## The Ga日éє language

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## Foreword

GaӨéc, in its current form, is a speedlang. No elements of the language existed before 18 March 2022, which is when I started working on it for Miacomet's Speedlang Challenge \#11. This document contains everything that I have decided upon for the language as of 3 April 2022. At the end there is a compilation of how Ga日ć fulfills the requirements of the challenge.
I am in general very satisfied with how the language turned out, though more examples are needed and the documentation of some syntactic topics needs more work before I can be happy with this as a grammar sketch presentable on its own. I would also have liked to expand on information structure and the pragmatics of deixis but I did not have time. But I will definitely continue working on Ga@će and document these topics in the future.

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## 1 Introduction

The Ga＠ć language is spoken by the GaӨúu people，who are named for the river Gáa日，along which they have lived throughout most of their known history．The current geographic extent of the Ga日úu people is in their homeland along the Gáa $\theta$ from the base of the northern mountains to the southern coast，as well as in signifi－ cant parts of the Havasur plain to the west，some coastal villages，and some islands off the coast．There are also some villages in the eastern forests where most people speak $\mathrm{Ga} \theta$ é $\varepsilon$ as a first language，but do not consider themselves Ga日úu．${ }^{1}$

For the last approximately three hundred years，the region where the GaӨúu live has been under heavy cultural，economic，and linguistic influence by the Havasindamy people，who inhabit the Havasur plain．The relations have at times been hostile， though most of their history has been remarkably peaceful．Ga＠ć and the Havasin－ damy language are distantly related（though this is not known to either people）and they form the core of a loose Sprachbund covering the region around them．The ef－ fect on Ga日é has mostly been in the form of many loanwords from the Havasindamy language，though often limited to formal registers，as well as some borrowed gram－ matical structures．The position of Havasindamy as a regional prestige language is seemingly in the process of changing，as GaOćz itself has become an increasingly important language in many respects，especially in trade．Among the GaOúu them－ selves，most people have at least a passive understanding of Havasindamy，and it retains a prestige status．
GaӨće does not have much dialectal variation，but there is some regional vocabu－ lary，as well as small shifts in pronunciation，including different realisations of the language＇s tone patterns．The dialect described in this document is exclusively that of Bónaŋ，the largest Ga日úu settlement，at the mouth of the river Gáa日．

[^0]
## 2 Phonology

### 2.1 Segmental inventory

GaAéc has a phonemic inventory consisting of 23 consonants and 10 vowels (of which 7 are monophthongs and 3 are diphthongs):


The language will be written with IPA characters throughout this article. The only allophony worth mentioning is that the sibilants ts $d s$ palatalise to $t \int d \int$ when next to $i$ or after ai or $\varepsilon i$, which will be reflected in writing. Palatalising and non-palatalising environments are shown in examples 1a and 1 b respectively.

$$
\begin{array}{llll}
\text { a. } & \text { tfiwà } & \text { 'leaf' } & \text { *tsiwà }  \tag{1}\\
\text { rífu } & \text { 'well' } & \text { *rísu } \\
& \text { cif } & \text { 'bottom' } & \text { *sis }
\end{array}
$$

b. tsàjò 'rest' *tfàjò
daini 'plate' *Gaini
grus 'beetle' *gouf

The glottal stop $?$ is a marginal phoneme only used in two verbal suffixes: -u? (frustrative) and -? (perfective participle). Apart from 3, the stops have a distribution limited in a different way: they can never appear after a vowel (in the same word), i.e. they only appear word-initially, and medially after another consonant. This restriction corresponds to a productive morphophonological process of lenition (see section 2.4).

There is vowel hiatus in the language, both within roots and across morpheme boundaries (though within roots not all possible hiatus pairs exist). The three diphthongs ai $\varepsilon i \jmath u$ are distinct from vowel pairs in hiatus with regard to tone assignment (see section 2.3), and they are also much more common. In careful speech, there is even a distinction in timing between the diphthongs [ai $\varepsilon \underset{\sim}{i}$ oud and the vowel sequences [a.i ع.i כ.u], the latter occurring across morpheme boundaries.
(2) $\emptyset$-aimá [āịmá] '[...] that he would tolerate'
a-imá [ā.īmá] '[...] that I would ascend'

### 2.2 Roots and phonotactics

All GaӨéc syllables have the shape (c)v(c). There are no restrictions on what phonemes may occur as onsets, ${ }^{2}$ but stops (apart from ?) as well as the semivowels $w j$ are not allowed in codas.

Native word-roots are generally mono- or disyllabic, though some trisyllabic seemingly native roots exist. The fricatives $f \theta \chi$ are uncommon root-initially, and stops are rare root-medially (and even then cannot exist intervocalically or in codas; only

[^1]after another consonant). However, fricatives commonly arise in root-initial position from lenition of a stop.

Many GaӨ́́ roots are loaned from Havasindamy. These roots are often longer than native ones, and more often contain nasal-plosive clusters. For example, the foursyllable qכndusara 'letter, message' is loaned from a Havasindamy word.

### 2.3 Tone

GaӨ́r has a highly symmetrical tone system with three underlying tonemes: H, M, and L. On a surface level, each syllable has one of seven tones: three level tones and four contour tones. These are shown below along with how they are notated for monophthongs and diphthongs, as well as their underlying forms in terms of tone melodies.

| Description | Orthography |  | Underlying form |
| :--- | :--- | :--- | :--- |
| High | á | óú | H |
| Mid | $a$ | ou | M |
| Low | $a ̀$ | jù | L |
| High falling | áa | óu | HM |
| Low falling | $a a ̀$ | où | ML, (MLM) |
| High rising | $a a ́$ | $u ́$ | MH, (MHM) |
| Low rising | àa | ju $u$ | LM |

The orthographic vowel doubling for monophthongs with contour tone is primarily an orthographic trick, but it also reflects a slight allophonic lengthening caused by the contour tones.

The surface-level tones are determined by each word's underlying tone melody, which can be one of the following: H, L, M, HM, MH, ML, LM, MHM, MLM. In other words, adjacent tonemes cannot be identical, and a tone melody may contain at most one marked toneme (that is, L and H ). One tone is assigned per syllable until either the tone pattern or the word ends. Diphthongs are treated like monophthongs and only take one tone, but vowels in hiatus take two tones:
(3) One-to-one tone assignment

$$
\begin{array}{ll}
\mathrm{HM}+\text { ji.wa } & \rightarrow \text { Jíwa 'hand' } \\
\text { ML }+ \text { a.rif } & \rightarrow \text { arîf 'crocodile' } \\
\text { MHM }+ \text { ع.ssi.ma } & \rightarrow \text { Esćíma 'priest' } \\
\text { MHM }+ \text { du.ne.o } & \rightarrow \text { dunéo 'third' }
\end{array}
$$

If there are more tone units than syllables, the remaining tones fuse onto the last syllable, giving rise to a contour tone as in the table above.
(4) Contour tone formation

$$
\begin{array}{ll}
\mathrm{ML}+\text { na } & \rightarrow \text { naà 'dream' } \\
\text { MHM }+ \text { ge.o } & \rightarrow \text { geóo 'second' }
\end{array}
$$

If there are more syllables than tone units, the last tone unit is copied across two syllables, after which every syllable gets mid tone. ${ }^{3}$

[^2]\[

$$
\begin{array}{ll}
\mathrm{L}+\text { tsa.jo } & \rightarrow \text { tsàjò 'rest' } \\
\mathrm{ML}+\text { am.be.we } & \rightarrow \text { ambè̀è 'type of flower' } \\
\mathrm{ML}+\text { a.ri.fa.rif } & \rightarrow \text { arìfàrif '(group of) crocodiles' }
\end{array}
$$
\]

The final example arìfàrif above also exemplifies the general GaӨé pattern to not modify the tone melody of a word when the segmental part is reduplicated (compare arìf 'crocodile').

There are special tone rules for prefixes, which are only partially integrated into the tone melody. There is no leftward tone shift when prefixes are added: MHM molóo 'nose' becomes M-MHM amolóo 'my nose', which is a tone melody that can not be found in unprefixed words. However, the restriction on the number of marked tones is upheld with prefixes: if the root melody contains H or L, the prefix can only carry mid tone, but if the tone melody of the root is just M , prefixes with an inherent vowel receive high tone: se 'brother' becomes áse 'my brother'.

### 2.4 Lenition

Apart from tone assignment, there is one major morphophonological process in GaӨéc, namely intervocalic lenition of stops. This process occurs to root-initial stops which become intervocalic either due to reduplication or addition of a prefix. Perhaps unusually, it does not involve voicing, turning voiceless stops into fricatives, and voiced stops into various sonorants.

| Base form | p | t | ts | k | q | b | d | d | d | g |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Lenited | f | $\theta$ | s | $\chi$ | $\chi$ | w | l | r | r | j |

As an example, tuyci 'hand' becomes á $\theta u \eta \varepsilon i$ 'my hand' with the addition of the $a$ prefix marking first person singular. Reduplication can also trigger lenition: kùre 'red' becomes kùreұure 'very hot'.

### 2.5 Other morphophonology

There are some minor morphophonological processes that deserve to be mentioned: the consonantal prefixes $r$ - and $m$ - (2SG and 1PL subject agreement) acquire an echo vowel when preceding another consonant (which occurs with the majority of verbs): $r$-náa $\rightarrow$ ranáa ‘[...] that you went', but $r$-qúu $\rightarrow$ ruұúu '[...] that you saw'. Consonantal suffixes added to a consonant-final stem also acquire a separating vowel, but it is always $a$ : dén- $m \rightarrow$ dénám 'to be held in high regard'. This applies even to separate identical consonants: túm-m $\rightarrow$ túmám 'to fall'. However, in sequences of identical vowels or identical consonants where the latter is not the entirety of its own morpheme, one copy is omitted without replacement: qúu-up-? $\rightarrow$ qú?ap 'having tried to see' and $\chi$ íi $-\chi a \rightarrow \chi i ́ \chi a$ 'to laugh at'.

## 3 Noun phrases

GaӨéc noun phrases are largely analytic in structure and contain both prenominal and postnominal modifiers. The only inflectional morphology of nouns is a tone pattern indicating definiteness, prefixes for inalienable possession, and reduplication with various functions. There is also some derivational morphology, using tone patterns and suffixes. There is a class of adjectives with somewhat similar inflection to nouns. Nouns and adjectives will be described together in this section, along with other noun phrase elements and general noun phrase syntax. ${ }^{4}$

### 3.1 Definiteness

All noun phrases are marked for definiteness, which is realised as a tone pattern on the head noun and all its modifying adjectives, as well as through the presence of a definite article for definite noun phrases. There are multiple tone marking paradigms for both nouns and adjectives, but in all paradigms, the indefinite tone pattern has a higher overall tone melody than the corresponding definite form.
(6)
a. tèi
daà
big:NDF
'a big stone’
$\begin{array}{llll}\text { b. } & t \grave{̀} \grave{l} & d \grave{a} & u \\ & \text { stone:DEF } & \text { big:DEF } & \text { DEF }\end{array}$
'the big stone'

There are 6 general tone-marking classes, some of those classes are realised differently on nouns and adjectives, making for a total of 10 classes. The basis for grouping some classes together in a larger pattern is the highly productive derivation between nouns and adjectives marked only by changing the tone pattern.

|  | Indefinite |  | Definite |  | 'tree' <br> 'wooden' | Distribution <br> Nouns <br> Adjectives |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type 1a | H | úlí | HM | úli |  |  |
| Type 1b | H | úlí | MH | ulí |  |  |
| Type 2 | HM | sáa | M | sa | 'brother' | Both |
| Type 3a | MH | diөú | MHM | diӨúu | 'hunger' | Nouns |
| Type 3b | MH | diөú | MLM | diөùu | 'hungry' | Adjectives |
| Type 4a | MLM | kanう̀s | ML | kanı̀ | 'moon' | Nouns |
| Type 4b | MHM | kanós | ML | kanı̀ | 'lunar' | Adjectives |
| Type 5 | M | ere | LM | غ̀re | 'foot' | Both |
| Type 6a | LM | tsàjo | L | tsàjò | 'rest' | Nouns |
| Type 6b | ML | tsajò | L | tsàjò | 'calm' | Adjectives |

A definite article is required for most definite nouns (including proper nouns and alienably possessed nouns). Only inalienably possessed nouns and nouns in certain fixed constructions do not need the article. The definite article is placed after the noun and other postnominal modifiers, at the end of the noun phrase. It has four different forms, govered by the noun phrase's status on two axes:

[^3]|  | Initial | Altered |
| :--- | :--- | :--- |
| Plain | $u$ | $\eta u$ |
| Focused | $w i$ | $\eta i$ |

The initial-altered opposition is governed by NP-internal structure. Altered forms of the definite article are triggered by certain kinds of prenominal modification: alienable possession, demonstratives, and some quantifiers. The plain-focused opposition is governed by whether the NP receives focus or not. Examples 7b-7d show prenominal modification requiring the altered article. Example 7 e is modified with an adjective, which is postnominal and therefore never requires the altered article. However, example 7 f shows modification by a numeral which is prenominal never triggers the altered article. It remains to be seen whether there is a simple unifying property of the modifiers requiring the altered article.
$\begin{array}{lll}\text { a. } & t \grave{l} & u \\ & \text { stone:DEF } & \text { DEF }\end{array}$
'the stone'
c. na tè̀ $\quad \eta u$

1SG stone:DEF DEF.ALT
'my stone'
$\begin{array}{llll}\text { e. } & \text { tè̀ } & \text { dzujò̀ } & u \\ & \text { stone:DEF } & \text { heavy:DEF } & \text { DEF } \\ & \text { 'the }\end{array}$
'the heavy stone'
$\begin{array}{llll}\text { b. } & g u & \text { tè̀ } & \eta u \\ & \text { there } & \text { stone:DEF } & \text { DEF.ALT }\end{array}$
'that stone'
d. $\quad j \grave{\partial}$ tè̀̀ $\quad \eta u$
few stone:DEF DEF.ALT
'the few stones'
$\begin{array}{lll}\text { f. } & \text { goa tè̀ } & u \\ \text { two stone:DEF } & \text { DEF } \\ & \text { 'the two heavy }\end{array}$
'the two heavy stones'

### 3.2 Reduplication

There is no obligatory plural marking on nouns in GaӨ́と (it is however obligatory on pronouns and in verb agreement), but nouns may be reduplicated which generally has a plural, collective, or intensifying function. The intensifying use is most common with mass nouns. The most common and the only productive reduplication pattern is full reduplication, but there exist many fossilized cases of partial or imperfect reduplication. Reduplication commonly triggers lenition of root-initial stops, and in e.g. tsaifai it can also trigger palatalisation (as a regular consequence of allophony after lenition). Sometimes the meaning of the reduplicated form is somewhat unpredictable, especially with irregular formations, and in some of these cases an irregular form coexists with a regular form carrying a more straightforward meaning.
(8) kéra 'person' kéraұera 'people, crowd'
tsai 'spear' tsaifai 'spears'
laұ’́s 'food’ laұólaұ’ 'feast'
goò 'flowing water' gojò 'river, waterfall'
nuӨ 'bee' nunuө 'swarm'
arìf 'crocodile' arìmàrif 'dangerous territory'
arìf 'crocodile' arìfàrif 'crocodiles'
These reduplicated forms are not used to indicate plurality in quantified contexts (e.g. after a numeral). However, the collective meaning is still available in those contexts should the reduplicated form be used.

### 3.3 Possession

GaӨć differentiates alienable and inalienable possession. Inalienable possession is used for body parts, family members, inherent properties, and certain material possessions and other relations, and is with pronominal possessors indicated by a personnumer prefix attached directly to the definite noun stem, normally without an article, as in 9a. Alienable possession is used in all other cases and is by default indicated by placing the possessor before the possessee, without any special marking, but requiring the altered definite article for the possessee, as in 9 b .
a. a-máa
1SG-mother:DEF
'my mother'
b. na dirai $\quad \eta u$
1SG lemon:DEF ALT.DEF
my lemon'

The inalienable possession prefixes are similar in appearance to verbal subject agreement markers (see section 4.1), only differing in the presence and quality of some of the vowels, both having ambiguity between second and third person plural. The possession prefixes are as follows:

|  | 1 | 2 | 3 |
| :--- | :--- | :--- | :--- |
| SG | $a-$ | $r u-$ | $\emptyset-$ |
| PL | $m a-$ | $\varepsilon_{-}$ | $\varepsilon-$ |

These prefixes are also used for participial subjects, see section 4.6.
When the possessor is not a pronoun but itself a full noun phrase, it is placed before the possessee in both kinds of possession. The possessor does not automatically get the altered article, only if it is itself modified in a way requiring the altered article. Possessor number is still distinguished in inalienable possession, but not in alienable possession.
a. efée u máa

Efée DEF mother:DEF
'Efée's mother'
b. esćíma u e-máa
priest DEF 3PL-mother:DEF
'the priests' mothers'
c. Esćíma $u$ dirai $\quad \eta u$
priest DEF lemon:DEF ALT.DEF
'the priest's/priests' lemon(s)'
Possessees are usually definite, but do not have to be. Possessees in either construction may be made indefinite like any other noun:
(11)
a. $a$-sáa
1SG-brother:NDF
'one/some of my brothers'
b. na dírai
1sG lemon:NDF
'one/some of my lemons'

### 3.4 Adjectives

GaӨ́ŕ has a productive class of nounlike adjectives. They are marked for definiteness through a tone pattern like nouns, and are invariably placed after the noun they modify. They may be reduplicated, which always indicates intensity.
(12) tèi
đuujó
stone:NDF heavy:NDF
'a heavy stone'
tèi đujó~rújo
stone:NDF heavy:NDF~very
'a very heavy stone’
There are four common adverbs which may be used to modify an adjective: sul 'unintentionally, unexpectedly, to a surprising degree', maұэ́u 'pretending to be', nэu 'enough', and de 'barely'. Of these, sul may only be used to modify adjectives, but the other three can be used clausally, too. They all come after the adjective:

| a. | kérá | ta | sul |
| :--- | :--- | :--- | :--- |
|  | person:IPFV | dirty:IPFV | unintentionally |

'a person who became dirty by accident'
b. kérá ta mađóu
person:IPFV dirty:IPFV pretending
'a person pretending to be dirty'
c. kérá ta nou
person:IPFV dirty:IPFV enough
'a dirty-enough person'
d. kérá ta de
person:IPFV dirty:IPFV barely
'a person who is barely dirty'

### 3.5 Vocatives

GaӨć has a vocative construction where a definite-marked noun is used without a definite article, but followed by a vocative particle $\eta$ à.

### 3.6 Prepositions

GaӨéc has a class of prepositions with various uses, mostly relating to location or direction, though not exclusively, e.g. ji 'for' which has a benefactive meaning when on its own, but can combine with the adverbs gusu 'outside' or fèem 'inside' to form a compound preposition meaning 'out of' or 'into'. Prepositions come before a noun phrase and do not modify it in any way, and in particular do not trigger the altered definite article.

| a． | đi bónay <br> in Bónay | $\begin{aligned} & u \\ & \text { DEF } \end{aligned}$ | b． | $\begin{array}{ll} \text { aja } & i  \tag{14}\\ \text { to } & 3, \end{array}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ＇in Bónay＇ |  |  | ＇to him／her／it＇ |  |  |  |
| c． | $\begin{array}{ll} \text { fi } & n a \\ \text { for } & 1 \mathrm{SG} \end{array}$ |  | d． |  | $\begin{aligned} & \text { gust } \\ & \text { out } \end{aligned}$ | màrò box：DEF | $\begin{aligned} & u \\ & \text { DEF } \end{aligned}$ |
|  | ＇for me＇ |  |  | ＇out | of th | box＇ |  |

b．aja日 ì to 3SG
＇to him／her／it＇
c．$f i n a$
for out box：DEF DEF
＇out of the box＇
There is a preposition $5 \mathcal{E}$ which is required by the objects of certain transitive verbs， e．g．Jingáa＇transfer＇and e éćme＇consume in small pieces＇（shown below）．


These noun phrases with sэe behave as objects in every way，e．g．with regard to passivization．All verbs requiring sכe are well－established loans from Havasindamy， having entered GaOć $\varepsilon$ between 260 and 330 years ago，at a rough estimate．What is puzzling about this preposition is that there is no other obvious connection：it only applies to a handful of the many Havasindamy－origin loaned transitive verbs，the verbs are not semantically or phonologically similar，and the corresponding verbs in Havasindamy do not require such a preposition．When asked to explain the meaning of $\operatorname{sJ\varepsilon }$ or translate it into another language，most Ga日é speakers with knowledge of Havasindamy will link it to Havasindamy soa，an adverb with a sequential temporal meaning，similar to＇then＇．This is however an unsatisfying explanation as the words are not used similarly．The best theory is likely that an influential speaker of an Ga日é with imperfect command of Havasindamy insisted on the use of sכe with certain verbs，which then spread and became established．

## 3．7 Pronouns

There are seven free personal pronouns，distinguishing person and number，and for third person also a logophoric form，shown in the table below．The pronouns are used on their own as noun phrases and take no morphology or modifiers．The prefixes marking inalienable possessors（section 3.3 ）and verb subjects（section 4.1 ）obviously have the same origin as the free pronouns；they are repeated in the table below for comparison．

|  | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Free | $n a$ | ré $\varepsilon$ | $\grave{\text { in }}$ bì | $m a$ | $\varepsilon ́ r \varepsilon$ | $\grave{\varepsilon} \grave{\prime}, b i ̀ ~$ |
| Possession | $a-$ | $r u-$ | $\emptyset-$ | $m a-$ | $\varepsilon-$ | $\varepsilon-$ |
| Verb prefix | $a-$ | $r-$ | $\emptyset-$ | $m-$ | $a-$ | $a-$ |

## 3．8 Numerals

There are three kinds of numerals in Ga0ćc．Counting numerals are used successively when counting out loud．Modifier numerals are used to quantify nouns，and usually
come before the nouns, though tan 'one' comes after it (this may be connected to the fact that tay is polysemous with 'just, only'). Ordinal numerals are used to pick out items in a sequence, but also to specify amounts when no noun is attached.

|  | Counting | Modifier | Ordinal |
| :---: | :---: | :---: | :---: |
| 1 | mi | .. tay | тео́o |
| 2 | gi | goa | geóo |
| 3 | du $\theta$ | duna | dunéo |
| 4 | $\chi a r$ | xara | $\chi$ дае́o |
| 5 | ko | koa | koléo |

There is a system for counting higher than 5 , but due to limited funding we must leave this a subject of future research.

### 3.9 Derivation

There exist much nominal derivational morphology, which usually changes the tone pattern and may add a suffix. Some examples:
(16) gáa日 'Gáa日 river’ $\rightarrow$ gaӨúu 'GaӨúu person’

|  |  |
| :---: | :---: |
| $\chi$ awas 'Havasur plain' | $\rightarrow$ ұawásu 'Havasindamy person' |
|  | $\rightarrow$ Хawáse 'Havasindamy language' |
| dirai 'lemon' | dìràì 'lemon tree' |
| arìf 'crocodile' | $\rightarrow$ árifay 'baby crocodile' |
|  | $\rightarrow$ arife 'crocodile nest' |
| lisò 'dog' | $\rightarrow$ lísoy 'puppy' |

The above is far from an exhaustive list of the patterns found. ${ }^{5}$

[^4]
## 4 Verbs

### 4.1 Finite inflection

Verbs are have a moderate degree of morphological complexity, and are maximally inflected with (i) a prefix agreeing with the subject, (ii) a tone pattern indicating mood and subject number, (iii) a 'voice' (not really) suffix, and (iv) a combined aspect $+\operatorname{mood}+$ evidentiality suffix. The agreement prefixes are as follows:

|  | 1 | 2 | 3 |
| :--- | :--- | :--- | :--- |
| SG | $a-$ | $r-$ | $\emptyset-$ |
| PL | $m-$ | $a-$ | $a-$ |

First person singular as well as second and third person plural are all marked with $a$-. This creates an ambiguity between the second and third person plural, but not with the first person singular as it is disambiguated by the tone patterns. The prefixes $r$ and $m$ - acquire an echo vowel if added to a consonant-initial verb root. To illustrate the agreement markers in context, the following example gives the TAM-unmarked forms of qúu 'to see':
a. $\quad a-\chi u ́ u$
1SG-see
'I saw'
b. mu-ұù
1PL-see:PL
'we saw'
c. ru-ұúu
2sG-see
'you saw'
d. $\quad a-\chi u ̀$
2/3PL-see:PL
'y'all/they saw'
e. qúu
3SG-see
'he/she/it saw'

Do note that while the above unmarked forms are translated as independent English clauses, they can only be used dependently in Gafé as will be explained later. In the later parts of the grammar, plural $a$ - will be glossed either as 2PL or 3PL depending on the proper meaning in context, but the reader should be aware that the form is ambiguous.

Verb roots are marked for subject number and realis/irrealis mood with a tone pattern. There are three tone marking paradigms:

|  | SG.RE |  |  |  | PL.RE |  | SG.IRR |  | PL.IRR |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| Type 1 | H | túm | ML | tuùm | MH | tuúm | M | tum | 'descend' |  |  |
| Type 2 | HM | náa | L | nà | MH | naá | ML | naà | 'go' |  |  |
| Type 3 | MHM | lesée | LM | lèse | HM | lése | MLM | lesèe | 'crush' |  |  |

After the stem, one of three mutually exclusive suffixes may be added. Two of them would normally be classified as voices, though the last one would not. It is not fully clear why the frustrative suffix cannot be combined with, say, the causative. The syntax and semantics of these suffixes is described in section 4.5.

| Suffix | Meaning |
| :--- | :--- |
| $-\chi a$ | Causative |
| $-m$ | Middle voice |
| $-u ?$ | Frustrative |

Finally, all finite verbs require an aspect-mood-evidentiality suffix, distinguishing perfectivity on one axis, and mood-evidentiality on the other. The evidentiality distinction between firsthand and non-firsthand evidence is only applicable in realis mood.

|  | RE.FH | RE.NFH | IRR |
| :--- | :--- | :--- | :--- |
| PFV | $(-\varepsilon)$ | $-s$ | $(-\varepsilon)$ |
| IPFV | $-r$ | $-l i$ | $-l \varepsilon$ |

The suffix $-\varepsilon$ marking perfective firsthand or irrealis verbs has a zero allomorph (or is not present, whichever option the reader prefers) on verbs in complement clauses (section 6.2).

### 4.2 Aspect

GaӨé́ verbs distinguish perfective and imperfective aspects in all verbs except nonfinal verbs in an SVC (though the final verb is marked, which gives aspectual specification to the whole SVC; see section 5.3 ) and locative-oriented participles (see section 4.6). Perfective and imperfective are marked with different suffixes (see sections 4.1 and 4.6).

With realis verbs, perfective and imperfective are interpreted as being in the past and the present, respectively. However, the imperfective can refer to past events when time is specified either explicitly, or through context. Combining realis perfective with dojò 'now' gives an immediate past reading, and the same with irrealis perfective gives immediate future.

### 4.3 Mood

There is a distinction between realis and irrealis mood: realis predicates mean, in essence, that the state or event it describes has in fact taken place (including negation). The simple presence of a realis verb does however not mean that the verb has taken place. Realis verbs may be used when describing beliefs, or in questions, without implying the corresponding assertion.

Irrealis verbs are used for future events, hypotheticals, counterfactuals, commands, and so on.

### 4.4 Evidentiality

Ga日é $\begin{gathered}\text { distinguishes evidentiality in all finite realis verbs in a suffix also marking }\end{gathered}$ aspect: firsthand evidentiality is marked by $-\varepsilon$ or $-\zeta$, and non-firsthand evidence is marked by $-s$ or -li, as shown in section 4.1.

Firsthand evidentiality is used when the speaker experienced and remembers the event, or is currently experiencing it. Non-firsthand evidentiality is thus primarily used for reported or inferred events.

| a. | $r i-f i ́ n-\varepsilon$ | $n a$ | gawar |
| :--- | :--- | :--- | :--- |
|  | 2SG-steal-PFV.FH | 1SG | $m u$ |
|  | 'You stole my money! (I saw it happen)' |  |  |

```
b. ri-fín-as na gawar yu
    2SG-steal-PFV.NFH 1SG money:DEF DEF.ALT
```

'You stole my money! (I inferred it, or someone told me)'
(5MOYD \#1627)
Evidentiality is used both for past and present events, as those may be realis, but future events are never realis, ${ }^{6}$ so evidentiality is not applicable to future events.

### 4.5 Voice

There are three mutually exclusive verbal suffixes grouped together as 'voice': $-\chi a$ (causative), $-m$ (middle), and -u? (frustrative). They will be described in turn.
The causative suffix - $\chi a$ is always valency-increasing. In all productive uses (exemplified in 19a), it applies to a verb to introduce a causer subject, and demote the original subject to a causee object. However, for a handful of intransitive verbs (exemplified in 19b), applying the suffix - $\chi$ a does not have a causative but an applicative meaning. For most of these verbs there exists a separate root used when the 'expected' causative meaning would be desired, e.g. émbáí 'to make laugh, entertain'.
a. Examples of causative - $\chi a$

| qúu | 'to see' | qúxa | , |
| :---: | :---: | :---: | :---: |
| nós | 'to flee' | banóqa | 'to chase away' |
| m | 'to exit' | ทธ́mхá | 'to take out' |
| óo | 'to ente | dóxa | 'to insert' |

b. Examples of applicative $-\chi a$

ұíथ 'to laugh' $\chi$ í $\chi a$ 'to laugh at' miŋáa 'to collapse' miŋá $\begin{gathered}\text { a } \\ \text { 'to collapse on' }\end{gathered}$

The 'middle voice' suffix - $m$ has a number of functions, most of them valency-decreasing. Applied to transitive verbs it can act as a regular passive or a reciprocal. Some meanings are more common with certain verbs, but both interpretations are grammatical. It can also apply to transitive verbs and agentive intransitive verbs to indicate a lack of control or loss of agency, in which case there is no decrease in valency. It never applies to patientive intransitive verbs.
a. Examples of passive $-m$
qúu 'to see' qúum 'to be seen'
ŋó 'to hold' ŋóm 'to be held'
b. Examples of reciprocal -m

งfóu 'to meet' эfóum 'to meet e.o.'
láa 'to hit' láam 'to fight e.o.'
c. Examples of de-agentive $-m$

эfóu 'to meet' $\quad$ fóum 'to happen upon'
Өí 'to say, tell' Өím 'to let slip'
túm 'to descend' túmám 'to fall'

[^5]The frustrative affix $-?$ conveys unsuccessful or pointless action．When applied to transitive verbs，it always creates an ambitransitive verb：the object may remain， but it may also be left out．

## 4．6 Participles

Ga日ée non－finite verbs come in two flavors：non－final verbs in SVCs，which use all finite verbal morphology except the final aspect－mood－evidentiality suffix（see sec－ tion 5.3 ），as well as participles．Ga日é $\varepsilon$ participles are used solely in relative clauses and differ morphologically from finite verbs in two ways．They do not have ordi－ nary subject marking and always use the singular tone patterns，but they may op－ tionally mark subjects with possessor prefixes；and the normally final aspect－mood－ evidentiality suffix is replaced by a suffix partially indicating participle orientation and aspect．An example of a participle：
（21）aұùs fíwáfiwa عwanóวm

| $a$－qù－s | fíwá～fiwa | $\varepsilon$－banóo－m |
| :--- | :--- | :--- |
| 3PL－see：PL－PFV．NFH | snake～COLL | 3PL．POSs－flee：SG－IPFV．PTCP |
| ＇They must have seen many fleeing snakes．＇ |  |  |

Note that the subject of the participle is plural third person，but is not marked with the regular third person plural prefix $a$－，but with $\mathcal{\varepsilon}$－，which is normally used to indi－ cate inalienable possession（see section 3．3），and that the tone pattern of the partici－ ple does not reflect the plurality of the subject．Participial subjects may always be indicated in this way，but it is optional for subject－oriented participles（i．e．when the head noun modified by the participle is also that participle＇s subject）．That is，the above example could have had banóm without the $\varepsilon$－prefix without affecting gram－ maticality．However，the subject must be indicated in this way when the participle is not subject－oriented．

There are three different participles in Ga日éع：core－oriented perfective，core－oriented imperfective，and locative－oriented．The last type does not distinguish aspect．The suffixes marking each of these types are given below：

|  | PFV | IPFV |
| :--- | :---: | :---: |
| Core | $-P$ | $-m$ |
| Locative | $-r 0$ |  |

Aspect in participles works in the exact same way as in main verbs（see section 4．2）， but orientation needs to be explained．The core－oriented participles are by far the most common and are used when the relativized noun is a core argument of the participle．The locative－oriented participle，on the other hand，is used when the relativized noun is a location，direction，time，or other context for the participial clause．

## 5 Simple clauses

This section deals with the structure of 'simple' clauses, that is, independent clauses not themselves containing any embedded clauses. Clause embedding structures are covered in section 6. Additionally, topics such as discourse markers and narrative structures do impact the formation of certain simple clauses (e.g. in that they can contain discourse markers), but these topics are described in section 7.

### 5.1 Arguments of verbs

GaӨéc verbs can have anywhere from 0 to 4 arguments (the maximum, 4, is only possible by causativizing a verb with three arguments). They generally have quite fixed transitivity, though some ambitransitive verbs exist. Pro-drop is common with subject pronouns, but rare if at all possible elsewhere. The typical constituent order is SVO, with indirect objects before direct object, and causee objects before any others. However, Gäć $\varepsilon$ word order is quite free despite the lack of role marking on noun phrases, and multiple variant orders exist.
a. Jíná- $\varepsilon$
rain-PFV
'It rained'
b. efée $u$ dá-

Efée DEF sleep-PFV
'Efée slept'
c. efée $u$ qú- $\varepsilon$ arí $u$

Efée DEF see-PFV Arí DEF
'Efée saw Arí'
d. efée $u$ wín-غ́ arí $u$ dírai

Efée DEF give-PFV Arí DEF lemon:NDF
'Efée gave Arí a lemon'
e. efée $u$ wíy-Хá-e na arí $u$ dírai

Efée DEF give-PFV 1SG Arí DEF lemon:NDF
'Efée made me give Arí a lemon'

### 5.2 Copula

GaӨéc has a copula with four forms, distinguishing polarity and perfectivity.

|  | AFF | NEG |
| :--- | :--- | :--- |
| PFV | júu | lú |
| IPFV | íi | lá |

The copula differs significantly from regular verbs in that it takes none of the regular verbal affixes, including subject markers. Instead, the copula requires pronominal subjects to be expressed by full pronouns. The copula complement may be a noun phrase, as in the following examples:

| a. | $n a$ | $i$ | $a r i ́$ | $u$ |
| :--- | :--- | :--- | :--- | :--- |
|  | 1SG | COP.IPFV | Arí | DEF |

'I am Arí'
b. na lá arí u 1sG COP.IPFV.NEG Arí DEF
'I am not Arí'

### 5.3 Serial verbs

GaӨę́ frequently employs serial verb constructions, where multiple verbs are strung together to describe one event. Only the final verb in GaOé SVCs is marked with the aspect-mood-evidentiality suffix, but all other morphology remains on all verbs, including the subject marking prefix. All verbs must share a subject, but the restrictions on objects are laxer (but not yet fully understood).

| $i ̀$ | $a-r i ́$ | $a-n a ́-\varepsilon$ | gèa |
| :--- | :--- | :--- | :--- |
| 3SG | 1SG-pick | 1SG-go-PFV | to.there |

'I brought it there'
Many SVCs are best considered lexemes in their own right as the meaning may not be obvious considering the component verbs. Many SVC constructions are considered somewhat informal, and are replaced by simple verbs loaned from Havasindamy in formal speech. Interestingly, the opposite situation also occurs: some SVC constructions are only found in formal speech, where they replace certain native verbs.

### 5.4 Time, place and direction

There are four 'tense' adverbs which may be used to indicate the relation between the event time and utterance or reference time: $\theta$ ćíw (past), djjò (ongoing in the present), ri (about to start, immediate or sequential future), and $m \varepsilon \grave{~(f u t u r e) . ~ T h e ~}$ 'sequential' meaning of $r i$ is the only one which works in relation to a potentially non-present reference time.

Place and direction are usually indicated with adverbs like $g u$ 'there' or prepositional phrases:
(25) ri nai fi gusu lu wirì ju fixá gámá then and for out here black:DEF DEF.ALT sound:NDF unusual:NDF lúu $\quad$ ह́m-ár flow exit-IPFV
'And also out of this black thing, a strange sound was coming out.'
(5MOYD \#1642)

### 5.5 Questions

Wh-questions front a question word, e.g. sóxi ‘where’.

### 5.6 Imperatives

One way to form imperatives is to reduplicate a verb in a serial construction with itself. With already serial verbs, the whole complex is reduplicated:

| (26) | máa | jà | ro-poś | ro-jo- $\chi$ á | ro-ŋวว์ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | mother:DEF | voc | 2SG-hold:IRR | 2SG-eat:IRR-CAUS | 2SG-hold:IRR |
|  | ro-jo- $\chi$ á-lé |  | $a$-walì |  |  |
|  | 2SG-eat:IRR-CAUS-IRR.IPFV 1S |  |  | ild:DEF |  |
|  | 'Mother, take care of my child!' |  |  |  | MOYD \#1596) |

### 5.7 Negation

There is a negation particle, ili.
(27) ijùr u taí-Xá-le ges ili tamàs u wind:DEF DEF open:IRR-CAUS-IRR.IPFV ABIL NEG door:DEF DEF 'The wind cannot open the door.'

## 6 Complex clauses

### 6.1 Relative clauses

A common way of forming relative clauses is to use a participle (section 4.6):
(28) a-rí $a-\eta o ́-\varepsilon ́ \quad$ ojos あì̀ $a-\chi u ́ u-? \quad \eta u$ 1SG-pick 1SG-hold-PFV all apple 1SG-see-PFV.PTCP DEF.ALT
'I took all the apples I saw'
(5MOYD \#1641)
There may or may not also be other methods.

### 6.2 Complement clauses

Certain verbs, e.g. $\theta$ í ‘say’, doó $\chi$ 'know' and paláa 'believe' may introduce a complement clause as in example 29. The complement clauses are not introduced in any special way, but the suffix $-\varepsilon$ (marking either perfective realis firsthand or perfective irrealis verbs) is realised as zero on verbs of complement clauses.

| a-ró $\chi$-ác | ru- $\chi u ́ u$ | $i ̀$ |
| :--- | :--- | :--- |
| 1SG-know-IPFV | 2SG-see | 3SG |

'I know that you saw him'
The verb $\theta i ́$ may be used with an irrealis complement to produce an especially forceful command.

| $a-\theta i ́-r$ | re-weláí-m! |
| :--- | :--- |
| 1SG-say-IPFV | 2SG-submerge:IRR-MID |
| 'I'm telling you to bathe!' |  |

There is a 'logophoric' third person pronoun bì, whose main use is in some complement clauses to refer to the subject of the main clause. It can replace both thirdperson singular ì and third-person plural $\grave{l}$, but not first or second person pronouns.

| a. | efée | $u$ | $\theta i ́-\varepsilon$ | $b i ̀ ~$ | dá |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Efée | DEF | say-PFV | LOG | sleep |
|  | 'Efée ${ }_{i}$ said that he $\mathrm{i}_{\mathrm{i}}$ slept.' |  |  |  |  |


| b. | efée | $u$ | $\theta i ́-\varepsilon ́$ | $i$ |
| :--- | :--- | :--- | :--- | :--- |
|  | Efée | DEF | say-PFV | 3SG |
|  |  |  |  |  |
|  | 'Efée | sleep |  |  |
|  | said that he ${ }_{j}$ slept.' |  |  |  |

### 6.3 Reason, purpose, and goal

Clauses indicating reasons, purposes, and goals are introduced with conjunctions.
(32) lu anáe ò̀ gi日 awenéer here 1SG:go:PFV then because 1SG:be.hungry:IPFV
'[...] so I came here because I am hungry'

## 7 Interclausal structures and pragmatics

### 7.1 Discourse markers

Gâé $\begin{gathered}\text { has a class of discourse markers which usually occupy a postverbal position. }\end{gathered}$ For example, the particle $d u u$ indicates that the speaker believes the listener to already know something, but that the speaker is bringing it up to remind about it or indicate its current relevance. It does not change the truth value of a sentence, but it would be infelicitous in a context such as 33b.
(33) a. Context: the speaker has alredy told the listener about the crocodile encounter, but the listener appears to have forgotten.

| $k i$ | $r i$ | $a-\chi u ́-\varepsilon$ | duu | arìf |
| :--- | :--- | :--- | :--- | :--- |
| yesterday | then | 1SG-see-PFV | already.known | crocodile:NDF |

'I saw a crocodile yesterday, remember?'
b. Context: the speaker cannot be sure whether the listener knows about the crocodile encounter.

| \# ki | $r i$ | $a-\chi u ́-\varepsilon$ | $\boldsymbol{k} u$ | arìif |
| :---: | :--- | :--- | :--- | :--- |
| yesterday | then | 1SG-see-PFV | already.known | crocodile:NDF |

Other common discourse markers are ilóu which expects disagreement from the listener, ruđ which indicates that the statement contradicts what was previously said, and fii which indicates that the speaker considers the statement of lesser importance to the ongoing discourse.

### 7.2 Interjections and common phrases

There are multiple interjections which may stand on their own as complete utterances, e.g. kióo! 'ew, yuck' indicating disgust or a! 'oh' indicating surprise. Interjections may be lengthened for intensity or severity, e.g. aaaaaaa! for great suprise or pain.

There are two especially common greetings, róu and tigai, which are mostly equivalent, but róu is somewhat more familiar, and tipai is as a result more often used when adressing people of higher social status, such as teachers or elders.

### 7.3 Conversations

The following is a conversation between a fisherwoman named Efée and her apprentice Goa. Efée has recently returned from a fishing trip with a moderate amount of fish, but leaves it unattended for a little while. When she comes back, the fish is gone, and Goa is there instead. Arí is Efée's husband.

```
a. róu gวa yà
hello Goa voc
'Hello, Gэa.'
```

b. a tiyai efée jà
oh hello Efée VOC
'(surprised) Hello, Efée.'
c. a sóxi pà e-fín-ұá-? u
oh where fish:DEF 1SG-stuck-CAUS-PFV.PTCP DEF
'Oh! Where is the fish I caught?'
d. $\varepsilon \varepsilon \varepsilon . .$.
uhh
'Uhh...'
e. lún-غ́ duu dojò
be.here-PFV you.know now
'It was here just now, you know.'
(Efée)
f. arí wi rí náa-s jei duré?

Arí DEF.FOC pick go-PFV.NFH in.order.to sell:IRR-PFV.IRR
'Maybe Arí took it to sell it?'
g. ler đi bónay wi íi arí u
no in Bónay DEF.FOC COP Arí DEF
'No, Arí is in Bónay.'
h. (Goa proceeds to apologize and explain that he stole the fish to give to his mother Faja, who is very poor and often hungry.)

Sentence 34 f is a lie by Goa, not because Arí did not take the fish - using the nonfirsthand evidential, especially with an uncertain intonation, covers the speaker from blame in case the statement is false - but because using the non-firsthand evidential implies that Goa does not know what happened to the fish, but he does.

### 7.4 Narratives

A distinctive feature of Ga-ćc storytelling is its narrative-initial construction: this consists of an optional location, and two mandatory elements, a definite noun without a definite article, and finally one of the 'tense adverbs' $\theta \varepsilon ́ i ́ w \varepsilon, d \jmath j \grave{\jmath}, ~ r i, ~ a n d ~ m \varepsilon \grave{~}$ introduced in section 5.4. This is not at all grammatical in normal GaӨé clauses, but in the beginning of a story it sets up a central participant and establishes when the story is supposed to take place.
(35) a. bifou $\theta$ ćiwe
fisherman:DEF PST
'There once was a fisherman, [...]'
$\begin{array}{lll}\text { b. bónay } & \text { bijou } & \theta \text { éciwe } \\ \text { Bónay } & \text { fisherman:DEF } & \text { PST }\end{array}$

- fisherma
'There once was a fisherman of Bónay, [...]'

All traditional Ga日é stories begin this way. Longer stories with multiple parts may begin each part with a new narrative-initial construction. The initial construction at the beginning of a story is distinctive enough that it is often used as the name of a story, unless another established name exists. Modifying a GaӨ́́ story when retelling it is acceptable, and often even encouraged, but the narrative-initial construction is never changed.

## 8 Native script

There is a syllabary script used to write GaAćc，adapted from Havasindamy，though it is far from uniform in its use by the GaӨúu people．GaӨé employs more phonemic contrasts than Havasindamy and the syllabary is highly underspecified，and different groups have invented different strategies for dealing with this underspecification About $15 \%$ of the GaӨúu population are able to read or write some form of the script， mostly limited to merchants，records keepers，priests，scholars，and messengers．The most common（and also most underspecified）form of the script is shown below：

|  | $m$－ | $\begin{aligned} & n- \\ & n- \end{aligned}$ | $\begin{aligned} & b- \\ & p- \\ & f- \end{aligned}$ | $\begin{aligned} & t- \\ & t s- \end{aligned}$ | $k$－ | $\begin{aligned} & q- \\ & \chi- \end{aligned}$ | $d-$ <br> d－ <br> dK－ | $g$－ | $\begin{aligned} & S- \\ & \theta- \end{aligned}$ | $l-$ | $r-$ $r-$ | $\begin{aligned} & j- \\ & w- \\ & \emptyset- \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| －a，－ai | $q$ | か | $\checkmark$ | 57 | $=$ | $\bigcirc$ | $\tau$ | － | $\zeta$ | ก | $\Sigma$ | d |
| $-\varepsilon$ ，$-\varepsilon i$ ，－e | ¢ | 人 | 2 | 2 | r | $\sqsupset$ | 4 | ＋ | 0 | 18 | U | $\bigcirc$ |
| －i | 寝 | 2 | 九 | $\varphi$ | $r$ | $\varepsilon$ | بי | 2 | $\bigcirc$ | － | $=$ | 3 |
| －Ј，－－u，－о，－u | $\varepsilon$ | $\vdash$ | H | 4 | 万 | $\cdots$ | T | 7 | $\bar{\imath}$ | d | Y | く |

Characters are written left－to－right．Tone is entirely unwritten，and coda consonants are usually written as if they had an echo vowel．Sentence 34f looks like this：
は詮けん

## 9 Dictionary

Entries for nouns and adjectives are given with the headword in the definite form， and entries for verbs are given with the headword in the（unmarked）third person singular realis nonfinite form．The alphabetical order is as follows：

$$
a b d d d e \varepsilon f g i j k l m n \eta o \rho p q r \int s \theta t t s u \chi \chi
$$

Tone only impacts the sorting of words that only differ in tone，in which case higher tones are sorted first．The $i$－adjacent allophones $t \int d \int$ of $t d t s$ are indicated in writing but not treated differently for sorting．
a！interj．oh；indicates surprise
áíma $v$ ．tolerate，allow，grow accustomed to
aja日 prep．to（direction），until
ambèwè $n$ ．a type of small red flower trea－
sured for its beauty
arìf $n$ ．crocodile
árifay $n$ ．baby crocodile
arìmàrif $n$ ．dangerous waters or dangerous territory；seemingly an irregular reduplica－ tion of arif＇crocodile＇
banós $v$ ．flee
balì $n$ ．child
bélai $v$ ．submerge
benée $v$ ．be hungry
bì pro．he，she，it；third person singular free logophoric pronoun；see also the non－ logophoric ì，and section 6.2
bijou $n$ ．fisherman，fisherwoman
bónay pn．Bónay town，the largest Ga日úu settlement and de facto capital
dén $v$ ．hold in high regard，value
dirai $n$ ．lemon
dìrà̀ $n$ ．lemon tree
djjò $a d v$ ．now
duna num．three（cardinal modifier）
dunéo num．third（ordinal）
dúur $v$ ．sell
duө num．three（sequential counting）
đá $v$ ．sleep
dà adj．big
de adv．barely；can modify adjectives or clauses
diӨúu $n$ ．hunger
diӨùu adj．hungry
đ́́u $n$ ．destination，final location（after some process），place of rest or stillness，grave

あaiyi $n$ ．plate，tray，cutting board；any flat surface used for preparing or serving food
ci prep．in，at
đì̀ $n$ ．apple
cóo $v$ ．go in，enter
kó $\chi$ v．know
cujùे adj．heavy
du part．discourse marker indicating an ex－ pectation that the listener already knows the stated fact
efée $p n$ ．a common female name
éres $n$ ．sun，sunlight，daytime；this word is not used to refer to the sun in a spiritual context，see $q a$
émbáí $v$ ．entertain，make laugh
e日éme $v$ ．consume in small pieces；loaned from Havasindamy；object requires $s \mathcal{\mathcal { E }}$
è̀ pro．they，them；third person plural free pronoun
عi $\int n$ ．bottom
ére pro．you（pl），y’all；second person plural free pronoun
ère $n$ ．foot
عséíma $n$ ．priest
fèem $a d v$ ．inside，in；see also $\int i$
fiì part．discourse marker indicating that the speaker considers the statement of lesser importance to the ongoing discourse
gáa $\theta n$ ．the river Gáa $\theta$ ，along which the Gäúu people live；possibly connected to goò＇flowing water＇
gamá adj．unusual，strange

gaӨúu $n$ ．Ga日úu person；commonly used re－ duplicated as gäújäu＇the Ga日úu people＇
gawar n．money
gèa $a d v$. there (direction)
geóo num. second (ordinal)
ges $a d v$. indicates ability
gi num. two (sequential counting)
goa num. two (cardinal modifier)
góo $v$. eat
goò $n$. flowing water; commonly used redu-
plicated as gojò 'river, waterfall'
goa $n$. a common gender neutral name gous $n$. beetle
gu $a d v$. there (position)
gusu $a d v$. outside, out; see also $\int i$
ì pro. he, she, it; third person singular free pronoun; see also the logophoric bì
il $a d v$. unintentionally, by accident
ili $a d v$. not
ilóu part. discourse marker expecting disagreement from the listener
íma $v$. rise, ascend, float up
ìjùr $n$. wind
jei conj. in order to
kanò n. moon
kanò adj. lunar
kéra $n$. person; commonly used reduplicated as kéraxera 'crowd'
ki $a d v$. yesterday
kióo! interj. ew, yuck
ko num. five (sequential counting)
koa num. five (cardinal modifier)
koléo num. fifth (ordinal)
kùre adj. red, warm, angry; kùreұure very hot
laұ́s $n$. food, drink; the reduplicated form lađólaұว is commonly used with the meaning 'large meal, feast, celebration'
ler interj. no; expresses disagreement
lesée $v$. crush
li adv. here (direction)
liss̀ $n$. dog
lísoy $n$. puppy
lu adv. here (location)
lún $v$. be here
lúu $v$. flow
ma pro. we, us; first person plural free pronoun
máa $n$. mother
mađóu $a d v$. pretending to do, pretending to
be; can modify adjectives or clauses
meóo num. first (ordinal)
mej̀ $a d v$. in the future
mi num. one (sequential counting)
miyáa $v$. collapse; gets an applicative sense from - xa; miŋá $\chi a$ collapse on
molóo $n$. nose
na pro. I, me; first person singular free pronoun
náa $v$. go
nai conj. and, connects clauses
nou $a d v$. enough; can modify adjectives or clauses
nü $n$. bee
nunu $\theta$. swarm of bees; irregular reduplication of $n u \theta$ 'bee'
yà part. vocative particle
yém $v$. go out, exit
yi art augmented-prominent definite article; see section 3.1
yó $v$. hold
yu art. augmented-plain definite article; see section 3.1
ojos part. all; prenominal; requires the altered article
ofóu $v$. meet
paláa $v$. believe
pà $n$. fish
qa $n$. the Sun; the word has spiritual and poetic connotations; éres is a more mundane synonym
qondusara $n$. letter (written message), missive; a loanword from Havasindamy
qúu $v$. see
ré́ pro. you (sg); second person singular free pronoun
rí $v$. pick; ri $\eta$ ó take
ri adv. immediate following, about to start, soon
rífu $n$. well (a hole as a source of water)
róu interj. hello; familiar greeting
rux part. discourse marker indicating that the statement contradicts what was previously said
sa $n$. brother
fi prep. for; fi gusu out of; fi fèem into
Síná $v$. rain

Singáa $v$. transfer, displace, move around, shuffle; loaned from Havasindamy; object requires $s ร \varepsilon$
Síwa $n$. snake
$\int i \chi$ áa $n$. sound
só $\chi i$ adv. where
soe prep. required by the objects of certain verbs; see section 3.6
sul $a d v$. unintentionally, unexpectedly, to a surprising degree; only modifies adjectives; a similar clausal function is carried out by il
Өéíwe adv. in the past
өí v. say, tell
táa adj. dirty
táí $v$. open (intransitive)
$\boldsymbol{t a y} a d v$. only, just, one, barely; there is no ordinary cardinal numeral one, and tay is used for this function; see section 3.8
tamàs $n$. door
tèì n. stone, rock; hard lump; protrusion; button
tiyai interj. hello; neutral to formal greeting túm $v$. go down, descend, sink
tuyci $n$. hand
tsai $n$. spear
tsàjò $n$. rest
tsàjò adj. calm
tfín $v$. become stuck
tfíin $v$. steal
tfiwà $n$. leaf
$\mathbf{u}$ art. initial-plain definite article; see section 3.1
úli $n$. tree
ulí adj. wooden
wi art. initial-prominent definite article; see section 3.1
wín $v$. give
wirì adj. black
$\chi$ ar num. four (sequential counting)
$\chi$ ara num. four (cardinal modifier)
хaréo num. fourth (ordinal)
$\chi$ í $\chi$ v. laugh; gets an applicative sense from - $\chi$; ұíxa laugh at

## 10 Speedlang metadocumentation

No elements of this language existed before 18 March 2022, which is when I started working on it for Miacomet's Speedlang Challenge \#11. I have indicated here how I have chosen to satisfy each of the requirements of the challenge (I did them all).

Diphthongs. the diphthongs si ai $\supset u$ behave like single vowels in many ways (see the discussion in section 2.1).

Limited distribution phoneme. $?$ only appears in two verbal suffixes: $-u$ ? (frustrative) and $-?$ (perfective participle).

Root-template morphology. Roots for most content words (verbs, nouns, and adjectives) are underspecified for tone, but gain a tone melody through derivation and inflection. Worth noting is that some tone melodies only appear in this way - the tone melodies found on words other than verbs, nouns, and adjectives are drawn from a more limited set.

Discourse markers. see section 7.1.
Evidentiality. see section 4.4.
Make a script. There is a script, shown in section 8. However, I must admit that it is not my finest work - there is still much visual refinement to do.

AI Prompts. I tried to interpret these as well as I could.
A sentence consisting of an uninflected phrase followed by an adverb indicating tense, where the two elements must have been expressed together in the original. This prompt is a bit incomprehensible, but I think the narrative-initial construction in example 35 satisfies it (taking 'original' to mean the original version of a story, as changing the narrative-initial construction between versions is taboo).

Adverbs of manner which do not modify the verb. The four adverbs sul, max'́u, nou, and de describe manners and they can all modify adjectives (see section 3.4).
"Because." Can be found in section 6.3.
Prepositions with no meaning. I believe the preposition sכe should be sufficiently meaningless, see section 3.6.

Exclamation points. See section 7.2.
Words which convey their own meaning. I believe the word aaaaaaa! conveys quite well that it means "aaaaaa!".

Expressions which are true but make no sense. This is satisfied by grammatical (and truthful) sentences which are infelicitous in a given context, e.g. 33b.

Sentences which say what they mean. ... I think all sentences do that? Anyways example 30 says that it means what it means, which surely must satisfy this prompt.

Sentences which are not true. The conversation in example 34 contains a lie.
Sentences which are false. See the above.
Task 1 (document the language). You're looking at it.
Task 2 (translate examples). Multiple examples are given throughout the grammar, of which 5 indeed are 5moyds.

Task 3 (present a dialogue). It's not long, but see the conversation example in section 7.3.


[^0]:    ${ }^{1}$ We have not heard from our cartographer for over two weeks－he was supposed to return five days ago from a trip to chart the northern mountains．We fear that he may have died．For this reason we have not been able to include any maps in this document．

[^1]:    ${ }^{2}$ Though since $?$ only occurs postvocalically one could argue that it is always a coda, and that in sequences like -up- it does not become the onset of $\varepsilon$. Either way, the question seems irrelevant to the description of Gäć $\varepsilon$.

[^2]:    ${ }^{3}$ These tone rules are very easily illustrated with autosegmental diagrams, but due to budget limitations we have none. Please imagine them.

[^3]:    ${ }^{4}$ The critical reader may remark: "That doesn't seem very structured!", and to that I would cautiously agree. However, I think it turned out fine, but if you have suggestions for improvement, please tell me.

[^4]:    ${ }^{5}$ It was at this point the speedlanger - uh, I mean, language documenter! yes! - ran out of time and creativity.

[^5]:    ${ }^{6}$ No experiments have been done on time-traveling or clairvoyant speakers of GaӨć , so take this absolute statement as an "as far as we know".

