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Part I

Sound rules

Preliminaries

In chapter 1 of the AITWG I describe a system of notation for morphemes, join patterns, phonemes and levels of language description, which I employ throughout the rest of the book. In the present book I use the same notation, so this short chapter is meant as a brush-up and (rather terse) summary of the most important points. You can safely skip it and read chapter 1 of the AITWG instead, if you prefer more detailed explanations.

1.1 Morphemes

Greenlandic is a polysynthetic language, meaning that you *construct* words on-the-fly, as you speak (or write), by joining many ‘bits’ of words together, to form complete words. These ‘bits’ are called *morphemes* in the linguistic, technical jargon I have dubbed ‘Grammaric’; and a morpheme is defined as an element with a *meaning* that cannot be subdivided any further. This is the reason why Greenlandic words can be so long, compared to e.g. English words: they consist of many morphemes – 5-6 per word is not unusual – whilst English words usually just consist of one or two morphemes. Here is a simple example, where I have indicated the morpheme boundaries with a | symbol:

pi|si|niar|fim|mu|ka|rusuk|kalua|ra|ma

meaning *because I actually wanted to go to the store (but ...)* Each segment contributes a specific meaning to the word, so for example *-rusuk-* means *want to*, and the segment *-si-* means to buy something.

You cannot find this word in any Greenlandic dictionary, because I just constructed it. To translate such a word, you must instead be able to take it apart again, to find the

constituent morphemes which you then *can* translate, e.g. with the aid of a dictionary. And conversely, to learn to speak or write Greenlandic, you must learn the rules for how to join morphemes together.

This can be difficult, because morphemes change their shape and sound, depending on the other morphemes surrounding them. For example, *-rusuk-* can also come to be spelt *-kusup-* or *-kuso-* and several other variants. To abstract away from all this variation, I instead write morphemes in a special ‘canonical’ form, from which you can then derive the *final*, context dependent form, by applying a small number of rules. I write this canonical form of each morpheme in curly braces; so taking the previous example again, I would write it thus:

{pi}{si}{niaq}{(v)vik}{mut}{-kaq}{(q)gusuk}{galuaq}{ga}{ma}

1.2 Join markers and morpheme class/type

Greenlandic only has three classes of words (at least for the purpose of this book): *nouns*, *verbs* and *particles*. But since words are constructed by joining morphemes together, then morphemes too can be divided into these three groups. Furthermore, particles are not constructed, so this is the only group of words it will make sense for you to memorise as whole words.

This leaves us with just nouns and verbs; or rather *nominal* and *verbal* morphemes. A nominal morpheme gives rise to a nominal *stem*, which can then be extended by adding another morpheme onto the end of it, and likewise does a verbal morpheme give rise to a verbal stem. Words are built from left to right, by always joining morphemes onto the right end of a word, so to indicate the *stem class* of a morpheme, I add one of the symbols **N** (for *nominal*) or **V** (for *verbal*) to the *right* end of morphemes. For example:

- {auk}**N** is a nominal stem (it means *blood*)
- {suli}**V** is a verbal stem (it means *to work*)

Orthogonal to this categorisation, morphemes can also be classified as one of four *types*:

- *bases*, which must appear at the *start* of a word; i.e. the left-most position.
- *affixes*, which can only appear *after* a base; i.e. in the middle of a word.
- *endings*, which must appear at the *end* of a stem. The ending completes the stem, turning it into a full word.
- *enclitics*, which can only appear at the end of a completed word; i.e. after the ending, or at the end of a particle.

Two (rather obvious) rules of word formation apply:

- A noun or verb must have *one, and only one* base, and *one and only one* ending. Both must always be present to yield a complete, well-formed word.
- A noun or verb can contain *zero to many* affixes, and it can have *zero to many* enclitics added onto the end. Both affixes and enclitics are optional (for the purpose of building a syntactically well-formed word).

I encode the *type* of a morpheme by adding one of the symbols **N**, **V** and ***** onto the *left* side of a morpheme. I collectively call these symbols *join markers*, because they denote the stem class that the morpheme will join *onto*. If {*morf*} is an arbitrary morpheme, then

- {*morf*}**N** and {*morf*}**V** are both *bases*. No join marker appear at their left-hand side, because bases cannot be joined onto anything. They must appear at the head (start) of a word.
- **N**{*morf*}**N**, **N**{*morf*}**V**, **N**{*morf*}**V** and **V**{*morf*}**V** are all *affixes*. They join onto stems of the class indicated by the left-hand join marker, and they yield stems of the class denoted by the right-hand join marker.
- **N**{*morf*} and **V**{*morf*} are both *endings*. No join marker appear at their right-hand side, because an ending completes the stem, yielding a full word.
- *****{*morf*} is an *enclitic*. It can be joined onto any complete word (including particles), and it yields again a complete word. Thus no join marker appears on the right-hand side.

When I partition a word into a string of morphemes, I may do it in either of two ways: I can either write each morpheme separately, with spaces in between; or I can write them as *joined on their join markers*. Here is an example of both:

$$\begin{array}{c} \{\text{qikmiq}\}\mathbf{N} + \mathbf{N}\{-\text{qaq}\}\mathbf{V} + \mathbf{V}\{\text{vuŋa}\} + *\{\text{lu}\} \\ \downarrow \\ \{\text{qikmiq}\}\mathbf{N}\{-\text{qaq}\}\mathbf{V}\{\text{vuŋa}\}*\{\text{lu}\} \end{array}$$

As you can see, the latter is more succinct (and compact), whilst still preserving all information about both type and class of the morphemes.

1.3 Transformations

The symbols written *within* the curly braces represent *phonemes*. A phoneme is an abstraction over one or several sounds, which the phoneme can come to have once the final word is pronounced. For example, the phoneme /t/ can take either a d-like sound as in *door* (which is the most common), or a t-like sound as in *time* (whenever it is followed by an /i/), as well as a few others. Which sound is ultimately chosen is determined by a handful of *sound rules*, which are the topic of the entire part I of this book.

Phonemes are written between forward slashes; either a single phoneme like /t/, or a string of phonemes like

/pisiniaqvikmukaqgusukgaluaqgama/

which is the string of phonemes we would obtain by joining the morphemes of my initial example. By applying the sound rules to this string of phonemes, we obtain the actual *pronunciation* of the word, which is written in hard brackets:

[pisiniaffimmukarusukkaluarama]

And finally, given the pronunciation of a word, we can also write it down, by applying the *spelling rules* of the New Orthography.¹ I have no special symbol to denote the spelling of a word, but I indicate the final form of a (written) word in italics. Thus:

pisiniarfimmukarusukkaluarama

Morphemes, phonemes, pronunciation and spelling constitute four different *levels* on which we may want to describe Greenlandic words. We move from one level to the next by applying a set of transformation rules (i.e. the sound rules and the spelling rules) to obtain the final form of the word.

Whenever I apply a rule, I use the symbol \Rightarrow to denote a *one-step* transformation. You can read \Rightarrow as “yields.” Likewise, if I omit listing each individual step separately, and instead just apply a number of transformations together, I use the symbol \Rightarrow^* . You can read \Rightarrow^* as “yields in a number of steps.”

¹Which are not numerous, because the New Orthography (for better or worse) aims to follow pronunciation very closely (i.e. so-called phonetic spelling).

How to introduce yourself

One of the most obvious things to learn first, when you are studying a new language, is undoubtedly to learn how to introduce yourself; to state some basic facts about who you are, where you are from, where you live, and so on. The focus of the present chapter is to review some fundamental sound rules, but I shall do so in the context of examples of how to introduce yourself. This will also provide you with some very basic vocabulary, consisting of some very common bases, affixes and endings that you will likely encounter countless times in everyday Greenlandic.

Unfortunately, it is difficult to construct just a single word, let alone a whole, meaningful sentence, without using at least 4-5 different sound rules. Yet my aim is here to introduce as few new rules as possible, to allow you to focus on learning and understanding just a single rule (or maybe two) at a time. The examples will therefore necessarily be very simple and somewhat artificial for now. I will also have to skip lightly over some details and defer some explanations to later.

2.1 How to be an N: N{-u}V

One very important affix is N{-u}V, which means *to be (an) N*.¹ Notice that this affix is written with a minus, ‘-’ in front; it signifies that this affix is *sandhi truncative*, which means that it will only attach to a *vowel*. Thus, if the preceding stem ends in a consonant, then this consonant is *deleted* when N{-u}V is added. However, if the stem actually *does* end in a vowel, then N{-u}V just attaches to that without further ado.

¹Or *is (an) N*, or *am (an) N*, or *are (an) N*. There is no distinction in Greenlandic.

Exercise 1: Practice sandhi truncativity and say ‘I am a(n) N’

Try adding **N{-u}V** to the stems {tuttu}N, {igacuq}N, {inuk}N, to say *I am a reindeer/a cook/a human*, respectively. In each case, adding **N{-u}V** yields a *verb stem*, and since all verb stems *must* have an ending to become complete verbs, you therefore also have to add an ending after **N{-u}V**. Use the verbal ending **V{vuŋa}**, which means *I Vb*. The solutions to all exercises are given at the end of the chapter.

- {tuttu}N{-u}V{vuŋa} \Rightarrow^* _____
I am a reindeer
- {igacuq}N{-u}V{vuŋa} \Rightarrow^* _____
I am a cook
- {inuk}N{-u}V{vuŋa} \Rightarrow^* _____
I am a human

A note on spelling: /c/ is always spelt *s* in the new orthography, and /ŋ/ is written as *ng*.

2.2 A sound rule for /v/

The ending **V{vuŋa}** means *I Vb*, as you saw above. Adding it onto a *vowel stem*, such as any stem created by **N{-u}V**, was entirely unproblematic in the sense that the ending was not affected in any way by being joined onto a vowel. **V{vuŋa}** came to be spelt *vunga* with an initial *v* in all cases.

However, not all stems end on a vowel: *consonant stems* end on one of the consonants /k/, /q/ or /t/, and this *will* affect an ending such as **V{vuŋa}** if it is joined onto a consonant stem. Specifically, it will affect the initial /v/. There is a very general sound rule, the *fricative rule*, that describe how a certain group of consonants (including /v/) behave, when they come to follow another consonant.

For now, we can skip the full explanation of the rule and just focus on what happens to /v/: If *c* is a consonant phoneme (either /k/ or /t/), then /cv/ comes to be written as *pp* (and pronounced as [pp]). However, if the consonant is /q/, then we have a slightly different situation: /qv/ comes to be written as *rp* (but still pronounced as [pp]). In other words:

$/kv/ \Rightarrow^* pp$
 $/tv/ \Rightarrow^* pp$
 $/qv/ \Rightarrow^* rp \leftarrow \text{Note!}$

With the help of this sound rule you can now also add **V{vuŋa}** to consonant stems.

Exercise 2: Practice the sound rule for /v/

Use the sound rule for /v/ and add the ending **V{vuŋa}** to each of the stems below:

- {nuuk}V{vuŋa} \Rightarrow^* _____
I move (to some place)
- {najugaqaq}V{vuŋa} \Rightarrow^* _____
I live (in some place)
- {tikit}V{vuŋa} \Rightarrow^* _____
I arrive (at some place)

2.3 A sound rule for vowels

You may be wondering why /qv/ is spelt as *rp* rather than *pp*, even though it is still *pronounced* as [pp]. The reason is that /q/ (and also /r/) is a so-called *uvular* consonant, and uvular consonants affect the pronunciation of any vowel immediately preceding it. Specifically, *any vowel standing before a uvular consonant is pronounced open*. This is a general sound rule for vowels; thus if *v* is any vowel phoneme, then the combinations /vq/ and /vr/ would both mean that *v* must have an *open* (or ‘uvularised’) pronunciation. And this is why /qv/ is written as *rp*, even though it is pronounced as [pp]; because in the combination /vqv/, the vowel *v* must *still* have an open pronunciation, even though the uvular /q/ itself comes to be pronounced as a [p], and it is therefore instead written as an *r* to remind us of that. /vqv/ is pronounced as [vpp] with an open sound of the vowel *v*.

This ‘openness’ quality of a vowel also affects the spelling; but unfortunately not consistently. Fortunately though, Greenlandic only has *three*² vowel phonemes, so this small lack of consistency is not unmanageable. The three Greenlandic vowel phonemes are /a/, /i/ and /u/, and their *normal* (i.e. non-uvularised) pronunciation is

²Actually *four*, but we can ignore the last vowel phoneme for now.

- /a/ \Rightarrow [a] as in English *fat*, *hat*, *cat*.
- /i/ \Rightarrow [i] somewhat as in English *free* or *bit*.
- /u/ \Rightarrow [u] as in *boot*, *tooth*.

However, when the vowel phonemes are followed by an uvular such as /q/, their pronunciation change. Here I just use /q/ for illustration, but /r/ would cause the same change:

- /aq/ \Rightarrow [a_q] as in *armour*, *carbon*.
- /iq/ \Rightarrow [ɜ_q] somewhat as in *bird* or *hair*.
- /uq/ \Rightarrow [ɔ_q] as in *thought*.

Now, [a], [i] and [u] (i.e. the non-uvularised pronunciations) are just straightforwardly spelt as *a*, *i* and *u*. For example, the word [uia], *her husband*, which contains all three vowel phonemes with non-uvularised pronunciation, is written simply as *uia*. However, two of these three vowels are *spelt* differently when they are uvularised; namely [ɜ] and [ɔ]:

- [ɜ] is written *e*.
- [ɔ] is written *o*.
- However, [a] is still just written as *a*.³

Thus, whenever you see written words like *igasoq*, *cook*, and *ateq*, *name*, you have to remember that these *e*'s and *o*'s are really /i/ and /u/ that just have come to have a special pronunciation, because they are followed by an uvular (here /q/), which is then reflected in the spelling.⁴ This is important, because if the /q/ is ever *removed*, e.g. if you add a truncative affix like N{-u}V onto these stems, then these vowels will of course revert to their normal (non-uvularised) pronunciation. And then they will, of course, just be *written* as *i* and *u* again.

Exercise 3: Practice the vowel rule

A dictionary like the DAKA^a does not list words in their morphemic form, as I do in this book. Instead, nouns are listed in the way they would be *written*, i.e. *after* all sound and spelling rules have been applied. Below are some examples. Use your knowledge of the vowel rule and add N{-u}V{vunja} to each of the nouns, to say *I am an N*, and notice how the spelling of the vowels changes:

³And this is the inconsistency. It would have been more consistent, if either *all three* or *none* of them used a different spelling for the uvularised pronunciation.

⁴Actually, the *e* in *ateq* is not really an /i/ but a /ə/, which is the fourth vowel I mentioned. However, it behaves just like an /i/ here, so we can safely treat it as such for now.

- *igasoq* \Rightarrow^* *igasuuvinga*
cook
- *ateq* \Rightarrow^* _____
name
- *ilisimasalik* \Rightarrow^* _____
person with scientific knowledge (of something)
- *qarasaasialerisoq* \Rightarrow^* _____
computer scientist
- *Nuummioq* \Rightarrow^* _____
A person from Nuuk

^aDAKA is short for *Dansk/Kalaallisut*, i.e. a Danish/Greenlandic (and Greenlandic/Danish) dictionary. You can access it online at <https://iserasuaat.gl/daka/daka>, or just by clicking on the name DAKA anywhere in this book.

2.4 How to have an N: N{-qaq}V

The affix N{-qaq}V means *to have an N*, and thus, by adding the ending V{vuŋa} onto the resulting stem, you can say *I have an N*. This is an incredibly useful, and hence also common, affix, since you likely often may want to express that you have something; e.g. a house, a car, a husband, a wife, siblings, children, friends; or simply just *a name*, since the Greenlandic equivalent of *I have a name* is the most common way of expressing *my name is ...*

There are a few things to note about N{-qaq}V: first of all, it is *truncative* (it has the ‘—’ symbol in front of it), and secondly, it begins with an *uvular* phoneme, namely /q/. This affix will thus *only* attach to *vowels* (and hence remove any final consonants standing in its way); and that vowel will, in turn, become *uvularised* because it comes to be followed by a /q/. This affix will therefore in a sense cause the ‘opposite’ transformation of what you saw N{-u}V do above; i.e. it will uvularise vowels that previously may have had just the ordinary (non-uvular) pronunciation and spelling.

Exercise 4: Practice the vowel rule again, and say ‘I have an N’

Add **N{-qaq}V{vuŋa}** to the following nouns to say *I have an N*. Use your knowledge of the vowel rule to write the correct form of the final vowel in each stem, and remember the rule for /qv/ when you join **V{vuŋa}** onto **N{-qaq}V**:

- *illu* \Rightarrow^* _____
house
- *bīili* \Rightarrow^* _____
car
- *nulīaq* \Rightarrow^* _____
wife
- *ui* \Rightarrow _____
husband
- *meeraq* \Rightarrow^* _____
child
- *najugaq* \Rightarrow^* _____
place to live/address
- *ateq* \Rightarrow^* _____
name
- *ukioq* \Rightarrow^* _____
year

There is one other thing to note about **N{-qaq}V**. Like all other affixes, this affix is of course added to the *stem*, rather than the final form of the word (even though the stem and the final form of all the nouns in the previous example actually coincide). This is important, because the *stem* of a noun does not include information such as *number*. In other words, **{miiraq}N** means *child*, but not e.g. *one child*; and when you add **N{-qaq}V{vuŋa}** onto this stem, you obtain a word that means *I have child*, and not *I have one child*. The resulting word can mean both *I have a child* and *I have children*, and this is the case for all the previous examples. You use the *same* word, whether you have one or several cars, houses, wives, husbands, children, addresses, names or years etc. Without further information, we cannot tell whether the noun should be understood as singular or plural, and thus whether

you have one or several children. I shall return to this point in a little while.

2.5 Weak q-stems and endings

All nouns and verbs in Greenlandic must have an ending. In the case of nouns, the ending tells us the *number* of the noun (i.e. whether it is singular or plural), and also the *function* of the noun in the sentence (e.g. whether the noun is subject, object, a place where the action described by the verb happens, and so on). Hitherto, all the nouns you have seen, such as *illu*, *inuk*, *najugaq*, *ukioq* etc. have been in their ‘most common’ *singular* form; this form is also called the *unmarked absolutive singular* in Grammaric. It just so happens that the ending that denotes ‘unmarked absolutive singular’ is $N\{\emptyset\}$, which is a morpheme consisting of *nothing* (i.e. the empty string). This is precisely why I said that the final form of all nouns you have seen so far, has coincided with the *stem* of the word; because adding an empty string $N\{\emptyset\}$ onto a stem obviously yields just the stem.

However, nouns can have many other endings besides the unmarked absolutive singular. Here are some:

- $N\{mi\}$, *in/at/on N* (unmarked locative singular)
- $N\{mut\}$, *to N* (unmarked allative singular)
- $N\{mit\}$, *from N* (unmarked ablative singular)

You can safely ignore the fancy Grammaric name in parentheses for now. The important thing here is the *form and meaning* of these endings. As you can see, they all begin with a *consonant*, namely /m/; so they are *consonant initial* endings.

You have also seen three different types of *nouns* (or rather, noun *stems*):

- Vowel stems such as *illu* that end in a vowel
- k-stems such as *inuk* that end in /k/
- q-stems such as *ukioq* that end in /q/

Most⁵ of the q-stems you have seen so far are called *weak* q-stems. This means that they will automatically throw away their final /q/ before consonant initial *endings*⁶ such as $N\{mi\}$, $N\{mut\}$ and $N\{mit\}$, *regardless* of whether the ending is truncative or not. As you can see, none of these endings are truncative (they do not have the ‘—’ symbol in front of them); they are *additive*, meaning they will attach to both vowels and consonants. Yet the weak q-stems will still throw away their final /q/ before them, and thus in a sense behave like *vowel stems*. This will of course again trigger a reversal of the vowel rule, since the final /q/, that caused uvularisation of the preceding vowel, no longer is present.

⁵But not *all*: *ateq* is *not* a weak q-stem.

⁶Only ending, not affixes!

Exercise 5: Use the vowel rule with weak q-stems

A good number of Greenlandic city names are weak q-stems. Add the endings **N{mi}**, **N{mut}** and **N{mit}** to say *in/to/from* that city, and use your knowledge of the vowel rule to choose the correct spelling for the final vowel. To create whole sentences, you can use {city name}**N{mi}** *najugaqarpunga* to express *I live in (city name)*; and {city name}**N{mut}** *nuuppunga* to say *I move to (city name)*:

- *Qaanaaq* \Rightarrow^* _____
- *Maniitsoq* \Rightarrow^* _____
- *Qaqortoq* \Rightarrow^* _____
- *Narsaq* \Rightarrow^* _____
- *Tasiilaq* \Rightarrow^* _____
- *Isortoq* \Rightarrow^* _____

2.6 A sound rule for k-stems

There is an important, and very general, sound rule in Greenlandic, which says that whenever we have two different consonant phonemes c_1 and c_2 in combination, c_1c_2 , then we always end up with two of the *second* type, c_2c_2 . Abstractly expressed:

$$c_1c_2 \rightarrow c_2c_2$$

This rule has wide-ranging implications, but for now we shall just consider it in the context of k-stems with nouns. The rule says that whenever we have a k-stem like {inuk}**N**, and we add an ending like **N{mut}**, we get a consonant cluster /km/, which by this rule becomes [mm], and which is also spelt as *mm*. The second consonant is /m/, and by this rule, we end up with two consonants of the second type. /km/ becomes *mm*. Thus

$$\{\text{inuk}\}\mathbf{N}\{\text{mut}\} \Rightarrow / \text{inukmut} / \Rightarrow [\text{inummut}] \Rightarrow \text{inummut}$$

which means *to the human*. This rule is important, because many morphemes, both affixes and endings, are additive *and* consonant initial; and whenever any of these are added to a consonant stem, the combination will therefore trigger this rule.

Exercise 6: The consonant rule with k-stems

A number of Greenlandic towns are k-stems. Use your knowledge of the new sound rule for k-stems and add the endings **N{mi}**, **N{mut}** and **N{ni}** as in exercise 5:

- *Nuuk* \Rightarrow^* _____
- *Nanortalik* \Rightarrow^* _____
- *Upernavik* \Rightarrow^* _____
- *Arsuk* \Rightarrow^* _____
- *Kulusuk* \Rightarrow^* _____

You can again use *najugaqarpunga* resp. *nuuppunga* to create whole sentences.

Exercise 7: City names with plural

The *plural* forms of **N{mi}**, **N{mut}**, **N{mit}** are, respectively, **N{ni}** (in/on/at Ns), **N{nut}** (to Ns) and **N{nit}** (from Ns). Thus e.g. *illumut* means *to the (single) house*, but *illunut* means *to the (several) houses*. The consonant rule of course still applies; so if you end up with /kn/, then the combination becomes [nn].

Some Greenlandic towns have names in plural; and thus to say *in, to, from* such a city, you therefore have to use the *plural* forms of these endings. However, since endings are added to *stems* (and not to complete words), you therefore need to know the *stem* form of these city names (i.e. *without* the plural marker), in order to add these new, plural endings onto it. Here are some examples: some of them are k-stems, and others are weak q-stems, and I have added the stem form in parenthesis. Add the plural version of the endings to the stem forms:

- *Sisimiut* ({Sisimiuq}N) \Rightarrow^* _____
- *Paamiut* ({Paamiuq}N) \Rightarrow^* _____
- *Aasiaat* ({Aasiak}N) \Rightarrow^* _____
- *Qasigiannugit* ({Qasigiannguaq}N) \Rightarrow^* _____
- *Kapisillit* ({Kapisilik}N) \Rightarrow^* _____

2.7 Modifiers to incorporated nouns

As you saw earlier, the affix **N{-qaq}V** attaches to a *noun stem* and yields a verbal stem meaning *to have* (*noun stem*). This is also called *noun incorporation* in Grammaric, and we say that the noun stem has been *incorporated* into the verbal stem.

As I also mentioned, the incorporated noun stem does not contain any marker for *number*. If I say e.g. *illoqarpunga*, then it can mean either that I have just a single house, or several houses. The word literally just means *I have house*.

Now suppose I want to say that I have a **red** house. The word *red* is a noun in Greenlandic, *aappaluttoq*, and it is also a weak q-stem. I can use this word as a so-called *modifier* of an incorporated noun, by giving it an ending of a new type: **N{mik}** in singular, and **N{nik}** in plural.⁷ And by using either the singular or the plural ending, I can signify whether the incorporated noun (in this case, the house *illu*) is singular or plural. Thus

- *Aappaluttumik illoqarpunga* means *I have a (single) red house*.
- *Aappaluttunik illoqarpunga* means *I have (several) red houses*.

This construction is particularly common, because **N{-qaq}V** is such a common affix. For example, you use it whenever you want to say your name or your age:

- To express *my name is N*, you literally say *I have a name* using *ateq* and **N{-qaq}V**, and then you specify *what* the name is by adding **N{mik}** to the name itself. You use the singular ending, because there is only a single name.
- To express *I am N years old*, you literally say *I have (several) years* using *ukioq* and **N{-qaq}V**, and then you specify the *number* of years by adding **N{nik}** to the number. You use the plural ending, because you presumably are more than a single year old (although if you *were* just a single year old, you would of course use the singular ending **N{mik}** instead).

2.8 Text

You are now ready for the last exercise of this chapter: a text in Greenlandic. It ties together everything you have learned so far, and specifically it reuses many of the glossaries and constructions you have hitherto seen in the previous exercises of this chapter.

⁷These endings belong to a class called the *instrumental* case; thus **N{mik}** is the unmarked singular instrumental, and **N{nik}** is the unmarked plural instrumental.

Exercise 8: Translate the text

Aluu, Stianimik ateqarpunga. 36-nik ukioqarpunga. Qarasaasialerisuuvunga. Aamma tarnip pissusiinik ilisimasaliuvunga. Aalborgiminngaanneerpunga, kisianni 2011-mi Kalaallit Nunaannut nuuppunga. 2011-mit 2016-imut Nuummi najugaqarpunga. Taava 2016-imi Aalborgimut uterpunga. Kisianni ullumikkut Reykjavíkmi najugaqarpunga. 2021-mi maanga nuuppunga.

Glossary:

- *aamma*, and, also, furthermore
- *tarnip pissusiinik ilisimasalik*, psychologist
- *Aalborg*, a city in Northern Jutland, Denmark
- *N{minngaanniiq}V*, is from N; comes from N
- *kisianni*, but, however
- *Kalaallit Nunaannut*, to Greenland
- *taava*, then
- *{utiq}V*, returns (to some place)
- *ullumikkut*, now, today, nowadays
- *Reykjavík*, the capital city of Iceland
- *maanga*, hither (to here)

One last detail: You may have noticed an /i/ that appears at the end of some of the loan-word in exercise 8, such as *Aalborgimut* and *2016-imi*. It does not mean anything, but is just added to loan-words (including names such as mine), if the word does not already end on a vowel, or one of the consonant sounds [t], [k] or [q]; because that is the shape of all Greenlandic words. The /i/ is thus used to ‘greenlandize’ foreign words. As you may also notice, *2011-mit* and *2021-mi* do *not* have this greenlandizing /i/. This is because Greenlandic uses the Danish numerals for numbers larger than 12, and 2011 (totusindogelleve) and 2021 (totusindogenogtyve) actually *do* end on a vowel in Danish, so the extra /i/ is not needed.

Solutions to the Exercises

Solution 1: Practice sandhi truncativity and say ‘I am a(n) N’

- {tuttu}N{-u}V{vuṇa} \Rightarrow^* *tuttuuvunga*
- {igacuq}N{-u}V{vuṇa} \Rightarrow^* *igasuuuvunga*
- {inuk}N{-u}V{vuṇa} \Rightarrow^* *inuuvunga^a*

^a*inuuvunga* also means *I am alive*.

Solution 2: Practice the sound rule for /v/

- {nuuk}V{vuṇa} \Rightarrow^* *nuuppunga*
- {najugaqaq}V{vuṇa} \Rightarrow^* *najugaqarpunga*
- {tikit}V{vuṇa} \Rightarrow^* *tikippunga*

Solution 3: Practice the vowel rule

- *igasooq* \Rightarrow^* *igasuuuvunga*
- *ateq* \Rightarrow^* *atiuvunga^a*
- *ilisimasalik* \Rightarrow^* *ilisimasaliuvunga*
- *qarasaasialerisoq* \Rightarrow^* *qarasaasialerisuuvunga*
- *Nuummioq* \Rightarrow^* *Nuummiuuvunga*

^aThe sentence *I am a name* does of course not make much sense. But it is a valid sentence.

Solution 4: Practice the vowel rule again, and say ‘I have an N’

- *illu* \Rightarrow^* *illoqarpunga*
- *biili* \Rightarrow^* *biileqarpunga*
- *nuliaq* \Rightarrow^* *nuliaqarpunga*

- *ui* \Rightarrow^* *ueqarpunga*
- *meeraq* \Rightarrow^* *meeraqarpunga*
- *najugaq* \Rightarrow^* *najugaqarpunga*
- *ateq* \Rightarrow^* *ateqarpunga*
- *ukioq* \Rightarrow^* *ukioqarpunga*

Solution 5: Use the vowel rule with weak q-stems

- *Qaanaaq* \Rightarrow^* *Qaanaami*, *Qaanaamut*, *Qaanaamit*
- *Maniitsoq* \Rightarrow^* *Maniitsumi*, *Maniitsumut*, ...
- *Qaqortoq* \Rightarrow^* *Qaqortumi*, ...
- *Narsaq* \Rightarrow^* *Narsami*
- *Tasiilaq* \Rightarrow^* *Tasiilami*
- *Isortoq* \Rightarrow^* *Isortumi*

Solution 6: The consonant rule with k-stems

- *Nuuk* \Rightarrow^* *Nuummi*, *Nuummut*, *Nuummit*
- *Nanortalik* \Rightarrow^* *Nanortalimmi*, *Nanortalimmut*, ...
- *Upernavik* \Rightarrow^* *Upernavimmi*, ...
- *Arsuk* \Rightarrow^* *Arsummi*
- *Kulusuk* \Rightarrow^* *Kulusummi*

Solution 7: City names with plural

- *Sisimiut* ($\{\text{Sisimiuq}\}\text{N}$) \Rightarrow^* *Sisimiuni*, *Sisimiunut*, *Sisimiunit*
- *Paamiut* ($\{\text{Paamiuq}\}\text{N}$) \Rightarrow^* *Paamiuni*, *Paamiunut*, ...
- *Aasiaat* ($\{\text{Aasiak}\}\text{N}$) \Rightarrow^* *Aasianni*
- *Qasigiannguut* ($\{\text{Qasigiaṅṅuaq}\}\text{N}$) \Rightarrow^* *Qasigiannguani*
- *Kapisillit* ($\{\text{Kapisilik}\}\text{N}$) \Rightarrow^* *Kapisilinni*

Solution 8: Translate the text

Hi, my name is Stian. I am 36 years old. I am a computer scientist. I am also a psychologist. I come from Aalborg, but in 2011 I moved to Greenland. I lived in Nuuk from 2011 to 2016. Then, in 2016 I returned to Aalborg. However, now I live in Reykjavík. I moved hither in 2021.

Travelling to Greenland

In the previous chapter I mentioned that I moved to Greenland in 2011. In this chapter, I will elaborate more on that story, by describing my journey from my previous hometown, Aalborg, in Northern Jutland, to Nuuk, the capital of Greenland. Apart from that, the aim of this chapter is to introduce a few more affixes and endings, and to add another case to the so-called *fricative rule* that you saw in the previous chapter. You will also get a glimpse of the important concept of *mood* for verbs, and a new type of sandhi behaviour called *epenthesis*.

3.1 Review

Let us just briefly review what you learnt in the previous chapter:

- Morphemes have different preferences for what they will join onto: The *additive* morphemes like **N{mi}**, **N{mut}** etc. will join onto both consonant and vowel phonemes. This is the default behaviour, and additive morphemes are therefore written without any special symbol in front. In contrast, *truncative* morphemes like **N{-u}V** and **N{-qaq}V** will *only* join onto *vowel* phonemes and therefore they *remove* any final consonant phoneme of the preceding stem that stands in their way.
- There are different types of noun stems: vowel stems, k-stems and q-stems. Within the latter group, most q-stems are *weak* q-stems, meaning that they will automatically throw away their final /q/ before consonant-initial *endings* (not affixes!), regardless of whether the ending itself is additive or truncative.



Figure 3.1: The view from Kangerlussuaq Airport, while I waited for the plane to Nuuk. The large aircraft (center) is the Atlantic aircraft, nicknamed *Norsaq*.

- The *vowel rule* stipulates that vowels have an *open* pronunciation before uvulars (/r/ and /q/), and that /i/ and /u/ are also *spelt* differently when they have become uvularised, namely as *e* and *o* respectively.
- The *consonant rule*, $c_1c_2 \rightarrow c_2c_2$, is responsible for assimilating all consonant clusters, such that you always end up with a double consonant sounds of the second type. This is the rule that transforms /Nuuk*mut*/ into *Nuummut* and /Aasiak*ni*/ into *Aasianni* and so on.
- Lastly, you got a partial glimpse of the *fricative rule*, which (amongst other things) determines that /qv/ comes to be spelt as *rp*; and for all other consonant phonemes *c* that /cv/ comes to be spelt *pp*. This rule is particularly important when joining v-initial endings such as V{vun̥a} onto the various types of verbal stems.

This is already quite a list of abstract rules that you need to manage, just to be able to understand and construct even the most basic words and sentences.

3.2 A new ending

The ending **V{vuŋa}** means *I Vb* as you have seen. But what if the subject of the sentence is someone else than *I*, such as for example *he*? In that case, you need a different ending: in this case the ending **V{vuq}**, which means *he/she/it Vb's* (there is no difference in Greenlandic between *he*, *she* and *it*). This ending is also called the *3rd person (intransitive) indicative*.

Exercise 9: The 3rd person indicative

Rewrite the text from exercise 8 to the 3rd person by using **V{vuq}** instead of **V{vuŋa}**, such that it now instead means *His name is Stian. He is 36 years old. He is a computer scientist ...* and so on. Here is the original text:

Stianimik ateqarpunga. 36-nik ukioqarpunga. Qarasaasialerisuuvunga. Aamma tarnip pissusiinik ilisimasaliuvunga. Aalborgiminngaanneerpunga, kisianni 2011-mi Kalaallit Nunaannut nuuppunga. 2011-mit 2016-imut Nuummi najugaqarpunga. Taava 2016-imi Aalborgimut uterpunga. Kisianni ullumikkut Reykjavímmi najugaqarpunga. 2021-mi maanga nuuppunga.

The shape of endings

You may have noticed a certain similarity between the endings **V{vuŋa}** and **V{vuq}**. They both begin with the phoneme string /vu/.

This is no coincidence: the string /vu/ is actually a special morpheme {vu}, called the *(intransitive) indicative mood marker*, and it denotes that the verb is a *statement* of some kind. This is precisely what is meant by the Grammatic word *indicative*, hence the name. **V{vuŋa}** and **V{vuq}** both belong to a group of endings called the *indicative mood*, which is used for expressing statements. Greenlandic also have several other moods (i.e. groups of verbal endings) for expressing e.g. questions, orders, wishes etc., and these use different mood markers, as you will see later.

Conversely, **V{vuŋa}** and **V{vuq}** also differ in the second half of the ending: the first ends with the string /ŋa/, whilst the second ends with a /q/. These are also morphemes, {ŋa} and {q}, and they denote the *person* who performs the action; thus {ŋa} denotes *I* (also called the *1st person singular*), and {q} denotes *he/she/it* (also called the *3rd person*

singular). As you will see later, this nice regularity makes it easy to learn whole new *sets* of endings (i.e. moods), once you know the person markers, because you can often just exchange one mood marker for another, but leave the person markers unaltered.

Dictionary entries

Dictionaries such as the DAKA do not list stems and affixes as morphemes as I do. Instead, verbs (and verbal affixes) are listed *with endings*, using (usually) the 3rd person indicative ending.¹ In my opinion, it is a deeply impractical (and even counter-productive) way of doing it, because it means that some affixes, due to the changes caused by the sound rules, may be listed 3-4 times. And without knowledge of the sound rules (which certainly are *not* common knowledge in the teaching of Greenlandic as a foreign language), it can be extraordinarily difficult to figure out when each of the different forms should be used. However, now that you know the 3rd person indicative ending **V{vuq}**, you will hopefully find it easier to use a dictionary like the DAKA, and understand what needs to be replaced if you want to say a word with a different ending than precisely the 3rd person indicative.

3.3 Verbalisation of the allative **N{mut}** and **N{nut}**

You have seen the endings **N{mut}** and **N{nut}**, which mean *to N* (singular) and **N{to Ns}** (plural), respectively. They belong to a group of noun endings called the *allative* case, which I abbreviate as **N{ALL}**, and the common factor is that they mean *to/onto/into* and so on; some sense of movement from one area to another.

Allative case endings can be *verbalised*, meaning that we can transform them into a verbal stem, by adding a special morpheme **N{ALL}{-kaq}V** onto them. The morpheme is special in the sense that it contradicts the rule that we normally cannot add new affixes on top of an ending, and furthermore it *only* attaches to allative endings, which is what the part **N{ALL}** indicates. By using **N{ALL}{-kaq}V** with **N{mut}** and **N{nut}**, we thus get two new morphemes, **N{mukaq}V** and **N{nukaq}V**, that mean *go to N* and *go to Ns*.

Exercise 10: Going to places

Use the 3rd person indicative ending **V{vuq}** and the verbalisation of the allative endings **N{mut}** and **N{nut}** to say *he goes to (city name)*. Remember that some city names are weak q-stems, and some are inherently plural and therefore require the use of the allative plural ending **N{nut}**. You may want to check your answers

¹In the AITWG I dubbed this way of describing the language *Graphemism* (from the Grammatic word *grapheme*, the unit of spelling).

to exercise 7 on page 15 for help.

- *Nuuk* \Rightarrow^* _____
- *Paamiut* \Rightarrow^* _____
- *Arsuk* \Rightarrow^* _____
- *Qaqortoq* \Rightarrow _____
- *Illoqqortoormiut* \Rightarrow^* _____
- *Aasiaat* \Rightarrow^* _____
- *Qasigianniguit* \Rightarrow^* _____
- *Isortoq* \Rightarrow^* _____
- *Uummannaq* \Rightarrow^* _____
- *Kapisillit* \Rightarrow^* _____

I should also mention two other places, you probably might want to go to:

- *Kangerlussuaq* is the name of a small town on the west coast where the atlantic airport is located. All flights from Copenhagen go to *Kangerlussuaq*, and you then continue on with smaller flights to your final destination. *Kangerlussuaq* is singular, but it is *not* a weak q-stem, so the ending N{mut} attaches directly to the final /q/. *He goes to Kangerlussuaq* is therefore *Kangerlussuarmukarpoq*.
- *Kalaallit Nunaannut* means *to Greenland*. It is a so-called *noun phrase*, because it consists of several coordinated nouns, but in this case we only need to worry about the ending on the final noun. As you can see, it carries an allative ending, so *he goes to Greenland* is therefore straightforward *Kalaallit Nunaannukarpoq*.

3.4 An affix for ability: V{sinnaa}V

Hitherto you have only seen verbal stems that express that someone *does* something. However, you might equally well want to express that you have the *ability* to do something; i.e. to say *I can Vb*. This is precisely what the affix V{sinnaa}V means. For example, {aallaq}V means *travel (to some place)*, so *aallarpoq* means *he travels*, but *aal-larsinnaavoq* means *he can travel*.

Exercise 11: Rewrite the sentences to say ‘can’

Rewrite the following sentences to express that the subject (either ‘I’ or ‘he’) *can* perform the action, by injecting **V{sinnaa}V** before the ending. Remember that you are now adding the ending onto a *vowel stem*, to its form may change by the fricative rule.

- *Nuummut aallarpunga* \Rightarrow^* *Nuummut aallarsinnaavunga*
I travel to Nuuk
- *Kalaallit Nunaannukarpoq* \Rightarrow^* _____
He goes to Greenland
- *kalaallisut oqarpoq* \Rightarrow^* _____
He says something in Greenlandic
- *Københavnimut qimuttuitsorpunga* \Rightarrow^* _____
I travel by train to Copenhagen
- *timmisartumut ilaavoq* \Rightarrow^* _____
he is a passenger on an aeroplane i.e. he travels by plane
- *Kangerlussuarmut tikippunga* \Rightarrow^* _____
I arrive in Kangerlussuaq

3.5 The fricative rule again

A good many affixes and endings begin with the phoneme /g/, for example the affix **V{galuaq}V** and the ending **V{gama}**. Here the fricative rule shows up again in another guise: this time it says that whenever a /g/ is joined onto a *consonant phoneme* /k/ or /t/ (but *not* /q/!), then /cg/ becomes **kk**. Abstractly written:

$$/cg/ \Rightarrow^* kk$$

where $c \neq /q/$.² This is yet another immensely common sound change.

²What happens when /g/ is joined onto a /q/ is handled by another rule, so we shall save that case for later.

Exercise 12: The fricative rule for /g/

The ending **V{gama}** means *when (or because) I Vb'ed*. Unlike **V{vuna}**, which is just used to state a fact, **V{gama}** is used to express some kind of (past) *cause or condition* for another verb, such as for example **because I worked I was tired**. Add **V{gama}** to one of the following stems, and **V{vuna}** to the other, to create complete sentences:

- **{suli}V {qasu}V** \Rightarrow^* _____
(work, be tired \Rightarrow because I worked, I was tired)
- **{tikit}V {isiq}V** \Rightarrow^* _____
(arrive, go inside \Rightarrow when I arrived, I went inside)
- **{nuuk}V {aallaq}V** \Rightarrow^* _____
(move, travel \Rightarrow because I moved, I travelled)

The fricative rule and the consonant rule

You have seen /cv/ become **pp** and /cg/ become **kk** because of the fricative rule. But you also know that by the *consonant rule*, $/c_1c_2/ \Rightarrow^* [c_2c_2]$. You may therefore be wondering how these two rules fit together: why does /kv/ and /tg/ not become [vv] and [gg] by the consonant rule, instead of [pp] and [kk]?

The explanation is that they actually *do*. /kv/ and /tv/ do indeed both become [vv] by the consonant rule; and likewise do /kg/ and /tg/ indeed become /gg/. However, both [v] and [g] belong to a group of consonants called *voiced fricatives*, and what the fricative rule actually says is that *when a voiced fricative is doubled, it must become devoiced*. One of the devoiced sounds corresponding³ to [v] is [p], so by the fricative rule, [vv] becomes [pp]. And likewise, one of the devoiced sounds corresponding to [g] is [k], so [gg] becomes [kk]. Hitherto, I have just preferred to describe it as a one-step transformation, rather than two steps, to make it easier for you to actually use the rule.

3.6 Necessarily truncative morphemes

Here is a simple rule to make your task of learning Greenlandic a little easier: *all morphemes that begin in a double consonant are truncative*. To learn affixes like **N{-qaq}V**

³Corresponding in the sense that they have the same place of articulation: Both [v] and [p] are pronounced on the *lips*.

and **N{-u}V**, you have to actively *remember* that these affixes are truncative. It is one more piece of information you have to memorise, along with their form, meaning, and what type of stem they join onto, and what type of stem they give rise to.

On the other hand, whenever you see a morpheme (either an affix or an ending) that starts with a *double* consonant /*cc*/, then by this rule you *know* that it is truncative. It is given directly by the shape of the morpheme. There is no reason to add that little ‘—’ in front of it, and consequently I shall not do so. Thus I write e.g. **V{ŋŋit}V** rather than **V{-ŋŋit}V**, because this affix (which by the way means *not Vb*) begins in a double consonant.

The slightly longer explanation

The explanation for this is a little technical, but it is worth for you to know: All *syllables* in all Greenlandic words (excluding Danish loan words) are of the form

$$(c)v(v)(c)$$

where *c* is a consonant phoneme, *v* is a vowel phoneme, and anything in parentheses can be omitted. Thus, the shortest possible syllable consists of a single vowel. The vowel can also be double, *vv*, but it must be two of the *same* kind of vowel, if they are to belong to the same syllable. In other words, *uia* (*her husband*) consists of three short syllables, [u-i-a]; but *Nuuk* is a single syllable. Also, there can be *at most one* consonant at the beginning and the end of a syllable, like in *Nuuk*, but not more than that.

Now consider what happens if we combine *two* syllables. According to this pattern of the structure of syllables, they would have to look like this:

$$(c)v(v)(c)|(c)v(v)(c)$$

I have simply doubled the pattern and added a | to mark the boundary between the two syllables. As you can see, there can *at most* be *two* consonant phonemes standing next to each other, at the boundary. There is simply no way in which you can combine any two legal instances of the pattern $(c)v(v)(c)$ such that you would ever end up with more than two consonants standing next to each other.

This means that whenever you join a morpheme {*ccv...*}, beginning in a double consonant /*cc*/, onto any kind of stem, then the result still *must* conform to this pattern of syllables. Consequently, if the stem itself ends in a consonant, {...*vc*}, then it *must* be removed, because otherwise there would be *three* consonants standing next to each other, which is disallowed by the syllable pattern.

Exercise 13: How to say 'not' with V{ḡḡit}V

The affix **V{ḡḡit}V** negates the meaning of the stem it attaches to. In other words, it means *not Vb*. Just as you naturally may want to say that you *do* something (or *can* do something), you may equally well also want to be able to express that you do *not* (or *cannot*) do something.

In this exercise, you rewrite verbs to negate their meaning by joining **V{ḡḡit}V** onto the stem. However, for a technical reason, you shall also add yet another affix after **V{ḡḡit}V**, which is one of the following:

- **V{galuaq}V**, which means *actually Vb (but ...)*. It can be a little difficult to describe the meaning, so an example will have to do: *sulivunga* means *I worked*, but *suligaluarpunga* means *I actually worked (but...)* something else happened, that contradicts the overt meaning of the stem {suli}V. Maybe I did not get much work done, or maybe you did not see me at work, which is why you might disbelieve that I actually worked.
- **V{-vik}V**, which means *totally/completely*. In combination with **V{ḡḡit}V** it means *not at all*.

Add the appropriate combination of **V{ḡḡit}V** and **V{galuaq}V** or **V{-vik}V** to the following verbs, to match the given translation:

- *Nuummukarpunga* \Rightarrow^* _____
(*I went to Nuuk* \Rightarrow *I didn't actually go to Nuuk*)
- *qimuttuitsorpunga* \Rightarrow^* _____
(*I went by train* \Rightarrow^* *I didn't actually go by train*)
- *aallarpunga* \Rightarrow^* _____
(*I travelled* \Rightarrow^* *I did not travel at all*)
- *oqarpunga* \Rightarrow^* _____
(*I said something* \Rightarrow^* *I did not say anything at all*)
- *tikippunga* \Rightarrow^* _____
(*I arrived* \Rightarrow^* *I didn't actually arrive*)
- *paasivakka^a* \Rightarrow^* _____
(*I understood them* \Rightarrow^* *I did not understand them at all*)

A note on spelling: /ḡḡ/ is spelt **nng** (and not **ngng**).

^aThe stem is {paasi}V and the ending is V{vakka}

A different type of verb and ending

The last word in exercise 13, *paasivakka*, had a different ending than any you have hitherto seen. The stem, {paasi}V means ⟨agent⟩ understands ⟨patient⟩, so there are two ‘roles’ built into the meaning of this verbal stem: one (the ⟨agent⟩) who does the understanding, and one (the ⟨patient⟩) who is understood. The first will normally be the *subject* of the final verb, and the other will be the *object*. Verbs that have *two* such inbuilt roles, are called *transitive* in Grammaric, and they normally also require an ending with *two* person markers; one denoting the subject, and one denoting the object. Thus e.g. V{vakka} means *I Vb them*.⁴ I shall have much more to say about transitive verbs and endings later on.

3.7 The contemporative mood and sandhi epenthesis

You have so far only seen a small handful of different endings for verbs: V{vuŋa} and V{vuq} both belong to one group called the *indicative mood* (denoted by the mood marker {vu}); whilst V{gama} belongs to a different mood called the *causative mood* (denoted by the mood marker {ga}). Indicative is for direct statements, and causative is for past cause or reason.

Now, here is a third kind of ending: V{(l)luŋa}. It also means *I Vb*, just like V{vuŋa} (so as you will notice, both contain the same person marker, {ŋa}), but it is used when you do *several* things in the same sentence. One verb (the main verb) will then carry an indicative ending, and the other verbs will carry an ending of this new kind. V{(l)luŋa} belongs to a set called the *contemporative mood*, denoted by the mood marker {(l)lu}, and instead of translating it as *I Vb*, it can often just be translated as *Vb’ing*.

Sandhi epenthesis

There is one other detail to note about V{(l)luŋa}: The (l) in parentheses *only* appears, when V{(l)luŋa} is added to a *vowel stem*. When instead it is added to a *consonant stem*, (l) just disappears.

This type of morpheme is thus in a way the opposite of truncative: it *only* joins onto consonant stems, and if the stem does not have a final consonant, the morpheme just injects one itself; in this case an extra /l/. Such ‘sound injection’ is called *epenthesis* in Grammaric, and I therefore call morphemes with this behaviour (sandhi) *epenthetic*, and I denote them by writing the extra consonant in parentheses, as in V{(l)luŋa}.

⁴In contrast to an ending like V{vuŋa}, that only means *I Vb*, because it only contains *one* person marker, namely {ŋa}.

Exercise 14: Play a bit with epenthesis

Rewrite the following sentences to use the contemporative mood ending **V{(l)luṅa}** instead of the indicative **V{vuṅa}**, and use instead *aallarpunga* as main verb:

- *timmisartumut ilaavunga* \Rightarrow^* _____
I'm a passenger on a plane \Rightarrow *I travel, (I) being a passenger on a plane, i.e. I travel by plane*
- *qimuttuitsorpunga* \Rightarrow^* _____
I go by train \Rightarrow *I travel, (I) going by train*
- *Nuummukarpunga* \Rightarrow^* _____
I go to Nuuk \Rightarrow *I travel, (I) going to Nuuk*

A note on spelling: /ql/ is spelt *rl* (and pronounced [ʈ]).

3.8 Text

At last, I have once again written a longer piece of text (and with much longer words), using the rules and constructs you have seen in this chapter. This piece is about how I first travelled to Greenland.

Exercise 15: Translate the text

2011-mi upernaakkut Kalaallit Nunaannut aallarpunga. Kisianni Aalborgimit toqqaannartumik Kalaallit Nunaannukarsinnaanngikkaluarpunga. Taamaammat majip (ulluisa) 16-ianni Københavnimukarpunga qimuttuitsorlunga. Aatsaat majip (ulluisa) 17-ianni Kalaallit Nunaannukarsinnaavunga. Ulloq taanna Københavnimit Kangerlussuarmut aallarpunga, timmisartumut ilaallunga. Qulingiluanut Kastrupimit timmisartoq 'Norsaq' aallarpoq. Tiimit sisamat ingerlasariaqarpoq. Kiisami Kangerlussuarmut tikippunga. Kangerlussuarmut tikikkama nalunaaqutaq aamma qulingiluanngorpoq, kisianni Kastrupimi ataasinngorpoq. Nalunaaqutaq aqqanermut timmisartoq Kangerlussuarmut Nuummut aallarpoq. Nuummut tikikkama timmisartup

naalagaa højtalerikkut kalaallisut oqarpoq: 'Nuummut tikilluaritsi!'. Oqaatsit paasisinnaanngivippakka.

Glossary:

- *upernaakkut, in the spring*
- *toqqaannartumik, directly*
- *taamaammat, therefore*
- *aatsaat, not until*
- *majip (ulluisa)^a 16-ianni, on the 16th of May*
- *ulloq taanna, on that (aforementioned) day*
- *(nalunaaqutaq)^b qulingiluanut, at 9 o'clock*
- *Kastrup, the name of Copenhagen Airport (or, the town where it is located)*
- *Tiimit sisamat ingerlasaqariaqarpoq, the trip was four hours*
- *kiisami, finally*
- *(nalunaaqutaq) qulingiluanngorpoq, it was 9 o'clock*
- *(nalunaaqutaq) ataasinngorpoq, it was 1 o'clock*
- *(nalunaaqutaq) aqqanermut, at 11 o'clock*
- *timmisartup naalagaa, the captain of the aircraft*
- *Højtalerikkut, on the speaker. Højtaler is borrowed from Danish.*
- *oqaatsit, (the) words*

^a*ulluisa* is often omitted.

^b*nalunaaqutaq (clock)* is sometimes omitted.

Solutions to the Exercises

Solution 9: The 3rd person indicative

Stianimik ateqarpoq. 36-nik ukioqarpooq. Qarasaasialerisuvoq. Aamma tarnip pissusiinik ilisimasaliuvoq. Aalborgiminngaanneerpoq, kisianni 2011-mi Kalaallit Nunaannut nuuppoq. 2011-mit 2016-imut Nuummi najugaqarpoq. Taava 2016-imi Aalborgimut uterpoq. Kisianni ullumikkut Reykjavímmi najugaqarpoq. 2021-mi maanga nuuppoq.

Solution 10: Going to places

- *Nuuk* \Rightarrow^* *Nuummukarpoq* (singular, k-stem)
- *Paamiut* \Rightarrow^* *Paamiunukarpoq* (plural, weak q-stem)
- *Arsuk* \Rightarrow^* *Arsummukarpoq* (singular, k-stem)
- *Qaqortoq* \Rightarrow *Qaqortumukarpoq* (singular, weak q-stem)
- *Illoqqortoormiut* \Rightarrow^* *Illoqqortoormiunukarpoq* (plural, weak q-stem)
- *Aasiaat* \Rightarrow^* *Aasiannukarpoq* (plural, k-stem)
- *Qasigiannguit* \Rightarrow^* *Qasigiannguanukarpoq* (plural, weak q-stem)
- *Isortoq* \Rightarrow^* *Isortumukarpoq* (singular, weak q-stem)
- *Uummannaq* \Rightarrow^* *Uummannamukarpoq* (singular, weak q-stem)
- *Kapisillit* \Rightarrow^* *Kapisilinnukarpoq* (plural, k-stem)

Solution 11: Rewrite the sentences to say 'can'

- *Nuummut aallarpunga* \Rightarrow^* *Nuummut aallarsinnaavunga*
- *Kalaallit Nunaannukarpoq* \Rightarrow^* *Kalaallit Nunaannukarsinnaavunga*
- *kalaallisut oqarpoq* \Rightarrow^* *kalaallisut oqarsinnaavoq*
- *Københavnimut qimuttuitsorpunga* \Rightarrow^* *Københavnimut qimuttuitsorsinnaavunga*
- *timmisartumut ilaavoq* \Rightarrow^* *timmisartumut ilaasinnaavoq*
- *Kangerlussuarmut tikippunga* \Rightarrow^* *Kangerlussuarmut tikissinnaavunga*

Solution 12: The fricative rule for /g/

- {suli}V {qasu}V \Rightarrow^* *suligama qasuvunga*
- {tikit}V {isiq}V \Rightarrow^* *tikikkama iserpunga*
- {nuuk}V {aallaq}V \Rightarrow^* *nuukkama aallarpunga*

Solution 13: How to say ‘not’ with V{ŋjit}V

- Nuummukarpunga \Rightarrow^* Nuummukanngikkaluarpunga
- qimuttuitsorpunga \Rightarrow^* qimuttuitsunngikkaluarpunga
- aallarpunga \Rightarrow^* aallanngivippunga
- oqarpunga \Rightarrow^* oqanngivippunga
- tikippunga \Rightarrow^* tikinngikkaluarpunga
- paasivakka \Rightarrow^* paasinngivippakka

Solution 14: Play a bit with epenthesis

- timmisartumut ilaavunga \Rightarrow^* aallarpunga timmisartumut ilaallunga
- qimuttuitsorpunga \Rightarrow^* aallarpunga qimuttuitsorlunga
- Nuummukarpunga \Rightarrow^* aallarpunga Nuummukarlunga

Solution 15: Translate the text

I travelled to Greenland in the spring of 2011. However, I could not actually go directly from Aalborg to Greenland. Therefore, I went to Copenhagen by train on the 16th of May. Not until the 17th of May could I go to Greenland. On that day I travelled from Copenhagen to Kangerlussuaq, going by aeroplane. The aircraft ‘Norsaq’ departed from Kastrup at 9 o’clock. The trip was four hours.

Finally, I arrived in Kangerlussuaq. When I arrived Kangerlussuaq, it was also 9 o'clock, however in Kastrup it was 1 o'clock.^a The flight from Kangerlussuaq to Nuuk departed at 11 o'clock. When I arrived in Nuuk, the captain of the aircraft said in Greenlandic on the speakers: *Nuummut tikilluaritsi!* I did not at all understand the words.

^aThe trip is four hours, and the timezone difference is also four hours.

Coming to Nuuk

Nuuk is the capital of Greenland, and also the largest town in the country. When I moved there in 2011, there were some 16.000 inhabitants, which is likely less than most other capitals in the world (but Greenland is a very sparsely populated country).

This chapter continues the story of my travel to Nuuk, where I had been offered a position as educational psychologist in the municipal School Administration. The aim of this chapter is to teach you just a single new sound rule, the *ð-rule*, an immensely common affix, **V{ðuq}N**, and also to provide you with some further insights into the system of verbal endings and the whole issue of *mood* and *mood markers*.

4.1 Review

We begin again by reviewing the rules you have seen thus far:

- Affixes and endings have three different *joining strategies* (or ‘sandhi’): they can be *additive*, *truncative* or *epenthetic*.
 - Additive morphemes like **N{mut}** and **V{sinnaa}V** join onto both vowel- and consonant stems without further ado.
 - Truncative morphemes like **N{-u}V** and **N{-qaq}V** will only join onto vowels, and if the previous stem end in a consonant, it is removed. Morphemes beginning in a double consonant, like **V{ŋŋit}V** are *necessarily* truncative, because of the syllable structure, so I write them without any special symbol to indicate truncativity.

- Epenthetic morphemes like **V{(l)luŋa}** will only join onto consonants, so if the previous stem ends in a vowel, the morpheme injects the extra consonant written in parentheses.
- Vowels have an open (uvularised) pronunciation before uvulars (/r/ and /q/), and open /i/ and open /u/ are spelt as *e* and *o*, respectively.
- By the consonant rule, all consonant clusters c_1c_2 are assimilated to c_2c_2 .
- By the fricative rule, [vv] becomes [pp], [gg] becomes [kk], and [ll] becomes [ʃʃ], and they are spelt *pp*, *kk*, *ll* respectively. However, if the first consonant is a /q/, that has been assimilated by the consonant rule, i.e. /qv/ or /ql/, they are instead spelt *rp* and *rl*, respectively.

4.2 Spelling of assimilated /q/

Here is a rule I have indicated indirectly several times, but not yet stated clearly: *whenever a /q/ is assimilated by the consonant rule, it is always spelt as r*. In other words, whenever you have a consonant cluster of the form /qc/ where *c* is any consonant, then it comes to be pronounced as [cc] by the consonant rule. But since the underlying (now assimilated) /q/ still affects a preceding vowel by the vowel rule, then this assimilated /q/ is *written* as *r*, to remind us that the preceding vowel is uvularised.¹ You have already seen several examples of this, e.g. whenever you have joined a non-truncative morpheme onto a q-stem, but here is another for good measure:

{kanqluk}N{(q)cuaq}N{mut}
 ⇒ /kanqlukcuaqmut/
 ⇒* [kanʃʃuccuammut]
 ⇒* *kangerlussuarmut*

{kanqluk}N means *fjord*, and N{(q)cuaq}N means *big/great/huge N*, so the name *Kangerlussuaq* literally means *the great fjord*. Notice also that N{(q)cuaq}N is *not* a weak q-stem.

4.3 A sound rule for /ð/

A number of endings and a good deal of very common affixes begin in a strange consonant phoneme /ð/; for example the immensely common affix **V{ðuq}N** that means *one*

¹And there must necessarily always *be* a vowel preceding a consonant cluster /qc/ because of the syllable structure.

who *Vb*'s. It is 'strange' because it has no associated pronunciation of its own. Instead, it always changes into another phoneme (which then determines its pronunciation), but *which* phoneme it changes into depends on the context. It is determined by the following rule:

$$\begin{aligned} /v\text{Ǿ}/ &\rightarrow /vc/ \\ /c\text{Ǿ}/ &\rightarrow /ct/ \end{aligned}$$

where *c* is any consonant phoneme, and *v* any vowel phoneme as usual. In other words, the rule says that /Ǿ/ *becomes* /c/ *whenever it follows a vowel*, but it *becomes* /t/ *whenever it follows a consonant*.²

- In the former case, /c/ is pronounced as [ʃ] (an sh-like sound, as in *she*), and [ʃ] is always spelt as *s*, just like an ordinary [s] is.³
- In the latter case, we then end up with a consonant cluster /ct/, which then of course by the consonant rule becomes [tt] and is also spelt *tt* (or *rt*, if the assimilated consonant is /q/).

Thus, you can also just choose to learn a 'short-circuited' version of this rule, namely that /cǾ/ is spelt *tt* (or *rt* if *c* = /q/); and /Ǿ/ is spelt *s* whenever it follows a vowel.

Exercise 16: V{Ǿuq}N, the one who *Vb*'s

V{Ǿuq}N (a weak q-stem) is perhaps *the* most natural way to turn any verb stem meaning *(someone) does (something)* into a noun stem meaning *one who does (something)*. It appears in everything from the names of colours to job titles. Add it to the following stems, using the empty nominal ending N{∅}, to produce a new noun with the corresponding meaning:

- {iga}V \Rightarrow^* _____
(*cooks food* \Rightarrow *one who cooks food* = *a cook*)
- {atuaq}V \Rightarrow^* _____
(*reads, goes to school* \Rightarrow *one who reads, goes to school* = *school pupil*)
- {suli}V \Rightarrow^* _____
(*works* \Rightarrow *one who works* = *a worker/employee*)

²I hope the font difference is clear enough that you can distinguish between /c/, which is a symbol I use to represent an *arbitrary* consonant phoneme; and /c/, which is a *specific* consonant phoneme, namely the one that is pronounced as [ʃ].

³Actually, a good number of speakers (especially the younger) do not even distinguish between [ʃ] and [s]; they just say [s] in both cases.

- {aakpaluk}V \Rightarrow^* _____
(is red \Rightarrow one/something that is red = the colour red)
- {miki}V \Rightarrow^* _____
(is small \Rightarrow one/something that is small = small)
- {utaqqi}V \Rightarrow^* _____
(waits for somebody \Rightarrow one who waits for somebody)
- {nuuk}V \Rightarrow^* _____
(moves \Rightarrow one who moves)
- {qaquq}V \Rightarrow^* _____
(is white \Rightarrow one/something that is white = the colour white)

Exercise 17: The habitual affix V{ðaq}V

Greenlandic verbal bases can roughly be divided into two categories:

- Bases describing a *state of being*, like {miki}V, *is small*.
- Bases describing an *event that happens once* and has a beginning and an end, like {tikit}V, *arrives*.

Now consider a sentence such as *I worked in the School Administration*. Supposedly, I went to work there more than just one single time (in fact, I did so every weekday for five years). To express that, you need to add an affix to the stem, indicating that the event happened *repeatedly*. The most common such affix is V{ðaq}V, which precisely expresses that the event happened more than once. You can perhaps translate it as *habitually Vb*.^a

Add V{ðaq}V to the following stems to indicate that they occur repeatedly/habitually. Use the ending V{vuna} to obtain a complete verb:

- Atuarfeqarnermut Ingerlatsivimmi {suli}V \Rightarrow^* _____
(In the School Administration, work \Rightarrow I worked in the School Administration)
- Nuummi {atuaq}V \Rightarrow^* _____
(In Nuuk, go to (primary) school \Rightarrow I went to (primary) school in Nuuk)
- Ullaakkut {kaffisuq}V \Rightarrow^* _____
(In the morning, drink coffee \Rightarrow I (habitually) drink coffee in the morning)

- $Qallunaatut \{uqaluk\}V \Rightarrow^* \underline{\hspace{10em}}$
(*Danish, speak* \Rightarrow *I speak Danish*)

^aAlthough it sounds somewhat artificial, since English does not consistently distinguish between one-time and recurring events.

Exercise 18: $V\{\dot{d}aq\}N$ with other affixes

$V\{\dot{d}aq\}V$ is also often combined with $V\{\dot{d}uq\}N$ to create a noun meaning *one that (habitually) Vb*; or with another affix, $V\{(f)fik\}N^a$ which means *place where one Vb*. Many of these combinations have been *lexicalised*, i.e. added to the dictionary with a specific meaning.

Combine the following morphemes to create a noun with the corresponding meaning, and use the ‘empty’ singular ending $N\{\emptyset\}$ to create a complete noun:

- $\{tiŋmi\}V + V\{\dot{d}aq\}V\{\dot{d}uq\}N \Rightarrow^* \underline{\hspace{10em}}$
(*fly* \Rightarrow *one that (habitually) flies* = *aeroplane*)
- $\{uqaluk\}V + V\{\dot{d}aq\}V\{(f)fik\}N \Rightarrow^* \underline{\hspace{10em}}$
(*speak* \Rightarrow *place where one (habitually) speaks* = *lectern, pulpit*)
- $\{timiŋsuq\}V + V\{\dot{d}aq\}V\{\dot{d}uq\}N \Rightarrow^* \underline{\hspace{10em}}$
(*do sports* \Rightarrow *athlete, sportsman*)
- $\{timiŋsuq\}V + V\{\dot{d}aq\}V\{(f)fik\}N \Rightarrow^* \underline{\hspace{10em}}$
(*do sports* \Rightarrow *stadium, gym*)
- $\{tikit\}V + V\{\dot{d}aq\}V\{(f)fik\}N \Rightarrow^* \underline{\hspace{10em}}$
(*arrive* \Rightarrow *airport terminal (for arrivals)*)
- $\{sinik\}V + V\{\dot{d}aq\}V\{(f)fik\}N \Rightarrow^* \underline{\hspace{10em}}$
(*sleep* \Rightarrow *place where one (habitually) sleeps* = *bedroom*)
- $\{mit\}V + V\{\dot{d}aq\}V\{(f)fik\}N \Rightarrow^* \underline{\hspace{10em}}$
(*land (like a bird)* \Rightarrow *place where one (habitually) lands* = *airport*)

^aThe morphemic form is actually $V\{(v)vik\}N$, so this affix is one of a few, very rare examples where /vv/ does *not* become [pp] as usual by the fricative rule. Instead, this affix prefers a different, devoiced sound (that also corresponds to /v/); namely [ff].

4.4 Noun phrases

Words like *aappaluttoq* and *mikisoq* correspond to what we in English would call adjectives; i.e. *red*, *small* and so on. Words we would use to describe some quality or characteristic of another noun.

But in Greenlandic, *aappaluttoq* and *mikisoq* are themselves *nouns*. There is no separate class of adjectives in Greenlandic; the adjectival meaning is instead expressed with verbal stems like {aakpaluk}V and {miki}V, which can then be transformed into nouns by adding V{ðuq}N. So how would you then use these words to describe another noun, such as *illu*?

You could of course just use {miki}V as a verb and say *illu mikivoq*, but it means *the house is small*, and not just *a small house*. It is a full sentence (there is a verb, *mikivoq* and a subject, *illu*), which is not what we are interested in here. We just want a group of nouns, that *as a whole* could function as e.g. the subject of a sentence, or as something we go into, or come out of, etc. Such a group of ‘coordinated’ nouns is called a *noun phrase* in Grammaric. Here is how to do it:

1. Add V{ðuq}N to the adjectival, verbal stem; e.g. *mikisoq*.
2. Place your new ‘adjectival noun’ *after* the noun you want it to describe; e.g. *illu mikisoq*.
3. Give both nouns the same ending; i.e. *illu mikisoq* (*the small house*) both have the N{∅} ending; *illumut mikisumut* (*to the small house*) both have the N{mut} ending; *illuni mikisuni* (*in the small houses*) both have the (plural) N{ni} ending, and so on.

Exercise 19: Create noun phrases and sentences

Add V{ðuq}N and the appropriate endings, N{∅}, N{mit}, N{mut} and V{vunja} to the following stems to obtain a sentence matching the translation:

- {tiŋmiðaqðuq}N, {aakpaluk}V, {niu}V \Rightarrow^* _____
(*aeroplane, is red, disembarks* \Rightarrow *I disembarked **from** the red aeroplane*)
- {tikitðaqfik}N, {miki}V, {isiq}V \Rightarrow^* _____
(*terminal (arrivals), is small, enter* \Rightarrow^* *I entered **into** the terminal*)
- {iŋlu}N, {qaquq}V, *takulerpara* \Rightarrow^* _____
(*house, is white, I noticed it* \Rightarrow *I noticed the white house*)

Note in the last sentence, that I have ‘pre-constructed’ the verb *takulerpara* (*I noticed it*) for you here, because it requires one of these endings with *two* person markers, which I have also previously mentioned but not yet explained in detail. For now, it suffices to note that the endings is **V{vara}** and means *I Vb him* (or *her* or *it*).

4.5 Persons, mood markers and participial endings

As you saw in the previous chapter, you can use the so-called *contemporative mood* to express that a person does several things in the same sentence; e.g. as in *aallarpunga timmisartumut ilaallunga*. The mood marker of the contemporative mood is **{(l)lu}**, so for example instead of our usual intransitive indicative 1st person singular ending **V{vuŋa}**, we now get **V{(l)luŋa}**.

However, there is a catch: you can *only* use the contemporative mood if it is the *same* person who does several things in the sentence. So what if you have two *different* persons doing something? Consider for example the sentence *he said (that) I was a passenger on the plane*. Clearly, *he* \neq *I*, so we cannot use the contemporative mood.

Instead, you need to use a different mood, called the *participial mood*. This is fortunately very easy, now that you know about mood markers: the participial mood marker is **{ðu}**, so instead of **V{vuŋa}** and **V{(l)luŋa}**, we now get the ending **V{ðuŋa}**, meaning (*that*) *I Vb*.⁴

But we can also take this one step further, since you have also seen another intransitive indicative ending; namely the *3rd person singular* ending **V{vuq}**, meaning *he Vb's*. So what do you now think the corresponding *participial* ending is? If you guessed **V{ðuq}**, then you are absolutely right.⁵

And we can go further still, but let me first introduce a bit of terminology and some notational short-hand:

- The *first* (1.) person is *I* in singular (sg); and *we* in plural (pl). I abbreviate them as *1.sg* and *1.pl*.
- The *second* (2.) person is *you* in both singular and plural in modern English; but in Shakespearean times, the singular was called *thou*, whilst the plural was *you*. I abbreviate the singular *thou* as *2.sg* and the plural *you* as *2.pl*.

⁴It may often, but not always, make sense to have “*that*” in the English translation of a participial sentence.

⁵Be careful not to confuse **V{ðuq}** with the nominalising affix **V{ðuq}N**. Even though they look the same (especially when the noun carries the empty ending **N{∅}**), they have different meanings. Most notably, the former is a verb, and the latter is a noun.

- The *third* (3.) person is *he*⁶ in singular, and *they* in plural; so I abbreviate them as *3.sg* and *3.pl* respectively.

Henceforth I can therefore just refer to **V{vuŋa}** as *indicative 1.sg*, and **V{ðuq}** as *participial 3.sg*. And now that you understand how the two moods are related, you can learn both of them at the same time. For every new ending you learn from one set, you get another one for free. For example, the indicative 2.sg ending is **V{vutit}** (*thou Vb*); and the indicative 1.pl ending is **V{vugut}** (*we Vb*). But now you can also mechanically determine their participial counterparts.

In sum, here are the intransitive indicative and participial endings you now should know:

1.sg	V{vuŋa}	V{ðuŋa}	(<i>I Vb</i>)
2.sg	V{vutit}	V{ðutit}	(<i>thou Vb</i>)
3.sg	V{vuq}	V{ðuq}	(<i>he Vb's</i>)
1.pl	V{vugut}	V{ðugut}	(<i>we Vb</i>)

Exercise 20: Use the participial mood

Here are some pairs of sentences. Combine each pair into a single sentence, by rewriting the second sentence to use the participial mood:

- *Takulerpara. Arnaq utaqqivoq.* \Rightarrow^* _____
(*I noticed it. A woman waited (for somebody).* \Rightarrow *I noticed (that) a woman waited (for somebody).*)
- *Oqarfigaanga. Suleqatigiippugut.* \Rightarrow^* _____
(*He said (something) to me. We work together.* \Rightarrow *He said to me (that) we work together*)
- *Oqarpoq. Nuniaffimmi najugaqarputit.* \Rightarrow^* _____
(*He said (something). You live in Nuniaffik* \Rightarrow *He said you live in Nuniaffik*)
- *Illinuna. Stianimik ateqarputit.* \Rightarrow^* _____
(*It is you. Your name is Stian* \Rightarrow *It is you whose name is Stian*)

Glossary:

- **{taku}V**, $\langle agent \rangle$ sees $\langle patient \rangle$. With **V{-liq}V**, begins to see, notices.

⁶And *she* and *it*, but we ignore them, since that distinction does not exist in Greenlandic.

- **V{-liq}V**, *begins to Vb*. It indicates the start/onset of the behaviour/event described by the stem it is affixed to.
- **V{-qatigiik}V**, *Vb together* (only with ending in plural).
- ***{una}**, *it is ...*, or, when used as a question *is it ...?* Note: this is an enclitic.

4.6 Transitive endings

Most of the verbal endings you have seen thus far have only contained a single person marker; endings like **V{vuŋa}**, **V{ðutit}**, **V{(l)luŋa}** and so on. These are called *intransitive* endings in Grammaric; so this is why I have spoken of e.g. **V{vuŋa}** as being the *intransitive* indicative 1.sg ending.

However, you have also now begun to see a few verbal stems describing actions that logically involve two parties; a ‘doer’ of the action, and a ‘doee’ who the action is directed at, or performed upon. I call the ‘doer’ of such an action the *⟨agent⟩*, and the ‘doee’ or recipient is the *⟨patient⟩*. As an example, you saw the base **{taku}V** in the glossary for exercise 20. It means *see*, but logically there must be someone doing the seeing, and someone being seen, so I translate this stem as *⟨agent⟩ sees ⟨patient⟩*. Here are some further examples:

- **{paasi}V**, *⟨agent⟩ understands ⟨patient⟩*
- **{aa}V**, *⟨agent⟩ fetches ⟨patient⟩*
- **{uqnik}V**, *⟨agent⟩ approaches ⟨patient⟩*

Such stems usually require endings with *two* person markers; one to tell us who the *⟨agent⟩* is, and one to denote who the *⟨patient⟩* is. These endings are correspondingly called *transitive* endings, and you have already seen a few of them; for example:

- **V{vara}**, *I Vb him* (indicative 1.sg/3.sg)
- **V{vakka}**, *I Vb them* (indicative 1.sg/3.pl)

It is not important here what the person markers actually are. The main thing to notice is that they both start with /va/. This is a morpheme **{va}**, which is the mood marker for *transitive* indicative (like **{vu}** for *intransitive* indicative). Most moods use the same mood marker for both intransitive and transitive endings, but the indicative and participial moods are two exceptions.

Notice also the notation: With transitive endings I write x_1/x_2 to indicate the two persons; e.g. ‘1.sg/3.pl’ as I did above. Thus, x_1 is the person taking the *⟨agent⟩* role, and x_2 is the person taking the *⟨patient⟩* role. This also means that whenever you see x_1/x_2

in the translation for an ending, you know that it is a *transitive* ending (and conversely, if I only mention a single person, then you know it is *intransitive*).

A first glimpse of /ə/

In exercise 20 you saw a word, *oqarfigaanga*, with a strange-looking ending. It is actually **V{vaan̥a}** (indicative 3.sg/1.sg), but as you can see, it seems like /v/ has disappeared from the mood marker {va}. And indeed it has.

I have previously mentioned that Greenlandic also has a *fourth* vowel phoneme; this is called /ə/ (‘schwa’), and the stem of *oqarfigaanga* actually ends on this vowel. In other words, it is a *ə*-stems, {uqaqfigə}V, meaning ⟨agent⟩ tells ⟨patient⟩ (something).

The vowel phoneme /ə/ has no sound of its own, but it causes trouble in a variety of contexts, including here; i.e. right before an indicative ending. I shall return to this issue later, but for now it suffices for you to know the following (partial) rule: *Whenever you add a transitive indicative ending to a ə-stem, remove both /ə/ and /v/ from the mood marker {va}*. You simply delete the combination /əv/.

Exercise 21: Transitive indicative on ə-stems

Add the transitive indicative ending to the following *ə*-stems:

- {uqaqfigə}V + V{vaatit} \Rightarrow^* _____
(⟨agent⟩ tells ⟨patient⟩ (something) + he Vb’s you (indicative 3.sg/2.sg))
- {apirə}V + V{vaan̥a} \Rightarrow^* _____
(⟨agent⟩ asks ⟨patient⟩ (something) + he Vb’s me (indicative 3.sg/1.sg))

With this last difficulty out of the way, you are now ready for the main text of this chapter. Here I describe my arrival in Nuuk and my first encounter with one of my new colleagues, a lady named Arnannnguaq.

Exercise 22: Translate the text

Nuummut tikikkama timmisartumit aappaluttumit niuvunga. Tikittarfimmut mikisumut iserpunga kuffertiga aallugu.
Iserlunga takulerpara arnaq kalaaleq utaqqisoq. Ornikkakku aperaanga qallunaatut oqalulluni: “Stianiuna?”
“Aap” akivunga, “Stianimik ateqarpunga.”

“Kutaa, uanga Arnannguamik ateqarpunga. Atuarfeqarnermut Ingerlatsivimmi sulisarpunga. Pisortannguarpuk oqarfigaanga suleqatigiissasugut.”

“Aamma oqarfigaatit sumi najugaqassasunga?”

“Aap, oqarpoq Nuniaffimmi najugaqassasutit.”

Taava Arnannguag uangalu mittarfimmit anivugut Nuniaffimmukalerlutalu.

Glossary:

- *kufferti*, *suitcase*, borrowed from Danish
- *N{ga}*, *my N*
- *V{gakku}*, *when I Vb'ed her* (causative 1.sg/3.sg)
- *V{(l)luni}*, *(she) Vb'ing* (contemporative 4.sg, but think of it as 3.sg)
- *aap*, *yes*
- *{aki}V*, *answer/reply*
- *kutaa*, *hello/good day*, borrowed from Danish
- *uanga*, *I*, can be used for emphasis of 1.sg
- *{pisuqtaq}N*, *boss/chief*
- *N{nguaq}N*, *dear/little*, often used for (unironic) endearment
- *N{(q)vut}*, *our N*
- *V{ssa}V*, *shall Vb*, denotes future
- *V{(l)luta}*, *(we) Vb'ing* (contemporative 1.pl)
- **{lu}*, *and* (enclitic)

Solutions to the Exercises

Solution 16: V{ðuq}N, the one who Vb's

- {iga}V \Rightarrow^* *igasoq*
- {atuaq}V \Rightarrow^* *atuartoq*
- {suli}V \Rightarrow^* *sulisoq*
- {aakpaluk}V \Rightarrow^* *aappaluttoq*
- {miki}V \Rightarrow^* *mikisoq*
- {utaqqi}V \Rightarrow^* *utaqqisoq*
- {nuuk}V \Rightarrow^* *nuuttoq*
- {qaquq}V \Rightarrow^* *qaqortoq^a*

^aThis is also the name of a town in South Greenland, *Qaqortoq*.

Solution 17: The habitual affix V{ðaq}V

- *Atuarfeqarnermut Ingerlatsivimmi* {suli}V \Rightarrow^*
Atuarfeqarnermut Ingerlatsivimmi sulisarpunga
- *Nuummi* {atuaq}V \Rightarrow^* *Nuummi atuartarpunga*
- *Ullaakkut* {kaffisug}V \Rightarrow^* *ullaakkut kaffisortarpunga*
- *Qallunaatut* {uqaluk}V \Rightarrow^* *Qallunaatut oqaluttarpunga*

Solution 18: V{ðaq}N with other affixes

- {tiŋmi}V + V{ðaq}V{ðuq}N \Rightarrow^* *timmisartoq*
- {uqaluk}V + V{ðaq}V{(f)fik}N \Rightarrow^* *oqaluttarfik*
- {timiŋsuq}V + V{ðaq}V{ðuq}N \Rightarrow^* *timersortartoq*
- {timiŋsuq}V + V{ðaq}V{(f)fik}N \Rightarrow^* *timersortarfik*
- {tikit}V + V{ðaq}V{(f)fik}N \Rightarrow^* *tikittarfik*
- {sinik}V + V{ðaq}V{(f)fik}N \Rightarrow^* *sinittarfik*
- {mit}V + V{ðaq}V{(f)fik}N \Rightarrow^* *mittarfik*

Solution 19: Create noun phrases and sentences

- {tiŋmiðaqðuq}N, {aakpaluk}V, {niu}V
 \Rightarrow^* *timmisartumit aappaluttumit niuvunga*
- {tikitðaqfik}N, {miki}V, {isiq}V
 \Rightarrow^* *tikittarfimmut mikisumut iserpunga*
- {iŋlu}N, {qaquq}V, *takulerpara* \Rightarrow^* *illu qaqortoq takulerpara*

Solution 20: Use the participial mood

- *Takulerpara. Arnaq utaqqivoq.* \Rightarrow^* *Takulerpara arnaq utaqqisoq*
- *Oqarfigaanga. Suleqatigiippugut.* \Rightarrow^* *Oqarfigaanga suleqatigiittugut*
- *Oqarpoq. Nuniaffimmi najugaqarputit.*
 \Rightarrow^* *Oqarpoq Nuniaffimmi najugaqartutit*
- *Illinuna. Stianimik ateqarputit.* \Rightarrow^* *Illinuna Stianimik ateqartutit*

Solution 21: Transitive indicative on ə-stems

- {uqaqfigə}V + V{vaatit} \Rightarrow^* *oqarfigaatit*
- {apirə}V + V{vaaja} \Rightarrow^* *aperaanga*

Solution 22: Translate the text

When I arrived in Nuuk, I disembarked from the red aeroplane. I went into the small terminal, fetching my suitcase.

Coming in, I noticed a Greenlandic woman waiting for somebody. When I approached her, she asked me, speaking in Danish: “Is it Stian?”

“Yes” I replied, “my name is Stian.” “Hello, my name is Arnannguaq. I work in the

School Administration. Our (dear) boss told me that we shall be working together.”
“Did she also tell you where I shall stay (have address)?”
“Yes, she said (that) you shall stay (have address) in Nuniaffik.”
Then Arnannguaq and I went out of the airport and began going to Nuniaffik.

Geography of Nuuk

Immediately after I arrived in Nuuk, I moved into a temporary apartment (or rather, a room) in Nuniaffik, which is in the district of Nuussuaq, approximately midway between the ‘old town’ of Nuuk proper, and the latest expansion, called Qinnngorput. In this chapter, I will tell you a bit more about the geography of Nuuk, and also introduce two new (but fortunately quite simple) sound rules, as well as some new endings for both nouns and verbs.

5.1 Review

We begin, as usual, with a review of what you already know. But as there are quite a number of rules now, I have separated them into four distinct topics:

Sandhi rules:

- Affixes and endings display three distinct types of *sandhi* or ‘joining’ behaviour: They can be *additive*, *truncative* or *epenthetic* (‘sound injecting’).
- Affixes beginning in a double consonant like $V\{\eta\eta it\}V$ and $V\{ssa\}V$ are *necessarily* truncative, because of the syllable structure.

Sound rules:

- The δ -rule: $/c\delta/ \rightarrow /ct/$, whilst $/v\delta/ \rightarrow /vc/$. Or less abstractly, that $/\delta/$ becomes $/t/$ when added to a *consonant*, but $/c/$ (pronounced [ʃ] and spelt s) on a *vowel*.
- The vowel rule: Vowels have an open pronunciation before uvulars ($/r/$ and $/q/$).



Figure 5.1: A map of Nuuk and the three major city areas: *Nuup Qeqqa*, *Nuussuaq* and the newest expansion, *Qinngorput*. I have also added the location of *Nuniaffik*, where I (initially) stayed, and also the location of *Atuarfeqarnermut Ingerlatsivik* where I went to work.

- The consonant rule: All consonant clusters c_1c_2 are assimilated to c_2c_2 .
- The fricative rule: $[vv] \rightarrow [pp]$ ¹; $[gg] \rightarrow [kk]$; and $[ll] \rightarrow [ʃʃ]$.

Spelling rules:

- Open (uvularised) /i/ and /u/ (that is, [ɜ] and [ɔ]) are spelt as *e* and *o*; but an open /a/ (that is, [ɑ]) is still just spelt *a*, like the non-uvularised [a].
- [ʃʃ] is spelt *ll* (or *rl* as noted below).
- Whenever a /q/ is assimilated by the consonant rule, it is always spelt as *r*. So all clusters /qc/, which become [cc] by the consonant rule, are spelt as *rc*.
- [ŋ] is spelt *ng*, but double [ŋŋ] is just spelt *nng* (and not *ngng*)

Grammar:

- Verbal endings consist of a *mood marker* and one or two *person markers*. The mood markers you have seen thus far are
 - {vu}/{va} (indicative)
 - {(l)lu} (contemporative)
 - {ðu} (participial)
 - {ga} (causative)
- The mood marker indicates the type of expression: direct statement (indicative); *Vb'ing* or several things in the same sentence (contemporative); (*that*) ... *Vb* when the two subjects differ (participial); and *when/because* ... *Vb'ed* for past cause/reason (causative).
- *Intransitive* endings have a single person marker, whilst *transitive* endings have two person markers; one denoting the ⟨agent⟩ and the other denoting the ⟨patient⟩.

5.2 A sound rule for /g/

You have seen several examples of g-initial morphemes being joined onto k-stems and t-stems, where /tg/ and /kg/ both become [kk] by first applying the consonant rule, and then applying the fricative rule. However, hitherto I have deliberately avoided giving you any examples or exercises that would require you to join a g-initial morpheme onto a *q-stem*, because that combination has its own, specialised sound rule:

$$/qg/ \rightarrow /r/$$

¹Or, in rare cases like **V**{(v)vik}**N**, /vv/ → [ff]

In other words, *whenever you have the combination /qg/, they merge and become a single /r/*. Thus, in this case, you do not have to worry about consonant assimilation and the fricative rule: The g-rule is unconditional and thus quite simple; /qg/ always become /r/, with no exceptions.

5.3 The iterative mood

Here is a new verbal ending: **V{gaṇama}**, meaning *whenever I Vb*. It belongs to a new mood, called the *iterative* mood, and as you maybe have guessed, the mood marker is {gaṇa}, and the person marker is {ma} (1.sg), just like with causative **V{gama}**.

Whenever you say *whenever*, you obviously also need a *main clause* (sentence), where you describe what happens, whenever you Vb; for example, *whenever I wake up, I drink coffee*. Here *I drink coffee* is the main clause, and since this is something that happens *repeatedly* (namely whenever I wake up), the verb in the main clause of course needs an affix to mark it as a recurrent/repeated action; usually the affix **V{ḏaq}V** that you also saw in exercise 17.

Exercise 23: Use the iterative mood

Here are some pairs of verbal bases: Add **V{gaṇama}** to the first, and **V{ḏaq}V** + **V{vuṇa}** to the second to form complete sentences:

- {itiq}V, {kaffisuq}V \Rightarrow^* _____
wake up, drink coffee \Rightarrow *whenever I wake up I drink coffee*
- {sinnaqtuuq}V, {bussiq}V \Rightarrow^* _____
oversleep, take the bus \Rightarrow *whenever I oversleep, I take the bus*
- {suliffimnukaq}V^a, {pisuk}V \Rightarrow^* _____
go to my workplace, walk \Rightarrow *whenever I go to my workplace, I walk*

^aThis stem is of course made with the allative verbalisation **N{ALL}{-kaq}V**. The allative ending is **N{mnut}**, *to my N*, added onto the noun *suliffik*, built from {suli}V, *work*, and **V{(f)fik}N**, *place where one Vb's*.

5.4 The go-to affix V{gi'jaqtuq}V

Here is a useful, but slightly peculiar affix: V{gi'jaqtuq}V, meaning *go (somewhere) to Vb*. The peculiarity is that this affix has an idiosyncratic sandhi rule; that is, a special rule for joining onto other stems, which *only* holds for this particular affix. The rule is:

$$\begin{aligned} \{\dots c\}V + V\{gi'jaqtuq\}V &\rightarrow \{\dots cgi'jaqtuq\}V \\ \{\dots v\}V + V\{gi'jaqtuq\}V &\rightarrow \{\dots vjaqtuq\}V \end{aligned}$$

In other words, *whenever this affix joins onto any vowel stem* $\{\dots v\}V$, *the prefix /gi/ disappears*; but on a *consonant stem* $\{\dots c\}V$, */gi/ is present*. It is an annoying extra detail you need to learn, since this rule only holds for this single affix; but at least it is not difficult, and fortunately there are not many affixes with idiosyncratic sandhi rules like this.

A spelling rule for /ij/

In order to use the affix V{gi'jaqtuq}V, you also need to know another spelling rule (which is fortunately a *general* rule, so you will encounter it in many other contexts as well). The rule is simply that [ij] is spelt as just *i*, which is quite natural, since a [j] after an [i] becomes almost inaudible anyway. But as you can probably imagine, this spelling rule will be needed with the affix V{gi'jaqtuq}V.

Exercise 24: Explore the forms of V{gi'jaqtuq}V

Add V{gi'jaqtuq}V to the following stems, to explore the many possible forms, this affix can end up having in a completed word. How many different forms are there? Use indicative 3.sg V{vuq} (for intransitive verbs) or 3.sg/3.sg V{vaa} (for transitive verbs) to create complete sentences:

- {kaffisuq}V \Rightarrow^* _____
drink coffee \Rightarrow *he goes (somewhere) to drink coffee*
- {sinik}V \Rightarrow^* _____
sleep \Rightarrow *he goes (somewhere) to sleep*
- {ilitniaqtit}V \Rightarrow^* _____
<agent> teaches <patient> \Rightarrow *he goes (somewhere) to teach him (something)*
- {iga}V \Rightarrow^* _____
cook food \Rightarrow *he goes (somewhere) to cook food*
- {suli}V \Rightarrow^* _____
work \Rightarrow *he goes (somewhere) to work*

- {taku}V \Rightarrow^* _____
 $\langle \text{agent} \rangle$ sees $\langle \text{patient} \rangle \Rightarrow$ *he goes (somewhere) to see him*

Note on spelling: [ij] is spelt *i*.

5.5 A sound rule for [a]

Here is a rule for the sound [a], but let me first emphasise that it deals with the *sound* [a], and not (necessarily) the *phoneme* /a/. The reason for this distinction will soon become apparent. The rule is:

$$[av] \rightarrow [aa]$$

or, in other words: *any vowel sound v , that follows the sound [a], will itself become [a]*. The vowel phoneme /a/ does of course have the *sound* [a]² but the sound [a] can also arise in other ways. That is why this rule has to be expressed at the level of *sounds*, rather than phonemes. But in any case, it is a simple rule without any special conditions.

Exercise 25: Use the a-rule

You have already seen the affix N{-u}V, meaning *is an N*. The affix is truncative, so it can easily come to follow an /a/; either if the stem ends on [a], or if it is the last vowel in the stem. Add it to the following stems, using your knowledge of the a-rule, and add the ending V{vuq} to produce complete words:

- {ila}N \Rightarrow^* _____
part/member \Rightarrow *he is a part/member (of something)*
- {aqnaq}N \Rightarrow^* _____
woman \Rightarrow *she is a woman*
- {tacca}N \Rightarrow^* _____
that \Rightarrow *it is that; that is*

²[a] may of course subsequently be uvularised to [ɑ] by the vowel rule, but that happens later in the process, so we do not need to deal with that here.

A detail about the a-rule

In the text of this chapter, you will see the word *ilai* meaning *its (several) parts*. This might look like an exception to the a-rule, but the exception is only apparent: the word is actually pronounced [ilaaⁱ] with a long [aa] sound, and just a slight [j]-like sound at the end, as a last remnant of the underlying /i/ phoneme. This /i/ is actually a morpheme, N{-i}, which denotes *his (several) Ns*, or just 3.sg/pl for short, and in making the new orthography it was decided that this special /i/ phoneme should still be *written* as *i*, whenever it occurs as the final phoneme in a word, even though it is not *pronounced* as [i], but as [a] as stipulated by the a-rule. So, as I said, the exception is only apparent.

5.6 Plural of nouns and verbs

The ‘empty’ ending N{∅} is used to mark just the singular form of a noun that may appear e.g. as the *subject* of a verb. For example, the sentence *arnaq igavoq* means *the woman cooks food*. The verb *igavoq* means *he/she/it cooks food*, as you know, and *arnaq* means *(the) woman*. The noun *arnaq* thus functions as a *specification* of who the unspecified *he/she/it* mentioned in the verb ending V{vuq} is.

Here *arnaq* carries the empty ending N{∅}, because she is singular. And *igavoq* carries the 3rd person, singular ending V{vuq} to match the singular subject specification *arnaq*. But what if we instead wanted to make the sentence plural and say *the women cook food*? Then we would have to alter both the noun and the verb: the noun must instead carry an ending to mark that it is *plural*, and the verb must have a new ending with a person marker for 3rd person *plural*. This is fortunately quite easy:

- The plural ending for nouns is N{t} for vowel stems and weak q-stems; and N{-it} for k-stems and some (non-weak) q-stems, most notably N{-innaq}N *just N* and {utuqqaq}N *an old/elderly person*.
- The intransitive indicative 3.pl ending is V{(v)vut}, *they Vb*.³

Exercise 26: Practice plural

Here are some nominal and verbal stems. Add the plural ending N{t} or N{-it} to the nominal stem(s), and the indicative 3.pl ending V{(v)vut} to the verbal stem to create full sentences:

³Here the nice correspondence with the participial mood partly breaks down, because the corresponding 3.pl participial ending is just V{ðut} (and not *V{(ð)ðut}). This is because /v/ is a type of consonant that *can* become doubled, whilst /ð/ is not. The cause of the doubling is here the person marker {t}.

- {aqnaq}N, {iga}V \Rightarrow^* _____
woman, cooks food \Rightarrow the women cook food
- {inlu}N, {anji}V \Rightarrow^* _____
house, is big \Rightarrow the houses are big
- {inuk}N, {sinik}V \Rightarrow^* _____
person, sleeps \Rightarrow the people sleep
- {ausiak}N, {miki}V \Rightarrow^* _____
(spider, is small) \Rightarrow the spiders are small
- {inuk}N, 17.000 + N{-innaq}N, {najugaqaq}V \Rightarrow^* _____
person, 17.000 + just, lives \Rightarrow just 17.000 people live (somewhere)

Note: N{-innaq}N is one of the few, rare q-stems that also take N{-it} as its plural ending, and in the last example you (of course) has to add a plural ending to both {inuk}N and N{-innaq}N.

5.7 Verbalisation of the locative: Being in N

You have already seen one kind of *verbalisation* of a set of noun endings, namely the special affix N{ALL}{-kaq}V which can only be added onto the so-called *allative* case endings, i.e. N{mut}, N{nut} and so on. Here is another very useful verbalisation.

The endings N{mi}, N{ni} that you use to express *in/on/at* etc. also have a fancy, Grammatic name: This set of endings is called the *locative* case, and it too can be verbalised, using the special affix N{LOC}{it}V. With N{mi} and N{ni} we thus get two new affixes, N{miit}V, *is in/at/on N* (singular), and N{niit}V, *in in/at/on Ns* (plural).

Exercise 27: Use N{LOC}{it}V

Verbalise the following nouns (in the locative case) by adding N{LOC}{it}V. Use the indicative 3.sg ending V{vuq} to create complete verbs:

- Nuummi \Rightarrow^* _____
in Nuuk \Rightarrow it is in Nuuk
- Nuussuarmi \Rightarrow^* _____

in Nuussuaq \Rightarrow *it is in Nuussuaq*

- *Qinngutsinni* \Rightarrow^* _____
in Qinngorput \Rightarrow *it is in Qinngorput*

You can also use the locative verbalisation on an entire *noun phrase* consisting of several words, as long as the final word carries a locative ending. Here are some examples of so-called *possessive noun phrases*, where one noun ‘owns’ the next, like the construction *X of the Y* in English. Add **N{LOC}{it}V** and **V{vuq}** as before, but add it only onto the *last* word, carrying a locative ending.

- *Nuussuup kitaani* \Rightarrow^* _____
in the area west of Nuussuaq \Rightarrow *it is in the area west of Nuussuaq*
- *Nuussuup kangiani* \Rightarrow^* _____
in the area east of Nuussuaq \Rightarrow *it is in the area east of Nuussuaq*
- *Nuniaffiup saninnguani* \Rightarrow^* _____
in the area right beside Nuniaffik \Rightarrow *it is in the area right beside Nuniaffik*
- *Nuup kangerluata qinnguani* \Rightarrow^* _____
in the bottom of the fjord of Nuuk \Rightarrow *it is in the bottom of the fjord of Nuuk*

More about possession

You have seen two different kinds of endings for nouns:

- Endings like **N{mi}**, **N{ni}**, **N{mut}**, **N{nut}**, **N{∅}**, **N{t}** and so on. These are called the *unmarked* case endings (of locative, allative, absolutive and so on).
- Endings like **N{ga}** (*my N*), **N{(q)vut}** (*our N*), **N{mnut}** (*to my N*), **N{-i}** (*his Ns*) that are used to denote that someone *owns* the noun. These are called the *possessive* (or ‘marked’) case endings.

The point is that *for each* of the sets locative, allative, ablative, absolutive etc., you have *two unmarked* endings (one for singular, and one for plural), and then you also have endings for each possible *person who can own* the noun. Thus for example **N{∅}** and **N{t}** are the *unmarked absolutive* endings, whilst **N{(q)vut}** is the 1.pl/sg *possessive absolutive* ending; i.e. the absolutive ending meaning ‘first person, plural owns singular N’ or, less

formally, *our N*. Similarly, **N{mut}** and **N{nut}** are the *unmarked allative* endings, and **N{mnut}** is the 1.sg/sg *possessive allative* ending; i.e. the ending meaning *to my N*.

By using these possessive endings, you can create *possessive noun phrases*, consisting of several words. For example, *Kalaallit Nunaat* is one such noun phrase, consisting of *Kalaallit* (*the Greenlanders*) and *Nunaat* (*their (singular) land*). The latter word is built from the base {nuna}N (*land*) and the absolutive 3.pl/sg ending **N{-at}** (*their N*).

Possessive endings are extensively used in Greenlandic, so I will have much more to say about them later on.

5.8 Comparing things

Adjectives in English are words that describe nouns, like *big*, *small*, *white* etc., but as you know, Greenlandic does not have a separate word class of adjectives. Instead, these attributes are described by *verbal* stems, and you have, in fact, already seen a number of so-called ‘adjectival’ verbal stems like {aŋi}V, *is big*; {miki}V, *is small*; {qaquq}V, *is white* and so on. With these, you can e.g. say *the house is big* (*illu angivoq*); but what if you want to express that *the house is bigger than the car*, for example? Or *this house is the biggest of the houses in the town*?

Changing the adjective *big* to the forms *bigger*, *biggest* is called *comparison* in Grammaric, and in Greenlandic you achieve the same effect by using affixes. Here are two you can use:

- **V{niru}V**, *is more Vb (than something)*. This is the one you would use to express e.g. *bigger*. And if you optionally also want to express what the subject is more Vb *than*, then the noun you are comparing the subject against must appear in the *ablative* case; i.e. **N{mit}**, **N{nit}** etc.
- **V{nicarə}V**, *⟨patient⟩ is the most Vb of the ⟨agents⟩*. This affix yields a *transitive* verb, so it must have a transitive ending. Furthermore, you are here comparing the object against a *group* of subjects, so the ending must have a plural subject. This is the affix you would use to express that *the house (object) is the biggest of all the houses in town (subjects)*

Exercise 28: Comparison

Here are sets of two nouns and an adjectival verbal stem. Use the first noun as subject, and add the unmarked ablative singular ending **N{mit}** to the second. Use **V{niru}V** and **V{vuq}** on the verbal stem to create the Greenlandic sentence corresponding to the translation:

- *illu, biili, {aŋi}V* \Rightarrow^* _____
house, car, is big \Rightarrow the house is bigger than the car
- *Nuup Qeqqa, mittarfik, {uŋasik}V* \Rightarrow^* _____
Nuuk city center, airport, is distant \Rightarrow Nuuk city center is more distant than the airport
- *Nuuk, Aalborgi, {miki}V* \Rightarrow^* _____
Nuuk, Aalborg, is small \Rightarrow^* Nuuk is smaller than Aalborg

Now try with **V{nicarə}V**: For each of the points below, the first noun is the *object*, and the second is the *subject* (in plural). Leave them unaltered, but add **V{nicarə}V** to the verbal stem, and use the 3.pl/3.sg ending **V{vaat}**, *they Vb him*. Remember that this is a *ə-stem*, so delete /əv/ when you add the ending:

- *Nuuk, Kalaallit Nunaata illoqarfīsa, {aŋi}V* \Rightarrow^* _____
Nuuk, the towns of Greenland, is big \Rightarrow^* Nuuk is the biggest of the towns of Greenland
- *Qinngorput, Nuup ilaasa, {uŋasik}V* \Rightarrow^* _____
Qinngorput, the parts ('areas') of Nuuk, is distant \Rightarrow^* Qinngorput is the most distant of the areas of Nuuk
- *illuga, illut, {miki}V* \Rightarrow^* _____
my house, the houses, is small \Rightarrow my house is the smallest of the houses

5.9 There is N: N{-qaq}V

You have previously seen the affix **N{-qaq}V** meaning *has an N*. However, if this affix is used with a 3.sg ending (i.e. **he has (an) N**) without any further specification of who 'he' is, then this affix can also mean **there is (an) N**. For example, **arnaqarpoq** does not necessarily mean **he has a woman**; if we are not given any further indication of who 'he' is then it could also simply mean **there is a woman**. This is a very useful (and common) construction; especially in combination with another noun in the locative case (i.e. **N{mi}**, **N{ni}** etc.) to specify *where* the N is located.

Exercise 29: Use N{-qaq}V in the sense ‘there is N’

Here are some pairs of nouns. Use the locative case and N{-qaq}V{vuq} to create sentences corresponding to the translation:

- *igaffik, arnaq* \Rightarrow^* _____
kitchen, woman \Rightarrow *there is/are woman/women in the kitchen*
- *aqqusineq, biili* \Rightarrow^* _____
road, car \Rightarrow *there is/are car(s) on the road*
- *immikkoortoq kingulleq, oqaluttuaq* \Rightarrow^* _____
previous chapter, story \Rightarrow *there is a story in the previous chapter*
- *Nuniaffiup saninngua, unittarfik* \Rightarrow^* _____
area right beside Nuniaffik, (bus) stop \Rightarrow *there is a bus stop right beside Nuniaffik*

Note: *aqqusineq* and *kingulleq* are both non-weak q-stems; and *Nuniaffiup saninngua* is a possessive noun phrase, so add {ni} onto *saninngua* and leave *Nuniaffiup* unaltered.

5.10 Text

The main text of this chapter contains some sentence constructions that deserve a few extra comments to make sense:

Impersonal sentences

The base {taa}V means *<agent> calls <patient> (something)*. With V{ðaq}V and indicative 3.pl/3.sg ending V{vaat} you obtain a word meaning *they (habitually) call it (something)*. If ‘they’ are not further specified by an explicit noun in the sentence, then the meaning is *impersonal*, somewhat like the impersonal use of ‘you’ or ‘one’ in English.

Consider for example the sentence *One does not simply walk into Mordor*. Here ‘one’ refers to anybody and nobody in particular; the meaning is impersonal. And the same impersonal meaning is expressed in Greenlandic by using the 3.pl (‘they’) as subject.

That-clauses of that-clauses

Recall that you use the participial mood to express sentences of the form *that (subject) Vb*, such as for example *you told (that) I travelled to Nuuk*. Here *you told (something)* is the so-called *main clause*, and *I travelled* is the ‘that-clause’ (or *subordinate clause* in Grammaric). We would therefore use the participial mood on {aullaq}V, so the sentence becomes

oqaluttuarputit Nuummut aallartunga

Recall also that the participial only can be used if the two persons doing something in the sentence are *different*. Here ‘you’ \neq ‘I’, so this is fine. But what if instead the sentence was *I told (that) I travelled to Nuuk*? Here ‘I’ is the subject of both the main clause and the subordinate clause, so we cannot use the participial mood.

Instead we must use the *contemporative* mood, because we have the same person doing several things in the same sentence (here ‘telling’ and ‘travelling’). Thus the sentence now becomes

oqaluttuarpunga Nuummut aallarlunga

Consider now the sentence *you recall (that) I told (that) I travelled to Nuuk*. This sentence combines the two previous cases: *you recall (something)* is the main clause, and *I told (something)* is the subordinate clause, so it should use the participial ending V{ðuŋa} since ‘you’ \neq ‘I’. But *I told (something)* is itself also a main clause for the subordinate clause *(that) I travelled to Nuuk*, so *I travelled* should use the *contemporative* ending V{(l)luŋa} since ‘I’ am the subject of both clauses.

The base {iqqaima}V means ⟨agent⟩ recalls ⟨patient⟩, and the indicative 2.sg/3.sg ending is V{vat}, you Vb it. Now try to construct the sentence *you recall that I told that I travelled to Nuuk* before you check the answer in the footnote:

4

Exercise 30: Translate the text

Nuuk Kalaallit Nunaata illoqarfiisa annersaraat (angersaraat). Kisianni illoqarfik angisuunngivippog: Kalaallit Nunaannut aallarama, inuit 17.000-innaat Nuummi najugaqarput, Aalborgimili inuit 200.000-it najugaqarput. Taamaammat Nuuk Aalborgimit assut minneruvoq (mikineruvoq).

Nuup ilai pingasuupput. Tassaapput: Nuup Qeqqa, Nuussuaq, Qinngorpullu. Nuup Qeqqa Nuussuup kitaaniippoq, Qinngorpullu Nuussuup kangianiippoq

⁴*eqqaamavat oqaluttuarpunga Nuummut aallarlunga.*

Qinngorput Nuup kangerluata qinnguaniippoq, taamaammatt taasarpaat 'Qinngorput'

Immaqa eqqaamasinnaavat immikkoortumi kingullermi oqaluttuartunga Nuniaffimmi najugaqassallunga. Nuniaffik Nuussuarmiippoq, aqqusinermut qanilluni.

Ajoraluartumik suliffiga (Atuarfeqarnermut Ingerlatsivik) ungasilaarpoq, Nuup Qeqqaniilluni. Suliartoraangama ullaakkut pisuttarpunga, sinnartooraangamali bussertariaqartarpunga inortuiumananga. Ajoraluartumik sinnartooraajuppunga, qujanartumilli Nuniaffiup saninnguani unittarfeqarpoq.

Glossary:

- *{li}, but (*this enclitic is an alternative to kisianni*)
- *taamaammatt*, thus/therefore
- *assut*, very/much
- *Nuup ilai*, Nuuk's parts (or 'areas')
- {pijasuq}N, *the number three (only with plural endings)*
- *immaqa*, maybe/perhaps
- {iqqaima}V, ⟨agent⟩ recalls/remembers ⟨patient⟩
- V{vat}, thou Vb it (*indicative 2.sg/3.sg*)
- {qanik}V, *is close (to something in allative case)*
- V{(l)luni}, *contemporative 4.sg (but think of it as 3.sg)*
- *ajoraluartumik*, unfortunately. A lexicalised word, built from {ajuq}V, *is bad/broken* + V{galuaq}V + V{ðuq}N + N{mik}.
- V{-laaq}V, *somewhat Vb*
- *ullaakkut*, *in the morning*
- V{ðariaqaq}V, *has to Vb*
- *inortuiumananga*, *in order (for me) not to be late*
- V{gajuk}V, *Vb often*
- *qujanartumik*, *fortunately/thankfully*. A lexicalised word, built like *ajoraluartumik* but with {quja}V, *is thankful, as base instead*.
- {unikðaqfik}N, *(bus) stop, built from {unik}V, stops* + V{ðaq}V + V{(f)fik}N.
- N{-qaq}V + *any 3.sg ending*: there is N <–

Solutions to the Exercises

Solution 23: Use the iterative mood

- $\{\text{itiq}\}\mathbf{V}, \{\text{kaffisug}\}\mathbf{V} \Rightarrow^* \text{iteraangama kaffisortarpunga}$
- $\{\text{sinnaqtuuq}\}\mathbf{V}, \{\text{bussiq}\}\mathbf{V} \Rightarrow^* \text{sinnartooraangama bussertarpunga}$
- $\{\text{suliffimmukaq}\}\mathbf{V}, \{\text{pisuk}\}\mathbf{V} \Rightarrow^* \text{suliffinnukaraangama pisuttarpunga}$

Solution 24: Explore the forms of $\mathbf{V}\{\text{gi'jaqtuq}\}\mathbf{V}$

- $\{\text{kaffisug}\}\mathbf{V} \Rightarrow^* \text{kaffisoriartorpoq}$
- $\{\text{sinik}\}\mathbf{V} \Rightarrow^* \text{sinikkiartorpoq}$
- $\{\text{ilitniaqtit}\}\mathbf{V} \Rightarrow^* \text{ilinniartikkiartorpaa}$
- $\{\text{iga}\}\mathbf{V} \Rightarrow^* \text{igajartorpoq}$
- $\{\text{suli}\}\mathbf{V} \Rightarrow^* \text{suliartorpoq}$
- $\{\text{niu}\}\mathbf{V} \Rightarrow^* \text{takujartorpaa}$

There are thus four different forms: *-kiartor-* on k-stems and t-stems, *-riartor-* on q-stems, *-jartor-* on a-stems and u-stems, and *-artor-* on i-stems.

Solution 25: Use the a-rule

- $\{\text{ila}\}\mathbf{N} \Rightarrow^* \text{ilaavoq}^a$
- $\{\text{aqnaq}\}\mathbf{N} \Rightarrow^* \text{arnaavoq}$
- $\{\text{tacca}\}\mathbf{N} \Rightarrow^* \text{tassaavoq}$

^aYou actually saw this word in chapter 3, exercise 11, where I presented it as a verbal stem $\{\text{ilaa}\}\mathbf{V}$. But now you know that it actually is $\{\text{ila}\}\mathbf{N}\{-u\}\mathbf{V}$.

Solution 26: Practice plural

- {aqnaq}N, {iga}V \Rightarrow^* *arnat igapput*
- {inlu}N, {anji}V \Rightarrow^* *illut angipput*
- {inuk}N, {sinik}V \Rightarrow^* *inuit sinipput*
- {ausiak}N, {miki}V \Rightarrow^* *aasiaat mikipput*^a
- {inuk}N, 17.000 + N{-innaq}N, {najugaqaq}V
 \Rightarrow^* *inuit 17.00-innaat najugaqarput*

^aSo the town name *Aasiaat* literally means *spiders*.

Solution 27: Use N{LOC}{it}V

- *Nuummi* \Rightarrow^* *Nuummiippoq*
- *Nuussuarmi* \Rightarrow^* *Nuussuarmiippoq*
- *Qinngutsinni* \Rightarrow^* *Qinngutsinniippoq*
- *Nuussuup kitaani* \Rightarrow^* *Nuussuup kitaaniippoq*
- *Nuussuup kangiani* \Rightarrow^* *Nuussuup kangianiippoq*
- *Nuniaffiup saninnguani* \Rightarrow^* *Nuniaffiup saninnguaniippoq*
- *Nuup kangerluata qinnguani* \Rightarrow^* *Nuup kangerluata qinnguaniippoq*

Solution 28: Comparison

- *illu, biili, {anji}V* \Rightarrow^* *illu biilimit angineruvoq*
- *Nuup Qeqqa, mittarfik, {unjasik}V*
 \Rightarrow^* *Nuup Qeqqa mittarfimmit ungasinneruvoq*
- *Nuuk, Aalborgi, {miki}V* \Rightarrow^* *Nuuk Aalborgimit mikineruvoq*
- *Nuuk, Kalaallit Nunaata illoqarfiisa, {anji}V*
 \Rightarrow^* *Nuuk Kalaallit Nunaata illoqarfiisa anginersaraat*
- *Qinngorput, Nuup ilaasa, {unjasik}V*
 \Rightarrow^* *Qinngorput Nuup ilaasa ungasinnersaraat*
- *illuga, illut, {miki}V* \Rightarrow^* *illuga illut mikinnersaraat*

Note: Both *V{niru}V* and *V{nicarə}V* contain a morpheme *V{nəq}N*, which can

delete a final /ə/ from a stem. The bases {aŋi}V, {miki}V are actually ə-stems, {aŋə}V and {mike}V, so you may also see the forms *anneruvoq*, *annersaraat*, *minneruvoq*, *minnersaraat*, where /ə/ has been deleted, and /n/ has assimilated the consonant in the verbal base.

Solution 29: Use N{-qaq}V in the sense ‘there is N’

- *igaffik*, *arnaq* \Rightarrow * *igaffimmi arnaqarpoq*
- *aqqusineq*, *biili* \Rightarrow * *aqqusinermi biileqarpoq*
- *immikkoortoq kingulleq*, *oqaluttuaq* \Rightarrow * *immikkoortumi kingullermi oqaluttuaqarpoq*
- *Nuniaffiup saninngua*, *unittarfik* \Rightarrow * *Nuniaffiup saninnguani unittarfeqarpoq*

Solution 30: Translate the text

Nuuk is the largest of the cities of Greenland. But the town is not at all big: When I travelled to Greenland just 17.000 people lived in Nuuk, but 200.000 people lived in Aalborg. Thus, Nuuk is much smaller than Aalborg.

Nuuk consists of three parts: Nuup Qeqqa, Nuussuaq and Qinngorput. Nuup Qeqqa lies west of Nuussuaq, and Qinngorput lies east of Nuussuaq. Qinngorput is located in the bottom (innermost part) of the fjord of Nuuk; thus ‘they’ call it ‘Qinngorput.’^a Perhaps you recall (that) I told in the previous chapter (that) I should stay/live in Nuniaffik. Nuniaffik is in Nuussuaq, close to the road.

Unfortunately, my workplace (Atuarfeqarnermut Ingerlatsivik) is somewhat distant, being located in Nuup Qeqqa. Whenever I went to work, I walked in the morning, but whenever I overslept I had to take the bus to avoid being late. Unfortunately, I often overslept, but fortunately there was a bus stop right beside Nuniaffik.

^aFrom {qinŋuq}N, bottom/innermost part of a fjord + N{(q)vut}, our N.

The new apartment

The room in Nuniaffik was only a temporary place where I could stay, until my furniture and other possessions arrived in Greenland. And fortunately, because it was a *very* small room. But after about a month, a new (and larger) apartment was ready for me, so I had to move once again. Not far, though, because the new apartment was located right on the other side of the road across from Nuniaffik, in Atertaq, close to the small grocery store Brugseneeraq. Quite convenient.

This chapter continues the story of the previous chapters, describing the move to my new (and permanent) apartment in Atertaq. It also introduces a new, important sound rule; the *schwa-rule*, which accounts for the behaviour of the mysterious fourth vowel phoneme, /ə/, that shows up in several different guises in both nominal and verbal stems. This rule is the last of the major, important sound rules in Greenlandic, and with that in place, you should finally be able to understand all the common sound changes that occur whenever you join morphemes together.

6.1 Review

As always, we begin with a short review of what you have learned so far, with sandhi and sound rules again presented in order of application:

Sandhi rules:

- Affixes and endings display three distinct types of *sandhi* or ‘joining’ behaviour: They can be *additive* (no symbol); *truncative* (denoted by —) or *epenthetic* (denoted by a consonant in parentheses).



Figure 6.1: A view of the iconic Mt. Sermitsiaq behind Nuuk, taken near my new apartment in Atertaq.

- Affixes beginning in a double consonant like $\mathbf{V}\{\eta\eta\text{it}\}\mathbf{V}$ and $\mathbf{V}\{\text{ssa}\}\mathbf{V}$ are *necessarily* truncative, because of the syllable structure.

Sound rules:

- The δ -rule: $/c\delta/ \rightarrow /ct/$, whilst $/v\delta/ \rightarrow /vc/$ ($/c/$ is pronounced $[\text{ʃ}]$).
- The g-rule: $/qg/$ merge to a single $/r/$: i.e. $/qg/ \rightarrow /r/$
- The a-rule: Any vowel $[v]$ following $[a]$ will itself become $[a]$; i.e. $[av] \rightarrow [aa]$.
- The vowel rule: Vowels have an open pronunciation before uvulars ($/r/$ and $/q/$).
- The consonant rule: All consonant clusters $[c_1c_2]$ are assimilated to $[c_2c_2]$.
- The fricative rule: $[vv] \rightarrow [pp]$ or (rarely) $[ff]$; $[gg] \rightarrow [kk]$; and $[ll] \rightarrow [\text{ʡ}]$.

Spelling rules:

- Open (uvularised) /i/ and /u/ (that is, [ɜ] and [ɔ]) are spelt as *e* and *o*; but an open /a/ (that is, [ɑ]) is still just spelt *a*, like the non-uvularised [a].
- [ʃʃ] is spelt *ll* (or *rl* as noted below).
- Whenever a /q/ is assimilated by the consonant rule, it is always spelt as *r*. So all clusters /qc/, which become [cc] by the consonant rule, are spelt as *rc*.
- [ŋ] is spelt *ng*, but double [ŋŋ] is just spelt *nng* (and not *ngng*).
- [ʃ] (i.e. /c/) is spelt *s*, as is ordinary [s].
- [ij] is just spelt *i*, since [j] becomes inaudible after an [i] anyway (but it is still there!).

Note also the *order* of the sandhi, sound and spelling rules; I have written them in the order in which you must *apply* them, since some rules naturally must be applied before others to yield the correct result. For example, the a-rule must be used before the vowel rule, to ensure that e.g. [avq] becomes [aaq]. This is usually quite obvious, so you need not be overly concerned about memorising the exact order; just beware that the order sometimes *does* matter. You will see further examples of this in the present chapter.

Grammar:

- Verbal endings consist of a *mood marker* and one or two *person markers*. Here are the mood markers with their Grammatic names and meanings:
 - *Indicative*: {vu}/{va}, statements.
 - *Contemporative*: {(l)lu}, multiple (parallel or consecutive) actions by the same person; also *that ... Vb*.
 - *Participial*: {ðu}, *that ... Vb*, when subject differs from subject of main clause.
 - *Causative*: {ga}, *when/because* for (past) cause or reason.
 - *Iterative*: {gaan}, *whenever* for repeated condition, and with **V{ðaq}V** on the main verb.
- *Intransitive* endings have a single person marker, whilst *transitive* endings have two person markers; one denoting the ⟨agent⟩ and the other denoting the ⟨patient⟩.
- Nominal endings are divided into sets, called *cases*, based on their usage/meaning, and they come in two types: *unmarked* and *possessive* (or ‘marked’). The unmarked endings only contain a *case marker*; but the *possessive* endings also contain a *person marker* that denotes the person who *owns* the noun. Here are the cases, their Grammatic names, and the usages you have seen so far:

- *Absolutive*: Subject of *intransitive* verbs, and object of *transitive* verbs.
Unmarked: $\mathbf{N}\{\emptyset\}$ (sg) and $\mathbf{N}\{\mathbf{t}\}$ ¹ (pl).
Possessive: $\mathbf{N}\{\mathbf{ga}\}$ (1.sg/sg); $\mathbf{N}\{(\mathbf{q})\mathbf{vut}\}$ (1.pl/sg); $\mathbf{N}\{-\mathbf{i}\}$ (3.sg/pl).
- *Instrumental*: Modifier of nouns incorporated with e.g. $\mathbf{N}\{-\mathbf{qaq}\}\mathbf{V}$.
Unmarked: $\mathbf{N}\{\mathbf{mik}\}$ (sg) and $\mathbf{N}\{\mathbf{nik}\}$ (pl).
- *Allative*: *to N*.
Unmarked: $\mathbf{N}\{\mathbf{mut}\}$ (sg) and $\mathbf{N}\{\mathbf{nut}\}$ (pl).
Possessive: $\mathbf{N}\{\mathbf{mnut}\}$ (1.sg/sg).
- *Ablative*: *from N*.
Unmarked: $\mathbf{N}\{\mathbf{mit}\}$ (sg) and $\mathbf{N}\{\mathbf{nit}\}$ (pl).
- *Locative*: *in/at/on N*.
Unmarked: $\mathbf{N}\{\mathbf{mi}\}$ (sg) and $\mathbf{N}\{\mathbf{ni}\}$ (pl).

6.2 A sound rule for /ə/

At last, we come to the rule for the mysterious fourth vowel /ə/ in Greenlandic, the schwa. Just like /ð/, this phoneme has no default sound of its own, but instead chooses the sound of one of the other vowels, depending on context. Here is the general rule:

$$\begin{aligned} /əc/ &\rightarrow [ic] \\ /əv/ &\rightarrow [av] \end{aligned}$$

In other words: *Whenever /ə/ is followed by any consonant phoneme /c/, it takes the sound [i]; and whenever /ə/ is followed by any vowel phoneme /v/, it takes the sound [a].* However, /ə/ can also occur as the *final* phoneme in a word, and in that case, there are a few extra possibilities:

$$\begin{aligned} /v\mathbf{t}\mathbf{ə}/ &\rightarrow [vt] \\ /c\mathbf{ə}/ &\rightarrow [ci] \quad \text{where } /c/ \neq /t/ \end{aligned}$$

In other words: *If /ə/ is last and follows a single /t/, it disappears; but if it follows any other consonant than a single /t/, then it also takes the sound [i].* Note that this implies that /ə/ also will take the sound [i] if it follows a *double* consonant; even if it is a double /t/. It can *only* disappear before a *single* /t/.

¹And $\mathbf{N}\{-\mathbf{it}\}$ for k-stems and some non-weak q-stems.

The ə-rule and the a-rule

There is one (rather obvious) detail about the ə-rule; you may already have guessed it, but I'll spell it out in detail in any case: The ə-rule *must* be applied *before* the a-rule. Can you see why?

Consider the combination /əv/ where *v* is any vowel phoneme. By the ə-rule, this yields [əv]. But, by the *a-rule*, any vowel *v* that follows an [ə] sound must *itself* become [a]; and thus [əv] yields [aa]. You have to take one extra step to obtain the correct result.

Exercise 31: Examples of the ə-rule

Here are some ə-stems with affixes and/or endings. In particular, there is also a new absolutive possessive ending, **N{-a}**, *his N* (3.sg/sg). Use the ə-rule (and all of the other sound rules as necessary) to produce the correct form of the final word:

- {aŋutə}N{t} \Rightarrow^* _____
man, ABS.pl \Rightarrow men
- {aŋutə}N{-qaq}V{vuq} \Rightarrow^* _____
man, there is/are N \Rightarrow there is/are a man/men
- {aŋutə}N{-u}V{vuŋa} \Rightarrow^* _____
man, I am an N \Rightarrow I am a man
- {aŋutə}N{∅} \Rightarrow^* _____
man, ABS.sg \Rightarrow man
- {inə}N{t} \Rightarrow^* _____
room, ABS.pl \Rightarrow rooms
- {inə}N{-qaq}V{vuq} \Rightarrow^* _____
room, there is/are N \Rightarrow there is/are a room/rooms
- {inə}N{-a} \Rightarrow^* _____
room, ABS 3.sg/sg \Rightarrow his room
- {inə}N{-i}^a \Rightarrow^* _____
room, ABS 3.sg/pl \Rightarrow his rooms
- {inə}N{∅} \Rightarrow^* _____
room, ABS.sg \Rightarrow room

- {siunniqsuqðə}N{t} \Rightarrow^* _____
counselor, ABS.pl \Rightarrow counselors
- {siunniqsuqðə}N{∅} \Rightarrow^* _____
counselor, ABS.sg \Rightarrow counselor
- {siunniqsuqðə}N{-u}V{vunə} \Rightarrow^* _____
counselor, I am an N \Rightarrow I am a counselor
- {piqutə}N{∅} \Rightarrow^* _____
(piece of) furniture, ABS.sg \Rightarrow (a piece of) furniture
- {piqutə}N{t} \Rightarrow^* _____
(piece of) furniture, ABS.pl \Rightarrow furniture
- {piqutə}N{kka} \Rightarrow^* _____
(piece of) furniture, ABS 1.sg/pl \Rightarrow my furniture
- {atuagautə}N{kka} \Rightarrow _____
(owned) books, ABS 1.sg/pl \Rightarrow my books (books owned by me)^b

^aRemember that the marker N{-i} is still *spelt* as *i* when it is final, even when it has been assimilated by the a-rule.

^bAs opposed to books *written* by me.

A note about historic details

As you can see, /ə/ can either appear as *i* or as *a* (or not appear at all); and in fact, some of the *i*'s you have hitherto seen in morphemes are actually /ə/. For example, the morphemic form of *house* is actually {əŋlu}N, and not {iŋlu}N; and the verbalisation of the locative case is in fact N{LOC}{ət}V.

However, this is mainly relevant for historic reasons, and not something you need to be overly concerned about remembering; whether you learn the morpheme meaning *house* as {əŋlu}N, {iŋlu}N, or even as {illu}N, does not actually matter. You can *almost* always safely 'precompute' the final form of any stem up to (but excluding) the last syllable and still obtain the correct result, because – with a few special exceptions – adding a morpheme onto a stem can *at most* alter the final syllable of the stem.

Almost, but not always. Because there *are* a few exceptions, although they are rare: they concern noun stems ending in /əq/, or (even rarer) /ək/, and with these, some changes *can* happen, that can affect even more than the last syllable. You will hear more

about these changes later; but for now, just beware whenever you see a noun stem ending in /əc/. One thing you *can* be sure of is that whenever you see one of these stems ending in /əq/, then it is *not* a weak q-stem.²

More about nominal ə-stems

Exercise 31 gave you some examples of the different types of ə-stems: the /tə/ stems like {aŋutə}N; the stems where the single, last consonant is something *else* than /t/, such as {inə}N; and lastly the stems that have a double consonant before /ə/, such as {siunniqsuqðə}N. Here are a few points to keep in mind about them:

- The /tə/ stems are by far the most common type of nominal ə-stem. In fact, *every* (singular) noun listed in the DAKA as ending on /t/ is in fact a ə-stem! Or stated otherwise: *there is no such thing as a nominal t-stem*. Thus, whenever you see a noun that appears to end on a *t* in its singular form, then you can be sure that it actually is a ə-stem where /ə/ just has disappeared.³
- Stems like {inə}N are quite rare, although several of them are frequently used. Besides {inə}N they include {tipə}N (*smell*), {nipə}N (*voice*), {icə}N (*eye*), {timə}N (*body*), {niqə}N (*meat*) and {puəðə}N (*seal*). You could simply memorise this list and it would likely cover most of the ə-stems (apart from the tə-stems) that you will encounter in the foreseeable future.
- Stems like {siunniqsuqðə}N, with a double consonant before /ə/, are also quite rare. Most of them are formed with a single affix, V{ðə}N, which means *one who Vb for someone (else)*, so if you see a noun with something like this meaning, and which seems to end on *i* before a double consonant, then it is probably a ə-stem.

6.3 Verbal ə-stems with indicative mood

In chapter 5 you encountered a few *verbal* ə-stems, most notably those created with the comparison affix V{nəqcarə}V, and in a previous chapter you also saw {apirə}V, ⟨agent⟩ asks ⟨patient⟩ (something).

These verbal ə-stems alter the indicative mood marker, such that the final form of the verb becomes ‘contracted’; i.e. we get *aperaanga* by adding the ending V{vaəŋa} onto {apirə}V. As you may recall, I gave you this heuristic pseudo-rule, that you could just delete /əv/ when you add the ending onto a verbal ə-stem. This rule is not quite correct,

²But the converse does not hold: not all non-weak q-stems end in /əq/. For example, N{(q)cuaq}N is not a weak q-stem, but it does not end in /əq/, so it is a counter-example.

³This does not always hold for *borrowed* words, but that is a detail.

and now that you know the ə-rule we can finally do away with it. Here is the real rule for adding indicative endings onto ə-stems:

$$\{\dots\mathfrak{e}\}\mathbf{V} + \{\mathbf{vu}\} / \{\mathbf{va}\} \rightarrow \{\dots\mathfrak{e}\}\mathbf{V} + \{\mathbf{u}\} / \{\mathbf{a}\}$$

In other words, /ə/ just deletes /v/ from the mood marker – *both* from intransitive {vu} and transitive {va}. Now by the ə-rule, /ə/ becomes [a] because it is followed by a vowel; namely either /u/ or /a/. And then we of course in both cases get [aa] by the a-rule. Quite simple, now that you know the ə-rule and the a-rule, right?

However, there is one small complication: if you ever end up with a *triple* [aaa], then this is reduced to just [aa] because of the syllable structure. Greenlandic does not allow a vowel sound to be longer than *two*, so [aaa] → [aa].

Exercise 32: Indicative endings on verbal ə-stems

Practice adding indicative endings onto verbal ə-stems by writing the final form of the following combinations. Note also a new affix, $\mathbf{V}\{-\mathfrak{q}\mathfrak{e}\}\mathbf{V}$, meaning *Vb very /greatly/much*, which is commonly used for emphasis:

- $\{\text{nuannar}\mathfrak{e}\}\mathbf{V}\{\text{vara}\} \Rightarrow^* \underline{\hspace{10em}}$
<agent> likes/enjoys <patient>, 1.sg/3.sg ⇒ I like/enjoy it
- $\{\text{nuannar}\mathfrak{e}\}\mathbf{V}\{\text{vaa}\} \Rightarrow^* \underline{\hspace{10em}}$
<agent> likes/enjoys <patient>, 3.sg/3.sg ⇒ he like/enjoy it
- $\{\text{mik}\mathfrak{e}\}\mathbf{V}\{-\mathfrak{q}\mathfrak{e}\}\mathbf{V}\{\text{vuq}\} \Rightarrow^* \underline{\hspace{10em}}$
is small, Vb very, 3.sg ⇒ it is very small
- $\{\text{aŋ}\mathfrak{e}\}\mathbf{V}\{-\mathfrak{q}\mathfrak{e}\}\mathbf{V}\{(\text{v})\text{vut}\} \Rightarrow^* \underline{\hspace{10em}}$
is big, Vb very, 3.pl ⇒ they very big

A detail

It is actually not *all* verbal ə-stems that behave in this way, although most of them still do. For example, the bases $\{\text{aŋ}\mathfrak{e}\}\mathbf{V}$ (*is big*) and $\{\text{mik}\mathfrak{e}\}\mathbf{V}$ (*is small*) are actually ə-stems, but they do not alter the indicative mood marker; i.e. they behave just as ordinary i-stems. However, *most* ə-stems still behave according to this special rule, and all of those that do are listed in the DAKA with ‘contracted’ indicative endings; i.e. *-aa* for the transitive verbs, and *-aaq* for the intransitive.

Part of the problem is probably that nobody can actually remember anymore which of the *i*'s in a word are actually /ə/, and which are true /i/ phonemes. Thus, a /ə/ that historically has taken the sound [i], may come to behave more like a true /i/ and lose the ability to alternate between [i], [a] and no sound. Yet in both of the aforementioned cases, we know that the final vowel actually *is* (or, at least historically *was*) a /ə/, because, as you saw in the previous chapter, it can still disappear in certain contexts, such as before the comparison morpheme **V{nəq}N**, and other morphemes derived from it; e.g. **V{nəru}V** (*Vb more*) and **V{nəqcarə}V** (*<patient> is the most Vb'ing of <agents>*). Thus, you saw e.g. **anneruvoq**, **minneruvoq** (*it is bigger, it is smaller*), from {aŋə}V, {mikə}V, even though we say **angivoq**, **mikivoq**, and not **angaaq*, **mikaaq*.

6.4 A sound rule (and spelling rule) for /t/

Here is a rule I have hitherto ignored, because it mostly does not affect the way words are spelt, but only pronunciation: Normally, /t/ takes the pronunciation [t], which sounds like the 'd' in *door*. But whenever it is followed by an [i] sound, /t/ instead takes the sound [t^s], which is probably more like the sound you would normally associate with the letter *t*; it sounds approximately like 't' in *time*, *teeth*, with perhaps a slightly more pronounced blow of air through your teeth. The rule is thus

$$[ti] \rightarrow [t^s i]$$

and (as you perhaps can imagine) this rule must be applied *after* the ə-rule, but *before* the vowel rule; because a /ə/ that has taken the sound [i] will also trigger this rule, and the rule remains in effect even if [i] is later uvularised to [ɜ]. In other words, for example [tiq] will become [t^sɜq].

It sounds complicated, but it is actually quite easy: Just remember to pronounce /t/ as [t^s] whenever it is followed by either [i] or [ɜ]. The rule is unambiguous, so [t^si] and [t^sɜ] are not even spelt differently; they are just spelt as *ti* and *te* respectively. Thus e.g. {timə}N{∅} (*body*) is pronounced [t^simi], but it is just spelt *timi*.

However, there is one annoying complication, which is due to the new orthography: a double [t^st^si] (and [t^st^sɜ] also) is *spelt* as *tsi* (and *tse*). Thus, the spelling rule is that

$$[t^s t^s i] \rightarrow tsi$$

$$[t^s t^s ɜ] \rightarrow tse$$

except if the first consonant is an assimilated /q/. In that case it is just spelt as *rti* (and *rte*). In other words, you have to apply the spelling rule of assimilated /q/ *before* you apply this rule. Thus e.g. {əlitniaqtət}{vaa}V (*he teaches him*) is pronounced [ilinniat^st^sippaa], but it is spelt *ilinniartippaa*.

Exercise 33: The t-rule and the ə-rule

The t-rule and its associated spelling rule can be somewhat confusing; not least in cases where it is combined with the ə-rule, because it can alter how a word is pronounced and spelt. Here are a few examples; write the final form of the words, and try also to pronounce them, and observe how the sounds change:

- $\{uqaluk\dot{o}\dot{a}\}N\{\emptyset\} \Rightarrow^* \underline{\hspace{2cm}}$
interpreter, ABS.sg \Rightarrow an interpreter
- $\{uqaluk\dot{o}\dot{a}\}N\{-u\}V\{vu\eta a\} \Rightarrow^* \underline{\hspace{2cm}}$
interpreter, is an N, I Vb \Rightarrow I am an interpreter
- $\{najuq\dot{o}\dot{a}\}N\{\emptyset\} \Rightarrow^* \underline{\hspace{2cm}}$
(lay) representative, ABS.sg \Rightarrow a (lay) representative
- $\{najuq\dot{o}\dot{a}\}N\{-u\}V\{vu\eta a\} \Rightarrow^* \underline{\hspace{2cm}}$
(lay) representative, is an N, I Vb \Rightarrow I am a (lay) representative

6.5 A new verbal stem type: t(ə)-stems

There is one last type of verbal stems we have not yet covered; the so-called t(ə)-stems. These are all formed by a special morpheme, $\{ut(\dot{a})\}$ or one of its variants, but they are numerous enough to be considered a separate type of verbal stems.

Hitherto, you have seen the two major groups of vowel stems and consonant stems. Each of these can then be subdivided into more specific groups based on the final phoneme of the stem; i.e. ə-stems, t-stems, k-stems and so on. The special feature of this new type of t(ə)-stems is that they behave like a *mixture* of these other stem types; specifically, they sometimes behave like t-stems, and sometimes like ə-stems. Fortunately, it is easy to predict when they behave like what.

Here is the rule: Suppose S is any string of phonemes, such that $\{S\}$ is an additive morpheme, and $\{-S\}$ is a truncative morpheme. Then

$$\begin{aligned} \{\dots t(\dot{a})\} + \{S\} &\rightarrow \{\dots tS\} \\ \{\dots t(\dot{a})\} + \{-S\} &\rightarrow \{\dots t\dot{a}S\} \end{aligned}$$

In other words: *Additive (and epenthetic) morphemes are added to /t/, but truncative morphemes are added to /ə/.* Or in yet other words, t(ə)-stems behave as consonant stems

before *additive* morphemes, but as vowel stems before *truncative* morphemes, which is what this epenthetic (ə) in parentheses is meant to signify.

Exercise 34: Add morphemes to t(ə)-stems

{nassiut(ə)}V is a t(ə)-stem, meaning ⟨agent⟩ sends ⟨patient⟩ (to somebody). Write the final form of the word obtained by adding the following morphemes, using all necessary sound rules, and notice how the stem changes appearance depending on the sandhi type of the following morpheme.^a

- V{vaa} \Rightarrow^* _____
indicative 3.sg/3.sg \Rightarrow *he sends it (to somebody)*
- V{ssa}V{vaa} \Rightarrow^* _____
shall (future), indicative 3.sg/3.sg \Rightarrow *he shall send it (to somebody)*
- V{nəqaaq}V{(v)vut} \Rightarrow^* _____
⟨patient⟩ was/is Vb'ed, indicative 3.pl \Rightarrow *they were sent (to somebody)*
- V{qqu}V{vara} \Rightarrow^* _____
⟨agent⟩ bids ⟨patient⟩ Vb, indicative 1.sg/3.sg \Rightarrow *I bid (someone) send it (to somebody)*
- V{ðariaqaaq}V{vakka} \Rightarrow^* _____
must Vb, indicative 1.sg/3.pl \Rightarrow *I must send them (to somebody)*

Note on spelling: [uva] is just spelt *ua* in the new orthography, because /v/ tends to become inaudible between [u] and [a]. The same happens between [u] and [i], so [uvi] is also just spelt *ui*.

^aSpecifically, if the morpheme is truncative, you will see a *tī*, but if it is additive, you will only see an assimilated consonant.

6.6 Numerals

The Greenlandic numerals, i.e. the words for *one*, *two*, *three*, etc. are (perhaps not surprisingly) nouns. Thus, you can also use them, just like any other nouns, by adding affixes and endings to them. The only speciality you need to be aware of here, is that some of the numerals only make sense with plural endings, which is rather obvious if the number is

greater than one. In other words, you will often see the numerals (greater than one) with plural endings, but if you want to add affixes to them, you still need to know their morphemic form, which usually corresponds to the singular, even though the singular form of e.g. the number ‘three’ might not make much sense. Here are the numerals from one to twelve:

1. {atausiq}N (singular) \Rightarrow^* *ataaseq*
2. {maqluq}N (dual) \Rightarrow^* *marluk*
3. {piņasuq}N \Rightarrow^* *pingasut*
4. {sisamaq}N \Rightarrow^* *sisamat*
5. {tatlimaq}N \Rightarrow^* *tallimat*
6. {aqvinəq}N (singular, non-weak q-stem) \Rightarrow^* *arfineq*
7. {aqvinəq-maqluq}N (dual) \Rightarrow^* *arfineq-marluk*
8. {aqvinəq-piņasuq}N \Rightarrow^* *arfineq-pingasut*
9. {quləŋiluaq}N, {qulaaluaq}N \Rightarrow^* *qulingiluat*, *qulaaluat*
10. {qulə(k)}N (‘weak’ k-stem) \Rightarrow^* *qulit*
11. {aqqanəq}N (singular, non-weak q-stem) \Rightarrow^* *aqqaneq*
12. {aqqanəq-maqluq}N (dual) \Rightarrow^* *aqqaneq-marluk*

For numbers greater than twelve, the Danish numerals are usually used. Now, as you can see, there are a few peculiarities to keep in mind with these numerals:

- {atausiq}N, *one*; {aqvinəq}N, *six*; and {aqqanəq}N, *eleven* are all *singular*. The number system is based on counting fingers (and toes), so {atausiq}N is the first finger on the first hand; {aqvinəq}N is the first finger on the *second* hand, and so on.
- *marluk*, *two* is actually an old *dual* form, even though the dual number system has all but disappeared in Greenlandic.⁴ The dual marker was {k}, and it also appeared before case endings; thus e.g. in the instrumental case, we get {maqluq}N{knik} \Rightarrow^* *marlunnik*. If this seems confusing, just think of it in this way: {maqluq}N behaves *as if* it were a k-stem {maqluk}N when you add *endings* to it; but as a (weak) q-stem {maqluq}N when you add affixes to it.
- {piņasuq}N, *three*; {sisamaq}N, *four*; {tatlimaq}N, *five* are just plain, weak q-stems. They are always used with plural endings (since they are plural in meaning).
- The words for *seven*, *eight* and *twelve* are compound words (as indicated by the hyphen, although they can optionally also be written without a hyphen), formed from the word for the other hand, and the word for *two*, *three*. You just treat them as

⁴But you can still see it in Inuktitut and other, more western inuit languages

a single stem; i.e. you only add affixes and endings to the last word in the compound. This also means that the compounds formed with {maqluq}N take dual endings, just like *marluk*.

- The two forms for the word *nine*, {quləŋiluq}N and {qulaaluq}N, can be used interchangeably.
- The word for *ten* is *qulit*, but it was (historically) a /ək/-stem, even though /ə/ today behaves just like an ordinary /i/.⁵

Exercise 35: Use the numerals

Here are a number of sentences in English, involving the use of numerals. Write the corresponding sentence in Greenlandic (and use the glossary for help). Remember that N{-qaq}V{vuq} means *there is/are N*, and modifiers to the incorporated noun are added in the instrumental case, i.e. N{mæk}, N{næk}.

- _____
There are three rooms
- _____
There is just one apartment
- _____
There are two mountains
- _____
I saw three mountains
- *sinittarfimmi* _____
in the bedroom there are just two beds
- *inissartaami* _____
in the new apartment there is just one kitchen
- *inersuarmi* _____
in the living room there are five chairs
- *inissartaara* _____
my new apartment has just one bathroom

⁵But you can see it once was a /ə/ in the second word for *nine*, where /ŋ/ had disappeared, which yielded /quləiluq/ ⇒ [qulailuq] ⇒ [qulaaluq] by the ə-rule and the a-rule.

- _____
the small apartment has just two rooms
- _____
I stayed/lived just one month in Nuniaffik

Glossary:

- {inə}N, room
- {inəkciaq}N, apartment
- N{-innaq}N, just N. Note: non-weak q-stem. Add this to the numeral.
- {qaqqaq}N, mountain
- {taku}V, ⟨agent⟩ sees ⟨patient⟩
- V{vakka}, I Vb them (indicative 1.sg/3.pl)
- {sinəkðaqvik}N, bedroom
- {sinəkvik}N, bed
- {igavvik}N, kitchen
- N{taaqaq}N, a new N
- {inəqcuaq}N, living room
- {issiavik}N, chair
- {uvvaqvik}N, bathroom
- N{-araq}N, a small N
- {qaummatə}N, month

6.7 Text

Here at last is the text of the chapter. As usual, I have tried to use as many glossaries from the previous exercises as possible

Exercise 36: Translate the text

Immikkoortumi kingullermi oqaluttuarpunga Nuniaffimmi inissiaqarlunga. Imaluunniit oqassagaluarpunga inissiaaraqarlunga: Inissiaara mikeqaaq, marluinnarnik ineqarluni. Sinittarfeqarpoq uffarfeqarlunilu. Qujanartumik qaammat ataasiinnaq Nuniaffimmi najugaqartariaqarpunga. Taava inissiartaamut annerusumut (anginerusumut) nuuppunga. Inissiartaara aqquserngup akianiippoq, pisiniarfiup 'Brugseneeqqap' eqqaaniilluni. Pingasunik ineqarpoq: tassaapput inersuaq igaffilik, sinittarfik

uffarfillu. Aamma qamani aneersuarterfeqarpoq; tassannga qaqqaq 'Sermitsiaq' takuneqarpoq. Isikkivik assut nuannaraara.

Kalaallit Nunaannut aallarama soorunami kuffertimik ataasiinnarmik nassarsinnaavunga. Pequtikka atuagaatikkalu tamarmik uannut umiarsuarmik nassiunneqarput. Umiarsuaq tikimmat pequtit pivakka, aatsaallu inissiartaannut isertersinnaallunga.

Glossary:

- *imaluunniit*, or.
- *V{ssa}V{galuaq}V*, *should*.
- *aqquuserngup akiani*, *on the other side of the road*.
- *pisiniarfup 'Brugseneeqqap' eqqaani*, *in the vicinity of the store 'Brugse-neeraq' ('the little grocery store')*.
- *N{-læk}N*, *equipped with N*. The meaning is equivalent to the combination *N{-qaq}V{ðuq}N*.
- *qamani*, *outside (of the house)*.
- *{aniiqcuaqðaqvik}N*, *balcony*.
- *tassanga*, *thence (from there)*.
- *{icækkivik}N*, *view*.
- *assut*, *very much*.
- *soorunami*, *of course*.
- *{nassaq}V*, *bring (something)*. Note: if explicitly mentioned, the (something) must carry an instrumental case ending.
- *tamarmik*, *all of them (as subject of a sentence)*.
- *{umiaqcuaq}N*, *ship*. With instrumental ending: **by ship**.
- *uannut*, *to me*.
- *V{(m)mat}*, *when it Vb'ed (causative 3.sg)*.
- *{pi}V*, *<agent> gets <patient>*.
- *{isæqtæq}V*, *move into (something)*. Note: if explicitly mentioned, the (something) must carry an allative case ending.

Solutions to the Exercises

Solution 31: Examples of the ə-rule

- {aŋutə}N{t} \Rightarrow^* *angutit* (/əc/ \rightarrow [ic])
- {aŋutə}N{-qaq}V{vuq} \Rightarrow^* *anguteqarpoq* (/əc/ \rightarrow [ic])
- {aŋutə}N{-u}V{vuŋa} \Rightarrow^* *angutaavunga* (/əv/ \rightarrow [av])
- {aŋutə}N{∅} \Rightarrow^* *angut* (final /vtə/ \rightarrow [vt])
- {inə}N{t} \Rightarrow^* *init* (/əc/ \rightarrow [ic])
- {inə}N{-qaq}V{vuq} \Rightarrow^* *ineqarpoq* (/əc/ \rightarrow [ic])
- {inə}N{-a} \Rightarrow^* *inaa* (/əv/ \rightarrow [av])
- {inə}N{-i} \Rightarrow^* *inai* (/əv/ \rightarrow [av])
- {inə}N{∅} \Rightarrow^* *ini* (final /cə/ \rightarrow [ci] when $c \neq /t/$)
- {siunniqsuqðə}N{t} \Rightarrow^* *siunnersortit* (/əc/ \rightarrow [ic])
- {siunniqsuqðə}N{∅} \Rightarrow^* *siunnersorti* (final /ccə/ \rightarrow [cci])
- {siunniqsuqðə}N{-u}V{vuŋa} \Rightarrow^* *siunnersortaavunga* (/əv/ \rightarrow [av])
- {piqutə}N{∅} \Rightarrow^* *pequt* (final /vtə/ \rightarrow [vt])
- {piqutə}N{t} \Rightarrow^* *pequtit* (/əc/ \rightarrow [ic])
- {piqutə}N{kka} \Rightarrow^* *pequtikka* (/əc/ \rightarrow [ic])
- {atuagautə}N{kka} \Rightarrow^* *atuagaatikka* (/əc/ \rightarrow [ic])

Solution 32: Indicative endings on verbal ə-stems

- {nuannarə}V{vara} \Rightarrow^* *nuannaraara*
- {nuannarə}V{vaa} \Rightarrow^* *nuannaraa*
- {mikə}V{-qə}V{vuq} \Rightarrow^* *mikeqaaq*
- {aŋə}V{-qə}V{(v)vut} \Rightarrow^* *angeqaat^a*

^aIn V{(v)vut}, /v/ is doubled to /vv/, but since /v/ is deleted by /ə/ there is nothing to double. In other words, even /(v)v/ is deleted by this rule.

Solution 33: The t-rule and the ə-rule

- {uqalukðə}N{∅} \Rightarrow^* [ɔqalut^st^si] \Rightarrow^* *oqalutsi*
- {uqalukðə}N{-u}V{vuna} \Rightarrow^* [ɔqaluttaavuna] \Rightarrow^* *oqaluttaavunga*
- {najuqðə}N{∅} \Rightarrow^* [najɔt^st^si] \Rightarrow^* *najorti*
- {najuqðə}N{-u}V{vuna} \Rightarrow^* [najɔttaavuna] \Rightarrow^* *najortaavunga*

Solution 34: Add morphemes to t(ə)-stems

- V{vaa} \Rightarrow^* *nassiuppaa*
- V{ssa}V{vaa} \Rightarrow^* *nassiutissavaa*
- V{nəqaq}V{(v)vut} \Rightarrow^* *nassiunneqarput*
- V{qqu}V{vara} \Rightarrow^* *nassiutequara*^a
- V{ðariaqaq}V{vakka} \Rightarrow^* *nassiuttariaqarpakka*

^aRemember, V{qqu}V is necessarily truncative, because of the syllable structure.

Solution 35: Use the numerals

- *pingasunik ineqarpoq*
- *ataasiinnarmik inissiaqarpoq*
- *marlunnik qaqqaqarpoq* (dual)
- *qaqqat pingasut takuakka* (NB: [uva] \Rightarrow ua)
- *sinittarfimmi marluinnarnik siniffeqarpoq*
- *inissiartaami ataasiinnarmik igaffeqarpoq*
- *inersuarmi tallimanik issiaveqarpoq*
- *inissiartaara ataasiinnarmik uffarfeqarpoq*
- *inissiaaraq marluinnarnik ineqarpoq*
- *qaammat ataasiinnaq Nuniaffimmi najugaqarpunga*

Solution 36: Translate the text

In the previous chapter I told that I had an apartment in Nuniaffik. Or (perhaps) I should say that I had a tiny apartment: My apartment was very small, having just two rooms. There was a bedroom and a bathroom. Fortunately, I had to stay just one month in Nuniaffik. Then I moved to a larger, new apartment.

My new apartment was located on the other side of the road, in the vicinity of the store 'Brugseneeraq' (the little grocery store). It had three rooms: they were: living room with kitchen, bedroom and a bathroom. Outside there was also a balcony; thence the mountain Sermitsiaq could be seen. I was very fond of the view.

When I travelled to Greenland I could of course bring only one suitcase. All my furniture and books were brought by ship. When the ship arrived I received my furniture, and finally I could move into my new apartment.

Bibliography

Fortescue, M., Jacobson, S., and Kaplan, L. (2010). *Comparative Eskimo Dictionary With Aleut Cognates*. Alaska Native Language Center, Fairbanks, Alaska, 2 edition.

Glossary

Through the chapters of this book I have introduced many bases and affixes as glossaries for the various exercises. Here follows a complete list, together with a translation. I use the following alphabetisation:

a b c d ð e ə f g h i j k l m n ŋ o p q r s t u v w x y z æ ø å

Particles and similar ‘frozen’ words and phrases are written using the new orthography; but otherwise, bases and affixes are given in a morphemic form that generally is close to the one used by Fortescue et al. (2010) in their Comparative Eskimo Dictionary. However, I have decided to transcribe historical /ə/ that has become either /i/ or /a/ as that respective vowel, *except* when it appears in the final syllable of a morpheme, where it might affect the final form of the word depending on the following morphemes. Or, conversely, where the presence of a true /i/ otherwise might affect a following /t/.

A.1 Bases and particles

A

aamma, *and, also, furthermore.*

aappaluttoq, {aukpalukðuq}N, *the colour red; something that is red.*

Aasiaat, *spiders*, a town in West Greenland. The name is the plural form of {ausiak}N.

Arsuk, a small town in South Greenland near the (now closed and desolate) cryolite mine *Ivigîtût*. The name may derive from the word for *pamper/spoil*.

ateq, {atəq}N, *name*. Strong q-stem with metathesis.

B

biili, *car*, borrowed from Danish.

I

igasoq, {igaðuq}N, *a cook*, i.e. *one who cooks food*.

ilisimasalik, {əlisimaðalək}N, *person with scientific knowledge (of something)*, with (something) given in the instrumental case. The final morpheme is N{-lək}N; see it for notes on sandhi.

Illoqqortoormiut, *the big-house dwellers*, a town in Northeast Greenland. The name is plural, the final morpheme is N{miuq}N.

illu, {əŋlu}N, *house*

inuk, {inuk}N, *human; person*. It can also refer more specifically to a member of the ethnic group of Inuit. Lastly, it is also a (unisex) name.

Isortoq, *the unclear/turbid*. A small town on the East coast, near Tasiilaq. The name refers to the colour of the waters around the town.

K

kalaaleq, {kalaaliq}N, *Greenlander*. Weak q-stem with gemination of /l/ to [ʟ], and final /i/ assimilates /t/ to /s/, hence e.g. *kalaallisut* with equalis N{tut}.

Kalaallit Nunaat, *Land of the Kalaallit*, the name for Greenland in Greenlandic. Possessive noun phrase, built from {kalaaliq}N and {nuna}N.

Kangerlussuaq, *the great fjord*, a town in

West Greenland where the Atlantic airport is located. The final morpheme is N{(q)cuaq}N, see its entry for notes on sandhi.

Kapisillit, *salmon*, a small town/settlement near Nuuk. The name is plural, the final morpheme is N{-lək}N; see its entry for notes on sandhi.

kisianni, *but, however*

kufferti, *suitcase*, borrowed from Danish.

Kulusuk, a small town in East Greenland near Tasiilaq.

M

maanga, *hither*.

Maniitsoq, *the uneven*, town just north of Nuuk.

meeraq, {miiraq}N, *child*. Weak q-stem with gemination of /r/ to [qq].

N

najugaqar-, {najugaqaq}V, *live/have address/residency (in some place)*, with (place) given in the locative case.

Nanortalik, *the place with polar bears*. A small town in South Greenland. The last morpheme is N{-lək}N, see its entry for notes on sandhi.

Narsaq, *plain*, town in south Greenland.

nuliaq, {nuliaq}N, *wife*. Final /aq/ drops before vowel-initial endings.

nuup-, {nuuk}V, *move (to some place)*.

Nuuk, *headland*, the capital of Greenland.

Nuummioq, {Nuukmiuq}N, a citizen of Nuuk.

P

Paamiut, a town in West Greenland, south of Nuuk. The name is plural, the final morpheme is N{miuq}N.

pissuseq, {piccusi}N, behaviour. Weak q-stem with gemination of /s/ to [t^st^s].

Q

Qaanaaq, a town in Northwest Greenland near the Thule Airbase.

Qaqortoq, the white, town in south Greenland.

qarasaasialerisoq, {qarasausialirəðuq}N, computer scientist, literally one that works with computers.

Qasigiannguit, the little spotted seals, a town in West Greenland. The name is plural, the final morpheme is N{ηηuaq}N. See its entry for notes on sandhi.

S

Sisimiut, the fox-hole dwellers, a town in Central West Greenland. The name is plural, the final morpheme is N{miuq}N.

A.2 Affixes

C

V{ccusi}N, the act of being Vb'ing; Vb'ness; abstract noun/concept. Weak q-stem with

T

taava, then.

tarnip pissusiinik ilisimasalik, psychologist. Noun phrase built from {taqnə}N / {taqnəq}N / {taqnək}N, {piccusi}N and {əlisimaðalək}N.

Tasillaq, East Greenlandic form of the word *tasiusaq*, meaning something that looks like a lake. The largest town on the East coast.

tikip-, {təkit}V, ⟨agent⟩ arrives at ⟨patient⟩. Non-patient preserving.

tuttu, {tuntu}N, reindeer/caribou.

U

ui, {ui}N, husband.

ukioq, {ukiuq}N, year, winter.

ullumikkut, now, today, nowadays.

Uummannaq, heart-like, a city in Northwest Greenland. The name derives from an iconic, heart-shaped mountain behind the city.

Upernavik, spring/summertime settlement, a town in North West Greenland.

uter-, {utəq}V, return (to some place), with (place) given in the allative case.

gemination of /s/ to [t^st^s]

L

N{-lək}N, *one equipped with N; one that has N*. Semantically, this affix is equivalent to the combination **N{-qaq}V{đuq}N**. It displays a remnant of k-metathesis, so the ergative, plural and absolutive 2.sg/sg forms are *-llip*, *-llit*, but otherwise it behaves like an ordinary k-stem.

K

N{ALL}{-kaq}V, *go to*, verbalisation of the allative case.

M

N{miuq}N, *one who lives in N; a citizen of N*.

ŋ

N{ŋŋuaq}N, *dear/little*, often used for (unironic) endearment. On spatial noun stems it means *right/just*, e.g. *qulinnguani*, *right/just above it*. It behave as a weak q-

stem before consonant-initial endings, but final /aq/ drops before vowel-initial endings and **N{-u}V**, and it takes **N{-up}** and **N{-it}** in ergative and plural.

Q

N{-qaq}V, *has N*. With 3.sg ending and unspecified subject, it can also mean *there is N*.

N{(q)cuaq}N, *big/bad N*. The meaning can be *big/great* without negative connotations. It behaves as a strong q-stem before consonant-initial endings, but final /aq/ drops before vowel-initial endings and **N{-u}V**, and it takes **N{-up}** and **N{-it}** in ergative and plural.

S

V{sinnau}V, *can Vb*.

U

N{-u}V, *is (an) N*.