation of the elicitor's description. This phrase simply states 'person who knows medicine'.

**mata pia perumpa** 'pirate' | BI: bajak laut | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**mata pia sosa** 'criminal' | BI: pidana | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**matalin** 'to forget' | BI: lupa | collected on: (S) source: numerous 2010.

**matapia** 'human being' / 'mankind' / 'society' | BI: orang | collected on: (S) source: numerous 2010–2019. note: see also *pia*.


**matapia babota** 'butcher' | BI: tukang daging | collected on: (S) source: numerous 2010–2019.

**matapia bamaha** 'merchant' | collected on: (S) source: numerous 2010.


**matapia basa (2)** 'guest' | BI: tamu | collected on: (S) source: two to three consultants 2010–2019. note: it is unclear how widespread this usage is.

**matapia bau-awa** 'farmer' | source: natural speech samples. 2010-2019.

**matapia baumaneha hal** 'problem solver' (person of conflict resolution, counselor) | collected on: (S) source: numerous 2010.

**matapia binaka** 'corrupt' | BI: korup | collected on: (S) source: numerous 2010–2019.

**matapia bumeha** 'lost (person)' | BI: tersisat | collected on: (S) source: numerous 2010–2019.

**matapia bumohi** 'lost (person)' | BI: tersisat | collected on: (S) source: numerous 2010–2019.

**matapia duki** 'guest' | BI: tamu | collected on: (S) source: numerous 2010–2019.

**matapia hia** 'someone' | BI: seseorang | collected on: (S) source: numerous 2010–2019.

**matapia makata** 'doctor' (traditional medicine) | collected on: (S) source: numerous 2010. note: literally 'person medicine'.

**matapia mana, matapia ma'ana** 'man' | collected on: (M) source: three to five consultants 2014.


matilali  'confusing' | BI: membingungkan | collected on: (M), Waitulia village source: single consultant 2014.

matnana (1)  'elder' / 'spouse' | source: Ida collected on: (S) source: numerous 2010–2019. note: through metonymy, this word can mean many things. In this way, it also can function as a formal third person pronoun.

matnana (2)  'my old man' / 'my old lady' (informal 'spouse') | source: natural speech samples. 2010-2019. note: literally 'elder'.

matnana (3)  'parent' (honorific) | source: natural speech samples. 2010-2019. note: literally 'elder'.


matopa  'circle' | collected on: (S) source: numerous 2014. note: see also matupa (Mangon).

matpebi  'tail' | collected on: (M) source: three to five consultants 2010.

matua  'leader' / 'elder' / 'old' / 'ripe' ('old' people and objects) | BI: pemimpin | collected on: (S) source: numerous 2010–2019. note: matua kampung (village elders).

matupa  'circle' | collected on: (M) source: two to three consultants 2014. note: see also matuopa collected on: Sanana.


mau (2)  'useful' | BI: berguna | collected on: (S) source: numerous 2010–2019.

mau (3)  'to wish' / 'to want' | BI: ingin | source: natural speech samples. 2010-2019.

maufai  'to swell' | BI: membengkak | collected on: (M), Ulfoa village source: numerous 2014. note: see also mafai.


mbaso  'heart' | collected on: (M) source: single consultant 2014. note: see also lal, tuka.
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**mboli** 'to roll' | BI: menggulung | collected on: (M), Waitulia village source: numerous 2014. note: possible loan Dutch, *bal*, probably by way of Malay *bola*. The *n* is likely an expletive prefix.

**mboni** 'mouth' | collected on: (M) source: three to five consultants 2010.

**mboni foro** 'moustache' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**mboni koli** 'lips' | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also *nbayon kol*.

**mboya** 'tail' | collected on: (S) source: numerous 2014. note: compare (Mangon) *mboyu*, *nboyu*, *boyu*, collected on: Sanana *nboya*, *boya*.

**mboyu** 'tail' | BI: ékor | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**me'u** 'rope' | BI: tali | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**me(')u** 'rope' / 'string' | BI: tali | collected on: (S) source: numerous 2010–2019.

**mehi (1)** 'small' | BI: kecil | collected on: (S) source: numerous 2014. note: see also *mehi*.


**mehi nana** 'child' | BI: anak | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**Mei** 'May' | source: natural speech samples. 2010-2019.

**meihi** 'small' | BI: kecil | collected on: (S) source: numerous 2014. note: see also *mehi*.

**meikap** 'cosmetics' | BI: bahan kecantikan | collected on: (S) source: single consultant 2010–2019. note: loan from 'make up'.

**meja** 'table' | collected on: (S) source: numerous 2010.


**memang** 'still' / 'yet' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**memanta** 'unripe' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: likely loan from Malay 'matang'.

**mena (1)** 'sad' / 'to cry' / 'to weep' | BI: menangis | collected on: (S) source: numerous 2010–2019. note: see also *minga*, *mina*.

**mena (2)** 'front' | source: natural speech samples. 2010-2019.

**menga** 'to cry' | BI: menangis | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
mengaku moya  'to deny' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

menit  'minute' | source: natural speech samples. 2010-2019.

menjanga  'deer' | BI: rusa | collected on: (S), (M), Capuli village source: numerous 2014, 2015.


menyanyi  'to sing' | collected on: (S) source: numerous 2014. note: loan from Malay.


meu  'rope' | BI: tali | collected on: (M) Kampung Waitina, (S) Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Falahu, Facei tribes 2014.

meu bolila  'from above' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.


mewa  'bamboo basket' (for catching crabs) | collected on: (S), Wai Ipa beach source: numerous 2014.

mi'a  'red' | BI: mérah | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

mi'u  'rope' | collected on: (S) source: single consultant 2010. note: see also meu.

mi(')a  'red' | BI: merah | collected on: (S) source: numerous 2010. note: mi'a is CMD from Wai U village.

mia (1)  'monkey' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

mia (2)  'red' | BI: méra | collected on: (M) Kampung Waitina, (S) Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Falahu, Facei tribes 2014.

mia tahai  'pink' | BI: merah jambu | collected on: (M), Ulfoa village source: single consultant 2015.

miha  'sister-in-law WBW' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
miki  'evil spirit' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

min (1)  'nose' | BI: hidung | collected on: (S) source: numerous 2010.

min (2)  'mucus' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this Holle list entry is plausible, but it was not verified. The interviewee likely misunderstood when pointing toward the nose, as the basic meaning of min is 'nose'. This could be a case of metonymy.


mina (1)  'to weep' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also mena, minga.

mina (2)  'before (temporal)' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

mina (3)  'sweet' / 'delicious' | collected on: (S) source: numerous 2010.


minga  'to weep' | collected on: (M) source: two to three consultants 2014. note: see also mena, mina.

mingu  'mucus' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

misa  'chili pepper' | BI: cabai | collected on: (M), Capuli village source: single consultant 2015.

mit  'black' | BI: hitam | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

mit gab  'fog' | BI: kabut | collected on: (M), Wai U village source: numerous 2014. note: see also fangara.

mit(i)  'dark' / 'black' | BI: gelap | collected on: (S), (M) source: numerous 2010–2019.

mita  'wet' | BI: basa | collected on: (S) source: numerous 2014. note: see also meta.

miti  'black' | BI: hitam | collected on: (M) (CMD region), all villages source: targeted elicitions for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

mo  COMMAND WORD | collected on: (M), Wai U village source: single consultant 2015. note: in Wai U village (but apparently not universally), mo is a phrase-
initial particle that signals a command. There is no English equivalent. *mo laka bo uma* 'Go home!'.

**moa** 'sinks' / 'sink' | BI: penenggelam | collected on: (S) source: numerous 2010–2019.

**mofakat** 'to negotiate' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**moi** 'not yet' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I am skeptical of this form. I suspect it is *moya*.

**mok** 'wave' | collected on: (S) source: numerous 2014. note: Holle postulates this as a Ternate loan.

**mok mok** 'surf' / 'wave' | BI: ombak | collected on: (S) source: numerous 2010–2019.

**mok pisa** 'surf' / 'waves' | collected on: (S) source: single consultant 2014. note: Holle postulates this as a Ternate loan. I think it is native Sula.

**moka** 'dull' / 'blunt' | BI: tumpul | collected on: (M), Ulfoa village source: numerous 2014.

**mokawa'i** 'earthworm' | BI: cacing | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**mokayat** 'evil spirit' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**molai** 'main' | BI: utama | collected on: (S) source: numerous 2010–2019.

**moma** 'to hit' / 'to slap' / 'hit with a stick' / 'lash' | collected on: (S) source: numerous 2010.

**momu** 'to pound' / 'beat' | collected on: (M) source: natural speech samples. 2010–2019.

**mon (1)** second-person singular pronoun (informal) | BI: anda | collected on: (S), (M) source: numerous 2010–2019. note: second-person singular pronoun. Preverbal agreement marker: *gu*-.

**mon (2)** 'thou' | BI: engkau | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Facei tribes 2014. note: I am skeptical of this form. The formal second person is almost certainly *kim* in all villages, and the informal is almost certainly *mon*. This likely resulted from responses where the consultants were not considering a formality difference between the prompts, *kamu* and *anda*.

monca (1) 'piper betel' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
monca (2) a fish that is either the same as or similar to the green jobfish (aprion virencens) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.
moncalefa 'lizardfish' (synodus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.
monga 'sharp' | collected on: (M) source: single consultant 2014. note: see also mana, manga, wa, waha.
mora 'ot 'tornado' | BI: angin topan | collected on: (S) source: numerous 2010.
mora (bufa) 'wind' | BI: angin | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.
mora kadiga 'strong wind' | BI: angin kencang | collected on: (S) source: numerous 2010.
mora laka 'to blow as the wind' | BI: bertiup | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.
mora,(bufa) 'blowing wind' | BI: angin | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.
moru 'wind' | collected on: (M) source: natural speech samples. 2010-2019.
mot (1) 'follow' / 'join' e.g. a-mot sekola feu, I joined the new school | BI: ikut | collected on: (S) source: numerous 2010–2019.
mot (2) AUXILIARY | source: natural speech samples. 2010-2019.
mot mau 'want', 'shall', 'will', 'should' / AUX | source: natural speech samples. 2010-2019.
mot mot faa pia 'vegetarian (person)' | BI: pengikut aliran vegitarian | collected on: (S) source: single consultant 2010-2019. note: I am skeptical of this entry.
mota 'warm' / 'hot' / 'burn' | BI: panas | collected on: (S) source: numerous 2010.
motu 'old fruit' / 'mature fruit' e.g. nui motu 'mature coconut' (vs. young green coconut) | collected on: (M), Waitulia village source: numerous 2014.
moya 'not' / 'no' | BI: tidak | collected on: (S) source: numerous 2010–2019. note: see also moyu for Mangon form.
**moya da, moya ta (1)** 'last (previous)' | BI: sebelumnya | collected on: (S) source: numerous 2010–2019.

**moya da, moya ta (2)** 'never' | BI: tidak pernah | collected on: (S) source: natural speech samples. 2010-2019.

**moyu** 'not' / 'no' | BI: tidak | collected on: (M) source: numerous 2010. note: Mangon form. See also *moya* for Sanana form.

**mpan** 'wing' | BI: sayap | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**mpani** 'wing' | BI: sayap | collected on: (M), Ulfoa village source: numerous 2014. note: prenasal is expletive. See also *pani, npani*.

**mping** 'ear of corn' / 'tuft of rice' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**mua** 'all' | BI: semua | collected on: (S) source: numerous 2014.

**mua mua** 'all' / 'everything' / 'everyone' | BI: semua | collected on: (S) source: numerous 2010–2019.

**mua pel** 'finish' / 'after' / 'last' / 'final' | BI: akhir | collected on: (S) source: numerous 2010–2019.

**mudi** 'eugenia' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**muhi (1)** 'to smell' | collected on: (S) source: numerous 2010. note: see also *sumi*.

**muhi (2)** 'to sniff' / 'smell' | BI: mencium | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**mui** 'type of bug that eats wood' | collected on: (M), Waitulia village source: numerous 2014. note: probably 'termite'. Possibly 'weevil'.

**muka** 'in front of' | source: natural speech samples. 2010-2019.


**mulu bebe** 'small banana cultivar' | collected on: (M), Capuli village source: single consultant 2015.

**mum (1)** 'midday' / 'noon' | BI: siang | collected on: (S) source: numerous 2010–2019. note: see also *la eya*.

**mum (2)** 'iron' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**mum (3)** 'to sniff' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
**mum, mana-mum**  
'to sniff' / 'smell' | BI: mencium | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**mumam**  
'small food' / 'snack' / 'cake' | collected on: (S) source: numerous 2010.

**mumpon**  
'anvil' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**munara**  

**mungkuriu**  
'to help' | BI: menolong, bantu | collected on: (M), Waitulia village source: numerous 2014. note: see also *baku bantu*.

**mura**  
'cheap' | collected on: (S) source: numerous 2014. note: loan from Malay.

**mus lea bana**  
'summer' | collected on: (S) source: numerous 2010.

**mussa**  
'navel' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**musawai**  
'umbilical cord' | BI: tali pusar | collected on: (S), Malbufa village source: two to three consultants 2019.

**musik**  

**musti**  
'must' / AUX | BI: harus | source: natural speech samples. 2010-2019. note: likely loan from Dutch *moest* 'must' or North Moluccan Malay *musi* 'must' (itself a likely Dutch loan).

**musu**  

**musun**  
'monsoon' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**na**  
'name' | BI: nama | collected on: (S) source: numerous 2010.

**na pertama**  
'first name' | BI: pranama | collected on: (S) source: two to three consultants 2010–2019. note: *pertama* is a loan from Malay.

**na'u**  
'long (temporal)' | collected on: (M) source: numerous 2014. note: see also *nau, nahu*.

**nafa iya**  
'tomorrow' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I do not know how to parse this Holle entry other than as 'one road'. It could be something metaphorical like 'one day on the road of life', but that is a stretch.

**nafakau**  
'way' / 'road' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**nag**  
'type of edible fish' e.g. *kena nag sinanga* 'fried nag fish' | collected on: (S), Malbufa village source: single consultant 2015.

**naha (1)**  
'to scream' | collected on: (S) source: numerous 2010.
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**naha (2) 'angry' | source: natural speech samples. 2010-2019.**

**naha (3) 'punish' | source: natural speech samples. 2010-2019.**

**naha tina 'palate' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.**

**nahi era 'twins' | BI: kembar | collected on: (S) source: numerous 2010–2019.**

**nahu 'long' / 'length' | BI: panjang | collected on: (S) source: numerous 2010–2019.**

**nai 'brother' | collected on: (M) Collins 1981.**

**nak 'to know someone' a-nak mon 'I know you' | BI: kenal | collected on: (S) source: numerous 2010–2019.**

**naka 'jackfruit' | collected on: (S) source: numerous 2014.**

**nale'i, mana'u 'small' | BI: kecil | collected on: (M) source: entry from Holle List; unable to verify c. 1900.**

**nan (1) 'bath' / 'wash (oneself)' | BI: mandi | collected on: (S) source: numerous 2010–2019. note: Sanana form. See also nangu for Mangon form.**

**nan (2) 'swim' (action of swimming) | BI: berenang [renang] | collected on: (S) source: numerous 2010–2019. note: Sanana form. See also nangu for Mangon form.**

**nan hawa 'swim' (swimming as locomotion toward a destination) | BI: berenang [renang] | collected on: (S) source: numerous 2010–2019.**

**nan limayai 'to swim' | BI: berenang | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.**

**nana (1) 'child' | BI: anak | collected on: (S) source: numerous 2010.**

**nana (2) 'narrow' | BI: sempit | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.**

**nana (3) 'small' / 'little' | BI: kecil | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.**

**nana fina 'daughter' | collected on: (S) source: numerous 2010.**

**nana nana (para) 'few' / 'little' (quantity, amount) | BI: sedikit | collected on: (S) source: numerous 2010–2019.**

**nana pahaka 'nephew' | collected on: (S) source: numerous 2010.**

**nanas 'pineapple' | BI: nanas | collected on: (S), Waibau village source: numerous 2015. note: loan. See also danas.**
nangu  'to swim' | BI: berenang | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
nap (1) 'head' | collected on: (S) source: numerous 2014. note: metonymy. See also foa 'hair'.
nap (2) 'hair' | BI: rambut | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015. note: commonly meaning 'hair' through metonymy.
nap (f)oka 'head' | BI: kepala | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.
nap buhu 'brain' | collected on: (S) source: numerous 2010.
nap fat (2) 'skull' | BI: tengkorak | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.
nap fat hai 'skull' | collected on: (S) source: numerous 2014.
nap foa 'hair' | collected on: (S) source: numerous 2014.
nap foka (2) 'head' | BI: kapala | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
nap gika 'headache' | collected on: (S) source: single consultant 2014. note: see also ngapu gika, nap geka, ngapu geka.
napa fini 'grandmother' | collected on: (M) source: three to five consultants 2014.
napa nana 'grandfather' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
napa nohi 'ancestors' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.
napfatgeka 'smart' | collected on: (S) source: numerous 2010.
napu (1) 'hair' | BI: rambut | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

napu (2) 'head' | BI: kapala | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

napufoa 'hair' | BI: rambut | collected on: (M), Capuli village source: numerous 2015. note: see also nap foa / ngapu foa.

napwaka 'hair' | BI: rambut | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

naraka 'underworld' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted 2014. note: loan neraka.

nas 'bite' | BI: gigitan | collected on: (S), Umahoya village source: Fagudu tribe 2014. note: see also ngasi, uka.

nasehat 'advice' | collected on: (S) source: two to three consultants 2010. note: loan.

nau (1) 'to understand'/ 'to know'/ 'to be knowledgeable' | BI: mengerti | collected on: (S) source: numerous 2010. note: minimal pair with dau.

nau (2) 'long' | collected on: (M) source: numerous 2010. note: Minimal pair with dau. See also nau.

nau (3) 'cat' | BI: kucing | collected on: (S) source: numerous 2010–2019. note: Sanana form. Minimal pair with dau. See also ngau for Mangon form.

nau fa 'smart' | BI: pintar | collected on: (M), Capuli village source: two to three consultants 2015. note: literally 'know' + 'things'.

nau li 'a meow' | collected on: (S) source: numerous 2010–2019. note: lit. 'cat' + 'speech'.

nawa nui 'sugar palm' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: This Holle list item is likely the result of a miscommunication. The morphemes present are n- which is an expletive discussed in the grammar chapter of this volume followed by awa 'farm field' and nui 'coconut'. I suspect the interviewer attempted to explain ‘sugar palm’ by pointing to a coconut palm and describing an orchard, which the interviewee misunderstood to be asking about coconut orchards (common in Sula). See also pe’i ‘sugar palm’ and kanou, also from Holle. See also pe’i ‘sugar palm’ and kanou, also from Holle.

nayo hiha 'chin' | collected on: (S) source: numerous 2014.
**Sula**

*nbayon kol* 'lips' | collected on: (S) source: numerous 2014. note: Mangon form. For Sanana form, see also *mboni koli.*

* nboyu  'tail' | collected on: (M) source: numerous 2014. note: compare (Mangon) *mboyu, boyu*, collected on: Sanana *mboya, nboya, boya.*

*nbungi foro* 'eyebrow' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

*nbebu* 'branch' | BI: dahan | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

*nceli* 'fruit' | BI: buah | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

*nceli fatu gia* 'a piece of fruit' | BI: sebiji buah | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

*nceli ngkoli* 'rind' / 'peel' | collected on: (M) source: numerous 2010. note: Mangon form. For Sanana form, see also *fua kol.*

*nceli, kau nceli* 'fruit' | BI: buah-buahan | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

*ncili* 'fruit' | BI: buah | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: see also *nceli.*

*ncumi* 'nose' | BI: hidung | collected on: (M) source: numerous 2010. note: Mangon form. For Sanana form, see also *ne.*

*ndalia* 'durian' | collected on: (M) source: two to three consultants 2014. note: see also *dahia.*

*ndani* 'to plant' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

*ndasa wonga* 'rib' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

*ndili* 'jackfruit' | collected on: (M) source: three to five consultants 2014.

*ndong dui* 'embers' / 'coals' / 'glowing' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

*ne (1)* 'that' | BI: itu | collected on: (M), Ulfoa village source: two to three consultants 2014. note: abbreviation of *neka.*

*ne (2)* 'nose' | BI: hidung | collected on: (S) source: numerous 2010. note: Sanana form. For Mangon form, see also *ncumi.*

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**ne'e**  'nose' | BI: hidung | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**ne'i**  'nose' | BI: hidung | collected on: (S) Kampung Umaloya, Kampung Sama source: (tribe-based variation elicitations) Fagudu, Facei tribes 2014.

**ne'u**  'below' | BI: di bawah | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**ne'u heha**  'below' | BI: di bawah | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**ne(')e**  'nose' | BI: hidung | collected on: (S) source: numerous 2010–2019. note: see also *ne*.

**ne(')u (1)**  DIRECTION either clockwise or counterclockwise around island depending on village | BI: di bawa | collected on: (S), (M) source: numerous 2010–2019. note: directions: *lepa* 'up' and *neu* 'down' correspond to clockwise and counterclockwise depending on the village. Directions: *tema* 'inland' and *fai* 'seaward' are universal in Sula.

**ne(')u (2)**  'below' / 'bottom (position)' | BI: di bawa | collected on: (S) source: numerous 2010–2019.

**nee (1)**  'to point' | BI: menunjuk | collected on: (M), Ulfoa village source: numerous 2015.

**nee (2)**  'nose' | BI: hidung | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**neka**  'that' | BI: itu | collected on: (S) source: numerous 2010–2019.


**nepu**  a fish that is either the same as or similar to the redbarred hawkfish (cirrhitops fasciatus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**neu**  'below' / 'down' | BI: di bawah | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**neu bia foku**  'to descend' e.g. from a ladder | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I suspect this means 'come down from a mountain pass' (*foku* 'joint').
neu heha 'below' | BI: di bawah | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

neu, lal neu 'below' | BI: di bawah | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

nfo 'feather' | BI: bulu | collected on: (M) source: numerous 2014. note: if parsed as an expletive prenasal, this is an abbreviated form of the general word for 'hair' / 'feather' (see also fo, foa). Otherwise, the initial n is part of the contracted compound man + foa.

nforo 'body hair (animal)' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: archaic. several Mangon forms on the Holle list suggest possible loss of intervocalic r. See also foa.

nga 'name' | collected on: (M) source: numerous 2010. note: see also na.


nganting 'earring' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: Holle postulates this as a Ternate loan.

ngapu 'head' | collected on: (M) source: numerous 2014. note: see also nap.

ngapu fatu loi 'skull' | collected on: (M) source: three to five consultants 2014.

ngapu fo 'hair' | BI: rambut | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

ngapu gika 'headache' | collected on: (M) source: single consultant 2014. note: see also nap gika, nap geka, ngapu geka.

ngapu tuka gika 'cold, a' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this probably means 'headache' rather than 'a cold'. Literally it is 'sick inside head'. Usually bakef 'cough' is doubles as 'a cold'.

ngapu foro 'hair' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: if correct, this Holle form implies intervocalic r deletion within the past century. See also ngapufo.
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ngasi 'to bite' | BI: gigitan | collected on: (M) source: numerous 2010. note: see also nas, uka.
ngatina 'palate' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.
ngau 'cat' | collected on: (M) source: three to five consultants 2014.
nge 'nose' | collected on: (M) source: three to five consultants 2010.
ngkoli 'skin' | BI: kulit | collected on: (M) source: single consultant 2010-2019.
ngoi foku 'posterior' / 'buttock' | collected on: (M) source: numerous 2010. note: Mangon form. For Sanana form, see also goi foka.
ngyaya 'mother' | BI: ibu | collected on: (M), Ulfoa village source: numerous 2014.
i'i fafi 'molar' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: lit. 'tooth' + 'pig'.
i'i mata 'gums' | collected on: (M) source: three to five consultants 2014.
nib (1) 'to sit' | BI: duduk | collected on: (S) source: numerous 2010–2019.
nib (2) 'to reside' | BI: tinggal | collected on: (M) (CMD region), all villages source: numerous 2010–2019.
nib baka kihi yai 'sit (with the knees bent to one side)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
nib paha tiga 'to squat' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
nib puku tiga 'to squat' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
nibu 'sit' | collected on: (M) source: three to five consultants 2010.
nibu (1) 'to sit' | BI: duduk | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
nibu (2) 'to reside' | BI: tinggal | collected on: (M), CMD region source: natural speech samples. 2010-2019.
nihi (1) 'flesh' | BI: daging | collected on: (S) source: numerous 2010–2019. note: n is an expletive prefix.
nihi (2) 'teeth' | BI: gigi | collected on: (S) source: numerous 2010–2019.
nihi (3) 'to bite' | BI: gigit | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

nihi faf 'molar' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.
nihi mata 'gums' | collected on: (S) source: numerous 2014.

nika (1) 'that (far-away)' | collected on: (S) source: single consultant 2014. note: see also neka.
nika (2) 'to ask' | collected on: (S) source: numerous 2014.
niki 'to confess' | collected on: (M) source: single consultant 2014. note: see also hika.
nin 'earthquake' | collected on: (S) source: numerous 2014.
nini 'great' / 'large' | collected on: (M) source: numerous 2014. note: see also fanini.
nipa 'nipa palm' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

nis 'half' | collected on: (S) source: numerous 2014.
nish-nish 'piece' | BI: potongan | collected on: (S) source: numerous 2010–2019. note: see also yota-yota.
nisi 'meat' / 'flesh' | BI: daging | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014. note: see also ihi.
nisi fata 'body' | collected on: (M) source: three to five consultants 2014.

nkol matabol nahu 'slim' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: literally 'narrow' 'skin'.
nli 'to say' / 'to answer' | collected on: (M) source: numerous 2014. note: expletive n-.
See also li.

noi (1) 'lend to' | collected on: (S) source: numerous 2014.
noi (2) 'to request' / 'to ask' e.g. noi tabak 'ask for a cigarette' | BI: minta | collected on: (S) source: numerous 2010–2019.

noi limpa 'to beg' / 'to pester with requests' | collected on: (M) source: two to three consultants 2014. note: Mangon form. For Sanana form, see also noi lipa.

noi lipa 'to beg' / 'to pester with requests' | collected on: (S) source: three to five consultants 2014. note: Mangon form. For Sanana form, see also noi limpa.
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noi ma(')af 'apologize' (formal) e.g. ak a-noi ma'af 'please forgive me' | BI: permintaan maaf | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: literally 'beg' + 'apology'.

noi nika 'to ask for' | collected on: (S) source: numerous 2014.


=non POSSESSIVE CLITIC 'belongs to' (non-first-person possessors) e.g. ik bob ak non 'this is my spoon' | BI: milik | collected on: (M), Capuli village source: numerous 2015. note: Possessive morpheme. See also gon.

nona 'sleep' / 'to lie down' | BI: tidur | collected on: (S) source: numerous 2010–2019.


nona bal naha 'to lie on back' | collected on: (S) source: numerous 2014. note: Sanana form. For Mangon form, see also nonu palinga.

nona bal pif 'to lie on belly' | collected on: (S) source: numerous 2014. note: Sanana form. For Mangon form, see also nonu pal tutu.

nona bol 'to lie down' | BI: berbaring | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

nona bol (bol) 'to lie down' | BI: berbaring | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

nona boli 'to lie down' | BI: berbaring | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

nona-kega 'the routine of going to bed and getting up' | source: natural speech samples. 2010-2019.

nonako 'omen' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

nong 'charcoal' | collected on: (S) source: numerous 2014.

nongmarur 'embers' / 'coals' / 'glowing' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

nonu 'to sleep' | collected on: (M) source: numerous 2010. note: Mangon form. For Sanana form, see also nona.

nonu boli 'to lie down' | BI: berbaring | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
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**nonu palinga** 'to lie on back' | collected on: (M) source: two to three consultants 2014. note: Mangon form. For Sanana form, see also *nona bal naha*.

**nonu pal tutu** 'to lie on belly' | collected on: (M) source: two to three consultants 2014. note: Mangon form. For Sanana form, see also *nuna bal pif*.

**nopa fina** 'grandmother' | collected on: (S) source: numerous 2014.

**nopa nahi** 'ancestors' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**nora** 'pillow' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**November** 'November' | source: natural speech samples. 2010-2019.

**npani** 'wing' | BI: sayap | collected on: (M) source: numerous 2014. note: expletive *n-*.

See also *pani, mpani*.

**npeu** 'bile' | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also *peu*.

**nsoba** 'wing' | collected on: (S) source: numerous 2014. note: expletive *n*-.

See also *soba*.

**ntakali so'ofu** 'thirsty' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also *saota, lawai saota*.

**ntuka giki** 'jealous' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**nuba** 'mouth' | BI: mulut | collected on: (M) source: three to five consultants 2010–2019.

**nui** 'coconut' | collected on: (S) source: numerous 2010.

**nui kau** 'coconut tree' | BI: pohon kelapa | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.

**nui wai** 'coconut water' | collected on: (S) source: numerous 2010.

**nui wai ihi** 'coconut meat' | collected on: (S) source: numerous 2010. note: literally 'coconut water' + 'meat'.

**nuki** 'coral reef' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**nya** 'mother' | collected on: (M) source: three to five consultants 2010.

**nyai (1)** 'leg' / 'foot' | BI: kaki | collected on: (M) Kampung Waitina source: (tribe-based variation elicitation) Mangon tribe 2014.

**nyai (2)** 'leg' | collected on: (M) source: natural speech samples. 2010-2019.
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**nyaiyea** 'road' / 'path' | BI: jalan | collected on: (M) (CMD region), Kampung Wai U
source: targeted elicitations for CMD dialect description. Reference Appendix
data for number of consultants producing this form. 2015.

**nyanyi** 'poem' | collected on: (S) source: numerous 2010.

**nyawa** 'soul' / 'spirit' / 'ghost' | collected on: (S) source: entry from Holle List; unable
to verify c. 1900.


**nyaya mahua** 'stepmother' | collected on: (S) source: numerous 2014.

**o** 'The God (specific)' | collected on: (S) source: entry from Holle List; unable to verify c.
1900. note: Holle postulates this as a Ternate loan.

**oba** 'to shut' | BI: tutup | collected on: (S) source: numerous 2010–2019.

**obat** 'gun powder' | collected on: (S) source: entry from Holle List; unable to verify c.
1900. note: loan from Malay.

**obor** 'torch' | BI: obor | collected on: (M), Waitulia village source: numerous 2014.
note: likely loan from Malay. see also **pancona, padamara**.

**ofa** 'pour' | collected on: (S) source: numerous 2010.

**ofi** 'species of tuber' | collected on: (M) source: entry from Holle List; unable to verify c.
1900.

**og** 'to be silent' | collected on: (S) source: two to three consultants 2014. note: Sanana
form. For Mangon form, see also **ogu**. Holle postulates this as a Ternate loan.


**ogu** 'to be silent' | collected on: (M) source: two to three consultants 2014. note:
Mangon form. For Sanana form, see also **og**. Holle postulates this as a Ternate
loan.

**ojo** 'scramble' / 'shuffle' / 'mix' (e.g. beat an egg, shuffle dominos) | BI: aduk | collected

**ok** 'in' | BI: dalam | location: unknown source: Umaternate 2013.

**ok ok** 'quiet, whisper' | BI: sepsi | collected on: (S) source: numerous 2010–2019.

**Oktober** 'October' | source: natural speech samples. 2010-2019.

**ol** INCEPTIVE ASPECT MARKER ('from now') (said referring to others) | BI: ~sudah |
collected on: (S), (M) source: numerous 2010–2019. note: commonly directed
toward others.
ong ko foi 'drinking bowl' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this Holle term has likely dropped out of the language. People use cups and glasses now.


opa 'what' | BI: apa | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I suspect this is a Holle List error. The consultant likely repeated the Malay prompt, apa, with a Sula accent. The o and a vowel spaces frequently overlap, and this can make transcription difficult even after years of experience. See also hapa, ganao.


oros moya 'dust cloud' / 'plume' (e.g. drop something onto dusty soil) | collected on: (S) source: numerous 2010.

ot 'penis' | collected on: (S) source: natural speech samples. 2010-2019.

ot(i) 'penis' | BI: zakar | collected on: (S), (M) source: numerous 2010–2019.

ota 'one hundred' | BI: seratus | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

oti 'penis' | collected on: (M) source: natural speech samples. 2010-2019.


oya (2) 'to throw' | collected on: (S) source: numerous 2010.

oya keu 'to spit' | BI: meludah | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

oyu 'crab' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also yoya, uha.

pa 'only' | collected on: (M) source: numerous 2010. note: abbreviated form of para.

pa cagi geriha 'square' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.


pa-ka-  MULTIPLICATIVE & ORDINAL PREFIX | source: natural speech samples. 2010-2019. note: this is likely analyzed by speakers as two affixes: ga-/ka-cardinal, and pa-multiplicative and ordinal. Historically, this appears to trace back to the AN multiplicative prefix, *paka-.

pa-ka-caga'u 'two thousandth' / 'two thousand times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-cahia 'one thousandth' / 'one thousand times' | collected on: (S) source: natural speech samples. 2010-2019.


pa-ka-hu 'second' / 'twice' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-lima 'fifth' / 'five times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-ne 'sixth' / 'six times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-ota 'hundredth' / 'hundred times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-pit 'seventh' / 'seven times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-poa 'tenth' / 'ten times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-poadoga'u 'twelfth' / 'twelve times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-poadogatel 'thirteenth' / 'thirteen times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-poadohia 'eleventh' / 'eleven times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-poga'u 'twentieth' / 'twenty times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-pogalima 'fiftieth' / 'fifty times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-pogatel 'thirtieth' / 'thirty times' | collected on: (S) source: natural speech samples. 2010-2019.
pa-ka-pogatel do gahu  'thirty-second' / 'thirty-two times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-pogatel do gatel  'thirty-third' / 'thirty-three times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-pogatel do hia  'thirty-first' / 'thirty-one times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-reha  'fourth' / 'four times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-tahua  'eighth' / 'eight times' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-tel  'third' / 'thrice' | collected on: (S) source: natural speech samples. 2010-2019.

pa-ka-tsia  'ninth' / 'nine times' | collected on: (S) source: natural speech samples. 2010-2019.

paafat  'whole nutmeg' | BI: pala | collected on: (S), Malbufa village source: numerous 2015. note: possible loan from Malay pala. Also possible that pala is a loan from Sula or another local language, as nutmeg is native to Maluku.

paafua  'nutmeg fruit' | BI: buah pala | collected on: (S), Malbufa village source: numerous 2015.

paaful  'mace spice' | collected on: (S), Malbufa village source: numerous 2015. note: the red flesh surrounding whole nutmeg. dried and used in cooking and traditional medicine.

paakol  'nutmeg shell' | BI: kulit pala | collected on: (S), Malbufa village source: numerous 2015.


paca  'wipe' | collected on: (M) source: three to five consultants 2010.


pada  'imperata cylindria' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

padad  'creation' | collected on: (S) source: numerous 2010.

padamara  'torch' | BI: obor | collected on: (S), Malbufa village source: numerous 2014. note: see also pancona, obor.
padomu 'knee' | collected on: (M) source: numerous 2010. note: see also paroma collected on: Sanana.
padyanga 'attic (under the roof)' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.
pahu gan (2) 'seems to be' | source: natural speech samples. 2010-2019.
pai (1) INCEPTIVE ASPECT MARKER ('from now') (said referring to oneself) | BI: dulu | collected on: (S), (M) source: numerous 2010–2019. note: usually used when referring to oneself.
pai (2) 'ray' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
pai (3) 'two people' | source: natural speech samples. 2010-2019.
pak (1) 'to use' | source: natural speech samples. 2010-2019.
pak (2) 'wear' e.g. pak kemeja 'wear a shirt' | BI: memakai [pakai] | collected on: (S) source: numerous 2010–2019.
pak (3) 'to speak' (action of speaking a language) | collected on: (S) source: numerous 2010.
pak li Sua 'speak Sula' | collected on: (S) source: numerous 2010.
pak pai 'borrow' e.g. ta-pak pai ak lota 's/he borrows my boat’ | BI: meminjam [pinjam] | collected on: (S) source: numerous 2010–2019.
pakai 'all people' (people) e.g. kit pakai (all of us) | BI: semua | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.
pake 'use' / 'wear' | collected on: (S) source: numerous 2010.
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**paked**  'to hear' | BI: mendengar | collected on: (M) (CMD region), Kampung Wai U | source: targeted elicitations for CMD dialect description. Reference Appendix | data for number of consultants producing this form. 2015.

**pakiaki**  'all' | BI: semua | collected on: (S) Kampung Sama | source: (tribe-based variation elicitations) Facei tribe 2014.

**paktatoto**  'pounder' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: onomatopoeia?

**pal sek**  'to flip' e.g. (1) a boat (2) an egg | collected on: (M), Ulfoa village | source: single consultant 2015.

**palaka**  'ride a vehicle' / 'trek' / 'take a trip' / 'journey' | BI: perjalanan | collected on: (S) source: numerous 2010–2019.

**palu**  'to hit' | BI: memalu | collected on: (M) Kampung Waitina | source: (tribe-based variation elicitations) Mangon tribe 2014.


**pama (2)**  'to split' | BI: membelah | collected on: (M) (CMD region), Kampung Wai U | source: targeted elicitations for CMD dialect description. Reference Appendix | data for number of consultants producing this form. 2015.


**pamasi**  'rice' | collected on: (M) source: numerous 2010. note: see also *bira*.

**pamasi kakolbi**  'harvested rice' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I believe this Holle form actually means 'de-hulled rice'.

**pampres**  'diaper' / 'nappy' | BI: popok | collected on: (S) source: numerous 2010–2019. note: loan from brand name.

**pan**  'wing' | BI: sayap | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U | source: targeted elicitations for CMD dialect description. Reference Appendix | data for number of consultants producing this form. 2015.

**pana**  'to shoot with bow' | BI: memanah | collected on: (M) (CMD region), all villages | source: targeted elicitations for CMD dialect description. Reference Appendix | data for number of consultants producing this form. 2015.

**pana (do jub)**  'to stab, pierce' | BI: menikam | collected on: (S) Kampung Wailau | source: (tribe-based variation elicitations) Falahu tribe 2014.

**pana nawur**  'to twine a rope' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
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**pancona** 'torch' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this does not have the feel of a native Sula word. I suspect this is a loan, but the source is unclear. *Penerang* 'torch' from Malay seems unlikely.

**pandei** 'clever' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**pang** 'pot' (cooking) | BI: panci | collected on: (S) source: numerous 2010–2019.

**pangara** 'cloud' | BI: awan | collected on: (S) source: numerous 2014. note: see also *fangara*.

**pange** 'shield' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**panglu** 'bullet' | collected on: (S) source: single consultant (also matches Holle List) 2010. note: possible loan from Malay *peluru*.

**pani** 'wing' | BI: sayap | collected on: (M), Ulfoa village source: numerous 2014. note: see also *mpani, npani*.

**panika** 'question' | BI: pertanyaan | collected on: (S) source: numerous 2010–2019.

**paniki** 'bat' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**panoida** 'companion, friend, guide' | BI: rekan | collected on: (S) source: numerous 2010–2019. note: *panoida* is a variant of ponoida recorded in Wai U village.


**panu** 'wing' | collected on: (M) source: three to five consultants 2010.


**papa hoi** 'cheek' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**papa'oi** 'cheek' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**par hia** 'pair' | BI: sepasang | collected on: (S) source: numerous 2010–2019.

**para (1)** 'only' / 'just' | BI: hanya | collected on: (S) source: numerous 2010–2019.

**para (2)** 'cogon grass' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: I’m very dubious of this Holle list translation. My consultant accepted it, but did not produce it.


**pari** 'bitter melon' | collected on: (S) source: numerous 2010.

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**parut sa** 'sago palm ground to sawdust powder' | collected on: (M), Capuli village source: two to three consultants 2015.

**pas (1)** 'just right' | BI: pas | collected on: (S) source: numerous 2010–2019. note: likely loan from Malay.

**pas (2)** 'island' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**pas waktu** 'on time' | BI: tepat waktu | collected on: (S) source: numerous 2010–2019.

**pasa (1)** 'market' | BI: pasar | collected on: (S) source: numerous 2014. note: loan from Malay.

**pasa (2)** 'ago' / 'before' / 'past' e.g. (1) *taun pasa ik* 'one year ago' (2) *tua fat tiga yang pasa ak lal senang kadiga* 'three husbands ago, I was very happy.' | BI: lalu | collected on: (S), Waibau village source: numerous 2014.


**pastina** 'coral reef' | collected on: (M) source: three to five consultants 2010.

**pat** 'smell' e.g. (1) *pat mon* 'good smell' (2) *pat suba* 'bad smell' | BI: bau | collected on: (S) source: numerous 2010–2019. note: see also suba, pati foro.

**pata** 'corpse' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**pata bit** 'funeral ceremony' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.


**patfai** 'moldy' / 'stale' / 'old' / 'stagnant' / 'still' (milk, water) | collected on: (S), (M) source: numerous 2010.

**patfo** 'rotten' | BI: busuk | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**pati foro** 'to stink' / 'smell' | collected on: (M) source: numerous 2014. note: see also pat, suba.

**patii** 'owl' | BI: burung hantu | collected on: (M), Waitulia village source: numerous 2015.


**patok (2)** 'present' (gift) | BI: hadiah | collected on: (S) source: numerous 2010–2019.


**patsuba** 'rotten' / 'decay' | collected on: (S) source: numerous 2010. note: with emphasis on the smell of decay rather than sight or texture.

**patu** 'hoe' | collected on: (M) source: three to five consultants 2014.
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**pau**  'back' | BI: punggung | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**pe**  COMPLETIVE AND PERFECT ASPECT WORD | BI: sudah~ | collected on: (M), Waitulia village source: numerous 2014. note: abbreviated form of *pel*.

**pe'i**  'sugar palm' | BI: aren | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.

**peda**  'chopper' / 'machete' | BI: golok | collected on: (S), (M) source: numerous 2010-2019.

**pedahi**  'opinion' e.g. *mon-pe'da.hi* 'your opinion' | BI: pendapat | collected on: (S) source: numerous 2010–2019.

**pedi**  'machete' | collected on: (S) source: numerous 2010.

**pefa**  'explode' | collected on: (S) source: numerous 2010.

**pei mapai, pe'i**  'palm wine (fermented)' | collected on: (S), Waibau village source: numerous 2015.

**pei mina**  'palm juice (unfermented)' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**pel**  COMPLETIVE ASPECT MARKER ('already') | BI: sudah~ | collected on: (S), (M) source: numerous 2010–2019.


**pen (2)**  'a bunch' e.g. (1) flower bunch (2) *fia pen* 'cluster/ hand of bananas' | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.

**pena**  'pen' | source: natural speech samples. 2010-2019. note: loan.

**peng habisan**  'end' | BI: akhir | collected on: (S) source: numerous 2010–2019.

**pena bisan**  'last' (final) | BI: terakhir | collected on: (S) source: numerous 2010–2019.

**pengi**  'a bunch' e.g. (1) flower bunch (2) *fia pengi* 'cluster/ hand of bananas' | collected on: (M), Waitulia village source: numerous 2014.

**penu**  '(sea) turtle' | BI: penyyu | collected on: (M), Waitulia village source: numerous 2014. note: likely loan from Malay.


**pepe**  'vagina' / 'vulva' | BI: vagina | collected on: (M), Waitulia village source: numerous 2014. note: child language term—less rude, but still taboo. Mangon form. See also *pok*, *poki*.
per 'spear' | collected on: (S), Kampung Wailau source: natural speech samples. 2010–2019.


perlu 'to need' / 'to want' | BI: perlu | collected on: (S) source: numerous 2010–2019.
note: a-perlu faahia 'I want/need something'. Loan from Malay.


pernah moya 'never' | source: natural speech samples. 2010-2019. note: pernah is a loan from Malay.

persis 'same' | collected on: (S) source: numerous 2010.


note: loan from Malay.

peu 'bile' | collected on: (S) source: single consultant 2014. note: Sanana form. For Mangon form, see also npeu.


pia (2) 'to be alive' / 'good' / 'safe' / 'life' / 'honest' / 'beautiful' / 'in good, healthy condition' e.g. matapia pia 'a good person' | BI: hidup | collected on: (S) source: numerous 2010–2019.


pia makata 'doctor' (traditional medicine) | collected on: (S) source: numerous 2010.
note: literally 'person medicine'.
**Chapter 4: lexicon**


**pia moya (1)** 'strange' / 'unsafe' | BI: aneh | collected on: (S) source: numerous 2010–2019.

**pia moya (2)** 'not good' | source: natural speech samples. 2010-2019.


**pian** 'other' | BI: lain | collected on: (S) source: numerous 2010.


**piga** 'dish' / 'bowl' / 'plate' | collected on: (S) source: numerous 2010.

**piga lisa** 'saucer' (small plate) | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**pihu (1)** HABITUAL INCEPTIVE ASPECT MARKER ('again from now') | source: natural speech samples. 2010-2019. note: intervocalic devoicing variant of bihu.

**pihu (2)** 'again' / 'return' e.g. *oje pihu* 'shuffle again' | BI: lagi | collected on: (S) source: numerous 2010–2019. note: alternate pronunciation of *bihu*. As an aspect marker, it is nearly synonymous with *son*. It indicates a commencing a recurring activity. e.g. *gaya son/pihu* 'eat again from now'.

**pikir** 'to think' | collected on: (M) source: three to five consultants 2010.


**pil (1)** 'already' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: archaic. See also *pel*.

**pil (2)** 'to see' | source: natural speech samples. 2010-2019.

**pila** 'how many' | collected on: (M) source: three to five consultants 2010.

**pili** 'to choose' | BI: memilih | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**pin** 'a bunch' e.g. (1) flower bunch (2) *fia pen* 'cluster/ hand of bananas' | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.


**pinding** 'belt (clothing)' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**pinjam** 'borrow' | source: natural speech samples. 2010-2019. note: loan from Malay.
pintar  'smart' | BI: pintar | collected on: (S) source: numerous 2010. note: loan from Malay.

pip nana  'change (coins)' | BI: uang kecil | collected on: (S) source: numerous 2010–2019.


pip(i)  'money' | collected on: (S), (M) source: numerous 2010–2019.

pisnoya  'speak (talk)' | BI: berbicara [bicara] | collected on: (S) source: numerous 2010–2019. note: see also bisnoya.

pita  'to exist' / 'to be' | BI: menjadi | collected on: (M), Waitulia village source: numerous 2014. note: see also dahi.

po (1)  'cardinal number ten' | BI: sepuluh | collected on: (M) source: numerous 2010-2019. note: see also poa.

po (2)  'blood' | BI: darah | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014. note: see also poa.


po(a)dogata hua  'eighteen' | collected on: (S) source: numerous 2014.

po(a)dohia, poaduhia  'eleven' | collected on: (S) source: numerous 2014.

po(a)ga'u  'twenty' | collected on: (S) source: natural speech samples. 2010-2019.

po(a)galima  'fifty' | collected on: (S) source: natural speech samples. 2010-2019.

po(a)gatel  'thirty' | collected on: (S) source: natural speech samples. 2010-2019.

po(a)gatel do gahu  'thirty-two' | collected on: (S) source: natural speech samples. 2010-2019.

po(a)gatel do gatel  'thirty-three' | collected on: (S) source: natural speech samples. 2010-2019.

po(a)gatel do hia  'thirty-one' | collected on: (S) source: natural speech samples. 2010-2019.

po: (1)  'banana inflorescence' | collected on: (M) source: natural speech samples. 2010-2019.

po: (2)  'blood' | collected on: (M) source: natural speech samples. 2010-2019.

po: (3)  'ten' | collected on: (M) source: natural speech samples. 2010-2019.

poa (1)  'blood' | collected on: (S) source: numerous 2010–2019. note: see also po.
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poa (2) 'cardinal number ten' | BI: sepuluh | collected on: (S) source: numerous 2010.
   note: see also po.

poa (3) 'banana inflorescence' | collected on: (S) source: natural speech samples. 2010-2019.

poa bai 'to be born' / 'to give birth' | collected on: (S) source: numerous 2010.

poa gatel 'thirty' | collected on: (S) source: numerous 2014.


poa doga'u 'twelve' | collected on: (S) source: natural speech samples. 2010-2019.

poa dogatel 'thirteen' | collected on: (S) source: natural speech samples. 2010-2019.

poa dohia 'eleven' | collected on: (S) source: natural speech samples. 2010-2019.

poa gahu 'twenty' | BI: dua puluh | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

poci 'pot' / 'jar' | collected on: (S) source: numerous 2010.

podigatu 'thirteen' | collected on: (M) source: natural speech samples. 2010-2019.

podigia 'eleven' | collected on: (M) source: natural speech samples. 2010-2019.

podiguu 'twelve' | collected on: (M) source: natural speech samples. 2010-2019.

pogalima 'fifty' | BI: lima puluh | collected on: (M) Kampung Waitina, (S) Kampung Sama source: (tribe-based variation elicitations) Mangon, Facei 2014.

pogatelu 'thirty' | collected on: (M) source: natural speech samples. 2010-2019.

pogatelu di gatel 'thirty-three' | collected on: (M) source: natural speech samples. 2010-2019.

pogatelu di gia 'thirty-one' | collected on: (M) source: natural speech samples. 2010-2019.

pogatelu di guu 'thirty-two' | collected on: (M) source: natural speech samples. 2010-2019.

pogu 'twenty' | BI: dua puluh | collected on: (M) Kampung Waitina, (S) Kampung Sama source: (tribe-based variation elicitations) Mangon, Facei 2014.

pogu, poagu'u 'twenty' | BI: dua puluh | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

pogu(') 'twenty' | collected on: (M) source: natural speech samples. 2010-2019.

poguu 'twenty' | collected on: (M) source: natural speech samples. 2010-2019.
**pohi**  'lemon-like fruit' / 'orange-like fruit' / 'juice' | BI: jeruk asam | collected on: (S) source: numerous 2010–2019.

**pohi kaya**  'grapefruit' | collected on: (S) source: numerous 2014.

**pohi limcu**  'lemon' | collected on: (S) source: numerous 2014.

**pok**  'vagina' / 'vulva' | collected on: (S) source: numerous 2014. note: Sanana form. See also pepe, pokī.


**poki**  'vagina' / 'vulva' | BI: vagina | collected on: (M) source: numerous 2014. note: Mangon form. See also pepe, pokī.


**pon hia**  'group' | BI: kelompok | collected on: (S) source: numerous 2010–2019.

**ponda (1)**  'pandanus' | collected on: (M) source: three to five consultants 2010.

**ponda (2)**  'sleeping mat' | collected on: (M) source: three to five consultants 2014.


**popa**  'grandfather' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**poro**  'blood' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: several Mangon forms on the Holle list suggest possible loss of intervocalic r. See also po, poa.

**pu**  'faeces' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: loan?


**puhi (1)**  'navel' | BI: pusar | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**puhi (2)**  'centre' e.g. town | BI: pusat | collected on: (S) source: numerous 2010–2019.

**puhi wai**  'umbilical cord' | BI: tali pusar | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**pusi**  'headache' | source: natural speech samples. 2010-2019. note: loan from Malay.

**put'ana**  'ghost' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**putar**  'to turn completely, 180 degrees' | BI: berputar | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description.
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Reference Appendix data for number of consultants producing this form. 2015.

note: loan from Malay.

rabana  'tambourine' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: loan from Malay.

rairai  'to guess' | collected on: (S) source: two to three consultants 2010. note: likely loan from an unknown source, as there are few if any native Sula words beginning with r.


ranta aya; ranta me'ihi  'basket (all sorts of)' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: likely loan from an unknown source, as there are few if any native Sula words beginning with r. Possible metathesis of rattan?

ranta nini, ranta make'i  'basket (all sorts of)' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: likely loan from an unknown source, as there are few if any native Sula words beginning with r. Possible metathesis of rattan?


rasa lua  'nausea' | BI: mual | collected on: (S) source: numerous 2010–2019. note: literally 'feeling' + 'vomit'.


rek (2)  'detail' | BI: perincian | collected on: (S) source: numerous 2010–2019. note: likely loan from unknown source.

reking  'to count' | BI: menghitung | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

rica (1)  'red pepper' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I am skeptical of this gloss. The word rica means 'chili pepper'.

rica (2)  'black pepper' | collected on: (M) source: three to five consultants 2010. note: likely loan from an unknown source, as there are few if any native Sula words beginning with r.
sula

ronggi 'to dance' | collected on: (S) source: two to three consultants 2014. note: see also baronggeng.

roti 'bread' | BI: roti | collected on: (S), (M) source: numerous 2010–2019. note: loan from Malay.

rugi 'loss' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: loan from Malay.

ruwi 'mango' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I am highly doubtful of this entry, as there are few if any native Sula words beginning with r.

sa / sa’a ‘sago’ / ‘sago starch’ | collected on: (S) source: natural speech samples. 2010-2019. note: pronunciation sa’a was recorded in CMD region of Mangon.

sa, napi 'sago tree' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: sa is verified as ‘sago’. I repeatedly collected sa kau as ‘sago tree’. It is unclear what napi means here. I have only collected it with a verbal prefix ba- meaning 'to shoot'.

sa’afa, saafa, safu ‘rat’ | BI: tikus | collected on: (S) source: numerous 2010.

sa’afa, safa ‘rat’ | BI: tikus | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

sa’aka ‘silver’ | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I collected this term as sa kau. The Holle entry loofs like a partial loan from Malay pohon.

sa’ik ‘here’ | BI: di sini | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

sa’ik, deha sa’ik ‘here’ | BI: di sini | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

sa’ilu ‘to slurp’ | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

sa’oa ‘where’ | BI: dimana | collected on: (S) source: numerous 2014. note: see also sahoa, soa.

sa’ota (1) ‘dry’ | BI: kering | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
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sa'ota (2) 'to be wrecked' e.g. shipwreck | collected on: (S) source: numerous 2014. note: Sanana form. For Mangon form, see sa'otu.

sa'ota (3) 'dry' | collected on: (S) source: numerous 2014. note: see also sa'otu, saotu (Mangon).

sa'otu (1) 'to be wrecked' e.g. shipwreck | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see sa'ota.

sa'otu (2) 'dry' | collected on: (M) source: numerous 2014. note: see also sa'ota, saota collected on: Sanana.

sa'wehi 'seashell' | collected on: (S) source: numerous 2010.


saba 'koka' 'ring' | collected on: (S) source: numerous 2010.

sabai 'slap' | BI: tendangen | collected on: (M), Ulfoa village source: single consultant 2015.

sabakoka 'ring' | collected on: (S) source: numerous 2010. note: Sanana form. For Mangon form, see sabakoku.

sabakoku 'ring' | collected on: (M) source: two to three consultants 2010. note: manga is 'sharp'. Mangon form. For Sanana form see also sabakoka.

sabata 'rug' / 'mat' / 'pandanus leaf' / 'sleeping mat' | BI: permadani | collected on: (S), (M) source: numerous 2010–2019.


sabeya 'to worship' | BI: sembahyang | collected on: (S) source: single consultant 2010–2019. note: see also sabia, bau perinta joh.

sabia 'to worship' | collected on: (S) source: single consultant 2014. note: Holle postulates this as a Ternate loan. See also sabeya, bau perinta joh.

sabil 'sabre' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

sabota 'sleeping mat' | collected on: (S) source: numerous 2014.

sabu 'to close' | collected on: (M) source: numerous 2014. note: see also oba.


safa  'rat' | BI: tikus | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
safak  'shield' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I have never seen a shield in Sula. I've thrown a spear at a wild boar, but not seen a shield.
safe (keu)  'to spit' | BI: meludah | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
safila  'lightning' | BI: kilat | collected on: (S) source: Fagudu speaker 2010. note: Possible Arabic loan: saeija 'lightning' shaeila 'flame' / 'torch'. See also sagila at.
sagat  'to carry on the hip' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: see also sanggate, sanggati.
sagig lal (1)  'to carry under the arm' | collected on: (S) source: numerous 2014. note: Sanana form. For Mangon form, see also sagigi tuka.
sagig lal (2)  'armpit' | collected on: (S) source: numerous 2014.
sagigituka (1)  'to carry under the arm' | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also sagig lal.
sagigituka (2)  'armpit' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
sagila (at), sagila'at, sagilaat  'lightning' | BI: kilat | collected on: (S) source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015. note: Possible Arabic origin: saeija 'lightning' shaeila 'flame' / 'torch'. See also safila.
sagilaatu  'lightning' | BI: kilat | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015. note: Possible Arabic loan: saeija 'lightning' shaeila 'flame' / 'torch'. See also safila.
sagu  a fish that is either the same as or similar to the blue goatfish (parupeneus cyclostomus) and manybar goatfish (parupeneus multifasciatus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.
sahafa  'rat' | BI: tikus | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.
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**sahoa, sa'oa, saoa, soa** 'where' | BI: dimana | collected on: (S) source: (tribe-based variation elicitation) Falahu tribe 2014.


**sahosa (2)** 'roof thatch' | BI: atap | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitation for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**sai** 'to go' / 'depart' | BI: pergi | collected on: (S) source: numerous 2010–2019.

**sai (1)** 'floor' (made from wood) | collected on: (S) source: numerous 2010-2019.

**sai (2)** 'paddle(s)' / 'to row' | BI: dayung | collected on: (S) source: numerous 2010–2019.


**sai gabalil** 'go around' / 'circumnavigate' | source: natural speech samples. 2010-2019.

**sai lepa** 'go up' (e.g. a an inclined road) | source: natural speech samples. 2010-2019.

**sai maneha neha** 'go straight ahead' | source: natural speech samples. 2010-2019.

**sai neu** 'go down' (e.g. a an inclined road) | source: natural speech samples. 2010-2019.

**sai pon** 'shoulder blade' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also sanapau.

**saik** 'here' | BI: di sini | collected on: (S) source: Fagudu speaker 2010. note: see also isuka, saiki, saiya, sit iki, deha saik, siku.

**saiki** 'here' | BI: di sini | collected on: (M) received from a Mangon speaker 2010. note: see also isuka, saik, saiya, sit iki, deha saik, siku.

**saiya, sa'ia** 'here' | BI: di sini | collected on: (S) source: numerous 2010–2019. note: see also isuka, saik, saiya, sit iki, deha saik, siku.


**sak (2)** 'to pierce' | collected on: (S) source: natural speech samples. 2010-2019.

**sak (3)** 'to stab' | collected on: (S) source: natural speech samples. 2010-2019.

**sak kau bo hai** 'plant' (in the manner of planting a flag) | collected on: (S), Kampung Umaloya source: natural speech samples. 2010-2019. note: literally 'pierce' + 'wood' + LOC + 'earth'.

**sak-tilu** 'pierce ear' | collected on: (M), CMD region source: natural speech samples. 2010-2019.
**sak(u)**  'stab' / 'poke' e.g. *sak tuf tilu* 'pierce ear' (CMD dialect, Ulfoa village) | BI: menusuk | collected on: (S), (M) source: numerous 2010. note: this is an overhead stab 'Psycho' type stab.

**saka**  'one hundred' | BI: seratus | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**saka lifi**  'to turn' | BI: berputar | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**sakaf**  'to hold' | BI: menggenggam | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**sakaf bon tinakan**  'to carry (to the front of the body)' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**sakafi**  'to hold under the arm at side' / 'to cradle as one would a baby' | collected on: (M), Kampung Waitina source: natural speech samples. 2010-2019.

**sakafi bun takau**  'to carry (to the front of the body)' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**sakawa**  a fish that is either the same as or similar to the bigeye emperor / humpnose big-eye bream (*monotaxis grandoculis*) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**sakeu**  'to scratch an itch' | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**sakohi**  'to grunt' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**saksi**  'witness' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: loan from Malay.

**saku**  'to stab' / 'pierce' | BI: menikam | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**sakum**  'to sniff, smell' | BI: menghiru | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**sala**  'guilty' / 'wrong' | BI: salah | collected on: (S) source: numerous 2010–2019. note: likely loan from Malay.
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*salama lama pel* 'forever' | BI: selama | collected on: (S) source: numerous 2010–2019. note: literally 'until time finish'.

*salena* 'to fry without oil e.g. toasting seeds' | collected on: (S) source: numerous 2010.

*salju* 'snow' | collected on: (M) source: three to five consultants 2010.

*saloa* 'advice' | BI: nasihat | collected on: (S), Umahoya village Source: Fagudu tribe 2014. note: in some communities, minimal pair with sahoa 'where'.

*saloi* 'woven basket backpack' | collected on: (M), Capuli village source: numerous 2015. note: see also *kal*. image 2201.

*sam* 'bedding' / 'clothing' / 'bandage' / 'blanket' / 'sarong' | BI: kain tempat tidur | collected on: (S) source: numerous 2010–2019.

*sama (1)* 'same' e.g. sama para 'just the same' | collected on: (S) source: numerous 2010. note: loan from Malay.

*sama (2)* 'rat' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see *sahafa*.

*sama sehul, sam iropu, sami ladu, sami eropu* 'cotton fabric (local, European)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

*samab* 'mosquito' | BI: nyamuk | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014. note: said to be Falahu tribe word, but field recordings suggest the variation is more geographic than tribal. See also *kafin* and *kafini*.

*samaka* 'watermelon' | BI: semangka | collected on: (S), Waibau village source: two to three consultants 2015. note: loan from Malay.

*samam (1)* 'to chew' | BI: mengunyah | collected on: (S) source: numerous 2010–2019.

*samam (2)* 'to cook' | BI: menanak | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014. note: I am skeptical of this response. In other elicitation sessions, this form means 'to chew'.

*samamo* 'other' | BI: lain | collected on: (M) source: three to five consultants 2010.

*samamu* 'to chew' | BI: mengunyah | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Facei tribes 2014.
samana  'there' / 'yonder' (distant, near addressee) | collected on: (S) source: numerous 2010–2019. note: see also isuna.

samangka  'watermelon' | BI: semangka | collected on: (M), Waitulia village source: two to three consultants 2015. note: loan from Malay.

same (1)  'count' | BI: menghitung | collected on: (S) source: numerous 2010.

same (2)  'fall' | collected on: (S) source: numerous 2010.


samo  'needle' | collected on: (M) source: natural speech samples. 2010-2019.

samo(ha)  'needle' (both sewing and syringe types) | BI: jarum | collected on: (S) source: numerous 2010–2019.

samoha  'needle' | BI: jarum | collected on: (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitions) Fagudu, Falahu, Facei tribes 2014.

samohi  'last (temporal)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see hia tuna and da.


samsi beu  'headcloth (for men)' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

sana  'stick' / 'branch' | BI: dahan | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015. note: branch still in the tree. See also daeti.

sana fanau  'big pathway' | BI: jalan raya | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


sana pit  'roofing: bamboo lath' | collected on: (S) source: numerous 2010.

sana, kau sana  'branch' | BI: dahan | collected on: (S) Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Falahu, Facei tribes 2014.


sanafa  'road' / 'path' | BI: jalan | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

sanafa fanin  'big' | BI: raya | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

sanang  'comfortable' e.g. bau sanang and baka sanang 'get comfortable' | BI: menyenangkan | collected on: (S) source: numerous 2010–2019.

sanapa(h)u, sanapa'u (2)  'shoulder' | BI: bahu | collected on: (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Fagudu, Falahu, Facei tribes 2014.

sanapahu 'back' | BI: punggung | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

sanapau (1)  'back' | BI: punggung | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

sanapet 'roof' / 'roof thatch' | BI: atap | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

sanapetu 'roof' / 'roof thatch' | BI: atap | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

sanas  'familial relationship' | BI: keluarga | collected on: (S), Malbufa village source: two to three consultants 2015. note: sanas is a relationship unit. It can represent a nuclear family relationship, a clan relationship, a tribe relationship, or the Sula ethnic relationship. This form shows a sound change in process across the region. See also basanasi, sanohi.

sanasi 'familial relationship' | BI: keluarga | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see note above. See also basanasi, sanas, sanohi.

sanasi fini 'sister' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: archaic. See sanohi.


sanga  'branch' | BI: cabang | collected on: (M), Waitulia village source: numerous 2014.

sangapetu  'thatch' / 'roof' | BI: atap | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

sangapitu  'roofing: bamboo lath' | collected on: (M) source: three to five consultants 2010.

sangati 'to hold under the arm at one's side' | collected on: (M), Kampung Waitina source: natural speech samples. 2010-2019.
sanggate 'to carry on the hip' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: see also sagat, sanggati.
sanggati 'to carry on the hip' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: see also sanggate, sagat.
sangihi 'to cough' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: likely antiquated. See also bakef, sanihi.
sanihi 'to cough' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: likely antiquated. See also bakef, sangihi.
sanisi 'comb' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
sanka 'think' / 'assume' / 'suspect' e.g. a-sanka 'I think' | BI: kira | collected on: (M), Ulfoa village source: numerous 2015.
sanohi (1) 'family' / 'brother' / 'friend' / 'comrade' e.g. sanohi gareha bo hai Sula 'there are four tribes on the Sula Islands' | BI: keluarga | collected on: (S) source: numerous 2010–2019. note: sanohi is a relationship unit. It can represent a nuclear family relationship, a clan relationship, a tribe relationship, or the Sula ethnic relationship. This form shows a sound change in process across the region. See also basanasi, sanas, sanasi.
sanohi (2) 'connection' (things/ideas) | BI: hubungan | collected on: (S) source: numerous 2010–2019.
sanohi duki 'guest' | BI: tamu | collected on: (S) source: numerous 2010–2019. note: -i is optional on duk(i). Literally 'familial relationship' + 'come'.
sanohi fina 'sister' | collected on: (S) source: numerous 2010. note: literally 'family female'.
sanohi ma(’)ana 'brother' | collected on: (S) source: numerous 2010. note: literally 'family male'.
saoa (1) 'thunder' | BI: guntur | collected on: (S) source: numerous 2010–2019. note: see also telapat.
saoa (2) 'where' | BI: dimana | collected on: (S) source: numerous 2010. note: see sahoa and sa’oa.
saota 'desiccated' / 'to dry' | BI: kering | collected on: (S) source: numerous 2010–2019.
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**saota, s'ota** 'dry' | BI: kering | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.


**sap ihi** 'beef' | BI: daging sapi | collected on: (S) source: numerous 2010–2019.

**sap lal** 'rack above the fireplace' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this is an intriguing term, because it is almost certainly false. *ap lal* / *api lal* means 'in fire'. My best guess is the interviewer pointed at a roasting spit and asked what it was, to which the answer was *sap lal* / *sapi tuka* 'it goes in the cow' (*sap/sapi* 'cow' + *lal/tuka* 'inside')

**sap lal**

**sap li** 'to moo (as of a cow)' | collected on: (S) source: numerous 2014. note: lit. cow' + 'speech'.

**sap ma'ana** 'bull' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: literally 'male bovine'.

**sapa** 'slap' | BI: tempeleng | collected on: (M), Waitulia village source: numerous 2014. note: see also *lap*.

**sape'i keu** 'to spit' | BI: meludah | collected on: (M) source: two to three consultants 2014. note: see also *bitfua keu, bua keu*.


**sapituka** 'rack above the fireplace' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see note for *sap lal*.

**sar** 'to row' / 'to pull' | collected on: (S) source: numerous 2014.

**sara** 'burn' | BI: bakar | collected on: (S) source: numerous 2010–2019.

**sara ap dawika** 'to turn on (a light)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

**sara tabak** 'to burn' (describes the slow burning of a cigarette or a mosquito coil.) | BI: membakar | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014. note: not to be confused with *sui*, 'smoking' a cigarette.

**sara'ap sanana** 'to turn on (a light)' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: *sara ap* is to turn on a light (lit. 'burn fire'). It is unclear what *sanana* means here. This form might hint at the historical
meaning of the name Sanana. Perhaps it is named with regard to light, similar to 日本.

**sarag** 'gong' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

**sarampa dahi** 'measles' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**sarong** 'sheath' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: loan from Malay.

**sasua** 'fishing with a throwing spear' | collected on: (M), Waitulia village source: single consultant 2014.


**sau (2)** 'glue' | collected on: (S) source: numerous 2010.

**sau, ma'idi** 'resin' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**saudagar mata pia bedagang** 'merchant' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**saup** 'to sip' / 'slurp' | collected on: (S) source: single consultant 2014. note: onomatopoeia.


**sawai (pul)** 'to turn completely, 180 degrees' | BI: berputar | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**sawehi** 'mussel' | BI: remis | collected on: (S) source: numerous 2010–2019.

**saya** 'grammar' | collected on: (S) source: numerous 2010.

**sayang** 'to sniff, smell' | BI: mencium | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**sayowa** a fish that is either the same as or similar to the small-toothed jobfish / forketail snapper (aphareus furca) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.


**sebab** 'because' | source: natural speech samples. 2010-2019. note: loan from Malay.

**sebab apa** 'what reason' | collected on: (M) source: numerous 2014. note: loan from Malay.
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**sedi** 'sad' | BI: anak kecil | collected on: (S), Waibau village source: numerous 2014. note: loan from Malay.

**seg** 'flood tide' | BI: air pasang | collected on: (S) source: numerous 2010–2019. note: see also it.

**segar** 'fresh' | collected on: (S) source: numerous 2010. note: loan from Malay.

**sekoci** 'rowboat' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I'm not sure I ever saw a rowboat. Sula still uses primarily canoes and outrigger canoes.

**sekola lepayau** 'university' | collected on: (S) source: numerous 2010.

**sekolah** 'school' | source: natural speech samples. 2010-2019.

**sel** 'to plant' / 'a plant' | BI: tumbuhan | collected on: (S) source: numerous 2010–2019.

**sel nui** 'coconut crop' | BI: tanam kalapa | collected on: (S), Pastina village source: Falahu tribe farmers 2014.

**selalu** 'often' | BI: sering | collected on: (S) source: numerous 2010–2019.


**seli** 'to plant' | BI: menanam | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**seli, kau seli** 'fruit' | BI: buah-buahan | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**selu** 'needlefish' (belonidae) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**selumpoyu** 'dark colored triggerfish' (balistidae) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**sempit (ID)** 'narrow' | collected on: (M) source: three to five consultants 2010.

**sena** 'to jump' | collected on: (S) source: numerous 2010.


**senapan** 'rifle' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**senapang** 'gun' | collected on: (S), Kampung Wailau source: natural speech samples. 2010-2019.

**senin** 'Week' | collected on: (S) source: numerous 2010.

**sepa** 'to kick' | BI: menyepak | collected on: (S) source: numerous 2010–2019.
**sepatu lepayau** 'boot (shoe)' | BI: sepatu tinggi | collected on: (S) source: numerous 2010–2019.

**September** 'September' | source: natural speech samples. 2010-2019.

**sering** 'often' | source: natural speech samples. 2010-2019.

**sesa** 'locust' | collected on: (M), Capuli village source: two to three consultants 2015.

**sia-sia** 'pail' / 'bucket' | BI: ember | collected on: (M), Waitulia village source: three to five consultants 2014.

**siap-siap** 'prepared' | collected on: (S) source: numerous 2010. note: loan from Malay.

**siba** 'to defecate' | collected on: (S) source: two to three consultants 2014. note: see also geka.

**sibo** 'where' | BI: dimana | collected on: (M) source: three to five consultants 2010.

**sida** 'to split' | BI: membelah | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**sidag** 'diarrhea' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan. See also seba seba.

**sidenga** 'strait(s)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

**sig** 'flood tide' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**sihir** 'magic' | collected on: (S) source: two to three consultants 2010. note: loan.

**sik** 'here' | BI: di sini | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**siku** 'here' | BI: di sini | collected on: (M), Ulfoa village source: numerous 2014. note: *siku* is a contraction of *saiku*. In accommodating to Mangon speakers, CMD speakers (especially in Ulfoa village) would re-add final vowels that were dropped in Sanana. The chosen vowel did not always match the Mangon target though. This is not unlike speakers of British dialects that have dropped initial *h* re-adding it to words beginning with vowels when talking to English speakers of other dialects (*I'll ave an happle please*). See also isuka, saik, saiki, saiya, sit iki, deha saik.

**siku papa** 'seat' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: *siku* is a contraction of *saiku*. This word was likely collected in a CMD area.
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**siku, bo siku** 'here' | BI: di sini | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**sil** 'to plant' / 'a plant' | collected on: (S) source: two to three consultants 2014. note: variant of sel / basil.

**silfoka** 'elbow' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**silibo** 'sweat' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**silifoku** 'elbow' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**simpau** 'shoulder' | BI: bahu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


**sinanga** 'to fry' / 'grill' / 'bake' / 'burn' | collected on: (S) source: numerous 2010-2019. note: Holle postulates this as a Ternate loan.

**sindu pamasi** 'chaff' | collected on: (M) source: two to three consultants 2014. note: see also kol.


**sinsara** 'hard (difficult)' | BI: susah | collected on: (S) source: numerous 2010–2019.

**sis** 'to cut, hack' | BI: menetak | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**sisa (1)** 'chop away at something' e.g. sisa noi 'to hack back coconut husk' | BI: tanam memotong | collected on: (S), Bega village source: Falahu tribe 2014.

**sisa (2)** 'sugarcane' | collected on: (M) source: three to five consultants 2014.

**sisum koli** definition unclear but term used in describing shaved old coconut | collected on: (M), Waitina village source: Mangon tribe 2014. note: koli is 'skin', but sisum is unknown.

**sit iki** 'here' | BI: di sini | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also isuka, saik, saiki, saiya, deha saik, siku.

**slendang** 'shawl' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
so'a  'thunder' | BI: guntur | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.
so'asa  'bronze' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
soa (1)  'where' | BI: dimana | collected on: (S) source: numerous 2010–2019. note: see also sa'oa and sahoa.
soa (2)  'family name' / 'division of society' | BI: fam | collected on: (S), (M) source: numerous 2010–2019.
soa (3)  'thunder' | BI: guntur | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.
soa, s'oa  'where?' | BI: dimana | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.
soa (4)  'family name' / 'division of society' | BI: fam | collected on: (S), (M) source: numerous 2010–2019.
soa (5)  'where?' | BI: dimana | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.
soba (1)  'to depart' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this Holle form is translated incorrectly. It means 'to depart by boat' / 'to sail off'. Literally, soba is 'wing' / 'sail'.
soba (2)  'sail' / 'to sail' | BI: layar | collected on: (S) source: numerous 2010–2019.
soba kan  'sailboat mast' | collected on: (S) source: numerous 2014.
sof  'chop away at something' e.g. chopping husk off coconut with machete | BI: tanam memotong | collected on: (S), Pastina village source: Falahu tribe farmers 2014.
sofa (2)  'plaited rattan fish trap' | BI: bubu | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
soi  'to open' | collected on: (M) source: two to three consultants 2014. note: variant of hoi.
soklat  'brown' | BI: coklat | collected on: (S) source: numerous 2010–2019. note: [ʃoklat] would be expected if there were a native /ʃ/ in Sula. Loan from Nahuatl by way of Malay.
soklat bamata  'raw chocolate' | BI: coklat mentah | collected on: (M), Capuli village source: numerous 2015.
solbi  'tail bone' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
soli (1)  'eagle' | BI: elang | collected on: (S), Waibau village source: numerous 2015. note: they are known to snatch chickens and small dogs.
solí (2) 'kite bird' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
some 'to sniff' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
son (1) HABITUAL INCEPTIVE ASPECT MARKER ('again from now') | source: natural speech samples. 2010-2019.
son (2) 'because' | source: natural speech samples. 2010-2019.
son (3) 'more' | source: natural speech samples. 2010-2019.
songú general term for 'triggerfish' (balistidae) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.
sonlulu bet gatel 'in three days' (after day three) | source: natural speech samples. 2010-2019.
sorga 'the upperworld' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: borrowing from Malay.
sosa (1) 'milk' | collected on: (S) source: numerous 2014. note: see also sosú (Mangon).
sosa (2) 'female breast' | BI: susu | collected on: (S) Kampung Umaloya, Kampung Sama source: (tribe-based variation elicitations) Fagudu, Facei tribes 2014.
sosa pea 'nipple' | collected on: (S) source: numerous 2010.
sosa wai 'breast milk' | collected on: (S) source: numerous 2014.
soso 'breasts (female)' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this archaic form, if correct, has implications on the Proto–Sula high vowel sound change. It would imply that *susu > soso > sosú in Mangon and simultaneously *susu > soso > sosú in Sanana, as sosú and soso were both recorded on the Holle list. It should be said though that Sula vowels encroach on each other (especially o, a, and to an extent u), and they are hard to pin down even to the experienced ear, so it is probable that many of the unexpected vowels in the Holle list are simply transcription differences.
soso ngua 'nipple' | collected on: (M) source: three to five consultants 2010.
soso wai 'breast milk' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
**Sula**

**sosu (1)** 'milk' | collected on: (M) source: numerous 2014. note: likely borrowing from Malay *susu* after the introduction of canned and powdered milk. See also *sosa* collected on: Sanana.

**sosu (2)** 'female breast' | BI: susu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**sotu** 'dry' | BI: kering | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

**soya** 'to say' / 'to tell' | BI: bilang | collected on: (S) source: numerous 2010–2019.

**soya du(a)lu** 'to advise' / 'to tell' | BI: saran | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2010–2019. note: *a-soya dualu* 'I'll tell/advice you'.

**soya kuiki’i** 'to guess' | collected on: (S) source: numerous 2010.

**strat** 'Strait' (between islands) | collected on: (S) source: numerous 2010.

**su’isa** 'drum' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**Sua** 'Sula' (language, land, and people) | BI: Sula | collected on: (S), (M) source: numerous 2010–2019.

**sub** 'lamp wick' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**suba (1)** 'the smell of rot' | BI: bau | collected on: (S) source: numerous 2014. note: see also *pat, pati foro, suma.*

**suba (2)** 'rotten' | BI: busuk | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**subo** 'where' | BI: dimana | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also *sibo.*

**subur** 'morning' / AM | BI: pagi | collected on: (S), (M) source: numerous 2010–2019.

**sug** 'shy' / 'timid' | BI: malu | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**suglela** 'to play' / 'to enjoy' (e.g. game, sport, or music) | BI: bermain [main] | collected on: (S) source: numerous 2010–2019.

**suglik** 'riddle' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**suglila** 'to play' | collected on: (S) source: two to three consultants 2014. note: variant of *suglela.*

**sugu liku** 'riddle' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
suha  'spike' (especially a sharpened bamboo pole planted into the ground at an angle along a perimeter fence as a barrier to keep wild pigs out of gardens.) | BI: paku | collected on: (S), Umahoya village Source: Fagudu tribe 2015.

sui  'to inhale' / 'to smoke' e.g. sui tabak 'to smoke cigarettes | collected on: (S) source: numerous 2010.


suk  'breadfruit' e.g. suk ihi 'breadfruit meat' | BI: sukun | collected on: (S) source: numerous 2010.

suk hal  'breadfruit blossom' | BI: mekar sukun | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.

suk ihi  'breadfruit meat' | BI: buah sukun | collected on: (S) source: numerous 2010.

suk kau  'breadfruit tree' | BI: pohon sukun | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.


suka (2)  'to like' / 'to want' | collected on: (S) source: numerous 2014.

suka (3)  'like' / AUX | source: natural speech samples. 2010-2019.

sum  'mouth' | BI: mulut | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

suma (1)  'to blow one's nose' | collected on: (M) source: numerous 2014. note: see also pat, pati foro, suba.

suma (2)  'to smell' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: this form is recorded as 'nose blowing'. See also pat, pati foro, suba.

sumba  'flower' | BI: bunga | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

sumi  'smell' | collected on: (M) source: numerous 2010. note: see also muhi.

sumpati  'to sniff, smell' | BI: menghiru | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.

sumpi  'blowpipe' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

sungea  'a large bird similar to a parrot' | collected on: (M), Wai U village source: single consultant 2015. note: image 2325.

sungga  'spike' | BI: paku | collected on: (M), Ulfoa village source: numerous 2015.

sup papa  'seat' | collected on: (S) source: numerous 2010-2019.

surat  'letter' | collected on: (S) source: numerous 2014. note: loan from Malay.
**Suremu**  a fish that is either the same as or similar to the yellowfin goatfish (mulloidichthys vanicolensis) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**Susa** 'poverty' | BI: kemiskinan | collected on: (S) source: numerous 2010–2019.

**Susu** 'milk' | collected on: (S) source: natural speech samples. 2010-2019. note: loan from Malay.

**Sutera** 'silk' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**Talal** 'a lot' / 'much' / 'many' | BI: banyak | collected on: (S), Malbufa village source: numerous 2015. note: see also eb, ib, ibu, foloi, kadiga.

**Ta- (1)** first plural (inclusive) agreement marker | source: natural speech samples. 2010-2019.

**Ta- (2)** verbal prefix | source: natural speech samples. 2010-2019. note: it is unclear whether this is truly a verbal prefix or rather the third person agreement marker affixed to some verbs in citation form.

**Ta(i)wai** 'urine' / 'to urinate' | collected on: (S) source: numerous 2010-2019.

**Tab** 'mud' | collected on: (S) source: numerous 2010.

**Tabak** 'tobacco' / 'cigarette' | collected on: (S) source: numerous 2014. note: Sanana form. For Mangon form, see also tabaku, tabaki.

**Tabaku, Tabaki** 'tobacco' | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also tabak.

**Tabe** 'excuse me' | BI: permisi | collected on: (M), Ulfoa village source: numerous 2015.

**Tabi** 'mud' | collected on: (M) source: three to five consultants 2010.


**Taboi** 'hatchet' / 'axe' | collected on: (M) source: three to five consultants 2014.

**Tabuna hai** 'pot (earthenware)' | collected on: (S) source: two to three consultants 2010. note: Sanana form. For Mangon form, see also tabuna lai.

**Tabuna lai** 'pot (earthenware)' | collected on: (M) source: single consultant 2010. note: Mangon form. For Sanana form, see also tabuna hai.

**Tabuna mam** 'pot (iron)' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**Tabuna mum** 'pot (iron)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**Tadu** 'horn' | collected on: (M) source: natural speech samples. 2010-2019.
**tadu (tar in Sula)** 'horn' | collected on: (M) source: three to five consultants 2010.


**taga** 'lake' | BI: danau | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**tagi** 'short (temporal)' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**taha** 'provisions' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.


**tahai** 'young' / 'unripe' | BI: muda | collected on: (S) source: numerous 2010–2019.

**tahan** 'arrest' | BI: menangkap | collected on: (S) source: numerous 2010–2019. note: possible loan from ID tahan 'take', 'hold up'.

**tahi** 'put' / 'throw' / 'pour' e.g. (1) put something somewhere / throw it over there / pour it in there (2) *tahi cenke bo karung* 'put cloves in the bag' (3) *tahi wai bo galas* 'pour water in the glass' | collected on: (S), Waibau village source: numerous 2010, 2015.

**tahun** 'year' | BI: tahun | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**tahun dabet** 'last year' | source: natural speech samples. 2010-2019.


**tahun pihu** 'next year' | source: natural speech samples. 2010-2019.

**tahun'iik** 'this year' | source: natural speech samples. 2010-2019.

**tai** 'faeces' | collected on: (S) source: numerous 2014.

**taka er** 'frog' | BI: kodok | collected on: (S) source: numerous 2010–2019.

**taka er yai** 'fin' / 'flippers (swimming)' | BI: kaki katak | collected on: (S) source: numerous 2010–2019.

**taka'idu** 'frog' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: Holle postulates this as a Ternate loan. See also taka er, wak.

**taka'ru fatu** 'back' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted 2014.

**takalia wai** 'throat' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
takau  'stomach' / 'belly' | collected on: (M) source: numerous 2014. note: Mangon form. Contraction of tena kau.
takau gika  'stomachache' | collected on: (M) source: numerous 2014. note: Mangon form. For Sanana form, see also tena geka.
talan  'copper sauce' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
talanga yai  'anklet' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
talapati  'thunder' | BI: guntur | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
tali  'main posts' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: I don't understand the Holle gloss.
tali kidi  'waist belt' / 'band' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: tali 'rope'.
tali nga  'ear' | collected on: (M) Collins 1981. note: Collins lists this as two words. There might be a morphological basis for that, however phonologically it is one word with a predictable stress pattern. See also talinga.
talina bin  'deaf' | collected on: (S) source: numerous 2014.
talinga (1)  'ear' | collected on: (M) source: numerous 2014. note: see also til, telina.
talinga (2)  'to listen' | source: natural speech samples. 2010-2019.
talinga bombingi  'deaf' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
tam  'parents-in-law' | collected on: (S) source: numerous 2010.
tam ma'ana  'father-in-law' | collected on: (S) source: numerous 2014.
tamba'u  'grasshopper' | collected on: (M) source: three to five consultants 2014.
tambaebu  'to swell' | collected on: (M) source: three to five consultants 2010.
tamil  'beans' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
tamilu  'beans' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
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**tampayan** 'earthen water barrel' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**tampayang** 'pot (ceramic)' | BI: guci | collected on: (S) source: numerous 2010–2019.

**tamua** 'lead' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: loan from Malay.

**tamua boti** 'tin' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**tana (1)** 'centipede' | collected on: (M) source: three to five consultants 2014.

**tana (2)** 'earthworm' | BI: cacing | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**tania hoi** 'shin' | collected on: (S) source: two to three consultants 2014. note: see *yai tia loi*. *tania hoi* is probably metathesis of *yai tia loi / yai tia hoi* 'shin' which breaks down as *yai* 'leg' *tia* 'bone' (*l*-*h* is a sound change in process. Some communities retain *l* where others have gone to *h*, others yet have converted *h* to a glottal and still others have dropped the segment entirely. The difficulty of traversing between communities up until a couple years ago provides a snapshot of various stages of sound change in process. Most of these differences are likely to level off in the next few years because of new coastal roads.).

**tanumba** 'ceiling beams' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**tap** 'anchor' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

**tapa, lima tapa** 'left (direction)' | BI: kiri | collected on: (S) source: numerous 2010–2019.

**tapaya** 'papaya' | BI: pepaya | collected on: (S), Pastina village source: Pastina farmers 2014. note: loan from Carib via Spanish, Portugese, Malay.

**tapi** 'but' / 'however' | source: natural speech samples. 2010-2019. note: loan from Malay.

**tapisnoya** 'to speak' | source: natural speech samples. 2010-2019.

**tar** 'horn' | collected on: (S) source: numerous 2010.

**tara tib** 'sit (with the legs crossed)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**tas** 'bag' | BI: tas | collected on: (S) source: numerous 2010–2019.

**tasoya** 'to say' | source: natural speech samples. 2010-2019.
tatabahasa  'grammar'  |  collected on: (S) source: numerous 2010. note: loan from Malay.
tatabuang  'xylophone'  |  collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.
taun, tahun  'year'  |  collected on: (S) source: natural speech samples. 2010-2019. note: loan from Malay.
tayoya  'heron'  |  collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: see also man camo.
te (1)  QUESTION PARTICLE  |  collected on: (S) source: numerous 2010–2019.
te (2)  'or'  |  BI: atau  |  source: natural speech samples. 2010-2019.
temoya  'or not'  e.g. gu-laka bo uma te moya 'are you going home or not'  |  BI: apakah  |  collected on: (S), (M) source: numerous 2010–2019.
te-moya  QUESTION PHRASE  |  source: natural speech samples. 2010-2019. note: phrase final, literally 'or not'.
tea  'type of small bamboo'  |  BI: bambu kecil  |  collected on: (S) source: numerous 2010–2019.
ted  'to hold' / 'carry' (this to seems to be more 'hold' than 'carry'. It can be used for items that are either on the front or back and also inanimate objects such as a boat holding people.)  |  collected on: (S), Umahoya village Source: Fagudu tribe 2014.
telama  'meal'  |  BI: makanan  |  collected on: (M), Waitina village source: Mangon tribe 2014.
telanihi  'lightning'  |  BI: kilat  |  collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
telapati  'thunder'  |  BI: guntur  |  collected on: (S), (M) source: numerous 2010–2019. note: Sanana form. For Mangon form, see also saoa, telopati.
telina  'ear'  |  collected on: (S) source: numerous 2014. note: see also til, talinga.
telopati  'thunder' | BI: guntur | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: antiquated. See telapat collected on: Sanana, telapati (Mangon).
tema 'direction of the island interior ' | collected on: (S) source: numerous 2010–2019. note: directions: lepa 'up' and neu 'down' correspond to clockwise and counterclockwise depending on the village. Directions: tema 'inland' and fai 'seaward' are universal in Sula.
tembaga  'copper' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
tena (kau) 'belly' | BI: perut | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
tena aya 'pregnant' | BI: hamil | collected on: (S) source: numerous 2010–2019. note: said to be the Fagudu pronunciation.
tena eya 'pregnant' | BI: hamil | collected on: (S) source: numerous 2010–2019. note: said to be the Falahu pronunciation.
tena kau 'belly' | BI: perut | collected on: (M), Ulfoa village source: numerous 2014. note: see also takau.
tena lal 'intestines' / 'guts' | collected on: (S) source: numerous 2010–2019.
tendau 'rainbow' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: see also fal.
tentu 'certainly' / 'sure' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
terompit 'horn' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.
tetap 'but' | source: natural speech samples. 2010-2019.
tetapa 'sieve for rice' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.
tetapi 'but' | collected on: (S) source: numerous 2014. note: loan from Malay. See also tapi,.

ti ad 'to exchange' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Holle postulates this as a Ternate loan.

tia 'type of small bamboo' | BI: bambu kecil | collected on: (M), Waitulia village source: single consultant 2014.

 tiad(i) 'change (money?)' | BI: menukar | collected on: (S) source: numerous 2010–2019.


 tiap-tiap 'each' / 'every' | BI: setiap | collected on: (S) source: numerous 2010–2019.

 tiba 'which' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

tibas boya 'a type of grass' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

 tifa 'drum' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

til 'ear' | BI: telinga | collected on: (S) source: numerous 2010–2019. note: see also tilu.


til (hosa) 'ear' | BI: telinga | collected on: (M) (CMD region), Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

 tilaka 'dangerous situation' / 'natural disaster' | collected on: (S) source: numerous 2010.

 tilapat 'thunder' | BI: guntur | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: antiquated. See telapat collected on: Sanana, telapati (Mangon).

 tilopate 'thunder' | BI: guntur | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: antiquated. See telapat collected on: Sanana, telapati (Mangon).

 tilu 'ear' | BI: telinga | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015. note: see also til.

 tim 'cucumber' | collected on: (S) source: numerous 2010.

 tima 'land' | collected on: (S) source: single consultant 2014. note: loan from Malay. tanah?

timbun 'float' | collected on: (M) source: three to five consultants 2010.

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timu (1) 'dew' | collected on: (M) source: three to five consultants 2014.
timu (2) 'east' | collected on: (S) source: numerous 2014. note: loan from Malay.
timur 'east' | BI: timur | collected on: (S), Waibau village source: numerous 2010–2019. note: lack of native words suggests ancient Sula had a non-cardinal direction system.
tin 'dew' | collected on: (S) source: numerous 2014.
tina 'on top of' (e.g. the floor) | collected on: (S) source: numerous 2010–2019.
tina gika 'stomachache' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: archaic. See also tena geka.
tipis (ID) 'thin' | collected on: (M) source: three to five consultants 2010.
tipu 'to cheat' / 'trick' | collected on: (S) source: two to three consultants 2014. note: see also bahas.
tiyadi 'to exchange' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
to (1) 'bop' / 'to strike weakly' / 'small punch' (playful hit e.g. after telling a joke) | BI: pukulan lemah | collected on: (M), Waitulia village source: numerous 2014.
to (2) 'to cut' / 'to hack' | BI: menetak | collected on: (M), Ulfoa village source: numerous 2014.
tobu 'keris' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.
togi 'short' | collected on: (M) source: three to five consultants 2010.
tok tok 'cow bell' | BI: lonceng sapi | collected on: (M), Ulfoa village source: single consultant 2015. note: onomatopoeia?
toko 'shop' | collected on: (S) source: numerous 2014. note: loan from Malay.
toling toling 'cow bell' | BI: lonceng sapi | collected on: (M), Ulfoa village source: single consultant 2015. note: onomatopoeia?
tom 'indigo (dye)' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: I could not verify this Holle list item, but it is possibly derived from the cherry-like tom tom fruit.
tom tom 'a cherry-like tree fruit' | collected on: (S), Malbufa village source: numerous 2015.
tomati 'tomato' | collected on: (S) source: numerous 2010.
**tongki iata** 'lizard' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**tonka** 'stick' (especially a 'walking stick or cane') | BI: tongkat jalan | collected on: (S) source: numerous 2010. note: loan from Malay.


**totoya** 'very' | collected on: (S) source: numerous 2010.

**totu** a fish that is either the same as or similar to the long-spine porcupinefish (diodon holocanthus) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**trus** 'continue' / 'straight on' | BI: jurusan | collected on: (S) source: numerous 2010–2019. note: loan from Malay.

**trus trus pel** 'for (duration), forever' | BI: selama | collected on: (S) source: numerous 2010–2019.

**tu saji** 'container cover' / 'lid' | BI: penutup | collected on: (M), Waitulia village source: single consultant 2014.

**tua (1)** 'husband' | BI: suami | collected on: (S) source: numerous 2014.

**tua (2)** 'old' (people) | BI: tua | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**tubi** a fish that is either the same as or similar to the belted wrasse (stethojulis balteata) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.

**tud** 'to overnight' | BI: menginap | collected on: (S) source: numerous 2010–2019.

**tuf** 'hole' e.g. sak tuf til 'to pierce an ear' (lit. 'pierce ear hole') | collected on: (M), Ulfoa village source: numerous 2015. note: see also duf.

**tufi (1)** 'to drip' | BI: menetes | collected on: (M), Waitulia village source: numerous 2014.


**tufi (3)** 'to stab, pierce' | collected on: (M), CMD region source: natural speech samples. 2010-2019. note: literally 'hole'.

**tugar** 'remainder' / 'change' (as in change during a monetary transaction) | collected on: (S) source: numerous 2010. note: loan from Malay.

**tui** 'snake' | BI: ular | collected on: (S) source: numerous 2010–2019.
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**tui gaya fasina** 'mooneclipse' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: Very cool if this is correct, as the literal translation is 'the snake ate the moon'.

**tui patola** 'a type of colorful snake' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.


**tuka (2)** 'heart' ('heart' in the symbolic sense and perhaps the literal sense as well depending on village.) | BI: jantung | collected on: (M) source: numerous 2010–2019. note: see also *lal*.

**tuka (3)** 'intestines' | BI: usus | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu tribes 2014.

**tuka pon** 'intestines' | BI: usus | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.


**tukang awa** 'gardner' | BI: tukang kebun | collected on: (S) source: numerous 2010–2019.


**tuma** 'flea' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**tumba (1)** 'spear' | collected on: (S) source: numerous 2014.

**tumba (2)** 'to stab' | BI: menusuk | collected on: (M), Ulfoa village source: three to five consultants 2015. note: this is an overhead stab 'Psycho' type stab.


**tut (1)** 'to grind' | collected on: (S) source: numerous 2014.

**tut (2)** 'to pound' / 'beat' | BI: menumbuk | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**tut (bira)** 'to pound' / 'beat' | BI: menumbuk | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.

**tut bira** 'to pound' / 'beat' | BI: menumbuk | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.
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**tutu** 'to grow' | BI: tumbuh | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**u** 'Southeast Asian mancalas' (game) | BI: congklak | collected on: (S) source: single consultant 2014.

**ua (1)** 'vein' / 'tendon' | collected on: (M) source: numerous 2010-2019.

**ua (2)** 'shrimp' / 'lobster' | collected on: (M) source: natural speech samples. 2010-2019.

**ua lima** 'wash the hands' | BI: cuci tangan | collected on: (S), Malbufa village source: numerous 2015.

**uang** 'money' | source: natural speech samples. 2010-2019. note: loan from Malay.

**uha** 'lobster' / 'shrimp' | BI: udang | collected on: (S) source: numerous 2010–2019.

**uka** 'to bite' (animals, e.g. dog or insect) | BI: gigitan | collected on: (S) source: numerous 2010–2019.

**uka (nihi)** 'to bite' | BI: gigit | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**ukur besa** 'unhappiness' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**ukur pia** 'happiness' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**ul (1)** 'caterpillar' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this Holle entry is possibly wrong, as *ul* means 'worm'.

**ul (2)** 'earthworm' | BI: cacing | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Wai U source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**ul (3)** 'small worm' | BI: earthworm | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.

**ulai ngai** 'worm' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: *ulai* is 'worm earth' but it is unclear what *ngai* means.

**ul nana** 'earthworm' | BI: cacing | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**ulat** 'worm' | collected on: (M) source: three to five consultants 2010.

**ule** 'worm' | collected on: (M) Collins 1981. note: see also *ul, uli, makahor*. 

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**Ulfoa**  'Urifola village' / 'Orifola village' | BI: Kampung Orifola | collected on: (M), Ulfoa village source: numerous 2015.


**uli (2)** 'worm' | BI: cacing | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**ulmakodi** 'earthworm' | BI: cacing | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**uma** 'home' / 'house' | BI: rumah | collected on: (S) source: numerous 2010–2019.

**uma bira** 'rice-barn' | collected on: (S) source: numerous 2010. note: literally 'rice house'. See also **uma pamasi**.

**uma boba** 'ridge of roof' | collected on: (S) source: two to three consultants 2010. note: Sanana form. For Mangon form, see also **uma bobu**.

**uma bobu** 'ridge of roof' | collected on: (M) source: numerous 2010. note: Mangon form. For Sanana form, see also **uma boba**.

**uma fuloni** 'space under the house' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**uma galiha** 'crawl space beneath stilt house' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**uma nana** 'sitting platform on farm land' | BI: peron | collected on: (S) source: numerous 2010–2019. note: literally 'small house'.

**uma pamasi** 'rice-barn' | collected on: (M) source: numerous 2010. note: literally 'rice house'. See also **uma bira**.

**Umaloya, Umahoya, Umaoya, Umoya** 'Umaloya village' | BI: Kampung Umaloya | collected on: (S), Umahoya village Source: Fagudu tribe 2010–2019. note: l > h > 0 is an advanced sound change in Umaloya. Only the h is optionally deleted in uma(h)oya but entire ha syllable can be dropped in fa(ha)hu. To contrast: 'Sula' is only Sua and never, *Suha. Perhaps this is because there is a lexical item, suha blocking it. Also, kalau is only kalo and never *kaho, *kao, or *ka. Perhaps this is because it is a loanword or a non-medial syllable? See also Fahahu, kalo, Sua, Saloa, Sahoa.

**una** 'crown' | collected on: (S) source: numerous 2014.

**uni** 'crown' | collected on: (M) source: three to five consultants 2014.
Sula

**untung (1)** 'victory' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: loan from Malay.

**untung (2)** 'profit' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**urara** 'bluestripe snapper' (lutjanus kasmira) | collected on: (M), Waitulia village source: Waitulia fishermen 2014.


**usus** 'guts' | BI: usus | collected on: (M) source: numerous 2010. note: loan from Malay. See also tuka.

**uta** 'vegetables' | collected on: (S) source: numerous 2014.

**uta fua** 'eggplant' / 'aubergine' | BI: terung | collected on: (S) source: numerous 2010–2019. note: literally 'vegetable fruit'. See also utufua, utufua miti.

**uta mahi** 'seaweed' | collected on: (S) source: numerous 2014. note: literally 'ocean vegetable'.

**uta uta** 'vegetable' | BI: sayur-mayur | collected on: (S) source: numerous 2010–2019.

**utufua** 'eggplant' | BI: terong | collected on: (S), Umahoya village Source: Fagudu tribe 2014. note: see also uta fua, utufua.

**utufua miti** 'black eggplant' | BI: terong hitam | collected on: (S), Umahoya village Source: Fagudu tribe 2014. note: see also uta fua, utufua miti.

**utusan** 'delegate' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**uwa** 'rattan' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**uwa kadiga** 'rheumatism' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**uwadu** 'eel' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.


**uya bana** 'light rain' | collected on: (S) source: numerous 2010.

wa (1) 'to sharpen' / 'grind' | collected on: (M) source: numerous 2014. note: see also mana, manga, monga, waha.


wa (3) 'to get' / 'to take' | collected on: (S) source: numerous 2010–2019.

wa (4) 'to choose' | BI: memilih | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

wa iku 'to choose' | BI: memilih | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

wa ngapu 'go head hunting' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: if the Sula people ever practiced headhunting, it was so long ago that a word for it has fallen out of the language. This entry literally means 'take head', so it is unclear whether it was a Sula term or simply a translation of the interviewer's prompt.

wa'a nap 'go head hunting' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

wag 'oil' | collected on: (M) source: numerous 2010. note: see also wagi for Mangon form.

wagi 'oil' | collected on: (M) source: numerous 2010. note: see also wag for Sanana form.

waha 'to sharpen' / 'grind' | collected on: (S) source: numerous 2014. note: see also mana, manga, monga, wa.

wahi lal 'bush' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

wai 'water' / 'river' / 'stream' | BI: air | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.

wai aya 'large body of water' e.g. 'pond', 'lake', 'sea' | BI: danau | collected on: (M), Wai U village source: numerous 2014. note: literally 'water' + 'big'.


wai bakatai 'dirty water' | collected on: (S) source: numerous 2010.
**wai bayon lal** 'saliva' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: this literally means 'water in the mouth'. See also the Mangon form, *wai nboni tuka*.

**wai bena** 'high tide' | BI: pasang | collected on: (S) source: numerous 2010–2019.

**wai duba** 'lake' | BI: danau | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**wai ewa (1)** 'to flow' | BI: mengalir | collected on: (S) Kampung Sama source: (tribe-based variation elicitations) Facei tribe 2014.

**wai ewa (2)** 'river' | collected on: (M) source: numerous 2010. note: literally 'flowing water'.


**wai ewa (kadiga)** 'flood' | collected on: (S) source: numerous 2010. note: literally 'strong water flow'.


**wai hama** 'source' e.g. a water spring | collected on: (S) source: numerous 2014. note: literally 'water eye'.

**Wai Ipa** community name | source: natural speech samples. 2010-2019.

**wai ita** 'river valley' | collected on: (S) source: numerous 2014.

**wai iwa** 'flood' | collected on: (S) source: numerous 2014. note: see also *wai ewa*.

**wai mota** 'hot water' | BI: air panas | collected on: (S) source: numerous 2010–2019.

**wai nboni tuka** 'saliva' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: this literally means 'water in the mouth'. See also the Sanana form, *wai bayon lal*.

**wai ngapu** 'source' e.g. a water spring | collected on: (M) source: numerous 2014. note: literally 'water head'.

**wai pe'i** 'sap of sugar palm tree' | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015. note: literally 'water' + 'sugar palm'.

**wai sau** 'waterfall' | BI: air terjun | collected on: (S) source: numerous 2010–2019.

**wai yawa** 'high tide' | BI: pasang | collected on: (S) source: numerous 2010–2019.

**wai-ewa** 'river | source: natural speech samples. 2010-2019.

**Waibao** community name | source: natural speech samples. 2010-2019.

**waisum** 'a water well' | BI: sumur | collected on: (M), Waitulia village source: numerous 2014. note: likely loan from Malay *sumur*.
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Waitebi  Name of town on Mangon Island  |  source: natural speech samples.  
2010-2019.

wak (1)  'frog'  |  collected on: (S) source: numerous 2014. note: Holle postulates this as  
a Ternate loan. See also taka er.

wak (2)  'love'  |  BI: cinta  |  collected on: (S) source: numerous 2010–2019.

wak (5)  'scoop' (quantity) e.g. (1) wak cenke 'scoop of cloves' (2) wak ipa 'scoop of  
kenari nuts' (3) wak coklat 'scoop of cacao' (4) wak ha'i 'scoop of earth'  
collected on: (S), Waibau village source: numerous 2015.

wak (dab) (3)  'to remember'  |  BI: mengingat  |  collected on: (S) source: numerous  

wak (dab) (4)  'to think'  |  BI: berpikir  |  collected on: (S) source: numerous  


waka, kau waka  'root'  |  BI: akar  |  collected on: (M) Kampung Waitina, (S) Kampung  
Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation  
elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.

wakdab, wakidabu  'to remember' / 'to miss'  |  BI: ingat  |  collected on: (S), (M)  

waki  'to think' / 'remember' / 'miss'  |  BI: ingat  |  collected on: (M) source: numerous  
2014. note: Mangon form. For Sanana form, see also wak.

waki dabu (1)  'to think'  |  BI: berpikir  |  collected on: (M) Kampung Waitina source:  
(tribe-based variation elicitations) Mangon tribe 2014.

waki dabu (2)  'to remember'  |  BI: mengingat  |  collected on: (M) source: natural  
speech samples. 2010-2019.

wako  'root vegetable'  |  collected on: (M) source: three to five consultants 2010.

waktu  'season' / 'while'  |  BI: musim  |  collected on: (S) source: numerous 2010–2019.  
note: loan from Malay. 'time'?

waktu lea  'summer'  |  BI: musim panas  |  collected on: (S) source: numerous 2010– 
2019.

wama (1)  'breast'  |  collected on: (S) source: numerous 2010.

wama (2)  'breathe'  |  BI: bernapas  |  collected on: (S) source: numerous 2010–2019.

wama (3)  'asthma'  |  BI: asma  |  collected on: (S) source: numerous 2010–2019.

wama (4)  'breast'  |  BI: dada  |  collected on: (M) Kampung Waitina, (S) Kampung  
Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation  
elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.
Sula

**wama aya** 'to sigh' | collected on: (S) source: numerous 2010–2019. note: literally 'big breath'. See also *wama sia*.

**wama bo lal** 'inhale' | collected on: (S) source: numerous 2010.

**wama siya** 'to sigh' | collected on: (M) source: numerous 2014. note: literally 'one breath'. Fossil form of numeral 'one' seen also in the numeral 'nine', *gatasia* (minus one). Mangon form. For Sanana form, see also *wama aya*.

**wama sup** 'exhale' | collected on: (S) source: numerous 2010.

**wan** 'bee' / 'honey' | BI: madu | collected on: (S) source: numerous 2010–2019.

**waris** 'inheritance' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**wariu** 'to split' | BI: membelah | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


**welirang** 'sulphur' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**weu fua** 'mango fruit' | BI: buah mangga | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.

**weu hal** 'mango blossom' | BI: mekar mangga | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.

**weu kau** 'mango tree' | BI: pohon mangga | collected on: (S) source: Duwila; Fagudu Tribe, Waibao village 2015.

**weu, weuw, wewi** 'mango' | BI: mangga | collected on: (S) source: numerous 2010.

**weuw** 'mango' | source: natural speech samples. 2010-2019.


**wil (1)** 'to call' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900. note: archaic.

**wil (2)** 'to swallow' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this is likely an alternate pronunciation of *win* 'to drink'. Sula does not usually have widely-known sub-specifying words for larger actions, and *wil~win* is a natural sound correspondence. That said, there is a word for 'swallow', *ma lia*, and there is also a parallel in 'to eat' / 'to bite', but the word *uka* 'to bite' applies only to animals biting in the violent sense. It is not

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acceptable for humans taking a bite of food. For that, a counting word would be used with *gaya* 'to eat'—i.e. *gaya fat hia* 'to bite' (literally 'one eat').

**wila** 'iguana' | collected on: (M) source: entry from Holle List; unable to verify c. 1900. note: there are no iguanas on Sula. Lizards are called *kebal*, and monitor lizards are called *komodo*.

**win** 'to drink' | BI: minum | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**win (wai)** 'to drink' | BI: minum | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitations) Fagudu, Falahu tribes 2014.

**win(u)** 'to drink' | BI: minum | collected on: (M), (S) source: numerous 2010–2019.

**winti ebi** 'fishing with a throwing net' | collected on: (M), Waitulia village source: single consultant 2014.

**winu** 'to drink' | BI: minum | collected on: (M) (CMD region), Kampung Wai U, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**wiwa (1)** 'sea' | collected on: (S) source: numerous 2010-2019.

**wiwa (2)** 'to scatter seeds' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

**wiya** 'rain' | collected on: (S) source: numerous 2010. note: variant pronunciation of *uya*.

**wo(ha)** 'stab' | BI: menusuk | collected on: (M), Capuli village source: numerous 2015. note: straight ahead stab in the manner of a jouster.

**woha** 'to stab, pierce' | BI: menikam | collected on: (M) (CMD region), Kampung Ulfoa, Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.

**wol** 'boat rudder' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

**wosa** 'admission (entry)' / 'including' | BI: masuk | collected on: (S) source: numerous 2010–2019.

**wosa bo (kamar) ganti** 'change (rooms)' | BI: (kamar) ganti pakaian | collected on: (S) source: numerous 2010–2019. note: loan from Malay.

ya (1) 'mother' | collected on: (M) source: numerous 2010. note: see also nyaya.


ya (3) 'road' / 'path' | BI: jalan | collected on: (S) source: numerous 2010–2019.

ya aya 'way' / 'road' / 'path' / 'main road' | BI: jalan raya | collected on: (S) source: numerous 2010–2019. note: ya 'road' + aya 'big'.

ya nana 'small path' / 'footpath' / 'aisle' e.g. between rows of seats as at an event or on an airplane | BI: gang, jalan kecil, trotoar, lorong | collected on: (S) source: numerous 2010–2019.

yaeya eya 'big pathway' | BI: raya | collected on: (S) Kampung Wailau source: (tribe-based variation elicitation) Falahu tribe 2014. note: look into this for localized a > e.

yaeya lal 'road' / 'path' | BI: jalan | collected on: (M) (CMD region), Kampung Ulfoa source: targeted elicitation data for number of consultants producing this form. 2015.

yaeya, yaea 'way' / 'road' / 'path' | BI: jalan | collected on: (M) (CMD region), all villages source: targeted elicitation for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015. note: see also ya aya, yaeya eya.

yag yag habar 'legend' e.g. (1) yag yag habar (bo) hai sua 'a legend about Sula' (2) yag (yag yag) habar hai Sua bo ak 'tell me a legend about Sula' | collected on: (S) source: numerous 2010.

yaha 'tired' | BI: cape | collected on: (S), Malbufa village source: numerous 2015. note: see also kol yaha.

yai 'leg' / 'foot' | BI: kaki | collected on: (S) source: numerous 2010.

yai ea 'road' / 'path' | BI: jalan | collected on: (S) Kampung Umaloya, Kampung Wailau source: (tribe-based variation elicitation) Fagudu, Falahu tribes 2014.

yai eya aya 'big pathway' | BI: jalan raya | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitation) Fagudu tribe 2014.

yai funa 'footprint' / 'footstep' | collected on: (M) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.

yai hila hama 'ankle' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

yai ipa 'footprint' / 'footstep' | collected on: (S) source: verified from Holle list by two or more speakers unless otherwise noted c. 1900.
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*yai ka'odi* 'claw' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

*yai kahor* 'claw' | BI: kuku | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

*yai kol* 'hoof' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: literally 'leg skin'.


*yai pat* 'broken leg' | collected on: (S) source: two to three consultants 2010.

*yai tia loi* 'shin' | collected on: (M) source: numerous 2014. note: see *tania hoi*.

*yai tila* 'calf' | collected on: (S) source: entry from Holle List; unable to verify c. 1900.

*yai tiya* 'calf' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.


*yaieya* 'road' / 'path' | BI: jalan | collected on: (M) (CMD region), all villages source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.


*yana* 'look' / 'watch' / 'see' (with volition, e.g. a film) | BI: melihat | collected on: (S) source: numerous 2010–2019.

*yana bua in hama* 'stand a row of dominos to be visible' | BI: meliat anka | collected on: (S) source: two to three consultants during same session 2010–2019. note: this phrase is interesting, as it is not said to mean a row of dominos stacked for tumbling, but it glosses as 'see' + 'fall' + POSS 'eye'. Perhaps it would make sense in the context of local domino rules.


*yanakoa* 'to eavesdrop' | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: as if peeking through a keyhole.

*yang* 'which' / 'that' | source: natural speech samples. 2010-2019. note: loan from Malay.


*yanga* 'to see' | BI: melihat | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.
yao 'far' | BI: jauh | collected on: (S) source: numerous 2014.
yau (1) 'away' | BI: jauh | collected on: (S) source: numerous 2010–2019.
yau (2) 'far' | BI: jauh | collected on: (M) Kampung Waitina, (S) Kampung Umaloya, Kampung Wailau, Kampung Sama source: (tribe-based variation elicitations) Mangon, Fagudu, Falahu, Facei tribes 2014.
yawa 'down', 'drop', 'take one's turn' | BI: turun | collected on: (S) source: two to three consultants 2010–2019. note: as in a game of dominos when one must place a domino down on the table.
yawa bia lida 'to descend' e.g. from a ladder | BI: turun | collected on: (S) source: entry from Holle List; unable to verify c. 1900. note: this Holle form is incorrect. It means 'go downhill'. Literally 'down from mountain'. See also yawa lida.
yaya 'mother' | BI: ibu | collected on: (S) source: numerous 2010. note: see also nyaya.
yaya goa 'funny (for women)' | BI: lucu | collected on: (S) source: numerous 2010–2019.
yeba 'to cut, to hack' | BI: memotong | collected on: (M) (CMD region), Kampung Capuli source: targeted elicitations for CMD dialect description. Reference Appendix data for number of consultants producing this form. 2015.
yom (nui) 'to burn' (burning coconut shells like when cooking over them) | BI: membakar | collected on: (S) Kampung Umaloya source: (tribe-based variation elicitations) Fagudu tribe 2014.
yop 'to suck' | BI: mengisap | collected on: (S) Kampung Wailau source: (tribe-based variation elicitations) Falahu tribe 2014.
yota 'short' / 'low' (height, length) | BI: pendek | collected on: (S) source: numerous 2010.
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**yota (haiwan)**  'to hunt' | BI: berburu | collected on: (S) source: numerous 2010.

Note: haiwan is a loan from Arabic, hayawan.

**yota haiwan**  'to hunt' | source: natural speech samples. 2010-2019.


Note: see also *nish-nish*.

**yotu**  'to hunt' | BI: berburu | collected on: (M) Kampung Waitina source: (tribe-based variation elicitations) Mangon tribe 2014.


**yoyu nana**  'aunt MZy' | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**yu'u lama**  'to nod' | BI: anggukan | collected on: (M) source: entry from Holle List; unable to verify c. 1900.

**yua**  'wash' | BI: mencuci | collected on: (M) source: three to five consultants 2010.

**yua lima**  'to hold hands' | BI: berpegangan tangan | collected on: (S) source: numerous 2010.
LEXICON FINDER LIST (ENGLISH–SULA)

The following list is provided to assist with finding Sula words in the lexicon above. The list includes many English terms along with Sula forms that correspond to various word senses of the English term. That is: the following list does not indicate word senses, examples, or even differentiate between homographs, so Sula forms listed after an English entry like wind will include forms related to ‘air’ and also forms related to ‘winding’ / ‘twisting’. The list also does not indicate which forms are non-standard, antiquated, ambiguous or otherwise suspect, so please use with caution and reference the lexicon above for more information.

**a lot:** eb, ta lal

**able to:** dahi, da’i

**aboard:** dena

**above:** deha lepa, lepa, la lepa, lipa

**abroad:** luar

**accident:** cilaka

**achilles tang (acanthurus achilles):**

mankina

**across:** ila hia, lug

**actual:** dit

**addiction:** katageya

**address:** leha nib bo sahoa

**admission:** wosa

**admit:** wa

**adopted child:** ana piara, ana sil

**adult:** pia aya, pia eha

**advice:** nasehat, saloa, soya du(a)lu

**afraid:** kag(i)

**after:** malel pel (less common), mua pel, sonlulu

**afternoon:** lea neu

**again:** dua, mehi, pihu

**ago:** bo mena, bo mina, pasa

**ah:** a

**ahead:** bu muka

**aid:** mariu

**air:** mora

**airplane:** kapal udara

**all:** mua, mua mua, pakiaki, pakaiki

**allergy:** mana, mahana

**ally:** mariyu

**almond:** amande

**almost:** han, lani, yog yog

**alone:** gahia

**already:** dad pel, pel, pil

**also:** do
always: betia, suka
an island jack (carangoides orthogrammus): bubara
ancestors: napa nohi, nopa nahi
anchor: tap
ancient thing: fabumena mena
and: damu, dan, di, do, du, di
angry: hana, lal basah, lal basahn, naha
animal: haiwan, haiwani
ankle: foku, yai hila hama
anklet: fo’aha yai, talanga yai
another: basa, hasoya, jawab, basana, nli
ant: kakui bina
anvil: mumpon
anything: fahapa (para)
anytime: bet pila, oras goa para
anywhere: saoa para
apologize (formal): noi ma(‘)af
appear: pahu
apple: apel
April: April
arbab: arbab
areca catechu Linn.: el, elu
argue: banta
arm: lima kau
armpit: sagig lal, sagigituka
around: dagalil, gabalil
arrange: kub
arrest: tahan
arrive: aduk, aduki, duk(i)
as / like: gaika
ascend: bena, ben
ash: af(u)mai, aftuka, afumai, hai mai, afmai
ashamed: bal, mamihi
ashtray: apleha
ask: nika, noi
ask (a ques) / to question: danika
ask for: noi nika
assault: mana fau, mana pau
assume: sanka
asthma: wama
at what time?: befa ga pila
attic (under the roof): kaka’al, padyanga
aubergine: ufa fua
August: Agustus
aunt MZy: yoyu nana
awake: mara (mara), gega (ol)
away: yau
awful: kag(i), takut
axe: baliu, taboi
baby / small child: ana mehi nana, ana mehi nana, ana nana, ana ta(ha)i
babysitter: pia jaga ana
back: bahu, bau, bo gehe, bo gehi, ded pon, gehi, gehi fat, gihi fat, lela fatu, lif, loi nau, pau, sanapahu, sanapau, taka’u fatu
bad: baeo, basa, bisa moya, kabares, kabaresi, kabures, baeu
bag: tas
bag (made from rope): bana kanoufo
bait: kapamid
bake: sinanga
ball: bal
bamboo: au, au ponta
bamboo basket: mewa
bamboo branch: au sanga
bamboo lath: sangapitu
bamboo sections between joints: au lewa
banana: fia
banana cultivars: fia kaeda, fia raja, fia manafu, fia wata
banana inflorescence: fia po, fia poha, fia pohu, poa
banana leaf: fia hosa
banana meat: fia ihi
banana tree: fia kau
band (line): bend, tali kidi
banyan tree: kau nona
barber: guti nap
bargain: yawa falihi (baka), yawa falihi (lu)
bark: kau kol, kau koli, kau kuli, as li, fako sipa
base of tree: kau tafi
bask: balea dit
basket: ranta aya; ranta me'ihi, ranta nini, ranta make'i
bat: paniki
bathe: nan
bathroom: leha nona
bay: batuka, mahi (bo) lal
be: pita
be alive: pia
be awake: mada
be born: poa bai
be silent: og, ogu
be wrecked: maka'ita, sa'ota, sa'otu
beach: kami tina, kuma wai tina
beans: tamil, tamilu
bear fruit: babua
beard: diangku, jinggo
beat: dotu, mana fau, mana pau
beautiful: birahi, birahi bisa, bisa, pia
because: sabab, sebab, son
become: labahu
bed: leha nona
bed curtain: kelambur
bedding: sam
bedroom: leha nona
bee: wan
beef: sap ihi
before: bo mena, bo mina, demet, mina, pasa
beg: noilipua
beggar: noinoini
behind: bo gehi, gehi
belch: mari'a
belly: takau, tena, tena kau
belong to (first-person possessors): =gon
below: bo heha, bulela, deha ne'u, ila neu, ne'u, ne'u heha, neu heha, neu, lal neu
belt (clothing): pinding
belted wrasse (stethojulis balteata): tubi
bent: babuk
beside: ila, ila-pon
bet: batar
betel leaf: gam
betrothal: makjad bakai
between: do
bicycle: sapeda
big: babiku, bakosa, eya, fanini, makosa, sanasa fanini
bigeye (heteropriacanthus cruentatus): kaleofua
bigeye emperor / humpnose big-eye bream (monotaxis grandoculis): sakawa
bigeye fish (heteropriacanthus): kena kaleo fua
biggest: aya kadigadiga
bile: npeu, peu
bird: haiwan, haiwan kao goga, mankau, manu kaupetu, manu kaupetu
bird (other than chicken): man kau (goga)
bird's foot: man in yai koku
bite (e.g. from dog or insect): mana uka, ka, nas, gigi, ngasi, nihi, uka, uka (nihi)
bitter: mampai, mapai
bitter mellon: pari
black: mit(i)
black eggplant: utufua miti
black pepper: rica
black sand: kamiya miti
blackside razor wrasse (iniistius umbrilatus): kena tubi
blackspot sergeant (abudefdul sordidus): dakoku
bladder: kawaileha
bleat: bib gamei, bib gamei
bleed: po suk, poa suk
blessing: banoi
blind: hama kaok, ka'oki, lama ka'oki
blister: katefa
blocked: daupa
blood: po, po:, poa, poro
blossom: bahal, hal
blotcheye soldierfish (myripristis berndti): kaleu
blow: baha, buha, boli
blow as the wind: bufu, mora laka
blow one's nose: suma
blow with the mouth: bufu, buha
blowpipe: sumpi
blue: babir, bahu, bakiru, mai babiru
blue goatfish (parupeneus cyclostomus) and manybar goatfish (parupeneus multifasciatus): sagu
bluestripe snapper (lutjanus kasmira): kena gurara, urara
bluff: la dad moya
blunt: bapompu, mahoka, moka
board a vehicle: bena, ben
boat: bodi, lota
boat rudder: wol
body: ihi fata, kit badan, nisi fata
body hair: foa
body hair (animal): nforo
boil: fif, ngan, haku
boiled egg: ngan mantel
boiled water: ngan wai
bone: ho'i, ho(')i, hoi, loi
book: kitab
boot (shoe): sepatu lepayau
bop (to strike gently): to
border: it, iti
bored: puas pel
boring: kabosan pel, pak pai, pinjam
boss: arbab
bottle: botol
bottom (posterior): goi, goiyon
boundary: it, iti
bow: jub
bowl: piga, saf
box: dos
boy: ana ma’ana me’ihi, ana mana
   nana, ana mehi maana
boyfriend: bobai ma’ana, bobai
bracelet: foro
braid: lil
brain: nap buhu, nap fat
branch: badaeti, bati, daet, daeti, in
   sana, kaopet, ncanga, sana, kau sana,
   sanga
brave: baran, beran
bread: roti
breadfruit: suk
breadfruit blossom: suk hal
breadfruit meat: suk ihi
breadfruit tree: suk kau
break: gabat, pama
break (bone): despat
break down: busu
breakfast: gaya hok
breast: basa, behi(tan), bokatan, kilu,
   lela fatu, wama
breast milk: sosa wai, soso wai
breasts (female): soso
breath: (it) wama
bribe: danamatapia
bride price: kai fa’oii, kai falili
bridge: dodok(u)
bright (color): mawita
bring: dol
broad: da’ofa, dayas
broken: ba’sa (pel), gabat, basa
broken leg: yai pat
bronze: so’asa
brother: nai, sanohi ma(‘)ana
brother-in-law: sa(‘)u, sanu
brow: bun
brown: gingga matua, soklat
bruise: kan mafai
brush: isa
bucket: sia-sia
bug: uli
build: bake
builder: tukang
bull: sap ma’ana
bullet: panglu
bunch: pen, pengi, pin
burn: batona, batonu, mota, sara,
   sinanga, badona, beruwi, donu, sara
   tabak, yom (nui)
burn / burnt: dona, (ap) dona
bush: abu tuka, wahi lal
but: mai, tapi, tetap, tetapi
butcher: matapia babota
butterfly: lapa lapa, la’apa, ma’apa,
   kafin
buttock: goi foka, ngoi foku
buy: ba, ba(ha), ba:, baha
by: han, baka han, han, mak han
bye: da
calendar: almanak
calf: yai tila, yai tiya
call: bowel, wil
calm: badium, og og
camera: kamera
can (ability) / can (permission): dad
can (permission): dad ine
cancel: dad moya
cannon: dahi aya, dohi nana, lila tembaga
cannot: dad moya
Capalulu Village: Capuli
care for, look after: mariu matapia
carpenter: sinot kau
carry: ted, hen, leba
carry (on the back): bon gihi fat, bun taka’u fata
carry (on the head): dundu bo ngapu, dur bo nap
carry (to the front of the body): sakaf bon tinakan, sakafi bun takau
carry in the hand: gim barin, gin ba dini
carry on the hip: sagat, sanggate, sanggati
carry something that hangs from the hand: gigi, ginggi
carry under the arm: sagig lal, sagigituka
carry in front of oneself: kaf(i)
casava: kasbi
casava meat: kasbi ihi
case for cloth: berua, barua
cash: dana muamua, dana pakiki
cash (eg check): tiade
cashew fruit: boyakis, bua yakis, fua yakis
cashew nut meat: yakis ihi
cassowary: kasawari
cat: nau, ngau
caterpillar: ul
causative prefix: baka-
cave: fatuf
ceiling beams: kata niga, tanumba
celebration: baleleyan
centipede: mana afoya, tana
centre: puhi
ceremony: adat
certain: tentu
chaff: kol, sindu pamasi
chair: leha nib
change: tiad(i), tugar
change (coins): pip nana
charcoal: nong
charming: maoma
cheap: mura, falihi mura
cheat: tipu, bahas
cheek: papa hoi, papa’oi
chef: pia (tuka) bamap
cherry-like tree fruit: tom tom
chest (body): da, behi(tan)
chew: bakumur, mama, samam, samamu
chicken: man, man nana tahai, manu panda
chicken coop: em
chickpea: kafui
chief: kapala desa
child: amehinana, ana, ana mehi, ana nana, anak, gama (nana), mehi nana, nana
chili pepper: mahisa, maisa, misa
chili sauce: dab(u)-dab(u)
chin: lamida lila, nayo hiha
China: Cina
chocolate: choklat
choke: gat, gati
choose: bapili, bis loi, lika, pili, wa, wa iku
chop: bota, bama
chop away at something: sisa, sof
cigarette: tabak
circle: matopa, matupa
circumnavigate: gabalil, sai gabalil
clan: kumpulan
claw: kahor, kodi, yai ka’odi, yai kahor
clean: bagila, bau-gamiha paka
cleaning: gemiha
clever: pandei
cliff: felbok
climb: bawel, binabo lida, bena, ben
close: han han, kapa oba, sabu
clothesline: meu kapayapa
clothing: lab
cloud: awan, fangara, fengara, pangara, fengara fengara
coals: ndong dui, nongmarur
coast: kuma wai pon, mahi ila, mahi pon
cockroach: dor
coconut: nui
coconut crop: sel nui
coconut meat: nui wai ihi
coconut tree: nui kau
coconut water: nui kau
coffee: kof, kofi
cogon grass: para
coin: pip seng
cold: bamin, bago(:), bagoo, bagoa, bamoda
cold (illness): bakef, maka didi
cold drink: es
cold, a: ngapu tuka gika
color: hama
comb: bi, sanisi
come: duki, duk(i)
comfortable: kol sanang, lal senang, sanang
commit adultery: lohi
companion, friend, guide: panoida, ponoida
complimentary (free): dok basa
confess: hika, niki
confusing: matilali
connection: sanohi
construction: baka-gehi, baka-kehi, bau-gehi
container: dos
continue / straight on: trus
convey: baka-toya
convict tang (acanthurus triostegus): kena langpama
cook: bamap, bamapu, baumapu, samam, bama(pu), pabamap
cook rice: bamap bira, bamapu bira, haku
cookie: biskuit
cool (temp): makoha
cool season: bagoa
copper: tembaga, talan
coral reef: nuki
corn: gar, gandu
corner: foka, yon
corpse: pata
correct: dahi, da’i
corrupt: matapia binaka
cosmetics: meikap
cost: falihi
cotton: lai, lawi
cotton fabric (local, European): sama sehu, sam iropa, sami ladu, sami eropa
couch: dog
cough: bakef, sangihi, sanihi
could: mai dad
count: same, rek, reking
country: hai, ia fai
countryside: hai yon
cover something: dutu
cow: sap
cow bell: tok tok, toling toling
crab: oyu, yoya
cracked: gabat
cradle as one would a baby: sakafi
cramp: bamata, mamanto
crash: mato
crawl space beneath stilt house: uma galiha
crazy / delirious: babua
creation: padad
credit bondsman: gaya tulunga
cremation: dona banke
criminal: mata pia sosa
crocodile: foya, fuaya
crooked: babuk
crop: lopa
crow: katinggu, kutig
crown: una, uni
cry: mena, menga
cucumber: katim, katimu, katimun, ketim, ketimu, ketimun, mantimu, tim, timu
cup: kop
curcuma domestica: kon, kuni
cured: ban makata sigadu pia, bau-makata bihu pia
curtain: jahi
custom: adat
cut: bota, botu, gut, det(i), to
cut, a: makan
cut, hack: bama, daneta, det, deti, kau, sis, yeba
cute: birahi, imut
cutlery: fame(hi)
daily: betia
damaged: basa
dance: baronggeng, joget, ronggi
danger poisonous: berbisa berbahaya
dangerous: faadab
dangerous situation: tilaka
daring: beran
dark: gamam, mit(i)
darling (boyfriend/girlfriend): bubai
darling (my dear): pacar
date: mak-bobai
dating (courtship): mak bobai
daughter: ana fina, ana fini, nana fina
daughterinlaw: gumamoro
day: be, bet, bet(u), beti, betu, bitu
day after tomorrow: benai
day before yesterday: damitu
dead: mata
deaf: talina bin, talinga bombingi, til (ben)
dead: mata
debt: limpa, lipa
decade: tahun paka-poa
decay / rot: patsuba
December: Desember
decide: fota
deep: baleu
der: menjanga
defeat: malawan
defecate: bu, siba
delayed: baka-yea
decorate: utusan
delicious: mina
deliver: dol
deny: mengaku moya
depart: sai, soba
descend: neu bia foku, yawa bia lida
descendent: turunan
desiccate: saota
destination: mak sud
detail: rek
device for measuring liquids: botol
dew: timu, tin
diaper: pampres
diarrhea: seba-seba, sidag
dibble: kanum, kauumi
die: mata
different: beda, kata
dig: dagigi, geka, bau-leu, gahu, gahui, gai, gika
dining place: leha gaya
dirty: baka-tai
dirty water: wai bakatai
disease: panyak
disgusting: baka-tai
dish: piga
dive: le
divorce: map(a)reha, mangapadila, manparika
dizzy: nap geka
doctor: dokter, matapia makata, pia makata
dog: as, asu, fa’ko, fako
don’t: koi
doors: eamata, eya mata, lea ngada
down: neu, yawa
downhill: yawa lida
dream: dagama, badagana, baragana, dagana
dress: fafoi, lab
dried fruit: kaufua saota
dried small whole fish: kena kawahi
drink: win(u), win(u) wai
drinking bowl: ong ko foi, akafoi
drip: dana, tufi
drop: yawa
drought: lea kadiga
drum: su’isa, tifa
drunk: dab, falai, ma’angu
dry: sa’ota, sa’otu, saota, s’ota, sotu, saota
dry oneself: balea dit
dry season: oras lea
duck: beb
dugout canoe with a motor
dugout canoe with a motor
attached: jonson
dull: bapompu, mahoka, moka
dumb: bakago
durian: dahia, ndalia

dust: abu, hai mai, lai mai, mai-mai

dust cloud: hai bopa, oros moya

dust storm: bufai mai

dwarf: mata pia matua nkol

each: tiap-tiap

eagle: soli

ear: tali nga, talinga, telina, til, til
(hosa), tilu

ear of corn: bira pin, mping

ear-clip: karabu

early: bahu

earring: nganting, nganti nganti

earth: ha’i, hai, loi, lai

earth (globe): dunia

earthen water barrel: tampayan

earthquake: nen, nin

earthworm: cacing, makodi, mokawa’i, tana, ul, ul nana, ulmakodi

east: timu, timur

easy: gampang para, maka aya para

eat: gaya, gia, giya, giya

eavesdrop: yanakoa

ebb tide: it, it, gasu

echo: gena

eel: ima, uwadu

egg: man(u)telu, mantel, mantelu, mantelu, mantel, manutelu

eggplant: uta fua, utufua

eight: gaatua, gatahua, gata’ua, gatauwa, gatua, gatua, gatua, gat-hua, gatahua

eighteen: po(a)dohia hua

eighth / eight times: pa-ka-tahua

elbow: silfoka, silifoku

elder: matua

elder (old person): matnana

eleven: po(a)dohia, poaduhia, poadohia, podigia

eleventh / eleven times: pa-ka-poadohia

embarrassed: bahal

embers: ndong dui, nongmarur

emergency: og og para

emotional: peresaan, rasa

empty: batuka, malel, malil

end: di moya pel, peng habisan

enemy: maku lawa

English: Sanana

enjoy: lela, suglela

enjoy (oneself): bau-lal suka (dit)

enough: dad pel

evec: baka-kehi

essential: yang penting

eugenia: mudi

even: mai

ever: pernah

every: tiap-tiap

everybody: matapia mua-mua, mua mua

everything: mua mua, fah mua mua

evil: kabares, kabaresi, kabures

evil spirit: miki, mokayat

exactly: pahugan

example: maciam

exchange: matiad, ti ad, tiyadi

excluded: wosa moya

excuse me: tabe, ma’af

exhale: wama sup

exist: dahi, da’i
Chapter 4: lexicon

exit: ea mata sup
expensive: mahal
explode: pefa
explode strong: ba'tuh kadiga
extinguish a fire: ban mapai ap
extremely: kadiga
eye: hama, lama
eyebrow: bunfoa, nbungi foro
fabric: fafoi
face: lamatuka, lug
faint: dabol
fair: deneka
fall: same, bakagi, bona, bua
fall behind: bumohi
fall down: bua neu
falling tide: bau-neu
familial relationship: sanas, sanasi, sanohi
family name / division of society: soa
fan (uchiwa): wihi
far: de yau, yao, yau
farm, field, garden: awa
farmer: mata pia bau awa, matapia awa, matapia bau-awa
fast, quick, in a hurry, soon, urgent: bahu bahu, bahuol
fasten: beu
fat: babiku, bag, bagawagi, bakosa, bakosa bag, fanini, gaji, gajigat
father: baba
father-in-law: baba tam, tam ma’ana
fault (guilt) / mistake: bau-sala
favorite: lal sukasuka
fear: kag(i), kag, kagi
feather: foa, haiwan foa, man kau
(goga) in foa, man(u)fo, manfoa, nfo, fua, kol foa
February: Februari
feces: pu, tai
fee / price (service): onkos
feed: dok tea maha
feel (touch): akaaka, laulau
feeling: perasa
female breast: sosa, sosu
fence: hisa, tora
fetch water: dok wai
fever: dagis, degis, maka didi
few: ga io, hia, losi-losi, los-los, lu, lu'u, lulu, nana nana (para)
fifth / five times: pa-ka-lima
fiftieth / fifty times: pa-ka-pogalima
fifty: po(a)galima, pogalima
fight: mana fau, mana pau, manatota, da’hi dota
fighting cock: manu
fill: baka-wosa
filtered: taf
fin / flippers (swimming): taka er yai
final: mua pel
find: dahi, da’i
fine: dana
finger: lima kaku (wanga), lima koka (wana), lima koku (wanga), lima wanga, lima wana
fingernail: kahor, kodi
finish: bau-mua pel, mua pel, bau-mua
fire: ap, api, apu
fire / light: ap, ap
fire place / hearth: hit, hitu
fire wood: kan hut, kau tonu
fire, lay off: baka-baret
firefly: kunong
firewood: kau ap
first: petama-tama, feu
first name: na pertama
first person singular agreement marker: a-
first person singular pronoun: ak, aku
first plural (exclusive) agreement marker: ka-
first plural (exclusive) pronoun: kam
first plural (inclusive) agreement marker: ta-
first plural (inclusive) pronoun: kam, kit, kiti
fish: kena
fish, to: ba(u) ma'i (kena)
fishing hook / fishing lure: kaihi
fishing rod: kapamid kau
fishing with a line & pole: bawiti
fishing with a machete: botu peda
fishing with a spear gun: jubi
fishing with a throwing net: winti ebi
fishing with a throwing spear: sasua
five: galima
flame anglefish (loriculus): dakoku
flare up: lin
flat: maleb
flathead grey mullet (mugil cephalus): bana au
flatulate: ba'itu, baku
flea: kota , kotu, tuma
flesh: nihi
flip: pal sek
float: daduba, timbun
flood: wai ewa (kadiga), wai iwa
flood tide: seg, sig
floor: dof, kasafo(h)i, sai
flour: terigu
flow: dena, ewa, wai ewa, wai ewa
flower: bahal, kau bahal, bunga, hal, kau hal, kau nhal, kau sumba, sumba
flowing blood: po laka, poa laka
flute: filut [u]
fly: la, laː, laa
fly (insect): fina muya, finga muya
fog: bafee, bafei, bafel, fangara, fengara, hitam, kabut, laf, mit gab
fold: dud
follow: laka mot, mot
follower: ba
food: gaya
foot: yai, yai lafa
footpath: ya nana
footprint: yai funa, yai ipa
for: buat
for (duration): salama
forbidden: haram
forehead: lama tina, paitina
foreskin (vulgar): las ot(i)
forest: fa'a oki, fa'ok, fa'oki, faa ok, faok(i), faoki, kamatua
forest fire: hai mota
forever: trus trus pel, salama lama pel
forget: matalin
forgive: maaf
forgotten: dehaat
fork: for
Formal agreement marker: gi-
formerly: bo (mina)
fortification: benteng
forward: gamana, lug
four: gareha, gadia, garea
fourth / four times: pa-ka-reha
fragile (easy break): bahu pama, gang pang pama, jepat pama
freeman: bala
freeze: baka-digapa
fresh: bagoa, segar, senang
fried banana: fia-sinanga
frog: taka er, taka’idu, wak, bia
from above: meu bolila
from now: ol, pai
front: bo mena, lug, mena
fruit: fua, kau fua, kao fua, nceli, kau nceli, ncili, seli, kau seli, bua, fo’oha
fruit pit: fatu
fruit rind / fruit peel: fua(ng) kol, nceli ngkoli
fry: sinanga
fry without oil: salena
full (satisfied): bis, bis pel, gub
fun: bau-lela, bau-senang senang
funeral ceremony: panau, pata bit
funny (for men): baba ema
funny (for women): yaya goa
future: dawika, masa duk
game (sport): batanding
garbage: eka
gardner: tukang awa
garlic: bao bot
gather together: kub, lopa, lopu
get: wa
get revenge: bau-sin
ghost: nyawa, put’ana
giant trevally (caranx ignobilis): kena bubara
gift: cato
girl: ana fina me ihi, ana fina nana, fina ko(a)
girl (preteen and up): ana fina
girl / young girl: ana mehi fina
girlfriend: bobai fina, bubai fina
girlfriend (also boyfriend): bobai
give / gift: dok, doki
give birth: bahaka, baka, la’oka, poa bai
glad: lal suka
glass / cup: galas(i)
glowing: ndong dui, nongmarur
glue: sau
go: laka, sai
go camping: laka berkema
go down: sai neu
go eat: laka kaya
go out in search of a good time: bis loi senang senang
go planting: laka pasel
go searching: laka pisloi
go straight ahead: laka terus, sai maneha neha
go up: sai lepa
go upstream: bo wai nap, laka tima bo wai ngapu
goat: bib
goatfish (parupeneus): kena Saguu
god: jao
gold: famaka, mas
gone to sleep (appendage): bamata
gong: sarag
good: bisa, pia
good (used for objects): birahi
goods / things: fa'a (mehi)
gourd: kalebasa, kalibas
grab: gem
grab (in the manner of firmly grasping another's arm): manakem
grammar: saya, tatabahasa
grandchild: ana nopa, ana opu
grandfather: napa nana, popa
grandmother: napa fini, nopa fina
grapefruit: limu kia, pohi kaya
grasp: manakem
grass: badaeti, eka, hik, kau hik, ka'ik, ka'iku, kahik, kahiku, kaik, kasaf(h)i, kekku, keku, kiku
grass (types of grass): iayu, tibas boya
grass or grass mats on the floor of a home: engka
grasshopper: ata bau, tamba'u
grateful: ber sukur
grate: kub
gray color: bafei
grease: bakosa bag, gaji, gajigat, lemak
great (fantastic): ebat
great / large: aya, nini
great baracuda: kena Sambali
green: babir, bafee, bafei, bubir, iju
green jobfish (aprion virescens): monce
green leaf: babiru kaulosa
grill: sinanga, haka, lofi
grind: gem lima, wa, waha, tut
ground: kasaf(h)i
ground meat: daeta (yeba)
group: pon hia
grow: atut, batut, batutu, bau-faa sel, dog / dogi, dogi, dota, tutu
grunt: gamuda, sakohi
guard: kapita, jaga
guess: dua dua, rairai, soya kuiki'i
guest: mata pia duki, mata pia hai bosa, matapia basa, matapia duki, sanohi duki
guilty: sala
gum (mouth): fea, ni'i mata, nihi mata
gun: senapang
gun powder: obat
guts: tena lal, usus
habit: patol suhu
hack: bota, det(i), to
hair / feather: fo:, keku, nap, nap foa, napu, napufoa, napwaka, ngapu fo, ngapuforo
half: ence, enci, donis, donnis, dunnis, dunnis, nis, lu-lu
hammer: martel, martil
hand: lima, lima lafa
handsome: birahi, birahi bisa
hang clothes to dry: balea
hankerchief: hoi min
happiness: ukur pia
happy: lal senang, lal suka
harassment: percobaan
harbor: boban, loleu
hard (difficult): sinsara
hard / stale: kadiga
hard to breath: behi dagati
harvested rice: bira ka kol, pamasi kakolbi
hatchet: baliu, taboi
hate: mahara
have forgotten (something): manta manu
have fun: bau-lela, bau-senang senang
head: nap, nap (f)oka, nap foka, napu, ngapu
headache: nap geka, nap gika, nap-geka, ngapu gika, pusi
headcloth: lispeu, samsi beu
hear: baked, baker, apakid, gena, geni, gina, paked
heart: bihofor, bosu, lal, mbaso, tuka
heart break: lal kangela
heart of the tree: kau ladu, kau nfat
heatwave: mota kadiga, lea kadiga
heavy: fa'ata, fayata, faata
hedge: hisa
Heller's barracuda (sphyraena helleri): doma
help: mariu, patok, baku bantu, mungkurui
hen: man fina
herbs: makata
here: deha saik, ik, iki, ika, ika, iki, iku, isuka, sa’ik, deha sa’ik, saik, saiki, saiya, sa’ia, sik, siku, siku, bo siku, sit iki
heron: man camo, tayoya
hiccups: mandia doki, mari’a doki
hide an item: daufongi, daufon, da’ufon, dori fon, fongi
hide oneself: balfongi
high: lepa yau
high tide: wai bena, wai yawa
hill: foka nana, lida, lida ma’ihi
history: cerita
hit: bal, fau, bau, befa, dota, mangafau, moma, palu
hit on / chat up: manabaja
hit with a stick: moma
hoarse: li sei
hoe: cangkul, pacul, patu
hold: gawak, gem, gem (kati), gem kat, gemu, hakkot, kafi, luk, luku, manakem, sakaf, ted
hold as one would a baby: kaf
hold hands: yua lima
hold in hands: gami
hold under the arm at one's side:
sangati, binkaf, sakaf
hole: duf, leu, tuf, tufi
holy place: kramat
home: uma
homemaker: fata
homesick: lal wak kampung
honest: pia
honey: wan
hoof: yai kol
horn: tadu, tadu (tar in Sula), tar, terompit
horse: jara
hot: mota
hot water: wai mota
house: uma
how: ba gahowa, baga’oa, bagoa, bagano, bagahoa, bagahoa, bagaoa, bagoa, bagano, bahoa, bau gahoa, bau
gaoa, bau goa, gahooa, ganoa, ganoki, gaoa, goa, goa bal, baganoki, bau ganoa, go’a neka
how many / how much: eb gahoa, eb gaoa, eb goa, gapila, pila, eb gahoa
however: tapi
hug / embrace: hakkot
huge: aya kadiga
human / person: pia, matapia
humid: kafida
humorous: bau-lela, bau-senang
humuhumunukunukuāpuaʻa (Rhinocarthes aculeatus): kabu
hundredth / hundred times: pa-ka-ota
hungry: bayu, boya
hunt: banap, banapi, dol as, haiwan pakiai, laka bisloi, laka soi, yota (haiwan), yota haiwan, yotu
hurricane: mahuba
hurt: geka
husband: guntua, tua
hut: sabua
I: ak(u)
I love you: ak ngausu mon
I myself: ak gahia ak, aku nungga aku
ice: es
if: kalo, kalu, kalo
ignite: batona, batonu
ill: geka
imperata cylindria: pada
implements: fame(hi)
impossible: la dad moya
in: bo lal, lal
in (six) days: bet genei pihu
in front of: bomena, bumena, lug, muka
in good, healthy condition: pia
in order to / so: lamua
in that place: bo leha
in the manner of: genli, ing kina
in three days (after day three): sonlulu bet gatel
in, inside: ba leu, bo lali, bo tuka
incantation: fa pasia ban doa
including: wosa
inconvenient: bao repot
index finger: lima wana patub
indigenous: asli
indigestion: tena lal geka
indigo (dye): tom
indoors: bo uma lal
infection: makan
inflammation: lin, mafai
information: pesawat la
ingredient: teamaha
inhale: wama bo lal, sui
inherit: be’ina waris, waris
injury: makan
innocent: sala moya
insect: kakui, baleu, batuka, lal, tuka
interesting: birahi
interpreter: matapia tukang bahasa
intestines: lal, tena lal, tuka, tuka pon
introduce: baka-nau, mak nau, mak-nau
invite: bawel, dol
iron: mamu, mum
island: hai, pas
Chapter 4: lexicon

it: ik, iki, ika, ika, iki, iku
itch: mahana
items for sale: fa pamaha
jacket: lab, badu
jackfruit: naka, ndili
jail: bui
January: Januari
jar: kana, poci
jaw: damera
jealous: lal gika, ntuka giki
jealous anger: lal bena
jewellery: faa makaa
job: baumanara, manara
join: laka mot, mot
joint in bamboo: au foku, foka, foku
journey: palaka
judge: hakim
July: Juli
jump: sena
June: Juni
just: para
just right: pas, pia-pia (para)
kapok tree: kailupa
karate chop: det(i)
keep hitting: dota-tota
kenari blossom'(canarium): ipa hal
kenari fruit'(canarium): ipa fua
kenari nut (canarium): ipa
kenari tree (canarium): ipa kau
keris: tobu
kick: sepa
kidnapper: mata pia buwa mata pia
kidney: kula
kidney disease: kula-keka
kill: bau-mata, faumata
king: kolano, kolan
kiosk / stall for buying small items:
kios
kiss: manayop, cup-cup, manam
kitchen: leha bampah
kite bird: karan, soli
knee: padomu, paroma
knife: kob, kob(i)
knit: harja
knock (consecutive strikes):
liangada
know: nau
know someone: nak
knuckle: lima foku, lima foka
ladder: kahepa
ladle: iru oka, iru ongku
lagoon triggerfish (rhinecanthus aculeatus):
kabu
lake: danau, taga, tahaga, wai duba,
wai fanin
lamp: lamper
lamp wick: sub
land: dunia, hai, tima
langsat fruit (lansium parasiticum):
lasa, babunu
language: li‘i, lii, li, basa, bahasa
large: fenin
large body of water: wai aya
large quantity: eb talal
large type of kenari nut / canarium:
kam
last: mua pel, penga bisan
last (temporal): an samali, an samoli, samohi
last month: da fasina
last week: da ahat
last year: tahun dabet
late (late for an event): lat pel
late evening: buhi
later: bata
laugh: balela, baheha, mamui
law: aturan
lazy: bobus fat, busufat, pamalas
lead: tamua
leader: matua
leaf: hosa, hosa, kau hosa, kan hosa, kau
in hosa, kau losa, nlosa
leather: kol
leave / left: deha
left (direction): tapa, lima tapa
left side: ila tapa
leg: nyai
legend: yag yag habar
lemon: limu cui, pohi limcui
lemon-like fruit / orange-like fruit /
juice: pohi
lend: dok bihu
lend to: noi
less: dapuya, kurang
let's: mai
let's start: mai (dad) ol
letter: huruf, surat
lid: tu saji
lie (not tell truth), impossible
(thing): bagau
lie down: nona, nona (bol bol), baka-
leng, nona bol (bol), nona boli, nonu boli
lie on belly: nona bal pif, nonu pal tutu
life: pia
light: ap dawika, maha’aya, mangkayo
light (weight): maka aya
light rain: uya bana
lightning: kila, safila, sagila (at),
sagila’at, sagilaat, sagilatu, telanihi
like: genli, ing kina, lal suka, suka
like (in the manner of): ganika, ga’iki
like / as: gaika
like / AUX: suka
like a lot: lal suka
lime: fakeya, fakia, fakea
line: ber baris
lips: bayon kol, mboni koli, nbayon kol
listen: baked, baker, talinga
little: losi-losi, los-los, lulu, nana, nana
nana (para), lu
little finger: lima wana meihi, lima
wango nana
live: hidup
live / to be alive: marui
live somewhere / stay or remain:
deha
liver: be(hi)for, behifon, behifor, kila,
lal, lali
lizard: kadal, kebal, tongki iata
lizardfish (synodus): moncalefa
lobster: ua, uha
location: le(h)a, leha
lock: cunci
locust: sesa
loin cloth: kamu kau, koma
long: nau
long (temporal): na'u
long (temporal), old (object): manen
long / length: nahu
long tail: boya nahu
long time: bafoi pa, manin
long-spine porcupinefish (diodon holocanthus): totu
look: yana
look for: bisloii
lookout: yana-yana
loose: dalena
loosely fitting: dahoi, dasoi
lose: hira
loss: rugi
lost: fahira
lost (person): matapia bumeha, matapia bumohi
loud: baked
louse: kota, kotu
love: wak, banahi, basa ungi, cinta, lal suka
lover: bubai
low: yota
lucky: yota
lungs: behifor
mace spice: paa ful
machete: peda, pedi
made of: oya
magic: makata, sihir
magic book: buk
main: molai
main posts: hi, tali
main road: le(h)a, ya aya
make a fire: bali’ap, hut ap
make a hole: bau-tuf
Malay apple syzygium malaccense: gora
male (animal): mantua
male (person): mantina
man: ma’ana, maana, mana, matapia mana, matapia ma’ana, pia mana
mancalas (Southeast Asian game): u
mango: weu, weuu, wewi, ruwi
mango blossom: weu hal
mango fruit: weu fua
mango tree: weu kau
Mangole Island: hai Mangon, hai Mangoni
mangostene: mangis
many: eb, ebu, ib, ibu, ta lal
March: Maret
market: butu, pasa, pasar
marry: bakai
mask: fa’angapu
masseure / masseuse: uru
mat: sabata
mattress: kasur
mature fruit: motu
May: Mei
may (permitted): mai dad
maybe: bangal, barankali
MBo: mama tiba
meal: teamaha, telama
medicine: makata
medicinal plant used to treat cuts and scrapes: kau patsuba
medicine: makata
meet: mak-dahi, maki dahi
meet up: mak dahi
menstrual pain medicine: makata geka dahi bakatai
meow: nau li
merchandise: fa bama
merchant: matapia bamaha, saudagar
mata pia bedagang
message: baka-nau, baka-paked
midday: la eya
middle finger: lima wana tena, lima
wanga tenga
midnight: bauhi yau, sabatena
midwife: mata pia duduku
might: mai dad
milk: basa, sosa, sosu, susu
mince: daeta (yeba)
minute: menit
miserable life: hidup susa
miss: waki, wakdab, wakidabu
mix: ojo
mobile phone: handfon
molar: ni'i fafi, nihi faf
moldy: basa, patfai
moment ago, a: dahina, dinga
money: pip(i), uang
monitor lizard: komodo
monkey: kera, mia
monsoon: musun
month: fasina
moo (as of a cow): sap li
moon: fasina, sina
mooneclipse: tui gaya fasina
Moorish idol (zanculus cornutus):
langpama
more: fa'oi, fo'loi, son
more than: X bia Y
morinda atrocarpus: bahakur, kau bakunu
morning / AM: subur
mortar (culinary): kapatut
mosquito: ka fin, kafin, kafini, kufini, samab
mother: mama, ngyaya, nya, nyaya, ya, yaya
mother-in-law: tam fina
mountain: foku, lida, lira
mountain apple syzygium
malaccense: gora
mouse: fa'afoa
moustache: mboni foro
mouth: bayon, boni, lubayon, mboni, nuba, sum
much: eb, foloi, ib, ta lal
mucus: min, mingu
mud: tab, tabi
muddy ground: baka-tab
mumble: baka-toya pakasi, bisnoya
toka hau
murder: bau-mata
muscle: donga
mushroom: sosawita
music: musik
mussel: sawehi
must: bal, musti
mustache: lubayon foa
mute: baba tina
mutton: ihi domba
my things: ak fa
nail: ka'odi, ka'or
name: na, nga
nappy: pampres
narrow: dagai, dagat, dagat(i), dagati, gati, nana, sempit (ID)
natural disaster: dunya tiamat, tilaka
nature: dunia
nausea: rasa lua
navel: musa, puhi
near: baka-han, de lani, han, baka han, han, mak han, lani
neck: ek, ek (waka), ek lawa, eki, eki (wai), ekilawa, ik, iki wai
necklace: maenang
need: perlu
needle: samo, samo(ha), samoha, samoo
needlefish (belonidae): selu
negotiate: mofakat
neigh (horse sound): jara ban li
nephew: nana pahaka
nest: en'em
net: ja, ja soma
never: moya da, moya ta, pernah moya
never mind: dad fahia moya
new: fe'u, feu
next: fa damoha
next (temporal): bo mena
next month: fasina pihu
next to: ila hia
next week: ahat dawika
next year: tahun pihu
nickname: wel gal
night: ba'ahi, bauali, bedi, bo uhi
night fishing with a lamp: bita
nine: gatasia, gatasiya, gatsia
ninth / nine times: pa-ka-tsia
nipa palm: nipa
nipple: sosa pea, soso ngua
nit: kota til
no: koi
no one: hia moyu, gahiya moyu, gahiya moya
no smoking: koi sui tabak
no worries: dad fahia moyu
nod: yu'u lama
node in bamboo, sugarcane: foka, foku, donga, buku
noisy: goha
noon: mum
north: hafa
nose: ncumi, ne, ne'i, ne(')e, nge, min
not / no: moyu, moyu
not good: pia moyo
not one: di hia moyu, hia moyu
not yet: moii, moyu da
nothing: dai moyu
November: November
now: betik, ik, ika, iki
now / present time: bet ik
nurse at the breast: baso soso
nutmeg fruit: paa fua
nutmeg shell: paa kol
o'clock: befa
obsolete: maab
occasionally: manau, manin, munara
ocean: mahi, ma'i, mai
October: Oktober
octopus: ka'opa
of: bia
off: mata
off (spoiled): besah
offer: baka-neu
often: selalu, sering
oh, I see: ganeka
oil: wag, wagi
old: bafoi pa, maota, matua, tua
old (for things): manan, manau, manen, mane
old cutlery: famehi bumena mena
old fruit: motu
older brother: kak(a) maana
older people: pia matua
older sibling: kak(a), kaki
older sister: kak(a) fina
older woman: mat nana fina
oldest child: ana tiba
omen: nonako
on: goga, lepa
on (as with a lightbulb): marui
on time: pas waktu
on top: lepa, tina
once / first: pa-ka-hia
once again / once more: hia da
one: gia, giya, hia
one before: hia tuna
one hundred: ca ota, ota, saka
one thousand: ca ga(h)iya, cagia, cahia
one thousandth / one thousand times: pa-ka-cahia
onion / shallot / garlic: bawa
only: dadab, pa, para
onward: gamana
open: dika, gifu, hoi, soi
operation: bama
opinion: pedahi
opposite: lug, musu
opposite (face to face): lug de lug
or: atau, te
or not: te moya
ordinary: biasa
organize: dau kub
original: asli
other: berbeda, pian, samamo
outside: kakahoi
over: lepa
overnight: tud
owe: lepa
owl: patii
owner: hak
oyster: ena ena
paddle: dakhan, daku lanu, sar, sai
paddle (boat): dayu
pail: sia-sia
pain: geka, makan
painful: dagis, geka
pair: par hia
palate: na ha tina, ngatina
palm juice (unfermented): pei mina
palm of the hand: lima al, lima tuka
palm sugar: gua mia
palm wine (fermented): pei mapai, pe’i
palm wine moonshine: cap tikus
pandanus: ponda
pandanus leaf: sabata
pants (trousers): cahana
papaya: paia, tapaya
paper: kartas, kertas
parakeet: karica
paralysed: maroya, ma’uta
parents: pia matua, matnana
parents of a married couple: guntami mama
parents-in-law: tam
parrot (or similar): sungea, kakatua
parrotfish (scaridae): lapi (lapi-lapi), kena mami
part: baina
party (fiesta), busy (place): ram, rami rami
pass (go by): foloi
past: pasa, umena
path: nyaiya, sanafa, ya, yaeya lal, yaeya, yaea, yaiea, yaieya, fat
path (small): ya nana
pathway (large): sana fanau, yaeyaeya, yaeya, yai eya aya
pawn: dan sohangi
pay: dana, patana
peace / to make peace: bau-pia
peanut meat: kachan ihi
peel: kol
pen: pena
penis: ot, ot(i), oti
people: bangsa
per day, everyday: bet hia bet hia
period pain (menstrual): geka da hia bakatai
permission / permit: bole
pester with requests: noi limpa
phlegm: keu
pick up: ted lepa
pickaxe: baliu
piece: nish-nish, yota-yota
piece of fruit: fua hia, kau fua hia, kau fua fatia, nceli fatu gia
piece of~: fathia, fatugia
pierce: doi, sak
pierce ear: bau-tufi talinga, sak-tilu
pierce, to stab: bona, manasak, pana (do jub), saku, tufi, whoh
pig: faf, fafi
pillow: nora
pinch: am, gam(i), got
pineapple: danas, nanas
pink: mia tahai
pinktail triggerfish (Melichthys vidua): gamuli, kena songu
pins and needles (in appendage): bamata
piper betel: monca
pirate: mata pia perumpa
pit of fruit: fat
place: le(h)a, leha
placid: lea lea
plain: hai lib
plaited rattan fish trap: fofa, fofu, sofa
planet: fatui
plant: fasel, basel, baseli, batani, batut, ndani, seli, fa'a sil
plant, a plant: basel(i), sel, sil
plate: piga
plateau: lida lepayau
play: suglela, suglila
plume of dust: hai bopa, oros moya
PM: lea neu
pocket: sak
poem: nyanyi
poetry: pantun
point: baka-tin tui, baka-tini, baka-tui, baka-toya, nee
points (in a game): pen, ya
poison / poisonous: babisa
poke: sak(u)
poor: masusa
population: ia fai lal, iya fai tuka
pork: faf ihi
porridge: gul, guli
port: boban
post, wood: kau
posterior: goi foka, ngoi foku
pot: pang, poci, tampayang, tabuna hai,
tabuna lai, tabuna mam, tabuna mum
pound: batutu, dota, dota, mana tota,
dotu, mana pau
pound / beat: momu
pound, beat: batut (bira), tut, tut
(bira), tut bira
pound, beat rice: dotu pamasi
pounder: kapatut nana, paktatoto
pour: ofa
poverty: susa
powder: bedah
power: kuasa
prayer: banoi
predawn morning / when the rooster crows: mandokahu
prefix: ga-
pregnant: tena aya, tena eya
prepare: baka-han han
prepared: siap-siap
present: patok
prevent: baka-baret, beret, bret
price: fa’oi, falihi
private: faadit
problem: hal
problem solver: matapia baumanega hal
produce (make): bau-bal faa
profit: untung
promise: berjanji
prostitute: manat, mangati
protect: jagajaga
provisions: dafoma, taha
pull: gid, dayu, sar
punch: dotu
puncture: doi
punish: naha, hukuman
purchase: ba(ha)
pure, clean, smooth: gamiha, bagila
purified water: wai bagila
purple: baka-ran
push: dua
put / place / set: dau, tahi
put something in the wrong place: dau sala
quality: don fa(lihi), donin falihi
quarter, a: ence piu, enci piu
question: panika
queue: ber baris
quick: bahu, bahuol, bahu-pahu, bahu (bahu)
quiet, whisper: ok ok, baret
quiver: jub
rack above the fireplace: sap lal,
sapituka
raft: gocifa
rafter: kaha
rain: uya, wiya
rainbow: fal, tendau
rambling: laka laka
ransom: atuf akfa
rape: dahi ban
rare: baka-han maha, baka-han mahus, manen manen
rash (general): kan leha
rat: sa'aфа, safа, saафа, safа, saафа, sama, fafa
rattan: uwa
raw: bamata, mahus
raw chocolate: soklat bamata
ray: man'ei, pai
ready: maneha
real: dit
rear (location): ge
reason, for: alasan
recently: bia neka
recognise: bau-meneha
recommend: bau-meneha hal
record: tulis
red: mi'a, mi(')a, mia
red onion: bawamia
red pepper: rica
redbarred hawkfish (cirrhitops fasciatus): nepu
refuse: aheka moya, daki mayu, dok moya
region: leha perenta
related: basa nohi, basanasi
relationship: manatol
relax, rest: nib-nib, ma ga'a, sinang-sinang
relic: fa'a bumena, fabumena mena
remainder: tugar
remember: waki, wak (dab), wakidabu
remind: baka-wak
repair: bau-maneha
request: noi
reserve: bau-pais, bausalam
reside: nib, nibu
resin: sau, ma'idi
return: pihu, bihu, gaf, baka-pihu
rheumatism: lay tuka gika, uwa kadiga
rhythm: bobo
rib: dasa wana, ndasa wonga
rice: bira, bira'ihi, pamasi
rice chaff (husk): bira kol
rice stalk: bira kan
rice-barn: uma bira, uma pamasi
rice-field (dry): awa bira, awa pamasi
rice-kettle (copper): dang
rice-kettle (earthenware): kukusan liha
riddle: suglik, sugu liku
ride a vehicle or an animal: bena, ben
ridge of roof: uma bobа, uma bobu
rifle: senapan
right: kul, lima kul, kuli, limа kuli
right side: ila kul(i)
ring: bali, sabakoka, sabakoku
ring finger: limа koka wаna istinja
ripe: ma'untu, maha, matua
rising moon: fasina bena
rising tide: bau-bena
ritual: adat
river: ewа, wai, wai ewа, wai-ewа
river valley: wаi itа
road: nafakau, nyaieya, sanafa, ya, ya aya, yaеya lаl, yaеya, yаеa, yai еа, yaieya
roast (in the coals): danu bu api uki, dona bo ap ok
rock / stone: fatu
roll: dud, mboli, bul
roof: bobo, sahosa, sanapet, sangapetu
roof thatch: sahosa, sanapetu
roofing: sana pit
room: yoi
rooster: man ma’ana
root: waka, kau waka
root vegetable: wako
rope / string: me(’u), meu, mi’u
rose apple syzygium malaccense: gora
rot / decay: patsuba
rotten: basa, patfo, suba
rowboat: sekoci
rub: baubagila, es
rug: sabata
ruins: maiha
rule: aturan
run: lewa
runny nose: min ewa
rupture: pama
s/he: ili
sabre: sabil
sacred place: jere, jeri, bamok leha, goha
sad: lal masusa, mena, sedi
safe: pia, pia-pia (para)
sago / sago starch: sa / sa’a
sago palm ground to sawdust powder: parut sa
sago tree: sa, napi, sa’apon
sail / to sail: soba

sailboat mast: soba kan
sailor: monara
saliva: keu, wai bayon lal, wai nboni
salt: gas, gas(i), gasi, bagamai, gamahi
same: persis, sama
sand: ha’i, hai, ka’mi.a, kamiya, kum(a) hai, kum(a) wai
sandal: sandal
sandbank: kamia mayoki, kuma wai mahi oki
sap: kai iti, kau ni’it
sap of sugar palm tree: wai pe’i
sarong: sami
satisfied: bis pel
sauce: kecap
saucer (small plate): piga lisa
say: kata, beti, bicara, nli, soya, tasoya, bisnoya
scalp: nap kol
scar: kan liha, kani lia
scatter seeds: loda, wiwa
school: sekolah
scissors: bihi, bii, gut
scoop (quantity): wak
score: bau-nomor
scorpionfish (scorpaenidae): layu
scramble: ojo
scrape: hui
scratch (an itch): gada, gahu
scratch (for the purpose of hurting): gada, gahu, gaama, gama, gawai
scratch an itch: kahu, sakeu
scrawled filefish (aluterus scriptus): kena katip sai
scream: mahara, naha
sea: ma'hi, ma'i, mai, mai, wiwa
search: bis loi
seashell: sa'wehi
seasick: ma'hi dab
season / while: waktu
seat: siku papa, sup papa
seaward direction: fai
seaweed: uta mahi
second / twice: pa-ka-hu
second-person formal pronoun: kim
second-person singular and second-person plural agreement marker: gu-
second-person singular pronoun: mon
see: yana (yana), bil, pil, yanga
seed: fat, fin
seems to be: pahu gan
seldom: manen manen
self: dit
selfish: lal eya
sell: bama(ha), memaha
sensual: ter seraha bomon
sensual: manat
separate: baka-reha, manapareha
September: September
serious: hebat
seven: gapit, gapitu, kam kam
seventh / seven times: pa-ka-pit
several: baka-han han
severe: hebat
sew: sau, bisnau
sexual intercourse: ban, manapan
sexually aroused: barasa
shadow / shade: garum, koha
shake: er
shall: bit, bet, mot mau
shallot: bawamia
shallow: batina
shape: pahu gan
share: baina
sharp: mana, manga, monga
sharpen: gem lima, wa, waha
shatter: bate
shattered: gabat
shave: sawa
shawl: slendang
sheath: sarong
shell: kima
shelter: sabua
shield: pange, safak
shin: tania hoi, yai tia loi
ship: kapal
shirt: lab
shoelace: meu sepatu
shoot: banap, banapi, bapana
shoot (young plant): hoba, kasa
shoot a bow: jubi, bapana, jub, pana
shooting starr: fatui dai
shop: faa, toko, ba(ha)
short: togi, yota
short (temporal): tagi
short tail: boya yota
short time: manin moya
shortage: da(h)i moya
shortly: bata
shorts: cahana yota
should: bit, bet, mot mau
shoulder: sanapa(h)u, sanapa'u, simpau
shoulder blade: sai pon
shout: bawowu
show: baka-toya
shrew: finot
shrimp: ua, uha, yoya
shuffle: ojo
shut: oba
shy: bagu lia, bahal, bal, bali, mamei, sug
sick / sickness: da bol, dagis, geka, mahak
sickness: penyak
side: ila, ila-pon
side-dish: mai
sieve for rice: tetapa
sigh: wama aya, wama siya
silent: magaa
silk: sutera
silver: sa'aka
similar: pahu baka han-han
simple: lulu para
sin: dosa [fa='a besa]
since: bia
sing: manyanyi, menyani, menyanyi
single: gahia
single man: mata feu
single woman: fina ko(a)
sink: moa, daduba
sinker, fishing: moa
sip: saup
sister: feta, sanasi fini, sanohi fina
sister-in-law WBW: guifa, miha
sit: nibu, nib, nibu
sit (with the knees bent to one side): baka-kili yai, nib baka kihi yai
sit (with the legs crossed): tara tib
sitting platform on farm land: uma nana
six: gane(ː), ganei
sixth / six times: pa-ka-ne
size: parek
skin: kol, koli, kuli, ngkoli
skinny: badasa
skull: nap fat, nap fat hai, nap foka, ngapu fatu loi
sky: fa'ara, lan, langi, lani
slant: ling
slap: lap, sabai, sapa, moma
slave: falom
sleek unicornfish (naso hexacanthurus): bafe
sleep: nona, nonu
sleeping mat: ponda, sabata, sabota
sleeping place: lea nonu, liha nona
sleepy: do, doa, hamadoa
slice: bota
slim: nkol matabol nahu
slope: ling
slurp: saup, sa'ilu
small: male, malee, mehi, meihi, nale'i, mana'u, nana
small banana cultivar: fia jarum, mulu bebe
small child: fanana
small edible silver fish: kena maki
small parakeet: cincin
small worm: ul
Chapter 4: lexicon

small-toothed jobfish / forktail
snapper (aphareus furca): sayowa
smallpox: lut foya, luti foya
smart: etwama, mana-mum, manamumi, muhi, mum, napfatgeka, nau fa, pat, pati foro, pintar, sakum, sayang, suma, sumi, sumpati
smile: balela, baheha, bara em, ba’ipi mboni, biha lubayon
smith: kipu
smithy: dua
smoke: apfee, apifei, bafee, bafei, bosu tabaku, fe’i, fei, sui tabak, sui
snack food: mumam
snail (land snail): sofa
snake: tui
snake (a type of colorful snake): tui patola
snare / to snare: dudes
sneeze: bafai, dafai
sniff: mum, some
snow: salju
so / in order to: lamua
so that: la
society: matapia, pia
soil: ha’i, hai
soldierfish (myripristis): kaleo
some: ga io, gapila, gapila gapila, gapilaapa, hia
someone: matapia hia
something: faa hia
sometimes: manau, manin, munara, pa-ka hia-hia
son: ana ma(‘)ana
son-in-law: gunana mata mihi
song: lagu
sorcerer: mata pia fa pasia
sore: geka
soul: nyawa
sound: li
soup broth: mahi
sour: mangilu, manil
source: wai hama, wai ngapu
south: hifa, ilahia selatan
space under the house: uma fuloni
speak: pak, tapisnoya, bisnoya, tabicara, pisnoya
speak Sula: pak li Sua
spear: per, tumba
special: hebat pel
specialist: hebat
speech: li
speed (velocity), rapid: japat tatoya
spice: baha
spicy (hot food): baha(ha), ba’a(ha)
spider: lawa
spike: suha, sungga
spill: luba
spinach: sanaf
spirit: fapa sia, nyawa
spit: keu, bitfua keu, bu’a keu, bua keu, oya keu, safe (keu), sape’i keu
split: bama, makariu, pama, sida, wariu
split as one splits a coconut: da’a
spoiled (food): basah
spoon: bob
spotted eagle ray (aetobatus narinari): galema
spotted puffer (arothron meleagris): kena fia bega
spotted puffer (guentheridia formosa): mandi
spouse: matnana
sprain: dabol
sprout: hoba, kasa
spy: ianga kau, tanu
square: pa cagi geriha
squat: nib paha tiga, nib puku tiga
squeeze: am, ami, gami, bul
squinting: hama ba sagil, lama pasang gili
stab, pierce: bona, manasak, pana (do jub), tufi, sak(u), wo(ha), doi, duf, tumba
stagnant: basa, patfai
stairs: kahepa, leakau, mara
stale: basa, patfai
stalk: kau
stand: geli, keli, gehi, gili, gihi
stand a row of dominos to be visible: yana bua in hama
star: bintang, fantui, fatui, fentui
start: mulai
steak (food): kauwana
steal: bi-naka, bilnaka, binnaka
steamboat: kapal ap
steep: batif
stepdaughter: ana ma’uwa, ana mahua
stepfather: baba mahua
stepmother: nyaya mahua
stepparents: baba ma’uwa
steps: ka’ipa
stew: coto
stick: kau, kawana, sana, tonka
still: memang
stink: pati foro
stomach: faiao fat, takau, tena
stomachache: takau gika, tina gika
stop: baka-baret, baret, beret, bret
storm: mahubo
story: bacarita, bisnoya
straight: badafu, marofa
straight (line): maneha neha
straight ahead: laka maneha neha
straghts: istarat
Strait: strat, sidenga
strange: pia moya
stranger: mata pia duki, mata pia hai bosa, matapia basa
stream: wai
Street: ia
strike: bau
string / rope: me(’)u
striped squirrel: gek, geki
stroll along looking for a good time: laka hibar-hibar
strong: Kadiga
strong wind: mora kadiga
study: bau-pelajar
stuff / things: fa’a (mehi)
stupid: bata mila
stutter: baka-toya bayata, bis noya ba’ata
such as / in the manner of: gan
suck: bosa, bosu, yop
sugar: gua
sugar palm: kanou, nawa nui, pe’i
sugarcane: sisa
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suggestion: kira-kira ga(h)oa
sulphur: welirang
summer: lea kadiga, mus lea bana, waktu lea
sun: lea, lia
sunburn: lea bana bal katim
suneclipse: leya bira pit, liya bakampu
sunny: dawika
sunrise: lea bena, lea pefa
sunset: seb, lea seb
sunstroke: lea kadiga bal da bol
superstition: percaya faa basah
sure: tentu
surf, wave: mok mok, mok pisa
surge wrasse (thalassoma purpureum): kena gamuli
surgeonfish (acanthurus): kena pali
surrounding: dagalil, gabalil
suspect: sanka
swallow: ma lia, ma-lia, man sumbulia, wil
sweat: mapa, mapo, siliboi
sweet (taste): mina, kastela
swell: mafai, mamfai, maufai, tambaebu
swim: nan, nan hawa, nanu, le, lei, nan limayai, nangu
syrup: gua
table: meja
taboo / forbidden: bobos, bobosu
tail: boya, matpebi, mboya, mboyu, nboyu
tail bone: goi fur, solbi
take: wa
take away: wa
take one's turn: yawa
Taliabu Island: hai Taliab, hai Taliabu
talisman: aji mat
talk: bisnoya
tall: lepayau
tallon: kahor, kodi
tambourine: rabana
tame: bamu
taro: kat
tax: bea, beya
tea: teh
teach: baka-toya
teacher: jugur
tear: fota
tears: hama wai
teeth: nihi
tell: soya, soya du(a)lu
tell a lie: hasi
temperature (weather): ke adahan mora
temple (part of head): paitina
ten: fat poa, po, po:, poa
ten thousand: ca po(a)
tendon: ua
tent: sabua
tenth / ten times: pa-ka-poa
testicals: fatel
that: ina, mana, ne, neka, yang, nika
thatch: sangapetu
the day after tomorrow: banai
the day before yesterday: dabet hia tuna
the dust left from mui insects after eating wood: kau mai
The God (specific): jo, o
the month before last: fasina hia tuna
the routine of going to bed and getting up: nona-kega
the smell of rot: suba
the upperworld: sorga
the week after next: ahat banai, ahat pihu
the week before last: da ahat hia tuna
theft: bilnaka, binnaka
their things: ikinfa, ilinifa
there: isuna
there (distant): bangana
there (near addressee): bangana, isuna, bangana, neka
there / yonder: samana
there is/are: dai
they: eb kim
thick: bagu
thief: pinaka
thigh: kipa
thin: barasa, manip, manipi, tipis (ID)
thing: faa
things: fa’a (mehi)
think: pikir pikir, sanka, bapikir, pikir, wak (dab), waki, waki dabu
third: pa-ka-tel
third singular (human) pronoun: ki, ki'i, ki:
third singular agreement marker (human & nonhuman): i-
third-person plural agreement marker: i-
third-person plural pronoun: ihi
thirsty: lawai saota, lawoi sa’ota, ntakali so’ofu, saota (lawai) saota
thirteen: poadogatel, podigatelu
thirteenth / thirteen times: pa-ka-poadogatel
thirtieth / thirty times: pa-ka-pogatel
thirty: po(a)gatel, poa gatel, pogatelu
thirty-first / thirty-one times: pa-ka-pogatel do hia
thirty-one: po(a)gatel do hia, pogatelu di gia
thirty-second / thirty-two times: pa-ka-pogatel do gahu
thirty-third / thirty-three times: pa-ka-pogatel do gatel
thirty-three: po(a)gatel do gatel, pogatelu di gatelu
thirty-two: po(a)gatel do gahu, pogatelu di guu
this: i, ik, iki, iku, iya
this month: fasina’ik
this week: ahat’ik
this year: tahun’ik
thorn: hoi, loi
thou: mon
thousand: ca
thread: lai
threadfin butterflyfish (chaetodon auriga): kaminca
three: gatel, gatel, gatelu, gatelo, gatilu
three months from now: fasina gatel
three weeks from now: ahat gatel
(‘week three’)
thrice: pa-ka-tel
throw: be, bee, oya
throw / toss: behi
throw or shoot a spear: bona
throw pour: tahi
thumb: lima kaku wango nini, lima koka wana aya
thunder: badandu, batu, guntur, saoa, so'a, soa, telopati(i), telopati, tilapat, tilopate
thunderstorm: uya (saoa) mahuba, uya mahuba telapat
tie up: beu
tie up, fasten: be'u, beu
tiger: macan
tight, fast: beu, dagat(i)
tightly fitted: ba'ata, bayata
time: befa, bet(u)
timid: bagu lia, bali, sug
tin: tamua boti
tired: kol yaha, maka boa, makaba, makabo, maroya, yaha
to and fro: hifa hata
tobacco: tabak, tabaku, tabaki
today: bet ik, bet'ik, betik, betuka, bit iki, bitu ika
toe: yai wana
together: maneha neha, manehaneha
tomato: tomati
tomorrow: dawika, dewika, hai dewika, hai dawika, hai duika, nafa iya
tongs: at, gata
tongue: mak, maki
tonight: bauhi'ik
too: faloi
tool: fa bau maneha, faa mehi
tools: fame(hi)
tooth: ngi, ngi:
top: capalong
torch: obor, padamara, pancona
tornado: mora ot
tortoise: babenu, babinu
touch: baka-has
toward: mana
town (capital): ia fai aya
trade: bedagang, mana dok
traditional medicine practitioner: mata pia nau makata
translate: baka-nau
travel: laka laka
tree: kao, kau, kau yon, pon
tree root: kau waka
tree seedling: kau (n)tubi
tribe: bangsa, kumpulan
trick: tipu
triggerfish (balistidae): songu
triggerfish (balistidae) (a dark colored kind): selumpoyu
triggerfish spine: loi
trousers: ca'ana
trowel (a small trowel): kuda
true, right (correct): bau-maneha
truth: tatoya
try (attempt): coba
tsunami: mahi bena
tuft of rice: bira pin, mping
tuna: bega, kena bega
turn: bataboli, dai'oa, gabalili, gamat putar, saka lifi
turn around: lif gehi
turn completely, 180 degrees: dagalili, lif dagalili, lif puta, putar, sawai (pul)
turn halfway, 90 degrees: lif, lifi
turn left: lif (ila) tapa
turn off / to extinguish: bau-mata
ap(i)
turn off a light: bau-pai ap
turn on (a light): sara ap dawika,
sara’ap sanana
turn right: lif (ila) kul
turtle: baben, fonu, pin sanisi, penu
twelfth: pa-ka-poadoga’u
twelve: poadog’a’u, podiguu
twelve times: pa-ka-poadoga’u
twentieth: pa-ka-poga’u
twenty: po(a)ga’u, poagahu, pogu,
pogu, poagu’u, pogu(ː), poguu
twenty times: pa-ka-poga’u
twig: kau sana
twine a rope: pana nawur
twins: nahi era
two thousand: caga’u, caguu
two thousandth / two thousand
times: pa-ka-caga’u
type: in pahu gan
type of bug that eats wood: mui
type of edible fish: nag
type of edible fish similar to
skipjack: kena kombo
type of small bamboo: tea, tia
typhoon: mahuba
ugly: basa, bisa moya
ugly (things): besa
Umaloya village: Umaloya, Umahoya,
Umaoya, Umoya
umbilical cord: musawai, pahi wai
uncaria gambir: gambir
uncle: babahu
uncle / mother’s older brother:
mama kaka
uncle FBo: baba tina
uncle FBBy: baba kaka
uncle MB: baba tinga, baba koko
uncomfortable: mina moya
uncommon: manen manen
uncover: hoi, gifu, if
under: heha
underneath: ba ne’u, bo heha
understand: nau, naraka
unfair: deneka moya
unfortunate: masusa, ukur besa
unhusk rice: batutu
unicornfish (naso brevirostris): bumanga
universe: alam
university: sekola lepayau
unripe: memanta, tahai
unsafe: pia moya
until: magaa
until / in (distance): duki
until / in (time): bihai
untrue: la dad moya
unusual: hebath
up: lepa
upper: lipa
Urifola village / Orifola village:
Ulfoa
urinate: da’i, dayu, ta(i)wai
urine: ta(i)wai
use: pak, pakai, paka, pake
useful: dad bal pai, mau
vagina: pok lal
vagina / vulva: pepe, pok, poki
valley: leb
valuable: don fa(lihi), donin falihi
vegetable: uta (uta)
vegetarian (person): mot mot faa pia
vegetation: fa'a sil, fa'a tani
vein: hua, ua
venereal disease: leasa geka
venison: manjanga ihi
very: eb, kadiga, terlalu, totoya
very serious: hebat totoya
victory: untung
village / community location: baleha, kampung
village-head: kapala-desa
vinegar: faa manil
violin: arbab
virginity: fina ko(a)
virtue: fa'apia
visually impaired: hama ka'ok
voice: li
volcano: lida duku, lida'ap
vomit: lua, lua(h)
waist: kalea
waist belt: tali kidi
wait: bata
walk: laka, laka yai
walking stick: tongka
wall: ben ben
wall (bamboo): kapahaba au, paka'aba
wall (inside of building): fa kau
want: mau, perlu, suka, bit, bet, heka, mot mau
want (something): harp

war: bana, mana fau, mana pau
warm: baha(ha), ba'a(ha), bampana, buba, lia buba, mapana, mota
warm (things): ba'aha, ba'uba
warn: baka-wak
warrior: baru
wash: baeha, baheha, yua
wash oneself: nan
wash the hands: ua lima
watch: jaga, yana
water: wai
water well: waisum
waterfall: wai sau
watermelon: samaka, samangka
waves, surf: mok mok, mok pisa, maku, mok
way: nafakau
we: kam(i), kim kim
weak: baroa, ma'oma
wealthy: dini fa, don fa(lihi), donin falihi, kaya, pia kaya
wear: pak, pake
weather: kadaan
weave: basehu, ladu, lili siyo
wedding: pakai
weeds: ka'ik, ka'iku
week: ahad, ahat, senin
weekend: ahad mua
weep: mina, minga
weft: fa munara sam
welcome: pidatu, selamat (duk)
west: borat
wet: meta, mita
whale: kena gawan
what: ganao, hapa, opa
what else: hapa da
what reason: sebab apa
what?: apa, hapa
when: bit pila, bet pila, betu pila, bihoa
where: deha sahoa, deha so, sa'oa, sahoa, sa'o, saoa, soa, sibo, subo, bo soa, de sibo, s'oa
which: bahoa, hia bahoa, hia baoa, hia boa, tiba, yang, baoa, boa
white: bot, bot(i)
who: ani, han (neka), han, ani, an, ana
whole: pa-ka-hia
whole nutmeg: paa fat
why: ba gahowa, baga'oa, bagahooa, bagaoa, bagoa, bagano, bahoa, bau gahoa, bau gaoa, bau goa, gahoa, ganoa, ganoki, gaoa, goa, goa bal
wide: da'ofa, dahafa, dalena, dalina
wife: fata, gofata
will: bit, bet, mot mau
win / score points: gaya
wind: angi, buha, mora, mora (bufa), moru, bul
window: jangela, jengela
wing: in-pani, inpan, man pani, mpan, mpani, npani, nsoba, pan, pani, panu, soba
wipe: paca
wire: koa
wish: mau
with: do, gan, bo
within: baleu, bon lal
witness: saksi
woman: mata pia fina, fina
wonderful / best: bisa kadiga
wood: kau
woods: fa'a oki, fa'ok, fa'oki, faoki, kamatua
word: kata, li
work: afan, bau-munara
worm: makaor, makodn, mankawai, ul lai ngai, ulat, ule, uli, makahor
worm eggs: balahai
worn out: maab
worship: sabeya, sabia, bau-perinta joh
wound: makan, kan
woven basket backpack: kal, saloi
woven grass mat: kasafoi
write: lef
writing: lif
wrong: sala
xylophone: tatabuang
yawn: baka-faaya, bakafa, bakafa (eya), lakafa
year: taun, tahun
yell: gayai
yellow: kakon, kakoni, kokon, kon, koni, mangkuni
yellowfin goatfish (mulloidichthys vanicolensis): suremu
yes: io, iyo, i
yesterday: dabet, damet, damit
yet: memang
yonder: ikina, nika
you: kim kim
you all: kim mua-mua
young: mamfuwa, tahai
younger brother: fuk maana, lal fuk maana
younger sibling: fuk, fuki
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younger sister: fuk fina  your things: kim fa
youngest child: ana koha
Sula
APPENDIX
Appendix A. Questionnaire for language vitality survey. (English translation)

**Intergenerational Transmission**
2. Can most of the parent generation speak Sula? Please elaborate.
4. Does the grandparent generation speak in Sula when they talk to others their own age? Please elaborate.
5. Does the grandparent generation speak in Sula when they talk to the parent generation? Please elaborate.
6. Does the grandparent generation speak in Sula when they talk to children? Please elaborate.
7. Does the parent generation speak in Sula when they talk to the grandparent generation? Please elaborate.
8. Does the parent generation speak in Sula when they talk to others their own age? Please elaborate.
10. Do children speak Sula when talking to the grandparent generation and parent generation? Please elaborate.
11. Do children speak Sula when talking to each other? Please elaborate.

**Proportion of Speakers within the Total Population**
12. What percentage of the community can speak Sula?

**Shifts in Domains of Language Use**
13. What kind of places do you hear Sula spoken? Please elaborate.
15. Are there places where you do NOT hear Sula spoken? Please elaborate.
16. Are there topics that you hear people discussing in Bahasa instead of Sula? Please elaborate.
17. (Discuss this more & ask specifically about digital domains)

**Community Members’ Attitudes towards Their Own Language**
18. Please tell me your feelings about the Sula language.
19. Do you think Sula is important? (if not answered by previous question)
20. Would it matter if people stopped speaking Sula and only spoke Bahasa? Please elaborate.
21. Do you think people should try to protect Sula and encourage young people to speak it?
22. How do you think others feel about the Sula language?
23. Do others believe Sula is important? (if not answered by previous question)
24. Do you think others want to protect Sula and encourage young people to speak it? Please elaborate.

**Electricity**

25. Is there public electricity in your community?
26. Are there local power generators in your community?
27. (if yes) What percentage of your community can access public electricity in their homes?
28. Are there community power points for people who do not have in-home electric to use to charge batteries and devices?
29. How many hours per day is electricity available in your community?

**Television broadcast signal (including satellite dish when available)**

30. Is there Television reception in your community?
31. How many channels can you receive?
32. Is there a community television?
33. What percentage of the community lives close enough to a television that regularly watching TV is practical?

**Cellular access (voice, data)**

34. Is there cellular telephone access in your community?
35. Please describe when and where telephone signal is available. Please describe how strong the signal is.
36. Is there cellular data access in your community?
37. Please describe when and where a data signal is available. Please describe how strong the signal is and how reliably it works.
38. What percentage of adults in your community own a mobile phone?
39. What percentage of adults in your community own a smartphone (or other device)?
### Appendix B. Survey results by region.

#### Taliabo

<table>
<thead>
<tr>
<th>factors ↓</th>
<th>Community Name →</th>
<th>Taliabu-Barat</th>
<th>Taliabu-Selatan</th>
<th>Tabona</th>
<th>Taliabu-Timur-Selatan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017 figures from publication Kabupaten Kepulauan Sula Dalam Angka 2018.pdf</td>
<td>9,791</td>
<td>7,189</td>
<td>2,928</td>
<td>3,841</td>
</tr>
<tr>
<td></td>
<td>Total population of relevant regions: 122,945</td>
<td>3,000</td>
<td>3,000</td>
<td>1,500</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Corrected estimate of ethnic Sula community population</td>
<td>3,000</td>
<td>3,000</td>
<td>1,500</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Total corrected estimate of ethnic Sula community population in the Sula Archipelago: 80,111</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>each community's percentage of total corrected population estimate</td>
<td>0.0374</td>
<td>0.0374</td>
<td>0.0187</td>
<td>0.0250</td>
</tr>
<tr>
<td></td>
<td>notes about above:</td>
<td>note 1</td>
<td>note 2</td>
<td>note 3</td>
<td>note 4</td>
</tr>
</tbody>
</table>

**note 1:** (estimated down to a maximum of ~3,000 who are Sula after removing Taliabu natives, mine and timber workers, and Sulawesi diaspora communities after consulting with the development office. Ethnicity is not tracked by BPS, but they provided an impressionistic estimate)

**note 2:** (also estimated down to a maximum of ~3,000 who are Sula after removing Taliabu natives, mine and timber workers, and Sulawesi diaspora communities after consulting with the development office. Ethnicity is not tracked by BPS, but they provided an impressionistic estimate)

**note 3:** (estimated down to a maximum of ~1,500 who are Sula (from 2,928) after removing Taliabu natives. Estimate based on consulting with the development office. Ethnicity is not tracked by BPS, but they provided an impressionistic estimate)

**note 4:** (estimated down to a maximum of ~2,000 who are Sula (from 4,858) after removing Taliabu natives. Estimate based on consulting with the development office. Ethnicity is not tracked by BPS, but they provided an impressionistic estimate)

<table>
<thead>
<tr>
<th>1</th>
<th>Int Trans (0-5)</th>
<th>3</th>
<th>3</th>
<th>4</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intergenerational transmission value reduced according to each community's relative percentage of population.</td>
<td>0.1123</td>
<td>0.1123</td>
<td>0.0749</td>
<td>0.0999</td>
</tr>
<tr>
<td></td>
<td>notes about above:</td>
<td>due to being outnumbered</td>
<td>due to being outnumbered</td>
<td>score higher than Barat and Selatan, because the Taliabu natives do not put linguistic pressure on Sula communities in a way comparable to the Butonese and Bugis diaspora further to the West</td>
<td>Western communities are said to have stronger language use than those near the east coast which are on a heavily trafficked shipping lane between the islands</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>Spkr number</th>
<th>1,338</th>
<th>1,338</th>
<th>1,275</th>
<th>1,700</th>
<th>Total Sula Speakers on Taliabu: 5,651</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>percent of speakers w/in total regional population (including non-Sula population)</td>
<td>0.137</td>
<td>0.186</td>
<td>0.435</td>
<td>0.443</td>
<td></td>
</tr>
</tbody>
</table>

| 3 | Proportion (0-5) | 2 | 2 | 3 | 3 |
## APPENDIX B

<table>
<thead>
<tr>
<th>factors↓</th>
<th>Community Name →</th>
<th>Taliabu-Barat</th>
<th>Taliabu-Selatan</th>
<th>Tabona</th>
<th>Taliabu-Timur-Selatan</th>
<th>notes about above:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Proportion value reduced according to each community’s relative percentage of population.</td>
<td>0.0749</td>
<td>0.0749</td>
<td>0.0362</td>
<td>0.0749</td>
<td>sum: 0.2809</td>
</tr>
<tr>
<td>2</td>
<td>notes about above:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Domain shift (0-5)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Proportion value reduced according to each community’s relative percentage of population.</td>
<td>0.0749</td>
<td>0.0749</td>
<td>0.0374</td>
<td>0.0499</td>
<td>sum: 0.23717</td>
</tr>
<tr>
<td>5</td>
<td>New Domains (0-5)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Ed &amp; Lit matrls (0-5)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Gvt attitudes (0-5)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Com attitudes (0-5)</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Proportion value reduced according to each community’s relative percentage of population.</td>
<td>0.0374</td>
<td>0.0187</td>
<td>0.0499</td>
<td>0</td>
<td>sum: 0.1061</td>
</tr>
<tr>
<td></td>
<td>notes about above:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>As nearly all Sula speakers have been bilingual in Malay for generations, there does not seem to be a pervasive feeling of cultural loss or dread concerning the language.</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Documentation (0-5)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>for Factor 5↓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. public utility</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(note: this data was collected summer 2015. Utility coverage and roadways change suddenly with ambitious public works projects that lack maintenance funding. That said, on-site observation and surveys were wildly off from official statistics. I suspect that the statistics have been carried forward from a survey decades ago following an ambitious works project that erected power lines around Sanana island, extending the city’s power grid. Remnants of these lines remain, mostly inoperable and/or downed as of 2015, but with a range in and around Sanana city that regularly fluctuates.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. % in-home</td>
<td>&gt;70%</td>
<td>30–70%</td>
<td>&lt;10%</td>
<td>10–29%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>value corresponding to the percentage</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Estimated community population</td>
<td>3,000</td>
<td>3,000</td>
<td>1,500</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>population ÷ by 6 (because the weighting is on a 0-5 scale)</td>
<td>500.00</td>
<td>500.00</td>
<td>250.00</td>
<td>333.33</td>
<td></td>
</tr>
<tr>
<td></td>
<td>weighted result (population ÷ 6 multiplied by the assigned value)</td>
<td>2,500.00</td>
<td>1,000.00</td>
<td>0.00</td>
<td>333.33</td>
<td>normalized Factor 11 for Taliabu: 3,833</td>
</tr>
<tr>
<td></td>
<td>E. Community cooperative</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Estimated community population</td>
<td>3,000</td>
<td>3,000</td>
<td>1,500</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“NO” communities removed</td>
<td>3,000</td>
<td>3,000</td>
<td>1,500</td>
<td>2,000</td>
<td>sum: 9,500</td>
</tr>
<tr>
<td></td>
<td>E. Hours</td>
<td>evening–night</td>
<td>evening only</td>
<td>evening only</td>
<td>evening–night</td>
<td></td>
</tr>
<tr>
<td></td>
<td>notes about above:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>
## Sula

<table>
<thead>
<tr>
<th>factors ↓</th>
<th>Community Name →</th>
<th>Taliabu-Barat</th>
<th>Taliabu-Selatan</th>
<th>Tabona</th>
<th>Taliabu-Timur-Selatan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimated community population</td>
<td>3,000</td>
<td>3,000</td>
<td>1,500</td>
<td>2,000</td>
</tr>
<tr>
<td>E. Hours as assigned numerical value (0-N/A, 1-evening only, 2-evening–night, 3-24 hr)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>assigned numerical value as percentage (0 = .25, 1 = .5, 2 = .75, 3 = 1)</td>
<td>0.75</td>
<td>0.5</td>
<td>0.5</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>weighted result (percentage times population figure)</td>
<td>2250</td>
<td>1500</td>
<td>750</td>
<td>1500</td>
<td>sum: 6000</td>
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<tr>
<td>C. TV signal (y/n)</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Estimated community population</td>
<td>3,000</td>
<td>3,000</td>
<td>1,500</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>&quot;NO&quot; communities removed</td>
<td>3,000</td>
<td>3,000</td>
<td>2,000</td>
<td>sum: 8,000</td>
<td></td>
</tr>
<tr>
<td>C. TV (y/n)</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Estimated community population</td>
<td>3,000</td>
<td>3,000</td>
<td>1,500</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>&quot;NO&quot; communities removed</td>
<td>3,000</td>
<td>3,000</td>
<td>2,000</td>
<td>sum: 8,000</td>
<td></td>
</tr>
<tr>
<td>C. % TV access</td>
<td>&gt;70%</td>
<td>30–70%</td>
<td>&lt;10%</td>
<td>30–70%</td>
<td></td>
</tr>
<tr>
<td>value corresponding to the percentage</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>assigned numerical value as percentage (0 = .25, 1 = .5, 2 = .75, 3 = 1)</td>
<td>1</td>
<td>0.75</td>
<td>0.25</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>Estimated community population</td>
<td>3,000</td>
<td>3,000</td>
<td>1,500</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>weighted result (percentage times population figure)</td>
<td>3000</td>
<td>2250</td>
<td>375</td>
<td>1500</td>
<td>sum: 7125</td>
</tr>
<tr>
<td>C. cellular(0-5)</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>C. data(0-5)</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>C. smartphone %</td>
<td>30–70%</td>
<td>&lt;10%</td>
<td>&lt;10%</td>
<td>10–29%</td>
<td></td>
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<tr>
<td>notes about above:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>value corresponding to the percentage</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>C. dumbphone %</td>
<td>&gt;70%</td>
<td>30–70%</td>
<td>30–70%</td>
<td>&gt;70%</td>
<td></td>
</tr>
<tr>
<td>value corresponding to the percentage</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Totals for each region</td>
<td>14</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Estimated community population</td>
<td>3,000</td>
<td>3,000</td>
<td>1,500</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>community's percentage of total population</td>
<td>0.0374</td>
<td>0.0374</td>
<td>0.0187</td>
<td>0.0250</td>
<td></td>
</tr>
<tr>
<td>weighted totals for each region (totals for each region multiplied by its percentage of total Sula population)</td>
<td>0.5243</td>
<td>0.2247</td>
<td>0.0749</td>
<td>0.3997</td>
<td>sum: 1.02358</td>
</tr>
</tbody>
</table>
## Mangon

<table>
<thead>
<tr>
<th>Community Name →</th>
<th>Mangoli Tengah (7.32 % of Sula Regency population excluding Taliabu)</th>
<th>Mangoli Timur (4.95 % of Sula Regency population excluding Taliabu)</th>
<th>Mangoli Utara Timur (4.37 % of Sula Regency population excluding Taliabu)</th>
<th>Mangoli Barat (8.16 % of Sula Regency population excluding Taliabu)</th>
<th>Mangoli Utara (11.48 % of Sula Regency population excluding Taliabu)</th>
<th>Mangoli Selatan (5.32 % of Sula Regency population excluding Taliabu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017 figures from publication Kabupaten Kepulauan Sula Dalam Angka 2018.pdf</td>
<td>7,191</td>
<td>4,870</td>
<td>4,311</td>
<td>8,027</td>
<td>11,232</td>
<td>5,216</td>
</tr>
<tr>
<td>Total population of relevant regions: 122945</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Corrected estimate of ethnic Sula community population</td>
<td>6,112</td>
<td>4,870</td>
<td>4,311</td>
<td>401</td>
<td>1,123</td>
<td>5,216</td>
</tr>
<tr>
<td>Total corrected estimate of ethnic Sula community population in the Sula Archipelago: 80111</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sula community population on Mangoli: 22033</td>
</tr>
<tr>
<td>each community's percentage of total corrected population estimate</td>
<td>0.0763</td>
<td>0.0608</td>
<td>0.0338</td>
<td>0.0050</td>
<td>0.0140</td>
<td>0.0651</td>
</tr>
<tr>
<td>notes about above:</td>
<td>note 1</td>
<td>note 2</td>
<td>note 3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **note 1:** (the Mangoli Tengah population is reduced by 15% (from 7,191 to 6,112) to correct for, mostly Sulawesi-born workers servicing nearby resource exploitation operations. Ethnicity is not tracked by BPS, but they provided an impressionistic estimate)
- **note 2:** (the Mangoli Barat population is reduced by 95% (from 8,027 to 401) to correct for, mostly Sulawesi-born workers servicing nearby resource exploitation operations. Ethnicity is not tracked by BPS, but they provided an impressionistic estimate. In the case of Mangoli Barat, I am told that even if there is more than 10% ethnically Sula in the region, most of the native Sula present have switched to Indonesian to communicate with other workers)
- **note 3:** (the Mangoli Utara population is reduced by 90% (from 11,232 to 1,123) to correct for, mostly Sulawesi-born workers servicing nearby resource exploitation operations. Ethnicity is not tracked by BPS, but they provided an impressionistic estimate. In the case of Mangoli Utara, I am told that even if there is more than 10% ethnically Sula in the region, most of the native Sula present have switched to Indonesian to communicate with other workers)

<table>
<thead>
<tr>
<th>1</th>
<th>Int Trans (0-5)</th>
<th>4</th>
<th>4</th>
<th>5</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>sum: 1.13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intergenerationa l transmission value reduced according to each community's relative percentage of population.</td>
<td>0.3052</td>
<td>0.2432</td>
<td>0.2691</td>
<td>0.0100</td>
<td>0.0421</td>
<td>0.2604</td>
<td></td>
<td></td>
</tr>
<tr>
<td>notes about above:</td>
<td>note 1</td>
<td>note 2</td>
<td>note 3</td>
<td>note 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

583
## Sula

**Intergenerational transmission estimate relates to households that are likely to contain Sula Sula speakers. The estimate is not as low for Mangoli Tengah as for Mangoli Utara, because more of Mangoli Tengah's north-shore Sula population lives in communities that are majority Sula. Additionally, the south-shore communities are quite populous and solidly rate as 4.**

**Intergenerational transmission estimate relates to households that are likely to contain Sula Sula speakers**

**Intergenerational transmission estimate relates to households that are likely to contain Sula Sula speakers**

**It was difficult to select between 4 and 5 for Mangoli Selatan, because the cultural situation does not align with the political district. Western settlements of Mangoli Selatan are in regular daily communication with non-Sula groups whereas eastern communities generally are not. Having not visited the western part, I cannot say if the settlements in question would deserve a 3 or a 4, and the precise population breakdown within Mangoli Selatan is not available, but it is thought that some of the western communities are comparatively quite populous, and for this reason, choosing 5 for the region overall would be non-representative.**

<table>
<thead>
<tr>
<th>Community Name</th>
<th>Mangoli Tengah (7.32% of Sula Regency population excluding Taliabu)</th>
<th>Mangoli Timur (4.93% of Sula Regency population excluding Taliabu)</th>
<th>Mangoli Utara Timur (4.37% of Sula Regency population excluding Taliabu)</th>
<th>Mangoli Barat (8.16% of Sula Regency population excluding Taliabu)</th>
<th>Mangoli Utara (11.48% of Sula Regency population excluding Taliabu)</th>
<th>Mangoli Selatan (5.32% of Sula Regency population excluding Taliabu)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2</strong></td>
<td>Total Spkr number</td>
<td>5195.2</td>
<td>4139.5</td>
<td>4095.45</td>
<td>92.23</td>
<td>5090.58</td>
</tr>
<tr>
<td></td>
<td>percent of speakers w/in total regional population (including non-Sula population)</td>
<td>0.722</td>
<td>0.850</td>
<td>0.950</td>
<td>0.011</td>
<td>0.045</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Proportion (0-5)</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Proportion value reduced according to each community's relative percentage of population.</td>
<td>0.2289</td>
<td>0.2432</td>
<td>0.2591</td>
<td>0.0050</td>
<td>0.0280</td>
</tr>
<tr>
<td></td>
<td>sum: 1.0346</td>
<td></td>
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<tr>
<td>Notes about above:</td>
<td>As nearly all Sula speakers have been bilingual in Malay for generations, there does not seem to be a pervasive feeling of cultural loss or dread concerning the language.</td>
<td></td>
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</tr>
<tr>
<td><strong>4</strong></td>
<td>Domain shift (0-5)</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
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<tr>
<td></td>
<td>Proportion value reduced according to each community's relative percentage of population.</td>
<td>0.1526</td>
<td>0.1824</td>
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<td>0.0050</td>
<td>0.0280</td>
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<td>sum: 0.77858</td>
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<td><strong>5</strong></td>
<td>New Domains (0-5)</td>
<td>1</td>
<td>1</td>
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<td>1</td>
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<td><strong>6</strong></td>
<td>Ed &amp; Lit matrls (0-5)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>Gvt attitudes (0-5)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td><strong>8</strong></td>
<td>Com attitudes (0-5)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>9</strong></td>
<td>Proportion value reduced according to each community's relative percentage of population.</td>
<td>0.1216</td>
<td>0.1076</td>
<td>0.0100</td>
<td>0.0000</td>
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<td></td>
<td>sum: 0.3043</td>
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<td>Notes about above:</td>
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</table>

**Total Sula Speakers on Mangon: 18457**
(note: this data was collected summer 2015. Utility coverage and roadways change suddenly with ambitious public works projects that lack maintenance funding. That said, on-site observation and surveys were wildly off from official statistics. I suspect that the statistics have been carried forward from a survey decades ago following an ambitious works project that erected power lines around Sanana island, extending the city’s power grid. Reminants of these lines remain, mostly inoperable and/or downed as of 2015, but with a range in and around Sanana city that regularly fluctuates.)

<table>
<thead>
<tr>
<th>Community Name →</th>
<th>Mangoli Tengah (7.32 % of Sulawesi Regency population excluding Talailbu)</th>
<th>Mangoli Timur (4.95 % of Sulawesi Regency population excluding Talailbu)</th>
<th>Mangoli Utara Timur (4.37 % of Sulawesi Regency population excluding Talailbu)</th>
<th>Mangoli Barat (8.16 % of Sulawesi Regency population excluding Talailbu)</th>
<th>Mangoli Utara (11.48 % of Sulawesi Regency population excluding Talailbu)</th>
<th>Mangoli Selatan (5.32 % of Sulawesi Regency population excluding Talailbu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. % in-home</td>
<td>30-70%</td>
<td>30-70%</td>
<td>&lt;10%</td>
<td>&gt;70%</td>
<td>30–70%</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>value corresponding to the percentage</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Estimated community population</td>
<td>6,112</td>
<td>4,870</td>
<td>4,311</td>
<td>401</td>
<td>1,123</td>
<td>5,216</td>
</tr>
<tr>
<td>population ÷ 6 (because the weighting is on a 0-5 scale)</td>
<td>1,018.67</td>
<td>811.67</td>
<td>718.50</td>
<td>66.83</td>
<td>187.17</td>
<td>869.33</td>
</tr>
<tr>
<td>weighted result (population ÷ 6 multiplied by the assigned value)</td>
<td>4,074.67</td>
<td>3,246.67</td>
<td>0.00</td>
<td>334.17</td>
<td>748.67</td>
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<td>normalized Factor 11 for Mangole: 8,404</td>
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<tr>
<td>E. Community cooperative</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Estimated community population</td>
<td>6,112</td>
<td>4,870</td>
<td>4,311</td>
<td>401</td>
<td>1,123</td>
<td>5,216</td>
</tr>
<tr>
<td>&quot;NO&quot; communities removed</td>
<td>6,112</td>
<td>4,870</td>
<td>0</td>
<td>401</td>
<td>1,123</td>
<td>5,216</td>
</tr>
<tr>
<td>sum: 17722</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Hours as assigned numerical value (0-N/A, 1- evening only, 2- evening–night, 3-24 hr)</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>assigned numerical value as percentage (0 = .25, 1 = .5, 2 = .75, 3 = 1)</td>
<td>0.75</td>
<td>0.75</td>
<td>0.25</td>
<td>0.75</td>
<td>0.75</td>
<td>0.5</td>
</tr>
<tr>
<td>weighted result (percentage times population figure)</td>
<td>4584</td>
<td>3652.5</td>
<td>1077.75</td>
<td>300.75</td>
<td>842.25</td>
<td>2608</td>
</tr>
<tr>
<td>sum: 13065.25</td>
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<td></td>
<td></td>
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<tr>
<td>C. TV signal (y/n)</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
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<tr>
<td>Estimated community population</td>
<td>6,112</td>
<td>4,870</td>
<td>4,311</td>
<td>401</td>
<td>1,123</td>
<td>5,216</td>
</tr>
<tr>
<td>&quot;NO&quot; communities removed</td>
<td>6,112</td>
<td>4,870</td>
<td>401</td>
<td>1,123</td>
<td>5,216</td>
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<td>sum: 12506</td>
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<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Estimated community population</td>
<td>6,112</td>
<td>4,870</td>
<td>4,311</td>
<td>401</td>
<td>1,123</td>
<td>5,216</td>
</tr>
<tr>
<td>&quot;NO&quot; communities removed</td>
<td>6,112</td>
<td>4,870</td>
<td>401</td>
<td>1,123</td>
<td>5,216</td>
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<tr>
<td>sum: 17722</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>C. % TV access</td>
<td>&gt;70%</td>
<td>&gt;70%</td>
<td>&lt;10%</td>
<td>&gt;70%</td>
<td>&gt;70%</td>
<td>10–29%</td>
</tr>
<tr>
<td>factors</td>
<td>Community Name</td>
<td>Mangoli Tengah (7.32 % of Sula Regency population excluding Taliabu)</td>
<td>Mangoli Timur (4.95 % of Sula Regency population excluding Taliabu)</td>
<td>Mangoli Utara Timur (4.37 % of Sula Regency population excluding Taliabu)</td>
<td>Mangoli Barat (8.16 % of Sula Regency population excluding Taliabu)</td>
<td>Mangoli Utara (11.48 % of Sula Regency population excluding Taliabu)</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
<td>----------------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
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<tr>
<td>value corresponding to the percentage</td>
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<td>1</td>
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<tr>
<td>assigned numerical value as percentage (0 = .25, 1 = .5, 2 = .75, 3 = 1)</td>
<td>1</td>
<td>1</td>
<td>0.25</td>
<td>1</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Estimated community population</td>
<td>6,112</td>
<td>4,870</td>
<td>4,311</td>
<td>401</td>
<td>1,123</td>
<td>5,216</td>
</tr>
<tr>
<td>weighted result (percentage times population figure)</td>
<td>6112</td>
<td>4870</td>
<td>1077.75</td>
<td>401</td>
<td>1123</td>
<td>2608</td>
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<td>C. cellular(0-5)</td>
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<td>3</td>
<td>3</td>
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<td>1</td>
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<tr>
<td>C. data(0-5)</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C. smartphone %</td>
<td>30–70%</td>
<td>10–29%</td>
<td>&lt;10%</td>
<td>10–29%</td>
<td>&lt;10%</td>
<td>10–29%</td>
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<td>value corresponding to the percentage</td>
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<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>C. dumbphone %</td>
<td>&gt;70%</td>
<td>&gt;70%</td>
<td>10–29%</td>
<td>&gt;70%</td>
<td>&gt;70%</td>
<td>&gt;70%</td>
</tr>
<tr>
<td>value corresponding to the percentage</td>
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<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Totals for each region</td>
<td>10</td>
<td>10</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Estimated community population</td>
<td>6,112</td>
<td>4,870</td>
<td>4,311</td>
<td>401</td>
<td>1,123</td>
<td>5,216</td>
</tr>
<tr>
<td>community's percentage of total population</td>
<td>0.0763</td>
<td>0.0608</td>
<td>0.0538</td>
<td>0.0050</td>
<td>0.0140</td>
<td>0.0651</td>
</tr>
<tr>
<td>weighted totals for each region (totals for each region multiplied by its percentage of total Sula population)</td>
<td>0.7629</td>
<td>0.6079</td>
<td>0.2691</td>
<td>0.0350</td>
<td>0.0961</td>
<td>0.4558</td>
</tr>
</tbody>
</table>
### APPENDIX B

**Sanana**

<table>
<thead>
<tr>
<th>Community Name</th>
<th>Sulabesi Barat (5.44 % of Sula Regency population excluding Taliabu)</th>
<th>Sulabesi Selatan (4.88 % of Sula Regency population excluding Taliabu)</th>
<th>Sanana (30.58 % of Sula Regency population excluding Taliabu)</th>
<th>Sulabesi Tengah (7.04 % of Sula Regency population excluding Taliabu)</th>
<th>Sulabesi Timur (3.58 % of Sula Regency population excluding Taliabu)</th>
<th>Sanana Utara (6.88 % of Sula Regency population excluding Taliabu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017 figures from publication Kabupaten Kepulauan Sula Dalam Angka 2018.pdf</td>
<td>5,364</td>
<td>4,782</td>
<td>30746</td>
<td>7019</td>
<td>3,522</td>
<td>6916</td>
</tr>
<tr>
<td>Total population of relevant regions: 122,945</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Corrected estimate of ethnic Sula community population</td>
<td>5,364</td>
<td>4,782</td>
<td>23,060</td>
<td>6,317</td>
<td>3,522</td>
<td>5,533</td>
</tr>
<tr>
<td>Total corrected estimate of ethnic Sula community population in the Sula Archipelago: 80,311</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>each community’s percentage of total corrected population estimate</td>
<td>0.0670</td>
<td>0.0597</td>
<td>0.2879</td>
<td>0.0789</td>
<td>0.0440</td>
<td>0.0691</td>
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<td>notes about above:</td>
<td>note 1:</td>
<td>note 2:</td>
<td>note 3:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>note 1: (around 25% of the population around Sanana city was subtracted as ethnically non-Sula (from 30,746 to 23,060). Ethnicity is not tracked by BPS, but they provided an impressionistic estimate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>note 2: (around 10% of the population around Sulabesi Tengah had to be subtracted as ethnically non-Sula (from 7,019 to 6,317). Ethnicity is not tracked by BPS, but they provided an impressionistic estimate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>note 3: (around 20% of the population around Sulabesi Barat had to be subtracted as ethnically non-Sula to compensate for the Bajo community and a few government and infrastructure outpost communities (from 6,916 to 5,533). Ethnicity is not tracked by BPS, but they provided an impressionistic estimate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Int Trans (0-5)**

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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
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<tr>
<td>Intergenerational transmission value reduced according to each community’s relative percentage of population.</td>
<td>0.2009</td>
<td>0.2985</td>
<td>0.5757</td>
<td>0.2366</td>
<td>0.1759</td>
<td>0.2763</td>
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<td>note 1:</td>
<td>note 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>note 1: (most of the population is in Malbufa which is a comparatively cosmopolitan village)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>note 2: (easily back-and-forth access to Sanana city. Residents in this region are often primed to speak Malay at home even if they are capable Sula speakers. That is, many or most adults spend significant portions of an average day in Sanana for work, commerce, or socializing. Most children in these areas attend schools that are more developed than in remote parts of the island and often taught by non-Sula faculty or Sula factory who have studied and lived off-island for extended periods, (i.e. language inertia)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
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<th>5</th>
<th>6</th>
<th>7</th>
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<tr>
<td>Spkr number</td>
<td>2,392.344</td>
<td>4,542.9</td>
<td>5,303.8</td>
<td>2,817.382</td>
<td>2,993.7</td>
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<tr>
<td>percent of speakers w/in total regional population (including non-Sula population)</td>
<td>0.446</td>
<td>0.950</td>
<td>0.173</td>
<td>0.401</td>
<td>0.850</td>
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<td>note 1:</td>
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<table>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
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<td>Proportion (0-5)</td>
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<td>2</td>
<td>2</td>
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<tr>
<td>Community Name →</td>
<td>Sulabesi Barat (5.44% of Sula Regency population excluding Taliabu)</td>
<td>Sulabesi Selatan (4.88% of Sula Regency population excluding Taliabu)</td>
<td>Sanana (30.58% of Sula Regency population excluding Taliabu)</td>
<td>Sulabesi Tengah (7.04% of Sula Regency population excluding Taliabu)</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Proportion value reduced according to each community's relative percentage of population.</td>
<td>0.1339</td>
<td>0.2985</td>
<td>0.5757</td>
<td>0.1777</td>
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<td>Domain shift (0-5)</td>
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<td>0.2388</td>
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<td>New Domains (0-5)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Ed &amp; Lit matrls (0-5)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Gvt attitudes (0-5)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Com attitudes (0-5)</td>
<td>1</td>
<td>2</td>
<td>0</td>
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<tr>
<td>9</td>
<td>Proportion value reduced according to each community's relative percentage of population.</td>
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<td>0.5757</td>
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<td>1</td>
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<td>for Factor 5↓</td>
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<td>NO</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>(note: this data was collected summer 2015. Utility coverage and roadways change suddenly with ambitious public works projects that lack maintenance funding. That said, on-site observation and surveys were wildly off from official statistics. I suspect that the statistics have been carried forward from a survey decades ago following an ambitious works project that erected power lines around Sanana island, extending the city's power grid. Reminants of these lines remain, mostly inoperable and/or downed as of 2015, but with a range in and around Sanana city that regularly fluctuates.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. % in-home</td>
<td>10–29%</td>
<td>&lt;10%</td>
<td>&gt;70%</td>
<td>10–29%</td>
</tr>
<tr>
<td>value corresponding to the percentage</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Estimated community population</td>
<td>5,364</td>
<td>4,782</td>
<td>23,060</td>
<td>6,317</td>
</tr>
<tr>
<td>population ÷ by 6 (because the weighting is on a 0-5 scale)</td>
<td>894.00</td>
<td>797.00</td>
<td>3,843.33</td>
<td>1,052.83</td>
</tr>
<tr>
<td>weighted result (population ÷ 6 multiplied by the assigned value)</td>
<td>894.00</td>
<td>0.00</td>
<td>19,216.67</td>
<td>1,052.83</td>
</tr>
<tr>
<td>normalized Factor 11 for Sanana: 23,930</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Community cooperative</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Estimated community population</td>
<td>5,364</td>
<td>4,782</td>
<td>23,060</td>
<td>6,317</td>
</tr>
</tbody>
</table>
APPENDIX B

<table>
<thead>
<tr>
<th>factors</th>
<th>Community Name</th>
<th>Sulabesi Barat (5.44 % of Sula Regency population excluding Talitubu)</th>
<th>Sulabesi Selatan (4.88 % of Sula Regency population excluding Talitubu)</th>
<th>Sanana (30.58 % of Sula Regency population excluding Talitubu)</th>
<th>Sulabesi Tengah (7.04 % of Sula Regency population excluding Talitubu)</th>
<th>Sulabesi Timur (3.58 % of Sula Regency population excluding Talitubu)</th>
<th>Sanana Utara (6.88 % of Sula Regency population excluding Talitubu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;NO&quot; communities removed</td>
<td>5,364</td>
<td>0</td>
<td>23,060</td>
<td>6,317</td>
<td>3,522</td>
<td>5,533</td>
<td>sum: 43,796</td>
</tr>
<tr>
<td>E. Hours</td>
<td>evening only</td>
<td>N/A</td>
<td>24 hr</td>
<td>evening only</td>
<td>evening only</td>
<td>evening only</td>
<td></td>
</tr>
<tr>
<td>notes about above:</td>
<td>note:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>note: This is a best-case scenario. During summer of 2015, electricity was mostly reliable for me in Sanana for around two weeks. During all of 2010, the neighborhood where I stayed had to have a cooperative generator even though it was only 1-2 km from the utility. During other stays, I experienced sporadic availability.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated community population</td>
<td>5,364</td>
<td>4,782</td>
<td>23,060</td>
<td>6,317</td>
<td>3,522</td>
<td>5,533</td>
<td></td>
</tr>
<tr>
<td>E. Hours as assigned numerical value (0-N/A, 1- evening only, 2- evening–night, 3-24 hr)</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>assigned numerical value as percentage (0 = .25, 1 = .5, 2 = .75, 3 = 1)</td>
<td>0.5</td>
<td>0.25</td>
<td>1</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>weighted result (percentage times population figure)</td>
<td>2682</td>
<td>1195.5</td>
<td>23060</td>
<td>3158.5</td>
<td>1761</td>
<td>2766.5</td>
<td>sum: 34,623.5</td>
</tr>
<tr>
<td>C. TV signal (y/n)</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Estimated community population</td>
<td>5,364</td>
<td>4,782</td>
<td>23,060</td>
<td>6,317</td>
<td>3,522</td>
<td>5,533</td>
<td></td>
</tr>
<tr>
<td>&quot;NO&quot; communities removed</td>
<td>5,364</td>
<td>23,060</td>
<td>6,317</td>
<td>3,522</td>
<td>5,533</td>
<td>sum: 43,796</td>
<td></td>
</tr>
<tr>
<td>C. TV (y/n)</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Estimated community population</td>
<td>5,364</td>
<td>4,782</td>
<td>23,060</td>
<td>6,317</td>
<td>3,522</td>
<td>5,533</td>
<td></td>
</tr>
<tr>
<td>&quot;NO&quot; communities removed</td>
<td>5,364</td>
<td>23,060</td>
<td>6,317</td>
<td>3,522</td>
<td>5,533</td>
<td>sum: 43,796</td>
<td></td>
</tr>
<tr>
<td>C. % TV access</td>
<td>30–70%</td>
<td>&lt;10%</td>
<td>&gt;70%</td>
<td>30–70%</td>
<td>10–29%</td>
<td>&gt;70%</td>
<td></td>
</tr>
<tr>
<td>value corresponding to the percentage</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>assigned numerical value as percentage (0 = .25, 1 = .5, 2 = .75, 3 = 1)</td>
<td>0.75</td>
<td>0.25</td>
<td>1</td>
<td>0.75</td>
<td>0.5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Estimated community population</td>
<td>5,364</td>
<td>4,782</td>
<td>23,060</td>
<td>6,317</td>
<td>3,522</td>
<td>5,533</td>
<td></td>
</tr>
<tr>
<td>weighted result (percentage times population figure)</td>
<td>4023</td>
<td>1195.5</td>
<td>23060</td>
<td>4737.75</td>
<td>1761</td>
<td>5533</td>
<td>sum: 40,310.25</td>
</tr>
<tr>
<td>C. celluar(0-5)</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>C. data(0-5)</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>C. smartphone %</td>
<td>30–70%</td>
<td>&lt;10%</td>
<td>30–70%</td>
<td>10–29%</td>
<td>&lt;10%</td>
<td>10–29%</td>
<td></td>
</tr>
<tr>
<td>notes about above: While it is counterintuitive to have a smartphone where data signal is unavailable, many (especially younger) people have inexpensive android phones that they use when traveling off island and to villages that have signal.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>factors</td>
<td>Community Name →</td>
<td>Sulabesi Barat (5.44 % of Sula Regency population excluding Taliabu)</td>
<td>Sulabesi Selatan (4.88 % of Sula Regency population excluding Taliabu)</td>
<td>Sanana (30.58 % of Sula Regency population excluding Taliabu)</td>
<td>Sulabesi Tengah (7.04 % of Sula Regency population excluding Taliabu)</td>
<td>Sulabesi Timur (3.58 % of Sula Regency population excluding Taliabu)</td>
<td>Sanana Utara (6.88 % of Sula Regency population excluding Taliabu)</td>
</tr>
<tr>
<td>---------</td>
<td>------------------</td>
<td>-------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>value corresponding to the percentage</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>C. dumbphone %</td>
<td>&gt;70%</td>
<td>10–29%</td>
<td>&gt;70%</td>
<td>&gt;70%</td>
<td>10–29%</td>
<td>&gt;70%</td>
<td></td>
</tr>
<tr>
<td>value corresponding to the percentage</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Totals for each region</td>
<td>17</td>
<td>2</td>
<td>17</td>
<td>9</td>
<td>2</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Estimated community population</td>
<td>5,364</td>
<td>4,782</td>
<td>23,060</td>
<td>6,317</td>
<td>3,522</td>
<td>5,533</td>
<td></td>
</tr>
<tr>
<td>community's percentage of total population</td>
<td>0.0670</td>
<td>0.0597</td>
<td>0.2879</td>
<td>0.0789</td>
<td>0.0440</td>
<td>0.0691</td>
<td></td>
</tr>
<tr>
<td>weighted totals for each region (totals for each region multiplied by its percentage of total Sula population)</td>
<td>1.1383</td>
<td>0.1194</td>
<td>4.8935</td>
<td>0.7097</td>
<td>0.0879</td>
<td>0.9669</td>
<td>sum: 7.9157</td>
</tr>
</tbody>
</table>
APPENDIX C

Appendix C. UNESCO Ad Hoc Expert Group on Endangered Languages’ nine factors for gauging language vitality and endangerment. (taken from Brenzinger et al. 2003:7-16)

Factor 1: Intergenerational Language Transmission

**safe (5):** The language is used by all ages, from children up.

**unsafe (4):** The language is used by some children in all domains; it is used by all children in limited domains.

**definitively endangered (3):** The language is used mostly by the parental generation and up.

**severely endangered (2):** The language is used mostly by the grandparental generation and up.

**critically endangered (1):** The language is used mostly by very few speakers, of great-grandparental generation.

**extinct (0):** There exists no speaker.

Factor 2: Absolute Number of Speakers

Factor 3: Proportion of Speakers within the Total Population

**safe (5):** All speak the language.

**unsafe (4):** Nearly all speak the language.

**definitively endangered (3):** A majority speak the language.

**severely endangered (2):** A minority speak the language.

**critically endangered (1):** Very few speak the language.

**extinct (0):** None speak the language.

Factor 4: Trends in Existing Language Domains

**universal use (5):** The language is used in all domains and for all functions

**multilingual parity (4):** Two or more languages may be used in most social domains and for most functions.

**dwindling domains (3):** The language is in home domains and for many functions, but the dominant language begins to penetrate even home domains.
limited or formal domains (2): The language is used in limited social domains and for several functions

highly limited domains (1): The language is used only in a very restricted domains and for a very few functions

extinct (0): The language is not used in any domain and for any function.

Factor 5: Response to New Domains and Media

dynamic (5): The language is used in all new domains.

robust/active (4): The language is used in most new domains.

receptive (3): The language is used in many new domains.

coping (2): The language is used in some new domains.

minimal (1): The language is used only in a few new domains.

inactive (0): The language is not used in any new domains.

Factor 6: Materials for Language Education and Literacy

(5): There is an established orthography, literacy tradition with grammars, dictionaries, texts, literature, and everyday media. Writing in the language is used in administration and education.

(4): Written materials exist, and at school, children are developing literacy in the language. Writing in the language is not used in administration.

(3): Written materials exist and children may be exposed to the written form at school. Literacy is not promoted through print media.

(2): Written materials exist, but they may only be useful for some members of the community; and for others, they may have a symbolic significance. Literacy education in the language is not a part of the school curriculum.

(1): A practical orthography is known to the community and some material is being written.

(0): No orthography available to the community.

Factor 7: Governmental and Institutional Language Attitudes And Policies, Including Official Status and Use

equal support (5): All languages are protected.

differentiated support (4): Minority languages are protected primarily as the language of private domains. The use of the language is prestigious.
**APPENDIX C**

**passive assimilation (3):** No explicit policy exists for minority languages; the dominant language prevails in the public domain.

**active assimilation (2):** Government encourages assimilation to the dominant language. There is no protection for minority languages.

**forced assimilation (1):** The dominant language is the sole official language, while non-dominant languages are neither recognized nor protected.

**prohibition (0):** Minority languages are prohibited.

**Factor 8: Community Members’ Attitudes toward Their Own Language**

(5): All members value their language and wish to see it promoted.

(4): Most members support language maintenance.

(3): Many members support language maintenance; others are indifferent or may even support language loss.

(2): Some members support language maintenance; others are indifferent or may even support language loss.

(1): Only a few members support language maintenance; others are indifferent or may even support language loss.

(0): No one cares if the language is lost; all prefer to use a dominant language.

**Factor 9: Amount and Quality of Documentation**

**superlative (5):** There are comprehensive grammars and dictionaries, extensive texts, and a constant flow of language materials. Abundant annotated high-quality audio and video recordings exist.

**good (4):** There is one good grammar and a number of adequate grammars, dictionaries, texts, literature and occasionally updated everyday media; adequate annotated high-quality audio and video recordings exist.

**fair (3):** There may be an adequate grammar or sufficient numbers of grammars, dictionaries and texts but no everyday media; audio and video recordings of varying quality or degree of annotation may exist.

**fragmentary (2):** There are some grammatical sketches, word-lists and texts useful for limited linguistic research but with inadequate coverage. Audio and video recordings of varying quality, with or without any annotation, may exist.
Sula

*inadequate (1)*: There are only a few grammatical sketches, short word-lists and fragmentary texts. Audio and video recordings do not exist, are of unusable quality or are completely un-annotated.

*undocumented (0)*: No material exists.
Appendix D. Data from Chapter Two part 1

**Proto–Sula. u > o when following syllable contains a high vowel**

<table>
<thead>
<tr>
<th>*uCi</th>
<th>PMP</th>
<th>PSM</th>
<th>Mangon</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*bukij</td>
<td>*faʔoki</td>
<td>faoki</td>
<td>faʔok</td>
<td>‘forested mountain areas’</td>
<td></td>
</tr>
<tr>
<td>*buni</td>
<td>*daʔufonji</td>
<td>daufonji</td>
<td>daʔufon</td>
<td>‘to hide’</td>
<td></td>
</tr>
<tr>
<td>*duRi</td>
<td>*loi</td>
<td>loi</td>
<td>hoi</td>
<td>‘thorn’/’bone’</td>
<td></td>
</tr>
<tr>
<td>*kulit</td>
<td>*koli</td>
<td>koli</td>
<td>kol</td>
<td>‘skin’</td>
<td></td>
</tr>
<tr>
<td>*ma-putiq</td>
<td>*boti</td>
<td>boti</td>
<td>bot</td>
<td>‘white’</td>
<td></td>
</tr>
<tr>
<td>*puki</td>
<td>*poki</td>
<td>poki</td>
<td>pok</td>
<td>‘vulva, vagina’</td>
<td></td>
</tr>
<tr>
<td>*qutin</td>
<td>*oti</td>
<td>oti</td>
<td>ot</td>
<td>‘penis’</td>
<td></td>
</tr>
</tbody>
</table>

**uCu**

<table>
<thead>
<tr>
<th>PMP</th>
<th>PSM</th>
<th>Mangon</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*bubu</td>
<td>*fofu</td>
<td>fofu</td>
<td>fofa</td>
<td>‘bamboo fish/eel trap’</td>
</tr>
<tr>
<td>*buku</td>
<td>*foku</td>
<td>foku</td>
<td>foka</td>
<td>‘joint, finger or bamboo’</td>
</tr>
<tr>
<td>*bulu</td>
<td>*fou</td>
<td>foː</td>
<td>foa</td>
<td>‘hair, feathers’</td>
</tr>
<tr>
<td>*kutu</td>
<td>*kotu</td>
<td>kotu</td>
<td>kota</td>
<td>‘hair louse’</td>
</tr>
<tr>
<td>*puluq</td>
<td>*pou</td>
<td>poː</td>
<td>poa</td>
<td>‘ten’</td>
</tr>
<tr>
<td>*pusuq</td>
<td>*pou</td>
<td>poː</td>
<td>poa</td>
<td>‘banana inflorescence’</td>
</tr>
<tr>
<td>*susu</td>
<td>*sosu</td>
<td>sosu</td>
<td>sosa</td>
<td>‘female breast’</td>
</tr>
<tr>
<td>*tunu</td>
<td>*donu</td>
<td>donu</td>
<td>dona</td>
<td>‘to burn’</td>
</tr>
<tr>
<td>*tuktuk</td>
<td>*dotu</td>
<td>dotu</td>
<td>dota</td>
<td>‘to strike’</td>
</tr>
</tbody>
</table>

**PSM to Sanana. u > a where preceding syllable contains o**

*u > a / oα_. Lowering of *u to a where the preceding syllable contains a mid back vowel

<table>
<thead>
<tr>
<th>PSM</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*bagou</td>
<td>bagoa</td>
<td>‘cold’</td>
</tr>
<tr>
<td>*bosu</td>
<td>bosa</td>
<td>‘to suck’</td>
</tr>
<tr>
<td>*donu</td>
<td>dona</td>
<td>‘to burn’</td>
</tr>
<tr>
<td>*dotu</td>
<td>dota</td>
<td>‘to hit’</td>
</tr>
<tr>
<td>*fou</td>
<td>foa</td>
<td>‘hair, feather’</td>
</tr>
</tbody>
</table>
Sula

<table>
<thead>
<tr>
<th>Sula</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*kotu</td>
<td>kota</td>
<td>‘louse’</td>
</tr>
<tr>
<td>*momu</td>
<td>moma</td>
<td>‘to hit’</td>
</tr>
<tr>
<td>*moru</td>
<td>mora</td>
<td>‘wind’</td>
</tr>
<tr>
<td>*moyu</td>
<td>moya</td>
<td>‘no, not’</td>
</tr>
<tr>
<td>*(N-)boyu</td>
<td>boya</td>
<td>‘tail’</td>
</tr>
<tr>
<td>*nonu</td>
<td>nona</td>
<td>‘to sleep’</td>
</tr>
<tr>
<td>*padomu</td>
<td>paroma</td>
<td>‘knee’</td>
</tr>
<tr>
<td>*pou</td>
<td>poa</td>
<td>‘blood’</td>
</tr>
<tr>
<td>*pou</td>
<td>poa</td>
<td>‘ten’</td>
</tr>
<tr>
<td>*pougahu</td>
<td>poagahu</td>
<td>‘twenty’</td>
</tr>
<tr>
<td>*pougalima</td>
<td>poagalima</td>
<td>‘fifty’</td>
</tr>
<tr>
<td>*samohu</td>
<td>samoha</td>
<td>‘needle’</td>
</tr>
<tr>
<td>*saotu</td>
<td>saota</td>
<td>‘to dry’</td>
</tr>
<tr>
<td>*sosu</td>
<td>sosa</td>
<td>‘female breast’</td>
</tr>
<tr>
<td>*yotu</td>
<td>yota</td>
<td>‘to hunt’</td>
</tr>
</tbody>
</table>

**PSM to Sanana. Loss of final i, u**

*i, u > Ø / [-glottal] _#*

<table>
<thead>
<tr>
<th>PSM</th>
<th>Sanana</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*(t,d)ufi</td>
<td>duf</td>
<td>‘to stab’</td>
</tr>
<tr>
<td>*aku</td>
<td>ak</td>
<td>‘1SG’</td>
</tr>
<tr>
<td>*api</td>
<td>ap</td>
<td>‘fire’</td>
</tr>
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<td>*nau</td>
<td>nau</td>
<td>nau</td>
</tr>
<tr>
<td>119</td>
<td>*nibu</td>
<td>nibu</td>
<td>nib</td>
</tr>
<tr>
<td>120</td>
<td>*nonu</td>
<td>nonu</td>
<td>nona</td>
</tr>
<tr>
<td>121</td>
<td>*ŋa</td>
<td>ŋa</td>
<td>na</td>
</tr>
<tr>
<td>122</td>
<td>*ŋapu</td>
<td>ŋapu</td>
<td>nap</td>
</tr>
<tr>
<td>123</td>
<td>*ŋau</td>
<td>ŋau</td>
<td>nau</td>
</tr>
<tr>
<td>124</td>
<td>*ŋihi</td>
<td>ŋihi</td>
<td>nihi</td>
</tr>
<tr>
<td>125</td>
<td>*padomu</td>
<td>padomu</td>
<td>paroma</td>
</tr>
<tr>
<td>126</td>
<td>*pia</td>
<td>pia</td>
<td>pia</td>
</tr>
<tr>
<td>127</td>
<td>*pou</td>
<td>poː</td>
<td>poa</td>
</tr>
<tr>
<td>128</td>
<td>*pou</td>
<td>poː</td>
<td>poa</td>
</tr>
<tr>
<td>129</td>
<td>*pougahu</td>
<td>pogh(uː)</td>
<td>poagahu</td>
</tr>
<tr>
<td>130</td>
<td>*rekiŋ (L)</td>
<td>rekiŋ</td>
<td>rek</td>
</tr>
<tr>
<td>131</td>
<td>*saku</td>
<td>saku</td>
<td>sak</td>
</tr>
<tr>
<td>132</td>
<td>*samamu</td>
<td>samamu</td>
<td>samam</td>
</tr>
<tr>
<td>133</td>
<td>*samohu</td>
<td>samo</td>
<td>samoha</td>
</tr>
<tr>
<td>134</td>
<td>*sanapetu</td>
<td>sanapet</td>
<td>sanapet</td>
</tr>
<tr>
<td>135</td>
<td>*saotu</td>
<td>sotu</td>
<td>saota</td>
</tr>
<tr>
<td>136</td>
<td>*soba</td>
<td>soba</td>
<td>soba</td>
</tr>
<tr>
<td>137</td>
<td>*sosu</td>
<td>sosu</td>
<td>sosu</td>
</tr>
<tr>
<td>138</td>
<td>*tadu</td>
<td>tadu</td>
<td>tar</td>
</tr>
<tr>
<td>139</td>
<td>*tahaga (L)</td>
<td>taga</td>
<td>tahaga</td>
</tr>
<tr>
<td>140</td>
<td>*tahun</td>
<td>taun</td>
<td>taun, tahun (L)</td>
</tr>
<tr>
<td>141</td>
<td>*tapa</td>
<td>tapa</td>
<td>tapa</td>
</tr>
<tr>
<td>142</td>
<td>*tilu</td>
<td>tilu</td>
<td>til</td>
</tr>
<tr>
<td>143</td>
<td>*timu</td>
<td>timu</td>
<td>tim</td>
</tr>
<tr>
<td>144</td>
<td>*tua</td>
<td>tua</td>
<td>tua</td>
</tr>
<tr>
<td>145</td>
<td>*tui</td>
<td>tui</td>
<td>tui</td>
</tr>
<tr>
<td>146</td>
<td>*tuka</td>
<td>tuka</td>
<td>tuka</td>
</tr>
<tr>
<td>147</td>
<td>*uha</td>
<td>ua</td>
<td>uha</td>
</tr>
<tr>
<td>148</td>
<td>*uma</td>
<td>uma</td>
<td>uma</td>
</tr>
<tr>
<td>149</td>
<td>*uya</td>
<td>uya</td>
<td>uya</td>
</tr>
<tr>
<td>150</td>
<td>*wai</td>
<td>wai</td>
<td>wai</td>
</tr>
<tr>
<td>151</td>
<td>*(wai) ewa</td>
<td>(wai) ewa</td>
<td>(wai) ewa</td>
</tr>
<tr>
<td>152</td>
<td>*waka</td>
<td>waka</td>
<td>waka</td>
</tr>
<tr>
<td>153</td>
<td>*waki dabu</td>
<td>waki dabu</td>
<td>wak dab</td>
</tr>
<tr>
<td>154</td>
<td>*wama</td>
<td>wama</td>
<td>wama</td>
</tr>
<tr>
<td>155</td>
<td>*winu</td>
<td>winu</td>
<td>win</td>
</tr>
<tr>
<td>156</td>
<td>*yaña</td>
<td>yaña</td>
<td>yana</td>
</tr>
<tr>
<td>157</td>
<td>*yau</td>
<td>yau</td>
<td>yau</td>
</tr>
<tr>
<td>158</td>
<td>*yotu</td>
<td>yotu</td>
<td>yota</td>
</tr>
</tbody>
</table>
Table A. Words identified as containing final /i/ or /u/ target environments.

<table>
<thead>
<tr>
<th>CMD (V# Variant)</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. uli</td>
<td>'worm'</td>
</tr>
<tr>
<td>2. ami</td>
<td>'to squeeze'</td>
</tr>
<tr>
<td>3. duki</td>
<td>'to come'</td>
</tr>
<tr>
<td>4. lifi</td>
<td>'to turn'</td>
</tr>
<tr>
<td>5. kagi</td>
<td>'to fear'</td>
</tr>
<tr>
<td>6. eki</td>
<td>'neck'</td>
</tr>
<tr>
<td>7. maki</td>
<td>'tongue'</td>
</tr>
<tr>
<td>8. banapi</td>
<td>'to shoot with a gun'</td>
</tr>
<tr>
<td>9. jubi</td>
<td>'to shoot with a bow'</td>
</tr>
<tr>
<td>10. deti</td>
<td>'to cut/hack'</td>
</tr>
<tr>
<td>11. baseli</td>
<td>'to plant'</td>
</tr>
<tr>
<td>12. pani</td>
<td>'wing'</td>
</tr>
<tr>
<td>13. manipi</td>
<td>'thin'</td>
</tr>
<tr>
<td>14. dagati</td>
<td>'narrow'</td>
</tr>
<tr>
<td>15. bali</td>
<td>'shy'</td>
</tr>
<tr>
<td>16. boti</td>
<td>'white'</td>
</tr>
<tr>
<td>17. miti</td>
<td>'black'</td>
</tr>
<tr>
<td>18. gasi</td>
<td>'salt'</td>
</tr>
<tr>
<td>19. lan</td>
<td>'sky'</td>
</tr>
<tr>
<td>20. nibu</td>
<td>'to sit'</td>
</tr>
<tr>
<td>21. baumapu</td>
<td>'to cook'</td>
</tr>
<tr>
<td>22. fatu</td>
<td>'stone'</td>
</tr>
<tr>
<td>23. bagu</td>
<td>'thick'</td>
</tr>
<tr>
<td>24. tilu</td>
<td>'ear'</td>
</tr>
<tr>
<td>25. nanu</td>
<td>'bathe'</td>
</tr>
<tr>
<td>26. napu</td>
<td>'head'</td>
</tr>
<tr>
<td>27. asu</td>
<td>'dog'</td>
</tr>
<tr>
<td>28. nibu</td>
<td>'sit'</td>
</tr>
<tr>
<td>29. fatu</td>
<td>'stone'</td>
</tr>
<tr>
<td>30. bagu</td>
<td>'thick'</td>
</tr>
<tr>
<td>31. saku</td>
<td>'to pierce'</td>
</tr>
<tr>
<td>32. aku</td>
<td>'1SG'</td>
</tr>
</tbody>
</table>

Items for which final /i/ or /u/ target environment was present, but no final vowel variant was produced:

33. gapit          | 'seven'          |
34. sanapet        | 'roof thatch'    |
35. kafin          | 'mosquito'       |

\[158\] All forms are included in percentage calculations
<table>
<thead>
<tr>
<th>Sula</th>
</tr>
</thead>
<tbody>
<tr>
<td>36. win</td>
</tr>
<tr>
<td>37. samam</td>
</tr>
<tr>
<td>38. nona bol</td>
</tr>
<tr>
<td>39. kol</td>
</tr>
<tr>
<td>40. mantel</td>
</tr>
<tr>
<td>41. gatel</td>
</tr>
</tbody>
</table>

**TABLE B. Percentages for each word of tokens showing epenthesis.**

<table>
<thead>
<tr>
<th>(-i#)</th>
<th>English</th>
<th>-V# variant</th>
<th>(% of tokens produced with -V#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>'black'</td>
<td>miti</td>
<td>(86%)</td>
</tr>
<tr>
<td>2.</td>
<td>'branch'</td>
<td>daeti</td>
<td>(100%)</td>
</tr>
<tr>
<td>3.</td>
<td>'day'</td>
<td>beti</td>
<td>(100%)</td>
</tr>
<tr>
<td>4.</td>
<td>'evil'</td>
<td>kabaresi</td>
<td>(50%)</td>
</tr>
<tr>
<td>5.</td>
<td>'mosquito'</td>
<td>kafini</td>
<td>(0%)</td>
</tr>
<tr>
<td>6.</td>
<td>'narrow'</td>
<td>dagati</td>
<td>(100%)</td>
</tr>
<tr>
<td>7.</td>
<td>'neck'</td>
<td>eki</td>
<td>(100%)</td>
</tr>
<tr>
<td>8.</td>
<td>'right'</td>
<td>kuli</td>
<td>(56%)</td>
</tr>
<tr>
<td>9.</td>
<td>'salt'</td>
<td>gasi</td>
<td>(50%)</td>
</tr>
<tr>
<td>10.</td>
<td>'shy, ashamed'</td>
<td>bali</td>
<td>(100%)</td>
</tr>
<tr>
<td>11.</td>
<td>'skin'</td>
<td>koli</td>
<td>(0%)</td>
</tr>
<tr>
<td>12.</td>
<td>'sky'</td>
<td>lani</td>
<td>(50%)</td>
</tr>
<tr>
<td>13.</td>
<td>'thin'</td>
<td>manipi</td>
<td>(100%)</td>
</tr>
<tr>
<td>14.</td>
<td>'to come'</td>
<td>duki</td>
<td>(100%)</td>
</tr>
<tr>
<td>15.</td>
<td>'to cut, hack'</td>
<td>deti</td>
<td>(100%)</td>
</tr>
<tr>
<td>16.</td>
<td>'to fear'</td>
<td>kagi</td>
<td>(100%)</td>
</tr>
<tr>
<td>17.</td>
<td>'to lie down'</td>
<td>nona boli</td>
<td>(0%)</td>
</tr>
<tr>
<td>18.</td>
<td>'to plant'</td>
<td>baseli</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

604
19. 'to shoot1'  
20. 'to shoot2'  
21. 'to sniff'  
22. 'to squeeze'  
23. 'to stab, pierce'  
24. 'to turn'  
25. 'tongue'  
26. 'white'  
27. 'wing'  
28. 'woods/forest'  
29. 'worm'  

(-u#)

<table>
<thead>
<tr>
<th>English</th>
<th>-V# variant</th>
<th>(% of tokens produced with -V#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. 'dog'</td>
<td>asu</td>
<td>(100%)</td>
</tr>
<tr>
<td>31. 'drink'</td>
<td>winu</td>
<td>(0%)</td>
</tr>
<tr>
<td>32. 'ear'</td>
<td>tilu</td>
<td>(100%)</td>
</tr>
<tr>
<td>33. 'egg'</td>
<td>mantelu</td>
<td>(0%)</td>
</tr>
<tr>
<td>34. 'fire'</td>
<td>apu</td>
<td>(100%)</td>
</tr>
<tr>
<td>35. 'head'</td>
<td>napu</td>
<td>(100%)</td>
</tr>
<tr>
<td>36. 'I'</td>
<td>aku</td>
<td>(83%)</td>
</tr>
<tr>
<td>37. 'pierce ear'</td>
<td>sak-tilu</td>
<td>(100%)</td>
</tr>
<tr>
<td>38. 'seven'</td>
<td>gapitu</td>
<td>(0%)</td>
</tr>
<tr>
<td>39. 'stone'</td>
<td>fatu</td>
<td>(75%)</td>
</tr>
<tr>
<td>40. 'thatch/roof'</td>
<td>sanapetu</td>
<td>(0%)</td>
</tr>
<tr>
<td>41. 'thick'</td>
<td>bagu</td>
<td>(100%)</td>
</tr>
<tr>
<td>42. 'three'</td>
<td>gatelu</td>
<td>(0%)</td>
</tr>
<tr>
<td>Sula</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. 'to chew'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>samamu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. 'to cook'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bamapu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. 'to cook rice'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>haku</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. 'to grow'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>batu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. 'to sit'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nibu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. 'to stab, pierce'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>saku</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. 'to swim'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nanu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(100%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix F

Appendix F. Dialect comparison lists. Four tribes plus Bajo

The following lists were collected with strict geographic and speaker demographic controls as described in chapter two. These lists are provided in the hopes they might help a future researcher better map Sula’s dialect regions—a task that will be a dissertation unto itself. All lists correspond to recordings archived and available.

<table>
<thead>
<tr>
<th>Vocabulary From Each Tribe (plus Bajo language)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>English</th>
<th>Facei Tribe in K. Sama, Sanana Island</th>
<th>Falahu Tribe in K. Wailau, Sanana Island</th>
<th>Fagudu Tribe in K. Umaloya, Sanana Island</th>
<th>Mangon Tribe in K. Waitina, Mangon Island</th>
<th>Ethnic Bajo settlement on Sanana Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 hand (tangan)</td>
<td>lima</td>
<td>lima</td>
<td>lima</td>
<td>lima</td>
<td>tangang</td>
</tr>
<tr>
<td>2 left (kiri)</td>
<td>tapa</td>
<td>(lima) tapa</td>
<td>(lima) tapa</td>
<td>(lima) tapa</td>
<td>kidal</td>
</tr>
<tr>
<td>3 right (kanan)</td>
<td>kul</td>
<td>(lima) kul</td>
<td>(lima) kul</td>
<td>(lima) kuli</td>
<td>kanan</td>
</tr>
<tr>
<td>4 leg/foot (kaki)</td>
<td>yai</td>
<td>yai</td>
<td>yai</td>
<td>nyai</td>
<td>nai</td>
</tr>
<tr>
<td>5 to walk (berjalan)</td>
<td>laka</td>
<td>laka</td>
<td>laka</td>
<td>laka</td>
<td>dumalang</td>
</tr>
<tr>
<td>6 road/path (jalan)</td>
<td>ya ea</td>
<td>yai ea</td>
<td>yai ea</td>
<td>sanafa</td>
<td>lalang</td>
</tr>
<tr>
<td>6 road/path (jalan)</td>
<td>laka-laka / berjalan-jalan</td>
<td>yai ea</td>
<td>sanafa</td>
<td>lalang</td>
<td></td>
</tr>
<tr>
<td>7 to come (datang)</td>
<td>duk</td>
<td>duk</td>
<td>duk</td>
<td>duki</td>
<td>tika</td>
</tr>
<tr>
<td>8 to turn (bélok) (to turn halfway, 90 degrees)</td>
<td>lif</td>
<td>lif</td>
<td>lif</td>
<td>lifi</td>
<td>pabale / pabelo*</td>
</tr>
</tbody>
</table>

*(They say pabale is ‘balik’, so this might be turning 180 (pabelo is probably either turning while in motion or turning 90 degrees.)

607
<table>
<thead>
<tr>
<th>English</th>
<th>Facei Tribe in K. Sama, Sanana Island</th>
<th>Falahu Tribe in K. Wailau, Sanana Island</th>
<th>Fagudu Tribe in K. Umaloya, Sanana Island</th>
<th>Mangon Tribe in K. Waitina, Mangon Island</th>
<th>Ethnic Bajo settlement on Sanana Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 to turn (berputar) (to turn (completely, 180 degrees)</td>
<td>putar</td>
<td>sawai (pul)</td>
<td>lif puta</td>
<td>(lif) dagalili</td>
<td>paputar</td>
</tr>
<tr>
<td>9 to swim (berenang)</td>
<td>nan</td>
<td>nan</td>
<td>nan</td>
<td>nangu</td>
<td>rumangi</td>
</tr>
<tr>
<td>10 dirty (kotor)</td>
<td>bakatai</td>
<td>bakatai</td>
<td>bakatai</td>
<td>bakatai</td>
<td>marota*</td>
</tr>
<tr>
<td>*(the “original Bajo word”) marumus, nakal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 dust (debu) (?)</td>
<td>hai mai</td>
<td>hai mai / mai-mai</td>
<td>bufa / bufai mai</td>
<td>lai mai</td>
<td>‘a.bu</td>
</tr>
<tr>
<td>12 skin (kulit)</td>
<td>kol</td>
<td>kol</td>
<td>kol</td>
<td>koli</td>
<td>‘ku.li</td>
</tr>
<tr>
<td>13 back (punggung)</td>
<td>ded pon</td>
<td>bahu / sanapahu / pau</td>
<td>gehi fat / sanapau</td>
<td>loi nau simpau (shoulder)</td>
<td>‘bu.ku (‘belakan’ ID)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘ba.ha</td>
</tr>
<tr>
<td>14 belly (perut)</td>
<td>tena</td>
<td>tena (kau)</td>
<td>tena (kau)</td>
<td>takau</td>
<td>‘bit.ta</td>
</tr>
<tr>
<td>15 bone (tulang)</td>
<td>ho’i</td>
<td>hoi (ho’i in Mangoli — VERIFIED)</td>
<td>ho’i (/hoi/ IS Fahu)</td>
<td>loi</td>
<td>‘ba.kas</td>
</tr>
<tr>
<td>16 intestines (usus)</td>
<td>tuka pon (had to be prompted)</td>
<td>tuka</td>
<td>tuka</td>
<td>tuka</td>
<td>‘tub.bo</td>
</tr>
<tr>
<td>17 liver (hati)</td>
<td>behifon</td>
<td>be(hi)for</td>
<td>behifor ('lungs' = wama)</td>
<td>kila</td>
<td>‘a.tai</td>
</tr>
<tr>
<td>18 breast (susu)</td>
<td>sosa</td>
<td>kila*</td>
<td>sosa (woman's breast)</td>
<td>sosu</td>
<td>‘su.su</td>
</tr>
<tr>
<td>*(pretty sure this is ‘liver’), wama (this means ‘breathe’)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>susu (milk) / sosu (woman's breast)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 breast (dada)</td>
<td>bokatan</td>
<td>behi (tan)</td>
<td>behi (tan)</td>
<td>lela fatu</td>
<td>ka’ri.ku</td>
</tr>
<tr>
<td>*(dada) (&quot;breast, chest&quot; - not gender-specific)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix F

<table>
<thead>
<tr>
<th>English</th>
<th>Facei Tribe in K. Sama, Sanana Island</th>
<th>Falahu Tribe in K. Wailau, Sanana Island</th>
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<th>Ethnic Bajo settlement on Sanana Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 shoulder (bahu)</td>
<td>sanapau</td>
<td>sanapau</td>
<td>sanapau</td>
<td>simpau sanapau (Fagudu)</td>
<td>'ba.ha ba’ha.ku ‘pid.di ('shoulder ache' I think)</td>
</tr>
<tr>
<td>20 to know, be knowledgeable (tahu)</td>
<td>nau</td>
<td>nau</td>
<td>nau</td>
<td>(dahi) nau</td>
<td>ka.to’nang.ku</td>
</tr>
<tr>
<td>21 to think (berfikir)</td>
<td>bapikir</td>
<td>bapikir</td>
<td>wak dab had to think a lot</td>
<td>waki dabu ('ingat' ID) bapikir ('berfikir' ID)</td>
<td>pi’kir</td>
</tr>
<tr>
<td>22 to fear (takut)</td>
<td>kag</td>
<td>kag</td>
<td>kag</td>
<td>kagi</td>
<td>‘ta.lau</td>
</tr>
<tr>
<td>23 blood (darah)</td>
<td>poa</td>
<td>poa</td>
<td>poa</td>
<td>po</td>
<td>‘la.ha</td>
</tr>
<tr>
<td>24 head (kepala) (Skt kapala 'skull')</td>
<td>nap (foka/ fat)</td>
<td>nap (f)oka (skull) / nap fat/</td>
<td>nap</td>
<td>ngapu</td>
<td>ti’ko.lo</td>
</tr>
<tr>
<td>25 neck (léhér)</td>
<td>ek</td>
<td>ek</td>
<td>ek</td>
<td>eki wai eki ek lawa (Fagudu)</td>
<td>‘kul.lo</td>
</tr>
<tr>
<td>26 hair (rambut)</td>
<td>nap foa</td>
<td>nap foa</td>
<td>nap foa</td>
<td>ngapu fo</td>
<td>bulu ti’ko.lo</td>
</tr>
<tr>
<td>27 nose (hidung)</td>
<td>ne'i</td>
<td>nee (long / e/)</td>
<td>ne'i</td>
<td>ncumi</td>
<td>u’ro</td>
</tr>
<tr>
<td>28 to breathe (bernapas)</td>
<td>wama</td>
<td>wama</td>
<td>wama</td>
<td>wama</td>
<td>ni’an.sa</td>
</tr>
<tr>
<td>29 to sniff, smell (mencium) (&quot;to kiss&quot;?)</td>
<td>sayang (mana)mum</td>
<td>muhi (they rejected / mui/) / manam (ok for 'kiss')</td>
<td>sumpati (only 'smell')</td>
<td>ngu’ro</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Facei Tribe in K. Sama, Sanana Island</td>
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<td>-------------------------</td>
<td>---------------------------------------</td>
<td>------------------------------------------</td>
<td>------------------------------------------</td>
<td>------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td><strong>29 to sniff, smell (menghiru)</strong></td>
<td>etwama (dental t)</td>
<td>sakum</td>
<td>Did Not Skip — forgot to write. Check recording.</td>
<td>sumpati</td>
<td>na.re’na.pas</td>
</tr>
<tr>
<td><strong>30 mouth (mulut)</strong></td>
<td>bayon</td>
<td>bayon (/a/ almost schwa)</td>
<td>sum</td>
<td>boni</td>
<td>‘bo.a</td>
</tr>
<tr>
<td><strong>31 tooth (gigi)</strong></td>
<td>nihi</td>
<td>nihi</td>
<td>nihi</td>
<td>ngi</td>
<td>‘gi.gi ku’le.ber (‘lips’)</td>
</tr>
<tr>
<td><strong>32 tongue (lidah) (metathesis)</strong></td>
<td>mak</td>
<td>mak</td>
<td>mak</td>
<td>maki</td>
<td>‘de.la</td>
</tr>
<tr>
<td><strong>33 to laugh (tertawa)</strong></td>
<td>balela</td>
<td>balela</td>
<td>balela</td>
<td>balela</td>
<td>ti’to.a (‘eyebrow’ = bulu’kin.ne)</td>
</tr>
<tr>
<td><strong>34 to cry (menangis)</strong></td>
<td>mena</td>
<td>mena</td>
<td>mena</td>
<td>menga</td>
<td>‘nang.is</td>
</tr>
<tr>
<td><strong>35 to vomit (muntah)</strong></td>
<td>lua</td>
<td>lua</td>
<td>lua</td>
<td>lua</td>
<td>‘ngu.ta</td>
</tr>
<tr>
<td><strong>36 to spit (meludah)</strong></td>
<td>buakeu (also buakeu)</td>
<td>buakeu</td>
<td>buakeu</td>
<td>safe (keu)</td>
<td>‘ru.ja</td>
</tr>
<tr>
<td><strong>37 to eat (makan)</strong></td>
<td>gaya</td>
<td>giya</td>
<td>gaya</td>
<td>giya</td>
<td>‘ngyin.ta</td>
</tr>
<tr>
<td><strong>38 to chew (mengunyah)</strong></td>
<td>samam</td>
<td>bamap</td>
<td>mama / samam</td>
<td>samamu</td>
<td>‘ma.pa</td>
</tr>
<tr>
<td><strong>39 to cook (memasak)</strong></td>
<td>bamap (bira) (they don't know / haku/)</td>
<td>bamap</td>
<td>bamap</td>
<td>bamapu</td>
<td>ma’da.ta.i ma.da.ta’i*</td>
</tr>
</tbody>
</table>

*(with rising intonation and stress shifting to end is question intonation ‘memasak apa’)*

---

Sula

English Facei Tribe in K. Sama, Sanana Island Falahu Tribe in K. Wailau, Sanana Island Fagudu Tribe in K. Umaloya, Sanana Island Mangon Tribe in K. Waitina, Mangon Island Ethnic Bajo settlement on Sanana Island

**29 to sniff, smell (menghiru)**
etwama (dental t)
sakum
Did Not Skip — forgot to write. Check recording.
sum
sumpati
na.re’na.pas

**30 mouth (mulut)**
bayon
bayon (/a/ almost schwa)
sum
boni
‘bo.a

**31 tooth (gigi)**
nihi
nihi
nihi
ngi
‘gi.gi ku’le.ber (‘lips’)

**32 tongue (lidah) (metathesis)**
mak
mak
mak
maki
‘de.la

**33 to laugh (tertawa)**
balela
balela
balela
balela
ti’to.a (‘eyebrow’ = bulu’kin.ne)

**34 to cry (menangis)**
mena
mena
mena
menga
‘nang.is

**35 to vomit (muntah)**
lua
lua
lua
lua
‘ngu.ta

**36 to spit (meludah)**
buakeu
oyakeu (also buakeu)
buakeu
safe (keu)
‘ru.ja

**37 to eat (makan)**
gaya
giya
gaya
giya
‘ngyin.ta

**38 to chew (mengunyah)**
samam
bamap
mama / samam
samamu
‘ma.pa

**39 to cook (memasak)**
bamap
bamap (bira) (they don’t know / haku/)
bamap
bamapu
ma’da.ta.i ma.da.ta’i* *(with rising intonation and stress shifting to end is question intonation ‘memasak apa’)*
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</tr>
</thead>
<tbody>
<tr>
<td><strong>39 to cook</strong> (menanak) (to cook (rice only))</td>
<td>bamap bira</td>
<td>samam</td>
<td>bamap (bira)</td>
<td>bamapu pamasi (pamasi is ‘rice’) (don’t have / haku/ here)</td>
<td>ma’da’ta.i (ki’na.kan) ‘cook rice’</td>
</tr>
<tr>
<td><strong>40 to drink</strong> (minum)</td>
<td>win</td>
<td>win (wai)</td>
<td>win (wai)</td>
<td>winu</td>
<td>‘ngi.nung (’bo.i/ is water)</td>
</tr>
<tr>
<td><strong>41 to bite</strong> (gigit)</td>
<td>uka</td>
<td>uka (nihi)</td>
<td>uka (animal) / gigi</td>
<td>ngasi</td>
<td>‘nge.ke</td>
</tr>
<tr>
<td><strong>42 to suck</strong> (mengisap)</td>
<td>bosa</td>
<td>yop (they also understand /bosa/ - / bosa/ more common for breast)</td>
<td>bosa</td>
<td>bosu (e.g. drinking with straw)</td>
<td>‘ngi.sa ge’go.la (’permen’ ID)</td>
</tr>
<tr>
<td><strong>43 ear</strong> (telinga)</td>
<td>til (hosa)</td>
<td>baked</td>
<td>baked / gena (seem to actually be the same. But /gena/ is an old word used by old people only)</td>
<td>talinga</td>
<td>ma’ka.le</td>
</tr>
<tr>
<td><strong>44 to hear</strong> (mendengar)</td>
<td>baked</td>
<td>baker (also know / gena/ but say it is Fagudu or Facei)</td>
<td>gena</td>
<td>ma’ka.le</td>
<td></td>
</tr>
<tr>
<td><strong>45 eye</strong> (mata)</td>
<td>hama</td>
<td>hama</td>
<td>hama</td>
<td>lama</td>
<td>‘ma.ta</td>
</tr>
<tr>
<td><strong>46 to see</strong> (melihat)</td>
<td>yana</td>
<td>yana</td>
<td>bil (‘see’ w/o volition necessarill y) / yana (‘watch’ with volition, eg. ’a film’)</td>
<td>yanga</td>
<td>na’rin.ta</td>
</tr>
<tr>
<td>English</td>
<td>Facei Tribe in K. Sama, Sanana Island</td>
<td>Falahu Tribe in K. Wailau, Sanana Island</td>
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<tr>
<td>---------</td>
<td>--------------------------------------</td>
<td>------------------------------------------</td>
<td>-------------------------------------------</td>
<td>------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>47 to yawn (menguap) ([&lt;kuap&gt;])</td>
<td>bakafa</td>
<td>bakafa (eya)</td>
<td>bakafa</td>
<td>bakafa</td>
<td>‘ngo.a</td>
</tr>
<tr>
<td>48 to sleep (tidur)</td>
<td>nona</td>
<td>nona</td>
<td>nona</td>
<td>nonu</td>
<td>‘ti.dor</td>
</tr>
<tr>
<td>49 to lie down (berbaring)</td>
<td>nona bol</td>
<td>nona bol / baka leng</td>
<td>nona bol (bol)</td>
<td>nonu boli</td>
<td>ba’le.a</td>
</tr>
<tr>
<td>50 to dream (bermimpi)</td>
<td>baragana</td>
<td>(ba)dagana</td>
<td>badagana</td>
<td>badagana</td>
<td>‘ngup.pi</td>
</tr>
<tr>
<td>51 to sit (duduk)</td>
<td>nib</td>
<td>nib</td>
<td>nib</td>
<td>nibu</td>
<td>’nin.ko.lo</td>
</tr>
<tr>
<td>52 to stand (berdiri)</td>
<td>gehi</td>
<td>gehi</td>
<td>gehi (CANNOT / gei/ or / gei/)</td>
<td>geli</td>
<td>‘nin.ge</td>
</tr>
<tr>
<td>53 person/human being (orang)</td>
<td>matapia</td>
<td>matapia</td>
<td>matapia</td>
<td>matapia</td>
<td>’a.ha</td>
</tr>
<tr>
<td>54 man/male (laki-laki)</td>
<td>ma’ana</td>
<td>ma’ana</td>
<td>maana (pia) mana</td>
<td>(NOT MAANA!!)</td>
<td>‘lil.la</td>
</tr>
<tr>
<td>55 woman/female (perempuan)</td>
<td>fina</td>
<td>fina</td>
<td>fina</td>
<td>fina</td>
<td>‘din.de (final e is schwa)</td>
</tr>
<tr>
<td>56 child (anak)</td>
<td>ana mehi</td>
<td>ana mehi</td>
<td>‘baby’ ana ta(ha)i (‘anak kecil’ ID) ana mehi nana / mehi nana (conversational)</td>
<td>gama (nana)</td>
<td>a’na.na (‘anak-anak’ ID)</td>
</tr>
<tr>
<td>57 husband (suami)</td>
<td>tua</td>
<td>tua</td>
<td>tua</td>
<td>tua</td>
<td>‘llll.la*</td>
</tr>
</tbody>
</table>

*~16:00 don’t know how to transcribe this, but same as 54 but with a very long l
Appendix F

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<thead>
<tr>
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<th>Falahu Tribe in K. Wailau, Sanana Island</th>
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</tr>
</thead>
<tbody>
<tr>
<td>58 wife</td>
<td>fata</td>
<td>fata</td>
<td>fata</td>
<td>fata</td>
<td>‘nnnn.de (final e is schwa)</td>
</tr>
<tr>
<td>(isteri) (Sanskrit strī 'woman; wife; female')</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59 mother</td>
<td>yayaya</td>
<td>ngaya</td>
<td>ngaya / mama</td>
<td>maman (NOT NYAYA)</td>
<td>‘mmm.me (final e is schwa)</td>
</tr>
<tr>
<td>(ibu)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 father</td>
<td>baba</td>
<td>baba</td>
<td>baba</td>
<td>baba</td>
<td>‘uu.e (final e is schwa)</td>
</tr>
<tr>
<td>(bapak)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61 house</td>
<td>uma</td>
<td>uma</td>
<td>uma</td>
<td>uma</td>
<td>‘ru.ma</td>
</tr>
<tr>
<td>(rumah)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62 thatch/roof</td>
<td>sahosa</td>
<td>sanapet</td>
<td>sahosa / sanahosa*</td>
<td>sangapetu</td>
<td>‘do.da</td>
</tr>
<tr>
<td>(atap)</td>
<td></td>
<td></td>
<td></td>
<td>daki (‘tutup’ ID)</td>
<td></td>
</tr>
<tr>
<td>*(came from same person. The other person did not notice sanahosa as being wrong but then said it was incorrect when I repeated it back. He also said sahosa and sa’ahosa are same.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sanapet (after sewed together and ready for use)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>63 name</td>
<td>na</td>
<td>na</td>
<td>nga</td>
<td>nga</td>
<td>‘a.rang</td>
</tr>
<tr>
<td>(nama)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘a.ra.nu ‘sa.i</td>
</tr>
<tr>
<td>(Sanskrit nāma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(‘what’s your name’)</td>
</tr>
<tr>
<td>(nāman)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘name’)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64 to say</td>
<td>soya</td>
<td>bisnoya</td>
<td>bisnoya</td>
<td>beti (berkata)</td>
<td>su’su.rang</td>
</tr>
<tr>
<td>(berkata)</td>
<td></td>
<td></td>
<td></td>
<td>(pisnoya only Sanana)</td>
<td></td>
</tr>
<tr>
<td>65 rope (tali)</td>
<td>meu</td>
<td>meu (no glottal stop here)</td>
<td>me‘u</td>
<td>meu</td>
<td>‘ta.li</td>
</tr>
<tr>
<td>66 to tie up,</td>
<td>be‘u</td>
<td>beu (no glottal stop here)</td>
<td>be‘u (/beu/ is Falahu)</td>
<td>beu</td>
<td>‘ning.ka</td>
</tr>
<tr>
<td>fasten</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(mengikat)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
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<td>---------------------------------------</td>
<td>------------------------------------------</td>
<td>--------------------------------------------</td>
<td>-------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>67 to sew (menjahit)</td>
<td>bisnau</td>
<td>bisnau (/ bisnau/ becomes [pisnau] in [a-pisnau moy])</td>
<td>bisnau (/ bisnau/ becomes [pisnau] in [a-pisnau moy])</td>
<td>doi (‘tusuk’ ID)</td>
<td>nga’ra.e</td>
</tr>
<tr>
<td>68 needle (jarum)</td>
<td>samoha [sa.mo.ha]</td>
<td>samoha</td>
<td>samoha</td>
<td>samo (long o) ‘ja.rum’</td>
<td></td>
</tr>
<tr>
<td>69 to hunt (berburu)</td>
<td>laka soi</td>
<td>* dol as** yotu ber’bu.ru</td>
<td>laka bisloi</td>
<td>**(lit. 'bring dog’), lui fo’ok, haiwan pakiaki, (/yota/ also accepted but nobody produced it)</td>
<td></td>
</tr>
<tr>
<td>70 to shoot (memanah) (To shoot with bow)</td>
<td>jub pana (bow) / banap (with a gun)</td>
<td>jub jubi bapana</td>
<td>‘ma.na’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>71 to stab, pierce (menikam)</td>
<td>sak pana (do jub)</td>
<td>sak (/duf til/ or /til duf/ ’pierce ear’)</td>
<td>saku ‘ngi.a (spearing e.g. fish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>71 to stab, pierce (menusuk)</td>
<td>sak sak (/duf talina/ ’pierce ear’)</td>
<td>sak doi (e.g. fish) bau tufi talinga ’pierce ear’ (‘bau tuf til’ Fagudu)</td>
<td>‘nub.ba (e.g. stab one with knife) ‘nga.jo (</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Facei Tribe in K. Sama, Sanana Island</td>
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</tr>
<tr>
<td><strong>72 to hit (memukul)</strong></td>
<td>moma (hit with stick)</td>
<td>dota</td>
<td>moma / dota</td>
<td>dotu</td>
<td>*</td>
</tr>
<tr>
<td><em>ngan.ja.gor ‘punch’, ‘ma.pas (sime type of hitting from above)</em></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>72 to hit (memalu) (to hit (with a hammer))</strong></td>
<td>befa</td>
<td>to (with hammer)</td>
<td>palu</td>
<td>*ma.lu</td>
<td></td>
</tr>
<tr>
<td><strong>73 to steal (mencuri)</strong></td>
<td>bilnaka</td>
<td>bilnaka</td>
<td>bilnaka</td>
<td>binaka</td>
<td>‘nan.kau</td>
</tr>
<tr>
<td><strong>74 to kill (membunuh)</strong></td>
<td>bau mata</td>
<td>bau mata</td>
<td>bau mata</td>
<td>bau mata</td>
<td>*mo.no</td>
</tr>
<tr>
<td><strong>75 to die, be dead (mati)</strong></td>
<td>mata</td>
<td>mata</td>
<td>mata</td>
<td>mata</td>
<td>*ma.ti</td>
</tr>
<tr>
<td><strong>76 to live, be alive (hidup)</strong></td>
<td>pia</td>
<td>pia</td>
<td>pia</td>
<td>pia</td>
<td>*u.lung</td>
</tr>
<tr>
<td><strong>77 to scratch (menggaruk) (to scratch (an itch))</strong></td>
<td>gada</td>
<td>sakeu</td>
<td>sakeu (reduced to [skeu] in conversatio n)</td>
<td>sakeu</td>
<td>nga’ka.yao</td>
</tr>
<tr>
<td><strong>77 to scratch (mencakar) (to scratch (for the purpose of hurting))</strong></td>
<td>gahu</td>
<td>gawai</td>
<td>gawai / gama (also accepted but not produced)</td>
<td>gama (`gawai’ Fagudu)</td>
<td>ngu.’ra.o</td>
</tr>
<tr>
<td><strong>78 to cut, hack (memotong) (cut)</strong></td>
<td>det</td>
<td>det</td>
<td>det (/det kau/ chop down tree)</td>
<td>deti</td>
<td>*ngit.ta</td>
</tr>
<tr>
<td><strong>78 to cut, hack (menetak) (hack)</strong></td>
<td>daneta</td>
<td>sis (/to/ is pounding, not chipping away at)</td>
<td>no specific word given</td>
<td>bama</td>
<td>*ngit.ta</td>
</tr>
<tr>
<td>English</td>
<td>Facei Tribe in K. Sama, Sanana Island</td>
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<tr>
<td>79 stick/wood (kayu)</td>
<td>kau (wood) / katanup (/ tonka/ is a walking stick — ID loanword)</td>
<td>kau (wood) / 'tonka' ID sana 'branch'</td>
<td>kau (wood) / tonka (stick)</td>
<td>'ka.yu'</td>
<td></td>
</tr>
<tr>
<td>80 to split (membelah)</td>
<td>makariu bama bama bama 'mi.la'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>81 sharp (tajam)</td>
<td>mana mana mana manga 'ta.rang'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>82 dull, blunt (tumpul)</td>
<td>mahoka mahoka moka bapompu 'tom.pol'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>83 to work (bekerja)</td>
<td>bau munara bau munara bau munara 'ngan.ja.ma'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>84 to plant (menanam)</td>
<td>basel basel basel batani 'na.nang'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85 to choose (memilih)</td>
<td>bis loi lika lika lika 'mi.si'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>86 to grow (tumbuh)</td>
<td>dog dog* dogi (grow) 'tim.bo dotu (pound)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*(they tell me /batutu/ same meaning but only Mangon)</td>
<td></td>
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</tr>
<tr>
<td>**(this seems more general than the others), sak kau bo hai (plant like planting a flag), batut (e.g. /kasbi/ or /bira/ plant the way you plant rice or casava)</td>
<td></td>
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</tr>
<tr>
<td>87 to swell (membengkak)</td>
<td>mafai mafai mafai mamfai 'ba.ha'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>88 to squeeze (memeras)</td>
<td>am am am gami* 'pir.ra'</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>*(hold in hands), sangati (hold under the arm against side), sakafi (hold under the arm against side /binkaf/ Fagudu), sa’ka.fi (e.g. baby)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>89 to hold (menggenggam)</td>
<td>kaf kaf* hakkot manakem 'gen.do (hold baby) 'ng.ke (hold not baby)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*(like holding baby) / ‘gendong’ (ID loan like holding baby)/ manakem (like grasping another’s arm with your hand)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td><strong>90 to dig</strong> (menggali)</td>
<td>gahu</td>
<td>geka (like with shovel) / gahu (scratch, or to dig in a ‘scratching’ way with the hand)</td>
<td>geka (dig with shovel) gahu (dig with hand)</td>
<td>gai</td>
<td>‘nga.li</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘ke.he‘</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(‘lubang’ ID)</td>
</tr>
<tr>
<td><strong>91 to buy</strong> (membeli)</td>
<td>baha</td>
<td>baha</td>
<td>baha</td>
<td>ba</td>
<td>‘mil.li</td>
</tr>
<tr>
<td><strong>92 to open, uncover</strong> (membuka)</td>
<td>hoi if* / hoi**</td>
<td>hoi</td>
<td>gifu</td>
<td>‘mu.ka</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(said with initial glottal but there is no phonemic contrast)</td>
<td></td>
<td></td>
<td></td>
<td><strong>(pronounced same as ‘bone’)</strong></td>
</tr>
<tr>
<td><strong>93 to pound,</strong> beat (memukul) (to beat, hit, strike [bell, drum, dog, etc.])</td>
<td>moma dota / mana tota / mana pau</td>
<td>moma / dotu (ba) / batutu (bira) / batutu (bira)</td>
<td>dotu / pamasi (pamasi / ‘rice’) / putu / pamasi (pamasi / ‘rice’)</td>
<td>‘nyan.ta’ / ‘nu.to’ / ‘lu.wo’ (‘lesung’ ID)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(to pound [e.g. to unhusk rice])</td>
<td>THEY SAY / THEY SAY / THEY SAY</td>
<td>THEY SAY / THEY SAY / THEY SAY</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>94 to throw</strong> (melémparkan)</td>
<td>behi</td>
<td>behi</td>
<td>behi</td>
<td>be</td>
<td>‘ngam.be.le</td>
</tr>
<tr>
<td><strong>95 to fall</strong> (jatuh)</td>
<td>bua</td>
<td>bua</td>
<td>bua</td>
<td>bua</td>
<td>‘ca.pa</td>
</tr>
<tr>
<td><strong>96 dog</strong> (anjing)</td>
<td>as</td>
<td>as</td>
<td>as</td>
<td>fa’ko (long / o/)</td>
<td>‘a.su</td>
</tr>
<tr>
<td><strong>97 bird</strong> (burung)</td>
<td>haiwan</td>
<td>haiwan kao goga*</td>
<td>** manu ma’ma.no</td>
<td>manu kaupetu manu panda</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(chicken)</td>
</tr>
<tr>
<td></td>
<td>*(mankaogoga / haiwan also understood)</td>
<td>*(mankaogoga / haiwan also understood)</td>
<td>*(mankaogoga / haiwan also understood)</td>
<td>*(mankaogoga / haiwan also understood)</td>
<td>***(mankaogoga / haiwan also understood)</td>
</tr>
<tr>
<td></td>
<td>Great examples of part-to-whole generalisation w/ animal &amp; bird</td>
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<td>Great examples of part-to-whole generalisation w/ animal &amp; bird</td>
</tr>
</tbody>
</table>

**617**
<table>
<thead>
<tr>
<th>English</th>
<th>Facei Tribe in K. Sama, Sanana Island</th>
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</tr>
</thead>
<tbody>
<tr>
<td>98 egg (telur)</td>
<td>mantel</td>
<td>mantel</td>
<td>mantel</td>
<td>man(u)telu</td>
<td>an'ti.lo</td>
</tr>
<tr>
<td>99 feather (bulu)</td>
<td>haiwan foa</td>
<td>foa</td>
<td>foa</td>
<td>man(u)fo</td>
<td>'bu.lu</td>
</tr>
<tr>
<td>100 wing (sayap)</td>
<td>pan</td>
<td>soba*</td>
<td>soba</td>
<td>man pani</td>
<td>'ka.pe</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Facei: /pan/)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*FALAHU (mpani FAGUDU &amp; FACEI / pani MANGON)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101 to fly (terbang)</td>
<td>la</td>
<td>la</td>
<td>la</td>
<td>la</td>
<td>'lu.me.a</td>
</tr>
<tr>
<td>102 rat (tikus)</td>
<td>safa</td>
<td>sahafa</td>
<td>/sa'afa/</td>
<td>fafa</td>
<td>'ti.kus</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(young one said /safa/)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103 meat/flesh (daging)</td>
<td>(haiwan)</td>
<td>ihi*</td>
<td>ihi</td>
<td>nisi</td>
<td>'da.ging</td>
</tr>
<tr>
<td></td>
<td>ihi</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*(did not produce it, but tell me it is the correct one when I ask)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>104 fat/grease (lemak)</td>
<td>gaji</td>
<td>gajigat</td>
<td>gaji</td>
<td>'mi.na</td>
<td></td>
</tr>
<tr>
<td>105 tail (ékor)</td>
<td>boya</td>
<td>boya</td>
<td>boya</td>
<td>mboyu</td>
<td>'eng.ko</td>
</tr>
<tr>
<td>106 snake (ular)</td>
<td>tui</td>
<td>tui</td>
<td>tui</td>
<td>tui</td>
<td>peng’a.hang</td>
</tr>
<tr>
<td>107 worm (earthworm) (cacing)</td>
<td>makodn (speaker produced post-nasal, likely non-phonemic)</td>
<td>makaor (Falahu: makaor)</td>
<td>mankawai</td>
<td>'ca.cing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>makahor /ul (small one)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>108 louse (kutu)</td>
<td>kota</td>
<td>kota</td>
<td>kota</td>
<td>kotu</td>
<td>'ku.tu</td>
</tr>
<tr>
<td>109 mosquito (nyamuk)</td>
<td>kafin</td>
<td>samab</td>
<td>samab</td>
<td>kafini</td>
<td>'la.ming.nga</td>
</tr>
<tr>
<td></td>
<td>(Facei &amp; Fagudu / kafin/ they till me)</td>
<td>(mosquito)</td>
<td>kafin</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(butterfly)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110 spider (laba-laba)</td>
<td>lawa</td>
<td>lawa</td>
<td>lawa</td>
<td>lawa</td>
<td>am'bom.bo</td>
</tr>
<tr>
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<tr>
<td><strong>111 fish (ikan)</strong></td>
<td>kena</td>
<td>kena</td>
<td>kena</td>
<td>kena</td>
<td>‘da.ya</td>
</tr>
<tr>
<td><strong>112 rotten (busuk)</strong></td>
<td>basa</td>
<td>basa (condition of being rotten) / suba (smell)</td>
<td>suba</td>
<td>basa</td>
<td>‘bun.tu</td>
</tr>
<tr>
<td><strong>113 branch (dahan)</strong></td>
<td>(kau) sana</td>
<td>(kau) sana</td>
<td>sana ('dahan' ID) daet ('ribun' ID)</td>
<td>ncanga badaeti ('barumput' ID)</td>
<td>‘e.ngas</td>
</tr>
<tr>
<td><strong>114 leaf (daun)</strong></td>
<td>hosa</td>
<td>(kau) hosa</td>
<td>(kau) hosa</td>
<td>nlosa</td>
<td>daun</td>
</tr>
<tr>
<td><strong>115 root (akar)</strong></td>
<td>(kau) waka</td>
<td>waka / (kau) waka</td>
<td>waka / (kau) waka</td>
<td>waka</td>
<td>‘u.ra.ga</td>
</tr>
<tr>
<td><strong>116 flower (bunga)</strong></td>
<td>bunga</td>
<td>kau hal</td>
<td>bunga*</td>
<td>sumba ('inhal' Sanana)</td>
<td>bunga</td>
</tr>
<tr>
<td>*ALSO: (kau) bahal (but only after I prompted about /kau hal/ from Falahu)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**117 fruit (buah-buahan) (&quot;fruits (the category, in general&quot;)</td>
<td>(kau) fau</td>
<td>(kau) fau</td>
<td>(kau) fau</td>
<td>(kau) seli</td>
<td>buah-buahan</td>
</tr>
<tr>
<td><strong>117 fruit (buah) (fruit)</strong></td>
<td>(kau) fau</td>
<td>fua</td>
<td>fua</td>
<td>nceli</td>
<td>buah</td>
</tr>
<tr>
<td><strong>117 fruit (sebiji buah) (&quot;a piece of fruit&quot;)</strong></td>
<td>(kau) fau</td>
<td>hia</td>
<td>(kau) fau</td>
<td>fatia</td>
<td>nceli fatu gia</td>
</tr>
<tr>
<td></td>
<td>(kau) fau</td>
<td>fatia</td>
<td>(kau) fau</td>
<td>fatia (they do not accept / fathia/)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'dam.bua</td>
<td>(kalo / da.kau/ itu satu)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>118 grass (rumput)</strong></td>
<td>(kau) hik</td>
<td>kahik (kasafoi is a woven grass mat)</td>
<td>kaik (alive outside) kasafoi (on floor of house)</td>
<td>kiku ‘grass growing outside’ (‘kah ik’ Fagudu) engka (on the floor)</td>
<td>‘sig.ge</td>
</tr>
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</tr>
<tr>
<td>119 earth/soil (tanah)</td>
<td>hai</td>
<td>hai</td>
<td>ha’i (FALAHU: hai)</td>
<td>lai</td>
<td>‘ta.na</td>
</tr>
<tr>
<td>120 stone (batu)</td>
<td>fat</td>
<td>fatu</td>
<td>fatu</td>
<td>fatu</td>
<td>‘ba.tu</td>
</tr>
<tr>
<td>121 sand (pasir)</td>
<td>kumawai</td>
<td>kum wai</td>
<td>kumwai</td>
<td>ka’mi.a</td>
<td>‘gu.so</td>
</tr>
<tr>
<td>122 water (air)</td>
<td>wai</td>
<td>wai</td>
<td>wai</td>
<td>wai</td>
<td>‘bo.i</td>
</tr>
<tr>
<td>123 to flow (mengalir)</td>
<td>wai ewa</td>
<td>(wai) ewa</td>
<td>(wai) ewa</td>
<td>(wai) ewa</td>
<td>‘nyu.ru</td>
</tr>
<tr>
<td>124 sea (laut)</td>
<td>mahi</td>
<td>mahi</td>
<td>mahi</td>
<td>mai</td>
<td>ta’ru.sang</td>
</tr>
<tr>
<td>125 salt (garam)</td>
<td>gas</td>
<td>gas</td>
<td>gas</td>
<td>gasi</td>
<td>‘ga.ram</td>
</tr>
<tr>
<td>126 lake (danau)</td>
<td>wai duba</td>
<td>tahaga</td>
<td>taga</td>
<td>taga (/ta/ = long a)</td>
<td>wai fanin</td>
</tr>
<tr>
<td>127 woods/forest (hutan)</td>
<td>kamatua</td>
<td>kamatua</td>
<td>fa’ok (reduced to [f-]schwa-'ok)</td>
<td>fa’oki</td>
<td>‘ro.ma</td>
</tr>
<tr>
<td>128 sky (langit)</td>
<td>lan</td>
<td>lan</td>
<td>lan</td>
<td>langi</td>
<td>‘lant.i</td>
</tr>
<tr>
<td>129 moon (bulan)</td>
<td>fasina</td>
<td>fasina</td>
<td>(fa)sina (s is back but not quite “sh”)</td>
<td>fasina</td>
<td>‘bu.lang ma.ta’ll.lau (‘matahari’ ID)</td>
</tr>
<tr>
<td>130 star (bintang)</td>
<td>fatui</td>
<td>fatui</td>
<td>fatui</td>
<td>fantui</td>
<td>‘bin.tang</td>
</tr>
<tr>
<td>131 cloud (awan)</td>
<td>pangara</td>
<td>fangara</td>
<td>fangara</td>
<td>pangara</td>
<td></td>
</tr>
<tr>
<td>132 fog (kabut)</td>
<td>bafei</td>
<td>laf / mit gab</td>
<td>laf</td>
<td>bafei</td>
<td></td>
</tr>
<tr>
<td>133 rain (hujan)</td>
<td>uya</td>
<td>uya</td>
<td>uya</td>
<td>uya</td>
<td>‘u.rang</td>
</tr>
<tr>
<td>134 thunder (guntur)</td>
<td>soa</td>
<td>telapat</td>
<td>so’a</td>
<td>badandu</td>
<td>‘gun.tur</td>
</tr>
<tr>
<td>135 lightning (kilat)</td>
<td>sagila’at</td>
<td>sagila’at</td>
<td>sagila at (not /sagila/ only)</td>
<td>sagila (‘sagila’at’ Fagudu)</td>
<td>nga’la.la ’pit.tir (‘pitir’ ID)</td>
</tr>
<tr>
<td>English</td>
<td>Facei Tribe in K. Sama, Sanana Island</td>
<td>Falahu Tribe in K. Wailau, Sanana Island</td>
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<tr>
<td>136 wind (angin)</td>
<td>mora</td>
<td>mora (bufa)</td>
<td>angi ('mora')</td>
<td>'sang.ai 'lan.do 'storm wind' ('angin kencang' ID)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-----------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>137 to blow (bertiup) (the wind blows)</td>
<td>mora laka</td>
<td>bufa</td>
<td>boli</td>
<td>'ni.u</td>
<td></td>
</tr>
<tr>
<td>137 to blow (meniup) (a person blows (something))</td>
<td>buha</td>
<td>bufa</td>
<td>boli</td>
<td>'ni.u</td>
<td></td>
</tr>
<tr>
<td>138 warm (panas) (hot)</td>
<td>bahaha (pedas baha)</td>
<td>mota</td>
<td>buba</td>
<td>'pa.nas 'nga.nga ('pedas' ID)</td>
<td></td>
</tr>
<tr>
<td>138 warm (haŋat) (warm)</td>
<td>mapana (Facei: /mapana/)</td>
<td>bampana</td>
<td>bapana</td>
<td>'ang.at</td>
<td></td>
</tr>
<tr>
<td>139 cold (dingin)</td>
<td>bagoa</td>
<td>bagoa</td>
<td>bago (long o)</td>
<td>ja’rin.ni</td>
<td></td>
</tr>
<tr>
<td>140 dry (kering)</td>
<td>saota</td>
<td>saota</td>
<td>sotu (long o)</td>
<td>'to.ho</td>
<td></td>
</tr>
<tr>
<td>141 wet (basah)</td>
<td>meta</td>
<td>meta</td>
<td>meta</td>
<td>'ba.se</td>
<td></td>
</tr>
<tr>
<td>142 heavy (berat)</td>
<td>fa’ata</td>
<td>fa’ata</td>
<td>fayata</td>
<td>'bir.ra</td>
<td></td>
</tr>
<tr>
<td>143 fire (api)</td>
<td>ap</td>
<td>ap</td>
<td>api</td>
<td>‘a.pi</td>
<td></td>
</tr>
<tr>
<td>English</td>
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<tr>
<td>144 to burn (membakar)</td>
<td>dona</td>
<td>dona</td>
<td>(ap) dona (general word)</td>
<td>batonu donu (both ok. ba- is prefix explained in ID at 55 min file 007.wav)</td>
<td>‘nu.nu</td>
</tr>
<tr>
<td>144 to burn (membakar)</td>
<td></td>
<td></td>
<td>(ap) mota (like house on fire)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>144 to burn (membakar)</td>
<td></td>
<td></td>
<td>yom (nui) (butning coconut shells like when cooking over them)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>144 to burn (membakar)</td>
<td></td>
<td></td>
<td>sara tabak (verb describing the slow burning of a cigarette or a mosquito coil. This is not to be confused with /sui/, 'smoking' a cigarrette.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>145 smoke (asap)</td>
<td>apfei</td>
<td>apfei</td>
<td>apfe’i / fe’i (also OK)</td>
<td>baféi</td>
<td>‘um.bu</td>
</tr>
<tr>
<td>146 ash (abu)</td>
<td>hai mai</td>
<td>aftuka</td>
<td>aftuka</td>
<td>af(u)mai (‘aftuka’ Fagudu)</td>
<td>‘a.bu</td>
</tr>
<tr>
<td>147 black (hitam)</td>
<td>mit</td>
<td>mit</td>
<td>mit</td>
<td>miti</td>
<td>‘lo.hong</td>
</tr>
<tr>
<td>148 white (putih)</td>
<td>bot</td>
<td>bot</td>
<td>bot</td>
<td>boti</td>
<td>‘po.ti</td>
</tr>
<tr>
<td>149 red (mérah)</td>
<td>mia</td>
<td>mia (/mi’a/ Fagudu &amp; Facei they say)</td>
<td>mi’a (FALAHU: / mia/)</td>
<td>mia</td>
<td>‘mi.ra</td>
</tr>
<tr>
<td>English</td>
<td>Facei Tribe in K. Sama, Sanana Island</td>
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<td>-----------------------------------------</td>
</tr>
<tr>
<td>150 yellow (kuning)</td>
<td>kakon</td>
<td>kakon</td>
<td>kakon</td>
<td>mangkuni</td>
<td>'ku.ne</td>
</tr>
<tr>
<td>151 green (hijau)</td>
<td>babir</td>
<td>bafe (long / e#/ )</td>
<td>babir</td>
<td>babiru</td>
<td>nu.lo 'da.ogn</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>kaulosa</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>mai babiru</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>('sea green' = blue)</td>
<td></td>
</tr>
<tr>
<td>152 small (kecil)</td>
<td>nana</td>
<td>nana</td>
<td>mehi / nana</td>
<td>male (long final /e/? )</td>
<td>di’di.ki</td>
</tr>
<tr>
<td>153 big (besar)</td>
<td>aya</td>
<td>eya (/aya/ Fagudu &amp; Facei they say)</td>
<td>aya</td>
<td>fanini</td>
<td>'ba.sar</td>
</tr>
<tr>
<td>153 big (raya)</td>
<td>aya</td>
<td>ya eya eya 'jalan raya' (look at this carefully, slightly diff from Fa&amp;Fac)</td>
<td>yai eya aya 'jalan raya'</td>
<td>sanafa fanin / sana fanau ('jalan raya' ID)</td>
<td>'la.lam 'ba.sar ('jalan raya' ID)</td>
</tr>
<tr>
<td>154 short (péndék)</td>
<td>yota</td>
<td>yota</td>
<td>yota</td>
<td>togi</td>
<td>pi’pin.da</td>
</tr>
<tr>
<td>155 long (panjang)</td>
<td>nahu</td>
<td>nahu</td>
<td>nahu</td>
<td>nau</td>
<td>'ta.ha</td>
</tr>
<tr>
<td>156 thin (tipis)</td>
<td>manip</td>
<td>manip</td>
<td>manip</td>
<td>manipi</td>
<td>ni’ni.pis</td>
</tr>
<tr>
<td>157 thick (tebal)</td>
<td>bag</td>
<td>bag</td>
<td>bag</td>
<td>bagu</td>
<td>'tub.bal</td>
</tr>
<tr>
<td>158 narrow (sempit)</td>
<td>dagat</td>
<td>dagat</td>
<td>dagat</td>
<td>dagati</td>
<td>'pi.pi</td>
</tr>
<tr>
<td>159 wide (lébar)</td>
<td>dalena</td>
<td>dalena / dahafa</td>
<td>aya (THEY DO NOT KNOW / dalena/)</td>
<td>dalena</td>
<td>'bu.ka</td>
</tr>
</tbody>
</table>

623
<table>
<thead>
<tr>
<th>English</th>
<th>Facei Tribe in K. Sama, Sanana Island</th>
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</tr>
</thead>
<tbody>
<tr>
<td>160 painful, sick (sakit)</td>
<td>geka</td>
<td>geka</td>
<td>geka / dagis</td>
<td>geka</td>
<td>‘pid.dí</td>
</tr>
<tr>
<td>161 shy, ashamed (malu)</td>
<td>bal</td>
<td>bahal</td>
<td>bahal (DON'T KNOW / bali/)</td>
<td>baali (long a)</td>
<td>‘i.ya</td>
</tr>
<tr>
<td>162 old (tua) (old (for people))</td>
<td>matua</td>
<td>matua</td>
<td>matua</td>
<td>matua</td>
<td>‘to.a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘a.ha ‘to.a ‘parents’</td>
</tr>
<tr>
<td>162 old (lama) (old (for things))</td>
<td>maneu</td>
<td>manen</td>
<td>manan</td>
<td>manau</td>
<td>‘bit.ta</td>
</tr>
<tr>
<td>163 new (baru)</td>
<td>fe’u</td>
<td>feu (no glottal contrast. fe’u also accepted)</td>
<td>feu</td>
<td>feu</td>
<td>ba’bau</td>
</tr>
<tr>
<td>164 good (baik) (for people)</td>
<td>pia</td>
<td>pia</td>
<td>pia</td>
<td>pia</td>
<td>‘a.la</td>
</tr>
<tr>
<td>164 good (bagus) (for things)</td>
<td>bisa</td>
<td>bisa</td>
<td>bisa</td>
<td>birahi / bisa (same range of meaning for both)</td>
<td>ma’la.so</td>
</tr>
<tr>
<td>165 bad, evil (jahat)</td>
<td>kabures</td>
<td>kabares</td>
<td>kabares</td>
<td>kabaresi</td>
<td>‘ra.ha</td>
</tr>
<tr>
<td>166 correct, true (benar)</td>
<td>dahi</td>
<td>dahi</td>
<td>dahi</td>
<td>dahi</td>
<td>ta’ru.a</td>
</tr>
<tr>
<td>167 night (malam)</td>
<td>bauhi</td>
<td>ba’uhi</td>
<td>ba’uhi (NOT: / buhi/)</td>
<td>bedi</td>
<td>‘sa.gnan</td>
</tr>
<tr>
<td>168 day (hari)</td>
<td>bet</td>
<td>bet</td>
<td>bet</td>
<td>betu</td>
<td>‘ill.lau</td>
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</tbody>
</table>

## Appendix F

<table>
<thead>
<tr>
<th>English</th>
<th>Facei Tribe in K. Sama, Sanana Island</th>
<th>Falahu Tribe in K. Wailau, Sanana Island</th>
<th>Fagudu Tribe in K. Umaloya, Sanana Island</th>
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</tr>
</thead>
<tbody>
<tr>
<td>169 year (tahun)</td>
<td>tahun</td>
<td>taun</td>
<td>taun</td>
<td>taun</td>
<td>‘ta.ung</td>
</tr>
<tr>
<td>What is she saying about “piaduki” ‘year’ (second file — i.e. just over an hour in)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170 when? (kapan) (Indonesian Only)</td>
<td>bet pila</td>
<td>bet pila</td>
<td>bet pila</td>
<td>bet pila</td>
<td>si’me.rang</td>
</tr>
<tr>
<td>170 when? (bila)</td>
<td>bihoa</td>
<td>bet pila</td>
<td>bet pila</td>
<td>si’me.rang</td>
<td></td>
</tr>
<tr>
<td>171 to hide (bersembunyi)</td>
<td>baifon</td>
<td>baifon (hide oneself) / daufon (to hide an item)</td>
<td>baifon (hide oneself) / da’ufon (to hide an item)</td>
<td>balfongi (oneself) / daufongi (item)</td>
<td>‘ta.po (oneself) / ‘na.po (item)</td>
</tr>
<tr>
<td>172 to climb (-naik) (1. ascend [person on stairs, balloon in air, bubble in water], 2. mount/ride [a horse, carriage, car, train, airplane])</td>
<td>bena</td>
<td>bena (also for transportati on)</td>
<td>bena</td>
<td>bena</td>
<td>du’tai</td>
</tr>
<tr>
<td>172 to climb (memanjat) (to climb [up a tree])</td>
<td>bena (kau)</td>
<td>bena (kau)</td>
<td>bena (kau)</td>
<td>ma’na.ya</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Facei Tribe in K. Sama, Sanana Island</td>
<td>Falahu Tribe in K. Wailau, Sanana Island</td>
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<td>----------------------------------------</td>
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</tr>
<tr>
<td>172 to climb (mendaki) (to climb [up a slope, a mountain])</td>
<td>bena (lida)</td>
<td>bena (lida)</td>
<td>bena (lida)</td>
<td>du’taï ‘climb’ ‘bul.lu ‘mountain’ du’taï ‘bul.lu ‘climb a mountain’</td>
<td></td>
</tr>
<tr>
<td>173 at (di)</td>
<td>bo</td>
<td>bo</td>
<td>bo</td>
<td>bo</td>
<td>ma</td>
</tr>
<tr>
<td>174 in, inside ([di] dalam)</td>
<td>bo lal</td>
<td>(bo) lal</td>
<td>(bo) lal</td>
<td>bo tuka (NOT lal)</td>
<td>da’a.lang</td>
</tr>
<tr>
<td>175 above ([di] atas)</td>
<td>deha lepa</td>
<td>(la) lepa</td>
<td>lepa</td>
<td>lepa</td>
<td>‘ma.di.a.ta</td>
</tr>
<tr>
<td>176 below (di bawah)</td>
<td>deha ne’u</td>
<td>(lal) neu</td>
<td>ne’u</td>
<td>bulela</td>
<td>ma’di.a</td>
</tr>
<tr>
<td>177 this (ini)</td>
<td>ik</td>
<td>ik</td>
<td>iki</td>
<td>ika</td>
<td>‘i.tu.ne</td>
</tr>
<tr>
<td>178 that (itu)</td>
<td>neka</td>
<td>mana (/neka/ Fagudu &amp; Facei)</td>
<td>neka</td>
<td>ina (NOT NEKA)</td>
<td>‘i.tu.ko</td>
</tr>
<tr>
<td>179 near (dekat)</td>
<td>bakahan</td>
<td>bakahan</td>
<td>han (NOT: /iku/)</td>
<td>(de)lani</td>
<td>tu’tu.ku</td>
</tr>
<tr>
<td>180 far (jauh)</td>
<td>yau</td>
<td>yau</td>
<td>yau</td>
<td>(de)yau</td>
<td>‘te.u</td>
</tr>
<tr>
<td>181 where? (dimana)</td>
<td>bo soa</td>
<td>sahoa</td>
<td>soa / s-oa (FALAHU: sahoa)</td>
<td>(de)sibo</td>
<td>ma’ai</td>
</tr>
<tr>
<td>182 I (saya) ((formal))</td>
<td>ak</td>
<td>ak (/aku/ reportedly Mangoli)</td>
<td>ak</td>
<td>aku</td>
<td>aku</td>
</tr>
<tr>
<td>182 I (aku) ((informal))</td>
<td>ak</td>
<td>ak</td>
<td>ak</td>
<td>aku</td>
<td>aku</td>
</tr>
<tr>
<td>183 thou (kamu)</td>
<td>kim</td>
<td>N/A (kim/ mon in all of Sula)</td>
<td>mon / kim</td>
<td>mon</td>
<td>‘ka.u</td>
</tr>
<tr>
<td>183 thou (eŋkau)</td>
<td>mon</td>
<td>N/A (kim/ mon in all of Sula)</td>
<td>mon</td>
<td>kim (older person than speaker)</td>
<td>‘ka.u</td>
</tr>
<tr>
<td>English</td>
<td>Facei Tribe in K. Sama, Sanana Island</td>
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</tr>
<tr>
<td><strong>184 he/she</strong> (beliau) (he/she (respectful))</td>
<td>??maybe mat nana??</td>
<td>don't have</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>184 he/she</strong> ([d]ia)</td>
<td>ki'i</td>
<td>i (they say ki'i is Fagudu) a Falahu example: i i-laka...'s/he walks'</td>
<td>ki'</td>
<td>ki (/i/- is agr marker) (13 min has explanation of agr markers)</td>
<td>ia</td>
</tr>
<tr>
<td><strong>185 we</strong> (kita)</td>
<td>kit</td>
<td>kit</td>
<td>kit</td>
<td>kita</td>
<td>kit</td>
</tr>
<tr>
<td><strong>185 we</strong> (kami)</td>
<td>kimkim</td>
<td>kam</td>
<td>kami (/kit muamua/ accepted but not produced)</td>
<td>kam</td>
<td>kami</td>
</tr>
<tr>
<td><strong>186 you</strong> (kalian) (Indonesian only)</td>
<td>N/A</td>
<td>kim</td>
<td>kim-kim / kim muamua</td>
<td>'ka.han</td>
<td></td>
</tr>
<tr>
<td><strong>186 you</strong> (anda)</td>
<td>mon</td>
<td>mon/kim</td>
<td>mon</td>
<td>mon</td>
<td>'ka.u</td>
</tr>
<tr>
<td><strong>187 they</strong> (meréka)</td>
<td>eb kim</td>
<td>??</td>
<td>??</td>
<td>kim (also /kim/)</td>
<td>'ka.hang</td>
</tr>
<tr>
<td><strong>188 what?</strong> (apa)</td>
<td>hapa</td>
<td>hapa</td>
<td>hapa</td>
<td>hapa</td>
<td>'a.i</td>
</tr>
<tr>
<td><strong>189 who?</strong> (siapa)</td>
<td>han (neka)</td>
<td>han</td>
<td>han (neka)</td>
<td>an (NOT HAN) /ana/ with questions (16 minutes)</td>
<td>'sa.i.ru</td>
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</tr>
<tr>
<td><strong>190 other</strong> (lain)</td>
<td>basa</td>
<td>basa</td>
<td>basa</td>
<td>basa</td>
<td>sa’di.ri</td>
</tr>
<tr>
<td><strong>191 all</strong> (semau) ([&amp;&lt;M])</td>
<td>pakiaki</td>
<td>pakahia / muamua</td>
<td>paki /kit paki/ 'all of us') muamua (all things</td>
<td>muamua</td>
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</tbody>
</table>

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<tr>
<th>English</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>184 he/she</strong> (beliau) (he/she (respectful))</td>
<td>??maybe mat nana??</td>
<td>don't have</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>184 he/she</strong> ([d]ia)</td>
<td>ki'i</td>
<td>i (they say ki'i is Fagudu) a Falahu example: i i-laka...'s/he walks'</td>
<td>ki'</td>
<td>ki (/i/- is agr marker) (13 min has explanation of agr markers)</td>
<td>ia</td>
</tr>
<tr>
<td><strong>185 we</strong> (kita)</td>
<td>kit</td>
<td>kit</td>
<td>kit</td>
<td>kita</td>
<td>kit</td>
</tr>
<tr>
<td><strong>185 we</strong> (kami)</td>
<td>kimkim</td>
<td>kam</td>
<td>kami (/kit muamua/ accepted but not produced)</td>
<td>kam</td>
<td>kami</td>
</tr>
<tr>
<td><strong>186 you</strong> (kalian) (Indonesian only)</td>
<td>N/A</td>
<td>kim</td>
<td>kim-kim / kim muamua</td>
<td>'ka.han</td>
<td></td>
</tr>
<tr>
<td><strong>186 you</strong> (anda)</td>
<td>mon</td>
<td>mon/kim</td>
<td>mon</td>
<td>mon</td>
<td>'ka.u</td>
</tr>
<tr>
<td><strong>187 they</strong> (meréka)</td>
<td>eb kim</td>
<td>??</td>
<td>??</td>
<td>kim (also /kim/)</td>
<td>'ka.hang</td>
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627
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</thead>
<tbody>
<tr>
<td>192 and (dan)</td>
<td>do</td>
<td>du (not /do/ here)</td>
<td>do</td>
<td>di (NOT /do/!!)</td>
<td>'ba.ka</td>
</tr>
<tr>
<td>193 if (kalau)</td>
<td>kalo</td>
<td>she says / kalu/ but uses /kalo/</td>
<td>kalo</td>
<td>kalo</td>
<td>'ka.pa</td>
</tr>
<tr>
<td>194 how? (bagaimana)</td>
<td>bau goa</td>
<td>bau ganoa (/bago(a)/Fagudu &amp; Facei)</td>
<td>go’a neka (Falahu: /ganoa/)</td>
<td>baganoki</td>
<td>ba’ting.ge.i.ru</td>
</tr>
<tr>
<td>195 no, not (tidak) ([&amp;&lt;mana?]?)</td>
<td>moya</td>
<td>~moya</td>
<td>~moya</td>
<td>~moyu</td>
<td>‘ng.gai</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘da.ha ‘(don’t = ‘jangan’ ID)</td>
</tr>
<tr>
<td>196 to count (menghitung)</td>
<td>rek</td>
<td>rek</td>
<td>rek</td>
<td>reking</td>
<td>nga’re.ke</td>
</tr>
<tr>
<td>197 One (esa) (one' (only used to express the oneness of God))</td>
<td>hia</td>
<td>hia</td>
<td>hia</td>
<td>esa</td>
<td></td>
</tr>
<tr>
<td>197 One (satu)</td>
<td>hia</td>
<td>hia</td>
<td>hia</td>
<td>giya</td>
<td>da’kau</td>
</tr>
<tr>
<td>198 Two (dua)</td>
<td>gu</td>
<td>gahu</td>
<td>g-u / gau (long u)</td>
<td>‘du.a</td>
<td></td>
</tr>
<tr>
<td>199 Three (tiga)</td>
<td>gatel</td>
<td>gatel</td>
<td>gatel</td>
<td>gatelu</td>
<td>‘tu.lu</td>
</tr>
<tr>
<td>200 Four (empat)</td>
<td>gareha</td>
<td>gareha</td>
<td>gareha</td>
<td>gadia</td>
<td>m’pa</td>
</tr>
<tr>
<td>201 Five (lima)</td>
<td>galima</td>
<td>galima</td>
<td>galima</td>
<td>galima</td>
<td>‘li.ma</td>
</tr>
<tr>
<td>202 Six (enam)</td>
<td>ganei</td>
<td>gane (long / e#/)</td>
<td>gane (long / e#/)</td>
<td>ganei</td>
<td>n’nang</td>
</tr>
<tr>
<td>203 Seven (tujuh)</td>
<td>gapit</td>
<td>gapit</td>
<td>gapit</td>
<td>gapitu</td>
<td>‘pi.tu</td>
</tr>
<tr>
<td>204 Eight (delapan)</td>
<td>gatahua</td>
<td>gatahua</td>
<td>gatau / gatahua / gatahua</td>
<td>gaatua</td>
<td>‘wa.lu</td>
</tr>
<tr>
<td>205 Nine (sembilan)</td>
<td>gatasia</td>
<td>gatasia</td>
<td>gatasia</td>
<td>gatasia</td>
<td>‘sang.ga</td>
</tr>
<tr>
<td>206 Ten (sepuluh)</td>
<td>poa</td>
<td>poa</td>
<td>poa</td>
<td>po</td>
<td>s(e)’pu.lu</td>
</tr>
<tr>
<td>207 Twenty (dua puluh)</td>
<td>po gu</td>
<td>poagahu*</td>
<td>pogu / poagu’u</td>
<td>pogu** ‘du.am ’pu.lu</td>
<td>*NOT THE FOLLOWING HERE: /pogu/, /poagu’u/</td>
</tr>
</tbody>
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*NOT THE FOLLOWING HERE: /pogu/, /poagu’u/
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<tbody>
<tr>
<td>208 Fifty (lima puluh)</td>
<td>po galima</td>
<td>poagalima*</td>
<td>pogalima</td>
<td>po galima</td>
<td>*li.mam pu.lu</td>
</tr>
<tr>
<td>209 One Hundred (seratus)</td>
<td>ota</td>
<td>ota</td>
<td>saka (NOT / ota/)</td>
<td>da’a.tus</td>
<td></td>
</tr>
<tr>
<td>210 One Thousand (seribu)</td>
<td>cahia</td>
<td>cahia</td>
<td>cagia</td>
<td>da’sab.bu</td>
<td></td>
</tr>
</tbody>
</table>
Appendix G. Dialect comparison lists. Facei tribe settlement on Sanana vs. Facei tribe settlements in mixed dialect region on Mangon.

The following lists are provided in the hopes they might help a future researcher better map Sula’s dialect regions—a task that will be a dissertation unto itself. All lists correspond to recordings archived and freely available).

<table>
<thead>
<tr>
<th>Term</th>
<th>Facei on Sanana Island</th>
<th>Facei on Mangon Island</th>
<th>notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 hand (tangan):</td>
<td>lima</td>
<td>lima</td>
<td></td>
</tr>
<tr>
<td>2 left (kiri):</td>
<td>tapa</td>
<td>tapa</td>
<td>Orifola session note: lima tapa 'left hand'</td>
</tr>
<tr>
<td>3 right (kanan):</td>
<td>kul</td>
<td>kuli</td>
<td>Orifola session note: lima kuli 'right hand'</td>
</tr>
<tr>
<td>4 leg/foot (kaki):</td>
<td>yai</td>
<td>yai</td>
<td></td>
</tr>
<tr>
<td>5 to walk (berjalan):</td>
<td>laka</td>
<td>laka</td>
<td></td>
</tr>
<tr>
<td>6 road/path (jalan):</td>
<td>ya ea</td>
<td>yai ea</td>
<td></td>
</tr>
<tr>
<td>6 road/path (jalanan):</td>
<td>—</td>
<td>yai ea</td>
<td></td>
</tr>
<tr>
<td>7 to come (datang):</td>
<td>duk</td>
<td>duki</td>
<td></td>
</tr>
<tr>
<td>8 to turn (bélok) (to turn (halfway, 90 degrees):</td>
<td>lif</td>
<td>lifi</td>
<td></td>
</tr>
<tr>
<td>8 to turn (berputar) (to turn (completely, 180 degrees):</td>
<td>putar</td>
<td>baputar</td>
<td>Orifola session note: forms are the same, but Orifola consultant included verbal morphology</td>
</tr>
<tr>
<td>9 to swim (berenang):</td>
<td>nan</td>
<td>nanu</td>
<td></td>
</tr>
<tr>
<td>10 dirty (kotor):</td>
<td>bakatai</td>
<td>bakatai</td>
<td></td>
</tr>
<tr>
<td>11 dust (debu) (?):</td>
<td>hai mai</td>
<td>hai mai</td>
<td></td>
</tr>
<tr>
<td>12 skin (kulit):</td>
<td>kol</td>
<td>kol</td>
<td></td>
</tr>
<tr>
<td>13 back (punggung):</td>
<td>ded pon</td>
<td>bahu / sanapahu</td>
<td></td>
</tr>
<tr>
<td>14 belly (perut):</td>
<td>tena</td>
<td>tena kau</td>
<td></td>
</tr>
<tr>
<td>Term</td>
<td>Facei on Sanana Island</td>
<td>Facei on Mangon Island</td>
<td>notes</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>15 bone (tulang):</td>
<td>ho’i</td>
<td>ho’i</td>
<td>Orifola session note: consultant says it is hoi in Sanana. Likely borrowed from Mangon neighbors where the glottal is present and possibly even phonemic.</td>
</tr>
<tr>
<td>16 intestines (usus):</td>
<td>tuka pon</td>
<td>tuka</td>
<td>Sama session note: accepted, but had to be prompted</td>
</tr>
<tr>
<td>17 liver (hati):</td>
<td>behifon</td>
<td>kila</td>
<td>Orifola session note: susu 'milk' / sosa 'woman's breast'</td>
</tr>
<tr>
<td>18 breast (susu) (1. woman's breasts, 2. milk [more often the latter, although originally it meant the former]):</td>
<td>bokatan</td>
<td>behi (tan)</td>
<td></td>
</tr>
<tr>
<td>19 shoulder (bahu):</td>
<td>sanapau</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>20 to know, be knowledgeable (tahu):</td>
<td>nau</td>
<td>nau</td>
<td></td>
</tr>
<tr>
<td>21 to think (berfikir):</td>
<td>bapikir</td>
<td>bapikir</td>
<td></td>
</tr>
<tr>
<td>22 to fear (takut):</td>
<td>kag</td>
<td>kagi</td>
<td></td>
</tr>
<tr>
<td>23 blood (darah):</td>
<td>poa</td>
<td>poa</td>
<td></td>
</tr>
<tr>
<td>24 head (kepala) (Skt kapala 'skull'):</td>
<td>nap</td>
<td>napu</td>
<td>Sama session note: e.g. nap foka / nap fat</td>
</tr>
<tr>
<td>25 neck (léhér):</td>
<td>ek</td>
<td>eki</td>
<td></td>
</tr>
<tr>
<td>26 hair (rambut):</td>
<td>nap foa</td>
<td>nap foa</td>
<td></td>
</tr>
<tr>
<td>27 nose (hidung):</td>
<td>ne’i</td>
<td>ne’e</td>
<td></td>
</tr>
<tr>
<td>28 to breathe (bernapas):</td>
<td>wama</td>
<td>wama</td>
<td></td>
</tr>
<tr>
<td>29 to sniff, smell (mencium) (&quot;to kiss&quot;?):</td>
<td>sayang</td>
<td>manamumi</td>
<td></td>
</tr>
<tr>
<td>29 to sniff, smell (menghiru):</td>
<td>etwama</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>30 mouth (mulut):</td>
<td>bayon</td>
<td>nuba</td>
<td></td>
</tr>
<tr>
<td>31 tooth (gigi):</td>
<td>nihi</td>
<td>nihi</td>
<td></td>
</tr>
<tr>
<td>Term</td>
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</tr>
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<td>------------------------</td>
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<tr>
<td>32 tongue (lidah)</td>
<td><code>mak</code></td>
<td><code>maki</code></td>
<td></td>
</tr>
<tr>
<td>(metathesis)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33 to laugh (tertawa)</td>
<td><code>balela</code></td>
<td><code>balela</code></td>
<td></td>
</tr>
<tr>
<td>34 to cry (menangis)</td>
<td><code>mena</code></td>
<td><code>mena</code></td>
<td></td>
</tr>
<tr>
<td>35 to vomit (muntah)</td>
<td><code>lua</code></td>
<td><code>lua</code></td>
<td></td>
</tr>
<tr>
<td>36 to spit (meludah)</td>
<td><code>buakeu</code></td>
<td><code>buakeu</code></td>
<td></td>
</tr>
<tr>
<td>37 to eat (makan)</td>
<td><code>gaya</code></td>
<td><code>gaya</code></td>
<td></td>
</tr>
<tr>
<td>38 to chew (mengunyah)</td>
<td><code>samam</code></td>
<td><code>samam</code></td>
<td></td>
</tr>
<tr>
<td>39 to cook (memasak)</td>
<td><code>bamap</code></td>
<td><code>baumapu</code></td>
<td>Orifola session note: haku bira 'cook rice'</td>
</tr>
<tr>
<td>(to cook (rice only))</td>
<td><code>bamap bira</code></td>
<td><code>haku</code></td>
<td>Orifola session note: win wai 'drink water'</td>
</tr>
<tr>
<td>40 to drink (minum)</td>
<td><code>win</code></td>
<td><code>win</code></td>
<td>Orifola session note: (both uka nihi 'bite meat' and uka temaha 'bite a friend')</td>
</tr>
<tr>
<td>41 to bite (gigit)</td>
<td><code>uka</code></td>
<td><code>uka</code></td>
<td></td>
</tr>
<tr>
<td>42 to suck (mengisap)</td>
<td><code>bosa</code></td>
<td><code>bosa</code></td>
<td></td>
</tr>
<tr>
<td>43 ear (telinga)</td>
<td><code>til</code></td>
<td><code>tilu</code></td>
<td>Sama session note: also til hosa</td>
</tr>
<tr>
<td>44 to hear (mendengar)</td>
<td><code>baked</code></td>
<td><code>gena</code></td>
<td></td>
</tr>
<tr>
<td>45 eye (mata)</td>
<td><code>hama</code></td>
<td><code>hama</code></td>
<td></td>
</tr>
<tr>
<td>46 to see (melihat)</td>
<td><code>yana</code></td>
<td><code>yana</code></td>
<td></td>
</tr>
<tr>
<td>47 to yawn (menguap)</td>
<td><code>bakafa</code></td>
<td><code>bakafa</code></td>
<td></td>
</tr>
<tr>
<td>([&lt;kuap])</td>
<td></td>
<td></td>
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<tr>
<td>48 to sleep (tidur)</td>
<td><code>nona</code></td>
<td><code>nona</code></td>
<td></td>
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<tr>
<td>49 to lie down (berbaring)</td>
<td><code>nona bol</code></td>
<td><code>nona bol</code></td>
<td></td>
</tr>
<tr>
<td>50 to dream (bermimpi)</td>
<td><code>baragana</code></td>
<td><code>badagana</code></td>
<td></td>
</tr>
<tr>
<td>51 to sit (duduk)</td>
<td><code>nib</code></td>
<td><code>nibu</code></td>
<td></td>
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<tr>
<td>52 to stand (berdiri)</td>
<td><code>gehi</code></td>
<td><code>gehi</code></td>
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</tr>
<tr>
<td>53 person/human being (orang):</td>
<td><code>matapia</code></td>
<td><code>matapia</code></td>
<td></td>
</tr>
<tr>
<td>54 man/male (laki-laki):</td>
<td><code>ma'ana</code></td>
<td><code>maana</code></td>
<td></td>
</tr>
<tr>
<td>55 woman/female (perempuan):</td>
<td><code>fina</code></td>
<td><code>fina</code></td>
<td></td>
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<tr>
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<tr>
<td>56 child (anak):</td>
<td>ana mehi</td>
<td>ana mehi</td>
<td></td>
</tr>
<tr>
<td>57 husband (suami):</td>
<td>tua</td>
<td>tua</td>
<td></td>
</tr>
<tr>
<td>58 wife (isteri)</td>
<td>fata</td>
<td>fata</td>
<td></td>
</tr>
<tr>
<td>(Sanskrit strī 'woman; wife; female')</td>
<td></td>
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</tr>
<tr>
<td>59 mother (ibu):</td>
<td>yaya</td>
<td>ngyaya</td>
<td></td>
</tr>
<tr>
<td>60 father (bapak):</td>
<td>baba</td>
<td>baba</td>
<td></td>
</tr>
<tr>
<td>61 house (rumah):</td>
<td>uma</td>
<td>uma</td>
<td></td>
</tr>
<tr>
<td>62 thatch/roof (atap):</td>
<td>sahosa</td>
<td>sanapet</td>
<td></td>
</tr>
<tr>
<td>63 name (nama)</td>
<td>na</td>
<td>na</td>
<td></td>
</tr>
<tr>
<td>(Sanskrit nāma (nāman) 'name')</td>
<td></td>
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<tr>
<td>64 to say (berkata):</td>
<td>soya</td>
<td>bicara</td>
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<tr>
<td>65 rope (tali):</td>
<td>meu</td>
<td>me'u</td>
<td></td>
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<tr>
<td>66 to tie up, fasten (mengikat):</td>
<td>be'u</td>
<td>be'u</td>
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<tr>
<td>67 to sew (menjahit):</td>
<td>bisnau</td>
<td>sau</td>
<td></td>
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<tr>
<td>68 needle (jarum):</td>
<td>samoha</td>
<td>samoha</td>
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</tr>
<tr>
<td>69 to hunt (berburu):</td>
<td>laka soi</td>
<td>yota</td>
<td></td>
</tr>
<tr>
<td>70 to shoot (menémbak):</td>
<td>banap</td>
<td>pana / banapi</td>
<td>Orifola session note: banapi 'shoot' (with a gun)</td>
</tr>
<tr>
<td>70 to shoot (memanah)</td>
<td>jub</td>
<td>jubi</td>
<td></td>
</tr>
<tr>
<td>(To shoot with bow):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71 to stab, pierce (menikam):</td>
<td>sak</td>
<td>saku</td>
<td>Orifola session note: sak tuf tilu 'pierce ear'</td>
</tr>
<tr>
<td>71 to stab, pierce (menusuk):</td>
<td>sak</td>
<td>saku</td>
<td></td>
</tr>
<tr>
<td>72 to hit (memukul):</td>
<td>moma</td>
<td>dota</td>
<td>Sama session note: (as in hitting with stick)</td>
</tr>
<tr>
<td>72 to hit (memalu) (to hit (with a hammer)):</td>
<td>befa</td>
<td>dota</td>
<td></td>
</tr>
<tr>
<td>73 to steal (mencuri):</td>
<td>bilnaka</td>
<td>bilnaka</td>
<td></td>
</tr>
<tr>
<td>74 to kill (membunuh):</td>
<td>bau mata</td>
<td>bau mata</td>
<td></td>
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<tr>
<td>75 to die, be dead (mati):</td>
<td>mata</td>
<td>mata</td>
<td></td>
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<tr>
<td>76 to live, be alive (hidup):</td>
<td>pia</td>
<td>pia</td>
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<tr>
<td>77 to scratch (menggaruk) (to scratch (an itch))</td>
<td><em>gada</em></td>
<td><em>sakeu</em></td>
<td></td>
</tr>
<tr>
<td>77 to scratch (mencakar) (to scratch (for the purpose of hurting))</td>
<td><em>gahu</em></td>
<td><em>gama</em></td>
<td></td>
</tr>
<tr>
<td>78 to cut, hack (memotong) (cut):</td>
<td><em>det</em></td>
<td><em>deti</em></td>
<td></td>
</tr>
<tr>
<td>78 to cut, hack (menetak) (hack):</td>
<td><em>daneta</em></td>
<td><em>to</em></td>
<td></td>
</tr>
<tr>
<td>79 stick/wood (kayu):</td>
<td><em>kau</em></td>
<td><em>kau / tonka</em></td>
<td>Orifola session note: kau 'wood' / tonka 'stick'</td>
</tr>
<tr>
<td>80 to split (membelah):</td>
<td><em>makariu</em></td>
<td><em>bama</em></td>
<td></td>
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<tr>
<td>81 sharp (tajam):</td>
<td><em>mana</em></td>
<td><em>mana</em></td>
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<tr>
<td>82 dull, blunt (tumpul):</td>
<td><em>mahoka</em></td>
<td><em>moka</em></td>
<td></td>
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<tr>
<td>83 to work (bekerja):</td>
<td><em>bau munara</em></td>
<td><em>bau munara</em></td>
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<tr>
<td>84 to plant (menanam):</td>
<td><em>basel</em></td>
<td><em>baseli</em></td>
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<tr>
<td>85 to choose (memilih):</td>
<td><em>bis loi</em></td>
<td><em>lika</em></td>
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<tr>
<td>86 to grow (tumbuh):</td>
<td><em>dog</em></td>
<td><em>batutu</em></td>
<td>Orifola session note: (one person present says maufai)</td>
</tr>
<tr>
<td>87 to swell (membengkak):</td>
<td><em>mafai</em></td>
<td><em>mafai</em></td>
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<tr>
<td>88 to squeeze (memeras):</td>
<td><em>am</em></td>
<td><em>ami</em></td>
<td></td>
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<tr>
<td>89 to hold (menggenggam):</td>
<td><em>kaf</em></td>
<td><em>manakem</em></td>
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<tr>
<td>90 to dig (menggali):</td>
<td><em>gahu</em></td>
<td><em>gahu</em></td>
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<tr>
<td>91 to buy (membeli):</td>
<td><em>baha</em></td>
<td><em>baha</em></td>
<td></td>
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<tr>
<td>92 to open, uncover (membuka):</td>
<td><em>hoi</em></td>
<td><em>hoi</em></td>
<td></td>
</tr>
<tr>
<td>93 to pound, beat (memukul) (to beat, hit, strike [bell, drum, dog, etc.]):</td>
<td><em>moma</em></td>
<td><em>mana pau</em></td>
<td></td>
</tr>
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<tr>
<td>93 to pound, beat (menumbuk) (to pound [e.g. to unhusk rice]):</td>
<td>tut</td>
<td>batutu</td>
<td>Wai U session note: batutu bira 'pound rice'</td>
</tr>
<tr>
<td>94 to throw (melémparkan):</td>
<td>behi</td>
<td>behi</td>
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<tr>
<td>95 to fall (jatuh):</td>
<td>bua</td>
<td>bua</td>
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<tr>
<td>96 dog (anjing):</td>
<td>as</td>
<td>asu</td>
<td></td>
</tr>
<tr>
<td>97 bird (burung):</td>
<td>haiwan</td>
<td>haiwan</td>
<td>Wai U session note: also: mankaogoga 'bird'</td>
</tr>
<tr>
<td>98 egg (telur):</td>
<td>mantel</td>
<td>mantel</td>
<td></td>
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<tr>
<td>99 feather (bulu):</td>
<td>haiwan foa</td>
<td>man foa</td>
<td></td>
</tr>
<tr>
<td>100 wing (sayap):</td>
<td>pan</td>
<td>mpani / pani</td>
<td></td>
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<tr>
<td>101 to fly (terbang):</td>
<td>la</td>
<td>la</td>
<td></td>
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<tr>
<td>102 rat (tikus):</td>
<td>safsa</td>
<td>safsa</td>
<td></td>
</tr>
<tr>
<td>103 meat/flesh (daging):</td>
<td>ihi</td>
<td>ihi</td>
<td>Sama session note: also: haiwan ihi</td>
</tr>
<tr>
<td>104 fat/grease (lemak):</td>
<td>—</td>
<td>lemak</td>
<td>Wai U session note: (consultant uncertain about this form)</td>
</tr>
<tr>
<td>105 tail (ékor):</td>
<td>boya</td>
<td>boya</td>
<td></td>
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<tr>
<td>106 snake (ular):</td>
<td>tui</td>
<td>tui</td>
<td></td>
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<tr>
<td>107 worm (earthworm) (cacing):</td>
<td>makodn</td>
<td>uli</td>
<td>Wai U session note: (consultant uncertain about this form) Sama session note: (speaker produced post-nasal dn, likely non-phonemic)</td>
</tr>
<tr>
<td>108 louse (kutu):</td>
<td>kota</td>
<td>kota</td>
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<tr>
<td>109 mosquito (nyamuk):</td>
<td>kafin</td>
<td>kafin</td>
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<tr>
<td>110 spider (laba-laba):</td>
<td>lawa</td>
<td>lawa</td>
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<tr>
<td>111 fish (ikan):</td>
<td>kena</td>
<td>kena</td>
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<tr>
<td>112 rotten (busuk):</td>
<td>basa</td>
<td>suba</td>
<td></td>
</tr>
<tr>
<td>113 branch (dahan):</td>
<td>sana</td>
<td>daeti</td>
<td>Sama session note: also: kau sana</td>
</tr>
<tr>
<td>114 leaf (daun):</td>
<td>hosa</td>
<td>hosa</td>
<td>Wai U session note: also: kau hosa 'tree leaf'</td>
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<td>----------------------------------------------------------------------</td>
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</tbody>
</table>
| 115 root (akar):                 | waka                  | waka                   | Wai U session note: also: kau waka 'tree root'
<p>|                                  |                       |                        | Sama session note: also: kau waka 'tree root'                         |
| 116 flower (bunga):              | bunga                 | bunga                  | Wai U session note:                                                 |
|                                  |                       |                        | (consultant uncertain about this form)                               |
| 117 fruit (buah-buahan) (&quot;fruits (the category, in general)&quot;): | fua                   | fua                    | Sama session note: also: kau fua                                     |
| 117 fruit (buah) (fruit):        | fua                   | fua                    | Sama session note: also: kau fua                                     |
|                                  |                       |                        | Sama session note: also: kau fua                                     |
| 118 grass (rumput):              | hik                   | kasafoi                |                                                                      |
| 119 earth/soil (tanah):          | hai                   | hai                    |                                                                      |
| 120 stone (batu):                | fat                   | fatu                   |                                                                      |
| 121 sand (pasir):                | kumawai               | hai                    | Wai U session note:                                                 |
|                                  |                       |                        | (consultant uncertain about this form)                               |
| 122 water (air):                 | wai                   | wai                    |                                                                      |
| 123 to flow (mengalir):          | ewa                   | ewa                    | Wai U session note:                                                 |
|                                  |                       |                        | wai ewa 'flowing water'                                              |
|                                  |                       |                        | Sama session note:                                                  |
|                                  |                       |                        | wai ewa 'flowing water'                                              |
| 124 sea (laut):                  | mahi                  | mahi                   |                                                                      |
| 125 salt (garam):                | gas                   | gas                    |                                                                      |
| 126 lake (danau):                | wai duba              | wai aya                |                                                                      |
| 127 woods/forest (hutan):        | kamatua               | fa'a oki               |                                                                      |
| 128 sky (langit):                | lan                   | lan                    |                                                                      |
| 129 moon (bulan):                | fasina                | fasina                 |                                                                      |
| 130 star (bintang):              | fatui                 | fatui                  |                                                                      |
| 131 cloud (awan):                | pangara               | fangara                |                                                                      |
| 132 fog (kabut):                 | bafei                 | mit gab                |                                                                      |
| 133 rain (hujan):                | uya                   | uya                    |                                                                      |
| 134 thunder (guntur):            | soa                   | batu                   | Wai U session note:                                                 |
|                                  |                       |                        | (consultant uncertain about this form)                               |</p>
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<tr>
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<td>135 lightning (kilat):</td>
<td><em>sagila’at</em></td>
<td><em>sagila</em></td>
<td></td>
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<tr>
<td>136 wind (angin):</td>
<td><em>mora</em></td>
<td><em>buha</em></td>
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<tr>
<td>137 to blow (bertiup) (the wind blows):</td>
<td><em>mora laka</em></td>
<td><em>buha</em></td>
<td></td>
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<tr>
<td>137 to blow (meniup):</td>
<td><em>buha</em></td>
<td><em>buha</em></td>
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<tr>
<td>138 warm (panas) (hot):</td>
<td><em>bahaha</em></td>
<td><em>mota</em></td>
<td>Sama session note: consultant says pedas is baha</td>
</tr>
<tr>
<td>138 warm (haŋat) (warm):</td>
<td><em>mapana</em></td>
<td>—</td>
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<tr>
<td>139 cold (dingin):</td>
<td><em>bagoa</em></td>
<td><em>bagoa</em></td>
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<tr>
<td>140 dry (kering):</td>
<td><em>saota</em></td>
<td><em>saota</em></td>
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<tr>
<td>141 wet (basah):</td>
<td><em>meta</em></td>
<td><em>meta</em></td>
<td></td>
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<tr>
<td>142 heavy (berat):</td>
<td><em>fa’ata</em></td>
<td><em>fa’ata</em></td>
<td></td>
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<tr>
<td>143 fire (api):</td>
<td><em>ap</em></td>
<td><em>apu</em></td>
<td></td>
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<tr>
<td>144 to burn (membakar):</td>
<td><em>dona</em></td>
<td><em>dona</em></td>
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<tr>
<td>145 smoke (asap):</td>
<td><em>apfei</em></td>
<td><em>apfe</em></td>
<td>Wai U session note: (ambiguous final vowel. maybe apfei)</td>
</tr>
<tr>
<td>146 ash (abu):</td>
<td><em>hai mai</em></td>
<td><em>aftuka</em></td>
<td></td>
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<tr>
<td>147 black (hitam):</td>
<td><em>mit</em></td>
<td><em>mit/miti</em></td>
<td></td>
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<tr>
<td>148 white (putih):</td>
<td><em>bot</em></td>
<td><em>bot/boti</em></td>
<td></td>
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<tr>
<td>149 red (mérah):</td>
<td><em>mia</em></td>
<td><em>mi’a</em></td>
<td></td>
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<tr>
<td>150 yellow (kuning):</td>
<td><em>kakon</em></td>
<td><em>kakon</em></td>
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<tr>
<td>151 green (hijau):</td>
<td><em>babir</em></td>
<td><em>bafei</em></td>
<td>Wai U session note: maybe transcribed better as bafeei</td>
</tr>
<tr>
<td>152 small (kecil):</td>
<td><em>nana</em></td>
<td><em>nana</em></td>
<td></td>
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<tr>
<td>153 big (besar):</td>
<td><em>aya</em></td>
<td><em>aya</em></td>
<td></td>
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<tr>
<td>153 big (raya):</td>
<td><em>aya</em></td>
<td><em>aya</em></td>
<td>Wai U session note: yai eya aya 'jalan raya'</td>
</tr>
<tr>
<td>154 short (péndék):</td>
<td><em>yota</em></td>
<td><em>yota</em></td>
<td></td>
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<tr>
<td>155 long (panjang):</td>
<td><em>nahu</em></td>
<td><em>nahu</em></td>
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<tr>
<td>156 thin (tipis):</td>
<td><em>manip</em></td>
<td><em>manipi</em></td>
<td></td>
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<tr>
<td>157 thick (tebal):</td>
<td><em>bag</em></td>
<td><em>bagu</em></td>
<td></td>
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<tr>
<td>158 narrow (sempit):</td>
<td><em>dagat</em></td>
<td><em>dagati</em></td>
<td></td>
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<tr>
<td>159 wide (lébar):</td>
<td><em>dalena</em></td>
<td><em>aya / dalena</em></td>
<td></td>
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<tr>
<td>160 painful, sick (sakit):</td>
<td><em>geka</em></td>
<td><em>geka</em></td>
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<tr>
<td>161 shy, ashamed (malu):</td>
<td>bal</td>
<td>bali</td>
<td></td>
</tr>
<tr>
<td>162 old (tua) (old (for people)):</td>
<td>matua</td>
<td>matua</td>
<td></td>
</tr>
<tr>
<td>162 old (lama) (old (for things)):</td>
<td>—</td>
<td>—</td>
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</tr>
<tr>
<td>163 new (baru):</td>
<td>fe'u</td>
<td>feu</td>
<td></td>
</tr>
<tr>
<td>164 good (baik) (for people):</td>
<td>pia</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>164 good (bagus) (for things):</td>
<td>bisa</td>
<td>bisa</td>
<td></td>
</tr>
<tr>
<td>165 bad, evil (jahat):</td>
<td>kabures</td>
<td>kabares</td>
<td>Wai U session note: (also maybe: kabaresa)</td>
</tr>
<tr>
<td>166 correct, true (benar):</td>
<td>dahi</td>
<td>dahi</td>
<td></td>
</tr>
<tr>
<td>167 night (malam):</td>
<td>bauhi</td>
<td>buhi</td>
<td>Wai U session note: (consultant uncertain about this form)</td>
</tr>
<tr>
<td>168 day (hari):</td>
<td>bet</td>
<td>hari</td>
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<td>169 year (tahun):</td>
<td>tahun</td>
<td>taun</td>
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<tr>
<td>170 when? (kapan) (Indonesian Only):</td>
<td>bet pila</td>
<td>bet pila</td>
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<tr>
<td>171 to hide (bersembunyi):</td>
<td>baifon</td>
<td>baifon / da'ufon</td>
<td>Wai U session note: baifon 'to hide oneself' / da'ufon 'to hide an item'</td>
</tr>
<tr>
<td>172 to climb (naik) (1. ascend [person on stairs, balloon in air, bubble in water], 2. mount/ride [a horse, carriage, car, train, airplane]):</td>
<td>bena</td>
<td>bena</td>
<td></td>
</tr>
<tr>
<td>173 at (di):</td>
<td>bo</td>
<td>bo</td>
<td></td>
</tr>
<tr>
<td>174 in, inside ([di dalam]):</td>
<td>bo lal</td>
<td>bo lal</td>
<td></td>
</tr>
<tr>
<td>175 above ([di atas]):</td>
<td>lepa</td>
<td>lepa</td>
<td>Sama session note: deha lepa 'exists above'</td>
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<tr>
<td>176 below (di bawah):</td>
<td>ne'u</td>
<td>ne'u</td>
<td>Sama session note: deha ne'u 'exists below'</td>
</tr>
<tr>
<td>177 this (ini):</td>
<td>ik</td>
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<tr>
<td>Term</td>
<td>Facei on Sanana Island</td>
<td>Facei on Mangon Island</td>
<td>notes</td>
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<tr>
<td>---------------------</td>
<td>------------------------</td>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
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<tr>
<td>178 that (itu)</td>
<td>neka</td>
<td>neka</td>
<td>Wai U session note: also offered deha so 'exists where'</td>
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<tr>
<td>179 near (dekat)</td>
<td>bakahan</td>
<td>iku</td>
<td>Sama session note: also offered bo soa 'at where'</td>
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<td>180 far (jauh)</td>
<td>yau</td>
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<td>181 where? (dimana)</td>
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<td>so</td>
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<td>182 I (saya) ((formal)):</td>
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<td>aku / ak</td>
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<tr>
<td>182 I (aku) ((informal)):</td>
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<td>aku / ak</td>
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<td>183 thou (kamu)</td>
<td>kim</td>
<td>mon</td>
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<tr>
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<td>mon neka</td>
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<td>ki'i</td>
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<td>(he/she (respectful)):</td>
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<td>184 he/she ([d]ia):</td>
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<td>kit</td>
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<td>185 we (kami):</td>
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<td>kit muamua</td>
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<td>(Indonesian only):</td>
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<td>186 you (anda):</td>
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<td>mon</td>
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<td>187 they (meréka):</td>
<td>eb kim</td>
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<td>188 what? (apa):</td>
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<td>hapa</td>
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<td>han</td>
<td>Sama session note: han neka 'who's that' offered</td>
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<td>190 other (lain):</td>
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<td>basa</td>
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<td>191 all (semua)</td>
<td>pakiaki</td>
<td>muamua</td>
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<td>Term</td>
<td>Facei on Sanana Island</td>
<td>Facei on Mangon Island</td>
<td>notes</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
<td>-------------------------------------------</td>
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<tr>
<td>192 and (dan):</td>
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<td>do</td>
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<td>193 if (kalau):</td>
<td>kalo</td>
<td>kalo</td>
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<td><strong>baugoa</strong></td>
<td><strong>bagoa / bago</strong></td>
<td>Wai U session note: also: bagoa neka / bago neka 'how's that'</td>
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<td>195 no, not (tidak) ([&amp;&lt;mana?]?):</td>
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<td>moya</td>
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<td>196 to count (menghitung):</td>
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<td><strong>hitung fata</strong></td>
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<td>197 One (esa) (one' (only used to express the oneness of God)):</td>
<td>—</td>
<td><strong>hia</strong></td>
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<tr>
<td>197 One (satu):</td>
<td>hia</td>
<td>hia</td>
<td></td>
</tr>
<tr>
<td>198 Two (dua):</td>
<td>gu</td>
<td>gu</td>
<td></td>
</tr>
<tr>
<td>199 Three (tiga):</td>
<td>gatel</td>
<td>gatel</td>
<td></td>
</tr>
<tr>
<td>200 Four (empat):</td>
<td>gareha</td>
<td>gareha</td>
<td></td>
</tr>
<tr>
<td>201 Five (lima):</td>
<td>galima</td>
<td>galima</td>
<td></td>
</tr>
<tr>
<td>202 Six (enam):</td>
<td><strong>ganei</strong></td>
<td><strong>gane</strong></td>
<td>Wai U session note: maybe ganee</td>
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<td>203 Seven (tujuh):</td>
<td>gapit</td>
<td>gapit</td>
<td></td>
</tr>
<tr>
<td>204 Eight (delapan):</td>
<td>gatahua</td>
<td>gatahua</td>
<td></td>
</tr>
<tr>
<td>205 Nine (sembilan):</td>
<td>gatasia</td>
<td>gatasia</td>
<td></td>
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<tr>
<td>206 Ten (sepuluh):</td>
<td>poa</td>
<td>poa</td>
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<tr>
<td>207 Twenty (dua puluh):</td>
<td><strong>pogu</strong></td>
<td><strong>pogu / poagu’u</strong></td>
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<tr>
<td>208 Fifty (lima puluh):</td>
<td>pogalima</td>
<td>pogalima</td>
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<tr>
<td>209 One Hundred (seratus):</td>
<td>ota</td>
<td>ota</td>
<td></td>
</tr>
<tr>
<td>210 One Thousand (seribu):</td>
<td>cahia</td>
<td>—</td>
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</table>
Appendix H

Appendix H. Dialect comparison lists. CMD region

The following lists were collected with the intention of following up on and refining part two of chapter two. This data includes wordlists created by speakers of different age ranges for each of the region’s villages. Where words appear in duplicate, it indicates the speaker giving multiple responses in succession. Unfortunately it became clear that speaker variation will be difficult to describe and as such, revising my preliminary conclusions from Chapter Two is a task that is too ambitious for the present dissertation. It is one that I hope to return to, but I am providing the raw data in case another ambitious researcher can approach the task before me. All lists correspond to archived recordings.

Young (Y) = -27 | Middle (M) = 28-47 | Older (O) = 48+

<table>
<thead>
<tr>
<th>Kampung Capuli</th>
<th>English</th>
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<tbody>
<tr>
<td>Asmi</td>
<td>Fadli</td>
</tr>
<tr>
<td>(Capuli ~25)</td>
<td>(Capuli ~21)</td>
</tr>
<tr>
<td>Young F</td>
<td>Middle M</td>
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aku / ak / aku
   di
   nanu
   tena kau
   bo heha

aku
   do
   nanu
   tena (kau)
   neʔu

aku
   do
   nanu
   tena (kau)
   neʔu

aku
   di
   nanu
   tena (kau)
   neʔu

aku
   di
   nanu
   tena (kau)
   (meja table) heha

aku
   di
   nanu
   tena (kau)
   heha / neʔu

1SG (saya)
and (dan)
bathe (mandi)
belly (perut)
below (di bawah)
<table>
<thead>
<tr>
<th>Asmi</th>
<th>Fadli</th>
<th>Tika</th>
<th>Ramli</th>
<th>Kalasun</th>
<th>Ali</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mafa</td>
<td>Sangaji</td>
<td>Gorontalo</td>
<td>Gorantalo</td>
<td>Kemhai</td>
<td>Umasan</td>
<td>gaji</td>
</tr>
<tr>
<td>aya</td>
<td>aya</td>
<td>aya</td>
<td>aya</td>
<td>aya</td>
<td>aya</td>
<td>big (besar)</td>
</tr>
<tr>
<td>miti</td>
<td>miti</td>
<td>miti</td>
<td>miti</td>
<td>miti</td>
<td>miti</td>
<td>black (hitam)</td>
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<tr>
<td>sana</td>
<td>bati</td>
<td>kau</td>
<td>sana</td>
<td>en</td>
<td>en</td>
<td>branch (dahan)</td>
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<td>ana</td>
<td>amehinan</td>
<td>ana</td>
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<td>child (anak)</td>
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<td>ana</td>
<td>anamhin</td>
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</tr>
<tr>
<td>nui</td>
<td>nui</td>
<td>nui</td>
<td>nui</td>
<td>nui</td>
<td>nui</td>
<td>coconut (kelapa)</td>
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<tr>
<td>katimu</td>
<td>katim</td>
<td>katimun</td>
<td>ketim</td>
<td>katimu</td>
<td></td>
<td>cucumber (ketimun)</td>
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<td>asu</td>
<td>asu</td>
<td>asu</td>
<td>asu</td>
<td>asu</td>
<td>asu</td>
<td>dog (anjing)</td>
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<td>saota</td>
<td>saota</td>
<td>saota</td>
<td>saota</td>
<td>saota</td>
<td>dry (kering)</td>
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<tr>
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<td>tilu</td>
<td>tilu</td>
<td>ear (telinga)</td>
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<tr>
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<td>haʔi</td>
<td>haʔi</td>
<td>haʔi</td>
<td>haʔi</td>
<td>haʔi</td>
<td>earth/soil (tanah)</td>
</tr>
<tr>
<td>mantel / mantelu / mantelu /</td>
<td>mantel / mantelu / mantelu /</td>
<td>mantel / mantelu / mantelu /</td>
<td>mantelu / mantelu / mantelu /</td>
<td>mantelu / mantelu / mantelu /</td>
<td>mantelu / mantelu / mantelu /</td>
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<tr>
<td>fua</td>
<td>foa</td>
<td>(kol) foa</td>
<td>(kol) foa</td>
<td>ihi</td>
<td></td>
<td>feathers (bulu)</td>
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<td>daging</td>
<td>daging</td>
<td>daging</td>
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</tr>
<tr>
<td>hitam</td>
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<td></td>
<td></td>
<td>bunga</td>
<td>bunga</td>
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<tr>
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<td>gareha</td>
<td>gareha</td>
<td>gareha</td>
<td>gareha</td>
<td>gareha</td>
<td>fog (kabut)</td>
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<td>fua</td>
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<td>fua</td>
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<td>napu</td>
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<table>
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<th>Kampung Capuli</th>
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<td>Kampung Capuli</td>
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| Hundred (one) (seratus) | |

642
## Appendix H

### Kampung Capuli

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<thead>
<tr>
<th>Asmi</th>
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<th>Tika</th>
<th>Ramli</th>
<th>Kalasun</th>
<th>Ali</th>
<th>English</th>
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<td>Gorantalo</td>
<td>Kemhai</td>
<td>Umasan</td>
<td>gaji</td>
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<td>lal</td>
<td>bo lali</td>
<td>ba leu</td>
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<td>in, inside ([di dalam] lake (danau) lightning (kilat) liver (hati)</td>
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<td>eki</td>
<td>eki</td>
<td>eki</td>
<td>eki</td>
<td>neck (léhér)</td>
</tr>
<tr>
<td>buku</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>node in bamboo, sugarcane (buku)</td>
</tr>
<tr>
<td>neʔi</td>
<td>neʔi</td>
<td>neʔi</td>
<td>neʔe</td>
<td>neʔe</td>
<td>neʔe</td>
<td>nose (hidung)</td>
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<tr>
<td>matua</td>
<td>matua</td>
<td>matua</td>
<td>matua</td>
<td>matua</td>
<td>matua</td>
<td>old (people) (tua)</td>
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<tr>
<td>hia</td>
<td>(fat)hia</td>
<td>hia</td>
<td>hia</td>
<td>hia</td>
<td>hia</td>
<td>one (satu)</td>
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<tr>
<td>sofa</td>
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<td></td>
<td></td>
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<td>plaited rattan fish trap (bubu)</td>
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<td>uya</td>
<td>uya</td>
<td>uya</td>
<td>uya</td>
<td>uya</td>
<td>uya</td>
<td>rain (hujan)</td>
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<td>safari</td>
<td>safari</td>
<td>safari</td>
<td>safari</td>
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<td>rat (tikus)</td>
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<td>yaeya</td>
<td>yaeya</td>
<td>yaeya</td>
<td>yaeya</td>
<td>yaeya</td>
<td>road/path (jalan)</td>
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<tr>
<td>sanapetu</td>
<td>sanapetu</td>
<td>sanapetu</td>
<td>sahosa</td>
<td>sanapetu</td>
<td>sanapetu</td>
<td>roof thatch (atap)</td>
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<td>gasi</td>
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<td>gasi</td>
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<td>gasi</td>
<td>gasi</td>
<td>rotten (busuk)</td>
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<tr>
<td>haʔi</td>
<td>haʔi</td>
<td>haʔi</td>
<td>haʔi</td>
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<td>kumawai</td>
<td>salt (garam)</td>
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<td>mahi</td>
<td>mahi</td>
<td>mahi</td>
<td>mahi</td>
<td>mahi</td>
<td>mahi</td>
<td>sand (pasir)</td>
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<tr>
<td>gapitu</td>
<td>gapitu</td>
<td>gapitu / gapitu / gapitu</td>
<td>gapitu</td>
<td>gapitu</td>
<td>gapitu</td>
<td>sea (laut)</td>
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<td>yota</td>
<td>yota</td>
<td>yota</td>
<td>yota</td>
<td>yota</td>
<td>yota</td>
<td>seven (tujuh)</td>
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<td>uha</td>
<td>uha</td>
<td>uha</td>
<td>uha</td>
<td>uha</td>
<td>uha</td>
<td>shrimp, lobster (udang)</td>
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643
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<tr>
<th>Sula</th>
<th>Kampung Capuli</th>
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<tbody>
<tr>
<td></td>
<td>Asmi Mafa</td>
</tr>
<tr>
<td>bal / bal</td>
<td>bal</td>
</tr>
<tr>
<td>koli</td>
<td>koli</td>
</tr>
<tr>
<td>lan</td>
<td>lan</td>
</tr>
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<td>nana</td>
<td>nana</td>
</tr>
<tr>
<td>bafei</td>
<td>apfei</td>
</tr>
<tr>
<td></td>
<td>fat</td>
</tr>
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<td>poa</td>
<td>poa</td>
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<tr>
<td>bagu</td>
<td>bagu</td>
</tr>
<tr>
<td>manipi</td>
<td>manipi</td>
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<td>gatel</td>
<td>gatelu</td>
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<td>nihi</td>
<td>nihi</td>
</tr>
<tr>
<td>buha</td>
<td>buha</td>
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<td>badona</td>
<td>dona</td>
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<td>mama</td>
<td>samam</td>
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<td>lika</td>
</tr>
<tr>
<td>duki</td>
<td>duki</td>
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<tr>
<td>bamapu</td>
<td>bamapu</td>
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<td></td>
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## Kampung Capuli

<table>
<thead>
<tr>
<th>Asmi Mafa</th>
<th>Fadli Sangaji</th>
<th>Tika Gorontalo</th>
<th>Ramli Gorontalo</th>
<th>Kalasun Kemhai</th>
<th>Ali Umasan</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>yeba (menetak)</td>
<td>deti</td>
<td>deti</td>
<td>deti</td>
<td>deti / da?eta (menetak)</td>
<td>deti</td>
<td>to cut (memotong) / to hack (menetak)</td>
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<tr>
<td>win / winu / winu</td>
<td>geka</td>
<td>geka</td>
<td>geka</td>
<td>geka</td>
<td>geka</td>
<td>to dig (menggali)</td>
</tr>
<tr>
<td>gaya</td>
<td>gaya</td>
<td>gaya</td>
<td>gaya</td>
<td>gaya</td>
<td>gaya</td>
<td>to eat (makan)</td>
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<tr>
<td>kagi</td>
<td>kagi</td>
<td>kagi</td>
<td>kagi</td>
<td>kagi</td>
<td>kagi</td>
<td>to fear (takut)</td>
</tr>
<tr>
<td>gena</td>
<td>gena</td>
<td>gena</td>
<td>gena</td>
<td>gena</td>
<td>gena</td>
<td>to grow (tumbuh)</td>
</tr>
<tr>
<td>gemu</td>
<td>luk / luku</td>
<td>gemu</td>
<td>gemu</td>
<td>gem (kati) / manake m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nona</td>
<td>nona boli</td>
<td>nona</td>
<td>nona</td>
<td>nona</td>
<td>nona</td>
<td>to lie down (berbaring)</td>
</tr>
<tr>
<td>hoi</td>
<td>hoi</td>
<td>hoi</td>
<td>hoi</td>
<td>dika (&quot;same as hoi&quot;)</td>
<td>hoi</td>
<td>to open, uncover (membuka)</td>
</tr>
<tr>
<td>baseli</td>
<td>baseli</td>
<td>seli</td>
<td>seli</td>
<td>baseli</td>
<td>seli</td>
<td>to plant (menanam)</td>
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<tr>
<td>gahu</td>
<td>gahu</td>
<td>gada</td>
<td>gada</td>
<td>gahu</td>
<td>gahu</td>
<td>to scratch (mencakar) (to scratch (for the purpose of hurting)</td>
</tr>
<tr>
<td>gada</td>
<td>gahu / sakeu</td>
<td>gahu / gada</td>
<td>gada</td>
<td>gada</td>
<td>gahu</td>
<td>to scratch (menggaruk) (to scratch (an itch)</td>
</tr>
<tr>
<td>jubi</td>
<td>jubi</td>
<td>jubi</td>
<td>pana</td>
<td>jubi</td>
<td></td>
<td>to shoot (memanah) (To shoot with bow)</td>
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<tr>
<td>banapi</td>
<td>banapi</td>
<td>banapi</td>
<td>banapi</td>
<td>banapi</td>
<td>banapi</td>
<td>to shoot (menémbak)</td>
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<tr>
<td>nib</td>
<td>nibu</td>
<td>nibu</td>
<td>nibu</td>
<td>nibu</td>
<td>nibu</td>
<td>to sit (duduk)</td>
</tr>
<tr>
<td>oyakeu</td>
<td>bitfua</td>
<td>buakeu</td>
<td>buakeu</td>
<td>buakeu</td>
<td>buakeu</td>
<td>to spit (meludah)</td>
</tr>
</tbody>
</table>
## Kampung Capuli

<table>
<thead>
<tr>
<th>Asmi Mafa</th>
<th>Fadli Sangaji</th>
<th>Tika Gorontalo</th>
<th>Ramli Gorantalo</th>
<th>Kalasun Kemhai</th>
<th>Ali Umasan gaji</th>
<th>English</th>
</tr>
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<tbody>
<tr>
<td>bama</td>
<td>wariu</td>
<td>bama</td>
<td>bama</td>
<td>bama</td>
<td>bama</td>
<td><strong>to split</strong> (membelah)</td>
</tr>
<tr>
<td>ami</td>
<td>ami</td>
<td>ami</td>
<td>ami</td>
<td>ami</td>
<td></td>
<td><strong>to squeeze</strong> (memeras)</td>
</tr>
<tr>
<td>saku</td>
<td>saku</td>
<td>saku</td>
<td>saku</td>
<td>saku</td>
<td>woha</td>
<td><strong>to stab, pierce</strong> (menikam)/ (menusuk)</td>
</tr>
<tr>
<td>nanu</td>
<td>nan</td>
<td>nan</td>
<td>le</td>
<td>nanu</td>
<td></td>
<td><strong>to swim</strong> (berenang)</td>
</tr>
<tr>
<td>lifi</td>
<td>lifi</td>
<td>lifi</td>
<td>lifi</td>
<td>lifi</td>
<td>lifi</td>
<td><strong>to turn (bélok) (to turn (halfway, 90 degrees))</strong></td>
</tr>
<tr>
<td>maki</td>
<td>lifi</td>
<td>putar</td>
<td>bataboli</td>
<td>putar</td>
<td>gabalili</td>
<td><strong>to turn (berputar)</strong></td>
</tr>
<tr>
<td>maki</td>
<td>maki</td>
<td>maki</td>
<td>maki</td>
<td>maki</td>
<td>maki</td>
<td><strong>tongue (lidah)</strong> (metathesis)</td>
</tr>
<tr>
<td>nihi</td>
<td>nihi</td>
<td>nihi</td>
<td>nihi</td>
<td>nihi</td>
<td>nihi</td>
<td><strong>tooth (gigi)</strong></td>
</tr>
<tr>
<td>boti</td>
<td>boti</td>
<td>boti / boti / boti</td>
<td>boti</td>
<td>boti</td>
<td>boti</td>
<td><strong>white (putih)</strong></td>
</tr>
<tr>
<td>uli cacing</td>
<td>npani / pani / cacing</td>
<td>pani / uli / cacing</td>
<td>pani / mpani / cacing</td>
<td>pani / cacing / uli</td>
<td><strong>wing (sayap)</strong></td>
<td></td>
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<tr>
<td>tahun</td>
<td>tahun</td>
<td>tahun</td>
<td>tahun</td>
<td>tahun</td>
<td></td>
<td><strong>year (tahun)</strong></td>
</tr>
<tr>
<td>kakoni</td>
<td>kakoni</td>
<td>kakoni</td>
<td>kakoni</td>
<td>kakoni</td>
<td></td>
<td><strong>yellow (kuning)</strong></td>
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</table>
Appendix H

Young (Y) = -27 | Middle (M) = 28-47 | Older (O) = 48+-1

Kampung Wai U

<table>
<thead>
<tr>
<th>Young F</th>
<th>Middle F</th>
<th>Middle M</th>
<th>Older M</th>
<th>Older F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ria Halim</td>
<td>Hasrina</td>
<td>Mardono</td>
<td>Hamsa</td>
<td>Darmi</td>
</tr>
<tr>
<td>Saturday 1 August 2015</td>
<td>Wednesday 29 July 2015</td>
<td>Wednesday 29 July 2015</td>
<td>Wednesday 29 July 2015</td>
<td>Wednesday 29 July 2015</td>
</tr>
</tbody>
</table>

*no consultant available. Small village and all of the young men were off to work

- ak: 1SG (saya)
- di: and (dan)
- nanu: bathe (mandi)
- tena (kau): belly (perut)
- neʔu: below (di bawah)
- aya: big (besar)
- miti / miti: black (hitam)
- sana: branch (dahan)
- ana: child (anak)
- nui: coconut (kelapa)
- mantimu: cucumber (ketimun)
- asu: dog (anjing)
- saota: dry (kering)
- tilu: ear (telinga)
- haʔi: earth/soil (tanah)
<table>
<thead>
<tr>
<th>Sula</th>
<th>Kampung Wai U</th>
</tr>
</thead>
<tbody>
<tr>
<td>mantelu</td>
<td>mantelu / mantelu</td>
</tr>
<tr>
<td>foa</td>
<td>foa / foa / foa</td>
</tr>
<tr>
<td>bafei / bafei</td>
<td>fangara / fangara</td>
</tr>
<tr>
<td>gareha</td>
<td>gareha / gareha</td>
</tr>
<tr>
<td>fua</td>
<td>fua / fua / fua</td>
</tr>
<tr>
<td>keku</td>
<td>keku / keku</td>
</tr>
<tr>
<td>napu</td>
<td>napfoa / napfoa</td>
</tr>
<tr>
<td>kota</td>
<td>kota / kota</td>
</tr>
<tr>
<td>napfoka</td>
<td>napfoka / napfoka</td>
</tr>
<tr>
<td>bo siku</td>
<td>siku / siku</td>
</tr>
<tr>
<td>uma</td>
<td>uma / uma</td>
</tr>
<tr>
<td>ca ota</td>
<td>ota / ota</td>
</tr>
<tr>
<td>bo lali</td>
<td>baleu / lal</td>
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</table>

<table>
<thead>
<tr>
<th>English</th>
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<tbody>
<tr>
<td>egg (telur)</td>
<td></td>
</tr>
<tr>
<td>feathers (bulu)</td>
<td></td>
</tr>
<tr>
<td>flesh (daging)</td>
<td></td>
</tr>
<tr>
<td>four (empat)</td>
<td></td>
</tr>
<tr>
<td>fruit (buah)</td>
<td></td>
</tr>
<tr>
<td>grass (rumput)</td>
<td></td>
</tr>
<tr>
<td>hair (rambut)</td>
<td></td>
</tr>
<tr>
<td>hair louse (kutu)</td>
<td></td>
</tr>
<tr>
<td>head (kapala)</td>
<td></td>
</tr>
<tr>
<td>here (di sini)</td>
<td></td>
</tr>
<tr>
<td>house (rumah)</td>
<td></td>
</tr>
<tr>
<td>Hundred (one)</td>
<td></td>
</tr>
<tr>
<td>(seratus)</td>
<td></td>
</tr>
<tr>
<td>in, inside ([di] dalam)</td>
<td></td>
</tr>
<tr>
<td>lake (danau)</td>
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</tr>
<tr>
<td>lightning (kilat)</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Ria Halim</th>
<th>Hasrina Umasanga ji</th>
<th>Mardono Murne</th>
<th>Hamsa Pora</th>
<th>Darmi Sangaji</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>mantelu</td>
<td>mantelu / mantelu</td>
<td>mantel / mantel</td>
<td>mantel / mantel</td>
<td>mantel / mantel</td>
<td>egg (telur)</td>
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<tr>
<td>foa</td>
<td>foa / foa</td>
<td>foa / foa</td>
<td>foa / foa</td>
<td>foa / foa</td>
<td>feathers (bulu)</td>
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<td>bafei / bafei</td>
<td>fangara / fangara</td>
<td>bafei / bafei</td>
<td>bafei / bafei</td>
<td>bafei / bafei</td>
<td>flesh (daging)</td>
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<td>gareha / gareha</td>
<td>garea / garea</td>
<td>garea / garea</td>
<td>garea / gareha</td>
<td>four (empat)</td>
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<td>fua</td>
<td>fua / fua</td>
<td>fua / fua</td>
<td>fua / fua</td>
<td>fua / fua</td>
<td>fruit (buah)</td>
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<td>keku</td>
<td>keku / keku</td>
<td>eka / eka</td>
<td>kahik / kahik</td>
<td>kahik / kahik</td>
<td>grass (rumput)</td>
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<tr>
<td>napu</td>
<td>napfoa / napfoa</td>
<td>nap foa / nap foa</td>
<td>nap / nap</td>
<td>nap / nap</td>
<td>hair (rambut)</td>
</tr>
<tr>
<td>kota</td>
<td>kota / kota</td>
<td>kota / kota</td>
<td>kota / kota</td>
<td>kota / kota</td>
<td>hair louse (kutu)</td>
</tr>
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<td>napfoka</td>
<td>napfoka / napfoka</td>
<td>napu / napu</td>
<td>nap / nap</td>
<td>nap / nap</td>
<td>head (kapala)</td>
</tr>
<tr>
<td>bo siku</td>
<td>siku / siku</td>
<td>siku / siku</td>
<td>sik / sik</td>
<td>deha saʔik / deha saʔik</td>
<td>here (di sini)</td>
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<tr>
<td>uma</td>
<td>uma / uma</td>
<td>uma / uma</td>
<td>uma / uma</td>
<td>uma / uma</td>
<td>house (rumah)</td>
</tr>
<tr>
<td>ca ota</td>
<td>ota / ota</td>
<td>ota / ota</td>
<td>ota / ota</td>
<td>ota</td>
<td>Hundred (one)</td>
</tr>
<tr>
<td>bo lali</td>
<td>baleu (explains at 6 min)</td>
<td>lal / lal</td>
<td>lal / lal</td>
<td>baleu / baleu</td>
<td>(seratus)</td>
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<tr>
<td>bo lali / bo lali</td>
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<td>taga / taga</td>
<td>taga / taga</td>
<td>taga / taga</td>
<td>in, inside ([di] dalam)</td>
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<td>sagila / sagila</td>
<td>sagila / sagila</td>
<td>sagila / sagila</td>
<td>sagila / sagila</td>
<td>lake (danau)</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>lightning (kilat)</td>
</tr>
<tr>
<td>Appendix H</td>
<td>Kampung Wai U</td>
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</tr>
<tr>
<td><strong>Kampung Wai U</strong></td>
<td><strong>English</strong></td>
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<td></td>
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<tr>
<td><strong>Ria Halim</strong></td>
<td><strong>Hasrina Umasanga ji</strong></td>
<td><strong>Mardono Murne</strong></td>
<td><strong>Hamsa Pora</strong></td>
<td><strong>Darmi Sangaji</strong></td>
<td><strong>English</strong></td>
</tr>
<tr>
<td>lal / lal</td>
<td>lal / lal</td>
<td>lal / lal</td>
<td>liver (hati)</td>
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<td>kafin / kafin</td>
<td>kafin / kafin</td>
<td>kafin / kafin</td>
<td>kafin / kafin</td>
<td>mosquito (nyamuk)</td>
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<td>dagat / dagat</td>
<td>dagat / dagat</td>
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<td>ek</td>
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<td>ek / ek / ek (waka) / ek (waka)</td>
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<td>donga / donga / donga</td>
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<td></td>
<td>node in bamboo, sugarcane (buku)</td>
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<td>ne?e / ne?e</td>
<td>ne?i / ne?i</td>
<td>ne?e / ne?e</td>
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<td>matua / matua</td>
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<td>nana / nana</td>
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<td>apfei / apfei</td>
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<td>bag / bag</td>
<td>bag / bag</td>
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<td>manip / manip</td>
<td>manip / manip</td>
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<td>nihi / nihi</td>
<td>uka / uka</td>
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<td>to bite (gigit)</td>
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<td>buha / buha</td>
<td>buha / buha</td>
<td>buha / buha</td>
<td>buha / buha</td>
<td>to blow (meniup) (a person blows (something)</td>
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<td>dona / dona</td>
<td>dona / dona</td>
<td>dona / dona</td>
<td>a tona / a tona</td>
<td>to burn (membakar)</td>
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<td>samam / samam</td>
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<td>pili</td>
<td>pili / pili</td>
<td>pili / pili</td>
<td>pili / pili</td>
<td>to choose (memilih)</td>
<td></td>
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<tr>
<td>Ria Halim *</td>
<td>Hasrina Umasaanga ji</td>
<td>Mardono Murne</td>
<td>Hamsa Pora</td>
<td>Darmi Sangaji</td>
<td>English</td>
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<td>duk / duki</td>
<td>duk / duk</td>
<td>duk / duk</td>
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<td><strong>to come</strong> (datang)</td>
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<td>bamapu / bamapu</td>
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<td>bamapu / bamapu</td>
<td><strong>to cook</strong> (memasak)</td>
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<td>deti</td>
<td>bota / bota</td>
<td>bota / bota</td>
<td>det / det</td>
<td>a tet / a tet / gi det / gi det</td>
<td><strong>to cut</strong> (memotong) / <strong>to hack</strong> (menetak)</td>
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<td>gahu / gahu</td>
<td>gahu / gahu</td>
<td>geka / geka</td>
<td>geka / geka</td>
<td><strong>to dig</strong> (menggali)</td>
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<td>winu</td>
<td>winu / winu</td>
<td>win / win</td>
<td>win / win</td>
<td>a win / a win</td>
<td><strong>to drink</strong> (minum)</td>
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<td>gaya / gaya</td>
<td>gaya / gaya</td>
<td>gaya / gaya</td>
<td>gaya / gaya</td>
<td><strong>to eat</strong> (makan)</td>
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<td>kag / kagi</td>
<td>kagi / kagi</td>
<td>kagi / kagi</td>
<td>kag / kag</td>
<td>a kag / a kag / a kag</td>
<td><strong>to fear</strong> (takut)</td>
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<td>dog / dog</td>
<td>dog / dog</td>
<td>dog / dog</td>
<td>a tut / a tut</td>
<td><strong>to grow</strong> (tumbuh)</td>
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<td>geni / geni</td>
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<td>baker / baker</td>
<td>baker / baker</td>
<td><strong>to hear</strong> (mendengar)</td>
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<td>kafi</td>
<td>gemu / gemu</td>
<td>sakaf / sakaf</td>
<td>gem / gem</td>
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<td><strong>to hold</strong> (menggenggam)</td>
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<td>nona</td>
<td>nona / nona</td>
<td>nona / nona</td>
<td>nona / nona</td>
<td>nona bol / nona bol</td>
<td><strong>to lie down</strong> (berbaring)</td>
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<tr>
<td>hoi</td>
<td>hoi / hoi</td>
<td>hoi / hoi</td>
<td>hoi / hoi</td>
<td>hoi / hoi</td>
<td><strong>to open, uncover</strong> (membuka)</td>
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<tr>
<td>baseli</td>
<td>seli / seli</td>
<td>basel / sel</td>
<td>sel / sel</td>
<td>a basel / a basel</td>
<td><strong>to plant</strong> (menanam)</td>
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<tr>
<td>gama</td>
<td>gahu / gama</td>
<td>gama / gaama</td>
<td>gahu / gahu</td>
<td>gahu / gahu</td>
<td><strong>to scratch</strong> (mencakar) (to scratch (for the purpose of hurting)</td>
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<tr>
<td>gahu</td>
<td>sakeu / sakeu</td>
<td>sakeu / gada</td>
<td>gada / kahu</td>
<td>a kahu / a kahu</td>
<td><strong>to scratch</strong> (menggaruk) (to scratch (an itch)</td>
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<td>Sula</td>
<td>Kampung Wai U</td>
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<td>Mardono Murne</td>
<td>Hamsa Pora</td>
<td>Darmi Sangaji</td>
<td>English</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| pana | jubi / jubi | pana / pana | jubi / jubi | to shoot (memanah)  
(To shoot with bow) |
| banap | banapi / banapi | banap / banap | banapi / banapi | to shoot (menémbak) |
| nibu | nibu / nibu | nib / nib | nib / nib | to sit (duduk) |
| buakeu | buakeu / buakeu | buakeu / buakeu | buakeu / buakeu | to spit (meludah) |
| pama | sida / sida | bama / bama | a pama / a bama | to split (membelah) |
| ami | ami / ami | am / am | ami / am | a am / a am | to squeeze (memeras) |
| bona | saku / saku | sak / sak | sak / saku | to stab, pierce  
(menikam)/  
(menusuk) |
| nanu | nanu / nanu | nan / nan | i nan / i nan | to swim (berenang) |
| lifi | lif / lif | lif / lif | a lif / a lif | to turn (bélok) (to  
turn (halfway, 90  
degrees) |
| saka lifi | daiʔoa / daiʔoa | lif / lif | taputar / taputar | to turn (berputar) |
| maki | maki / maki | mak / mak | maki / maki | tongue (lidah)  
(metathesis) |
| nihi | nihi / nihi | nihi / nihi | nihi / nihi | tooth (gigi) |
| boti | boti / boti | bot / bot | bot / bot | white (putih) |
| pani | pani / pani | pan / pan | pan / pan | wing (sayap) |
| mokawaʔi / mokawaʔi | ul / ul | ul / ul | worm (earthworm)  
(cacing) |
<p>| taun | taun / taun | taun / taun | year (tahun) |
| koni | koni / koni | konon / konon | konon / konon | yellow (kuning) |</p>
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<tr>
<th>Young F</th>
<th>Young M</th>
<th>Middle F</th>
<th>Middle M</th>
<th>Older F</th>
<th>Older M</th>
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<tbody>
<tr>
<td>Mardani</td>
<td>Eko P</td>
<td>Uni</td>
<td>Idham</td>
<td>Aisa</td>
<td>Kasim</td>
</tr>
<tr>
<td>English</td>
<td>English</td>
<td>English</td>
<td>English</td>
<td>English</td>
<td>English</td>
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<tr>
<td>Ulfoa</td>
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<td>Ulfoa</td>
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<td>Ulfoa</td>
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<tr>
<td>~17 y/o b.</td>
<td>~17 y/o b.</td>
<td>~27 or ~37 y/o self reports birth year as 1988 but probably misspoke &amp; 1978 in reality</td>
<td>~37 y/o</td>
<td>~55 y/o</td>
<td>~49 y/o</td>
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</table>

Friday 31 July 2015, Friday 31 July 2015, Friday 31 July 2015, Friday 31 July 2015, Saturday 1 August 2015, Thursday 30 July 2015

ak aku aku aku aku ak 1SG (saya)
di di di di do do / do
nan nan nanu nan nan nan
(kau) (kau) (kau) (kau) (kau)
neu / neu heha ne?u heha bo heha ne?u / neu
below (di bawah)
aya aya aya aya aya big (besar)
mit mit miti miti mit
sana in sana daeti kau sana sana / kau sana
nana ana mehi ana ana anak child (anak)
<table>
<thead>
<tr>
<th>Mardani Umasang aji</th>
<th>Eko P Umasang aji</th>
<th>Uni Umasang aji</th>
<th>Idham Pora</th>
<th>Aisa Umasang aji</th>
<th>Kasim Pora</th>
<th>English</th>
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<td>coconut (kelapa)</td>
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<td>katim</td>
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<td>asu</td>
<td>as</td>
<td>as</td>
<td>as</td>
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<td>tilu</td>
<td>tilu / tilu</td>
<td>til</td>
<td>til</td>
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<td>hai</td>
<td>haʔi</td>
<td>haʔi</td>
<td>hai</td>
<td>hai</td>
<td>hai</td>
<td>earth / soil (tanah)</td>
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<td>foa / foa</td>
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<td>feathers (bulu)</td>
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<td>flower (bunga)</td>
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<td>nap foa</td>
<td>nap</td>
<td>napwaka / nap</td>
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<td>kota</td>
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<td>kota</td>
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<td>hair louse (kutu)</td>
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<td>nap</td>
<td>napu</td>
<td>napu / nap</td>
<td>nap</td>
<td>nap / nap foka</td>
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<td>head (kapala)</td>
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<td>saʔik</td>
<td>siku</td>
<td>siku</td>
<td>siku</td>
<td>saik</td>
<td>saik*</td>
<td>here (di sini)</td>
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*saik (to here) siku / siku (to there at 14 min in sound file)

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<th>wai duba</th>
<th>telanihi</th>
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<td>Hundred (one) (seratus)</td>
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<td>in, inside ([di] dalam)</td>
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<td>lake (danau)</td>
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*donga / donga (same meaning -- both knuckle, elbow, bamboo joint etc)
<table>
<thead>
<tr>
<th>Mardani Umasang aji</th>
<th>Eko P Umasang aji</th>
<th>Uni Umasang aji</th>
<th>Kampung Ulfoa</th>
<th>Aisa Umasang aji</th>
<th>Kasim Pora</th>
<th>English</th>
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<tr>
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<td>bal</td>
<td>bal</td>
<td>bal / bahal</td>
<td>bal / bahal</td>
<td>bahal</td>
<td>shy, ashamed (malu)</td>
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<td>kol</td>
<td>kol</td>
<td>koli</td>
<td>kol</td>
<td>kol</td>
<td>kol</td>
<td>skin (kulit)</td>
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<tr>
<td>lan</td>
<td>lan</td>
<td>lan</td>
<td>lan</td>
<td>lan</td>
<td>lan</td>
<td>sky (langit)</td>
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<td>nana</td>
<td>nana</td>
<td>nana</td>
<td>nana</td>
<td>small (kecil)</td>
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<td>apfei</td>
<td>bafei</td>
<td>bafei (long e)</td>
<td>apfei</td>
<td>apfei</td>
<td>apfei</td>
<td>smoke (asap)</td>
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<td>fat</td>
<td>fatu</td>
<td>fatu</td>
<td>fatu / fatu</td>
<td>fatu</td>
<td>fatu</td>
<td>stone (batu)</td>
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<tr>
<td>poa</td>
<td>fat poa</td>
<td>poa</td>
<td>poa</td>
<td>poa</td>
<td>poa</td>
<td>ten (sepuluh)</td>
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<td>bagu</td>
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<td>bagu</td>
<td>bag</td>
<td>thick (tebal)</td>
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<td>manipi</td>
<td>manipi</td>
<td>manip</td>
<td>manip</td>
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<td>thin (tipis)</td>
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<td>gatelu</td>
<td>gatel</td>
<td>gatel</td>
<td>gatel</td>
<td>gatel</td>
<td>Three (tiga)</td>
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<td>uka</td>
<td>uka</td>
<td>nihi</td>
<td>nihi</td>
<td>nihi</td>
<td>thunder (guntur)</td>
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<td>buha</td>
<td>buha</td>
<td>buha</td>
<td>buha</td>
<td>buha</td>
<td>buha</td>
<td>to bite (gigit)</td>
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<tr>
<td>batona</td>
<td>dona</td>
<td>dona</td>
<td>batona</td>
<td>dona</td>
<td>dona</td>
<td>to blow (meniup)</td>
</tr>
<tr>
<td>wa iku</td>
<td>wa</td>
<td>lika</td>
<td>pili</td>
<td>pili</td>
<td>lika</td>
<td>(a person blows (something)</td>
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<td>duk</td>
<td>duki</td>
<td>duki</td>
<td>duki</td>
<td>duki</td>
<td>duki</td>
<td>to burn (membakar)</td>
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<td>bamap</td>
<td>bamapu</td>
<td>bamapu</td>
<td>bamapu</td>
<td>bamapu</td>
<td>bamapu</td>
<td>(burning) batona</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>to come (datang)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>to cook (memasak)</td>
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</tbody>
</table>

Kampung Ulfoa

Mardani Umasang aji

Eko P Umasang aji

Uni Umasang aji

English

to chew (mengunyah)

to choose (memilih)

to come (datang)

to cook (memasak)
<table>
<thead>
<tr>
<th>Mardani Umasang aji</th>
<th>Eko P Umasang aji</th>
<th>Uni Umasang aji</th>
<th>Idham Pora</th>
<th>Aisa Umasang aji</th>
<th>Kasim Pora</th>
<th>English</th>
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</thead>
<tbody>
<tr>
<td>bota</td>
<td>bota</td>
<td>bama</td>
<td>deti</td>
<td>bota</td>
<td>det / det</td>
<td>to cut (memotong) / to hack (menetak)</td>
</tr>
<tr>
<td>gahui</td>
<td>gahu</td>
<td>gahui</td>
<td>gahu</td>
<td>gahu</td>
<td>gahu /</td>
<td>to dig (menggali)</td>
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<tr>
<td>win</td>
<td>win</td>
<td>win</td>
<td>win</td>
<td>win</td>
<td>win</td>
<td>to drink (minum)</td>
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<td>gaya</td>
<td>gaya</td>
<td>gaya</td>
<td>gaya</td>
<td>gaya</td>
<td>gaya</td>
<td>to eat (makan)</td>
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<td>kagi</td>
<td>kagi</td>
<td>kagi</td>
<td>kagi</td>
<td>kag</td>
<td>kag</td>
<td>to fear (takut)</td>
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<td>dog</td>
<td>dota</td>
<td>dogi</td>
<td>dogi</td>
<td>dog</td>
<td>dog</td>
<td>to grow (tumbuh)</td>
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<td>gena</td>
<td>gena</td>
<td>fa?a /</td>
<td>gena</td>
<td>gena</td>
<td>to hear (mendenggar)</td>
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<td>gem</td>
<td>gem</td>
<td>gemu</td>
<td>gem fa /</td>
<td>gawak</td>
<td>manakem</td>
<td>to hold (menggenggam)</td>
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<td>nona</td>
<td>nona bol</td>
<td>nona</td>
<td>nona bol</td>
<td>nona</td>
<td>to lie down (berbaring)</td>
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<td>hoi</td>
<td>hoi</td>
<td>hoi</td>
<td>hoi</td>
<td>hoi</td>
<td>hoi</td>
<td>to open, uncover (membuka)</td>
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<tr>
<td>sel / basal</td>
<td>sel</td>
<td>sel</td>
<td>basal</td>
<td>basal</td>
<td>sel</td>
<td>to plant (menanam)</td>
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<td>gahu</td>
<td>gama</td>
<td>gahu</td>
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<td>to scratch (mencakar) to scratch (for the purpose of hurting)</td>
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<td>to scratch (menggaruk) to scratch (an itch)</td>
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<td>bapana</td>
<td>jub</td>
<td>panas /</td>
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<td>to shoot (memanah) (To shoot with bow)</td>
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<td>to shoot (menémbak)</td>
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<td>nib</td>
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<td>to sit (duduk)</td>
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<td>buakeu /</td>
<td>to spit (meludah)</td>
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<td>bama</td>
<td>bama</td>
<td>bama</td>
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<td>to split (membelah)</td>
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Kampung Ulfoa

Appendix H
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<th>Mardani Umasang aji</th>
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<td>am</td>
<td>am</td>
<td>am</td>
<td>am</td>
<td>to squeeze (memeras)</td>
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<td>sak</td>
<td>sak / woha</td>
<td>sak</td>
<td>sak (stab)</td>
<td>to stab, pierce (menikam)/(menusuk)</td>
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<td>nan</td>
<td>nanu</td>
<td>nan / nan</td>
<td>nan</td>
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<td>to swim (berenang)</td>
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<td>lifi</td>
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<td>bali</td>
<td>lif</td>
<td>to turn (béluk) (to turn (halfway, 90 degrees) to turn (berputar)</td>
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<td>ta putar</td>
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<td>kon / kon</td>
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REFERENCES


Berkmoes, Ryan Ver; Celeste Brash; Muhammad Cohen; Mark Elliott; Trent Holden; Guyan Mitra; John Noble; Adam Skolnick; Iain Stewart; Steve Waters. 2010. *Lonely Planet: Indonesia.* 9th Ed. Lonely Planet.


REFERENCES


Sula


REFERENCES


Campbell, Lyle. 2015. Email. 19 Apr.


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REFERENCES


Gordon, Elizabeth; Lyle Campbell; Jennifer Hay; Margaret Maclagan; Andrea Sudbury; and Peter Trudgill. 2004. New Zealand English: Its Origins and Evolution. Cambridge UP. Studies in English Language.


Hervás y Panduro, Lorenzo. 1784. Catálogo de las lenguas de las naciones conocidas, y numeración división y clase de éstas según la diversidad de sus idiomas y dialectos. Madrid.


REFERENCES


Holton, Gary; and Leah Pappas. in print. Spatial orientation in the Malayo-Polynesian languages outside Oceanic.


Sankararaman, Sriram; Swapan Mallick, Nick Patterson, David Reich. 2016. The Combined Landscape of Denisovan and Neanderthal Ancestry in Present-Day Humans. Current Biology; DOI: 10.1016/j.cub.2016.03.037.


REFERENCES


