

mimif (Mermish)

Alison Hau

# Contents

|          |  |           |
|----------|--|-----------|
| <b>1</b> | <b>Backstory</b>                       | <b>2</b>  |
| 1.1      | General Backstory . . . . .            | 2         |
| 1.2      | Biology . . . . .                      | 2         |
| 1.3      | Daily Life . . . . .                   | 2         |
| 1.4      | Society . . . . .                      | 2         |
| 1.5      | Values . . . . .                       | 2         |
| 1.6      | Mythology: 3em and safi . . . . .      | 3         |
| 1.7      | Metaphors . . . . .                    | 3         |
| 1.8      | Time . . . . .                         | 3         |
| <b>2</b> | <b>Phonology</b>                       | <b>5</b>  |
| 2.1      | Inventory . . . . .                    | 5         |
| 2.2      | Phonological Rules . . . . .           | 5         |
| 2.3      | Syllable Structure . . . . .           | 6         |
| <b>3</b> | <b>Counting and Numbers</b>            | <b>7</b>  |
| 3.1      | Numerals . . . . .                     | 7         |
| 3.2      | Ordinals . . . . .                     | 8         |
| <b>4</b> | <b>Noun Morphology</b>                 | <b>9</b>  |
| 4.1      | Plurals . . . . .                      | 9         |
| 4.2      | Case Endings . . . . .                 | 9         |
| 4.3      | Pronouns . . . . .                     | 12        |
| <b>5</b> | <b>Noun Phrases</b>                    | <b>13</b> |
| 5.1      | Possession . . . . .                   | 13        |
| 5.2      | Recursion . . . . .                    | 14        |
| 5.3      | Quantifiers and Definiteness . . . . . | 14        |
| 5.4      | Adjectives . . . . .                   | 15        |
| 5.5      | Word Order . . . . .                   | 15        |
| <b>6</b> | <b>Verb Morphology</b>                 | <b>17</b> |
| 6.1      | Number, Person, Tense . . . . .        | 17        |
| 6.2      | Aspect . . . . .                       | 18        |
| <b>7</b> | <b>Verb Phrases</b>                    | <b>19</b> |
| 7.1      | Adverbs . . . . .                      | 19        |
| 7.2      | Word Order . . . . .                   | 19        |
| <b>8</b> | <b>Sentences</b>                       | <b>20</b> |
| 8.1      | To Be (Or Not To Be) . . . . .         | 20        |
| 8.2      | Transitive and Intransitive . . . . .  | 20        |
| 8.3      | Negation . . . . .                     | 21        |
| 8.4      | Possession . . . . .                   | 22        |
| 8.5      | Location . . . . .                     | 23        |
| 8.6      | Time . . . . .                         | 24        |

|           |  |           |
|-----------|--|-----------|
| 8.7       | Comparison . . . . .                         | 25        |
| 8.8       | Questions (And Maybe Some Answers) . . . . . | 26        |
| <b>9</b>  | <b>Communication</b>                         | <b>30</b> |
| 9.1       | Greetings . . . . .                          | 30        |
| 9.2       | Partings . . . . .                           | 31        |
| 9.3       | Compliments and Insults . . . . .            | 32        |
| 9.4       | Speech Acts . . . . .                        | 33        |
| <b>10</b> | <b>Sample Narrative</b>                      | <b>35</b> |
| 10.1      | English Text . . . . .                       | 35        |
| 10.2      | Mermish Text . . . . .                       | 35        |
| 10.3      | Glosses . . . . .                            | 35        |
| 10.4      | Narrative Choices . . . . .                  | 38        |
| <b>A</b>  | <b>Lexicon</b>                               | <b>39</b> |
| <b>B</b>  | <b>Hand and labelled fingers</b>             | <b>42</b> |

# Chapter 1

## Backstory

### 1.1 General Backstory

Society of mer-people (*meeple*, or *merson* in the singular), who split off from humans before human development of language, so not influenced by human language. Influenced by what sounds carry underwater (e.g. fewer stops, more vowels, nasals, clicks) and how other sea creatures communicate (e.g. whales, clownfish). Used to live closer to coasts, but are now deep sea dwellers, so ocean surface is where dead things go and where danger is, but also where food comes from. Northern Atlantic Ocean off the coast of Newfoundland (that's where I got the rising and falling tide times for the time sentences).

There is currently no written form of the language.

### 1.2 Biology

6 fingers on each hand (2 opposable thumbs, same other 4 fingers as humans (webbing between pairs of fingers so pairs can work as a unit but also hands can be used for paddling in water) (see Appendix B for illustration); gills inside the body, so lungs are used to move water past the gills and hold water the same way humans hold their breath); tail-fins come in colors usually blue/purple or sometimes dark red; no gender or sex, baby mersons are made by one single parent just wanting it really badly.

### 1.3 Daily Life

Mostly hunting for food, since they live in open ocean/deep sea (esp. since human developments made it unsafe to be near the coast because humans pollute and are also liable to hunt you for food and sport); poor eyesight, so more words for smells/sounds as well as orientation wrt the earth (magnetic fields); lots of human cargo ships lose cargo in the ATlantic, and they're interested in what they find because htey can sometimes be useful but also it just adds to the ocean trash situation which is not good; because of their need to remain undetected and mobile, they don't keep a lot of unnecessary items.

### 1.4 Society

Everyone is mostly spread out because there's space to do that in the ocean, but "highway" travel via currents (e.g. Gulf stream); mostly live in nomadic tribes (pods, like whales) that belong to geographic kingdoms, but distance means royalty is not relaly part of daily life; generally peaceful, since there's a lot of pressure to exist off humans' radar and survive in over-fished oceans.

### 1.5 Values

Good things are associated with ocean currents, which bring warm and nutrient-filled waters as well as food and a means of travel; storms are not good because the rain and turbulent water makes it hard to hear at a distance; whales are very good because they are a source of food and are mysterious and majestic.

## 1.6 Mythology: ʒem and safi

The story of the oceans goes something like this:

Back when the world was young, the earth was bored and wished to fill the world with creatures to watch over. But the world is a big place, and filling it would take time, so Earth called on all their children to help them. To their youngest children, ʒem and safi, two giant saltwater catfish, they gave the responsibility of filling the oceans.

ʒem and safi soon began to struggle with their tasks. Their personalities were just too different, and all they could agree to make in those first days were flatworms and sea cucumbers. So they spoke to Earth, who divided the oceans between the two.

To ʒem, they gave all the places the light could touch under the water. ʒem, who loved to run and play and especially loved to eat, crafted his world in his vision. He filled the coasts and the reefs with millions of different fish so he'd never get bored, and filled the open ocean with huge schools of fish so he'd never go hungry.

To safi, the Earth gave the deepest parts of the sea, where light would never reach from above. safi, who had a deep love of sleeping, dozing, and napping, took her time. As ʒem created every variation of fish and crustacean he could imagine, safi slept. While she slept, she dreamt. And out of those dreams crawled the strangest, most bizarre creatures to grace the planet.

Eventually, ʒem's creations drew hungry humans to the water, and the merpeople retreated away from the abundance and variety of ʒem's waters to the safety of safi's dark and strange domain.

## 1.7 Metaphors

**Whales:** live in pods and are mysterious because they spend time above/near the surface (where mer-people can't/dont go because they can't breathe air and are afraid of humans) to breathe, then make deep dives for food (so they live both at the surface and in the deep); too big for meeple to hunt, but are a windfall of food and resources when they die.

Conceptual metaphor: People (target) are whales (source)

1. he's breaching → he's taking a risk for unknown reason (dating back to before mermaids realized whales need to breach to breath)
2. a dolphin → someone who isn't a useful resource to the tribe (based on the premise that dolphins are fake tiny whales)

Conceptual metaphor: Opportunities (target) are whales (source)

1. a fat opportunity → an opportunity that yields large positive results
2. a diving opportunity → it's coming closer (time-wise) / getting closer within the realm of possibility

## 1.8 Time

Time is usually not precisely told, so it's reported to the closest hour. When discussing lengths of time, it's acceptable to use fractions of hours (e.g. *meet me in 1/3 hour*), and then most people just estimate how long that is as timekeeping is a difficult art underwater.

The numbers six and 12 are important to these meeple, as each merson has 12 fingers, or six sets of webbed pairs (two thumbs, index and middle, and ring and pinky fingers, to use human analogues). Each year is divided into five months, each named after an animal historically hunted in that month. Each month has six *aifē* ("weeks") of twelve *ayfiē* (days) each and with 5 days at the end of the year not in any month. The days of the week are named after fingers on the hand, starting from right to left.

The time system is based on the tides, dating back to when this civilization lived close enough to the coast to be affected by the tides. Even though they have moved away from the coasts toward open ocean and the deeps, they still use the established system of keeping time.

Each day is divided into 4 sections of six hours, originally based off the tidal schedule. Each hour has (about) 60 minutes (like human hours). The first section of the day starts around what we'd call 5:00 AM. Time is told by how many hours into a section have passed.

| Time (human) | Language (IPA) | English (literal)   |
|--------------|----------------|---------------------|
| 5:00-11:00   | ziɜm           | rising tide         |
| 11:00-16:00  | saɜm           | falling tide        |
| 16:00-23:00  | aɲziɜm         | second rising tide  |
| 23:00-5:00   | aɲsaɜm         | second falling tide |

Table 1.1: The four sections of the day

# Phonology

## 2.1 Inventory

|              | Labial           | Labiodental | Dental | Alveolar         | Palato-Alveolar | Velar            | Glottal |
|--------------|------------------|-------------|--------|------------------|-----------------|------------------|---------|
| Nasal        | m                |             |        | n                |                 | ŋ                |         |
| Plosive      | p p <sup>h</sup> |             |        | t t <sup>h</sup> |                 | k k <sup>h</sup> |         |
| Affricate    |                  |             |        |                  |                 |                  |         |
| Fricative    |                  | f           | θ      | s z              | ʃ ʒ             | x                | h       |
| Approx.      |                  |             |        | r                |                 |                  |         |
| Lat. approx. |                  |             |        | l                |                 |                  |         |
| Glide        | w                |             |        |                  |                 |                  |         |
| Click        | ǀ                |             |        | ǁ                | ǃ               |                  |         |

Table 2.1: Consonants

|           | Front     | Central | Back      |
|-----------|-----------|---------|-----------|
| High      | i iː y yː |         | u uː ʊ ʊː |
| Near-High | ɪ ɪː      |         | ʊ ʊː      |
| High-Mid  | e eː      |         |           |
| Mid       |           | ə əː    |           |
| Low-Mid   | ɛ ɛː      |         | ʌ ʌː      |
| Near-Low  | æ æː      |         |           |
| Low       |           |         | ɑ ɑː      |

Table 2.2: Vowels

## 2.2 Phonological Rules

In order of application:

1.  $(C/V)_1 \wedge (C/V)_1 \rightarrow C_1\text{:} / \text{---}$   
 Adjacent identical sounds across morpheme boundary changes into sound + long.  
*e.g.*  $\text{ʊmɾi} + \text{ini} \rightarrow \text{ʊmɾi:ni}$
2.  $\emptyset \rightarrow [\varepsilon] / C_{[+manner1]} \wedge \text{---} C_{[+manner1]}$   
 $\varepsilon$  epenthesized between adjacent consonants of same manner of articulation at morpheme boundary  
*e.g.*  $\text{ɲeʒ} + \text{simʊ} \rightarrow \text{ɲeʒ\varepsilon simʊ}$
3.  $C_{[+stop]} \rightarrow C_{[+nasal]} / \text{---} (C/V)$   
 Stops change to nasals when they are not word-final  
*e.g.*  $\text{ak}^h + \text{ziʒim} \rightarrow \text{aɳziʒim}$

NB: order of application matters!  
 $\text{ak}^h + \text{ɲɪap}^h \not\rightarrow \text{aɲɛɲɪap}^h$   
 $\text{ak}^h + \text{ɲɪap}^h \rightarrow \text{aɲɪap}^h$

## 2.3 Syllable Structure

Allowed Syllable Structures:

1.  $(C_{[-stop]})(C_{[-stop]})V$
2.  $V(C_{[-stop]})(C_{[-stop]})(C)$
3.  $(C)$
4.  $V*$
5.  $V*(C_{[-stop]})V*$

Stops must be word-final.



## Chapter 3

# Counting and Numbers

### 3.1 Numerals

The number system of this language is in base 12, because each hand has 6 fingers. Numbers 0-12 have their own words, numbers 13-15 are compounds with some irregularity, and all numbers beyond are also compounds formed the same way but regularly. Compounds take the form *number* + /fie/ (**'and' used for adding numbers**) + **number**. 24 is its own word, and other multiples of 12 are compounds of the form *k twelve*.

|    | Language         | English (literal) |    | Language              | English (literal)   |
|----|------------------|-------------------|----|-----------------------|---------------------|
| 1  | fiv              | one               | 13 | anfieū                | twelve and one      |
| 2  | ak <sup>h</sup>  | two               | 14 | anfiea                | twelve and two      |
| 3  | sa               | three             | 15 | anfiesa               | twelve and three    |
| 4  | ŋeʒ              | four              | 16 | anfieŋeʒ              | twelve and four     |
| 5  | mʊt <sup>h</sup> | five              | 17 | anfiemʊt <sup>h</sup> | twelve and five     |
| 6  | æmp <sup>h</sup> | six               | 18 | anfieæmp <sup>h</sup> | twelve and six      |
| 7  | eiə              | seven             | 19 | anfie:iə              | twelve and seven    |
| 8  | esl              | eight             | 20 | anfie:sl              | twelve and eight    |
| 9  | fii              | nine              | 21 | anfiefi               | twelve and nine     |
| 10 | is               | ten               | 22 | anfieir <sup>h</sup>  | twelve and ten      |
| 11 | fʊf              | eleven            | 23 | anfiēfʊf              | twelve and eleven   |
| 12 | at <sup>h</sup>  | twelve            | 24 | hʊtʃ                  | twenty four         |
|    |                  |                   | 25 | hʊtʃfiēfiū            | twenty four and one |

Table 3.1: Some number examples

Numbers modifying nouns agree with the nouns they modify in number and case and appear after all adjectives modifying that noun.

*e.g. four hours*

1. xēnfie ŋeʒfie  
xēn    -fie        ŋeʒ    -fie  
hour   -NOM.PL   four   -NOM.PL  
hours               four  
'four hours(NOMINATIVE)'
2. xēnɪ ŋeʒɪ  
xēn    -ɪ        ŋeʒ    -ɪ  
hour   -ACC.PL   four   -ACC.PL  
hours               four  
'four hours(ACCUSATIVE)'

3. xɛnsfɛ ɲeʒsfɛ  
 xɛn -sfɛ ɲeʒ -sfɛ  
 hour -POSS.PL four -POSS.PL  
 its-hours its-four  
 ‘four hours(POSSESSIVE)’

4. xɛnə ɲeʒə  
 xɛn -ə ɲeʒ -ə  
 hour -ADPOS.PL four -ADP.PL  
 hours four  
 ‘four hours(ADPOSITIVE)’

## 3.2 Ordinals

Ordinals do not agree with the nouns they modify in case and number. Rather, they are formed by attaching to the beginning of nouns they modify as a clitic.

*e.g.*

1. rising tide : zɪʒɪm  
 second rising tide : ak<sup>h</sup> + zɪʒɪm → aɲzɪʒɪm
2. fish: ʃɪɛʃɪ  
 second fish: ak<sup>h</sup> + ʃɪɛʃɪ → aɲʃɪɛʃɪ  
 third fish: sa + ʃɪɛʃɪ → saʃɪɛʃɪ  
 eighth fish: esl + ʃɪɛʃɪ → eslʃɪɛʃɪ  
 25th fish: fɪʊtʃɪɛfɪʊ + ʃɪɛʃɪ → fɪʊtʃɪɛfɪʊʃɪɛʃɪ

# Chapter 4

## Noun Morphology

### 4.1 Plurals

For singular and dual nouns, if no number is included then it is an implicit one or two respectively. For plural nouns, either a number must be specified or the word *slix*, meaning *some unspecified amount*, must be used.

*e.g. red tail-fin(s)*

saip<sup>h</sup> flims  
saiph<sup>h</sup> -Ø flims -Ø  
tail-fin -NOM.SG red -NOM.SG  
tail-fin red  
'red tail-fin'

sam: flimsm  
sam -m flims -m  
tail-fin -NOM.DU red -NOM.DU  
tail-fin -s red  
'(two) red tail-fins'

samfie flimsfie safie  
sam -fie flims -fie sa -fie  
tail-fin -NOM.PL red -NOM.PL three -NOM.PL  
tail-fin -s red three  
'three red tail-fins'

samfie flimsfie slixfie  
sam -fie flims -fie slix -fie  
tail-fin -NOM.PL red -NOM.PL some -NOM.PL  
tail-fin -s red some  
'some red tail-fins'

### 4.2 Case Endings

Nouns have **number** (singular, dual, plural) and **case** (nominative, accusative, possessive, and adpositive (used in adpositional phrases)). The number and case are indicated with suffixed morphemes, where each combination of number and case has a different morpheme. The nominative singular form is marked with a null morpheme.

#### 4.2.1 Accusative Case

The accusative case is most often used without an adposition to indicate a noun is the object of a transitive verb.

*e.g.*

| Number | Nominative | Accusative | Possessive      | Adpositive |
|--------|------------|------------|-----------------|------------|
| SG     | -∅         | -aɪ        | ɪt <sup>h</sup> | -a         |
| DU     | -m         | -iɪ        | -wɛ             | -i         |
| PL     | -fiɛ       | -ɪ         | -sfɛ            | -ə         |

Table 4.1: Case endings

saɪaɪ ʃlɪmsaɪ  
*saɪ* -aɪ *ʃlɪms* -aɪ  
tail-fin -ACC.SG red -ACC.SG  
tail-fin red  
‘red tail-fin’

#### 4.2.2 Nominal Possession (Possessive Case)

Possession is shown by marking the possessive case on the possessed, with no marking on the possessor. Possessed nouns can be **alienable** or **inalienable**, which affects the word order within the noun phrase. Alienable nouns appear before the possessor, and inalienable nouns appear after the possessor.

*e.g.*

saɪp<sup>h</sup> ɲɛwfiɪt<sup>h</sup>  
*saɪp<sup>h</sup>* -∅ *ɲɛwfiɪ* -ɪt<sup>h</sup>  
tail-fin -SG.NOM color -SG.POSS  
tail-fin its-color  
‘tail-fin’s color’

ʃɪɛfɪt<sup>h</sup> wlat<sup>h</sup>  
*ʃɪɛfɪ* -ɪt<sup>h</sup> *wlat<sup>h</sup>*  
fish -SG.POSS 1.SG.PRO  
its-fish it  
‘its fish’

wlat<sup>h</sup> fiɛmuɪt<sup>h</sup>  
*wlat<sup>h</sup>* *fiɛmuɪ* -ɪt<sup>h</sup>  
1.SG.PRO head -SG.POSS  
it its-head  
‘its head’

saɪp<sup>h</sup> ɲɛwfiɪt<sup>h</sup>  
*saɪp<sup>h</sup>* -∅ *ɲɛwfiɪ* -ɪt<sup>h</sup>  
tail-fin -SG.NOM color -SG.POSS  
tail-fin its-color  
‘tail-fin’s color’

In the examples above, a fish is not inalienable to a merson (mer-person), but color is inalienable to a tail-fin and a merson’s head is inalienable to a merson. Comparison between examples 2 and 3 demonstrates the word order difference between alienable and inalienable possessives.

Nominal possession can be applied recursively, where the possession is applied first to the head, then to each possessor. A brief example:

ʃɪɛfɪt<sup>h</sup> ɲɛwfiɪt<sup>h</sup> wlat<sup>h</sup>  
*ʃɪɛfɪ* -ɪt<sup>h</sup> *ɲɛwfiɪ* -ɪt<sup>h</sup> *wlat<sup>h</sup>*  
fish -SG.POSS color -textscsg.poss 1.SG.PRO  
its-fish its-color me

‘my fish’s color’

For more examples of recursion, see Section 5.2.

### 4.2.3 Adpositive Case

This case is taken by nouns in adpositional phrases. The adposition is in most cases suffixed (postposition) to the last word in the adpositional phrase. These can be used to indicate a location, position, indirect object, or more.

*e.g. indirect object*

ʃ:ɛʃ:ɑmat<sup>h</sup>  
ʃ:ɛʃ: -a -mat<sup>h</sup>  
fish -SG.ADP -IO.POST  
fish to  
‘to a fish’

ʃ:ɛʃ:imat<sup>h</sup>  
ʃ:ɛʃ: -i -mat<sup>h</sup>  
fish -DU.ADP -IO.POST  
fish two to  
‘to two fish’

*e.g. instrument*

anɪlziɑsi  
anɪlzi -ɑ -si  
whale-bone -SG.ADP -INSTR.POST  
whale-bone using  
‘using a whale-bone’

anɪlzi:si  
anɪlzi -i -si  
whale-bone -DU.ADP -INSTR.POST  
whale-bone two using  
‘using two whale-bones’

*e.g. in*

ʃ:ɛʃ:ɑsɛ  
ʃ:ɛʃ: -ɑ -sɛ  
fish -SG.ADP -INE.POST  
fish in  
‘in a fish’

ʃ:ɛʃ:ə slɪxəsɛ  
ʃ:ɛʃ: -ə slɪx -ə -sɛ  
fish -PL.ADP some -PL.ADP -INE.POST  
fish some in  
‘in some fish’

*e.g. into*

ʃ:ɛʃ:asei  
ʃ:ɛʃ: -ɑ -sei  
fish -SG.ADP -ILL.POST  
fish in  
‘into a fish’

ʃ:ɛʃ:ə slɪxəsei  
 ʃ:ɛʃ: -ə      slɪx      -ə      -sei  
 fish -PL.ADP some -PL.ADP -ILL.POST  
 fish              some              in  
 ‘into some fish’

### 4.3 Pronouns

Pronouns have **number** (singular, dual, plural), **person** (1st, 2nd inclusive, 2nd exclusive, 3rd), and **case** (nominative, accusative, and adpositive (used in adpositional phrases)). Meeple (mer-people) do not have gender or sex, as is reflected in the language, so third person singular pronouns are applied the same to all individuals and also things. Pronouns do not have a possessive case because people cannot be owned (relation is not shown through possession).

| Number | Person | Nominative         | Accusative | Adpositive |
|--------|--------|--------------------|------------|------------|
| SG     | 1      | wlat <sup>h</sup>  | wlanɑɪ     | wlanɑ      |
|        | 2      | zɛm                | zɛmɑɪ      | zɛmɑ       |
|        | 3      | ʒɑ                 | ʒɑɑɪ       | ʒɑɑ        |
| DU     | 1 inc  | slap <sup>h</sup>  | slamiɪ     | slami      |
|        | 1 exc  | slan!              | slaniɪ!    | slani!     |
|        | 2      | zɛɑ                | zɛaiɪ      | zɛai       |
|        | 3      | ʒɛnt <sup>h</sup>  | ʒɛniɪ      | ʒɛni       |
| PL     | 1 inc  | nɛʃ                | nɛʃɪ       | nɛʃə       |
|        | 1 exc  | nɛʃ!               | nɛʃɪ!      | nɛʃə!      |
|        | 2      | sɛi                | sɛiɪ       | sɛiə       |
|        | 3      | ʒɛint <sup>h</sup> | ʒɛinɪɪ     | ʒɛinə      |

Table 4.2: Table of Pronouns

*e.g.*

ʃ:ɛʃ:ɪt<sup>h</sup> wlat<sup>h</sup>  
 ʃ:ɛʃ: -ɪt<sup>h</sup>      wlat<sup>h</sup>  
 fish -SG.POSS me  
 its-fish me  
 ‘my fish’

ʃ:ɛʃ:ɪt<sup>h</sup> ʒɑ  
 ʃ:ɛʃ: -ɪt<sup>h</sup>      ʒɑ  
 fish -SG.POSS it  
 its-fish it  
 ‘its fish’

ʃ:ɛʃ:ɪt<sup>h</sup> slap<sup>h</sup>  
 ʃ:ɛʃ: -ɪt<sup>h</sup>      slap<sup>h</sup>  
 fish -SG.POSS 1.DU.INCL  
 its-fish you-and-me  
 ‘our fish’

ʃ:ɛʃ:ɪt<sup>h</sup> slan!  
 ʃ:ɛʃ: -ɪt<sup>h</sup>      slan!  
 fish -SG.POSS 1.DU.EXCL  
 its-fish two-of-us-but-not-you  
 ‘our fish’

To see how possession works in these examples, see Section 5.1.

# Chapter 5

## Noun Phrases

### 5.1 Possession

Possession is shown by marking the possessive case on the possessed, with no marking on the possessor. Possessed nouns can be **alienable** or **inalienable**, which affects the word order within the noun phrase. Alienable nouns appear before the possessor, and inalienable nouns appear after the possessor.

*e.g.*

saip<sup>h</sup> ηεwfiɾt<sup>h</sup>  
saip<sup>h</sup> -∅      ηεwfiɾ    -it<sup>h</sup>  
tail-fin -SG.NOM    color    -SG.POSS  
tail-fin                its-color  
‘tail-fin’s color’

saip<sup>h</sup> ηεwfiɾt<sup>h</sup>  
saip<sup>h</sup> -∅      ηεwfiɾ    -it<sup>h</sup>  
tail-fin -SG.NOM    color    -SG.POSS  
tail-fin                its-color  
‘tail-fin’s color’

f:ef:ɪt<sup>h</sup> wlat<sup>h</sup>  
f:ef:ɪ    -it<sup>h</sup>      wlat<sup>h</sup>  
fish    -SG.POSS    1.SG.PRO  
its-fish                it  
‘its fish’

wlat<sup>h</sup> fiεmunt<sup>h</sup>  
wlat<sup>h</sup>      fiεmunt    -it<sup>h</sup>  
1.SG.PRO    head    -SG.POSS  
it                its-head  
‘its head’

In the examples above, a fish is not inalienable to a merson (mer-person), but color is inalienable to a tail-fin and a merson’s head is inalienable to a merson. Comparison between examples 2 and 3 demonstrates the word order difference between alienable and inalienable possessives.

Nominal possession can be applied recursively, where the possession is applied first to the head, then to each possessor. A brief example:

f:ef:ɪt<sup>h</sup> ηεwfiɾt<sup>h</sup> wlat<sup>h</sup>  
f:ef:ɪ    -it<sup>h</sup>      ηεwfiɾ    -it<sup>h</sup>                wlat<sup>h</sup>  
fish    -SG.POSS    color    -textscsg.poss    1.SG.PRO  
its-fish                its-color                me  
‘my fish’s color’

For more examples of recursion, see Section 5.2.

## 5.2 Recursion

Nominal possession can be applied recursively, where the possession is applied first to the head, then to each possessor, applying the ordering rules for alienable/inalienable nouns. For cases of multiple levels of recursion in the same noun phrase, word ordering can lead to ambiguity. Thus, for complex recursive nominal possession, any important words in the phrase are pulled to the beginning of the sentence and the rest of the possessive phrase is left to the audience to be understood from context.

*e.g.*

saip<sup>h</sup> ηεwfi<sup>h</sup>  
 saip<sup>h</sup> -∅ ηεwfi -it<sup>h</sup>  
 tail-fin color -1.SG.POSS  
 tail-fin its-color  
 ‘tail-fin’s color’

samit<sup>h</sup> ηεwfi<sup>h</sup> S:eS:  
 saim -it<sup>h</sup> ηεwfi -it<sup>h</sup> f:ef:  
 tail-fin -1.SG.POSS color -1.SG.POSS fish  
 its-tail-fin its-color fish  
 ‘fish’s tail-fin’s color’

ηεwfi<sup>h</sup> samit<sup>h</sup> f:ef:it<sup>h</sup> ama  
 ηεwfi -it<sup>h</sup> saim -it<sup>h</sup> f:ef: -it<sup>h</sup> ama  
 color -1.SG.POSS tail-fin -1.SG.POSS fish 1.SG.POSS parent  
 its-color its-tail-fin its-fish parent  
 ‘parent’s fish’s tail-fin’s color’

We know in example 2 that the translation cannot be *fish’s color’s tail-fin* because color is inalienable, so its possessor comes before it. We can apply this same logic to example 3, also knowing that fish is alienable to parent, so it must be *paren’ts fish’s...* rather than *fish’s parent...*

## 5.3 Quantifiers and Definiteness

Quantifiers and definite articles modify nouns and thus agree with the nouns they modify in number and case. For the quantifier nem, even if all of the noun in question is just one, they take the plural. Quantifiers and definite articles are listed after adjectives in use.

*e.g. all*

f:ef: flims nem  
 f:ef: -∅ flims -∅ nem -∅  
 fish red all  
 fish red all  
 ‘all red fish’

*e.g. definiteness*

f:ef: flims sim  
 f:ef: -∅ flims -∅ sim -∅  
 fish red specific  
 fish red specific  
 ‘specific red fish’

f:ef:a flimsa simamat<sup>h</sup>  
 f:ef: -a flims -a sim -a -mat<sup>h</sup>  
 fish -SG.ADP red -SG.ADP specific -SG.ADP -textipao.post  
 fish red specific to  
 ‘to the specific red fish’



## 5.4 Adjectives

Adjectives agree with the nouns they modify in number and case.

*e.g.*

ʃ:ɛf: ʃlɪms  
 ʃ:ɛf: -∅ ʃlɪms -∅  
 fish -NOM.SG red -NOM.SG  
 fish red  
 ‘red fish’

ʃ:ɛf:m ʃlɪmsm aɪm  
 ʃ:ɛf: -m ʃlɪms -m aɪm -m  
 fish -NOM.DU red -NOM.DU two -NOM.DU  
 fish red two  
 ‘two red fish’

Adjectives can be negated in two ways producing two different negations:

1. By suffixing *nɛʒ* to the adjective stem, meaning not-*adjective*, as in ”not happy, but some other emotion”
2. By suffixing *nɛnɛʒ* to the adjective stem, meaning opposite-*adjective*, as in ”opposite of happy i.e. unhappy”

*e.g.*

ʃ:ɛf: ʃlɪmsnɛʒ  
 ʃ:ɛf: -∅ ʃlɪms -nɛʒ -∅  
 fish -NOM.SG red -NEG -NOM.SG  
 fish red not  
 ‘not-red fish’

ʃ:ɛf: i:æfnɛʒ  
 ʃ:ɛf: -∅ i:æf -nɛʒ -∅  
 fish -NOM.SG quick -NEG -textscnom.sg  
 fish quick not  
 ‘not-quick fish’

ʃ:ɛf: ʃlɪmsnɛʒ  
 ʃ:ɛf: -∅ ʃlɪms -nɛnɛʒ -∅  
 fish -NOM.SG red -NEG -NOM.SG  
 fish red -opp  
 ‘green fish’

ʃ:ɛf: i:æfnɛnɛʒ  
 ʃ:ɛf: -∅ i:æf -nɛʒ -∅  
 fish -NOM.SG quick -NEG -textscnom.sg  
 fish quick -un  
 ‘slow fish’

## 5.5 Word Order

Adjectives modifying nouns appear after the nouns they modify. If multiple adjectives modify the same noun, they all follow that noun. Numbers modifying a noun follow other adjectives. Quantifiers/determiners follow numbers. Alienable possessed nouns (with possessive marker) appear before the possessor, and inalienable possessed nouns appear after the possessor.

*e.g. ordinal + adjective*

aŋʃ:ef: ʃlɪms  
 aŋ- ʃ:ef: -Ø ʃlɪms  
 second fish -NOM.SG red  
 second fish red  
 ‘second red fish’

*e.g. possessive + definiteness*

ʃ:ef:ɪt<sup>h</sup> sɪmɪt<sup>h</sup> wlat<sup>h</sup>  
 ʃ:ef: -ɪt<sup>h</sup> sɪm -ɪt<sup>h</sup> wlat<sup>h</sup>  
 fish -SG.POSS specific -SG.POSS me  
 its-fish its-specific me  
 ‘my specific fish’

*e.g. possessive + quantifier*

ʃ:ef: samsfɛ nɛmsfɛ  
 ʃ:ef: -Ø sɪm -sfɛ nɛm -sfɛ  
 fish -NOM.SG tail-fin -PL.POSS all -PL.POSS  
 fish its-tail-fin -s its-all  
 ‘all of the fish’s tail-fins’

*e.g. possessive + quantifier + definiteness + ordinals + adjectives + numbers + recursion*

ʃ:ef:ɪt<sup>h</sup> nɛmɪt<sup>h</sup> aŋsɪmwe ʃlɪmswe aŋwe sɪmwe amam sɪm:  
 ʃ:ef: -ɪt<sup>h</sup> nɛm -ɪt<sup>h</sup> aŋ- sɪm -wɛ ʃlɪms -wɛ aŋ -wɛ  
 fish -SG.POSS all -SG.POSS second- tail-fin -DU.POSS red -DU.POSS two -DU.POSS  
 its-fish its-all second- its-tail-fin its-red its-two  
 sɪm -wɛ ama -m sɪm -m  
 specific -DU.POSS parent -DU.NOM specific -DU.NOM  
 its-specific parent -s specific  
 ‘two specific red second tail-fins possessed by all the fishes belonging to two specific parents’

## Chapter 6

# Verb Morphology

Verbs have **number** (singular, dual, plural) and **person** (first, second, third), **tense** (past, present, future), **perfectivity** (perfect, imperfect).

### 6.1 Number, Person, Tense

The number, person, and tense are indicated with unique suffixed morphemes, as indicated indicated in the tables below.

| PRS | Person | Ending            | PST | Person | Ending               | FUT | Person | Ending            |
|-----|--------|-------------------|-----|--------|----------------------|-----|--------|-------------------|
| SG  | 1      | -εt <sup>h</sup>  | SG  | 1      | -εm                  | SG  | 1      | -iwi              |
|     | 2      | -ε                |     | 2      | -εma                 |     | 2      | -ini              |
|     | 3      | -a                |     | 3      | -ama                 |     | 3      | -ima              |
| DU  | 1.INCL | -εms              | DU  | 1.INCL | -εmsala              | DU  | 1.INCL | -ila              |
|     | 1.EXCL | -εmsa             |     | 1.EXCL | -εmsalt <sup>h</sup> |     | 1.EXCL | -ilt <sup>h</sup> |
|     | 2      | -υιθ              |     | 2      | -υιθα                |     | 2      | -ιθ               |
|     | 3      | -lit <sup>h</sup> |     | 3      | -lin:a               |     | 3      | -im               |
| PL  | 1.INCL | -ειθ              | PL  | 1.INCL | -ειθε                | PL  | 1.INCL | -ειθi             |
|     | 1.EXCL | -αιθ              |     | 1.EXCL | -αιθε                |     | 1.EXCL | -αιθi             |
|     | 2      | -eai              |     | 2      | -eame                |     | 2      | -ιθl              |
|     | 3      | -lit <sup>h</sup> |     | 3      | -lin:e               |     | 3      | -iml              |

Table 6.1: Present, past, and future tense verb endings

*e.g.*

ʃ:ɛʃ:ɪ slɪx.ɪ msa  
ʃ:ɛʃ: -ɪ slɪx -ɪ ms -a  
fish -PL.ACC some -PL.ACC have -3.SG.PRS  
fish some have  
'He has had some fish.'

ʃ:ɛʃ:ɪ slɪx.ɪ msama  
ʃ:ɛʃ: -ɪ slɪx -ɪ ms -ama  
fish -PL.ACC some -PL.ACC have -3.SG.PST  
fish some have  
'He had had some fish.'

ʃ:ɛʃ:ɪ slɪx.ɪ msa  
ʃ:ɛʃ: -ɪ slɪx -ɪ ms -ima  
fish -PL.ACC some -PL.ACC have -3.SG.FUT  
fish some have  
'He will have had some fish.'

## 6.2 Aspect

Imperfective aspect is marked with the /wat<sup>h</sup>/ suffix (attached behind the number-person-tense morpheme). If unmarked, then aspect is unspecified.

*e.g.*

ʊm:ɪɛma  
ʊm:ɪ -ɛma  
swim -2.SG.PRS  
swim  
'You have swum.'

ʊm:ɪɛmawat<sup>h</sup>  
ʊm:ɪ -ɛma -wat<sup>h</sup>  
swim -2.SG.PRS -IMPF  
swim  
'You are swimming.'

ʊs:ama  
ʊs: -ama  
swim -3.SG.PST  
swim  
'You had heard.'

ʊs:amawat<sup>h</sup>  
ʊs: -ama -wat<sup>h</sup>  
swim -3.SG.PST -IMPF  
swim  
'You were hearing.'

# Chapter 7

## Verb Phrases

### 7.1 Adverbs

Adverbs can be formed from adjectives by adding the verb ending to the nominative singular adjective (the stem).

*e.g.*

S:eS: i:æf

*f:ef:* -Ø      *i:æf* -Ø

fish -SG.NOM    quick -SG.NOM

fish                quick

‘The fish is quick.’

S:eS: i:æfa IENa

*f:ef:* *i:æf*      -a      *lɛk<sup>h</sup>* -a

fish    quick.ADV -3.SG.PRS    flap -3.SG.PRS

fish    quickly                    flap

‘The fish flaps quickly.’

S:eS: i:æf i:æfa IENa

*f:ef:* *i:æf*    *i:æf*      -a      *lɛk<sup>h</sup>* -a

fish    quick    quick.ADV -3.SG.PRS    flap -3.SG.PRS

fish    quick    quickly                    flap

‘The quick fish flaps quickly.’

### 7.2 Word Order

Adverbs modifying verbs occur before the verb and agree in number, person, tense, and aspect. *e.g.*

S:eS: i:æfa Um:ia

*f:ef:* *i:æf*      -a      *um:i* -a

fish    fast.ADV -3.SG.PRS    swim -3.SG.PRS

fish    quickly                    swim

‘The fish swims quickly.’

S:eS: s2i:æfa Um:ia

*f:ef:* *i:æf*    -a      *um:i*      -a

fish    NEG- fast.ADV -3.SG.PRS    swim -3.SG.PRS

fish    not    quickly                    swim

‘The fish does not swim quickly.’

(Negation is discussed in Section 8.3.)

# Chapter 8

## Sentences

### 8.1 To Be (Or Not To Be)

Zero copula encoding is mandatory for constructions involving predicate nominals. The order of the nominals is left to the speaker to decide, and tense is understood from context. Ambiguity is resolved through context as well.

*e.g.*

S:eS: SIIms

*f:ef: flims*

fish red

fish red

‘The fish is red.’

SIIms S:eS:

*flims f:ef:*

red fish

red fish

‘The fish is red.’

wlAt<sup>h</sup> eNek<sup>h</sup>

wlat<sup>h</sup> eyek<sup>h</sup>

1.SG.NOM.PRON trash

I trash

‘I am/was/will be trash.’

### 8.2 Transitive and Intransitive

#### 8.2.1 Active Voice

All sentences are nominative-accusative. For transitive sentences, the subject is in the nominative and the object is in the accusative. For intransitive sentences, the subject is in the nominative. The verb must agree with the subject in number.

*e.g.*

naUnIIHe sIIxHe naUmlinwAt<sup>h</sup>

naʊnl -fie slix -fie naʊm -lit<sup>h</sup> -wat<sup>h</sup>

whale -PL.NOM some -PL.NOM sing -3.PL.PRS -IMPF

whale -s some sing

‘Some whales are singing.’

naUnIIHe sIIxHe slAmir !amsinwAt<sup>h</sup>

naʊnl -fie slix -fie slamir !amsit<sup>h</sup> -it<sup>h</sup> -wat<sup>h</sup>

whale -PL.NOM some -PL.NOM -1.INCL.DU.NOM.PRON eat -3.PL.PRS -IMPF

whale -s some two-of-us-but-not-you eat

‘Some whales are eating us.’

Adpositional phrases follow the subject noun phrase and precede the object.

naUnIlHe sIlxHe wUlTasei Um:ilit<sup>h</sup>  
*naʊnɪl -fiə sɪlx -fiə wʊʌθ -a -sei ʊm:i -lit<sup>h</sup>*  
 whale -PL.NOM some -PL.NOM water-mass -SG.ADP -into.POST swim -3.PL.PRS  
 whale -s some water-mass into swim  
 ‘Some whales have swum into the water mass.’

anIlzi:si l2mAsr EmImliwi  
*anɪlzi -i -si lɒmas -ɪ ɛmɪml -iwi*  
 whale-bone -DU.ADP -using.POST hagfish -SG.ACC attack -1.SG.FUT  
 whale-bone -s using hagfish attack  
 ‘I will attack the hagfish using two whale-bones.’

## 8.2.2 Passive Voice

In passive voice sentences, the agent is indicated by the adpositive + *si*, while the patient is in the nominative. Passive voice verbs are indicated by prefixing *zis* to the verb stem and agree with the word in the nominative in number.

*e.g.*

wlat<sup>h</sup> simʊɪ ɛmɪmlɛnwat<sup>h</sup>  
*wlat<sup>h</sup> simʊ -ɪ ɛmɪml -ɛt<sup>h</sup> -wat<sup>h</sup>*  
 1.SG.NOM.PRON iceberg -SG.ACC attack -1.SG.PRS -IMPF  
 I iceberg attack  
 ‘I am attacking the iceberg.’

simʊ wlanasi zisɛmɪmlawat<sup>h</sup>  
*simʊ wlanə -si zɪs- ɛmɪml -a -wat<sup>h</sup>*  
 iceberg 1.SG.ADP.PRON -by.POST PASS- attack -3.SG.PRS -IMPF  
 iceberg me by attack  
 ‘The iceberg is being attacked by me.’

wlat<sup>h</sup> simʊasi zisɛmɪmlɛnwat<sup>h</sup>  
*wlat<sup>h</sup> simʊ -a -si zɪs- ɛmɪml -ɛt<sup>h</sup> -wat<sup>h</sup>*  
 1.SG.NOM.PRON iceberg -SG.ADP -by.POST PASS- attack -1.SG.PRS -IMPF  
 I iceberg by attack  
 ‘I am being attacked by the iceberg.’

Some verbs are automatically in the passive voice, do not take the passive prefix, and cannot be used as an active verb.

*e.g.*

naʊnɪlm wlanasi ʃylθm  
*naʊnɪl -m wlanə -si ʃylθ -ɪm*  
 whale -DU.NOM 1.SG.ADP.PRON -by.POST follow.PASS -3.du.fut  
 whale -s me -by.POST follow -  
 ‘The whales will be followed by me → I will follow the whales’

## 8.3 Negation

Negation can be expressed in two ways. For sentences containing a verb, the clitic /sɒ-/ is attached to the beginning of the verb phrase. *e.g.*

lɒmasaɪ fiɛt<sup>h</sup>  
*lɒmas -aɪ fiɛi -ɛt<sup>h</sup>*  
 hagfish -SG.ACC smell -1.SG.PRS  
 hagfish smell  
 ‘I have smelled the hagfish.’

$\lambda mas a i \text{ } s a f e i e t^h$   
 $\lambda mas \quad -ar \quad sa- \quad f e i \quad -e t^h$   
 hagfish -SG.ACC NEG- smell -1.SG.PRS  
 hagfish not smell  
 ‘I have not smelled the hagfish.’

For sentences without a verb,  $\exists e$  (*no*) is added to the end of the sentence. *e.g.*

$w l a t^h \text{ } f : e f :$   
 $w l a t^h \quad f : e f :$   
 1.SG.NOM.PRON fish  
 I fish  
 ‘I am a fish.’

$w l a t^h \text{ } S : e S : \text{ } Z E$   
 $w l a t^h \quad f : e f : \quad \exists e$   
 1.SG.NOM.PRON fish no  
 I fish no  
 ‘I am not a fish.’

This gives us two different ways to negate time sentences (Section 8.6.1):

$a \eta z i m \text{ } x e n i \text{ } a \eta i \text{ } \exists e$   
 $a \eta - \quad z i m \quad -\emptyset \quad x e n \quad -i i \quad a \eta \quad -i i \quad \exists e$   
 two- falling tide -NOM.SG hour -ACC.DU two -ACC.DU no  
 second- rising tide hour -s two no  
 ‘It is not 7:00 pm’

$a \eta z i m \text{ } x e n i \text{ } a \eta i \text{ } s a m s a$   
 $a \eta - \quad z i m \quad -\emptyset \quad x e n \quad -i i \quad a \eta \quad -i i \quad s a - \quad m s \quad -a$   
 two- falling tide -NOM.SG hour -ACC.DU two -ACC.DU not have -3.SG.PRS  
 second- rising tide hour -s two not have  
 ‘It is not 7:00 pm’

## 8.4 Possession

Possession is shown using the verb *ins* (*have*). *ins* operates like any other transitive verb, taking a subject and direct object. Both alienable and inalienable possessions are treated the same way.

*e.g.*

$u n i l z i \text{ } \eta e z i \text{ } m s e t^h$   
 $u n i l z i \quad -i \quad \eta e z \quad -i \quad m s \quad -e t^h$   
 whale-bone -PL.ACC four -PL.ACC have -1.SG.PRES  
 whale-bone four have  
 ‘I have four whale-bones.’

$a m a i \text{ } \eta e z i \text{ } m s e m$   
 $a m a \quad -i \quad \eta e z \quad -i \quad m s \quad -e t^h$   
 parent -PL.ACC four -PL.ACC have -1.SG.PRES  
 parent four have  
 ‘I have four parents.’

$s a m s i \text{ } \lambda m a s a i \text{ } m s e t^h$   
 $s a i p^h \quad -s i \quad \lambda m a s \quad -a i \quad m s \quad -e t^h$   
 tail-fin -in.POST hagfish have -1.SG.PRS  
 tail-fin in hagfish have  
 ‘I have a hagfish in my tail-fin.’

Time sentences are formed as possessive sentences (see Section 8.6.1).



## 8.5 Location

Location is marked by a number of postpositions, which take the adpositive case. The most common are *sœ* (*in*), *sei* (*into*), *mei* (*at*), *mia* (*near*), *li* (*through*; preposition, not postposition), and *li* (*below*).

wulθsœ um:iɛt<sup>h</sup>  
*wulθ* -sœ *um:i* -ɛt<sup>h</sup>  
 water-mass -in.POST swim -1.SG.PRS  
 water-mass in swim  
 ‘I swim in the water-mass.’

naʊnɪlm wulθsei wlanasi fylθm  
*naʊnɪl* -m *wulθ* -sei *wlana* -si *fylθ* -im  
 whale -DU.NOM water-mass -into.POST 1.SG.ADP.PRON -by.POST follow -3.du.fut  
 whale -s water-mass into me -by.POST follow  
 ‘I will follow the whales into the water-mass’

eŋfiɑm:ei ʒɑɑɪ us:ɛm  
*eŋfiɑp<sup>h</sup>* -mei *ʒɑɑɪ* us: -ɛm  
 shipwreck -at.POST hear 3.SG.ACC.PRON -1.SG.PST  
 shipwreck at it hear  
 ‘I heard it at the shipwreck.’

wulθmia um:iɛm  
*wulθ* -mia *um:i* -ɛm  
 shipwreck -near.POST swim -1.SG.PST  
 shipwreck near swim  
 ‘I swam near the shipwreck.’

simʊɪli um:iɛm  
*simʊ* -li *um:i* -ɛm  
 iceberg -below.POST swim -1.SG.PST  
 iceberg below swim  
 ‘I swam below the iceberg.’

li wulθ um:iɛm  
*li* *wulθ* *um:i* -ɛm  
 through.PREP water-mass swim -1.SG.PST  
 through water-mass swim  
 ‘I swam through the water-mass.’

Some words are irregular and do not take the adpositive with location words. Two notable examples are *ʒɛm* (the part of the ocean reachable by light) and *safi* (the dark depths of the ocean), which are derived from mermish mythology (mermythology), and are irregular in adpositive and accusative cases and are always inalienable possessors.

li ʒɛm i:æfiwi um:iwi  
*li* *ʒɛm* *i:æf* -iwi *um:i* -iwi  
 through.PREP light-ocean quickly -1.SG.FUT swim -1.SG.FUT  
 through light-ocean quickly swim  
 ‘I will swim quickly through the light-ocean.’

safisi məmamiwi  
*safi* -si *məmap<sup>h</sup>* -iwi  
 deep-ocean -in.POST sleep -1.SG.FUT  
 deep-ocean in sleep  
 ‘I will sleep in the deep-ocean.’

## 8.6 Time

### 8.6.1 Time as a Possession Sentence

Time sentences take the form of a "has" sentence. A time sentence starts with which tide it is in the nominative, followed by the number of hours (or hour, singular) into the tide in the accusative, then the singular third-person form of the verb *to have*. The hours can be modified by *and half* to indicate that it is near the middle of the hour, as it's hard to keep track of exact minutes underwater. It is also valid to use the present third-person verb *begins* or *ends* rather than the hours + *to have* if a new tide has just begun or will begin soon respectively. The *to have* or *one* (when only one hour has passed since a new tide) are sometimes elided.

1. saʒım eıɲa

|              |         |       |           |
|--------------|---------|-------|-----------|
| saʒım        | -Ø      | eıɲ   | -a        |
| falling tide | -NOM.SG | begin | -3.SG.PRS |
| falling tide |         | begin | -s        |

'It is just past 11 am'

2. zıɲım suɭa

|             |         |     |           |
|-------------|---------|-----|-----------|
| zıɲım       | -Ø      | suɭ | -a        |
| rising      | -NOM.SG | end | -3.SG.PRS |
| rising tide |         | end | -s        |

'It is almost 11 am'

3. aɲsaʒım xənı ɲeʒı msa

|                   |              |         |                  |         |      |         |      |           |
|-------------------|--------------|---------|------------------|---------|------|---------|------|-----------|
| ak <sup>h</sup> - | saʒım        | -Ø      | xet <sup>h</sup> | -ı      | ɲeʒ  | -ı      | ms   | -a        |
| two-              | falling tide | -NOM.SG | hour             | -ACC.PL | four | -ACC.PL | have | -3.SG.PRS |
| second-           | falling tide |         | hour             | -s      | four |         | has  |           |

'It is 3 am'

4. aɲzıɲım xənı aɲfiemʊnı msa

|                   |              |         |                  |         |     |      |       |         |      |           |
|-------------------|--------------|---------|------------------|---------|-----|------|-------|---------|------|-----------|
| ak <sup>h</sup> - | zıɲım        | -Ø      | xet <sup>h</sup> | -ı      | aɲ  | -fi  | -mʊn  | -ı      | ms   | -a        |
| two-              | falling tide | -NOM.SG | hour             | -ACC.PL | two | -and | -half | -ACC.PL | have | -3.SG.PRS |
| second-           | rising tide  |         | hour             | -s      | two | and  | half  |         | has  |           |

'It is 7:30 pm'

5. aɲzıɲım xənı aɲfiemʊnı

|                   |              |         |                  |         |     |      |       |         |
|-------------------|--------------|---------|------------------|---------|-----|------|-------|---------|
| ak <sup>h</sup> - | zıɲım        | -Ø      | xet <sup>h</sup> | -ı      | aɲ  | -fi  | -mʊn  | -ı      |
| two-              | falling tide | -NOM.SG | hour             | -ACC.PL | two | -and | -half | -ACC.PL |
| second-           | rising tide  |         | hour             | -s      | two | and  | half  |         |

'It is 7:30 pm'

6. saʒım xənı fıv ar msa

|              |         |                  |         |     |         |      |           |
|--------------|---------|------------------|---------|-----|---------|------|-----------|
| saʒım        | -Ø      | xet <sup>h</sup> | -aı     | fıv | -aı     | ms   | -a        |
| falling tide | -NOM.SG | hour             | -ACC.SG | one | -ACC.SG | have | -3.SG.PRS |
| falling tide |         | hour             |         | one |         | has  |           |

'It is noon'

7. saʒım xənı msa

|              |         |                  |         |      |           |
|--------------|---------|------------------|---------|------|-----------|
| saʒım        | -Ø      | xet <sup>h</sup> | -aı     | ms   | -a        |
| falling tide | -NOM.SG | hour             | -ACC.SG | have | -3.SG.PRS |
| falling tide |         | hour             |         | has  |           |

'It is noon'

8. saʒım xənı

|              |         |                  |         |
|--------------|---------|------------------|---------|
| saʒım        | -Ø      | xet <sup>h</sup> | -aı     |
| falling tide | -NOM.SG | hour             | -ACC.SG |
| falling tide |         | hour             |         |

'It is noon'

9. zizim xeni aji msa

|              |         |                        |         |           |         |           |           |
|--------------|---------|------------------------|---------|-----------|---------|-----------|-----------|
| <i>zizim</i> | -Ø      | <i>xet<sup>h</sup></i> | -iɪ     | <i>aj</i> | -iɪ     | <i>ms</i> | -a        |
| falling tide | -NOM.SG | hour                   | -ACC.DU | two       | -ACC.DU | have      | -3.SG.PRS |
| rising tide  |         | hour                   | -s      | two       |         | has       |           |

‘It is 7:00 am’

Comparison of examples 4 & 5 and 6, 7, & 8 demonstrate omission of *to have* and *one*. This language does not mark definiteness or gender, but does mark case and number (singular, dual, plural).

## 8.6.2 Time as a Noun Phrase

Time can also be expressed through nominal possession in a postpositional phrase. To use a time in a noun phrase, the appropriate tide is the possessor and the number of hours is the possessed (if any hours). *e.g.*

ajsaʒima ɲeʒxenasus

|                       |              |         |             |                        |         |              |
|-----------------------|--------------|---------|-------------|------------------------|---------|--------------|
| <i>ak<sup>h</sup></i> | <i>saʒim</i> | -a      | <i>ɲeʒ-</i> | <i>xet<sup>h</sup></i> | -a      | -suus        |
| two-                  | falling tide | -ADP.SG | three.ORD   | hour                   | -ADP.SG | -during.POST |
| second-               | falling tide |         | third-      | hour                   |         | during       |

‘at 3 am’

ajsaʒimasus

|                       |              |         |              |
|-----------------------|--------------|---------|--------------|
| <i>ak<sup>h</sup></i> | <i>saʒim</i> | -a      | -les         |
| two-                  | falling tide | -ADP.SG | -before.POST |
| second-               | falling tide |         | before       |

‘before 11 pm’

## 8.7 Comparison

### 8.7.1 Comparatives

Comparison is done by suffixing *if* to the comparative and the standard, then adding the case ending that agrees in number and case to the comparee NP. Pronoun standards agree with the comparee before suffixing the comparison morpheme. Adjectives modifying the standard also take the suffix, and the listener understands through context and word order which adjective is modifying the standard and which is the comparative.

*e.g.*

wlat<sup>h</sup> i:aeɸif zɛmɪf

|                         |              |       |               |       |
|-------------------------|--------------|-------|---------------|-------|
| <i>wlat<sup>h</sup></i> | <i>i:aeɸ</i> | -if   | <i>zɛm</i>    | -if   |
| 1.SG.NOM.PRON           | quick        | -COMP | 2.SG.NOM.PRON | -COMP |
| I                       | quicker      | than  | you           |       |

‘I am quicker than you.’

wlat<sup>h</sup> i:aeɸif ʃ:ef:ɪf ʃlɪmsɪf

|                         |              |       |              |       |              |       |
|-------------------------|--------------|-------|--------------|-------|--------------|-------|
| <i>wlat<sup>h</sup></i> | <i>i:aeɸ</i> | -if   | <i>ʃ:ef:</i> | -if   | <i>ʃlɪms</i> | -if   |
| 1.SG.NOM.PRON           | quick        | -COMP | fish         | -COMP | red          | -COMP |
| I                       | quicker      | than  | fish         |       | red          |       |

‘I am quicker than the red fish.’

ʃ:ef:ɑɪ ʃlɪmsɪfɑɪ ʃ:ef:ɪfɑɪ smɪfɑɪ mset<sup>h</sup>

|              |         |              |       |         |              |       |         |           |       |         |           |                  |
|--------------|---------|--------------|-------|---------|--------------|-------|---------|-----------|-------|---------|-----------|------------------|
| <i>ʃ:ef:</i> | -ɑɪ     | <i>ʃlɪms</i> | -if   | -ɑɪ     | <i>ʃ:ef:</i> | -if   | -ɑɪ     | <i>sm</i> | -if   | -ɑɪ     | <i>ms</i> | -ɛt <sup>h</sup> |
| fish         | -SG.ACC | red          | -COMP | -SG.ACC | fish         | -COMP | -SG.ACC | that      | -COMP | -SG.ACC | have      | -1.SG.PRS        |
| fish         |         | redder       | than  |         | fish         |       |         | that      |       |         | have      |                  |

‘I have a fish that is redder than that fish.’

ʃ:ef:ɑɪ ʃlɪmsɪfɑɪ ʃ:ef:ɪfɑɪ nɛmɪfɑɪ mset<sup>h</sup>

|              |         |              |       |         |              |       |         |            |       |         |           |                  |
|--------------|---------|--------------|-------|---------|--------------|-------|---------|------------|-------|---------|-----------|------------------|
| <i>ʃ:ef:</i> | -ɑɪ     | <i>ʃlɪms</i> | -if   | -ɑɪ     | <i>ʃ:ef:</i> | -if   | -ɑɪ     | <i>nɛm</i> | -if   | -ɑɪ     | <i>ms</i> | -ɛt <sup>h</sup> |
| fish         | -SG.ACC | red          | -COMP | -SG.ACC | fish         | -COMP | -SG.ACC | all        | -COMP | -SG.ACC | have      | -1.SG.PRS        |
| fish         |         | redder       | than  |         | fish         |       |         | all        |       |         | have      |                  |

‘I have a fish that is redder than all fish → I have the reddest fish’

This last example can also be constructed using superlatives (8.7.2)

Comparative adjectives can be used as adverbs (7.1).

ʃ:ɛʃ: i:æfɪfa naʊnɪlfa ʊm:ia  
 ʃ:ɛʃ: i:æf -ɪf -a naʊnɪl -ɪf -a ʊm:i -a  
 fish quick -COMP -3.SG.PRS whale -COMP -3.SG.PRS swim -3.SG.PRS  
 fish quick -er whale swim  
 ‘The fish swims more quickly than a whale.’

## 8.7.2 Superlatives

Superlatives are formed by suffixing *ɪfnɛm* to an adjective stem. Superlatives agree with the NPs they modify in number and case.

*e.g.*

wlat<sup>h</sup> i:æfɪfnɛm  
 wlat<sup>h</sup> i:æf -ɪfnɛm  
 1.SG.NOM.PRON quick -SUPL  
 I quick -est  
 ‘I am the quickest.’

ʃ:ɛʃ: ʃ:ɛʃ:ɪfnɛm i:æfɪfnɛm  
 ʃ:ɛʃ: ʃ:ɛʃ: -ɪfnɛm i:æf -ɪfnɛm  
 fish fish -SUPL quick -SUPL  
 fish fish quick -est  
 ‘The fish is the quickest fish.’

ʃ:ɛʃ:ɪfnɛmaɪ ʃlɪmsɪfnɛmaɪ mɛt<sup>h</sup>  
 ʃ:ɛʃ: -ɪfnɛm -aɪ ʃlɪms -ɪfnɛm -aɪ mɛs -ɛt<sup>h</sup>  
 fish -SUPL -SG.ACC red -SUPL -SG.ACC have -1.SG.PRES  
 fish reddest have  
 ‘I have the reddest fish.’

Compare this last example to the equivalent construction using comparatives (8.7.1) .

Superlative adjectives can be used as adverbs (7.1).

ʃ:ɛʃ: i:æfɪfnɛma ʊm:ia  
 ʃ:ɛʃ: i:æf -ɪfnɛm -a ʊm:i -a  
 fish quick -SUPLP -3.SG.PRS swim -3.SG.PRS  
 fish quick -est swim  
 ‘The fish swims the quickest.’

## 8.8 Questions (And Maybe Some Answers)

### 8.8.1 Yes–No Questions

Yes–no questions involving the zero copula indicated by the first word of the sentence – either *sa* if the speaker is indicating an expected ‘yes’ answer, *ʒɛ* to indicate an expected ‘no’ answer, or *saʒɛ* if no expectation.

*e.g.*

sa ʃlɪms ʃ:ɛʃ:  
 sa wlat<sup>h</sup> ʃ:ɛʃ:  
 yes red fish  
 yes red fish  
 ‘The fish is red, isn’t it’

ʒɛ ʃlɪms ʃɪɛʃ:  
 ʒɛ wlat<sup>h</sup> ʃɪɛʃ:  
 no 1.SG.NOM.PRON fish  
 no I fish  
 ‘The fish isn’t red, is it?’

saʒɛ ʃlɪms ʃɪɛʃ:  
 saʒɛ wlat<sup>h</sup> ʃɪɛʃ:  
 yes-no red fish  
 yes-no red fish  
 ‘Is the fish red?’

Other yes–no questions are formed by moving the verb phrase to the beginning of the sentence (while maintaining all other word order).

*e.g.*

sfʌ wlana ʊmɪ:niwat<sup>h</sup>  
 sfʌ wlana ʊmɪ: -ini -wat<sup>h</sup>  
 with.COM.PRE 1.SG.ADP swim -2.SG.FUT -IMPF  
 with me swim  
 ‘You will be swimming with me.’

ʊmɪ:niwat<sup>h</sup> sfʌ wlana  
 ʊmɪ: -ini -wat<sup>h</sup> sfʌ wlana  
 swim -2.SG.FUT -IMPF with.COM.PRE 1.SG.ADP  
 swim with me  
 ‘Will you be swimming with me?’

ɪ:æfɛma ʊmɪ:ɛma sfʌ wlana  
 ɪ:æf -ɛma ʊmɪ: -ɛma sfʌ wlana  
 quickly -2.SG.FUT swim -2.SG.FUT -IMPF with.COM.PRE 1.SG.ADP  
 quickly swim with me  
 ‘Did you swim quickly with me?’

!amsawat<sup>h</sup> lʌmas naʊnɪlɔɪ  
 !ams -a -wat<sup>h</sup> lʌmas naʊnɪl -aɪ  
 eat -3.SG.PRS -IMPF hagfish whale -SG.ACC  
 eat hagfish whale  
 ‘Did the hagfish eat the whale?’

Special emphasis can be placed on certain words in a question by suffixing /-θe/ to the word in question. For example:

!ɪ:æfawənθe amsawat<sup>h</sup> lʌmas naʊnɪlɔɪ  
 ɪ:æf -a -wat<sup>h</sup> -θe !ams -a -wat<sup>h</sup> lʌmas naʊnɪl -aɪ  
 quickly -E.SG.PRS -IMPF -textscq eat -3.SG.PRS -IMPF hagfish whale -SG.ACC  
 quickly eat hagfish whale  
 ‘Did the hagfish eat the whale *quickly*?’

Answers to yes/no questions are either just a *sa* or *ʒɛ* or else should have the answer (*sa/ʒɛ*) at the end of the sentence, regardless of the form of the response.

*e.g.*

ʃlɪms ʃɪɛʃ: sa  
 sa wlat<sup>h</sup> ʃɪɛʃ:  
 red fish yes  
 red fish yes  
 ‘Yes, the fish is red.’

ʃlms ʃ:ef: ʒɛ  
 ʒɛ wlat<sup>h</sup> ʃ:ef:  
 red fish no  
 red fish no

‘No, the fish is not red.’

ʌmas naʊnɪlɑː!amsawat<sup>h</sup> sa  
 ʌmas naʊnɪl -aɪ !ams -a -wat<sup>h</sup> sa  
 hagfish whale -SG.ACC eat -3.SG.PRS -IMPF yes  
 hagfish whale eat yes

‘Yes, the hagfish did eat the whale.’

## 8.8.2 Wh- Questions

”Wh-” questions ask for an answer that fills a specific part of the sentence. These questions are formed using the 3rd person pronoun with the appropriate number (as judged by the questioner) + /-θe/ in place of the word being questioned, maintaining normal sentence word order. For unknown quantities (how many?), the default number 12 (*at<sup>h</sup>*) + /-θe/ is used instead of the 3rd person pronoun.

*e.g.*

ʒaθe ʌmasɑː!amsawat<sup>h</sup>  
 ʒa -θe ʌmas -aɪ !ams -a -wat<sup>h</sup>  
 3.SG.NOM.PRON -Q hagfish -SG.ACC eat -3.SG.PRS -IMPF  
 who hagfish eat -ing

‘Who is eating the hagfish?’

ʌmas ʒaɑrθe !amsawat<sup>h</sup>  
 ʌmas ʒaɑr -θe !ams -a -wat<sup>h</sup>  
 hagfish 3.SG.ACC.PRON -Q eat -3.SG.PRS -IMPF  
 hagfish who eat -ing

‘Who(m) is the hagfish eating?’

ʌmas ʒaɑrθe !amsawat<sup>h</sup>  
 ʌmas ʒaɑr -θe !ams -a -wat<sup>h</sup>  
 hagfish 3.SG.ACC.PRON -Q eat -3.SG.PRS -IMPF  
 hagfish who eat -ing

‘Who(m) is the hagfish eating?’

naʊnɪlɑː ʒaɑθesi ɛmmɪlɪni  
 naʊnɪl -aɪ ʒaɑ -θe -si ɛmmɪl -ini  
 whale -SG.ACC 3.SG.ADP.PRON -Q -INSTR.POST attack -2.SG.FUT  
 whale what using attack

‘What will you use to attack the whale?’

ʒaθe amɑɪt<sup>h</sup> wlat<sup>h</sup>  
 ʒa -θe amɑ -ɪt<sup>h</sup> ʒem  
 3.SG.NOM.PRON -Q parent -SG.POSS 2.SG.NOM.PRON  
 who parent you

‘Whose parent are you?’

ʒaɑθesʊs ʊmɪɪni  
 ʒaɑ -θe -sʊs ʊmɪɪ -ini  
 3.SG.ADP.PRON -Q -during.POST swim -2.SG.FUT  
 when during swim

‘When are you going to swim?’

wlanai ʒaθemui emmlema

|               |               |     |                  |        |           |
|---------------|---------------|-----|------------------|--------|-----------|
| wlanai        | ʒaa           | -θe | -mui             | emmle  | -ema      |
| 1.SG.ACC.PRON | 2.SG.ADP.PRON | -Q  | -because-of.POST | attack | -2.SG.FUT |
| me            | why           |     | because-of       | attack |           |

‘Why did you attack me?’

Answers to Wh-questions are not always complete sentences or phrases, but should agree with the /θe/-word they answer.

*e.g.*

**Q:** nu ʒaθe umiila

|         |               |     |      |                |
|---------|---------------|-----|------|----------------|
| nu      | ʒaa           | -θe | umi  | -ila           |
| to.PREP | 3.SG.ADP.PRON | -Q  | swim | -1.DU.INCL.FUT |
| to      | what          |     | swim |                |

‘Where will we swim to?’

**A1:** nu simua umiila

|         |         |         |      |                |
|---------|---------|---------|------|----------------|
| nu      | simu    | -a      | umi  | -ila           |
| to.prep | iceberg | -SG.ADP | swim | -1.DU.INCL.FUT |
| to      | iceberg |         | swim |                |

‘We will swim to the iceberg.’

**A2:** nu simua

|         |         |         |
|---------|---------|---------|
| nu      | simu    | -a      |
| to.prep | iceberg | -SG.ADP |
| to      | iceberg |         |

‘To the iceberg.’

**A3:** simua

|         |         |
|---------|---------|
| simu    | -a      |
| iceberg | -SG.ADP |
| iceberg |         |

‘(To) the iceberg.’

## Chapter 9

# Communication

### 9.1 Greetings

The most informal greeting, used between people who know each other, is *euʒ*. Using this greeting with someone unfamiliar would typically lead to a "you talkin' to me???" reaction, but isn't inherently offensive. This is spoken with a lilting, song-like prosody inspired by whale-calls.

Friendly/informal greetings between strangers are sentences that involve a pleasantry or introduction. The informal greeting *euʒ* can be used after a quick introduction.

*e.g.*

*nimʊ wlat<sup>h</sup> euʒ*  
*nimʊ wlat<sup>h</sup> euʒ*  
nimU 1.SG.NOM.PRON hello  
nimU I hello  
'Hello! I'm Nemo.'

*saʒim aɪʊ*  
*saʒim aɪʊ*  
falling-tide warm  
falling-tide warm  
'Good afternoon.'

*ziʒim aɪʊ*  
*ziʒim aɪʊ*  
rising-tide warm  
rising-tide warm  
'Good morning.'

Greetings in passing (not stopping for a conversation) are typically conveyed through body language (a wave of the hand or a quick tail- or fin-flap), but can be vocalized with an alveolar click (//).

Formal greeting are used when talking to individuals of note/rank. This includes pod/family leaders, praiseworthy individuals, or subjects of intense flattery. These greetings are well-known, and shortening or changing of these greetings through omission or substitution of words are used mockingly.

*e.g. the serious ones*

*ʒemɑɪ ɦɪɪɛt<sup>h</sup> mɪt<sup>h</sup> naʊnɪlɑɪ ɦɪɪɛt<sup>h</sup>*  
*ʒemɑɪ ɦɪɪɪ -ɛt<sup>h</sup> mɪt<sup>h</sup> naʊnɪl -ɑɪ ɦɪɪɪ -ɛt<sup>h</sup>*  
2.SG.ACC.PRON see -1.SG.PRS and-so.CONJ whale -1.SG.ACC see -1.SG.PRS  
you see and-so whale see  
'I have seen you and-so I have seen a whale.'

*e.g. the not-serious ones*



zεmqɪ mit<sup>h</sup> naʊnɪɪɪ  
 zεmqɪ mit<sup>h</sup> naʊnɪ -aɪ  
 2.SG.ACC.PRON and-so.CONJ whale -1.SG.ACC  
 you and-so whale  
 ‘I have seen you and-so I have seen a whale hahahahahahha.’

*e.g. the not-serious ones*

zεmqɪ ɦɪɪɛt<sup>h</sup> mit<sup>h</sup> lɪmqɪɪ ɦɪɪɛt<sup>h</sup>  
 zεmqɪ ɦɪɪɪ -ɛt<sup>h</sup> mit<sup>h</sup> lɪmas -aɪ ɦɪɪɪ -ɛt<sup>h</sup>  
 2.SG.ACC.PRON see -1.SG.PRS and-so.CONJ hagfish -1.SG.ACC see -i.sg.prs  
 you see and-so hagfish see  
 ‘I have seen you and-so I have seen a hagfish (rude!!!).’

## 9.2 Partings

The most informal parting, used between people with basic familiarity with one another, is *a:rwε*. Using this parting with someone unfamiliar would typically lead to a “*you talkin’ to me???*” reaction, but isn’t inherently offensive. This is spoken with a rising, song-like prosody inspired by whale-calls.

The somewhat less informal parting is used to impart well-wishes on the departee. It is sometimes shortened, since it is a familiar phrase.

*e.g.*

mɛɪ sɒfi ʊmɪɪɪɪ  
 mɛ- -ɪɪ sɒfi ʊmɪɪ -ini  
 IMP- INE deep-ocean swim -2.SG.FUT  
 in deep ocean swim  
 ‘Be safe/bye!’

mɛɪsɒfi  
 mɛ- -ɪɪ -sɒfi  
 IMP- INE deep-ocean  
 in deep  
 ‘Be safe/bye!’

Partings in passing (not stopping for a conversation) are typically conveyed through body language (a wave of the arm or a quick tail- or fin-flap), but can be vocalized with an alveolar click (//) similarly to greetings.

Formal parting are not typical because if someone’s really that important they’ll just tell you that you’re leaving now (rude) or just swan off. A slightly mocking parting (someone you’re not a fan of is swimming off) would be a variant of the formal greeting but modified to reflect that the person is departing.

*e.g.*

zεmqɪ ɦɪɪɛma mit<sup>h</sup> mɛmɒmɛma  
 zεmqɪ ɦɪɪɪ -ɛma mit<sup>h</sup> mɛmap<sup>h</sup> -ɛt<sup>h</sup>  
 2.SG.ACC.PRON see -1.SG.PST and-so.CONJ sleep -1.SG.PST  
 you see and-so sleep  
 ‘I saw you and-so I slept (zzzz).’

zεmqɪ ɦɪɪɛma mit<sup>h</sup> sɪɦɪɪɛt<sup>h</sup>  
 zεmqɪ ɦɪɪɪ -ɛma mit<sup>h</sup> sɪ- ɦɪɪɪ -ɛt<sup>h</sup>  
 2.SG.ACC.PRON see -1.SG.PST and-so.CONJ -NEG see -1.SG.PRES  
 you see and-so not see  
 ‘I saw you and-so I don’t see.’

## 9.3 Compliments and Insults

### 9.3.1 Compliments

General compliments (not about a particular characteristic) typically either draw from the mermish fascination with whales or highlight a person's place/importance to the pod.

*e.g.*

|               |                           |                         |                  |      |        |                  |                    |
|---------------|---------------------------|-------------------------|------------------|------|--------|------------------|--------------------|
| zɛm           | naʊnɪɪfnɛmɪt <sup>h</sup> | naxɪfnɛmɪt <sup>h</sup> | nɛʃ              |      |        |                  |                    |
| zɛm           | naʊnɪɪ                    | -ɪfnɛm                  | -ɪt <sup>h</sup> | naxɪ | -ɪfnɛm | -ɪt <sup>h</sup> | nɛʃ                |
| 2.SG.NOM.PRON | whale                     | -SUPL                   | -SG.POSS         | huge | -SUPL  | -SG.POSS         | 1.INCL.PL.NOM.PRON |
| you           | whale                     |                         |                  | huge | -est   |                  | us                 |

‘You are our hugest whale. (Wow!! Very nice)’

|               |          |        |  |
|---------------|----------|--------|--|
| zɛm           | naxɪfnɛm |        |  |
| zɛm           | naxɪ     | -ɪfnɛm |  |
| 2.SG.NOM.PRON | huge     | -SUPL  |  |
| you           | huge     | -est   |  |

‘You are the hugest. (Pretty darn nice)’

|               |      |  |  |
|---------------|------|--|--|
| zɛm           | naxɪ |  |  |
| zɛm           | naxɪ |  |  |
| 2.SG.NOM.PRON | huge |  |  |
| you           | huge |  |  |

‘You are huge. (Slightly lukewarm, possibly damning with faint praise)’

|     |               |                         |                  |          |      |                |  |
|-----|---------------|-------------------------|------------------|----------|------|----------------|--|
| nɛm | zɛma          | ʒasafɪt <sup>h</sup> si | Um:iaIT          |          |      |                |  |
| nɛm | zɛma          | ʒasaf                   | -ɪt <sup>h</sup> | -si      | ʊm:i | -aɪθ           |  |
| all | 2.SG.ADP.PRON | shadow                  | -SG.POSS         | -in.POST | swim | -1.EXCL.PL.PRS |  |
| all | you           | your-shadow             |                  | in       | swim |                |  |

‘We all swim in your shadow → Your presence makes us safe → You’re generally very useful to the pod.’

### 9.3.2 Insults

General insults (not about a particular characteristic) typically either draw from the mermish fascination with whales or diminish a person's place/importance to the pod. Comparisons to debris from human existence are also considered particularly insulting because the merms do not appreciate the sloppy presence of humans in the oceans.

*e.g.*

|               |                           |                         |                  |      |        |                  |                    |
|---------------|---------------------------|-------------------------|------------------|------|--------|------------------|--------------------|
| zɛm           | naʊnɪɪfnɛmɪt <sup>h</sup> | naxɪfnɛmɪt <sup>h</sup> | nɛʃ              |      |        |                  |                    |
| zɛm           | naʊnɪɪ                    | -ɪfnɛm                  | -ɪt <sup>h</sup> | naxɪ | -ɪfnɛm | -ɪt <sup>h</sup> | nɛʃ                |
| 2.SG.NOM.PRON | whale                     | -SUPL                   | -SG.POSS         | huge | -SUPL  | -SG.POSS         | 1.INCL.PL.NOM.PRON |
| you           | whale                     |                         |                  | huge | -est   |                  | us                 |

‘You are a dolphin → You are small and fake whale → You’re fake and useless’

|               |                |        |        |
|---------------|----------------|--------|--------|
| zɛm           | naxɪmɛnɛʒɪfnɛm |        |        |
| zɛm           | naxɪ           | -nɛnɛʒ | -ɪfnɛm |
| 2.SG.NOM.PRON | huge           | -NEG   | -SUPL  |
| you           | huge           | opp    | -est   |

‘You are the tiniest.’

|               |           |      |  |
|---------------|-----------|------|--|
| zɛm           | naxɪmɛnɛʒ |      |  |
| zɛm           | naxɪmɛnɛʒ |      |  |
| 2.SG.NOM.PRON | huge      | -NEG |  |
| you           | huge      | opp  |  |

‘You are tiny.’

zɛm ɛɲek<sup>h</sup>  
 zɛm ɛɲek<sup>h</sup>  
 2.SG.NOM.PRON debris  
 you debris  
 ‘You are trash/human debris.’

## 9.4 Speech Acts

### 9.4.1 Commands

Commands are formed by using the clitic *mɛ* at the beginning of the sentence with the future tense verb.  
*e.g.*

sɬa wlana ʊ:mi:ni  
 sɬa wlana ʊ:mi -ini  
 with.ACC 1.SG.ADP.PRON swim -2.SG.FUT  
 with me you swim  
 ‘You will swim with me.’

mɛsɬa wlana ʊ:mi:ni  
 mɛ- sɬa wlana ʊ:mi -ini  
 IMP- with.ACC 1.SG.ADP.PRON swim -2.SG.FUT  
 with me you swim  
 ‘Swim with me.’

mɛʃ:ɛʃ:aɪ ɬamini  
 mɛ- ʃ:ɛʃ: -aɪ ɬam -ini  
 IMP- fish -ACC.SG swallow-whole -2.SG.FUT  
 fish swallow-whole  
 ‘Swallow-whole the fish.’

mɛɛɲiθl  
 mɛ- ɛɲ -iθl  
 IMP- begin -2.PL.FUT  
 begin  
 ‘(Y’all) begin.’

### 9.4.2 Requests

Requests are formed by moving the verb phrase to the beginning of the sentence (as one would a question) and using the imperative clitic *mɛ* (as with a command).

*e.g.*

sɬa zɛma ʊ:mi:wi  
 sɬa zɛma ʊ:mi -iwi  
 with.PREP 2.SG.ADP.PRON swim -1.SG.FUT  
 with you swim  
 ‘I will swim with you. **statement**’

ʊ:mi:wi sɬa zɛma  
 ʊ:mi -iwi sɬa zɛma  
 swim -1.SG.FUT with.PREP 2.SG.ADP.PRON  
 swim with you  
 ‘Will I swim with you? **question**’

mesʃa zɛma ʊmi:wi  
 mɛ- ʃa zɛma ʊmi -iwi  
 IMP- with.PREP 2.SG.ADP.PRON swim -1.SG.FUT  
 with you swim  
 ‘Let me swim with you. **command**’

mɛʊmi:wi ʃa zɛma  
 mɛ- ʊmi -iwi ʃa zɛma  
 IMP- swim -1.SG.FUT with.PREP 2.SG.ADP.PRON  
 swim with you  
 ‘Can I swim with you? **request**’

### 9.4.3 Promises

Promises are made by using the first person future tense verb form and the postpositional phrase *safiyɛ*, meaning *for the sake of safi* (the deep-ocean spirit of mythology, or just the deep-ocean itself).  
*e.g.*

safiyɛ ʃɛf:ɑɛmmliwi  
 safi -yɛ ʃɛf: -ɑɪ ɛmmɪl -iwi  
 deep-ocean -for-the-sake-of.POST fish -SG.ACC eat -1.SG.FUT  
 deep-ocean -for-the-sake-of fish eat  
 ‘I promise to eat the fish (I will eat the fish for the sake of safi)’

Promises can also be requested or commanded:

mesafiyɛ ʃɛf:ɑɛmmɪlini  
 mɛ- safi -yɛ ʃɛf: -ɑɪ ɛmmɪl -ini  
 IMP- deep-ocean -for-the-sake-of.POST fish -SG.ACC eat -2.SG.FUT  
 deep-ocean -for-the-sake-of fish eat  
 ‘Promise you will eat the fish.’

mɛ:mɪmmɪlini safiyɛ ʃɛf:ɑɪ  
 mɛ- ɛmmɪl -ini safi -yɛ ʃɛf: -ɑɪ  
 IMP- deep-ocean eat -2.SG.FUT -for-the-sake-of.POST fish -SG.ACC  
 deep-ocean -for-the-sake-of fish eat  
 ‘Do you promise to eat the fish?’

### 9.4.4 Boasting

The ocean is the ultimate authority, so boasts are often made comparing to the ocean spirits or the movement of the ocean.  
*e.g.*

ʒɪmsafie nɛmfie i:aeɸflit<sup>h</sup> wlaɪɸflit<sup>h</sup> sɑʊm:ilit<sup>h</sup>  
 ʒɪmsa -fie nɛm -fie i:aeɸ -if -lit<sup>h</sup> wlat<sup>h</sup> -if -lit<sup>h</sup> sɑ-  
 current -NOM.PL all -NOM.PL quick -COMP -3.PL.SG.PRES 1.SG.NOM -3.PL.SG.PRES NEG swim  
 current -s all quick -er me not  
 ʊm:i -lit<sup>h</sup>  
 -3.PL.SG.PRES  
 swim  
 ‘All the currents don’t swim faster than me.’

# Chapter 10

## Sample Narrative

### 10.1 English Text

Marlin and Dory are travelling to Sydney. Dory asks a dark and mysterious fish for directions. Marlin reprimands her while she shouts to the fish.

The fish grows and they see that the fish is.... a whale! Dory sings to the whale.

"Give us directions!!!"

The whale disappears and Marlin is frightened. Dory tells him that whales eat krill, not Marlins.

Suddenly, they see a lot of krill near them.

(...pause for suspense...)

The whale swallows them whole! Marlin frantically attacks the whale's baleen. Suddenly they see that the surface of the water of the whale's mouth is approaching...

The whale flaps its tongue. They hold onto the tongue while Dory begs Marlin trust her and let go. Marlin scolds Dory and sees a huge շԵՄ below him.

(...pause again for suspense...)

He lets go.

The whale swallows them quickly and blows them out into Sydney.

### 10.2 Mermish Text

maɫɫɪ ʌ nʊɪ nʊ sɪnɪa mɪɟɛnɪtʰ. nʊɪ laɪaɪ ʃɛf:a sɑmɑ ʌ ʒɛnɑnɪa mɛa. maɫɫɪ ʒɑaɪ xœxia swɪl ʃɛf:ɑnɪa sɑɪna.  
ʃɛf: nɛxmɪa mɪtʰ apʰ... ʃɛf:ɑɪ naʊnɪɑɪ ɸɪɪɪtʰ. nʊɪ naʊnɪɑnɪa naʊma.

'mɛslɑnɪ!nɪa laɪaɪ ʌɪzɪnɪ'

naʊnɪl ʊɑɪmɪa mɪtʰ maɫɫɪ ɑnɑnɑkʰ. nʊɪ ʒɑɑɪ ɑmɪɑ apʰ naʊnɪl nɛmɪ ʃɪɸɪ slɪxɪ !ɑmsɪml mɪɪtʰ maɪɪmɑɪ sʌ!ɑmsɪml.

ʒɑɑswɪs ʒɛnɪmɪa ʃɪɸɪ ɑɪɪɑɪ ɸɪɪɪtʰ.

(...mɛɑnɑɟɪɛ ʌmzɪnɪ...)

naʊnɪl ʒɛnɪɪ ɸɪɑmɑ. maɫɫɪ naʊnɪl ɸɪɪmɪnɪtʰ mɪɸɑmɪa ɛmɪmɪa. ʒɑɑswɪs ɸɪɪɑ apʰ naʊnɪlɑɪ ɛɟɪɪmɑɟɪtʰ wɪɪɪtʰ mɪnɪa...

naʊnɪl ʒɑaɪ ɪɪɑɪtʰ lɛɟɑ. ɪɪɑɪɪ ɟɪmɪɪtʰ swɪl nʊɪ maɪɪmɑɪ sɑθɑ apʰ ʒɑɑsm ɪɪʊmɪa mɪtʰ sʌɟɪmɪa.

maɫɫɪ nʊɪɑɪ xœxia mɪɪtʰ ʒɛm nɑxɪɑ ʒɑɑɪɪ ɸɪɪɑ.

(...mɛɑnɑɟɪɛ ɑɟɪmzɪnɪ...)

ɟɪmɪa.

naʊnɪl ʒɛnɪɪ ɪɑɛfɑ ɸɪɑmɑ mɪɪtʰ sɪnɪɑsɛɪ nɑʊzɪa.

### 10.3 Glosses

1. maɫɫɪ ʌ nʊɪ nʊ sɪnɪa mɪɟɛnɪtʰ

maɫɫɪ ʌ nʊɪ nʊ sɪnɪa mɪɟɛn -a mɪɟɛn -ɪtʰ

Marlin and.CONJ Dory to.PREP Sydney -SG.ADP travel -3.DU.PRS

Marlin and Dory to Sydney travel

'Marlin and Dory are travelling to Sydney.'

2. *nʊ.ɪ laɪɪ ʃɛʃ:a samɔ ʌ ʒɛnɔnɪ mɛa*  
*nʊ.ɪ laɪ -aɪ ʃɛʃ: -a sam -a ʌ ʒɛn -a -nɪɪ*  
 Dory direction -SG.ACC fish -SG.ADP dark -SG.ADP and.CONJ mysterious -SG.ADP -DO.POST  
 Dory direction fish dark and mysterious  
*mɛ -a*  
 request -3.SG.PRS  
 request  
 ‘Dory asks a dark and mysterious fish for directions.’
3. *maɪlm ʒaɪ xœxi suɪl ʃɛʃ:ɔnɪ saɪ:na*  
*maɪlm ʒaɪ xœxi -a suɪl ʃɛʃ: -a -nɪɪ saɪ:n*  
 Marlin 3.SG.ACC.PRON reprimand -3.SG.PRES while.CONJ fish -SG.ADP -DO.POST shout  
 Marlin her reprimand -s while fish to shout  
*-a*  
*-3.SG.PRES*  
*-s*  
 ‘Marlin reprimands her while she shouts to the fish.’
4. *ʃɛʃ: nɛxmla mɪtʰ apʰ ʃɛʃ:ɔɪ naʊnɪɪɪ fɪɪɪltʰ*  
*ʃɛʃ: nɛxml -a mɪtʰ apʰ ʃɛʃ: -aɪ naʊnɪ -aɪ fɪɪɪ -ltʰ*  
 fish grow -3.SG.PRES and.CONJ IS? fish -SG.ACC whale -SG.ACC see -3.DU.PRES  
 fish grow -s and that fish whale see  
 ‘The fish grows and they see that the fish is a whale.’
5. *nʊ.ɪ naʊnɪɪɪɪ naʊma*  
*nʊ.ɪ naʊnɪ -a -nɪɪ naʊm -a*  
 Dory whale -SG.ADP -DO.POST sing -3.SG.PRS  
 Dory whale to sing -s  
 ‘Dory sings to the whale.’
6. *mɛslɔnɪ!nɪɪ laɪɪɪ alzɪnɪ*  
*mɛ- slɔnɪ! -nɪɪ laɪ -aɪ alɪ -ɪnɪ*  
 IMP- 1.EXCL.DU.ADP.PRON -DO.POST direction -SG.ACC give -2.SG.FUT  
 us to direction give  
 ‘Give us directions.’
7. *naʊnɪ ʊsɔmɪn:a mɪtʰ maɪlm ɔnɔnakʰ*  
*naʊnɪ ʊsɔ- mɪn: -a mɪtʰ maɪlm ɔnɔnakʰ*  
 whale NEG- appear -3.SG.PRES and.CONJ Marlin frightened  
 whale dis- appear -s and Marlin frightened  
 ‘The whale disappears and Marlin is frightened.’
8. *nʊ.ɪ ʒaɪɪ amyɪa apʰ naʊnɪɪ nɛmɪ ʃɪʃɪ slɪxɪ ɪamsɪml mɪɪltʰ maɪlmɔɪ sɔɪamsɪml*  
*nʊ.ɪ ʒaɪɪ amyɪ -a apʰ naʊnɪ -ɪ nɛm -ɪ ʃɪʃɪ -ɪ slɪx*  
 Dory 3.SG.ACC.PRON tells -3.SG.PRES IS whale -PL.ACC all -PL.ACC krill -PL.ACC some  
 Dory him tell -s that whale -s all krill some  
*-ɪ ɪams -ɪml mɪɪltʰ maɪlm -aɪ sɔɪ ɪams -ɪml*  
 -PL.ACC eat -3.PL.FUT and.CONJ Marlin NEG- eat -3.PL.FUT  
 eat and Marlin not eat  
 ‘Dory tells him that whales eat krill, not Marlins.’
9. *ʒasʊs ʒɛnɪmɪa ʃɪʃɪ aɪɪɪɪ fɪɪɪltʰ*  
*ʒaɪ -sʊs ʒɛnɪ -mɪa ʃɪʃɪ -ɪ aɪɪ -ɪ fɪɪɪ -ltʰ*  
 3.SG.NOM.PRON -at.POST 3.DU.ADP -near.POST krill -PL.ACC many -PL.ACC see -3.DU.PRES  
 it at them near krill many see  
 ‘Suddenly they see a lot of krill near them.’

10. μεσσηγυρε αμzini

me- anaγ -yie αmz -ini  
IMP- fear -for-the-sake-of.POST pause -2.SG.FUT  
fear for pause

‘Pause for suspense.’

11. ναυnιl ζεν:iι fiam

navnιl zen:iι fiam -a  
whale 3.DU.ACC.PRON swallow-whole -3.SG.PRES  
whale them swallow-whole -s

‘The whale swallows them whole.’

12. μαlιm ναυnιlι filminι<sup>h</sup> mιsami emiml

malιm navnιlι -ι filmin -ιθ<sup>h</sup> mιsami -a emiml -a  
Marlin whale -SG.ACC baleen -SG.POSS frantic -3.SG.PRES attack -3.SG.PRES  
Marlin whale baleen frantic -ally attack -s

‘Marlin frantically attacks the whale’s baleen.’

13. ζαsυs fιλiα ap<sup>h</sup> ναυnιlι eγlιmakι<sup>h</sup> wιιιιt<sup>h</sup> min:a

ζαα -sυs hλι -a ap<sup>h</sup> navnιlι -αι eγlιmak<sup>h</sup> -ιt<sup>h</sup> wιιιι  
3.SG.NOM. -at.POST see -3.sg.pres IS? whale -SG.ACC mouth -SG.POSS water-surface  
it at see that whale mouth water-surface  
-ιt<sup>h</sup> min: -a  
-SG.POSS approach -3.SG.PRES  
approach -ing

‘Suddenly they see that the surface of the water of the whale’s mouth is approaching.’

14. ναυnιl ζααι ιlαlιt<sup>h</sup> λεγa

navnιl ζααι ιlαlι -ιt<sup>h</sup> λεγ<sup>h</sup> -a  
whale 3.SG.ACC.PRON tongue -SG.POSS flap -3.sg.pres  
whale it tongue flap -s

‘The whale flaps its tongue.’

15. ιlαlι ηιιιιιt<sup>h</sup> sυιl nυ:i μαlιnαι saθa ap<sup>h</sup> ζααsm ιιυm:iα mιt<sup>h</sup> sαηιιιm:a

ιlαlι -ι ηιιιιι -ιt<sup>h</sup> sυιl nυ:i μαlιnι -αι saθ -a ap<sup>h</sup>  
tongue -SG.ACC hold-onto -3.DU.PRES while Dory Marlin -SG.ACC beg -3.sg.pres IS  
tongue hold-onto while Dory Marlin beg -s to  
ζαα -sm ιιυm:i -a mιt<sup>h</sup> sα- ηιιιι: -a  
3.SG.ADP.PRON -ACCOM.POST rise -3.sg.pres and.CONJ NEG hold-onto -3.SG.PRES  
her with rise and not hold-onto

‘They hold onto the tongue while Dory begs Marlin to trust her and let go.’

16. μαlιm nυ:iαι xœxiα mlat<sup>h</sup> ζεm naxια ζααιι fιλiα

malιm nυ:iαι -αι xœxi -a mlat<sup>h</sup> ζεm -∅ naxια -α  
Marlin Dory -SG.ACC scold -3.SG.PRES and.CONJ light-ocean -SG.ADP huge -SG.ADP  
Marlin Dory scold -s and ζεm huge  
ζαα -ιlι hλι -a  
3.SG.ADP.PRON -below.POST see -3.SG.PRES  
him below see -s

‘Marlin scolds Dory and sees a huge ζεm below him.’

17. μεσσηγυρε αηαμzini

me- anaγ -yie αη- αmz -ini  
IMP- fear -for-the-sake-of.POST two- pause -2.SG.FUT  
fear for again pause

‘Pause again for suspense.’

18.  $\sigma\lambda\eta\iota\mu\iota\alpha$

$\sigma\lambda$ -  $\eta\iota\mu\iota$  -a  
 NEG- hold-onto -3.SG.PRES  
 not hold-onto -s  
 ‘He lets go.’

19.  $\nu\alpha\upsilon\nu\iota\lambda\ \zeta\epsilon\nu\iota\iota\iota\ \iota\alpha\epsilon\phi\alpha\ \phi\alpha\mu\alpha\ \mu\lambda\alpha\tau^h\ \sigma\iota\nu\iota\alpha\sigma\epsilon\iota\ \nu\alpha\upsilon\zeta\iota\alpha$

|                                    |                                   |                           |            |                 |            |                          |                       |            |
|------------------------------------|-----------------------------------|---------------------------|------------|-----------------|------------|--------------------------|-----------------------|------------|
| $\nu\alpha\upsilon\nu\iota\lambda$ | $\zeta\epsilon\nu\iota\iota\iota$ | $\iota\alpha\epsilon\phi$ | -a         | $\phi\alpha\mu$ | -a         | $\mu\lambda\alpha\tau^h$ | $\sigma\iota\nu\iota$ | -sei       |
| whale                              | 3.DU.ACC.PRON                     | quick                     | -3.SG.PRES | swallow-whole   | -3.SG.PRES | and.CONJ                 | Sydney                | -into.post |
| whale                              | them                              | quick                     | -ly        | swallow-whole   | -s         | and                      | Sydney                | into       |
| $\nu\alpha\upsilon\zeta\iota$      | -a                                |                           |            |                 |            |                          |                       |            |
| exhale                             | -3.SG.PRES                        |                           |            |                 |            |                          |                       |            |
| blow                               | -s                                |                           |            |                 |            |                          |                       |            |

‘The whale swallows them quickly and and blows them into Sydney.’

## 10.4 Narrative Choices

1. The story is told in present tense because that’s how stories are told.
2. **Text:** The mermish language has no written form, so punctuation and formatting is borrowed from English to emulate the spoken form of this story. Exclamation points were included in the English text but not in the Mermish text to avoid confusion with the IPA symbol.
3. The word *lai* means ”direction” as in ”advice or guidance”, but is translated as ”directions” as in ”course or route” in English. The switch from singular in the Mermish to plural in English is not a mistake.
4. **Sentence 9:** *zaasus* literally translates to ”at it (time)”, meaning ”at that time” or ”immediately”
5. **Sentence 12:** The water surface falling happened in the movie but it’s also a metaphor for danger!!
6. **Sentence 14:** The direct translation of ”trust” is ”swim up with”, as swimming close to the surface is considered dangerous and thus one should only do so with someone trusted to be alert and able to defend themselves.
7. **Sentence 15:** The phrase ”he sees a huge  $\zeta\epsilon\mu$  below him” is an idiom meaning that he saw that he was in a very dangerous situation (sort of like the idiom ”the alarm bells started going off”). This comes again from the idea that the closer to surface of the ocean, the more dangerous. If someone is close to the surface of the ocean, when they look down they’ll see more of  $\zeta\epsilon\mu$ , or the part of the ocean reachable by light, below them than if they were deeper down (though really there should have been way more clues..). Thus, looking down and seeing a ton of  $\zeta\epsilon\mu$ -water below you would tip you off that you’re in a dangerous position. The idiom is also sometimes shortened to ”sees a big of  $\zeta\epsilon\mu$ ” ( $\zeta\epsilon\mu\ \nu\alpha\chi\iota\alpha\ h\lambda\iota\alpha$ ) with the ”below *x*” understood.



# Appendix A

## Lexicon

| IPA                 | Part of Speech   | English Translation       |
|---------------------|------------------|---------------------------|
| ɑ:wε                | greeting         | goodbye                   |
| ɑmɔni               | verb             | scratch/claw              |
| ɑnak <sup>h</sup>   | noun             | fright                    |
| ɑnanak <sup>h</sup> | adjective/adverb | frightened                |
| εmɪml               | verb             | attack                    |
| fiΛɪ                | verb             | see                       |
| fiɛni               | noun             | typhoon/ocean storm       |
| fiʊ                 | noun             | one                       |
| fiʊts               | noun             | twenty four               |
| fiam                | verb             | swallow whole             |
| fiei                | verb             | smell                     |
| fi                  | noun             | nine                      |
| ms                  | verb             | have                      |
| ŋɪɔp <sup>h</sup>   | noun             | finger                    |
| ŋɪm:                | verb             | hold                      |
| ŋeʒ                 | noun             | four                      |
| ʃɪɪ                 | noun             | krill                     |
| ʃ:ɛʃ:               | noun             | fish                      |
| ʃyɪθ                | verb             | follow (passive)          |
| ʊm:i                | verb             | swim                      |
| ʊnɪlzi              | noun             | whale                     |
| ʊs:                 | verb             | hear                      |
| ʒɛm                 | noun             | light-ocean               |
| ʒɛni                | adjective/adverb | mysterious                |
| ʒɪmsa               | noun             | deep-sea current          |
| ʒasɑf               | noun             | shadow                    |
| ɹʊm:i               | verb             | rise (swim up)            |
| ɹli                 | postposition     | below (location)          |
| œmp <sup>h</sup>    | noun             | six                       |
| !ams                | verb             | eat                       |
| Λ                   | conjunction      | and (nominal conjunction) |

| IPA                   | Part of Speech   | English Translation                          |
|-----------------------|------------------|--|
| amz                   | verb             | pause/stop/rest                              |
| a:lu                  | adjective/adverb | warm   |
| a:ŋ                   | noun             | day  |
| ai                    | noun             | week   |
| aŋsaʒim               | noun             | second falling tide (11:00 pm)               |
| aŋziʒim               | noun             | second rising tide (5:00 pm)                 |
| ak <sup>h</sup>       | noun             | two  |
| alz                   | verb             | give   |
| amy:ɪa                | verb             | tell/report                                  |
| anfiɛ:ɪə              | noun             | nineteen                                     |
| anfiɛ:sl              | noun             | twenty                                       |
| anfiɛfi               | noun             | twenty one                                   |
| anfiɛɟɛʒ              | noun             | sixteen                                      |
| anfiɛv                | noun             | thirteen                                     |
| anfiɛæmp <sup>h</sup> | noun             | eighteen                                     |
| anfiɛa                | noun             | fourteen                                     |
| anfiɛvʊf              | noun             | twenty three                                 |
| anfiɛis               | noun             | twenty two                                   |
| anfiɛmʊt <sup>h</sup> | noun             | seventeen                                    |
| anfiɛsa               | noun             | fifteen                                      |
| anmɛm                 | noun             | flesh/meat                                   |
| ap <sup>h</sup>       | particle         | that/to (used in indirect speech/experience) |
| at <sup>h</sup>       | noun             | twelve                                       |
| ɛŋ                    | verb             | begin  |
| ɛŋfiap <sup>h</sup>   | noun             | shipwreck                                    |
| ɛɟɛk <sup>h</sup>     | noun             | human trash/debris                           |
| ɛŋlɪmak <sup>h</sup>  | noun             | water-surface                                |
| ɛɪa                   | noun             | seven  |
| ɛsl                   | noun             | eight  |
| ɛuʒ                   | greeting         | hello  |
| filmin                | noun             | baleen                                       |
| fʊf                   | noun             | eleven                                       |
| ɪ:æf                  | adjective/adverb | quick/quickly                                |
| ɪt <sup>h</sup>       | noun             | ten  |
| lɛk <sup>h</sup>      | verb             | flap   |
| li                    | preposition      | through (location)                           |
| liɪt <sup>h</sup>     | verb             | bite   |
| lɪmas                 | noun             | hagfish                                      |
| laʒ                   | verb             | chew   |
| lai                   | noun             | direction/advice                             |
| les                   | postposition     | before (time)                                |
| mɪfami                | adjective/adverb | frantic/desperate                            |
| mɪa                   | postposition     | near (location)                              |
| məmei                 | noun             | tuna   |
| mit <sup>h</sup>      | conjunction      | and-so/therefore (verbal conjunction)        |
| miŋɛn                 | verb             | travel/migrate                               |
| mm:                   | verb             | appear/show up                               |
| mʊt <sup>h</sup>      | noun             | five   |

| IPA                 | Part of Speech   | English Translation          |
|---------------------|------------------|------------------------------|
| ma:lm               | proper noun      | Marlin                       |
| mei                 | postposition     | at (location)                |
| mlat <sup>h</sup>   | conjunction      | and-then (verbal conunction) |
| naɣɿ                | adjective/adverb | huge                         |
| neɣnak <sup>h</sup> | noun             | eye of storm/whirlpool       |
| nɛxml               | verb             | grow                         |
| nʊ                  | preposition      | to (location)                |
| nʊ:ɿ                | proper noun      | Dory                         |
| naʊnɿl              | noun             | whale                        |
| naʊm                | verb             | sing                         |
| naʊzi               | verb             | blow/exhale                  |
| sœ                  | postposition     | in (location)                |
| safi                | noun             | dark-ocean                   |
| sam                 | adjective/adverb | dark                         |
| sula                | verb             | end                          |
| sa                  | noun             | three                        |
| saθ                 | verb             | beg/plead                    |
| sa:t <sup>h</sup>   | noun             | thirty six                   |
| sap <sup>h</sup>    | noun             | tail-fin                     |
| saɣim               | noun             | falling tide (11:00 am)      |
| sei                 | postposition     | into (location)              |
| sm                  | postposition     | with (accompaniment)         |
| simʊ                | noun             | iceberg                      |
| sin:i               | proper noun      | Sydney                       |
| siɣim               | noun             | rising tide (5:00 am)        |
| suil                | adverb           | while                        |
| suis                | postposition     | at (time)                    |
| wʊlθ                | noun             | water-mass                   |
| wɿu                 | noun             | mouth                        |
| xɛn                 | noun             | hour                         |
| xœxi                | verb             | reprimand/scold              |

## Appendix B

### Hand and labelled fingers

