

GEOBON

A Grammar

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Background & Motivation

Geoborj is a conlang spoken by a race of goblins in my as-of-yet-unnamed conworld. As goblins are sort of an underclass, their language will always be in a semi-precarious diglossic situation, and in the future I hope to add some fun sociolinguistics and diachronics based on interactions with the other languages from this conworld.

This language is intended to have some deliberately weird elements yet still retain a veneer of quasi-naturalism—while naturalism is definitely a concern, it can be discarded for the sake of trying out something fun.

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Glossing Abbreviations

| | | | | | |
|---|---------------|-----|----------------|------|---------------|
| > | acts upon | I | noun class I | POSS | possessive |
| 1 | first person | II | noun class II | V | noun class V |
| 2 | second person | III | noun class III | VI | noun class VI |
| 3 | third person | IV | noun class IV | | |

World & Culture

To-do. >1>3.11

Part I

Grammar

Phonology

1.1 Phoneme Inventory

1.1.1 Consonants

| | Bilabial | Denti-Alveolar | | Apicoalveolar | | Palatoalveolar | Alveolopalatal | Velar | Glottal |
|-----------|----------|----------------|----------------|---------------|----------------|----------------|----------------|------------|---------|
| | | Non-Sib. | Sib. | Non-Sib. | Sib. | | | | |
| Nasal | m | ṁ | | ṁ | | | | ŋ | |
| Plosive | p b | ṭ ḍ | ṭṣ ḍṣ | ṭ ḍ | ṭṣ ḍṣ | ṭʃ ḍʒ | ṭç ḍʒ | k g | ʔ |
| Fricative | | ṣ | s | ṣ | s | ʃ | ç | | |
| Approx. | | ḷ | | ḷ | | ɹ | ɹʲ | | |

Table 1.1: Consonant Inventory

Geobon's consonant inventory is somewhat large but fairly regular. By far the bulk of the inventory consists of coronals, comprising twenty-four of the thirty-one consonants. Geobon also distinguishes between a fairly large number of features within the coronals.

Laminarity appears to be the most fundamental of these distinctions, as all coronals can be classified into laminal and alveolar classes, and each has a counterpart in the other class. Among and overlapping with these classes are two major classes based on place of articulation—the frontmost coronals at the alveolar ridge and the

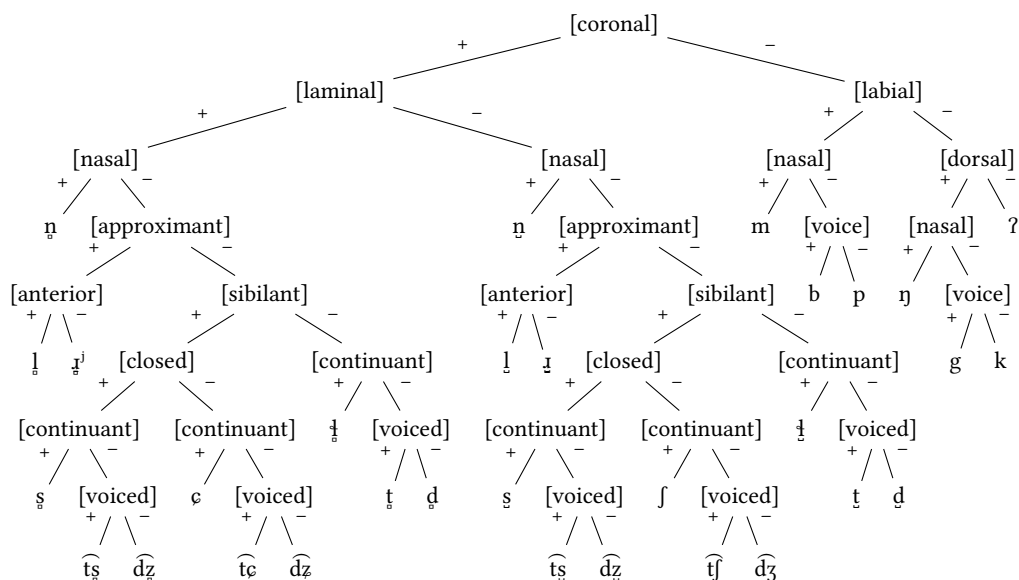


Figure 1.1: Contrastive Hierarchy of Geobon Consonants

post-alveolar coronals. The laminal alveolar coronals are realized as laminal denti-alveolar, while naturally the apical alveolar coronals are apico-alveolar. Among the postalveolar coronals, the alveolopalatals represent the laminals, whereas the palato-alveolars are grouped with the apical class (though in actuality it is not articulated apically).

A voicing distinction is made across all stops, with the exception of the glottal stop. However, this distinction is made only across stops—all sonorants and fricatives are phonemically unspecified for voice, with sonorants more often surfacing as voiced and fricatives more often surfacing as unvoiced.

1.1.2 Vowels

By contrast with its large consonant inventory, Geobonj’s vowel inventory is reasonably small, with six vowels. Most strikingly, Geobonj lacks any vowels lower than mid-close, resulting in an apparently very lopsided inventory. Some have speculated that this is the case because goblins mouths are naturally shorter or more close than the mouths of other species, but this has yet to be tested empirically.

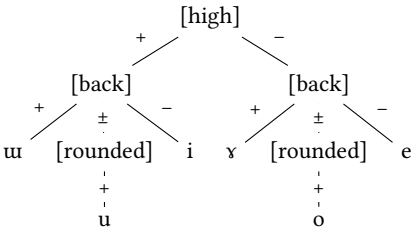


Figure 1.2: Contrastive Hierarchy of Geobonj Vowels

vowels. If the first vowel in the phonological word is front, all following vowels in the same phonological word are fronted. If the first vowel in the phonological word is back (unrounded), all following vowels in the same phonological word are backed. If the first vowel in the phonological word is (back) rounded, all following vowels in the same phonological word are rounded. More detail about the exact forms realized can be seen in Table 1.3

It is noteworthy that, although both the phonemically back vowels and the phonemically rounded vowels are realized as [u] and [o] according to this table, speakers generally have no trouble distinguishing between them in context. Explanations for this have varied, with some theorizing that the phonemically rounded vowels are slightly further front than their phonemically backed counterparts and others arguing that there are more complex differences in the articulations that cannot be described as simply frontness or closeness. Yet others argue that this is solely the influence of the surrounding context and that in isolation they would not be so easily distinguished. More research is necessary to determine which of these groups is in the right.

1.2 Syllable Structure

While there are two competing analyses of Geobonj syllable structure, distinguished by how they treat Geobonj’s syllabic consonant nuclei on a phonemic level. The dominant analysis is the so-called ‘vowelless’ analysis, which analyzes the nucleus as composed of a vowel and any non-stop (that is, sonorant or continuant, repre-

| | Front | Back | Rounded |
|------|-------|------|---------|
| High | i | u | u |
| Mid | e | ɣ | o |

Table 1.2: Vowel Inventory

Geobonj vowels can be neatly divided into three classes: front, back (unrounded), and (back) rounded. As indicated by the parentheses in the prior sentence, the unroundedness of the back unrounded vowels and the backness of the back rounded vowels are incidental and not phonemically meaningful. As a result, the back rounded vowels never trigger backing as the back unrounded vowels do, and the back unrounded vowels have no effect on rounding, unlike the back rounded vowels.

These classes participate in Geobonj’s system of vowel harmony, in which the leftmost (first) vowel occurring in a phonological word conditions the phonetic realizations of the following

| | Front | Back | Rounded |
|-----|-------|------|---------|
| /i/ | [i] | [i] | [y] |
| /e/ | [e] | [ɐ] | [ø] |
| /u/ | [i] | [u] | [u] |
| /ɣ/ | [ɐ] | [ɣ] | [o] |
| /u/ | [y] | [u] | [u] |
| /o/ | [ø] | [o] | [o] |

Table 1.3: Realizations of phonemic vowels in different vowel harmony environments

sented by R in the figures), both of which are optional but at least one of which must be present. The remaining rime consists of an optional coda consisting of any single consonant.

The onset is also optional, at least on a phonemic level, and can consist of any consonant, optionally preceded by a sibilant fricative (represented by S in the figures) and/or followed by a non-stop (that is, sonorant or continuant, represented by R in these diagrams). However, as Geobon does not permit vowel hiatus, the onset is only optional word-initially or when following a syllable with a coda. A syllable appearing after a coda-less syllable requires an onset to avoid hiatus.

This syllable structure can also be expressed in Recursive Baerian Phonotactic Notation¹ as follows:

$$\# \left[\begin{array}{c} [(S) C (R)]_{\omega} \\ \emptyset \end{array} \right] \left[\begin{array}{c} [V (R)]_{\nu} \\ R \end{array} \right] \begin{array}{c} C \\ \emptyset \end{array} \begin{array}{c} (\omega) \rho \\ \emptyset \\ \omega \rho \\ \emptyset \end{array} \right]_{\rho} \#$$

1.2.1 Underlying Vowel Analysis

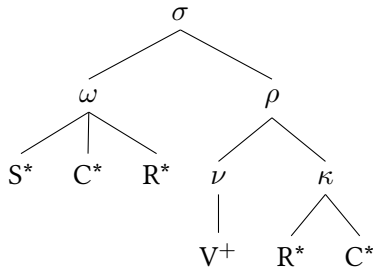


Figure 1.4: Syllable Structure in Vowelless Analysis

Among those who don't subscribe to an analysis of Geobon as possessing vowelless syllables, the dominant approach is to analyze the syllable structure as underlyingly more symmetric and regular, such as that shown in Figure 1.4, with a mandatory vowel nucleus and both onset and coda allowing any consonant to cluster with a non-stop. Within this analysis, what phonetically surface as syllabic consonants are really just allophonous realizations of an underlying unrealized vowel + consonant clusters.

In Baerian notation this is structured identically to the vowelless analysis, except that the ν block is replaced with a simple $V(R)$, with allophony and an underlying seventh vowel accounting for realization of the nucleus as a syllabic consonant phonetically in some contexts.

Those who champion this underlying vowel analysis tend to point to the relative symmetry of this structure compared to the more complicated analysis that allows for vowelless nuclei. However, those who oppose this analysis tend to consider the lack of similarity to surface forms as a point against this analysis.

In practice, both analyses generally can capture Geobon phenomena. In this grammar, we will point out where differences between these two analyses become relevant and refer to both analyses in those cases, but by and large we will focus on the actual changes in the surface forms rather than on their theoretical syllabic structure.

¹Described in https://11blumire.github.io/recursive-baerian-phonotactics-notation/Recursive_Baerian_Syntax_Notation.pdf. Here we make some minor changes to the notation. Simple $\frac{A}{\emptyset}$ stacks are rendered as (A) for the sake of simplicity and brevity. The labels for the blocks have been moved for readability, now subscripted after the final bracket. We also use λ for word-level blocks such that ω can be freed to be used for the syllable-onset block, in keeping with traditional syllable notation.

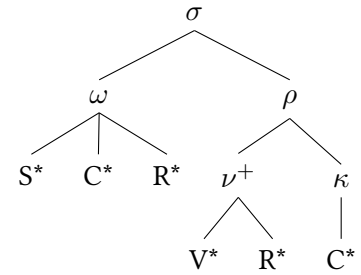


Figure 1.3: Syllable Structure in Vowelless Analysis

1.3 Phonotactics & Allophony

1.3.1 Consonant Harmony

In addition to vowel harmony, Geobon also possesses consonant harmony involving hissing vs. hushing sibilants. Unlike vowel harmony, this harmony is triggered by the rightmost occurrence of a relevant segment within a phonological word. If the last coronal sibilant in a phonological word is post-alveolar, all preceding sibilants within that phonological word will also be post-alveolar. ‘Laminarity’ is retained, so denti-alveolar sibilants become palatoalveolar while apicoalveolar sibilants become alveolopalatal. If the last coronal sibilant is alveolar, it similarly causes all preceding sibilants within that phonological word to be alveolar rather than post-alveolar, maintaining laminarity where possible.

While this consonant harmony is only triggered by sibilants, it also affects liquids, causing /l̥/ and /l̥/ to pattern with the hissing sibilants and /r̥/ and /r̥/ to pattern with the hushing sibilants. However, the liquids never trigger this harmony and only conform to it if sibilants are present later on in the word, so they can co-occur with the ‘wrong’ sibilant under some circumstances.

1.3.2 Laminal Assimilation

1. Coronal consonants persistently assimilate in laminarity to the following consonant.
 - syllabic consonants included
 - reflected in orthography
2. Sibilants become alveolopalatal after a palatal & palatal obstruents become alveolopalatal after a sibilant
 - syllabic consonants included
 - *not* reflected in orthography
3. Palatals become velar when they precede a non-palatal consonant
 - syllabic consonants *not* included
 - *not* reflected in orthography
4. Velars and non-sibilant coronals are palatalized before a palatal consonant
 - syllabic consonants included
 - *not* reflected in orthography
5. Obstruents persistently assimilate in voice to a following obstruent. Approximants devoice before unvoiced obstruents.
 - syllabic consonants included
 - reflected in orthography *sometimes* (i.e., when there is a symbol for the voiced/devoiced version of the respective sound)
6. Nasals assimilate in POA to a following plosive or nasal
 - syllabic consonants *not* included
 - reflected in orthography
7. Nasals become partially-voiced non-nasal stops before a voiceless obstruent
 - only applies to non-syllabic nasals
 - only reflected in orthography when it occurs due to productive *derivational* morphology, not when it occurs within a root or due to inflection

8. Coronal obstruents assimilate in sibilancy to a following fricative. Before a non-sibilant fricative, sibilant obstruents become lateral. Before a sibilant fricative, non-affricate stops become affricates
 - syllabic consonants *not* included
 - reflected in orthography
9. Two of the same consonant in a row merge into a single occurrence of that consonant. Fricatives following affricates at the same place of articulation are also deleted. Partially-voiced stops absorb following voiceless stops at the same place of articulation.
 - syllabic consonants included
 - reflected in orthography
10. Lateral fricatives cannot be adjacent to lateral approximants
 - if the approximant's placement violates the sonority hierarchy (if they are in the same syllable and it occurs before the fricative in the onset or after the fricative in the coda), the approximant is deleted
 - if they meet at a syllable boundary, they merge and the resulting phone takes on the voicing of the latter and the manner of articulation of the former
 - otherwise, the lateral fricative is realized as a velar non-lateral fricative
 - reflected in orthography, but

1.4 Romanization

| Roman. | Phon. | Roman. | Phon. | Roman. | Phon. |
|--------|-------|--------|-------|--------|-------|
| ⟨t⟩ | [t] | ⟨ch⟩ | [tʃ] | ⟨ee⟩ | [i] |
| ⟨d⟩ | [d] | ⟨j⟩ | [dʒ] | ⟨e⟩ | [e] |
| ⟨c⟩ | [tʃ] | ⟨sh⟩ | [ʃ] | ⟨eu⟩ | [u] |
| ⟨z⟩ | [dʒ] | ⟨r⟩ | [ɹ] | ⟨eo⟩ | [ɻ] |
| ⟨s⟩ | [s] | ⟨chy⟩ | [tʃ] | ⟨oo⟩ | [u] |
| ⟨n⟩ | [n] | ⟨jy⟩ | [dʒ] | ⟨o⟩ | [o] |
| ⟨l⟩ | [l] | ⟨shy⟩ | [ʃ] | ⟨iu⟩ | [y] |
| ⟨ty⟩ | [t] | ⟨ry⟩ | [ɹ] | ⟨io⟩ | [ø] |
| ⟨dy⟩ | [d] | ⟨p⟩ | [p] | ⟨i⟩ | [i] |
| ⟨cy⟩ | [tʃ] | ⟨b⟩ | [b] | ⟨u⟩ | [ʊ] |
| ⟨zy⟩ | [dʒ] | ⟨m⟩ | [m] | ⟨a⟩ | ∅ |
| ⟨sy⟩ | [s] | ⟨k⟩ | [k] | | |
| ⟨ny⟩ | [n] | ⟨g⟩ | [g] | | |
| ⟨ly⟩ | [l] | ⟨ŋ⟩ | [ŋ] | | |
| | | ⟨ʻ⟩ | [ʔ] | | |

When multiple laminal consonants occur in the same cluster, only a single ⟨y⟩ at the end of the cluster is used.

Chapter 2

Morphology

2.1 Nominal Morphology

2.1.1 Noun Class & Agreement

Classes

Geoborj has roughly five to seven noun classes, depending on how one analyzes the behavior of plural nouns. As a compromise, the ‘plural classes’ are often indicated as sub-classes of the appropriate noun class, which is the approach taken here. These classes are *largely* determined by the semantics of the lexical item, but there are often apparent exceptions and strange behavior according to outsiders.

Class I: Dominant Forces Perhaps the most apparently eclectic of the Geoborj noun classes, this class contains nouns that refer to anything markedly more powerful than a goblin, to the extent that an individual goblin doesn’t have much hope against it on its own. This includes natural forces, such as celestial bodies, weather events, fire, explosions, etc., but it also includes most non-goblin humanoids, mythical beasts, particularly dangerous or enormous animals, massive moving structures like ships, and later powerful weapons like cannons. This class is even used to refer to some goblins when those goblins have a particularly high degree of power or skill to the extent that they become threatening enough for this class. In this case, the noun class assignment ends up serving as a sort of honorific.

Class I-a: Collectives One of the ‘plural classes’, this class encompasses large groups of animate creatures acting as one. ‘Animate’ here is used rather loosely, referring to anything that can act on its own power. Since Geoborj pluralization is solely derivational, the plural forms of many nouns from classes II-III and even some from other classes are sorted into this class and are treated like Class I nouns in terms of agreement. For instance, the plural of the class II noun *geob* ‘goblin’, *geogeob* ‘a large group of goblins’ is a class I-a noun.

Class II: Goblins This class is fairly self-explanatory—it includes goblins, parts of goblins, and anything else sufficiently intelligent but non-threatening enough to be considered sufficiently goblin-like by a goblin. This generally does not include so-called ‘tall people’, who are usually placed into Class I, but goblins have been heard referring to elf or human children who are old enough to talk and communicate but young enough to not pose a threat using this class.

Class III: Animals Any creature that not intelligent enough for speech and weak enough that a single goblin could potentially at least defend itself against it successfully is sorted into this noun class. This includes many wild animals, but also babies even of intelligent species. Whether a dead animal is considered part of this class, however, depends on the context. Portions of a dead animal that are to be used for food or other purposes tend to be re-categorized into Class IV or V, but corpses of creatures that were particularly beloved or which had the potential of becoming intelligence (such as infants) tend to stay in this class.

Class IV: Quasi-Animate Things This class contains things that aren’t considered fully animate, since they cannot act on their own will, but which can have strong effects (positive or negative) on the world if used

by a truly animate being. Most tools fall into this category, as do most plants and their parts, as well as any particularly potent consumables such as medicine or drugs.

Class V: Inanimate Objects This class consist of the remainder of inanimate objects—anything which is part of the physical world but which doesn’t have a strong enough effect on the world even in the hands of others to be classified as class IV.

Class VI: One-in-Many Objects By far the smallest of the noun classes, this class is often ignored as being purely the product of plural inflection, as it contains the derivational plurals of several words that belong to Classes IV and V. This class consists of inanimate objects that are composed of a multitude of objects, but which are not inherently threatening enough for Class I-a. For instance, the word *shyopa* ‘sand’ (which, incidentally, is not derived from any other noun) is in Class VI, while the word *keershyiope* ‘sandstorm’ is in Class I.

Agreement

Agreement with noun class occurs in several places in Geobon grammar. Different elements of the grammar treat this agreement somewhat differently, however, and distinguishing these differences is important for grammatical agreement in Geobon. Three major classes of elements in Geobon grammar agree with the class of some noun: verbs and postpositions, nominal possessives, and pronouns. Nominal possessives are discussed further in subsection 2.1.3, while the other two classes are discussed here.

Verbs & Postpositions Experts disagree on whether verbs and postpositions can be considered truly separate classes in Geobon, but regardless of which conclusion one draws in that debate, it is clear that Geobon verbs and postpositions use the same mechanisms for agreement. Both are inflected with suffixes to agree with their objects in person and, in the case of third-person objects, in noun class.

| 1 | 2 | 3.I | 3.II | 3.III | 3.IV | 3.V | 3.VI |
|------|--------|------|--------|--------|-------|-------|------|
| -edy | -(a)rk | -meu | -(eo)g | -sy(u) | -(o)n | -(e)s | -eem |

As they are suffixes, naturally the forms of these agreement markers can differ in accordance with vowel harmony. Those forms with initial vowels in parentheses indicate that those vowels only occur when the word they are suffixed to ends in a consonant but do not occur when the word they are suffixed to ends in a vowel. The forms with initial vowels that are not in parentheses replace the final vowel of any vowel-final word they are suffixed to with the initial vowel of the suffix.

Pronouns Naturally, pronouns agree with noun class with their referents. However, unlike the agreement markers on verbs and postpositions, pronouns do not agree with the person of their referent; there is no distinction between a first-person reference to a goblin and a third-person reference to a goblin, at least when it comes to pronominal agreement.

| | I | II | III | IV | V | VI |
|----------|--------------|-------------|--------------|---------------|------------|-----------------|
| Unmarked | <i>meum</i> | <i>eog</i> | <i>syu</i> | <i>nyon</i> | <i>es</i> | <i>‘eem</i> |
| Emphatic | <i>ammeu</i> | <i>geog</i> | <i>syusy</i> | <i>nyonan</i> | <i>ses</i> | <i>‘eenjeem</i> |

Disambiguation of referents based on person can rely either on the agreement markers on adjacent verbs and postpositions, but speakers also often use names and other nominal repetition for disambiguation more often than speakers of many other languages.

2.1.2 Pluralization

What is known as the plural in Geobon is a nominal form created by reduplicating the onset and nucleus of the first syllable of the word with an onset. For instance, the word *geob* ‘goblin’ is pluralized into *geogeob* ‘a multitude of goblins’, while *emutee* ‘elf’ is pluralized into *memutee* ‘a multitude of elves’.

Geobon pluralization is an entirely optional process that is best analyzed as derivational process rather than an inflectional one—that is, the pluralization creates a new word whose semantics roughly correspond to a multitude of the noun from which it’s derived, rather than being simply a grammatically plural form of the original noun. There is a fairly large amount of evidence for this, which will go here once sparky feels like working on this section more.

Not every noun in Geobon can be pluralized, and indeed, pluralization is generally used for something more akin to emphasis of the large quantity of the underlying noun as opposed to simple pluralization. Several nouns, generally those in classes I(a) and VI, inherently refer to a collective or large quantity of something and instead have ways to derive words referring to their smallest components. This will also be elaborated on in this section when sparky feels like finishing this.

2.1.3 Possession

Possession in Geobon is marked on the possessee, as Geobon has a strong preference for head-marking structures. How the possessee is marked as possessed varies depending on certain lexical and morphosyntactic factors.

Certain nouns are obligatorily possessed and do not exist in isolation without any possessive morphology. They surface only with one of a variety of possessive prefixes, which agree with the possessor in person and, in the case of third-person possessors, noun class.

| | | | | | | | |
|----------------|---------------|----------------|-----------------|-----------------|----------------|--------------|----------------|
| 1 | 2 | 3.I | 3.II | 3.III | 3.IV | 3.V | 3.VI |
| <i>dye(t)-</i> | <i>k(a)r-</i> | <i>meu(m)-</i> | <i>eog(eo)-</i> | <i>syu(sy)-</i> | <i>nyo(n)-</i> | <i>s(e)-</i> | <i>‘ee(η)-</i> |

As they generally occur in the leftmost position, these prefixes can and do affect the vowel harmony of the rest of the word, and are likewise affected by the rest of the word in respect to consonant harmony.

To give an example, the Geobon word for ‘mother’ *-meo* is obligatorily possessed (like, in fact, most terms referring to familial relationships). *-meo* never surfaces in isolation and only occurs with one of these prefixes: *dyemu* ‘my mother’, *karmeo* ‘your mother’, *eogmeo* ‘their mother’, etc. Obligatorily possessed words tend to be words who tend to involve some form of lexically-inherent inalienable possession, such as body parts and family members.

Possessive inflection for standalone nouns involves addition of the suffix *-(a)l*, which derivationally forms a postposition meaning ‘possessing [noun]’. This is then inflected just as any other postposition, with the possessor serving as the object of the postposition. POSS FOSS OOSS

- (1) *kar -meo jryeshy -aly -ug*
 2.POSS-mother rucksack-POSS->3.II
“Your mother’s rucksack”

This resulting postpositional phrase can still be used as an argument, as technically all postpositional phrases can, but like other postpositional phrases, verbal agreement is with the *object* of the preposition, not the noun from which the postposition is derived.

- (2) a. *jryeshy es oom -ios*
 rucksack(v) there.is->3.v
“There’s a rucksack.”
- b. *karmeo jryeshyalyug es oom -og*
 your.mother(II) her.rucksack there.is->3.II
“There’s your mother’s rucksack.”

These possessive derived postpositions are not used exclusively for what we would traditionally consider possessives and are often used for purposes most would consider somewhat orthogonal to possession, such as quantification. Such further uses of this construction are discussed in chapter 4.

2.1.4 Other Derivational Operations

2.2 Verbal Morphology

Chapter 3

Syntax

Chapter 4

Semantics

Part II

Dictionary

T