## Segments A Journal of Constructed Languages

## Lexicon

## Issue 04

## Preface

Welcome to Segments, A Journal of Constructed Languages, and the official publication of the $/ r /$ conlangs subreddit team. Within this journal, you will find articles produced by members of our community.

This Issue is focused on Lexicon. Members of our community were invited to submit articles about their conlang's lexicon, how they form new words, how they build words with what they already have, the culture behind their words, and more. Additionally, we challenged our submitters to translate a short text into their conlang and to provide a full gloss and commentary.

We hope you enjoy this Issue, and we hope you will add your voice and perspective to future Issues in order to make Segments an even more wonderful and comprehensive resource!

Please email segments.journal@gmail.com if you would like to contribute.

## Acknowledgements

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Peace, Love, \& Conlanging

- Segments Team


## Segments.

## Lexicon

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## Abbreviations

|  | Fir | AUG | Augmentative |
| :---: | :---: | :---: | :---: |
|  |  | BG | Background marker |
| 2 | Second person |  |  |
|  |  | C | Complementizer |
| 3 | Third person |  |  |
|  |  | C1 | Class 1: Adults |
| 4 | 4th person |  |  |
|  |  | C3 | Class 3: Animals |
| A | Agent |  |  |
|  |  | c4 | Class 4: Plants |
| A.PREC | A preceding |  |  |
|  | Ablative | c5 | Class 5: Physical Objects |
| ABL | Ablative | C6 | Class 6: Abstractions |
| ABST | Abstraction |  |  |
|  |  | CAUS | Causative |
| ACC | Accusative |  |  |
|  |  | CEL | Celestial gender |
| ACT. HAB | Active habitual |  |  |
| ADJ | Adjective | CMPR | Comparative |
|  |  | COL | Collective |
| ADN | Adnominal |  |  |
|  |  | CONC | Concessive |
| ADV | Adverb |  |  |
|  |  | CONJ | Conjunction |
| AGN | Agentive |  |  |
|  |  | CONN | Connective particle |
| AN | Animate |  |  |
| AND | Andative | COORD | Coordination |
|  |  |  | Copula |
| ANTESS | Antessive |  |  |
|  |  | CVB | Converb |
| APPROB | approbation particle |  |  |
|  |  | CYC | Cyclical gender |
| APV | Antipassive |  |  |
| ASEA | Asea directional | DAT | Dative |
|  |  | DECL | Declarative |
| ASSEV | asseverative particle |  |  |
|  | Attributive | DEF | Definite |
| ATTR |  |  |  |
|  |  | DESID | Desiderative |


| DIM | Diminutive | IMP | Imperative |
| :---: | :---: | :---: | :---: |
| DIR | Direct | INAN | Inanimate |
| DIS | Distal/Distant | INF | Infinitive |
| DS | Different-subject | INSTR | Instrumental |
| DU | Dual | INTENS | Intensifier |
| E | Edible | INV | Inverse |
| EMOT | Emotional involvement | IPFV | Imperfective |
| EMPH | Emphatic | ITR | Iterative |
| ENC | Enclitic | LAH | lah-marker |
| EPIS | Epistemic | LAT | Lative |
| ERG | Ergative | LCN | Location Agreement |
| ESS | Essential | LNK | Linker |
| ETE | Eternal gender | LOC | Locative |
| EXIST | Existential | M | Masculine |
| F | Feminine | MID | Middle voice |
| FG | Foreground marker | N | Neuter |
| FOC | Focus | NAME | Personal Name |
| G1 | First Gender | NEC | Necessitative |
| G2 | Second Gender | NEG | Negative |
| G3 | Third Gender | NFUT | Non-Future |
| GC | Generic | NHA | Non-human animate |
| GEN | Genitive | NMLZ | Nominalizer |
| GENR | Generic | NOM | Nominative |
| GER | Gerund | NPR | Impersonal |
| GNO | Gnomic | NVIS | Non-visual |
| H | Human | NVL | Nonvolitional |
| HON | Honorific | OBL | Oblique |
| HUM | Human gender | OPT | Optative |
| ID | Ideophone | ORG | Origin |


| ORN | Ornative | S | Subject |
| :---: | :---: | :---: | :---: |
| P | Patient | SBJV | Subjunctive |
| PCP | Participle | SCA | Scalar/additive particle |
| PERL | Perlative | SEMBL | Semblative |
| PFV | Perfective | SER | Serial |
| PL | Plural | SG | Singular |
| PLACE | Place name | SS | Same-subject |
| PN | Pronoun, Proper noun | ST | Singulative |
| POS | Possessive | SUB | Subordinator |
| Poss | Possession | SUPL | Superlative |
| POSSD | Possessed | S | O-like subject |
| PROX | Proximal | TEM | Temporary Gender |
| PRP | Purpose clause | TER | Terrestrial gender |
| PRS | Present | TOP | Topic |
| PST | Past | UNSPF | Unspecified |
| PSV | Passive | VEN | Venitive |
| REASS | Deictic reassignment | VIS | Visual |
| REFL | Reflexive | VOC | Vocative |
| REL | Relative | VOL | Volitional |
| R/R | Reflexive/reciprocal | VRBLZ | Verbalizer |
| RVS | Reversative | WTF | "what the hell" postverbal particle |
| RZ | Realized |  |  |

## Showcases

# 01 Constructing Meaning 

by William S. Annis

## A cranky conlanger carves up semantic space

Kílta is a personal language. It lets me engage in the hobby of conlanging without all the background cultural and historical work, which is not really my favorite part, nor something I can usually manage without a lot of vosvótas. ${ }^{1}$ As a personal language, Kílta also gives me a vehicle to talk about the world in a way I find congenial. I keep a diary in the language, which I did initially as conlang creation tool. Lately I just use it more and more as an ordinary diary. This diary drives most new vocabulary creation, and is a testing ground for new constructions.

An inevitable side-effect of keeping a diary in your conlang is the tendency to run fullspeed into missing vocabulary. I have a backed up todo list of meanings to construct. It mostly gets longer. It rarely gets shorter. This can be a source of stress. Today I added the words "fractal" and "chaotic" (in the mathematical sense).

## (1) Nu si vurui ekólat no vau?

| ën -u | si | vurui | ekól | -at | n -o |
| :--- | :--- | :--- | :--- | :--- | :--- |
| this -PL | ACC | how | fashion artistically-INF | be-PFV | WTF |
| "How on earth will I make these?" |  |  |  |  |  |

When you're creating a personal language in which you keep a diary, a lot of the lexical work is very pedestrian, including things like siumma 'coriander,' itaicha 'rash,' nalëper 'facial tissue,' relës vë ákama 'parking lot,' etc. From time to time, however, some train of thought or observation leaves you with an opportunity to craft expressions for a chunk of semantic space little explored by your native language. Most of this article will be about addressing this more personal-not to say eccentric-side of construction creation. While there are a few nods to naturalism as an esthetic consideration, I'm focused here on my considerations for a personal language.

[^0]
## Mirabhasa Nova

Every social media-driven news outlet will eventually get around to puking forth an article about "Ten Untranslatable Words from Other Languages" which, of course, they will immediately go on to translate for you. They don't really mean untranslatable, just that the words don't have one-to-one translations. This is less revelatory, but, you know, you need the clicks.

## (2) Nivullësá në pëhër chéro.

| Niv -vull -ës -á | në | pëhër | chér -o |
| :--- | :--- | :--- | :--- | :--- |
| name-harvest-AGN -PL | TOP | dangerously too | know-PFV |
| "The social media platforms know too much." |  |  |  |

It is, nonetheless, convenient to be able to express certain things succinctly when your native language lets you down.

I had been creating languages for years by the time I first read Frank Herbert's Dune books as a teenager. He talks about language quite a bit in those books, including this fragment from Children of Dune:

They were using a mirabhasa language, honed phalange consonants and joined vowels. It was an instrument for conveying fine emotional subtleties. Edric, the Guild Steersman, replied to the Reverend Mother now with a vocal curtsy contained in a sneer-a lovely touch of disdainful politeness.

I have never figured out what exactly a phalange consonant is supposed to be, but the mirabhasa concept has stuck with me since I first read about it. I have decades of failed experiments trying to create something like it, or what I imagined it to be. Over time I have moved away from the description in the book to align more with my own interests, rather than crafting a language to satisfy the over-trained political sensitivities of Herbert's characters. There's not much curtsy left, though the sneer still comes out to play.

In the years of playing with the mirabhasa idea a few things have become clear. First, it is too easy, and a mistake, to go schematic. The results are generally not great-pages of tables full of words that all sound too much alike, or which laboriously encode nuance that is almost never relevant and which you may never use. The results can be vosvótu, a Kílta adjective currently defined, 'labored, strained, contrived, affected, overdone.' While I've had ideas in the general semantic space of vosvótin ${ }^{2}$ in mind for many years, only recently did I commit to this word. Primarily, it encodes an esthetic judgment, implicitly elevating the appearance of ease and naturalness in art. It is a term I can usually apply to my own attempts at watercolor painting, and sometimes even my conlanging efforts. I have also found it immediately useful for talking about code that produces the results you want, but maybe isn't doing the work in the most elegant way. It is a personal goal to avoid the impression of vosvótas in my conlangs.

[^1]The other major strain of difficulties in following the mirabhasa mirage is balancing between Boas ${ }^{3}$ and Grice. ${ }^{4}$ In the time since reading that mirabhasa passage I have, favoring Grice, learned the communicative value of silence. Some things are better communicated by what you leave out.

## (3) Ël në vura si mës mítët ráno.

| ël | në | vura | si | mës | mít-ët | rán | -o |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3.SG | TOP | what | ACC | NEG | say-CVB.PFV | make a sign-PFV |  |
| "She sent a message by saying nothing." |  |  |  |  |  |  |  |

When you've added some fancy and beloved doodad or fiddly bit to your language, it's worth considering what it might mean if a speaker leaves it out.

My accommodations to Boas have been directed at expanding options for salient distinctions, without strictly enforcing overt expression of every possible option. Just as there is value in silence, there is value in downplaying an available distinction, especially when that omission can make a point itself. In my earliest conlangs, Boas won out more often, with many obligatory features. ${ }^{5}$ But these days Grice more often decides the tricky questions of language design I run into.

My last, hard-won mirabhasa thought before moving on to look at a few ventures into crafting specific meanings: what you craft your language to say should develop naturally out of what you want to say, not what you think you're supposed to want to say. That is, having something to actually say is often the better guide for new meaning construction. Mechanically harvesting some newly conceived semantic field and cramming the results into a bunch of words mostly gives vosvótas. I'm always going on about the value of a diary for conlang creation, but it really is a helpful tool to discover what you're trying to say. ${ }^{6}$ If you want to say it, then some expression for it is in order.

## (4) Ton vë lëlaita si múlo më, in már húrusakin ${ }^{7}$ no so.



[^2]
## Page 3

## Invoking Semantic Space

It is not enough to just grab a handful of semantic space, roll it into a ball, and stick a name on it. Well, of course you can, but taking a little time to linger over what you've grabbed, and looking over the wider semantic neighborhood can often be extremely productive, occasionally surprising. Rather than strip-mining the local semantic territory, though, I look for how the new concept might relate to existing vocabulary. For every new word, it's worth considering the following questions (well, maybe not for 'strawberry,' say, but certainly many of them):

1. How do you say it's intense?
2. How do you say it isn't intense? That it is good at what it is or does?
3. What light verb constructions might this need?
4. What is the prototype image?
5. What conceptual metaphors might it participate in?

I think about the first three items-lexical collocations ${ }^{8}$-for nearly every new word I create, from the mundane to the most eccentric. It's not that every word needs a specially crafted intensifier ('strong tea, deep sorrow, heavy smoker, strongly condemn,' etc.), but when a collocation offers itself from material I already have, I'm inclined to take it.

For the prototypical image I mean some mental model of the core sense of the word. The more abstract the concept, the more important I find a more concrete model is. For example, one concept in Kílta is lús. It refers to a sense of situational awareness of a particular area due to long exposure. The prototypical expression of lús in action is traveling some road you're on every day and noticing that something is definitely out of place, the light is wrong, the feel is off, and then, finally, noticing that the giant but ailing ash tree has been cut down. This sensitivity to the change is lús. I've extended the meaning beyond the prototype to social situations, somewhat approximating "the ability to read the room," though only for rooms you have some familiarity with already, such as the workplace.

Another example is hwatés. In the lexicon it is simply defined 'abomination,' but the prototype image is of the cordyceps fungus, which takes over the brain of many kinds of arthropod, changing their behavior to suit its own reproductive needs. Anything that indifferently undermines someone or something else's agency for their own ends is hwatés.

These sorts of prototype scenes for abstract notions help even more than example sentences to remind me what exactly I intended for a word I concocted years ago and likely only sometimes use. They can often guide collocation choices. My conlang grammar template includes a semantics section immediately after the dictionary, and I describe the more important prototype images there.

Conceptual metaphors map one set of ideas to another. In general (though researchers debate some of this), the mapping is from more abstract to more concrete, since thinking about abstractions is more difficult. One good source of metaphor for new words is the prototype image. For example, since the prototype of hwatés is a parasitic fungus, I picked kacho 'suffer, endure,' used for illness of all kinds, to describe having one's agency undermined.

[^3]norul në hwatés si kach -o ëlli kor si san-o më bear TOP abomination ACC suffer-PFV so that person ACC eat-PFV NEG "The bear had its agency corrupted so that it didn't eat people."

Conceptual metaphors are a giant area of research all on their own, which I'm not going to try to compress into this short article. I will note, though, that metaphor pervades human language, and is an important way to set the character of a personal language. Will the language decide that TIME IS MONEY, or that IDEAS ARE CONSUMER GOODS? Will it go with LOVE IS A JOURNEY or LOVE IS WAR? There's yet another appendix after the lexicon in my template grammar just for conceptual metaphor.

Spending some time thinking about these five questions helps me anchor a new word into the existing language. This is especially important if the word is hard to describe in the first place.

## Muër, Sehisin

One small constellation of Kílta meaning is made up of muër 'interdependence' and sehisin 'insensible to interdependence.' The prototype image for muër is of the mycelial networks that connect and support a forest. ${ }^{9}$ It naturally extends out to interdependencies between other living things. This interdependence doesn't have to be friendly-it might be a predator and prey relationship-but it is understood to have a balance and to be necessary.
(6) Ëlá në sehisu nët, chauhur kwatu së si láko.

| ël-á | në | sehis | -u | n | -ët | chauh-ur | kwat-u | së |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 -PL | TOP | muër-insensible-PL | be-CVB.PFV | lák |  |  |  |  |
| rabbit -PL | all | -PL | even | ACC | kill |  |  |  |

"Insensate to natural interdependencies, they killed all of the rabbits."

One question that regularly comes up in various conlanging forums is when to use a new root and when to derive. In general, you expect more of the most commonly used words to be simple and short, with derived and especially compound words for less frequently used terms. Of course, there will always be a raft of exceptions, due to historical change if nothing else. For a personal language, I tend to tailor this a bit to my own likely frequency of use. ${ }^{10}$ For example, the word 'cave' is a very short and simple root in English. I don't often have occasion to talk about caves, so in Kílta I went with a longish compound, këllekunaima (lit., 'hill-mouth'). I don't need a short word for something I rarely say.

Earlier I warned of the dangers of making a total harvest of a semantic space. For the muër constellation, however, here I am with two separate, non-derived roots related to the same idea. I could easily have derived the sense of sehisin from muër. But by having a few words from a related space, it makes it easier to add new derivations that don't all sound too much alike. It also helps that the words don't align perfectly-muër is a phenomenon, and sehisin is the perception of it. This will give more space for development in the future.

[^4]
## Itomma, Pishan, Keriër

I've carved this gloomy constellation into three separate roots: itomma 'the lack of those things that makes life pleasant and meaningful-friends and family, health, autonomous work, etc.-operating on a wide, systematic level;' pishan (note: ['pis.xæn]) 'desperation compounded of deprivation, self-neglect, with a lack of social engagement and support;' and keriër 'a person in a state of pishan'. These meanings are a bit less abstract, so I've not recorded a separate prototype schema.

## Ëlá në ívin itomma mai ruto.

| ël-a | në | ívin itomma | mai rut -o |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $3-\mathrm{PL}$ | TOP | savage | systemic deprivation | LAT | choose-PFV |

One metaphoric image Kílta sometimes uses for the economy is that of a predatory animal. Itomma is not purely economic, but it's close enough that I picked an adjective used for a wild animal, ívin, to be the intensifier for it (ex.7). I have not yet figured out all the collocations for pishan, but I do treat it like an affliction, using kacho 'suffer' for the experience of it, as I did with hwatés 'abomination.'

Once again, I could easily have derived keriër from pishan, but I was leaving space for at least the possibility of future derivations. Those may or may not arrive, but the room is there if I need it. And, unfortunately, keriër seemed like a moderately fundamental concept to have at hand.

## The Riches You Already Have

In addition to crafting new words from scratch, or through derivation, from time to time the opportunity to craft new meaning out of existing words presents itself. For example, the Kílta word pikwautin 'blue' has the prototype image of the sky. One day, I associated the sky with the idea of "out in the open." And thus, now pikwautin also means 'flagrant, brazen,' especially for dishonesty, crimes, or moral infractions. A recent step was to attach pikwautin to íhamal 'law,' with the rather special meaning of a 'law written to permit what would normally be considered criminal.' These sorts of collocations which move beyond the ones for intensity are also a big part of any natural language's lexicon.

## (8) Ha në pikwautin lëlaita si mítár vëchirë.

| ha | në | pikwautin | lëlaita | si | mít -ár | vëch -irë |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG | TOP | blue | gibberish | ACC | speak-CVB.IPFV | remain-IPFV |

"I keep on talking blatant nonsense."

During the time I was writing this article a new item went onto my Kílta todo list: "fine, go ahead, just do that," a way to tell someone to just go ahead and do something they're going to do anyway, despite your objections. ${ }^{11}$ Kílta has a large collection of postverbal particles which perform a bunch of mostly pragmatic functions. ${ }^{12}$ It didn't take me too long to realize the particle të 'finally, at (long) last,' which isn't exactly felicitous in its usual sense with an

[^5]imperative, could be used here. Because the Kílta optative is formed by combining the imperative with yet another postverbal particle, rum, the chain të rum got the basic sense 'serves them right,' but more in the sense of a warning about present or future consequences than a past act.
(9) Esëmësá kë nisti të!

$\begin{array}{lllll}\text { esëmës -á } & \text { kë } & \text { nist } & \text {-i } & \text { të } \\ \text { doctor }- \text { PL } & \text { DAT } & \text { question-IMP } & \text { finally }\end{array}$
"Fine! Ask the doctors!"
(10) Ën si vachoti të rum!

| ën | si | vachot-i | të | rum |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| this | ACC | read | -IMP | finally | OPT |

"Let 'em read it! It'll serve 'em right."

There's generally less often call for adding pragmatic nuance, especially in a personal language which may have only a single speaker. ${ }^{13}$ I do find it satisfying to add an elegant bit of nuance like this, however, even if it doesn't come up very often, and even less often with such a tidy solution.

## At Last

There are many ways to go about creating a language, but I hope this account of a few of my lexical methods will be of use to some. These techniques have been refined over a few decades of conlanging, through trial and many, many notebooks worth of error. I'm hopeful they can be equally productive for others, but take what works for you, and chuck the rest.

## (11) Loratu mikur kwan, nochin chaso të hwí!

lorat -u mik -u kwan, nochin chas-o të hwí15
gentle-PL stone-PL INST, completed do -PFV at last APPROB
"Thank God, it's over at last!"

[^6]
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## Conceptual Metaphors in Mwanele

by Miacomet a.k.a. u/roipoiboy

## Sky-water you wanted to pick-up-think

## We ole, kwuŋo! Hello everyone!

In this article I'm going to talk a bit about conceptual metaphors in my conlang Mwaneḷe. Conceptual metaphors are ways of describing one domain, the target domain, in terms of expressions drawn from another domain, the source domain. In English, we like to use the source domain of war to talk about the target domain of arguments, for example you 'win' an argument by 'attacking' your interlocutor's 'weak points' while 'defending' your own. Following the notation from Lakoff and Johnson's 1980 book Metaphors We Live By, it's conventional to refer to metaphors with both domains written in all caps, like ARGUMENTS ARE WAR. ${ }^{1}$

I like to think about conceptual metaphors in conlangs for a few reasons: they make for richer lexicons, since they give words from the source domain additional metaphorical senses. On the other hand, they can make it easier to talk about the target domain in your conlang by using words or constructions from the source domain, without having to invent completely new vocabulary. Since natural languages make ample use of conceptual metaphors, they're worth thinking about if your goal is to create a naturalistic lexicon. Last, they're just plain fun! It's a nice creative exercise to come up with ways particular conceptual metaphors can be realized.

In this article, I'm going to talk about a few groups of conceptual metaphors in Mwanele and give examples of how they work.

## Time and Space

Unless you're a time traveler, it's a lot harder to conceptualize the dimension of time than the familiar spatial dimensions we can freely see and move through. It's common for

[^7]languages to use space as a source domain to make metaphors about time. For example, in English, the future is forward and the past is backwards. We can 'look back' when we're reminiscing or plan for what's 'ahead of us' in the future. Time also moves forward as it progresses (although confusingly, we also move forward through time...).

## PAST IS ABOVE and FUTURE IS BELOW

When Mwane people talk about time, they use the metaphor of motion and position up and down. Mwane people rationalize this by saying that all things naturally fall as time goes on, so if something is moving naturally, then it starts out high up and ends up down low. Historically, it might have to do with the fact that Mwane people traditionally used hourglasses and water clocks to keep time, so periods of time were talked about in terms of physical quantities of a material falling through a system.

Time is described as passing from top to bottom. The verb edol 'to fall' is used to say that time has elapsed. People are also said to move downwards through time, sort of like the ambiguity in English. Using edol for a person conveys a sense of passing time aimlessly or having time pass you by. A more common way to say you used time is to use ejenopwe 'to move downwards (past something),' which connotes a more intentional movement. Unlike in English, time isn't seen as a resource to be used or spent, but just something to traverse. I'm not sure if there are any Mwane stories about time travel, but if there are, I'd expect to use elage 'to ascend, to climb' to refer to going back in time.

Earlier events are said to be 'on top of' later events. The locative verbs xedefa 'to be above' and xeyi 'to be below' are also used to mean 'before' and 'after,' and can take both nouns (xedefa medoley 'before sunset') and full complement clauses (xeyi kwupweyo le xem 'after you buy groceries').

## (1) Kwu ḷelupikay xedefa medoley xeyi kwupweyo le xem.

keu le- lu-pikay xedefa medoley xeni kwu-pweyo=le xem OPT R/R-RVS-be.home be.above sunset be.below VEN-buy $=2$ food
"Come home before sunset but after you buy groceries."

There are also some paired time words which contain the same roots, for example medefa 'yesterday' and mekeyi 'tomorrow.'

Since time moves from top to bottom, periods of time are talked about as vertical distances. Long periods of time are said to be xas 'tall, deep' and short ones are mikwa 'short, lowlying' Amounts of time since something happened in the past are called defaḍa 'heights' and amounts of time until something happens in the future are called xeŋiḍa depths.

## Knowledge

## KNOWING IS POSSESSION

Mwaneḷe has a series of idiomatic verb constructions that use verbs involving placement or possession. If you pick something up you learn it, if you hold on to it you know it, and if you drop it you forget it. These usually involve serialization with the verb min, which historically meant 'to think,' but is now almost exclusively used in these constructions. If you remember or know something well, then you lome min 'hold think' it, and when you forget something, you padol min 'drop think' it.

The generic placement verb pa-je is also used with min to talk about knowledge. The verb pa-je is always used with a directional prefix, most often kwu- for motion towards something, xe- for motion away from something, or lu- for motion back to an original point. When it's used with min, it expresses movement of information relative to the center of 'motion.'

Usually, these expressions treat the subject as the center of motion. So pakwuje min, with kwu- marking motion towards, is used to mean 'to learn,' since the subject is putting information in their own possession. Likewise, paxeje min, with xe- denoting motion away, is used to mean 'to forget,' since the subject is moving the knowledge away from their own possession.

However, the center of motion isn't always the subject. When the center of motion is another person, paxeje min can mean 'to learn (from someone)' with the sense that the subject is taking knowledge from whoever is the center of motion, or pakwuje min can mean 'to teach (someone)' with the sense that the subject is putting knowledge in the possession of the center of motion. You can also get things like paluje min roughly 'put back know' for reminding someone of something they had known before.

## FAMILIARITY IS PROXIMITY

If something is nearby, then it's familiar, and if it's far away, then it's unusual. Familiarizing yourself with something is ekwunilo 'approaching' it. The verb naka 'to be far away' can be used to call things strange and the verb lepwu 'to be nearby' can be used to call things normal.

Both of these verbs can be used with impersonal constructions to express your thoughts about something.

## (2) Enaka tapijeximile gebe je wo.

$$
\begin{aligned}
& \text { e-naka ta- pi- e- xe-im -l =we gebe=je =wo } \\
& \text { APV-be.far C-NEG-APV-AND- sleep }-\mathrm{PFV}=\mathrm{LNK} \quad \text { child }=\text { PROX }=\text { yet } \\
& \text { "It's odd that the child still hasn't gone to sleep." }
\end{aligned}
$$

(5moyd \#1245)

## IDEAS ARE FISH

During last Lexember, I made a series of idioms using the metaphor that BRAINSTORMING IS FISHING. ${ }^{2}$ On the most basic level, ṇolotobwo alife 'to brainstorm' is literally 'to go out fishing for inspiration.' If something occurs to you out of the blue, then you lot luk 'unexpectedly caught' it.

When your ideas run dry, you stop catching fish: if something's on the tip of your tongue, then you nelak teṭime 'feel (something) pulling,' and if you draw a blank then you ṭime pilot 'reel in uncaught.' When you get writer's block, you're etasi i bweka 'writing while dry.' If you are having ideas, they just aren't any good, then you're lot pwago 'catching rocks.'

This sort of thing is part of why I like using metaphors that map between whole domains rather than just coming up with individual idioms. You get whole families of fun idioms that feel internally consistent. They can also reflect the culture of your speakers in ways that go a bit deeper than individual words. For example, the only thing that seems to be notable about Mwane people is that they're obsessed with sea life...

[^8]
## Qualities

It's common for some qualities to be described in terms of other qualities. For example, English describes sound pitch in terms of height (a high-pitched sound is no higher than a deeper, low-pitched sound, it's just a metaphor). ${ }^{3}$ Often the metaphors don't line up perfectly: a quiet sound is 'soft' but a loud sound isn't 'hard' (again, in English at least). Here are a few quality metaphors in Mwanele.

## PITCH IS HEIGHT

On the surface this looks the same as English's, but it maps a bit differently. Low-pitched sounds are thought of as being xas 'tall, deep' and high-pitched sounds are kolo 'short, shallow.' Mwane people will tell you this makes sense, since tall people, large animals, and long musical instruments tend to make lower-pitched sounds than their short and small counterparts. If something lowers in pitch, then it xasu 'deepens' and if it rises in pitch, it kolu 'shortens.'

## SENSORY PROMINENCE IS WIDTH

Mwaneḷe has an antonym pair geno 'wide, thick' and eday 'narrow, thin,' whose meanings are extended to reflect prominence to the senses. Loud noises (prominent to the ears) are thick, and quiet noises are thin. Strong, pungent smells (prominent to the nose) are thick, and lighter, fainter smells are thin. Intense flavors are thick, while more subtle flavors are thin. This split spreads to a few other places, for example a dark cup of tea is geno and a light cup of tea is eday.

## YOUTH IS LIGHT

Youth is thought of as a light within a person that dims gradually as they age. People use yin mek light people and yin tax dark people for young and old people. (These terms refer to brightness and luminosity rather than to shade, so there's no risk of confusion with terms relating to skin color, for example.)

Young people are said to be 'in their light years.' The verb etaxwu means 'to grow dim, to go out (of a flame)' and is used as a euphemism for aging. A little less kindly, the habitual form letaxweme describes a curmudgeon. There's a word kwelam, which refers to the part of the day after the sun has set, but before you go to sleep. It's used as a euphemism for senility, with the logic that that part of the day is as dark as it will get before things are over.

A pivotal event leading to maturity is sometimes called lemegwa 'solar eclipse,' especially when it's thought that it led to the person growing up too suddenly or quickly, just as an eclipse is sudden darkening of something that should be light.

## HAPPINESS IS OUTWARDS

With the person feeling emotions as the center of motion, happy feelings move outwards and sad feelings move inwards. It's common to add the appropriate directional prefixes to verbs talking about feelings, for example to intensify eḍaŋwo 'to be happy' you might say exeḍaywo with the andative prefix marking motion away from the happy person.

To talk about facial expressions, you ŋwamwen xilep 'push a smile' moving outwards, but

[^9]you ṭime gwonep 'pull a frown' moving inwards.
There are also expressions where happy feelings open and sad feelings close. If things are looking up, you might say that someone is keman tamek 'opening their days.' If you disappoint someone, you panu them, or 'make them close.'

## Social Structures

## INFLUENCE IS A WHEEL

Mwaneḷe uses wheels as a metaphor for influence and relationships, both interpersonal and political. Social circles or political spheres are called ywuwot 'wheels' and their members are different wheel components.

People who are well-connected and cities that are important and powerful are both called pwekwey 'hub.' People who are peripheral members of a social group or cities that are on the outer edge of a region of influence are called the melin 'rim.' Vital infrastructure or things that make influence possible are called feley 'axles.'

If you influence someone, then you're said to make them rotate (around you.) Maybe Mwanele shares English's expression that someone 'thinks the world revolves around them'!

## BONDS ARE BLOOD

Bonds are represented by blood, even when they aren't familial bonds (like English's notion of 'blood'). People with close, life-long bonds are said to be gowula luṣu 'made of the same blood.' If you take somebody in or build close ties with them, then you pakwux owula 'place blood' with them.

Blood loss is an evocative metaphor for both loss of someone close to you and for loss of a formerly close bond through betrayal.

## CONVERSATION IS COOKING

Food metaphors abound in discourse. An interesting conversation is geṭok, which literally means 'salted' but is a common expression for delicious savory food. A boring discussion is bweka 'bland.' You can make it interesting by adding țok 'salt' or nopak 'hot sauce' though.

The conversation is treated as being a cooking vessel. If you contribute to the conversation, you're adding something to the pot. If you're actively discussing, you might be stirring the pot, and if you stop to think, you're letting it simmer. Once you reach a decision, that topic of discussion is said to be served.

## THE END IS HERE

Oops, that's not a metaphor, it's just the end of the article. In this article, I tried to show some different conceptual metaphors that are used to varying extents in my conlang Mwaneḷ. I find them a fun way to enrich my lexicons and if you didn't use them before, then I hope you will now!

If you have any questions, comments, or suggestions, reach out to me on Reddit at $u$ /roipoiboy or on Discord at mi 二 comet\#5147!

Di ḍule laxe le! Thanks for reading!

## 03 <br> Hunt for the Future

by Christian Evans

## Migrations, and Sprachbunds and Thracian--Oh my!

With a topic like 'Lexicon' and since I've harbored a nearly irresistible diversion from Modern Gallaecian for quite some time now, the timing seems perfect for an article about my method of creating a posteriori languages. This article will cover the process by which I research a project and use what I learn to help shape the creative process and, more specifically, will cover the creation of a Balkan-style future particle for a Celtic language spoken in what would be modern day Bulgaria.

## Background

Unfortunately, there's no real clever story behind my interest in recreating one of the Celtic languages spoken in the Balkans. I've got extensive experience building out from Proto-Celtic at this point because of Modern Gallaecian and I moved to an area of New York City with a heavy population of people from the Balkan states. At some point it just clicked that it could make for an interesting project, particularly because of how different it might end up from my other one (not to mention the living Celtic languages).

The Balkan region is rich linguistically and full of all sorts of interactions between languages and language families that make the languages spoken there what they are. The location also provides the opportunity to create several script variations including Latin, Greek and Cyrillic. Moreover, the shared regional features provide an excellent blueprint for rooting a constructed language there.

## Research

The first step I take in researching what will become the background of one of these languages is using a shotgun approach to take in as much information as I possibly can about the things going on historically, with common linguistic features, and with potential interactions between my parent language and its soon-to-be neighbors. This basically translates to combing Wikipedia for things of interest, following citations to other websites or academic
papers to learn more, Googling the names of features I come across, etc.
Once I've gotten a taste, I create a Google Sheet and start trying to pull together a timeline. In the following subsections, I'll try my best to illustrate how this played out for this Balkan Celtic language.

## The who and where

It's relatively easy to find out that the Anatolian Celts, the Galatians, had migrated there, at least partially, from Europe proper. One of the tribes that would go on to become that population was the Tectosages, who also had a foothold/origin in the area of what is now Toulouse, France. Prior to moving onto Anatolia, these Celts were part of a group operating out of Pannonia and Illyria to raid Macedonia and Greece. Other tribes involved in these campaigns included the Trocmi and the Tolistobogii, who originaged near the Danube region. In addition to these larger groups were smaller tribes who also defected from the campaign in Macedonia, through Thrace and into Anatolia. One of these tribes was the Serdi, who had a region named after them by the Romans: Serdica, modern day Sofia in Bulgaria.

It's this tribe that I decided to build from, because of the possibility of including a Thracian admixture to the language and culture. With this established, we also know then that Bulgarian would have a lot of interaction with our Celtic speakers, which gives us a solid adstratum. It also gives us a reference point to use for Turkish loans from the Ottoman period of rule.

## The what and how

In this section, I'll move through my process of establishing the changes that will drive the language from weird dialect into full language. Obviously, this is a personal thing and I'm sure there are one hundred other ways to go about it, so take none of it as gospel.

## Phonology

Since the Serdi were likely a small part of the coalition from Gaul, I can use Gaulish as a base. To determine the dialect variations I'll use, I can look to the Galatian corpus. Using those two decisions, I know I can use the existing Gaulish corpus for vocabulary and can build out other words I need using a Proto-Celtic lexicon like the one offered by Prifysgol Cymru and just applying the necessary changes to derive Gaulish descendants. After scoping out those sorts of changes, I compiled this list:

- Final /-m/ becomes final /-n/, though there's a chance this is just representing nasality on the final vowel regardless, since it later disappears from Gaulish inscriptions. Galatian final <-n> may be maintained because of Greek transcription.
- Sequences of /ew/ become sequences of /ow/. In Western Gaulish dialects, this is eventually shifted further to /o:/.
- Sequences of /ej/ become /e:/.
- Sequences of $/ \mathrm{ln} /$ become $/ 1: /$.
- Before other plosives and /s/, plosives become /x/. Later, in Western Gaulish dialects resulting sequences of $/ \mathrm{xs} /$ change further to $/ \mathrm{s}: /$.
- All instances of $/ \mathrm{k}^{\mathrm{w}} /$ are changed to $/ \mathrm{p} /$ as in the Brythonic languages. However, initial $/ \mathrm{g}^{\mathrm{w}} /$ changes to $/ \mathrm{w} /$; it's not clear what intervocalic $/ \mathrm{g}^{\mathrm{w}} /$ changes into, if it changes at all, though it also likely mirrors Brythonic, meaning it would change to /w/ or sometimes /v/.
- Sequences of $/ \mathrm{ds} /$, /dz/ (and probably /ts/, /tz/) are changed to whatever sound was represented by the tau gallicum, presumed to be [ts]. Some academics think that sequences of /st/ also became [ts], but this is disputed by others.

The next thing to look at would be Thracian, which would most likely contribute some lexical items and maybe just enough influence to push over some other sound changes. It's likely that Thracian had a robust inventory of s-like fricatives, maximally $/ \mathrm{s} /, / \mathrm{z} /, / \mathrm{S} /$, and $/ 3 /$, which could mean these sounds would begin to be recognized by speakers of our Gaulish dialect, but I'd reckon these sounds would only appear in loans at this stage. Based on what I could gather, I would say that the Thracian influence would be limited to:

- Instances of /w/ shift to /v/ at least partially.
- Instances of /sw/ (or now /sv/) change to /v/ alone.
- Contrary to that, /tw/ simplifies to /t/.
- Instances of /sr/ gain an intrusive plosive, becoming /str/.
- A palatalized /d/ becomes /(d)z/. The same process would probably affect /t/ to produce $/(\mathrm{t}) \mathrm{s} /$ or something identical to the existing tau gallicum.
- The long vowel /e:/ is raised to /i/

The next stage of changes would be the ones that come with the Slavic migrations to the region up til the Ottoman occupation. To keep things simple, these are the Balkan Sprachbund areal features. Since the population is centered around Sofia, I'd want to make sure that I'm favoring changes that occur primarily in Bulgarian and maybe Romanian. This means we're looking at changes like these:

- Sequences of /vj/ are simplified to /v/.
- Syncope of final short vowels and reduction of final long vowel length.
- Unstressed /a/ becomes the familiar Balkan central vowel $/ \gamma /$, which I'll write as <ă $>$ in written examples.
- Nasalized /a/ and /o/ also become $/ \gamma /$.
- Between a labial consonant and a syllable with a back vowel /e/ becomes $/ \gamma /$, as well.
- The last of the central vowel changes is that /a/ followed by a syllable with /i/ in it also changes to $/ \gamma /$.
- Then, following the centralization, any new vowels $/ \gamma /$ become /e/ following a palatal approximant or a historically palatalized consonant. This also happens when preceded by an original tau gallicum, despite not being the result of a palatalization change.
- Sequences of $/ \mathrm{gn} /$ shift to $/ \mathrm{mn} /$.
- Intervocalically, /l/ shifts to ///.
- Sequences of /xt/ become / $\mathrm{ft} /$.
- New sequences of $/ \mathrm{tj} /$ and $/ \mathrm{dj} /$ become $/ \mathrm{St}$ and $/ 3 \mathrm{~d} /$, respectively.
- Sequences of $/ \mathrm{nj} /$ and $/ \mathrm{lj} /$ change to $/ \mathrm{n} /$ and $/ K /$ and eventually both $/ \mathrm{j} /$.
- Sequences of $/ \mathrm{kj} /$ and $/ \mathrm{gj} /$ change to $/(\mathrm{t}) \mathrm{S} /$ and $/(\mathrm{d})_{3} /$. The plosive initial is present initially and after other consonants, but not intervocalically.
- Sequences of $/ \mathrm{sj} /$ and $/ \mathrm{zj} /$ become $/ \mathrm{S} /$ and $/ 3 /$.


## Crafting tools

With those changes soft-set, we can start looking at the sorts of changes that will happen that will erode the morphological system of the language and promote change and innovation. These next sections will help create the tools we need to ultimately craft a sentence to test our soon-to-be future particle.

## Balkan Celtic

## Actors

When I say 'actors', I'm referring to the nouns we might use in our sentence. We've got to explore the way that Gaulish words would change over time to get 'modern' roots, as well as seeing what might happen to the case system once the changes we listed out go into effect.

## Morphology (Dative-Genitive Syncretism)

One of the features of the Balkan Sprachbund is dative-genitive syncretism. In laymans' terms, this basically means that the dative case takes over use cases from the genitive. For example, in Bulgarian, the original genitive of the first person singular pronoun, mene, was replaced by the dative and its meaning is derived from whether it is or isn't part of the Noun Phrase:
(1) Dade mi knigata. Bulgarian

| dade | mi | kniga-ta |
| :--- | :--- | :--- |
| gave.3.SG | me.DAT | book -DEF |

"He gave me the book."
(Krapova, Dimitrova 2015)
(2) Dade na Marija knigata mi.
dade na Marija kniga-ta mi
gave.3.SG to Marija book-DEF me.DAT
"He gave my book to Marija."
(Krapova, Dimitrova 2015)

With any luck we'll be able to easily get to a place where this works either because the cases fall together because of phonological changes or because the shift in use makes sense. As it stands, Celtic languages already do something similar when making statements of ownership:
(3) Mae gen i gar. Welsh

| mae | gen | i | gar |
| :--- | :--- | :--- | :--- |
| is.3.SG | with | me | car |

"I have a car."
(4) Tá carr agam. Irish

| tá | carr | agam |
| :--- | :--- | :--- |
| is.3.SG | car | at.me |

"I have a car."

Since we know we want to aim for that, let's start with nouns. There are some changes in the way the noun forms appear on inscriptions as they get later and later, so I've reflected both below. The Galatian corpus doesn't provide enough information to pull out any of the forms that made it out that far. The full declension of an o-stem masculine noun, mapos 'son', in Gaulish is:

|  | Singular | Plural |
| :---: | :---: | :---: |
| Nom | mapos | mapoi |
| Voc | mape | mapoi |
| Acc | mapon | mapōs $>$ mapūs |
| Gen | mapoiso $>$ mapi | mapon |
| Dat | mapūi $>$ mapū | mapobo |
| Loc | mapei $>$ mapē | mapois $>$ mapūs |
| Ins | mapū | mapuis $>$ mapūs |

After applying the sound changes outlined above we end up with the following o-stem declension for the Balkan Celtic language:

|  | Singular | Plural |
| :---: | :---: | :---: |
| Nom | măp | măpi |
| Voc | măp | măpi |
| Acc | măp | măpu |
| Gen | măpi | măp |
| Dat | măpu | măpob |
| Loc | măpi | măpu |
| Ins | măpu | măpu |

It's clear that the Vocative case is indistinguishable from the nominative case at this stage, which opens the door for some sort of particle akin to English ' $O, \ldots$...' Another interesting thing is that the nominative and accusative are only distinct in the plural forms. As far as the hope of finding a way to mix up the genitive and dative cases, it looks like the genitive is now the inverse of the nominative, which could persist, but with such a distinct dative case, I'd reckon it's likely that its use might expand. The instrumental case doesn't distinguish number any longer which means everywhere it's used will begin to sound like the English expression 'by hand', assuming it remains in use.

Before I start looking to cut cases, I plow through the remaining declension classes to see if there are consistencies in what would fall out. For example, here are a few of these classes:
žanetă 'girl, daughter'

| Nom | Singular | P̌lural |
| :---: | :---: | :---: |
| žanetă | žanetă |  |
| Acc | žanetă | žanetă |
| zen | žanet | žanetă |
| Dat | žanetă | žanetan |
| Loc | žanetab |  |
| Ins | žaneti | žanetab |
| žanetăb |  |  |

The accusative is a standout here, so I think it would be likely to adjust to the same form as the nominative. If the dative takes over the role of the genitive, it would reduce this declension class to two forms per number after the intrumental falls out of use. Moreover, since the plural isn't distinct from the singular, one of the suffixes that was used to form an additional plural in one of the other Celtic languages might be applied here to make that distinction.

## Balkan Celtic

vašt 'seer, prophet'

| Nom | Singular | Plural |
| :---: | :---: | :---: |
| voč | vati |  |
| Acč | vašt | vati |
| Gen | vati | vati |
| Dat | vati | vatib |
| Loc | vati | vatib |
| Ins | vati | vatib |

For i-stems like this, I opted to still drop the final vowel, but through an intermediate yer as in Slavic languages to produce some palatalization at the ends of words. This declension also is fun in that it has examples of both palatalization processes across the history of the language, producing nominative singular vašt $<$ wātis and genitive plural vađ $<$ wation, where $<đ\rangle$ is the tau gallicum. Again, we see a significant reduction in unique forms, though here the genitive is actually the unique one.
druv 'druid, magician'

| Nom | Singular | Plural |
| :---: | :---: | :---: |
| Voc | druv | druid |
| Acc | druid | druidă |
| Gen | druid | druid |
| Dat | druidi | druidob |
| Loc | druidi | druidob |
| Ins | druid | druidob |

This word is begging for an additional plural suffix to differentiate it from the singular oblique cases. The genitive is also completely indistinct. Outside of that, it's interesting to see that the plural maintains the distinction between nominative and accusative.

There are other declensions to be explored, but for the time being, I think that's enough to make some decisions about the way they might fall together. In order to get to the point where we are fully using dative pronouns and structures as possessives, there are some syntactical considerations to be made, but holding those aside for the time being, we can build out a sample Noun Phrase:
(5) mark biani

Balkan Celtic
mark bian -i
horse woman-F.SG.DAT
"woman's horse"

Not bad, but it feels a bit stilted. What's missing is are some determiners to sort out which woman and which horse. Coincidentally, another key feature of the Balkan Sprachbund is that the definite article is postposed to the noun. Let's see how that might look.

## Morphology (Articles)

The Celtic article is derived from an older demonstrative *sindos 'that', which was significantly reduced over the course of time, becoming Goidelic *in, na 'the' and Brythonic *i 'the'. The same word maintained its status as demonstrative when it followed the noun. For the Balkan language, these positions are actually going to be reversed.

Let's start with some of our sample words in the nominative case: măp 'son', žanetă 'girl, daughter', vašt 'seer, prophet'. The noun class of each of these is masculine, feminine, and masculine, respectively, meaning we'll need to define forms of the article for those two noun classes.

|  |  | Singular | Plural |
| :---: | :---: | :---: | :---: |
|  | Nom | sindos $>$ (s)in | sindoi $>$ (s)ini |
|  | Voc | sinde $>$ (s)in | sindoi $>$ (s)ini |
| Masculine | Acc | sindon $>$ (s)in | sindōs $>$ (s)inu |
| Masculne | Gen | sindoiso $>$ (s)ini | sindon $>$ (s)in |
|  | Dat | sindūi $>$ (s)inu | sindobo $>$ (s)inob |
|  | Loc | sindei $>$ (s)ini | sindūs $>$ (s)inu |
|  | Ins | sindū $>$ (s)inu | sindūs $>$ (s)inu |


|  | Singular | Plural |
| :---: | :---: | :---: |
| Nom | sindā $>(\mathrm{s})$ ină | sindās $>$ (s)ină |
| Feminine | sindā $>$ (s)ină | sindās $>$ (s)ină |
| Acc | sindan $>$ (s)in | sindās $>$ (s)ină |
| Gen | sindās $>$ (s)ină | sindanom $>$ (s)inan |
| Dat | sindāi $>$ (s)ini | sindābo $>$ (s)inab |
| Loc | sindī $>$ (s)ini | sindābo $>$ (s)inab |
| Ins | sindia $>$ (s)inie | sindābi $>$ (s)inăb |

The feminine article clearly has a bit of weirdness going on with that instrumental singular form, but that case is likely to fall out of wide use. I kept the initial /s/ in parentheses, because it might surface for nouns that end in something vowel-like (I'm thinking u-stems and i-stems) or for consonant-stem nouns who might have some interactions with the article, such as lenition. I'm going to assume that the point at which the article became a suffix, rather than an independent word, was around the same time that the final $/-\mathrm{s} /$ of the nominative and $/-\mathrm{n} /$ of the accusative had eroded, meaning o-stems will end in $/-\mathrm{o} /$ before the suffix is applied and a-stems will end in $/-\mathrm{a} /$. Let's take a look at our nouns declined while definite, removing the cases that wouldn't survive.
mark 'horse'

| Nom | Singular | Plural |
| :---: | :---: | :---: |
| Acc | markin | markini |
| Gen | markini | markin |
| Dat | markunu | markobinob |
| Loc | markini | markunu |

This word is relatively straightforward and I like the appearance of nearly all the forms right off the bat. However, that dative plural form sticks out like a sore thumb. I'm thinking

## Balkan Celtic

the duplicate sound (the original /-ob-/) could be deleted to leave markinob 'to the sons'. There are probably some other sound changes I could work with too since the earlier stage of the word *markobo(s)innobo has what looks like multiple ways to shrink it.
biană 'woman'

|  | Singular | Plural |
| :---: | :---: | :---: |
| Nom | bianină | bianini |
| Acc | bianin | bianini |
| Gen | bianină | biananinan |
| Dat | bianini | bianabinab |
| Loc | bianini | bianabinab |

This word has the same monster in the dative and locative plural, as well as something comparable in the genitive-which isn't the worst since it's likely going to be usurped completely by the dative, but still. I'd reckon the same replacement/deletion strategy I suggested for mark 'horse' would work for them as well. The other thing I notice is that, essentially, the definite form ultimately looks like a suffix /-in-/ inserted before the case ending, which might make it even easier to talk about.

With that defined, our example of dative-genitive syncretism can be improved. There are two options now that definiteness has been introduced: either both the possessee and the possessor can be made definite, or, as in Welsh, the possessee can remain indefinite if the possessor is definite. For the time being, I'm going to use the latter strategy:
mark bianini
Balkan Celtic
mark bian -in -i
horse woman-DEF-F.SG.DAT
"the woman's horse"

Lastly, for actors, let's take a look at personal pronouns and how they end up. There are as many cases for pronouns as there are for nouns proper, as well as both emphatic versions and unstressed short versions used with verbs. Some combination of all of these are going to be what comes together as our Balkan pronoun set. Here's the Gaulish set:

|  | 1st Singular | 1st Plural | 2nd Singular | 2nd Plural |
| :---: | :---: | :---: | :---: | :---: |
| Nom | mī | snīs | tū | suīs |
| Acc | me | snīs | te | suīs |
| Gen | mon | ansron | tou | suesron |
| Dat | moi | amē | toi | umē |
| Ins | moi | $?$ | toi | $?$ |
| Loc | moi | amē | toi | umē |

The plural pronouns also have Proto-Celtic emphatic reduplicated forms in *snisnis and *suisuis, respectively, which are what lead to the Irish pronouns sinn and sibh. On second thought, I might not use both, since the resulting pronouns might look a little odd (*snini and *visi).

Skipping a few steps in the background, we end up with a set like this:

|  | 1st Singular | 1st Plural | 2nd Singular | 2nd Plural |
| :---: | :---: | :---: | :---: | :---: |
| Nom | $\mathbf{m i}$ | sni | tu | visi |
| Acc | $\mathbf{m e}$ | sni | te | visi |
| Gen | mă | ăstră | tou | viastră |
| Dat | $\mathbf{m i}$ | ami | ti | $\mathbf{u m i}$ |
| Loc | $\mathbf{m i}$ | $\mathbf{a m i}$ | $\mathbf{t i}$ | $\mathbf{u m i}$ |

I love it, apart from the 2nd person singular genitive (which theoretically isn't going to be used often anyways). I can't help but wonder if the other pronouns having forms ending in /-ă/ wouldn't nudge that one to resolve as either *tă or *tovă. Regardless, we can now use pronouns in sample sentences and can tackle third person pronouns at some later time.

## Actions

When I say 'actions' I'm referring to verbs, as well as their modifiers, as the tools used to test different features of the language. There are significant differences between Celtic verbs and Balkan verbs and we need to explore how to nudge the original system closer to our target.

## Conjugation

Celtic verbs can be complex. There are strong and weak verbs that have forms with and without reduplication; there are multiple ways of forming the past tense that use a third person ending as a past marker or that blend perfect marking into other paradigms; there are multiple voices that interact with one another or have very similar morphology; there's the whole adjunct vs conjunct form dilemma for Insular languages; and there are pronouns that sneak into verb forms, particularly in Gaulish. Let's see if we can't make sense of some of that.

There are three, mostly regular conjugation patterns that will descend into this Balkan Celtic language, exemplified by the Proto-Celtic verbs *bereti 'he bears, carries', *k wrinati 'he buys' and *gabyeti 'he grabs, holds'. In the present tense, these verbs conjugate as follows:
*bereti 'he bears, carries'

| $1 s t$ | Singular | Plural |
| :---: | :---: | :---: |
| berū | beromu |  |
| $2 n d$ | beresi | berete |
| $3 r d$ | bereti | beronti |

* ${ }^{w}$ rinati 'he buys'

|  | Singular | Plural |
| :---: | :---: | :---: |
| 1st | $\mathrm{k}^{\mathrm{w}}$ rinami | $\mathrm{k}^{\mathrm{w}}$ rinomu |
| 2nd | $\mathrm{k}^{\mathrm{w}}$ rinasi | $\mathrm{k}^{\mathrm{w}}$ rinate |
| 3rd | $\mathrm{k}^{\mathrm{w}}$ rinati | $\mathrm{k}^{\mathrm{w}}$ rinonti |

*gabyeti 'he grabs, holds'

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|  | Singular | Plural |
| :---: | :---: | :---: |
| 1st | gabyū | gabyomu |
| 2nd | gabyesi | gabyete |
| 3rd | gabyeti | gabyonti |

The first is fairly straightforward in the way it progresses to our modern language. The most interesting change here is probably the second person plural form, which would have some final consonant palatalization after the /-e/ drops off. Note that I've also written the first person singular form with a digraph -ou to represent $/ \mathrm{u} /$; I've done this because I think that fronting regular $/ \mathrm{u} /$ to $/ \mathrm{y} /$ would keep the language honest to what might've been a change in progress in Gaulish and ties it in further with the Balkan vibe (see the vowels of Albanian). The word that turns the third person singular form into an infinitive is a from original *ad, mirroring the Romanian strategy.
a băre 'to bear, carry'

|  | Singular | Plural |
| :---: | :---: | :---: |
| $1 s t$ | bărou | bărom |
| $2 n d$ | băres | bărešt |
| 3rd | băre | bărăt |

Our second verb is cognate to Welsh prynu 'to buy'. As a quote unquote weak verb, it has a persistent $/-a-/$ at the end of the root, which affects the way it's conjugated across tenses and moods. In the present, it primarily means that the marker for the first person singular is $/ *-\mathrm{mi} /$ and not $/ *-\overline{\mathrm{u}} /$.
a prina 'to buy'

|  | Singular | Plural |
| :---: | :---: | :---: |
| 1st | prinam | prinom |
| 2nd | prinas | prinašt |
| 3rd | prina | prinăt |

The last verb is a little more interesting. Everything I've read about /*-yeti/ type verbs either has them maintaining their form or inserting an /-e-/ before the suffix. The latter presents itself in the living Celtic languages as verbs whose suffixes include the vowel /i/. It also looks like this might've been the case in some Gaulish inscriptions. Presumably that /*-eyeti/ was reduced to /*-iti/, which is where I'm going to work from for the most part. In Irish, the first person singular suffix was changed to end with the same $/ *-\mathrm{mi} /$ suffix as the a prina type verb, but I'm going to keep it as $/ *-\bar{u} /$ to create a class of verbs that are somewhat like the basic verb, once the palatal element drops out of some forms. Note that the first person singular form ends in $/ \mathrm{y} /$.
a găbi 'to grab, hold'

|  | Singular | Plural |
| :---: | :---: | :---: |
| 1st | gabu | gabom |
| 2nd | găbis | găbišt |
| 3rd | găbi | gabăt |

## Exploring Moods

In order to approach the topic of the future tense particle, we've got to talk about moods. There's a significant interplay between the future particle and specific verb forms used with it. In Romanian, the future particle is actually a variant of the verb vrea 'to want' and is conjugated for person with the infinitive of the verb following afterwards. In Greek, the so-called dependent form of the verb is used after the particle tha. In Bulgarian, there's the super reduced form of a verb that means 'want', šte, and then the present form of the verb inflected for person. In Albanian, a particle derived from 'want' do is followed by the word $t e \ddot{t h a t}$ indicates a subjunctive verb and finally the verb, conjugated for person.

There is a distinct subjunctive form of the verb in Gaulish that uses a suffix $-s(e)$ - before the normal endings, but I'm not sure whether that would be the best move or if the present tense would work better, or if there's something else I've not even considered. One unique trait of subjunctive forms in Balkan languages that I'm keen on is that the particle seemingly derives from a word like 'if' or 'and so', and it can also fill the role of the complementizer 'that' in the sentence. For that reason, I think it's definitely a useful thing to mimic. Irish has the words má 'if' for factual statements and dá 'if' for counterfactuals, whereas Welsh has os and pe with the same distribution. Welsh os is derivative of an older word o, od 'if' merged into a form of the copula $y s$ 'is' which means it's probably more appropriately translated as 'if it is [that]'; the other one pe is apparently derived from a form of the copula with the PIE root * $b^{h} u H$-, related to Old Irish $b a$, $f a$ 'or', and perhaps being more appropriately translated as 'were it [that]'. I'd guess that it's some old form that was something like *bua followed by a pronoun like *es or *id. The Irish word má 'if' comes from a Proto-Celtic word *mā 'if' from the PIE prohibitive particle *meh ${ }_{2}$. As far as the other word, I can't find an etymological source, which is more than mildly frustrating.

A similar distinction exists in Bulgarian and is even stronger in Macedonian, where ako is used for realistic condition and $\partial a$ is used for unrealistic conditions and can be translated as 'let, may'. Another use of ako I might just have to steal is the Macdeonian use as a colloquial permission particle, either at the start of an utterance, or as a tag question meaning 'is that alright?'.

I think the most sensible play is to use Proto-Celtic mā for one of the words and maybe derive my own from the copula á la Brythonic. So that leaves us with ma 'if' for the first one. The second one, we can grab the Gaulish example bueti(d), which a number of scholars think reflects a root-subjunctive form derived from PIE * $b^{h} u H-e-t i$ (though the fact that the vowel remains /e/ instead of shifting to /a/ after the laryngeal is a bit odd) and have it undergo sound changes as though it were in an unstressed position, producing be 'were it [that], if'.

With that settled, we can tentatively conjugate our verb a prina 'to buy' in the subjunctive by just adding the word be before the conjugated form.
a prina 'to buy'

| 1st | Singular <br> be prinam | Plural <br> be prinom |
| :---: | :---: | :---: |
| 2nd | be prinas | be prinašt |
| 3rd | be prina | be prinăt |

I do wonder if it wouldn't be interesting to set a past tense limitation on the forms starting

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with be as happens in Macedonian for $\partial a$. That would mean the subjunctive present could maintain its old conjugation pattern using the suffix /-se-/ (for most verbs) and would mean we wouldn't have a future that was near identical to Albanian once the required two particles were added (FUT verb.SUBJ instead of FUT SUBJ verb). Something to think about later.

## Onto the future

The future of Balkan languages is derived from a word that means 'to want, wish'. It's sometimes just a super reduced form of the verb root, sometimes it's the third person singular form, other times it's just a variant of the verb that's still inflected as though it was a full verb. For the purposes of our Celtic language, I think the best way to go is a heavily reduced third person form, similar to the subjunctive particle be.

There are two candidates for us to use in deriving this verb 'to want': the attested, Gaulish, middle-voiced uelor with the root *wel- and the root *kubr-which is historically part of the Old Irish verb ad cobra 'to want, wish'. The latter one has some wild semantics, being related to other languages' words for 'wish', but also 'boil' and the word copper in English, allegedly. The root is attested in a Gaulish noun cobro- 'greed, desire, want'. Assuming the particle would be unstressed, we can expect the progression of these two verb forms to go like this:

| Proto-Celtic | Gaulish | Old Balkan | Serdian |
| :---: | :---: | :---: | :---: |
| *welor, *weleti |  |  |  |
| *kubreti | uelor, *ueleti <br> *cobreti | vele, *ole <br> *cobre | vere, *ore <br> *cobre |

The second root ends up much larger than I'd like, even with the potential compression I can imagine of the /b/ spirantizing to form *coure. Same goes for the potential form *vere. However, I do like ore and I believe that's going to be the marker for this language.

## Putting it to use

Having finally come to the end of this snaking path of development, we have enough words and grammar written down to actually put together a sentence in the future tense in a Balkan Celtic language. Several in fact.
(7) Bianină ore be prina mă mark Balkan Celtic bian -in -ă ore be prina mă mark woman-DEF-NOM will SBJV buy.3.SG my horse "The woman will buy my horse."
(8) Mă măp i mă žanetă ore umi be bărăt dobrin.

Balkan Celtic mă măp i mă žanetă ore umi be băr -ăt dobr -in my son and my daughter will you.PL.DAT SBJV carry-3.PL water-DEF "My son and daughter will carry your water."
(9) Sni ore be pap' amseră viarom be pisom dounin mar. sni ore be pap amseră viar -om be pis-om doun-in mar we will SBJV each time want-2.PL SBJV see-2.PL city -DEF big "We will always want to see the big city."

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## 04 Qrai Augmentative Prefixes

by u/SufferingFromEntropy

## Signs from the past

Augmentative is a morphological device denoting a relatively great extent, quantity, size, or degree with respect to the average or expectation. Along with this evaluation, in many languages, augmentatives also possess a wide range of emotional connotations from the speaker, from respect and admiration to irony and contempt. Due to their properties, there has been a proposal that augmentative and diminutive are grouped into a distinct morphological level called evaluational morphology, ${ }^{1}$ as opposed to inflectional morphology and derivational morphology.

Word classes available for augmentatives usually follow a hierarchy ${ }^{2}$ where nouns are at the top, followed by adjectives and verbs. (1a-1c) illustrates augmentatives in different languages: (1a) features nominal augmentative in Sotho (Bantu, South Africa), ${ }^{3}$ (1b) shows adjectival augmentative in Greek, and (1c) shows verbal augmentative in Lamunkhin Even (Tungusic, Siberia).
(1) a. Monnahadi e mong ya matla ya neng a bitswa Nehore a qala ho

Sotho ruta mashano.
monna-hadi e mong ya matla ya neng a bitswa Nehore a qala man -AUG S somebody of power of who S named Nehor S start ho ruta mashano.
to preach lie
"A strong man named Nehor began preaching false doctrines."

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b. Malakótato to kréas.
malakó - tato to kréas
soft -AUG.N this.N meat.N
"The meat is very tender."
c. Ilaja:dzi ečije ilabahadni abagańdza. Lamunkhin Even ila -ja:d3i eči -je ila -baha -d -ni abaga stand_up -AUG.CVB like_this -AUG stand_up -AUG -NFUT-3SG grandfather -ńdza -AUG.DEF
"Standing up like this, he stood up, the big bear.4"

Some analyses treat English prefixes such as super- and over- as augmentatives as well, although these prefixes are not as productive as the augmentatives in (1a-1c). Augmentatives in aforementioned languages are steadily translated into adjectives in English. In this regard, we may treat some prefixes in Qrai as augmentatives as well. In the following text, we will see that some prefixes in Qrai, although analyzed as intensifiers in popular view, actually have their roots in Old Qrai augmentatives. These prefixes are not productive in modern time, but their semantics are close to prototypical augmentatives.

## Modification in Old Qrai

Before going into details of Qrai augmentatives, we should first have a look at means of adnominal modification in Old Qrai. An adjectival stem, such as oyor 'blue', can modify nouns either morphologically, occuring as a prefix, or syntactically, with an inflectional suffix -i. This suffix -i is thought to be cognate with the subordinate form of verbs, and we mark it as SUB for subordination. In traditional view, the former is regarded as more primitive and the latter as an emerging system of adjectives.
a. oyorgu
Old Qrai
oyor-gu
blue-bird
"blue bird"
b. gu oyoru
Old Qrai
gu oyor-u
bird blue -SUB
"blue bird"

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These two expressions are interchangeable in traditional view; that is, the choice of prefixing nouns or appending independent words after nouns is purely arbitrary, or at least due to some euphonic reason. However, when considering dialects and sister languages of Qrai, we could conjecture that morphological modification is more derivational in nature and it concerns with inherent properties of the referent, while syntactical modification focuses more on the appearance or attributes of individuals.

\footnotetext{
\({ }^{4}\) Pakendorf, Brigitte. 2017. Lamunkhin Even evaluative morphology in cross-linguistic comparison. Springer Verlag.
}
a. oyorusta
oyor- usta
blue- crow
"blue magpie"
b. y'ults'i Asa
y'ul-ts'i
blue-fish
"anchovy5"

There are morphemes that can only occur as prefixes, despite that their semantic contents are close to those of adjectives. For example, all occurrences of ama 'great, large' and in 'small' in Old Qrai literature are prefixes. In traditional view, these are archaic adjectives that soon fell out of use later. However, recent researches have proposed that these are a part of Old Qrai evaluative morphology. In this article, we will see the nominal prefix amaand verbal prefix si/thi- analyzed as augmentatives. We will also see their traces in Modern Qrai.

\section*{Nominal augmentative}

The prefix ama- is the only nominal augmentative in Old Qrai, prefixing nouns referring to landscape such as co 'mountain', wyi 'sea', ber 'wave', and od 'plain' and nouns referring to creatures such as la 'human', bra \(\gamma \mathbf{a}\) 'soft shell turtle', thi 'fish', and huthu 'pig'.
a. ...phekhi amaco dumagu wathig...

Old Qrai
phekh-i ama-co dumag -u wathig
cross -SUB AUG-mountain conquer-SUB PLACE
"...to go over the great mountain and conquer Wathig..."
b. Anu cem in amala sislibi di wyum.

Old Qrai
anu cem in ama-la si-slibi di wyum
god send OPT AUG-man AUG-destroy \(2 \mathrm{~s} . \mathrm{POS}\) kingdom
"God would send giants to destroy your kingdom."
c. Amabraүa lod stog ən wela.

Old Qrai
ama-braya lod stog ən wela
AUG-soft_shell_turtle sit bottom GEN lake
"Beneath the lake dwells a giant soft shell turtle."

Old Qrai augmentative can also occur before numerals to express quantities that are a little bit more than indicated. For example, as illustrated in (5), the word amamaske, based on maske '3600,' refers to a quantity that is "just over 3600."

\footnotetext{
\({ }^{5}\) Asa is a sister language of Qrai, descending from Old Qrai while undergoing severe sound changes. The stem oyor lost its initial vowel, had its first consonant pharyngealized, its vowel raised to \(/ \mathrm{u} /\), and its \(/ \mathrm{r} /\) sound converted to \(/ \mathrm{l}\), during the development of Asa.
}

Fazan ded ama-maske gegir-ira
PN rule AUG-3600 PN-DIM
"Fazan rules more than 3600 Gegir people."

Morphological modification suffered abstraction and generalization and gradually fell into disuse during the development of Middle Qrai as the prefix underwent sound changes, blurring the perceivable boundary between prefix and stem. Still, coinages using this prefix could be seen every now and then, but they are confined to abstract nouns and deverbal nouns.
(6) a. Woruhluba amasyere oyum enedla. Middle Qrai
\begin{tabular}{cccc} 
woru-hluba & ama-syere & o-yum & e-nedla \\
kill-destroy & AUG-epidemic & ACC-province & ACC-PLACE \\
"A great epidemic decimated the kingdom of Nedla."
\end{tabular}
b. Amarautho la luzau sai.

Middle Qrai
ama-rauth -o la luz -au sai
AUG-harvest-NMLZ be need-NMLZ 1p.pos
"A bumper harvest is all we need."
c. Hnotrunsuotro eamatekha yuphla.

Middle Qrai
\begin{tabular}{rrr} 
hno-trunsu-otro & e-ama-tekha & yu-phla \\
NEG-make -NEC & ACC-AUG-voice & SEMBL-that
\end{tabular}
"No need to yell like that."

At the beginning of Modern Qrai, the prefix was resurrected as the need for new words for new devices and machines in the industrial era surged. The prefix was added to words that could be considered as native counterparts of these new inventions. For example, the concept of locating multiple families inside one huge building is new, so the word amanathra is coined to refer this new type of housing, with nathra meaning "house." At this point, the prefix has lost its original semantic function and become a metaphor device. Table 1 gives coinages made at the dawn of industrial era.
\begin{tabular}{l|lll} 
Qrai & IPA & English & Base \\
\hline amadlaen & /,ama'dlen/ & cruise ship & dlaen 'ship' \\
amadroma & /,ama'droma/ & factory & droma 'roof' \\
amalestemeu & /,ama,lese'meí/ & locomotive & lestemeu 'beast of burden' \\
amanathra & /,ama'nat'ra/ & apartment & nathra 'house' \\
amapeuca & /,ama'peiga/ & empire & peuca 'empire' \\
amasoldu & /ama'soldu/ & blast furnace & soldu 'furnace' \\
amathonnou & /,ama'thonnu:/ & supermarket & thonnou 'market' \\
amizama & /,ami'zama/ & steam engine & izama 'heart' \\
amazano & /,ama'zano/ & world war & zano 'war'
\end{tabular}

Table 1: Words coined using ama- prefix in Early Modern Qrai.

Many of these new coinages later became obsolete. Some words are replaced by loadwords, such as amizama replaced by endyin 'engine.' Some are replaced by words with more
precise meaning, such as amapeuca 'empire, huge nation' giving way to political terms such as kholonoi 'colonizing power' and poeńoi 'republic.' Table 2 gives words derived with this prefix that are still being used today.
\begin{tabular}{|c|c|c|c|}
\hline Qrai & IPA & English & Base \\
\hline amaceil & /,ama'geil/ & sin & ceil 'wrongdoing' \\
\hline drom & /,ama'droma/ & factory & droma 'roof' \\
\hline amafusa & /,ama'fusa/ & bliss & fusa 'joy' \\
\hline anathra & /,ama'nat \({ }^{\text {h }}\) ra/ & apartmen & nathra 'house' \\
\hline va & /,ama'ra/ & justice & rwa 'correct answe \\
\hline amasoldu & /,ama'soldu/ & blast furnace & soldu 'furnace' \\
\hline amatekhra & /, ama'tek \({ }^{\text {h }} \mathrm{ra}\) / & to vociferate & tekha 'voice' \\
\hline amathonnou & /,ama'thonnu:/ & supermarket & thonnou 'market \\
\hline amazano & /,ama'zano/ & world war & zano 'war' \\
\hline
\end{tabular}

Table 2: Common words with ama- prefix in Modern Qrai.

\section*{Verbal augmentative}

The Old Qrai prefix si-, and its allomorph thi-, is a verbal augmentative marker. When the prefix occurs before plosives, it is fortified, becoming thi-. When it occurs before vowels, its vowel \(\mathbf{i}\) is dropped. Table 3 gives some instances of this prefix in Old Qrai.
\begin{tabular}{l|ll} 
Qrai & English & Base \\
\hline ses & to sail (for a long time) & es 'to sail' \\
sisetic & to betray & setic 'to betray' \\
sislib & to destroy, decimate & slib 'to destroy' \\
siz & to move (for a long distance) & za 'to move' \\
thibərig & to harrase & bərig 'to annoy' \\
thiph & to frequent; to come from afar & pha 'to come'
\end{tabular}

Table 3: Examples of verbal augmentative in Old Qrai.

This prefix occurred in different contexts. Some of these occurrences show clear concordance with their context, and this prefix can be thought as putting emphasis on some aspect of the base verb. Some occurrences, however, are not clearly related to either their context or their base; in these cases, the function of such occurrences is thought to be unrelated to the semantics of verbs. The most popular view of functions of this prefix are summed up in the following list:
1. The intensity or magnitude of the verb is emphasized.
2. The duration of the verb is emphasized.
3. The frequency of the verb is emphasized.
4. The emotion of the speaker is emphasized.
(7a-7c) illustrates the augmentative form sislib and its base form slib 'to destroy.' The base form is often used with its objects being physical entities such as rocks and armors and the event being feasible in terms of ordinary humans. Its augmentative form, however, occurs in two situations: when the agent is a supernatural or powerful being, and when the object is to be thoroughly destroyed, reduced to debris or ashes.
(7) a. Sislib in məye yoslad.
si-slib in məye yoslad
AUG-destroy OPT tribe PN
"The Yoslad tribe must be eradicated."
b. Yaqhene phimad sislibla amaber. Old Qrai
ya-qhene phimad si-slib -la ama-ber
HON-palace PN AUG-destroy-PSV AUG-wave
"The great palace of Phimad was destroyed by tsunami."
c. Qa hra spola qi slibi gera.

Old Qrai
qa hra spola qi slib -i gera
3s use sword 3s.pos destroy-COORD rock
"He destroyed the rock with his sword."
(8a-8c) illustrates that this prefix puts emphasis on the duration of verbs. In this case, most of the emphasized verbs are related to motion verbs. Alternatively, the prefix can be analyzed as emphasizing the difficulty of these verbs. The base form refers to either general motions or everyday activities, and the intensive form are used when there are a great number of people moving (8a), when the destination is far away ( 8 b ), or when there are great obstacles to overcome (8c).
(8) a. Siz gegir mledi emig.

Old Qrai
\begin{tabular}{clll} 
si-z & gegir & mled-i & emig \\
UG-move & PN & face -COORD & PLACE
\end{tabular}
"The Gegir people moved towards the Emig island."
b. Yazetwyum thiphelar fi khlusua.

Old Qrai
ya- zet-wyum thi-phelar fi khl-usua
HON-head-kingdom AUG-move.HON arrive far-south
"The great lord went on a long journey to the far south."
c. ...ən ses mledi tonu sei ewyur.

Old Qrai
\begin{tabular}{lcllll} 
ən & s-es mled-i & tonu se -i & ewyur \\
GEN AUG-sail face -COORD north suffer-COORD & monsoon \\
"...to sail northward against the monsoon." &
\end{tabular}

The augmentative prefix can also be used to suggest that the agent frequently performs the action. (9a) shows that the subject comes to the speaker's abode frequently, and (9b) shows that the subject causes trouble for more than one time. In both cases, the action (to come and to annoy, respectively) frequently occurs to the extent that the speaker considers them as an episode of a habit instead of a series of happenings.
(9) a. Oyorgu thipha wye si.

Old Qrai
oyor-gu thi-pha wye si blue-bird AUG-come abode 1s.POS
"A blue bird frequents my place."
b. Eqha thibərig codla.
eqha thi-bərig cod-la
PN AUG-annoy subordinate-man
"The Eqha tribe has been harassing our people."
(10a-10c) shows that the augmentative prefix can also convey a wide variety of emotional connotation from anticipation to profound grief. In this case, the prefix usually occurs in monologues and poems, and the sentence assumes an emphatic syntax where the emphasized noun phrase is fronted and marked with a vocative prefix a-.
a. Ayazet sisetic mertələ e \(\gamma \mathrm{di}\).

Old Qrai
\begin{tabular}{cccc} 
a- ya-zet & si-setic & mer-tələ & e \(\gamma-\) di \\
VOC- HON-master & AUG-betray & sweet-mouth & ACC-2s \\
"O my great master! How those sycophants betrayed you!"
\end{tabular}
b. Aslig sor sa e \(\gamma \mathrm{di}\).
\begin{tabular}{cccc} 
a-slig & \(s-\) or & sa & e \(\gamma-\mathrm{di}\) \\
vOC-wife & AUG-miss & 1s & ACC- 2 s
\end{tabular}
c. A \(\gamma\) anu da thikyuy sa.

Old Qrai
\begin{tabular}{rccc} 
a \(\gamma\)-anu & da & thi-kyuy & sa \\
vOC-god & 2 s & AUG-torture & 1 s
\end{tabular}
"O God! You tortured me well!"

The augmentative form of a verb may have different meanings in different context. (11a11b) shows that the very same augmentative thiph has two interpretations in different contexts, one being "to come frequently" and the other "to come from afar."
a. Sa thiph ba e \(\gamma w\) wela bemi.

Old Qrai
sa thi-ph ba e \(\gamma\)-wela bemi
1s AUG-come this ACC-lake often
"I come to this lake often."
b. Danga \(\gamma\) thiph ən ed zet.
\begin{tabular}{lclll} 
danga \(-\gamma\) & thi-ph & ən & ed & zet \\
message-AGN & AUG-come & GEN & see & master
\end{tabular}
"The ambassador came from afar just to see our master."

Like many other Old Qrai affixes, the verbal augmentative prefix underwent sound changes and eventually fell out of use. A process of dissimilation that occurred in the transition from Old Qrai to Middle Qrai debuccalized si- before words starting with fricatives and weakened thi- before aspirated plosives. Along with other sound changes, verbal augmentative no longer appeared systematic. Table 4 gives words in Modern Qrai that have their roots in Old Qrai augmentative verbs.
\begin{tabular}{|c|c|c|c|}
\hline Qrai & IPA & English & Base \\
\hline hisea & ／xi＇sia／ & to suffer chronically & sea＇to burden，suffer＇ \\
\hline hnoa & ／＇nua／ & to overindulge，spoil & unoa＇to love＇ \\
\hline hnova & ／＇nova／ & to ruminate & ova＇to think＇ \\
\hline hnura & ／＇nura／ & to wholesale & nura＇to sell＇ \\
\hline huvodra & ／xu＇vodra／ & to obtain with effort & vodra＇to take \\
\hline onthucoedu & ／，ont \({ }^{\text {h }}\)＇\({ }^{\text {Gozdu／}}\) & absolutely & oeda＇to sit，to be sure＇ \\
\hline sitikhani & ／，siti＇k \({ }^{\text {h }}\) ani／ & the day before yesterday & OQ khan＇to pass by＇ \\
\hline stiphi & ／s？iphi／ & the day after tomorrow & ha＇to come＇ \\
\hline & ／＇thaba／ & to have a feast & aba＇to eat＇ \\
\hline thibrig & ／thi＇briga／ & to harass & briga＇to annoy \\
\hline thicatha & \(/ t^{\text {h }} \mathrm{i}^{\prime}\) gat \({ }^{\text {h }}\) a／ & to yearn & catha＇to hope＇ \\
\hline thideda & ／thi＇deda／ & to have full control over & deda＇to rule＇ \\
\hline thucadoa & ／，t \({ }^{\text {h uga＇dua／}}\) & to confess & cadoa＇to speak＇ \\
\hline ra & ／thu＇govra／ & to spread uncontrollably & covra＇to thrive＇ \\
\hline thu & ／＇thugla／ & to travel & ugla＇to walk＇ \\
\hline tik & ／ti＇k \({ }^{\text {h }}\) isa／ & to beg for money & khisa＇to ask for help＇ \\
\hline tithrana & ／ti＇t \({ }^{\text {h}}\) rana／ & to examine，scrutinize & thrana＇to read＇ \\
\hline
\end{tabular}

Table 4：Modern Qrai words derived from Old Qrai augmentatives．

Note that sitikhani has a morpheme si－which bears resemblance to the augmentative prefix． However，that does not follow the phonological rule of si／thi－since the base＊tikhani begins with a plosive and，if it were to be prefixed，it would yield＊thitikhani．Therefore，si－is not augmentative but rather the noun si＇sun＇，and the－ti－part is truly the augmentative prefix， emphasizing the verb khan in its participle form．

\section*{Conclusion}

In this article，we have seen that some words in Qrai have their roots in augmentatives in earlier stages of the language．Most of the words sharing recognizable prefixes，namely thi－ and ama－，also have a common relation to their base form：these prefixed words are，in some way，a＂greater＂version of their base form．Certainly，there are words，despite prefixed with the very same prefixes，that do not exhibit the same relation to their base form．Some of these words were treated as whole lexical units and underwent semantic shift．Some，on the other hand，are coinages resulted from a novel application of the same suffixes．

Much of the inspiration of prefixes from earlier stages of the language falling out of use comes from relics of Old Japanese prefixes such as i－，ka－，sa－，and ta－．These prefixes can be found in Modern Japanese words such as kabosoi＇week，feeble＇（ \(<\) hosoi＇thin，fine＇）， samayou＇to wander＇（＜mayou＇to be lost＇），and tabakaru＇to conspire＇（＜hakaru＇to mea－ sure，conspire．＇）Words prefixed with i－did not made it to Modern Japanese．These prefixes are often considered expletives that make no difference to semantics of the base and only serve to adjust the rhythm of pronunciation．There has been effort to analyze these prefixes， and one \({ }^{6}\) of the analyses suggests that \(\mathbf{i}\)－serves as augmentative，referring to the long dis－ tance or long duration of events．However，different from Japanese，Old Qrai augmentatives has more prominent effect on the semantics of their bases and the prefixed words under－ went phonology changes and semantic shifts to the point that they are considered separate items．

\footnotetext{
\({ }^{6}\) 白井，清子．2003．上代の接頭語「い」．「学習院大学上代文学研究会」同人
}

\section*{05 Leveraging Body-Part Terms for Lexical Expansion}

\author{
by Jeffrey Henning
}

\section*{Word Formation in the Muna Lingi Polynesian Conlang}

\section*{Introduction to Muna Lingi}

Muna Lingi was the language of the pulotu, groups of singers who traveled between the Polynesian islands, sharing songs, stories, and news from other islands. These singers were themselves drawn from many islands, and Muna Lingi was initially their lingua franca when at sea. Over time it became a language in its own right, and the source of songs, tales, and news for isolated islanders. Most islands had a few men and women who could translate the songs and news from the pulotu's Muna Lingi into their local language. As a pidgin, Muna Lingi was much simpler and more regular than other languages and leveraged terms for body parts to greatly expand its lexicon for verbs and prepositions, as well as nouns in other semantic categories.

\section*{Classification}

Muna Lingi is an analytic, isolating language, with fairly free word order (favoring VSO and VOS with SVO permitted). It is primarily a head-initial language, with nouns preceding adjectives and relative clauses, verbs preceding adverbs, case markers preceding case phrases, and the use of prepositions rather than postpositions. Notable exceptions are that determiners and classifiers precede nouns and certain verbal particles precede verbs; the latter is a small closed set of preverbal particles for aspect, mood, and the reciprocal.

An old language, intermittently spoken by islanders when in contact with the pulotu, Muna Lingi has experienced much less semantic shift than the native languages of its speakers.

As a pidgin, Muna Lingi shares many attributes of other pidgins, including: monophthongization, lack of conjugation, declension, or agreement, and derivation of new vocabulary through nominalization, verbification, adjectivization, and semantically-transparent compounds.

\section*{Muna Lingi}

What we know about the language comes from Dutch and Spanish beachcombers in the 1600 s. The two most significant sources are Jan de Veer, a Dutch castaway from the Eendracht, and Cornelis van Noort, a clergyman who translated the Gospels into Muna Lingi.

\section*{Lexicon}

For convenience, etymologies list proto-forms. However, the words of Muna Lingi did not develop naturally from a Polynesian proto-language but instead are borrowed from many languages. Due to the high similarity of Polynesian languages, it is not possible to determine the ultimate source of words. One statistical analysis showed that \(67 \%\) of the words of Muna Lingi had recognizable cognates in Māori and a partially overlapping set of \(67 \%\) in Tikopia; 64\% each in East Futuna, Penrhyn, and Tuamotu; 63\% in Pukapuka; 62\% in Tokelau; 61\% in Rarotongan; and 58\% in Mangareva. Other languages with a high share of recognizable word stock include Emae, East Uvea, Fijian, Luangiua, Kapingamarangi, Marquesas, Niue, Nukuoro, Rennellese, Samoan, Tahitia, Takuu, Tongan, and West Futuna and West Uvea.

From a perspective of proto-languages, \(38 \%\) of the lexicon that can be traced has ProtoPolynesian roots, followed by Austronesian, Malayo-Polynesian, Nuclear Polynesian, and Oceanic each around \(10 \%\).

Reduplication is no longer productive in Muna Lingi but an early stage mainly seems to have functioned to differentiate words that historically had the same sounds: aloalo, 'to paddle or row a boat,' differentiated from alo, 'face.'

Languages: AN, Austronesian; CE, Central-Eastern Polynesian; CP, Central Pacific; EC, Ellicean; EO, Eastern Oceanic; EP, East Polynesian; FJ, Fijic; MP, Malayo-Polynesian; NP, Nuclear Polynesian; OC, Oceanic; PN, Proto-Polynesian; RO, Reconstruction Level RO; SO, Samoic-Outlier Polynesian; XW, West Polynesian.

\section*{Body Parts as a Lexical Resource}

According to eyewitness accounts documented by De Veer, Muna Lingi was often taught by pointing at the appropriate body part and then using it subsequently as a noun, preposition, and verb.

Muna Lingi speakers conceptualize body parts in different ways than English speakers do. The liver, not the heart, is the locus of emotions, and is also associated with martial fierceness. Eyes are visible signs of emotion, rather than the mouth. The ears are associated with knowledge and reason, not the brain, exhibiting a tendency towards a "knowing is hearing" metaphor rather than a "knowing is seeing" metaphor: not only is news transmitted orally, but sounds carry portents (weather changes, animal movements, etc.).

Compounds are generally rare in the lexicon but include:
- ate-ea [< ate, liver \(+e a\), air, 'liver of the air.'] n. Lungs. v. To breathe. adv. Gaspingly.
- taupe-mata [< taupe, hammock + mata, eye, 'eye hammock.'] n. Eyelid. v. To wink, to blink. cf. kemo.

One semantic area that makes extensive use of compounds are terms for aspects of the landscape:
- amo-maunga [ < amo, shoulders + maunga, mountain.] n. Mountain ridge.
- ivi-nuku [< ivi, bone + nuku, land.] n. Hill, hillock.
- leuleu-motu [< leuleu, waist + motu, island.] n. Isthmus.
- mata-fanga [PN mata-a-faga.] n. Beach, seashore. adj. s.v. Seaside. prep. i matafanga i: The seaside of.
- matikao-fanga [ < matikao, finger + fanga, bay.] \(n\). Peninsula.
- muli-maunga [< muli, mouth + maunga, mountain.] n. Volcano, caldera.
- muli-vai [PN muri-wai, mouth of river (butt + fresh-water).] n. Mouth of river.
- tuli-moana [ < tuli, knee + moana, ocean.] n. Waves, breakers.

A few compounds are widely attested in the source languages and still form distinct compounds in Muna Lingi:
- lau-ulu [PN lau-qulu, hair of head (leaf + head).] n. Hair. prep. i lau-ulu i: Between, among.
- muli-vae [PN muri-waqe, heel (butt + foot).] n. Heel, butt end of a tool or weapon.
- tuke-mata [NP tuke-mata, eyebrow (joint + eye).] n. Eyebrow.

Some former compounds are now regarded as single words, one or more of their roots not being preserved in Muna Lingi. For instance, taumata, from NP tau-mata, eyeshade ("hang from eyes"), meaning 'eyebrows'; while mata still means 'eye,' tau no longer means 'hang, suspended.'

Given the limited vocabulary of Muna Lingi, body parts are often used idiomatically in compounds in lieu of the language having more specialized vocabulary: "the leg of the spear" (the shaft of the spear), "the hand of the oar" (the blade of the oar), "the belly of the canoe" (the hull of the canoe).

\section*{Other Parts of Speech}

Most words in Muna Lingi can function as a noun, verb, adjective, or adverb, depending solely on their place in a sentence: for instance, Te toa toa ku toa toa, "The valiant warrior fought valiantly." Note that many of these senses are innovations. For instance, the word toa initially was a noun or adjective but acquired senses as a verb and adverb, while mata, like many terms for body parts, acquired many other senses, as an adjective, adverb, verb, and as two types of prepositions:
- toa [PN toqa, courageous, warrior.] n. Warrior, hero. adj. Valiant, courageous. v. To fight, to battle. adv. Valiantly, courageously.
- mata [AN mata.1a, face, eye.] n. Eye. adj. Visual. v. To see. adv. Visually. prep. i mata i: Towards. temp. va mata va: At the same time as, now that.
- kaokao [PN kao-kao, side, rib; analogous parts of a canoe.] n. Side, rib; edge; side of a canoe. adj. s.v. Adjacent, neighboring. v. To join together. adv. Together, aside. prep. i kaokao i: Beside; close to, next to; joined to. temp. va kaokao va: As soon as.

Usually senses of different parts of speech are related, as with toa. While the language typically avoids words with the same sound but different meanings, words with different parts of speech survive: miti when used as a noun (from an Ellicean root) means 'salt water,' but miti as a verb, meaning 'to lick, to suck up food without chewing,' is from an Oceanic root.

\section*{Muna Lingi}

\section*{Prepositions and Prepositional Phrases}

Prepositions modify the word they follow (typically a noun but also possibly an adjective - but not a verb or adverb). Like most pidgins, Muna Lingi has a small closed set of prepositions, in this case drawn from those common to many of the Polynesian languages. Unlike most pidgins, Muna Lingi supports the creation of new prepositions. Compound prepositions are formed from expressions based on body parts; for example, i ulo i, 'on top of' (e.g., "on the head of") and va mata va, 'at eye of' (meaning "at the same time as").

\section*{Body part Locative Preposition Temporal Preposition}
\begin{tabular}{|c|c|c|c|}
\hline alo & Face & In front of & Before, in the past when, ago [can only look back on the past] \\
\hline amo & Shoulders & Above & \\
\hline ate & Liver & Within & During, while, as long as \\
\hline engutu & Mouth, beak, lip & In front of, before & \\
\hline laulu & Hair & Between, among & \\
\hline lima & Hand, arm & & Later than, younger than \\
\hline kaokao & Side, rib & Beside; close to, next to & As soon as \\
\hline keke & Armpit & Beneath, underneath & \\
\hline kili & Skin & Outside, around, against & Until, till \\
\hline manava & Belly & Inside & In the middle of, since \\
\hline mata & Eye & Towards & At the same time as, now that \\
\hline niho & Tooth & In & \\
\hline tino & Body & At the center of & \\
\hline tua & Back & In back of, behind & After, when, once [note: back is to the unseen future] \\
\hline ulu & Head & On top of, on & Whenever, every time that \\
\hline uso & Umbilical cord & Out from & At the birth of, by the time \\
\hline vae & Leg, foot & Under, below & Earlier than, older than \\
\hline
\end{tabular}

This pattern of \(\mathbf{i}+\) noun \(+\mathbf{i}\) is productive and can be used to generate new and nonce locative prepositions (think of it as similar to as, in as long as, as soon as, as early as, etc.). The most common of those compound prepositions not directly based on body parts are in fact based indirectly on body parts: i fafa i, 'at sea' (from fafa, 'to carry on your back') and i mata-fanga i, 'the seaside of' (from PN mata-a-faga, "the face of the bay"). But not all: i alanga i, from 'tool,' meaning 'with, by means of.' Another set is based on Directionals (q.v.).

In contrast, the pattern of va + noun \(+\mathbf{v a}\), used for temporal prepositions, is less productive. The above table lists the most common of these that are derived from body parts.

\section*{Verbs}

Many of the most commonly used verbs are derived from body parts.
Almost all of these meanings are innovations; the source languages typically provided a noun and the sense of the verb developed from that, such as 'to bite' from AN nifo, 'tooth.' A few exceptions developed the noun sense from the verb:
- tuaki [CP tuaki, disembowel fish or fowl.] n. Bowels. v. To disembowel.
- hongi [PN sogi, smell v.t., touch noses in greeting.] n. Tip of the nose. v. To touch noses in greeting.
- filo [EO filo, twist cord from fibres by rolling them on the thigh.] n. Thigh. v. To twist cord from fibers by rolling them on the thigh.
\begin{tabular}{lll} 
& Body part & Verb \\
alelo & Tongue & To taste \\
alo & Face & To face \\
amo & Shoulders, pole & To carry on a shoulder \\
ate & Liver & To fight, to make war \\
ate-ea & Lungs & To breathe \\
engakau & Guts, intestines & To feel, to plan, to think, to want \\
engutu & Mouth, beak, lip & To talk \\
filo & Thigh & To twist cord from fibers by rolling \\
hongi & Tip of the nose & them on the thigh \\
ihu & Nose & To touch noses in greeting \\
kaokao & Rib & To smell, sniff \\
kemo & Eyelid & To join together \\
kili & Skin & To skink to blink \\
kopu & Throat, gullet, esophagus & To swallow, to ingest \\
manava & Belly, stomach, abdomen & To eat \\
mata & Eye & To see \\
matikao & Finger, toe & To touch \\
muli & Buttocks, posterior, rear end & To follow close behind \\
niho & Tooth & To bite \\
pali & Front of body below navel & To personalize, create for a partic- \\
ular person \\
talinga & Ear & To know, to reason \\
toto & Blood, sap & To bleed \\
tua & Back (of the body) & To follow \\
tuaki & Bowels & To disembowel \\
tuli & Knee & To kick \\
u & Breast & To nurse \\
ua & Body part, esp. neck & To rain on the back of the neck \\
ulu & Head & To enter \\
ulu & Umbilical cord & To give birth \\
uso & Leg, foot & To walk \\
vae &
\end{tabular}

\section*{Credits}

The Muna Lingi language would not exist without two key resources:
- The book Pacific Languages: An Introduction, by John Lynch.
- The POLLEX database: Greenhill SJ \& Clark R (2011). POLLEX-Online: The Polynesian Lexicon Project Online. Oceanic Linguistics, 50(2), 551-559.

For the use of body parts beyond prepositions and the "knowing is hearing" metaphor, see:
- Kraska-Szlenk, Iwona. (2014). Semantic extensions of body part terms: Common patterns and their interpretation. Language Sciences. 44. 15-39. 10.1016/j.langsci.2014.02.002.

And a special shoutout to Te Vaka, as my playlist of Tokelauan-language songs was a constant source of inspiration.

\section*{06}

\section*{Three Kinds of Tone Shift Derivatives in Skysong}

\author{
by Cass
}

\section*{Diminutives, Augmentatives, and Derived Antonyms}

\section*{Introduction}

Skysong, a purely tonal language spoken by avians and other flying creatures, features three kinds of derivative words formed only by tone shift. Two of them, the diminutive and augmentative, are productive in Skysong. The third, the derived antonym, was productive in Proto-Skysong but no longer is in modern Skysong. Many pairs of antonyms became lexicalized and remain in the modern language, however.

The diminutive is formed by a process of tone shifting up, the augmentative is formed by tone shifting down, and antonyms were productively derived by inverting the tones of a word across the middle tone. Before we look at these three forms in detail, however, a brief overview of basic Skysong phonology will be presented for reference.

\section*{Basic Skysong Phonology}

Skysong is a language spoken by a variety of species of flying creatures and consists entirely of tonal phonemes. This allows it to be produced by anyone capable of producing sound at five different pitch levels. Pitch is relative in Skysong and it doesn't matter which five tones are used or which scale they are a part of, though the five notes of the pentatonic minor scale are conventional among humans who whistle, sing, or produce the language via musical instruments. There are four types of tones: glides, tones, long tones, and trilled tones. Glides are the shortest and indicate a brief transition from the glide tone to the primary tone of a syllable, tones are steady and one mora long, long tones are steady and two morae long, and trilled tones are also two morae long but rapidly fluctuate between the primary tone and one a bit higher.

Skysong can be written with Latin characters representing every kind of tone. For a phonetic transcription, IPA tone letters are used, with a tilde below indicating a trilled tone and an optional macron below used to show long tones if needed. There is also a one mora pause phoneme represented by a glottal stop character (?) or interpunct ( \(\cdot\) ). The breve under is
only used to indicate glides standing alone-glides generally combine with their syllable's primary tone to create a contour.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Tone Pitch & Glide & & Tone & & \multicolumn{3}{|l|}{Long Tone} & \multicolumn{3}{|l|}{Trilled Tone} \\
\hline High & y / & & i / & 1 & ī & / & 7 & ì & / & 7 \\
\hline Mid-high & \(\mathrm{h} /\) & 1 & e / & 1 & è & / & -1 & è & 1 & \(\underset{\sim}{7}\) \\
\hline Middle & 1 / & - & \(\varepsilon /\) & - & \(\bar{\varepsilon}\) & 1 & - & غ̀ & / & \(\underset{\sim}{-1}\) \\
\hline Mid-low & r / & \(\pm\) & a / & - & \(\overline{\mathrm{a}}\) & 1 & \(\underline{-1}\) & à & 1 & \(\stackrel{1}{\sim}\) \\
\hline Low & w / & , & o / & , & \(\overline{0}\) & 1 & ل1 & ò & 1 & d \\
\hline
\end{tabular}

Table 1: Table of Skysong Phonemes (Latin / IPA)

\section*{The Skysong Diminutive}

The Skysong diminutive can be derived by shifting every tone in a word exactly one tone higher. \({ }^{1}\)
(1) a. laohe / \(/ \mathrm{y} /\) 'fruit'
b. heaye /Y-Y/ 'little fruit, berry’

If one of the tones is already the high tone, it remains the high tone.
(2) a. īye / \(7 \mathrm{Y} /\) 'sparrow, vegetarian'
b. īye /7y/ 'little sparrow'

Following conventions of Skysong phonology, if this process results in a glide and tone of the same pitch, the glide will disappear. If the previous tone is also the same pitch and is not already long, the two syllables will merge into one long tone.
(3) a. owarehi / \(\mathrm{\lambda}+1\) // 'to grow, to thrive; a living organism'
b. arelei / H 117 /to grow a little bit or to grow while small; a small living organism'
(4)
a. aaehi / \(\mathrm{H}+\mathrm{H} 1 /\) 'to give; a gift'
b. \(\varepsilon \varepsilon \overline{1} \quad / H-17 /\) 'to give a small or unimportant thing; a playful gift'

This can also happen if the second tone is long, in which case that tone is split, with the first mora of that formerly long tone joined with the previous tone and the second mora of that formerly long tone becoming its own syllable, a short tone. All of this follows standard Skysong phonological rules that prohibit continuous tones of more than two morae.
(5) a. عliyē / \(/ \uparrow \uparrow /\) 'beautiful, pretty, good'
b. ehīi /†า7/ 'cute, pretty'

Some diminutives become lexicalized with sound changes. For example, the word for kitten is the diminutive of cat with the trill lost and èè 'to tremble' is ultimately derived from the diminutive of eaعa 'to shake.'

\footnotetext{
\({ }^{1}\) For audio recordings of each of the examples, visit https://sites.google.com/view/skysong/
}
(6) a. rihò /イ\// 'cat'
b. liyā /イપ|/ 'kitten'
a. عaعa /HHH/ 'to shake'
b. èè \(/ \sim \sim \sim /\) 'to tremble, to quiver'

Sometimes diminutives form homonyms of unrelated words or two different words can have the same diminutive. These can usually be distinguished by context, but for clarity, an adjective or adverb like lille \(/ 71 /\) 'small' can be used with the base word instead of the diminutive.
\begin{tabular}{|c|c|c|}
\hline a. eyeh\&la & /HyH/ & 'tongue' \\
\hline b. iyehe & /7yy/ & 'little tongue' \\
\hline c. iyehe & /7yy/ & 'colorful, queer' \\
\hline d. eyehzla līle & /14y+ \(71 /\) & 'small tongue' \\
\hline
\end{tabular}

Skysong diminutives can be applied to nouns, verbs, adjectives, and adverbs (and all these parts of speech can be used as each other in Skysong) and take on meanings of smallness, a lessened effect, intimacy, or similar connotations.
(9) a. hiyore / \(1 V_{\uparrow} /\) 'tree'
b. iyale / / \(\uparrow 1 /\) 'small, delicate, or ornamental tree'
(10) a. èā / \(/-\downarrow /\) 'to perch, to sit, to settle'
b. ̀ \(\overline{\mathbf{\varepsilon}}\) / / \(\dashv /\) / 'to alight'
(11) a. rēle / \(\dagger 1 /\) adj. 'fast, quick, agile, graceful' adv. 'quickly, gracefully'
b. lēhi /-11/ adj. 'a little fast, somewhat quick, svelte' adv. 'a little quickly, a little gracefully'
(12) a. eliyare / \(\uparrow \uparrow \uparrow \uparrow /\) 'good, correct, right, true'
b. ehiygle /11Y1/ 'decent, cool, okay, fine, good or true in an endearing or casual way'

Using multiple diminutives in a clause can reinforce a sense of endearment.
\begin{tabular}{lllllll} 
(13) \begin{tabular}{llll} 
lēhi & ì & īye & -eee \\
gracefully \(\backslash\) DIM & perch \(\backslash\) DIM & sparrow \(\backslash\) DIM & COL\DIM
\end{tabular} & pretty \(\backslash\) DIM & e? & LOC & iyale \\
& tree \(\backslash\) DIM
\end{tabular}
"The cute little flock of sparrows alights a little gracefully on the trembling little tree."

\section*{The Skysong Augmentative}

The Skysong augmentative is formed in the opposite way as the diminutive: every tone in the base word is one tone lower.
(14) a. owehiyo / \(\downarrow\) 1 V/ 'mountain'
b. oweleho / \(\mathrm{\lambda}+\mathrm{V} /\) 'large mountain'
a. iiyare / \(/ 7{ }^{\prime} \downarrow /\) 'to write; something written'
b. eehowa / \(\uparrow \uparrow V \lambda /\) 'to write a book or other large piece of writing; a book or other large piece of writing'

The augmentative features all of the same phonological processes with consecutive low tones and glides as are encountered with high tones and glides in the diminutive.
(16) a. iroyehi /7JY1/ 'silver; something made of silver'
b. eohele /IJY1/ 'a large amount of silver; something large made of silver'
a. lowā / \(N / /\) /house, home'
b. rōo /لJ/ 'large house, mansion, castle'

Some augmentatives undergo alterations and become lexicalized just like what can happen with the diminutive. In the following case, the added trill echoes a raven's croaking call.
a. yāya / पY/ 'a crow or other large corvid'
b. hòho /

Like diminutives, augmentatives in Skysong can be nouns, verbs, adjectives, or adverbs. Their meanings involve greater size, intensity, or thoroughness than the base word, sometimes with connotations of seriousness or danger.
(19) a. èā / \(\underset{\sim}{-1 /}\) 'to perch, to sit, to settle'
b. غ̀̀ \(\quad / \underset{\sim}{\dashv} \downarrow /\) 'to lie down, to settle down for a long time'
(20) a. owehela /J訬/ 'to know'
b. owelaro / J \(\mathrm{N}_{\mathrm{J} / \text { / 'to know thoroughly, to understand' }}\)
(21) a. عlaao / \(\mid \uparrow-\downarrow /\) 'to tumble along the ground, to roll'
b. arooo / \(\dashv\rfloor\rfloor\rfloor /\) 'to tumble or fall downhill in great mass and quantity, to avalanche'
(22) a. līō / \(/ \downarrow /\) 'ice'
b. rēō / \(/ \uparrow /\) / 'glacier, ice sheet'
a. aeae /H-HH/ 'a period of time'
b. oaoa / \(-\downarrow-\downarrow /\) 'a long period of time'
a. hàro / N/J/ 'foreign, exotic, unknown'
b. lòo /ل /ل / 'large and unknown with connotations of being scary or dangerous'

Using multiple augmentatives in a clause can reinforce a sense of size, importance, weightiness, or foreboding.
\begin{tabular}{|c|c|c|c|c|}
\hline oaoa & arooo & rēō & \(\bar{\varepsilon}\) & oweleho \\
\hline period.of.time \(\backslash\) AUG & tumble\AUG & \(i c e \backslash A U G\) & PERL & mountain \(\backslash\) AUG \\
\hline ēli & & & & \\
\hline ANTESS NPR~ & erch \(\backslash\) AUG & & & \\
\hline
\end{tabular}
"The ice sheet avalanched down the large mountain for a long time before settling down."

\section*{Derived Antonyms in Skysong}

Unlike the diminutive and augmentative, derived antonyms are no longer productive in modern Skysong, so they cannot simply be formed from any word. But as a result of lexicalization of the antonyms already derived while productive in Proto-Skysong, many pairs of antonyms in modern Skysong follow a regular pattern.

In Proto-Skysong, an antonym was derived by inverting the tones around the middle tone so that a high tone became a low tone, a mid-high tone became a mid-low tone, a mid-low tone became a mid-high tone, a low tone became a high tone, and a middle tone remained unchanged.
a. عliyehe / \(\mathrm{H} Y \mathrm{Y} /\) 'healthy, energetic, well'
b. عlowere /H\\l/ ‘sick, ill, exhausted, unwell'

The most common type of derived antonyms are gradable antonyms where each represents the end of a continuous spectrum.
(27) a. lōla / \(/ \downarrow /\) 'big, large'
b. līle / / 1// 'little, small'
(28) a. ōlaro / \(\rfloor \downarrow \mathrm{J} /\) 'strong, powerful'
b. īlehi / ᄀ11/ 'gentle, weak'
(29) a. eeī /ㅓㄱ// 'tight, high (of pitch or tone)'
b. aaō / \(-\mathrm{H} \mathrm{H} /\) 'loose, low (of pitch or tone)'

Another common kind of derived antonym pair is complementary antonyms where the base word and derived antonym have opposite meanings but there is no spectrum.
(30) a. olōwe / لی// 'familiar; an acquaintance, friend'
b. ilīya /7१Y/ 'unfamiliar but not foreign or exotic; a stranger but not a foreigner'
(31) a. olī \(/\lrcorner \uparrow /\) 'to increase in strength or intensity, become brighter'
b. ilō /7ل/ 'to fade, to diminish'
(32) a. āro / \(\mathrm{H} /\) past tense particle
b. ēhi / /11/ future tense particle

Some derived antonyms have relational or even metaphorically opposite meanings. Nouns, verbs, adjectives, adverbs, and even prepositions and other particles can all have derived antonyms.
(33) a. īiyo /77V/ 'parent'
b. ōowi / \(/ \downarrow / /\) 'child (in relation to a parent)'
(34) a. waroa / \(\mathrm{J}_{\mathrm{H} / \text { / 'to commemorate, to celebrate in a solemn way; }}\)
a solemn ceremony, a funeral'
b. yehie /111/ 'to celebrate, esp. in a joyful way; a festive ceremony, a party'
(35) a. līlī /7१/ 'further, even more, moreover'
b. lōlō /لЈ/ 'but rather, instead'
a. عli \(/+1 /\) 'to, towards' (allative preposition)
b. عlo /HJ/ 'from, away from' (ablative preposition)

Perhaps due to the fact that it is no longer productive, there tend to have been a number of phonological and semantic changes to derived antonyms in addition to the regular antonyms cited above. In this first example, the expected antonym, *roalaa, has simplified to rōā through the influence of sound symbolism.
a. hielee /1111// 'to struggle, to squirm, to writhe, to be uncomfortable'
b. rōā \(/ \downharpoonleft-/\) 'to be still, to lie still, to be comfortable'

In this second example, both sound and meaning have shifted. The derived antonym of ieee 'to try' originally meant 'to not try, to not attempt to do something.' Its meaning shifted to mean 'to rest from doing something' and eventually also simply 'to rest.' The original form oعaと has seen a glide develop between the first two morae and a one-mora pause replace the third mora, likely for sound symbolism reasons and by analogy with words like ā?lo \(/\lrcorner \cdot \sqrt{ } /\) 'to pause or delay' and iye?o / \(7 \uparrow \cdot\rfloor /\) 'to end, to come to an end.'
(38) a. ieee /TH-N-1/ 'to try, to attempt'
b. owe?e \(/ J \lambda \cdot-/\) 'to rest, to take a rest from something'

\section*{Comparatives and Superlatives}

A special case of derived antonyms are the comparative (ee \(/ \mathrm{Ht} /\) and aa \(/ \mathrm{H} /\) /) and superlative (ii \(/ 17 /\) and \(\mathbf{0 o} /\lrcorner ل /\) ) particles. These pairs of antonyms mean 'less' or 'more' and 'least' or 'most' respectively, but tonal harmony determines which meaning applies. If the comparative or superlative matches the average tone of the modified word, the sense is more or most. If the tone is the opposite of the average tone of the modified word, the sense is less or least.
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{3}{*}{(39)} & ee عliyē & aa ōlaro \\
\hline & CMPR pretty & CMPR strong \\
\hline & "prettier; rather pretty" & "stronger; rather strong" \\
\hline \multirow[t]{3}{*}{(40)} & aa eliyē & ee ōlaro \\
\hline & CMPR \(\backslash\) NEG pretty & CMPR \(\backslash\) NEG strong \\
\hline & "less pretty; not so pretty" & "less strong; not so strong" \\
\hline \multirow[t]{3}{*}{(41)} & ii عliyē & oo ōlaro \\
\hline & SUPL pretty & SUPL strong \\
\hline & "prettiest; very pretty" & "strongest; very strong" \\
\hline \multirow[t]{3}{*}{(42)} & oo عliyē & ii ōlaro \\
\hline & SUPL\NEG pretty & SUPL\NEG strong \\
\hline & "least pretty; not at all pretty" & "least strong; not at all strong" \\
\hline
\end{tabular}

Superlatives and comparatives are used very frequently and have broad meanings as general intensifiers rather than serving only as literal comparisons.
oo liyā \(\sim\) yā

SUPL kitten ~PL
"many kittens"
(44) ii īye

SUPL sparrow
"very much a sparrow; a sparrow of sparrows"

Some verbs also are pairs of antonyms whose meaning depends on tone harmony.
(46) a. hiiī /117/ 'to become (tonal harmony-high), to become no longer (tonal disharmony-low)'
b. rooō \(/ \mathrm{J}\rfloor /\) 'to become (tonal harmony-low),
to become no longer (tonal disharmony-high)'
(47) rooō yayoyayo
become rain
"It's becoming rainy."
(48) hiiī \(\begin{array}{llll}\text { hilirehe } & \text { i? } & \text { owaro } \\ & \text { become } & \text { happy } & \text { A } \\ 1 \mathrm{~s}\end{array}\)
(48) hiiii \(\quad\) hilirehe \(\begin{array}{lll}\text { i? } & \text { owaro } \\ \text { become } & \text { happy } & \text { A } \\ \text { 1s }\end{array}\)
"I become happy."
(45) ii wiya \(\sim\) wiyawī

SUPL NPR~sing
"There is a lot of singing."
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
hiiī \\
become \(\backslash \mathrm{N}\)
\end{tabular} & yayoyayo rain \\
\hline \multicolumn{2}{|l|}{"It's becoming no longer raining."} \\
\hline Ooō & hilirehe i? owaro \\
\hline become\NEG & happy A 1s \\
\hline "I become & onger happy." \\
\hline
\end{tabular}

\section*{Conclusion}

We have explored the three regular derivational processes in Skysong that employ tone shift alone: the diminutive, the augmentative, and the derived antonym. In addition to
these, there are also four derivatives that are formed via various kinds of reduplication and tone shift of the reduplicant. These are the possessive, the adjectival, the causative, and the instrumental, and these may be explored in a future article. There are also various ad hoc instances of sound symbolism that have formed pairs of antonyms (e.g. owī /J// 'high, tall' and owā \(/\lrcorner \lambda /\) / 'low, short') and other lexemes that could be explored further as well.

\section*{07}

\section*{Derivational Prefixes in Emaic languages}

\author{
by Tonic
}

\section*{Like Bantu? Well yes, but actually no}

One of the features all Emaic languages have in common is the presence of a set of prefixes that can be traced back all the way to Proto-Emaic. These prefixes are mostly derivational, but have in some languages also gained inflectional uses. In this article I will describe how they were used to enrich the lexicon of Proto-Emaic and how they are used today in two Emaic languages belonging to separate branches, Atłaq and Zikkou.

\section*{Proto-Emaic}

There are dozens of derivational prefixes reconstructable for Proto-Emaic, although most only occur in a handful of words. In this article I will focus on some of the more common ones:
*i- Human, sometimes male human
*ul \({ }^{\text {d }}\) - Female human
*ge- Diminutive
* \(\mathbf{a}^{\text {h }}\) - Object, typically small and solid
*te \({ }^{\text {h }} \mathbf{m}\) - Flat object
*le- Location
*wi- Mass noun, sometimes abstract
* ßa- Abstract noun

To see how they work, let's look at a few examples.

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A lot of information can be extracted from these. First, the prefixes can attach to both nouns and verbs. Second, they can attach to words seemingly without changing the meaning. This is somewhat common, and while there might be some subtle distinction in how the words are used, there's often no way to recover it with any certainty. Third, prefixes can stack. This is pretty rare but when it happens it's usually *ge- that's attaching to a word that already has a prefix, like * \(\boldsymbol{\beta a s}^{\mathrm{r}}{ }^{\mathbf{a}}\) ata 'speech' in the example above.

Derivational prefixes were not only used on nouns, but on pronouns as well. The various Emaic languages differ a lot when it comes to which prefixes are allowed on pronouns, so it's hard to tell exactly what the situation looked like in Proto-Emaic. What's clear however is that they were only used on pronouns, not on any of the corresponding determiners.

\section*{Atłaq}

Derivational prefixes have largely become unproductive in Atłaq, with some exceptions. The main example is * \(\beta \mathbf{a}\) - which has become \(\mathbf{v}(\mathbf{a})\)-, marking infinitive verb forms. That said they are still commonly found in nouns, although the words have often experienced semantic change, obscuring the original meaning of the prefix. As an example, we have jam 'human ear' and simaam 'animal ear' from *im and *te \({ }^{\mathrm{h}} \mathbf{m}\) - \(\mathbf{i} \mathrm{m}\) respectively, where the 'ear' meaning is unchanged but *te \({ }^{\mathrm{h}} \mathbf{m}\) - \(\mathrm{i} m\) probably originally referred to an ear from a specific animal with flat-ish ears. Some prefixes have also changed their meaning more systematically, like ki- < *ge- which has evolved to now mostly be used for animals.

The derivational prefixes have had a major role in the formation of the Atłaq noun class system. There are three classes, whose members are assigned as follows:

Human Humans, excluding infants
Non-human animate Various things, including
- Animals and infant humans e.g. non-human mammals, birds, fish, reptiles, insects, crustaceans.
- Fleshy body parts and organs from both humans and animals e.g. hand, fin, brain, heart.
- Celestial objects e.g. star, planet.
- Self-moving things in nature e.g. river, lightning bolt, wind, hail storm.

Inanimate Everything else.
Agreement on verbs, possessives, and prepositions only distinguish between animate and inanimate nouns, but the full three-way distinction is made on numerals, determiners, and pronouns.
\[
\begin{aligned}
& \mathrm{k} \text { - aa } \mathrm{xutł}=\mathrm{s} \quad \mathrm{n}-\quad \mathrm{i} \text { - bittsa-tšam-ṃ̣ } \quad=\mathrm{aa} \quad \varnothing \text {-qaht -š } \\
& \text { NHA-DIS dog = FOC RZ-3SG.AN-pizza-eat -3PL.INAN = EPIS INAN-all -PN }
\end{aligned}
\]
"That dog must've eaten all the pizza!"

In example (1) above, kaa is the non-human animate form of the distal determiner agreeing with xutł. The \(\mathbf{k}\) - is in fact just the ki prefix we saw before, but now used as an agreement marker. Additionally, the qahtëš is the inanimate form of 'all', agreeing with bittsa. It's also possible that the animate subject marker i- comes from the derivational *i-, but this is disputed.

It's important to mention that the boundaries between noun classes are drawn almost exclusively along semantic lines, not morphological. So a noun with ki- is not necessarily part of the non-human animate class just because the same prefix is used for marking agreement with non-human animates. This is the case for kitsan 'younger sibling' which belongs to the human class, \({ }^{1}\) retaining the earlier semantics of ki-.

\section*{Zikkou}

Unlike Atłaq, a lot of derivational prefixes have remained productive in Zikkou. Because of this we can create another list showing how the Proto-Emaic prefixes shown earlier have evolved.
\begin{tabular}{|c|c|c|c|}
\hline PMA & C & V & \\
\hline *i- & \(>\) í- & íg- & Male human \\
\hline *ul \({ }^{\text {d }}\) - & \(>\) íi- & ír- & Female human \\
\hline *ge- & \(>\) se- & s- & Diminutive \\
\hline *ge- & \(>\) N/A & k- & Diminutive \\
\hline *a \({ }^{\text {h }}\) & \(>\) gà- & gàg- & Object, typically inanimate \\
\hline *te \({ }^{\text {h }}\) m & > tèm- & tèm- & Flat object \\
\hline *le- & \(>\) re- & r- & Location \\
\hline *ßa- & \(>\) ua- & u- & Abstract/Mass noun \\
\hline
\end{tabular}

The important changes can be summarised as follows:
- *i- stopped being used for humans in general and is now purely masculine.
- *ge- has split in two. Sound change turned it into se- before consonants and k- before vowels. This lead to diminutives with s-before vowels being formed by analogy, while retaining the old ones with k-.
- *a \({ }^{\text {h}}\) - has widened its use significantly. In some cases it can even be used to derive human nouns, for example gà- + suuri 'be wounded' > gàsuuri 'handicapped person'.
- *ßa- absorbed the meaning of *wi-. This was natural as they weren't too different semantically nor phonologically. \({ }^{2}\)

In general though, Zikkou has preserved the Proto-Emaic system decently well. In fact, all morphemes in the Zikkou list except for \(\mathbf{k}\) - and tèm- are still productive.

\footnotetext{
\({ }^{1}\) When referring to an infant sibling, non-human animate agreement can optionally be used
\({ }^{2}\) The expected reflexes of *wi- would be ui- before consonants and u-before vowels.
}

But what about pronouns? Well, gà-/gàg- is in fact obligatory on demonstrative pronouns and numerals used pronomially, as can be seen in example (2). No other derivational prefix is allowed there.
(2) Ra uati kpázzi serari som sée gàkíi ràgamni sée!
\begin{tabular}{lclllllll} 
ra & ua-ti & kpázzi-i & seral-i & som & sée & gà-kíi & rà-gamni & sée \\
1SG & 1sG-have & three -OBL & child-OBL & and & even & PN-four & 3PL-be_good & even
\end{tabular}
"I have three children but four would be better."

This is radically different from how it's used on regular nouns. Rather than saying something about the semantics of the antecedent to the pronoun, it's actually deriving the pronoun from the corresponding determiner. This is actually an areal feature common among Emaic languages. In example (1), -š is used for the same purpose on qaht 'all'.

\section*{Overview and Final Words}
\begin{tabular}{l|ccc} 
& Proto-Emaic & Atłaq & Zikkou \\
\hline Productive? & Common & Rare & Common \\
On pronouns? & Common & For agreement & For deriving from determiners \\
On determiners? & No & For agreement & No
\end{tabular}

While both Atłaq and Zikkou have conserved and innovated aspects of the Proto-Emaic system of derivational prefixes, Zikkou can be said to be the more conservative of the two. The overall system is still very much alive, with the biggest change occuring on pronouns. While derivational prefixes are plentiful in Atłaq too, they are perhaps more visible as infinitive and agreement markers nowadays than they are as a tool for deriving nouns.

\section*{08} Evolution of the Kallerian Lexicon

\author{
by Alex Penland (u/AlexPenname)
}

\section*{2,000 Years of Constructed History}

The Kallerian Language Family (KLF, or kelf when I'm alone and need a stupid laugh) is one of my more ambitious projects. It was created for my novel Aerklas /exkläs/, which is currently being queried to literary agents.

KLF is also my first step away from minlangs, and the first naturalistic language I've ever worked on. Please note: the sole focus of this project was on vocabulary and etymology. KLF is imperfect, imprecise, and frankly something of a living creature at this stage. Fortunately, the main focus of this article will be the simulated linguistic evolution and naturalization of KLF's lexicon, so I won't be talking too much about grammar or phonology. Still, pardon my metaphorical dust.

This article is also heavy on culture and worldbuilding, as the lexicon is deeply rooted in each.

\section*{A Quick History Lesson (and Reference for Initialisms)}

Kalleria is a secondary world with 2,000 years of recorded history, isolated city-states and kingdoms, and a couple fringe dialects from a diaspora community. It's Earthlike, but a little to the left-the moon's too close, the trees are all the wrong colors, and the atomic-bombequivalent that drops in chapter four is constructed by a symphony. It's designed to throw the main character off a little-she's expecting a 90 s portal fantasy \({ }^{1}\).

Kallerian recorded history only goes back about two millennia: a loose association of tribes on a solitary continent has evolved into various kingdoms and city-states. Generally, each faction consists of one major city and a number of associated villages or colonies, though there are a few exceptions. Over the course of history, these factions went to war and cut themselves off from each other, creating languages that sort of linger on the border between dialect and a language family. Most are at least somewhat mutually intelligible.

\footnotetext{
\({ }^{1}\) And ends up getting a post-apocalyptic generational family drama.
}
'Modern' history is mainly focused around the Unending War, which is an extended period of violence that comes to a brief ceasefire before the bomb drops and causes the apocalypse. Aerklas is centered around this end of the world: it follows a runaway chosen one, the daughter she's desperately trying to raise in a 'normal' environment, and the son she left behind.

\section*{Dead and Ancient Languages}

Pre-Historic Kallerian (PHK) is the KLF equivalent to PIE. PHK is not fully developed, and I have no plans to fully develop it at present-I just needed a set of concepts and roots as building blocks for the rest of the family.

Proto-City-State Kallerian (PCSK) is an ancient root language, sort of the KLF equivalent to Latin. It's still widely-studied and used by the oracles in...

Oracular Kallerian (OK), which is technically PCSK, but has its own 'vocabulary' and vague grammar. OK is a metaphorical language (think Tamarian) used mostly for prophecy and only ostensibly for communication. It is both extremely specific and generally unintelligible to anyone but the oracles themselves. Their priests and priestesses pick it up over time, but only oracles are capable of fluency.

\section*{Modern Languages}

Nation of Sky Kallerian (NSK) is used in the Nation of Sky. This is the most complete of the modern languages, as several main characters are bilingual in NSK and English.

Kingdom of Ash Kallerian (KoAK) is used in the Kingdom of Ash.
Floating Papacy Kallerian (FPK) is used in the Floating Papacy. The Floating Papacy is the home of the oracles, but exists as a city-state in its own right; oracles use OK, the general population uses FPK, and the actual papacy \({ }^{2}\) is bilingual.

Free Cities of Earth Kallerian (FCEK) is used in the Free Cities of Earth ('earth' here being a rough translation of a Kallerian word meaning 'land' or 'expanse').

Democracy of the Clock Kallerian (DoCK) is used in the Democracy of the Clock.

\section*{Hidden Languages}

Red Kingdom Kallerian (RKK) was used in the city-state of the Red Kingdom, which was razed at a turning point in the Unending War. It is widely accepted as dead-except among the survivors of the violence, who still actively speak it. Sort of.

Post-Diaspora Red Kallerian (PDRK) is inspired by various 'underground' codes and dialects. Many of the modern Kallerian languages are mutually intelligible-if you speak one, you can probably understand a good deal of the others, and learning them will be fairly easy. Therefore, Red Kingdom survivors speak a sort of Polari analogue: a mix of alliterative slang, reference slang, and rhyming grammar constructions, accompanied by words borrowed from other modern languages. PDRK originated as a dialect of RKK, but after a hundred years or so has evolved into its own branch of the family tree. Most survivors are bilingual at this point, and monolingual members of the community are more likely to speak PDRK than RKK: use of the parent language is rapidly declining.

\footnotetext{
\({ }^{2}\) Consisting of the oracles and the priests/priestesses who attend to them.
}

\section*{The Process of Evolving KLF}

The Kallerian lexicon is constructed using Carl Sagan's apple pie technique: words start from the building blocks of PHK and are constructed and re-shaped through time.

There are also several notable grammatical shifts and experiments, mostly in places where I found myself repeatedly making an error-or when I just wanted to try something weird.

\section*{General Simulated Evolution}

The languages of KLF were mostly created in chronological order. PHK-which at the moment consists solely of a vocabulary list of root words-came first, as a resource from which to construct vocabulary for PCSK. The vocabulary in PCSK was fleshed out into a proper lexicon, which is then put through several phonetic shifts and naturalistic quirks before finding their home in a modern language.

When creating a new word for, say, NSK, this process has to be either repeated or backengineered. If a word already has a plausible root in PCSK, or a similar concept that has already been formed from the root, it's extrapolated from those. If the word's entirely new, the history is constructed from PHK through the modern language.

A good example word for this is rundas /xyndäs/, which means 'ground, land' in PCSK.
\begin{tabular}{l|ccc} 
& Word & IPA & Meaning \\
\hline PHK & rund & дynd & ground, earth \\
PCSK & rundas & дyndäs & place of origin, home \\
NSK & randas & İandäs & shadow, heart-home \\
KoAK & ranban & İanbän & soil, grave, a home forever
\end{tabular}

Table 1: Evolution of rundas over time

Rund also branched into several other words: for example, it also became rundias in PCSK, meaning 'kingdom of the air', which became rundastrias in NSK-'nation of the sky/stars'.

There are often other factors which contribute to the shifting lexicon as well-words are loaned back and forth between factions over the centuries, and as of 20-odd years before the novel, there are a number of English loanwords as well. (Such as 'English' itself, which is Englas in NSK, or kafeas, which just means 'coffee'.) Words also become names, which then become words associated with the name of a famous person who held it (such as Klefas, a famous romantic-think gay Romeo-whose name means 'key' or 'beginning').

Sometimes loanwords and naming conventions combine in interesting ways. One of the main characters of the book is named Calebas-a name which means absolutely nothing in Kallerian. He was born during a wave of popularity for English names in the Nation of Sky, and his mother tacked the -as ending onto 'Caleb'.

The word ebatras is worth looking at briefly before the end of this section. This was the first piece of Kallerian vocabulary which has no direct English translation, because it refers to a specific quirk of the Nation of Sky's political landscape.

The Nation of Sky has one sole ruler, but is governed by something called the Senate of Queens-a political body made up entirely of single parents elected to represent their districts. When the ruler dies, the next ruler is chosen from the cohort of the Senate's
children \({ }^{3}\). Ebatras / 9 batıas/ refers to a member of this cohort. In translation, I tend to use the literal meaning of the word, 'of the ruler', or a translation of equivalent social status, 'prince/ess', like I do below.

\section*{Naturalization}

During the above process, I've made an effort for these changes to sound as natural as possible. This process involved a lot of writing spontaneously in various dialects without checking my grammar rules, making note of any mistakes I made continuously, and working them into the language. Regular mispronunciation or stumbling over vocabulary also affected the lexicon-both my own mistakes and the mistakes beta readers made when trying to read the language aloud.

I also observed some of my bilingual friends-not only paying attention to when they used their native tongue while speaking English, but to when they used English while speaking their native tongue. Many of my characters are bilingual, which resulted in conversations like this fight between brothers, fluent in NSK and English \({ }^{4}\).

For an accurate reading, keep in mind that a Kallerian speaker's accent in English generally clocks as similar to Italian to a speaker of American English. ESS stands for "Essential" form, which is explained below.

\section*{"Boj ninalle-vas, Calebas? You nearly got yourselves killed!" NSK/English}
"What were you thinking, Caleb?"
\(\begin{array}{lllll}\text { baz }_{2} & \text { nın } & \text {-allẹ } & \text { r }- \text { as } & \text { keıləb-as } \\ \text { what.ESS } & \text { thinking-PST } & \text { you-NOM } & \text { NAME-NOM }\end{array}\)
"WHAT you-Caleb were thinking?"
(2) "Odetle-ve! I didn't know you were going to-"

NSK/English
"Let me go!"
odet -l \(\varepsilon \quad \mathrm{V} \varepsilon\)
release-PRS 2.VOC
"You, release me!"
(3) "I tried to warn you Erzai-a! Aune ne ridi-vas-"

NSK/English
"I tried to warn you back on Earth! You never listen-"
9ız -ae ä!
Earth-ACC at
"At Earth"
\(\begin{array}{lllll}\text { aune } & \text { ne } & \text { xidi } & \mathrm{V} & -\mathrm{as} \\ \text { never } & \text { not } & \text { listen.ESS } & \text { you-NOM }\end{array}\)
"You never ever LISTEN"
(4) "I listen fine!"

\footnotetext{
\({ }^{3}\) In-world, this system of governance evolved from a monarchy in which the habit of marrying for political alliance got a little out of control. In reality, I wanted something that sounded absolutely insane but no less insane than the UK parliamentary system's relationship with the Royal Family.
\({ }^{4}\) Though it was written for English readers, and is therefore heavier on the English than I'd have preferred.
}

There were also a few scenes where a character who does not speak NSK requires a translator:
(5) "Tiras lanele-de. Erjias obele ris zran breza."
"City's closed. No one goes in or out."
\begin{tabular}{llll} 
tial & -as & lan & -ele \\
city-NOM & d \(\varepsilon\) \\
closed & -PST & PSV
\end{tabular}
"the city (has been) \({ }^{5}\) closed"
9.zqi -as ob -les dis zaan bueza
nobody-NOM going-PRS inside or outside
"no one is going in or out."
(6) "Livas-las an-e-melam ebatrelam. Calebas Batras-e. Aune tiras o lanle- NSK de yai."
"I'm [a member of the cohort of potential heirs]. Caleb Batras-e. The city never closes for me."
liv-as 1 -as an \(\varepsilon\) mel -am sbatisl -am be -PRS 1 -NOM one of sky-house-ACC prince/ss-ACC
"Am-I one-of-the-Sky House \({ }^{6}\) princes/ses."
keiləb-as batr -as \(-\varepsilon\)
NAME-NOM ruler-NOM - of
"Caleb, of the King"
aune tii. -as oo lan -le d \(\varepsilon\) jai
never city-NOM for closed-PRS PSV 1.REFL
"Never the city for me is closed."
(7) "Bet yan! Velle-vas A.Z.V.?"

NSK
"Great! Do you have your I.D.?"
bst jan
great yes
"great (sarcastic)"
vع -l -le \(\quad\) v -as ä-z-v
have-PRS you-NOM I.D.
"Have-you I.D.?"
"What does he want?"
(9) "He wants my identification. I don't have it on me."

In scenes like these, where bilingual characters are speaking, I got the chance to practice some naturalistic language variation among characters-for example, the city guard uses initialisms like A.Z.V rather than arizavisas, where in English Caleb uses 'identification' instead of 'I.D.'

\footnotetext{
\({ }^{5}\) Past perfect would have been the grammatically correct choice here, but the speaker isn't using proper grammar. The translation into present tense best captures the casual/bored effect that has on the sentence.
\({ }^{6}\) Literal translation of the city's name.
}

It was also an interesting chance to think about the flow of someone speaking what I've fondly called Kalenglish-the code-switching of bilingual characters. Kallerian lends itself to some very fluid, simple constructions that can be rather clunky in English, but English lends itself to choppy, pointed sentences in a way that Kallerian doesn't. In sentences like the first part of example 3, 'I tried to warn you' gives the speaker the staccato emphasis he's looking for, but 'back on Earth' doesn't have the crescendo he finds in Erzai-a.

The best way to make a language sound natural, especially through bilingual speakers, was to see where natural changes would happen. A lot of vocabulary building was simply done by letting the characters talk and finding their natural rhythms and speech patterns.

\section*{Oracular Kallerian Vocabulary}

Because OK is a language of metaphor \({ }^{7}\), it has very few direct or obvious translations. It is incredibly oblique and generally considered a useless form of communication-unless you're an oracle.

The oracular philosophy states that time is like a book: all events exist, but people travel through word by word, line by line \({ }^{8}\). Oracles, through a somewhat debilitating process, begin to zoom out-they begin to read page by page, and eventually see the whole book in its entirety, at all times. With training and meditation they're able to stay somewhat tethered in their own time, but it's difficult, and eventually they become so untethered that they are unable to care for themselves. They are then cared for by their priests until the end of their lives.

This is a long way of saying that, when an oracle speaks, they speak with knowledge of all of time and space. OK is an oracle's attempt at specificity. Rather than simply saying "the world is going to end", they will attempt to draw parallels and specify the emotional state of the world which leads up to the apocalypse, as well as trying to paint a picture of the apocalypse itself-and they'll try to do this all in a single phrase.

That mindset has led to a number of unique grammatical constructions, most of which are only used in OK. For example, verb conjugation is fairly complicated: there's a frequent 'stacking' of PCSK tenses, wherein the same verb will be repeated a few times in a different tense to achieve a nuanced sense of time and continuity, or of verbs in the same form to create a compound meaning, wherein different verbs in the same form are clustered together. I didn't have much room to really get into this, since I'm focusing on the lexicon, but I have an example of verb stacking at the end of this section.

In-world, there have been several attempts to make OK more accessible, and as a result certain stock 'vocabularies' have appeared over time. Time signifiers, for example, are somewhat standardized-when referencing earlier events, OK will never refer to a specific year, but will refer to places under the rule of a certain leader (think 'Victorian England') or events which caused a massive change in personal experience (think 'first Covid lockdown'). This has the benefit of being identifiable for historians and interpreters, but still carrying the specificity of emotion that oracles prefer.

However, most of these standards are set by the oracles, rather than an outside source, so it's not particularly helpful.

\footnotetext{
\({ }^{7}\) Yes, I did watch 'Darmok' on a Star Trek binge and thought, man, I want to try something like this.
\({ }^{8}\) And they're correct, within their world. I would know. I wrote the book.
}
\begin{tabular}{l|cc} 
Time Referenced & Phrase & Meaning \\
\hline Before recorded history & de agon runag borundathen & 'white fog on the land' \\
\begin{tabular}{l} 
Razing of the Red Kingdom \\
After/during the apocalypse
\end{tabular} & ino roras dayas & 'indeed the red sky' \\
sweyban sin & 'shattering song'
\end{tabular}

Table 2: Standardized tense signifiers in OK.

Standardized phrases are an attempt to avoid the oracular preference of simply referring to events that were personally important to the speaker, and may have gone completely unnoticed to anyone who cannot see everything at all times. See the oracle Sagape's attempt at warning the ruler of the Nation of Sky about the apocalypse \({ }^{9}\) :
(10) Then sinas sweybane kid bresasla berhe brey dorneang, ke tedon ten- PCSK odang, ke tedon rundang te gunathla, as e tedonage gunasla lowehe ke bresasla lishinhe de.
"The shattering song, when a little insect carries through the woods, and up the stairs, and above the world a small food (crumb), yet at the top the crumb falls and the little insect is despondent."

Sinas sweybane/'shattering song' refers to a prophecy we'll look at below, though the meaning of that text is itself only made clear after the apocalypse: the 'Shattering Song' is the spell used to end the world. However, the vast majority of the prophecy is taken up by the time signifier: the insect and the crumb. The moment is important to Sagape: the struggle of the small insect would be as clear to her as any major political event, and would seem to an oracle to be a much stronger metaphor for the state of politics at the time of the end of the world. I'm sure she wept when she thought of it, and historians will certainly find the metaphor poignant.

But as a time signifier it's impossible to identify-it's unimportant to everyone but the oracle and the insect. Use of a standardized phrase would have helped here, but she did not choose to do that.

Even so, the above example is actually fairly direct for OK. It uses a straightforward grammatical tense: prophecies don't always state directly that "x will happen when y". For example, the prophecy below attempts to state that the Red Kingdom will come to an end, as all kingdoms do, but which will still rise again in the form of a nomadic, flighty, hidden people. It uses the word sin /sin/, which in its noun form means 'music', but also serves as a comparative-'like' or 'similar to'-as a verb.
(11) "Tirundas sin datath. Tirundas sin diwath."

PCSK
"The city is like a bird. The city is like a book."
Or: "The city's song is a bird. The city's song is a book."
tixund -as sin dat \(-\mathrm{a} \theta\)
city -NOM CMPR\music.ESS bird-ACC
"city like/music bird"
tixund -as sin diw -a \(\theta\)
city -NOM CMPR \(\backslash m u s i c . E S S\) book-ACC
"city like/music book"

\footnotetext{
\({ }^{9}\) As much as I want to include a gloss here, it was a little long.
}

Tense in OK is rarely relative to the speaker: it is nearly always relative to the events of the prophecy itself, if tense is used at all \({ }^{10}\). Aspect is more common than tense, and oracles generally avoid using verbs when they can, preferring instruction or simply using verbs in their 'essential' form (the root of the word with no suffixes attached) \({ }^{11}\).

As the prophet used the essential form in the above prophecy, it has two possible translations, one which concerns the city itself and one which could instead concern the city's legacy. In either case, tirundas, datath, and diwath ('city', 'bird', and 'book') are metaphors in their own right, and therefore must be compared against the oracle's background for inworld historians to try and decipher the oracle's intended meaning. After all-which city does the oracle mean mean? They're originally from the Red Kingdom, so it could refer to their capital-but if the oracle lives in the Floating Papacy, maybe the prophecy refers to that location instead. In this case, the prophecy was written after the razing of the Red Kingdom-if that is the city it refers to, is it referencing a future or an element of the past? \({ }^{12}\)

For a final example of OK in action: below is one of the more famous prophecies. It's engraved on an ancient instrument, a glass bell, and dates from almost prehistory. The prophet is unknown; in-world historians are limited to comparison with other prophecies and what little they know of prehistory to determine context.
brok ban liath; sweyban sin
PCSK
"Music broken by striking; shatter song"
\begin{tabular}{lll} 
bıok & ban & li \(-\mathrm{a} \theta\) \\
break.ESS & strike.ESS & music-ACC
\end{tabular}
"break strike music"
sweiban sin
shatter.ESS CMPR \(\backslash\) music.ESS
"shatter like/music"

The prophecy consists of two short phrases. Brok ban liath comprises two stacked verbs in their essential form and one noun in the accusative: the verbs, meaning 'break' and 'strike', compound to mean 'break by striking' \({ }^{13}\). In this case, the oracle is foretelling the breaking of the instrument itself: it will never play music again after being struck and broken.

The second phrase is the first historical reference to the 'shattering song', and it is used here as a time signifier. The prophecy is fairly directly stated-the oracle intended it to say "this instrument will be struck and broken around the time of the end of the world", but again: oracles are more interested in conveying emotional and poetic specificity than information. In-world historical guesswork has interpreted it, variously, as the oracle interpreting the same event from two perspectives, as the oracle using music as a metaphor for a tentative peace and therefore signifying its end, or as the oracle foretelling some notable personal conflict between future individuals \({ }^{14}\).

\footnotetext{
\({ }^{10}\) This is stolen shamelessly from Tamarian. You know, Temba, his arms open.
\({ }^{11}\) The essential form is sometimes used for emphasis in other KLF languages (see ridi 'listen' in Example 3), but it comes from OK. It conveys a sense of timelessness, something which is always both complete and ongoing, which will always be in the present no matter when the action takes place. For the oracles, this applies to everything, always. For people who cannot see the future, this is merely dramatic.
\({ }^{12}\) You and I know, because I've told you the meaning of the prophecy above. But in-world historians don't have authorial insight.
\({ }^{13}\) The compounding of verbs in this way occurs nowhere else in Kallerian.
\({ }^{14} \mathrm{All}\) of these interpretations are also correct. Oracles aren't bad at what they do, just arcane.
}

This section is unreasonably long, so I'll conclude: I have had a great deal of fun working out the oracular lexicon. I'm still working out some of the details-it's a weird, amorphous, electrical storm of a language, especially since so much of it relies on the speaker and their personal relationship with language.

Though to be honest, the entire KLF is an exploration of personal relationship with language, so perhaps that makes sense.

\section*{Conclusion}

I've never done anything quite like this before, for either a conlang or a book. It's been a truly fascinating experiment, with the odd side effect that my Kallerian is about equivalent to my French. As in, I don't know that I could hold a full conversation, but in an argument I could get in some good insults before the other party realized I'm monolingual. I found myself editing my grammar on a couple of the prophecies as I copied them in here-I wrote a few very early on in the language development and occasionally forgot that nouns needed to go in the accusative.

But I've written poetry in these languages. I've written music. The characters argue and politick and flirt in these languages. My villains have pet names for each other. There are mothers with nicknames for their children, siblings who fight, community centers with generic signage. There's an English-speaking kid who, by the end of the novel, has picked up no Kallerian but the swear words.

It feels alive. It's a strange experience to see it living on the page. I'm proud of that.
Part of me wishes I'd put more effort into the phonology-I have a couple regrets about some choices I made-but I stand by my lexicon focus. It was fascinating to really dive into etymology, to let the language be a little disorganized, with some weird-sounding words and the occasional hilarious coincidence \({ }^{15}\). It was also fascinating to have a conlang which directly interacts with English-the crossover is recent, but old enough to have speakers who are natively bilingual, and that proved to be a fascinating influence on both the lexicon and characters' relationships with their language.

Doing this for a language family was a challenge in itself. I really wanted the different languages to sound unique-they had to be visually distinct but still clearly related, and (for the modern families at least) I wanted some of them to be mutually intelligible. Case endings do a lot of heavy lifting there, since the average reader of the novel won't be familiar with conlanging-but not always. The two languages we see most often are NSK and OK, and they're mainly distinguished by NSK's agreement inversions (the reason for the hyphenated words in Examples 1-9), not case endings.

There are currently ten languages in KLF, five of which are fairly complete and eight of which are actively usable. RKK and PDRK were later additions, and are still works in progress-which is the only reason I didn't include PDRK in this article. PDRK's lexicon is about as diverse and weird as OK's, but as of the writing of this article it's nowhere near crystallized or complete.

If I can get Aerklas picked up, I hope to have all ten languages in a usable, learnable state by publication-hopefully with a glossary and quick grammar in the back of the novel.

\footnotetext{
\({ }^{15}\) For examble, bac /bäk/, means 'shit' in Kallerian, but sounds nearly identical to the sound a cartoon chicken makes in the US, leading to some appalled parents who purchased American cartoons on the black market.
}

Wish me luck.

\section*{Challenges}

\section*{Challenge Parameters}

For this Issue, a challenge was posed to translate the text below. The intention was to showcase interesting lexical and grammatical features by having a glossed and commented translation to demonstrate the author's conlang's uniqueness.

An old man lived alone with his dog on a small, rocky island. They lived in a wooden hut covered in moss. The sky was always gray and it rained often. The old man had gray hair and a thick, wiry beard. The dog was big with a long, brown coat.
Each morning, the old man drank a bitter tea and shared cold leftovers with his dog. In the afternoon, he walked to the shore to catch some fish. The dog chased away seagulls that wanted to steal the tasty fish. The old man then chopped firewood, and the dog sat by his side, guarding the fish. In the evening, the man salted and cooked the fish, and ate them with the dog. They slept by the warm fire to keep away the bitter cold.
His life was simple, but so long as he had his dog, the old man was happy.

\section*{09 Hitoku \＆Syntax Flow}

\author{
by Matalya（HexSay）
}

\section*{Jono Fulwāñi Hanashi：A Flow of Story}

\section*{Introduction}

Hitoku（HK：히토쿠，EN：Hitokian，ES：Itocano，JP：ムゲケナガ語／ヒトク語，language－ specific names discouraged unless contextually required otherwise）is an agglutinative lan－ guage that started development on the 8th of January of 2017．It＇s primarily SVO，with some instances where SOV is actually acceptable．When a sentence is formed using SOV syntax，an accusative marker san，akin to Japanese wo，is added．

\section*{The Challenge}

\section*{Original Text}

An old man lived alone with his dog on a small，rocky island．They lived in a wooden hut covered in moss．The sky was always gray and it rained often．The old man had gray hair and a thick，wiry beard．The dog was big with a long，brown coat．

Each morning，the old man drank a bitter tea and shared cold leftovers with his dog．In the afternoon，he walked to the shore to catch some fish．The dog chased away seagulls that wanted to steal the tasty fish．The old man then chopped firewood，and the dog sat by his side，guarding the fish．In the evening，the man salted and cooked the fish，and ate them with the dog．They slept by the warm fire to keep away the bitter cold．

His life was simple，but so long as he had his dog，the old man was happy．

\section*{Translation}

Jono sabije rujin sasiji kōday yu ishije miyayukune goñi shibakyum. Goga sasiji sērwi-senfunje wōdesho chōsa. Monnaray kyu juryo jairu ku, kiame juryosara. Sey rujin sya jono bwofun yu senje kushi. Shiba sya ōdaije ku samoki jono lōmoje ku kakyukoje kamyoke.

Rujin sadaru nigaje cha ku satesseki issejasanu kiwane goñi shibakyum ishorikanlarune. Go sateirukana omakokanlarune. Shiba sameta sey kamomegi nān getabeji gogañi tabeshumasu kana. Rujin sakuwabu leña ku sey shiba sasissazoka rujiniñi moshiteng kurewaizī sey kana. Rujin satōnsha yu tani kana shifukanlarune yu tabeji shibakyum. Goga sayasumi jikañi moshiteng kumetazī sey kemuje jamura.

Goñi kusiji sya ikesshenkaih demo, go kudoyekagi goñi shiba, rujin sya egaije.

\section*{Orthography sample}

Rujin sakuwabu leña ku sey shiba sasissazoka rujiniñi moshiteng kurewaizī sey kana

Here, some things might pop up immediately. Starting with, yes, this is not a standard font, but rather a stylized one, a more geometric approach to the script. The second detail that's evident would be the combination of the writing system, Panakyume, with Hangeul. In short, both are used, and when a grammatical suffix is used, it's more often than not written in Kāshakyume, the language's word for Korean writing.

This is just a sample to show how to write Hitoku. As you can see, it's an abugida system with no assumed, or default, vowel; the consonants receive characters, and the vowels receive a simple diacritic which, depending on where it is relative to its parent letter(s), will indicate its meaning. In horizontal, high is A, mid is E and low is O. In vertical, high is I and low is U. Obviously, Korean units don't receive these diacritics.

\section*{Interlinear Gloss}
(1) Jono sabije rujin sasiji kōday yu ishije miyayukune goñi shibakyum.
\begin{tabular}{lllrlllll} 
jono & sabi-je & ru-jin & sa-siji & kōday & yu & ishi -je & miyayuku-ne \\
\(a\) & lone-ADJ & old-person & PST-live & small & CONN & rock-ADJ & island & -DAT
\end{tabular}
\[
\begin{array}{lll}
\text { go } & \text {-ñi } & \text { shiba -kyum } \\
\text { 3.SG -POSS } & \text { dog } & \text {-with }
\end{array}
\]
"A lonely old man lived on a small and rocky island with his dog."
(2) Goga sasiji sērwi-senfunje wōdesho chōsane.
\begin{tabular}{cclll} 
go-ga & sa-siji & sērwi-senfun-je & wōdesho chōsa-ne \\
3 -PL & PST-live & moss -cover -ADJ & wooden & hut -DAT
\end{tabular}
"They lived in a wooden hut covered in moss."
(3) Monnaray kyu juryo jairu ku, kiame juryosara.
\begin{tabular}{lllll} 
monnaray & kyu juryo jairu ku, ki-ame juryosara \\
gky
\end{tabular}
"The sky was always gray and it rained often."
(4) Sey rujin sya jono bwofun yu senje kushi.
sey ru-jin sa-moki jono bwofun yu sen-je kushi
the old-person PST-have a frondose CONN line-ADJ beard
"The old man had gray hair and a thick, wiry beard."
(5) Shiba sya ōdaije ku samoki jono lōmoje kukakyukoje kamyoke.
shiba sya ōdai-je ku sa-moki jono lōmo-je ku kakyuko-je dog PST.be big -ADJ CONJ PST-have a long -ADJ CONJ brown -ADJ kamyoke
fur
"The dog was big with a long, brown coat."
(6) Rujin sadaru nigaje cha ku satesseki issejasanu kiwane goñi shibakyum ishorikanlarune.
ru-jin sa-daru niga -je cha ku sa-tesseki isseja -sanu kiwane old-person PST-drink bitter-ADJ tea CONJ PST-share heated-not remainder
\[
\begin{array}{llll}
\text { go -ñi } & \text { shiba -kyum } & \text { ishorikan -laru -ne } \\
\text { 3.SG-POSS } & \text { dog } & \text {-with } & \text { morning }
\end{array} \text {-every-DAT }
\]
"The old man drank bitter tea and shared non-heated food remainders with his dog every morning."
(7) Go sateirukana omakokanlarune.
go sa-teiru-kana omakokan-laru -ne
3.SG PST-go.to -fish afternoon -every-in
"He went to fish every afternoon."
(8) Shiba sameta sey kamomegi nān getabeji gogañi tabeshumasu kana.
shiba sa-meta sey kamomegi nān ge-tabeji go-ga-ñi tabe-shumasu dog PST-deflect the seagull that OPT-eat 3-PL-POSS eat -able kana
fish
"The dog bounced off the seagulls that wanted to eat the eatable fish."
(9) Rujin sakuwabu leña ku sey shiba sasissazoka rujiniñi moshiteng kurewaizī sey kana.
\begin{tabular}{lcllllll} 
ru-jin & sa-kuwabu leña, & sey shiba & sa-sissa-zoka ru-jin(i) -ñi \\
old-person & PST-axe & firewood, the & dog & PST-sit & -while old-person-poss
\end{tabular}
"The old man axed firewood, and meanwhile the dog sat on his legs to guard the fish."
(10) Rujin satōnsha yu tani kana shifukanlarune yu tabeji shibakyum.
\begin{tabular}{lllllllll} 
ru-jin & sa-tōnsha & yu & tani & kana & shifukan-laru -ne & yu & tabeji \\
old-person & pST- salt & CONN & cook & fish & evening & -every-DAT & CONN eat
\end{tabular}
"The old man salted and cooked the fish, and ate it with the dog."
(11) Goga sayasumi jikañi moshiteng kumetazī sey kemuje jamura.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline go-ga & sa- yasumi & jika-ñi & moshi -teng & ku-meta -zī & & kemu -je \\
\hline \multirow[t]{2}{*}{3 -} & PST-sleep & fire - Poss & leg -over & GNO-deflect-to & the & crystal-ADJ \\
\hline & & & & & & \\
\hline
\end{tabular}
"They both slept over the fire's legs to evade the crystallising cold."
(12) Goñi kusiji sya ikesshenkaih demo, go kudoyekagi goñi shiba, rujin sya egaije.
\begin{tabular}{lllllllc} 
go & -ñi & kusiji & sya & ike - - (s)shenkaih & demo, & go & ku-doye-kagi \\
3.SG-POSs & life & PST.be & simple-ADJ & but & 3.SG & GNO-have-so.long
\end{tabular}
go -ñi shiba, ru-jin sya egai -je
3.SG-POSS dog old-person PST.be happy-ADJ
"His life was simple but, as long as he had his dog, the old man was happy."

\section*{On the Grammar}

Throughout this translation, which was fortunately long enough to include lots of bits of interesting grammar, you saw...well, that. We're going to be going over some of these features and how they relate to each other.

\section*{Agglutination}

As you can see throughout the text, Hitoku makes heavy use of affixing. Tense, aspect and other verbal markers, which are not heavily used in this text, are prefixes (sa-for past, ni-for present, ka- for future, ku- for gnomic, to- for continuous, zu- for passive, ge-for optative, mya- for causative, etc.). Adding extra verbs to modify the core meaning, like "know how to," "try to" are also prefixes. Most parts of speech also get their own distinct, and distinctly regular, suffix as well, such as one you've seen a lot: -je for adjectives (Also achieved through reduplication and -shenkaih), -ken for adverbs, -na for nouns from verbs, -ru for verbs from nouns, etc. These conversions are crucial to Hitoku's flexibility in communication.

\section*{Syntax Flow}

Hey, that's the title of the article! Yep, all of that mentioned before is because of a series of rules that, when combined, yielded interesting results:
1. A sentence can ideally only have core verbs, and when possible, modifiers rather than roots are encouraged to be used in its place.
2. A verb is almost always marked (To go around this that the gnomic aspect was added), except when it's used extralinguistically, or when it's connected sequentially to other verbs (Something you have seen in action here).
3. Verbs are anchor points in a sentence whose structure is strictly \(\mathrm{S}-\mathrm{V}-\mathrm{O}\).

These three rules made it so that you have to cram a lot of information and nuance around the single core verb of the sentence. For example, in the opening sequence:


Even though the language paints, sometimes, similar pictures to English or Spanish, these rules take the language in very different directions, particularly in how information is hierarchized.
\begin{tabular}{c|c|c} 
Rujin & sadaru & nigaje cha ishorikanlarune \\
S & V & O
\end{tabular}

Here, the when part is thrown in at the end, rather than at the beginning where one would expect it to be in this construction. This is because, as part of the object, it has to go with the rest of the syntactic object.

\section*{Connecting the Dots}

In Hitoku, there are several ways of connecting related pieces of information. Prepositions such as nān, meaning 'that,' serve to cross-reference the subject or object of a sentence unit in the next sentence unit, essentially used to "insert" sub-sentence units into their parent super-sentence. But it's not the only one, the inposition yu is used to "transfer" information across words, hence reducing the need for explicit affixing. This is what allowed the text to leave both verbs and adjectives unmarked at the beginning of the translation when using both small and rocky to describe the same island, and when describing the aftermath of the fishing, and using salt, cook and share with the same tense, to different objects. In this structure, you can basically list a series of actions, and divide them between the objects they affect. The subject is often assumed to be the same, so it's only mentioned in the \(S\) section of the parent sentence unit. The yu inposition shortcuts the creation of multiple sentences with multiple anchor verbs and multiple objects, and makes a super sentence that is all of the distinct elements of each sentence unit, but with the redundant bits omitted.

\section*{(13) Wo sashū yu ryukan sey kamime yu kimo san satoeh}
\begin{tabular}{lclllllll} 
wo & sa-shū & yu & ryukan & sey & kamine & yu & kimo & san \\
1.SG & PST-grab & CONN & fold & the & paper & CONN & tree & ACC \\
draw
\end{tabular}
"I reached for a paper, folded it and drew a tree [on it]."

\section*{10 Mwanele Challenge}

\author{
by Miacomet a.k.a. u/roipoiboy
}

\section*{Doesn't get more Mwane than drinking tea on an island}

For the Segments Issue \#4 Challenge, we were tasked with translating the following passage, which \(u / L y s i m a c h i a k i s ~ a d a p t e d ~ f r o m ~ u / D e d a l v s: ~\)
'An old man lived alone with his dog on a small, rocky island. They lived in a wooden hut covered in moss. The sky was always gray and it rained often. The old man had gray hair and a thick, wiry beard. The dog was big with a long, brown coat.

Each morning, the old man drank a bitter tea and shared cold leftovers with his dog. In the afternoon, he walked to the shore to catch some fish. The dog chased away seagulls that wanted to steal the tasty fish. The old man then chopped firewood, and the dog sat by his side, guarding the fish. In the evening, the man salted and cooked the fish, and ate them with the dog. They slept by the warm fire to keep away the bitter cold.

His life was simple, but so long as he had his dog, the old man was happy.'
Here's the passage translated into Mwanele. I didn't change it much, since the idea of a guy on an island eating fish with his dog meshes pretty tightly with the Mwane setting.

Fek lijo keselo lusi xiti gawope gepwago. Ke xiti kasape gegobi litaḷewe e lumo. Eka oley fune, ŋe eka dol ṇolak. Bidewe fek lijo i gwoḷu, ŋe jok i ṣaṣo xo sat. Bidelawe lusi te i owown xo goba.

Fek lijo wamwu ṭaṭamek ŋolu geno, be kwun inete ṭili ki lusi. Eṇomeŋi ke xasija ṇijelotobwo. Lusi lot subelak xet likwi taxef̣alakwuwe bwo geṭok. Fek lijo sijak lo gobi pilem ṇiṣukwu. Lusi lepwu ke llewe bwo. Fek kwu doley ṭok gapo bebwo, be kese lusi im jo. Ejin ke lepwu ṣuko ola ṇitaxepote ṭiliḍa xiki.

Enopwe xe fek i mikwa, be mwat takesewe lusi eḍaŋwo.
Now I'll break it down with some glosses and commentary on the translations, with a focus
on the word choice and constructions used, as opposed to the grammar. This is the Lexicon issue after all.

\section*{(1) Fek lijo keselo lusi xiti gawope gepwago.}
fek lijo kese -lo lusi xiti gawo - pe ge= pwago
man old accompany-IPFV dog be.in island-DIM ORN=rock
"An old man lived along with his dog on a small rocky island."

So in the first sentence I hit a hitch: Mwanele doesn't really have a word for 'to live.' There are words for being alive (versus being dead), for doing daily activities, and for spending your life a certain way, but not a specific word for living in a place. I had a serial verb construction (SVC) kese xiti 'accompany be.in' meaning 'to cohabitate,' so I split that up into components to describe the man living with his dog.

I translated 'rocky' using the ornative clitic ge, which marks modifiers that indicate composition, ingredients, decoration, or features of the head. Maybe the island is composed of rocks, or maybe it's just adorned with them.

\section*{(2) Ke xiti kasape gegobi litaḷewe e lumo.}
\begin{tabular}{lllccll} 
ke & xiti & kasa -pe & ge= gobi & li- ta-lewe & e & lumo \\
3 & be.in & house-DIM & ORN \(=\) wood & REL-PSV-cover & ERG & moss \\
"They lived in a wooden hut covered in moss." & &
\end{tabular}

I translated 'hut' with the diminutive of 'house' and then used the ornative again with gegobi. I didn't have a word for moss, so I coined one which covers moss, lichen, thin coatings of algae on surfaces like docks, and the coating of your tongue. The last one's a colexification from Chinese that I thought was kind of fun.

\section*{(3) Eka oley fune, ye eka dol ṇolak.}
\[
\begin{array}{rlllll}
\mathrm{e}-\mathrm{ka} & =\text { olen } & \text { fune } & \text { ye } & \mathrm{e}-\mathrm{ka} & =\mathrm{dol} \\
\text { nolak } \\
\text { APV-do.weather } & =\text { always } & \text { clouds } & \mathrm{DS} & \text { APV-do.weather }=o f t e n & \text { rain }
\end{array}
\]

The verb eka is used as a light verb with all sorts of weather words. Instead of saying the sky was gray, I said there was fune, which refers to smoke, steam, and fog, but also to the sort of cloud that blankets the sky completely. It contrasts with bwogom, which refers to the sort of puffy cumulus clouds you might see over some idyllic countryside. If it eka bwogom, a Mwane person would probably say it's still a nice day out. If it eka fune on the other hand...not so much.

The words 'always' and 'often' are rendered here as clitics on the verb. Mwanele has a fairly large number of adverbial clitics that add discourse information, time and place, and speaker attitude.

\section*{(4) Bidewe fek lijo i gwoḷu, ye jok i ṣaṣo xo sat.}
\begin{tabular}{lllllllllll} 
bide \(=\) we & fek & lijo & i & gwoḷu & je & jok & i & ṣaṣo & xo & sat \\
hair \(=\) LNK & man & old & COP & gray & DS & beard & COP & dense & and & wiry
\end{tabular}
"The old man had gray hair and a thick, wiry beard."

It felt odd to say 'had hair' or 'had a beard' here, so I reworded it here. Gwoḷu is a basic color term, ṣaṣo also refers to dense brush, tightly woven fabric, and complicated situations, and sat refers to the texture of thicker fibers.

The two 'and's used here are different: ye joins two complete clauses with different subjects. In English, 'the old man' is the subject of both, but the way I rendered it in Mwanele, 'the old man's hair' is the subject of the first and 'his beard' is the subject of the second. Xo is used to join two noun phrases or adjectives. There's also a third 'and' you'll see later, be, which joins two clauses with the same subject. I gloss ye and be as DS and ss for 'different subject' and 'same subject,' respectively.

Fun fact: bide is the first Mwanele word I ever added to my dictionary! I coined it on Day 2 of Lexember 2018 and forgot to add the words from Day 1 until later.

\section*{(5) Bidelawe lusi te i owowu xo goba.}
\begin{tabular}{llllllll} 
bidela \(=\) we & lusi & te & i & owowu & xo & goba \\
coat & \(=\) LNK & dog & big & cOP & long & and & brown
\end{tabular}
"The big dog's coat was long and brown."

Bidela comes from a collective form of bide. I reworked it to have a different subject, same as with the last sentence.

\section*{(6) Fek lijo wamwu țaṭamek yolu geno, be kwun iŋete ṭili ki lusi.}
fek lijo wamwu taṭamek yolu geno
man old drink every.morning tea wide
\[
\begin{array}{llllll}
\text { be } & \text { kwu-n } & \text { iŋete } & \text { țili } & \text { ki } & \text { lusi } \\
\text { SS } & \text { VEN-give } & \text { leftover } & \text { cold } & \text { ORG } & \text { dog }
\end{array}
\]
"Each morning, the old man drank a bitter tea and shared cold leftovers with his dog."

Ah tea vocab... Mwanele has three basic consumption verbs: im for solid things, wamwu for hot liquidy or soupy things and for smoking, and jey for cold liquidy things. I interpreted 'bitter tea' as a very strong cup, which I translated as yolu geno 'wide tea.' In Mwanele, strong flavors are thick or wide and weak flavors are thin or narrow. If the tea is bitter not because it's strong but because it's made from some gnarly medicinal herbs, then it would be yolu afu instead, using the literal word for a bitter or astringent flavor.

The word tamek refers to the time from 6 AM to 8 AM. Reduplicating the first syllable of a time noun gives an adverb meaning 'every X ,' so tatamek is 'every morning (between 6 AM and 8 AM).'

\section*{(7) Eṇomeyi ke xasija ṇijelotobwo.}
\[
\begin{aligned}
& \mathrm{e}-\quad \text { no-meni }=\mathrm{ke} \quad \text { xasija } \quad \text { ṇi- } \quad \mathrm{e} \text {-lotobwo } \\
& \text { APV- ASEA- walk }=3 \quad \text { afternoon } \\
& \text { PRP-APV-catch.fish }
\end{aligned}
\]

Mwaneḷe was made for this sentence. There's a prefix no- marking motion away from the land or towards the water, so enomeni ke means 'he walked to the shore.' Then there's a verb lotobwo meaning 'to catch fish, to fish for s.t.' With the antipassive voice and a purpose adverbial marker, you can get ṇijelotobwo '(in order) to catch some fish.' Just the right morphology for this sentence.

\section*{(8) Lusi lot subelak xet likwi taxefalakwuwe bwo geṭok.}
\begin{tabular}{llllllll} 
lusi lot & lobelak & xet & li-kwi & ta- & xe-falakwu \(=\) we & bwo & ge= tok \\
dog & hunt & seagull away & REL-want & C-AND-steal \(=\) LNK & fish & ORN= salt \\
"The dog chased away seagulls that wanted to steal the tasty fish."
\end{tabular}

The verb lot is pretty general and can mean 'search, look for, find, hunt, chase' and other things in that vein, but with the result complement xet 'away' it means 'chased away.'

Since salt enhances flavor, delicious savory things are said to be geṭok 'with salt,' even when they aren't literally salted.

\section*{(9) Fek lijo sijak lo gobi pilem ṇiṣukwu.}
fek lijo sijak=lo gobi pilem ṇi-ṣukwu
man old cut =so wood split PRP-burn
"The old man then chopped firewood."

The verb sijak 'cut' refers to cutting into something, but not necessarily to cutting it apart. If you want an expression that definitely entails cutting something apart, you can add a result complement, most often pot 'to remove' if you're cutting a part off of a whole, paṇifa 'to halve' if you're cutting something in two, or pilem 'to split' otherwise.

Mwaneḷe doesn't have a specific word for 'firewood' and doesn't tend to like forming compounds indicating the purpose of a noun, so I used another purpose adverbial here ṇisukwu 'to burn.'

\section*{(10) Lusi lepwu ke lewe bwo.}
lusi lepwu =ke lewe bwo
dog be.next.to \(=3\) protect fish
"The dog sat by his side, guarding the fish."

Nothing to say for this one really.
(11) Fek kwu doley țok gapo bebwo, be kese lusi im jo.
\begin{tabular}{lllllllll} 
fek & kwu & dolen & tok & gapo & bebwo & be & kese & lusi \\
im \(=\) jo \\
man & use & evening & salt & cook & fish & ss & accompany & dog \\
eat \(=\) DIS
\end{tabular}
"In the evening, the man salted and cooked the fish, and ate it with the dog."

I rendered 'salted and cooked the fish' as an SVC, kwu țok gapo bebwo 'use salt cook fish.' The time adverb comes after the first verb, which kinda breaks things up. Here I picked the word bebwo, which refers to fish meat rather than whole fish or fish as an animal.
(12) Ejin ke lepwu ṣuko ola ṇitaxepote ṭiliḍa xiki.
\[
\begin{array}{clllllll}
\mathrm{e}-\mathrm{in} & =\mathrm{ke} & \text { lepwu } & \text { ṣuko ola ni- ta- xe-pot }=\text { we ṭiliḍa } & \text { xiki } \\
\text { APV-sleep } & =3 & \text { be.next.to } & \text { fire } & \text { warm } & \text { PRP-PSV-AND-remove } & =\mathrm{LNK} & \text { coldness }
\end{array} \text { sharp }
\] "They slept by the warm fire to keep away the bitter cold."

SVCs, a purpose clause...not much new here either. A biting cold is xiki 'sharp' rather than bitter.
(13) Enopwe xe fek i mikwa, be mwat takesewe lusi eḍaŋwo.
\[
\begin{array}{rlllll}
\text { e-nopwe }=\mathrm{xe} & \text { fek } & \text { i } & \text { mikwa } & \\
\text { APV-progress }=\text { CONC } & \text { man } & \text { COP } & \text { simple } & \\
\text { be mwat } & \text { ta-kese } & =\text { we } & \text { lusi } & \text { e-dapwo } \\
\text { SS depend.on } & \text { C-accompany } & =\text { LNK } & \text { dog } & \text { APV-be.happy }
\end{array}
\]
"His life was simple, but so long as he had his dog, the man was happy."

Progress through life is thought of as moving downwards, so you use the verb enopwe 'to move down' for it. The adjective mikwa refers to low-lying or level topography as well as the simple, undecorated, unadorned, or plain versions of things.

The first clause has a clitic xe that I gloss as CONC for 'concessive.' It's used in statements that the speaker admits are in contrast to some other thing they're stating. A lot of the time, corresponding phrases in English will use 'may,' e.g. 'His life may be simple, but...' Mwanele doesn't really have a word that translates as 'but,' but one way to express the same sort of contrast is to use xe in the first of two clauses linked with ye or be.

A lot of emotions are lexicalized as verbs in Mwaneḷe, so you see eḍaywo 'to be happy, to celebrate, to enjoy' here.

Øe ejoti ole! And that's all! I'm happy to celebrate Mwanele's third birthday with a joyous Lexember.

\section*{11}

\section*{T＇addu Yal fi§ure} A Pardang Short Story

\author{
by／u／tryddle
}

\begin{abstract}
In the following article \({ }^{1}\) I will present the Pardang narrative T＇addu sal ficure with glosses and annotations．The text itself is a translation of the story provided by the fourth Segments issue under the direction of \(u\)／roipoiboy，\(u /\) Lysimachiakis and \(u\)／Slorany．Af－ ter presenting the bare text in comparison with the English equivalent，I will present a sentence－by－sentence analysis of the clauses＇morphosyntactic structures，accompanied by some notes that might be interesting．At last，I will provide a table of demonstra－ tives／determiners and the sound inventory of the Pardang language in appendices A and B．If you have any questions，PM me on Discord at tryddle\＃ 9377 or on reddit at u／tryddle．
\end{abstract}

\section*{Bare Text}

T＇addu ？asen yakka mi ？aay 乌al fiYure，ehu－ ehu ni？fo daŋ e hay p＇aa iwu．Ibu－ibu Paxayaa e ？ahołko dot＇a fo daך．Al－t＇u \({ }^{w}\) mi dottu Rak \({ }^{w}\) o e af－fuli mi dottu ？ata．乌a day ep＇a ？akwo \(^{w}\) i？yattu ？aweYiin e yakka \({ }^{\eta m}\) gbabulu－dalubu Rałay mi Rała．Đuy Raroŋwoo bikw mi Rała， erruy e ba？mi ？ador．
Wol le day yakka p＇ir al－ayya Rafa．．？um u ifatta ？apuy af－fi̧u nat．Łut le day yakka p＇ir i am－mu Radurk＇u u dow \(x^{w} a \eta\) ，e duy yakka ？ała i ？axºbbo mu yuk riŋ ？aSar urut \(x^{w} a \eta\) nat，yum lah！E daŋ yakka t＇eri－t＇ari ？asa？ ？asat，？um duy yakka 乌alat e ？anu nat，？um

An old man lived alone with his dog on a small，rocky island．They lived in a wooden hut covered in moss．The sky was always gray and it rained often．The old man had gray hair and a thick，wiry beard．The dog was big with a long，brown coat．

Each morning，the old man drank a bitter tea and shared cold leftovers with his dog． In the afternoon，he walked to the shore to catch some fish．The dog chased away seag－ ulls that wanted to steal the tasty fish．The old man then chopped firewood，and the dog sat by his side，guarding the fish．In

\footnotetext{
\({ }^{1}\) I＇d primarily like to thank the Segments team for providing such a great opportunity for conlangers to present their work．I also thank akam chinjir for creating the baarux and baabbrevs \(\mathrm{ET}_{\mathrm{E}} \mathrm{X}\) packages，which were essential to the formatting of this article．
}
 e Rakampa at-tamad, e Radi af-fifu e da3at, \(e\) da an day betteya 乌al ma?atarda \(u\) ta \(i\) ?ok \({ }^{w}\) oon.
Al-t’addu ?asen ay mi ?ade§e e?um §al fi§ur mi Rala §al wa ?axe? hay.
the evening, the man salted and cooked the fish, and ate them with the dog. They slept by the warm fire to keep away the bitter cold.
His life was simple, but so long as he had his dog, the old man was happy.

\section*{Annotated Gloss}
\begin{tabular}{lllllllllll} 
(1) & t'addu & Pa- & sen & yakka & mi & Pa- & ay & Cal & fi¢u & \(-\mathbf{r}\) \\
man & 3 & old & ERG & GENR & 3 & live & 3 & dog & POSSD & with
\end{tabular}
"An old man lived with his dog [...]"
- In Pardang, property concepts-or what are called 'adjectives' in European languagesare divided between nouns and verbs, meaning that some are expressed by nominal, others by verbal means. In this case, the property concept of sen 'old' is expressed by a verb in a relative clause. So-called adjectival verbs may be used for both attributive and predicative constructions, whereas adjectival nouns require special morphology to appear in attributive contexts.
- The verb ay 'to live' is a fluid verb, meaning that it can either take yakka ERG, or not, depending on the saliency of the subject. Without the ergative marker, the meaning of the verb changes to 'to be alive', which contrasts with the active form, whose meaning is 'to live swh.'
- Pardang distinguishes alienable and inalienable possession. In this case, alienable possession is present: the marker -r attaches to the possessed noun, which is preceded by its possessor.
(2) ehu ~ehu ni? fo day
land~DIM on EXIST VIS.UNSPF
"[...] (they were) on an island [...]"
- The diminutive of ehu 'land', which is formed by full reduplication, either means 'small island' or 'islet', or refers to any defined small land area.
- The word ni? refers to the scalp or the top of the head when used as a noun; as a postposition, as in this case, it means 'lying flat on top of sth.', but can also refer to objects that are located on the ground.
- fo can only be used for existential constructions that are combined with an adpositional oblique. For bare existential clauses (e.g. "There is a cat."), the verb ła 'to exist' is used.
- In narratives, the unspecified visible and non-visible demonstratives may also be used to indicate the pragmatic distance of anaphora. \({ }^{2}\) In that case, a visible demonstrative marks a pragmatically prominent referent, whereas a non-visible demonstrative marks a less prominent one. In sentence 2 day refers to both the man and the dog, as number is not distinguished on demonstratives.
(3) e hay p'aa iwu
and little.one bladder spicy.one
"[...] and it was small and harsh."

\footnotetext{
\({ }^{2}\) Cf. Appendix A for a full table of Pardang demonstratives and determiners.
}
- Equative predicates are constructed by simple juxtaposition. In this example, the copula subject is left out twice, once for the first equative construction [ \(\emptyset_{\mathrm{CS}}{ }^{3}\) hay CC ] and then a second time for the other, more complex construction [ \(\emptyset_{C S}\left[\mathbf{p} \mathbf{a a}_{C S} \mathbf{i w} \mathbf{u}_{\mathrm{CC}}\right.\) \(]_{\mathrm{cc}}\) ]. This latter construction could be translated literally as "[The island] is a bladder which is spicy.", or, more naturally, "It is a spicy bladder."
- In this clause, a mechanism can be observed which is present in numerous Pardang narratives: personification. The island is given human attributes such as hay 'little'-a property concept which is usually used for humans or animals-and p'aa iwu 'angry'. Furthermore, emotions are expressed by stating the physical state of the bladder, as it is seen as the centre of all emotional processes. That way, those two property concepts refer to the size and the inhospitableness of the island.
 house \(\sim\) DIM 3 wood REL VRBLZ and 3 be.covered.in.moss inside.of EXIST day
VIS.UNSPF
"They were in a hut that was made of wood and covered in moss."
- \&ot'a also means 'heart'. In Pardang, all spatial relations are encoded through relational nouns like this one.
- To derive material-denoting property concepts from nouns, the relativizer -ya is used. This process yields an adjectival noun that can be used predicatively. To use it as an attribute, like in this case, the general verbalizer, which lengthens the last vowel of the stem, is employed. Finally, for the result to be grammatical, a person marker needs to be prefixed, since this construction is a relative clause (cf. 1).
- As the alert reader might have noticed, this clause's structure is equivalent to the one present in sentence 2. It should be noted that parallelism is a common rhetoric device found in Pardang narratives.
 DEF sky GENR always 3 be.gray and DEF rain GENR often 3 exist "The sky was always gray and rain often existed."
- dottu usually means 'often', but has been used hyperbolically in this sentence, resulting in the meaning 'always'.
- Nouns referring to weather phenomena must always take the definite article.
- Color terms like \(\mathbf{k}^{\mathbf{w}} \mathbf{o}\) 'to be gray' are usually encoded by adjectival verbs.
(6)


"His (the man's) gray hair and [his] beard which is dense and says \({ }^{\eta m} g b a b u l u-d a l u b u\) existed."

\footnotetext{
\({ }^{3}\) In this notation, \(\mathrm{CS}=\) copula subject and \(\mathrm{CC}=\) copula complement.
}
- Sa may be used to denote that the referents of the pragmatic deixis markers have been reassigned. The new assignment of referents can solely be deduced by context, and in this instance, while at the beginning of the narrative day refers to both the dog and his owner, the reassignment results in day referring to the owner. This is evident, since yattu 'beard' is only used for humans, and not for animal fur.
- The syntactic structure of this clause is as follows: [ Ca day [ep'a Pak \(\left.^{\mathrm{w}}{ }^{\mathbf{o}}\right]_{\text {PossD1 }}\) i? [ yattu [ Pawefiin \(]_{\text {REL } 1}\) e [ \(\varnothing\) yakka \({ }^{\text {m }}\) gbabulu-dalubu Pałay \(\left.\left.]_{\text {REL } 2}\right]_{\text {POSSD2 }}\right]_{\text {NP }}\) mi Pała
- iP is used as a phrasal conjunction; in this case, it connects the possessees 'gray hair' and 'thick, wiry beard' (ep'a Rak \(^{\mathrm{w}}\) o and yattu ?awefiin e yakka \({ }^{\mathrm{nm}} \mathbf{g b a b u l u - d a l u b u}\) ?ałay respectively). By doing that, the possessor 〔a day does not have to be stated again.
- In this clause, only inalienable possession can be observed, since both ep'a and yattu are referring to body parts. In inalienable possessive constructions, the possessor is simply juxtaposed to the possessee.
- e is used as a clausal conjunction; in this case, it connects the relative clauses ?awe§iin and yakka \({ }^{\mathrm{pm}} \mathbf{g b a b u l u}\)-dalubu Rałay. Since the \(S_{O}\) of the first relative clause and the \(\mathrm{S}_{\mathrm{A}}\) of the second relative clause are co-referential, the subject yattu is not explicitly stated again.
(7) \begin{tabular}{lllllll|lll} 
duy & Pa- & ron \(^{w}\) oo & bik \(^{w}\) & mi & Pa- & ła, & erruy & e & ba? \\
NVIS.UNSPF & 3 & big:VRBLZ & fur & GENR & 3 & exist & brown.one & and & \(4 . S_{o}\)
\end{tabular} \(\begin{array}{lll}\text { mi } & \text { ?a- } & \text { dor } \\ \text { GENR } & 3 & \text { be.long }\end{array}\)
"Its-it was big-fur existed, [and it was a] brown one, it was long."
- \(\mathbf{b i k}^{\mathbf{w}}\) refers to the fur or skin of animals, whether it be in the context of hunting or not. It may also be used as a derogatory noun referring to pubic hair.
- roy \({ }^{\mathrm{w}} \mathbf{o}\) is an adjectival noun and thus requires the verbalizer to appear in attributive position.
- ba? is the fourth person \(\mathrm{O} / \mathrm{S}_{\mathrm{O}}\), and since dor is an adjectival verb and requires an \(\mathrm{S}_{\mathrm{O}}\) subject, this form of the pronoun is used. The correspondent \(\mathrm{A} / \mathrm{S}_{\mathrm{A}}\) form is Pa. The fourth person pronoun is rarely employed, and only used to disambiguate between referents. In this case, it refers to the dog's fur, and not to the animal itself.
(8) wol le day yakka p'ir al= ayya Pa- fa morning beneath VIS.UNSPF ERG ACT.HAB DEF ayya 3 drink
"In the morning, he used to drink ayya [...]"
- In Pardang, the time of day is always stated in combination with the postposition le 'leg, foot'.
- The active habitual marker p'ir is used for encoding that an event has been carried out by a subject multiple times or habitually. It focuses of the agentivity of that subject and is not used with natural cycles or habitual events that occur unvolitionally.
- ayya refers to a special kind of bitter herbal tea which, according to the Pardang, has healing abilities. It is often used in rituals but can be drunk in any social context. The word ayya is probably related to the verb ay 'to be alive, to breathe,' since the Pardang attribute sentient qualities to the beverage.
\begin{tabular}{llllllll} 
(9) & Pum & \(\mathbf{u}\) & iCatta & Ra- & puy & af \(=\) & fi§u \\
while & OBL & leftovers & 3 & share.with & DEF & dog & BG
\end{tabular}
"[...] while he shared iSatta leftovers with his dog."
- ifatta refers to a special kind of savoury pancake that is usually eaten with hot stew for dinner. It is also often consumed with sweet condiments on it the next day. Furthermore the noun may refer to any kind of cold leftovers, as it does in this example.
- The conjunction ?um 'while' introduces a dependent clause; thus, the constituent order changes to SVO (instead of SOV in independent clauses). Note that in this clause, the subject was omitted since it is co-referential with the subject in the preceding clause. Moreover, a conjunction like ?um belongs to either the set I or set II class, which influences the choice of person markers on the dependent verb. But since the paradigms of set I and set II verbal markers exhibit widespread syncretism, in 9 we don't see any surface-level change.
- The verb puy 'to share with' takes the object shared as an oblique argument, marked by the case marker \(\mathbf{u}\), while the person with whom it is shared is represented as direct object. The coding frame of this verb therefore varies greatly from that in English. \(\mathbf{u}\) is also used to mark the underlying O in applicative constructions, or to mark the object in frustrative constructions.
- The background marker nał appears in Pardang clause chains and encodes pragmatic prominence. It contrasts with the foreground marker \(= \pm\), which is used whenever a clause is deemed as describing a core event of the narrative. In this example, the sharing of the leftovers is not considered a core element of the narrative, and is therefore marked by nat.
- Another property of clause chains in Pardang is that only the first clause in each chain is marked for aspect. All subsequent clauses are left unmarked. Furthermore, only the first clause in each chain may take a time adverbial. To encode the temporal relations between two clauses, conjunctions like e, p'a? or ?um are used.
(10) tut le day yakka p'ir i am = mu Rał- urk'u u later beneath VIS.UNSPF ERG ACT.HAB go DEF water 3 walk OBL dow \(\mathrm{x}^{\mathrm{w}}\) ay
catch fish
"After that, he used to walk to the shore to catch some fish."
- In clauses describing events of motion, the goal of the motion is always marked by the bare form of the verb i 'to go'.
- Purposive clauses are formed by attaching a uninflected dependent clause (hence the VO constituent order) to the oblique case marker \(\mathbf{u}\).
(11) [...] e duy yakka 3 a - \(\ddagger \mathrm{a}\) i \(3 \mathrm{a}-\mathrm{x}^{\text {wobbo mu }}\) yuk riy \(3 \mathrm{a}-\) and NVIS.UNSPF ERG 3 do go 3 fly water bird PL 3 \begin{tabular}{llllll|ll} 
Car & \(\mathbf{u}-\) & \(\mathbf{r}=\) & \(\mathbf{u t}\) & \(\mathbf{x}^{\mathrm{w}}\) ay & nat, & yum & lah \\
desire & OBL & EP & steal & fish & BG & tasty.one & LAH
\end{tabular}
"And the dog made the water birds which desired to steal the fish fly away, it [the fish] must have been tasty!"
- The verb ła 'to do' may be used as a causativizer, similar to English 'make'.
- In isolation, the bare form of \(\mathbf{i}\) 'to go' encodes motion away from the deictic center.
- The verb far 'to desire' requires a purposive clause introduced by \(\mathbf{u}\). In this example, the verb ut 'to steal' is encliticized to the case marker, with an epenthetic element being inserted between the two parts.
- lah is a discourse particle encoding the speaker's persistence on the truthfulness of a seemingly doubtful assertion, but can also be used for epistemic modalities.

\section*{(12)}
\begin{tabular}{llllllll} 
e & day & yakka & t'eri-t'ari & 3a- & sa? & 3a- & sał \\
and & VIS.UNSPF & ERG & ID:distributed_performance & 3 & chop.wood & 3 & do.FG
\end{tabular}
"And he chopped wood like t'eri-t'ari, here and there [...]"
- The ideophone t'eri-t'ari is called distributed performance in the gloss, but its meaning is more appropriately approximated using the English phrase 'doing a little here and there, in a scattered manner'. It is often used when talking about activities such as plucking berries or chopping wood.
- Some commonly used verbs-like da 'to do'-have dedicated suppletive forms for their role in clause chaining.
(13) Tum duy yakka falat \(e\) Ra- nu nad, ?um Ra- fifuu \(a^{w}=\) while NVIS.UNSPF ERG 3.M with 3 sit BG | while 3 guard DEF
\[
\begin{array}{lll}
\mathrm{x}^{\mathrm{w}} \text { ay } & \text { riy } & \text { nał } \\
\text { fish } & \text { PL } & \text { BG }
\end{array}
\]
"[...] while it sat with him, while [it] guarded the fish."
- In this narrative, the chopping of the wood is considered to be the foreground activity, whereas the dog guarding the fish is seen as something that happens in the background. Therefore, in 13, nat is used.
- The verb fifuu 'to guard' is derived from the word for 'dog', fi§u, and specifically refers to the protection dogs provide to the property of their owners.
(14) e- p’a? ?a- ła \(\quad\) a- rup'uu e \(\quad\) ?a- kampa at \(=\) tam \(=\mathbf{a}-4\) and then 3 do 3 salt:VRBLZ and 3 cook DEF fish EP FG "And then, later, he made the fish salty and cooked it [...]"
- To denote a larger temporal distance between two dependent clauses, the conjunction p'a? can be suffixed onto e 'and'.
- The verbalizer mentioned above can also be used to derive verbs from non-adjectival nouns to denote 'having the quality of \(X\) '.
- While \(\mathbf{x}^{\mathrm{w}}\) ay refers to uncooked, freshly caught fish, tam refers to any type of prepared fish, whether it be salted, cooked or smoked.
\(\begin{array}{llllllllll}\text { (15) } & \mathbf{e} & \text { Ra- } & \text { di } & \mathbf{a f}= & \text { fi¢u } & \mathbf{e} & \text { da? } & =\mathbf{a} & -\mathbf{-} \\ & \text { and } & 3 & \text { eat } & \text { DEF } & \text { dog } & \text { with } & \text { AUDIT.UNSPF } & \text { EP } & \text { FG }\end{array}\)
"And he ate them with the dog."
- The auditory unspecified demonstrative may also be used in the same ways as the other demonstratives in the narrative. In this example, it refers to the cooked fish.
(16) \(\begin{array}{llllllllllll}\text { e } & \text { da } & \text { an } \\ \text { day } & \text { betteya } & \text { fal } & \text { ma- } & \text { Pa- } & \text { t- } & \text { arda } & \mathbf{u} & \text { ła } & \mathbf{i}\end{array}\)

2ok \({ }^{w}\) oon
coldness:INTENS
"And thus it was by the fireplace that they slept, to make the coldness go away."
- The particle an introduces an object fronting construction, which results in an OSV constituent order and new focus: the object. This transformation causes the verb to take the prefix ma- A.PREC which signals that the subject fal immediately precedes the verb. Moreover, the fronted object is obligatorily marked by the determiner day, which is homophonous to the demonstratives used above.
- In this clause, by incorporating an adposition into the verb complex, the underlying oblique was promoted to O . Thus the only way to focus an oblique is by using this kind of applicative construction.
- The general verbalizer also has a secondary function, which is intensifying nouns that describe weather phenomena.
(17)
\begin{tabular}{llllllllllll} 
al \(=\) & t'addu & Pa- & sen & ay & mi & Pa- & defe & e- & ?um & Yal & fifu \\
DEF & man & 3 & old & life & GENR & 3 & be.simple & and & as.long.as & 3 & dog
\end{tabular}
\begin{tabular}{lllllllll}
\(-\mathbf{r}\) & mi & Pa- & la & Cal & wa & Ra- & xe? & hay \\
POSSD & GENR & 3 & exist & 3 & DECL & 3 & be.happy & EMOT
\end{tabular}
"The old man's life was simple, and as long as his dog existed, he was happy-and still is."
- In Pardang, at the and of a narrative, after only being referred to by demonstrative or pronouns, the protagonists of the story are at last mentioned as entire noun phrases.
- With the meaning 'as long as', the conjunction ?um requires its dependent clauses to be followed by an independent clause that is not marked by aspect particles. In addition, in this narrative, the last clause uses the present, since the old man is considered to be happy up until this day.
- Since the last clause is not marked for aspect, the declarative marker wa appears right after the subject Yal. In its most unmarked form it would be accompanied by the particle an, which then would appear at the very end of the clause. In this example, an is replaced by hay, a discourse particle indicating the subject's emotional involvement regarding the event.

\section*{Appendix A: Demonstratives and determiners}
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & \multicolumn{2}{|l|}{Visible} & Non-Visible & Auditory \\
\hline & Proximal & Distal & & \\
\hline near speaker & ju & yaw & luy & \\
\hline near listener & lu & law & luy & ja? \\
\hline near both & ¢u & ¢aw & & \\
\hline far away & - & ?a & ¢uy & ¢allatuddi \\
\hline unspecified & day & & duy & da? \\
\hline
\end{tabular}

Table 1: Determiner/demonstrative system \({ }^{4}\)

\section*{Appendix B: Sound inventory}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & Labial & Dental & Post-Dental & Velar & & Guttural \\
\hline Ejective & p' & t' & & k' & & \\
\hline Voiceless plosive & p & t & & k & \(\mathrm{k}^{\mathrm{w}}\) & \(?\) \\
\hline Voiced plosive & b & d & d & & & \\
\hline Prenasalized cons. & & & & \({ }^{\mathrm{pm}} \mathrm{g} \mathrm{b}^{*}\) & & \\
\hline Nasal & m & n & & \(\eta\) & \(7^{\text {w }}\) & \\
\hline Fricative & f & s & q & x & \(\mathrm{x}^{\text {w }}\) & h~¢ h \\
\hline Approximants & & ¢ & l & & & \\
\hline Glides & & & j & & w & \\
\hline
\end{tabular}

Table 2: Pardang consonant sounds \({ }^{5}\)
\begin{tabular}{l|lll} 
& Front & Central & Back \\
\hline High & i i: & & u u: \\
Mid & e e: & & o o: \\
Low & & a a: &
\end{tabular}

Table 3: Pardang vowel sounds

\footnotetext{
\({ }^{4}\) Each of these forms may be used with a head noun as determiners, or without one as demonstratives. They may also be used with third person pronouns to indicate the deictic relations of the referents.
\({ }^{5}\) The consonant marked by * appears only marginally, and I do not consider it to be phonemic due to the lack of minimal pairs.
}

\section*{12 Golden Age Aeranir}

\author{
by as Avridán
}

\section*{Sometimes bitter tea is better}

Ñavter syris saiis rvranis cazis e vester marcastamo tam. Ivncervnt spadis palicis perlameis. Solla ignote camnervr illa ivs fvra. Vestra mannaqve camnera cavo cìdivmnvs griSis. Marcastama odervr casta ñahenta vindera.

Vester avstra tin altevn hiantvs eci casianvn nestros amatvn zaltvn cvr macastamo. Nespia vas coedae vomen corviendo travantvs. Vavenae ivre qvrirvntae torṇt marcastamvs. Vsta cidient parillae cvr marcastamo colis svlento ivre avhento. Casia maritvs pasvs eci cvr. Cvnṇt am parillis formis calman torendo.

Saie tam ivncvmnvs, marcastami mentis, ivrerur vester.

\section*{Preface}

This chapter presents the Golden Age Aeranir (henceforth simply Aeranir) translation of David J. Peterson's conlang listserv short text. Aeranir is an a priori naturalistic artlang designed as part of my Avríd consetting. It is a highly fusional, inflecting language with pragmatically marked word order, dependant marking, accusative alignment, and ergative personal indexing on the verb (a combination unattested in natural language).

Two romanisation schemes are used in this translation. The first, the simple romanisation is used for the full text given above. The second, the detailed romanisation, is used for the interlinear gloss presented below. The latter marks vowel length and distinguishes \(\mathbf{v}\) vs \(\mathbf{u}\). Below each line of source text, narrow IPA transcription is given, for the benefit of those few readers not familiar with Aeranir phonetics.

Because of this edition's theme, the notes given below the glosses treat primarily lexical issues. Where new words have been coined for this translation, their etymologies have been provided. Surprisingly, comparatively few new terms were required for this translation, a small testament to the development of the Aeranir lexicon, although perhaps also a disappointment to the Aeranir etymology fans out there. Words coined during Lexember 2021
are accompanied by an identifier beginning LMR21. The next two numbers signify the day in Lexember the word was created, and the final letter indicates the number of the word coined that day; thus LMR2114C designates the third word coined on 14th day of Lexember 2021.

\section*{Vesterqve marcastamvs vste-the old man and his dog}
(1) Ñauter sȳrīs saiīs rūrānīs cāzis ē vester mārcastamō tam.
['رô:trer 'sỵ̂rrivs 'sájji's riu'râani's 'kâ:tsis e 'vestrter marrِ'kástamo' tãm]
\begin{tabular}{lccll} 
ñauter & sȳr-īs & sai-īs & rūrān-īs & cāz-is \\
long.ADV & island-LOC.SG & small-TEM.LOC.sG & rocky-TEM.LOC.SG & fall-3sG.TEM
\end{tabular}
\begin{tabular}{lccc}
\(\overline{\mathrm{e}}\) & vester- \(\varnothing\) & mārcastam-ō & tam \\
ENC & elder-NOM.SG & dog-DAT.SG & only
\end{tabular}
"An old man lived alone with his dog on a small, rocky island."
- The irregular adverbial form of the adjective ñavis 'long' (corresponding stative verb ñahēsse 'to be long'), ñauter (attested as Old Aeranir ÑAVITER) is commonly used analogously to 'long ago' or 'a long time ago' at the beginning of a narrative. Although such an introductory phrase is absent in the original text, it is required by Aeranir convention.
- Aeranir has three grammatical genders-temporary, cyclical, and eternal-but Aeran society had no social concept of sex-based gender. Thus, what is used here to translate 'old man' is actually a gender neutral term vester 'elder.'
- The first word coined for this translation, rūrānus 'rocky' comes to us via rūs 'rock' (GEN.SG rūris, Old Aeranir rovos, Roveses) plus the suffix -ānus, which creates adjectives of characterisation from noun stems, i.e. 'characterised by rocks.'
- The forms ñavis, ñauter, and rūrānus serve as good examples of the role analogy and morphology play in shaping lexical items. The latter two demonstrate the regular sound change of Old Aeranir [awV owV] \({ }^{1}\) to [aw ow] (and subsequently [ \(\mathrm{m}: \mathrm{u}\) :]) whereas the first does not. This has to do with stem creation. All nominals \({ }^{2}\) must have a (mostly) unchanging minimum monosyllabic \({ }^{3}\) stem to which inflectional endings attach. Because ÑAVIS is parsed as |ÑAV|IS with the first and second vowel divided between the stem and ending it is resistant to the sound change. Compare this with |ROVES|ES where the relevant sequence falls entirely within the stem, and is thus affected by the sound change. The adverb ñauter, being uninflecting, seems to be exempt from this kind of preservation.
(2) Juncērunt spadīs pālicīs perlameīs.
[jũq'kê:rِũntr 'spádi'sِ 'pâ:liki's peŕ'łáme.i'ş]
\begin{tabular}{ccc} 
junc- èrunt & spad-īs & pālic- īs \\
attach-MID.3PL & hut-LOC.SG & wooden-CYC.LOC.SG
\end{tabular}
per- lame-īs
EMPH-moss covered-CYC.LOC.SG
"They lived in a wooden hut covered in moss."

\footnotetext{
\({ }^{1}\) Where V represents any vowel.
\({ }^{2}\) The macro-word class to which Aeranir nouns and adjectives belong.
\({ }^{3}\) There is one exception to this rule; the noun vēs, which has the stem \(\mathbf{v}\)-.
}
- The middle voice of the verb junce 'to stick, to attach' is used to stand in for the phrase juncunt ava 'connect the days,' i.e. 'to go on living,' 'to make a living,' etc..
- The preposition per 'through' is used very productively to produce adjectives that signify extreme degree, thus lameus 'mossy' LMR214D \(\rightarrow\) perlameus 'completely covered in moss.' This particular formation is clearly post-classical, and somewhat ad hoc, as [rl] does not undergo assimilation to geminate [11], and the medial vowel [a] is not reduced to [ I\(]\).
(3) Sollā ignōtē camnērur īlla jūs fura.

\begin{tabular}{lcccll} 
soll-ā & ignōt-ē & camn-ērur & îll-a & jūs & fur-a \\
sky-ABL.SG & unending-ADV & grey-3sG.ETE & rain-NOM.SG & good.ADV & fall-3sG.CYC
\end{tabular}
"The sky was always grey and it rained often."
- This sentence, as well as the following two, demonstrate the syntactic peculiarities of external topics and clausal coordination in Aeranir. Structurally speaking, an external topic, as the name implies, is external to the basic clause, and generated outside of it, as opposed to an internal topic, which is generated within the clause structure, and moved to a specifier outside of it, leaving behind a coindexed trace. External topics may be controllers, which can be paraphrased as possessors, e.g. (4), vestrā manna camnēra, lit. 'as for the elder, the hair is grey' can be rephrased as manna vestrī camnēra 'the elder's hair is grey' (although these phrases are not true transformations of one another, and are not completely equivalent).
External topics are used frequently in coordinated clauses where the topic is not available for extraction from all clauses. Where extraction is possible, i.e. where the subject is present as an argument or adjunct in both clauses, a construction like the latter part of (5) is most often used, with the internal topic followed followed by the first clause as a subordinated participle phrase, and then the second clause in its full form, with a finite verb; e.g. cāsta ñahenta vīndēra lit. 'the coat is long and brown.' The internal topic is indexed in accordance to its role in the full clause.
External topics on the other hand appear uniformly in the ablative case, regardless of their role(s) within any other clauses. Subordination via participle does not occur for any clause, however the verb of each clause is moved to final position, where it would normally be either first, second, or occasionally third in word order. Because in (3), sollun 'sky' is not properly present in the second clause, the two cannot be coordinated around an internal topic, so an external one is necessary.
- The verb camnēsse 'to be grey' LMR214F is derived from the adjective camnus 'grey' LMR214E, which comes from Proto-Iscaric *kapnom, from Proto-Maro-Ephenian *kr \({ }_{4} \mathbf{p}\) -nó-, a resultative nominal from root * \(\mathbf{k e r}_{4} \mathbf{p}\) - 'to burn, to flash,' and is a cognate with capus 'clean,' cōpun 'flatbread,' and capice 'to burn.'
- The adverbial form of jūris 'good' is used to mean 'often, frequently' with a verb in the active voice, whilst with a verb in the middle voice it conveys the notion of 'skilfully, well.'
(4) Vestrā mannaque camnēra cāvō cì \(\lambda\) umnus grīßis.
['véstrra• 'mắnnaqw \(\varepsilon\) kãm'nêra 'kâ:vo' kit'tqứmnus 'grîi:ðiṣ]
\begin{tabular}{lrrcc} 
vestr- \(\overline{\mathrm{a}}\) & mann- & a \(=\) que & camn-ēra & cāvō- \(\emptyset\) \\
elder-ABL.SG & hair - & NOM.SG \(=\) SCA & grey-3SG.CYC & jaw-NOM.SG
\end{tabular}
ci入入- umn-us grī \(\delta\)-is
polish-MID.PCP-TEM.NOM.SG dry up.PFV-3SG.TEM
"The old man had gray hair and a thick, wiry beard."
- The scalar/additive enclitic que is used to denote information which is notable or exceptional in some way, often translated as 'too,' 'also,' or 'even.' It is used here to draw attention to the fact that the elder's hair, like the sky, is grey.
- As can be seen in (4)—and (5) to follow-it is possible for a clause to have both external and internal topics. Above, vestrā is the external topic and carries over the clauses [mannaque cemnēra] and [cāvō cì \(\lambda\) umnus grīठis], whilst cāvō is an internal topic covering the clauses [cì. \(\lambda\) umnus] and [grī\&is]. Vestrā is not an argument of any of the verbs in the sentence, but cāvō is; it is the subject of both clauses pertaining to it, and is marked as such with the nominative case. We can see that it displays the subject + participle + finite verb coordination formation described above.
- The noun cāvō 'jaw' LMR214G (Proto-Iscaric *gewō) illustrates an interesting sound change in the history of Aeranir; the loss of contrastive phonation in stops. \({ }^{4}\) Voiced stops became voiceless, however they left behind and effect on stressed short vowels, causing them to break. Later, these broken vowels coalesced into pure long vowels and diphthongs; as with *gewō \(\rightarrow\) [kaewō] (attested in inscriptional in Old Aeranir CAEVO) \(\rightarrow\) [ka:vo:].
(5) Mārcastamā o \(\lambda\) ērur cāsta ñahenta vīndēra.
[marrِ'kástama' כ'thêrorur 'kǎ: \({ }^{2}\) snta na'fiźntra vĩrn'dêrra]
\begin{tabular}{clll} 
mārcastam-ā & \begin{tabular}{l} 
o \(\lambda\) - ērur \\
dog-ABL.SG \\
big-3SG.TEM
\end{tabular} & \begin{tabular}{l} 
cāst-a \\
fur-NOM.SG
\end{tabular} & \begin{tabular}{l} 
nah-ent-a \\
long-PCP-CYC.NOM.SG
\end{tabular} \\
vīnd-ēra & & & \\
red brown-3SG.CYC & & &
\end{tabular}
"The dog was big with a long, brown coat."
- The verb vīndēsse 'to be red-brown' LMR215F comes to us from the adjective vīniסus 'red-brown' LMR215E, which comes in turn from vīnus 'bloody' LMR215B, from Old Aeranir VEINOS, from Proto-Iscaric *gwoinos, from Proto-Maro-Ephenian *ǵwóyn-o-, from root *ǵweyn- 'to bleed.' Vīndēsse demonstrates the fortition of post-classical /ठ/ to [d] following a nasal. Historically, the pre-classical cluster /nð/ evolves into simple /nn/.
(6) Vester austrā tīn alteun hiantus eci cāsiānun nestrōs āmātun zaltun cur mācastamō.
 marrı'kástamo']


\footnotetext{
\({ }^{4}\) Voicing contrast was later reintroduced via loanwords and marginally in the native vocabulary by a number of sound changes.
}
\begin{tabular}{cccc} 
ām- & āt-un & zal- & t-un \\
remain- & PFV.PCP-ETE.ACC.SG & chill- & PFV.PCP-ETE.ACC.SG
\end{tabular}
```

mārcastam-ō
dog-DAT.SG

```
"Each morning, the old man drank a bitter tea and shared cold leftovers with his dog."
- The noun auster 'morning' LMR2112B comes to us via Old Aeranir AVIStEROS, from AVISOS, the source of aurōs 'west,' ultimately from au 'sun.'
- I first translated 'bitter' with the verb percinicī 'to be strong' LMR2112D, which is one of the few non-stative verbs used to describe a property concept in Aeranir. It is somewhat irregular, appearing only in the perfective aspect. It comes from per 'through,' used for intensive derivations, and cinice 'to be shut,' referring originally to something shut tight, and then to something tightly packed, before broadening to the meaning 'thick, dense, packed.' It is also used to refer to strong, earthy flavours, like that of tea. However, a problem of cultural difference caused me to change my mind. In the original text, it is fairly clear that this 'bitter tea' is supposed to be a bad thing, or at least an indicator of the old man's less than luxurious life. However, the Aerans loved bitter tea, so from an Aeran perspective, it sounds pretty sweet. So I decided to change it to 'watery,' a descriptor the Aerans would not like applied to tea. It implies that the old man has to reuse tea leaves over and over again, emphasising his poverty.
- The term cāsiānun is a substantial noun from the adjective cāsiānus 'of dusk' LMR2114C, from cāsia 'decline' LMR2114B, from cāzice 'to fall,' referring to the 'fall' (setting) of the sun.
- The noun nestror 'evening' LMR2112F is found only in the plural. This is because it originates from the phrase lȳror nestror 'evening/afternoon hours,' from the Old Aeranir adjective NESPITEROS, from nespis 'midday' LMR2112E. It originally referred to the hours between midday and sundown, but began to drift later and later into the evening.
- The verb zalice 'to cool' LMR2114A is most commonly to refer to coldness of food. It comes from the Proto-Maro-Ephenian root *ter \({ }_{3} 1\) - 'to be cold.'

\section*{(7) Nespiā vas coe \(\delta\) ae vōmen corviendō travantus.}

\begin{tabular}{ccccc} 
nesp-iā & v -as & coe \(\delta-\mathrm{ae}\) & vōmen- \(\emptyset\) & corv-iend- \(\overline{\mathrm{o}}\) \\
afternoon-LOC.PL & go-3SG.TEM & shore-DAT.SG & river-ACC.SG & hook-GER-DAT \\
trav-ant-us & & & & \\
walk-PCP-TEM.NOM.SG & & &
\end{tabular}
"In the afternoon, he walked to the shore to catch some fish."
- Here again we see nespis 'midday.' Despite the fact that nestror has shifted semantically, nespis remains more or less unchanged; it has remained more or less unchanged since Proto-Maro-Ephenian \({ }^{*} \mathbf{r}_{2}\) nésp-i-s 'afternoon.'
- The term vōmen 'river' is also used to mean 'fish.'

\section*{(8) Vavēnae jūre quriruntae torṇt mārcastamus.}

\begin{tabular}{lcr} 
vavēn-ae \(\quad\) jūr-e & qur- \(\quad\) īr- unt-ae & tor-ent \\
seagull-ACC.PL \(\quad\) good-ETE.ACC.SG & steal-DESID-PCP-CYC.ACC.PL & drive off-3PL \\
mārcastam-us & & \\
dog-NOM.SG & &
\end{tabular}
"The dog chased away seagulls that wanted to steal the tasty fish."
- The term vavēna 'seagull' is onomatopoeic, from Proto-Iscaric *gwawēna. The suffix -ēna is often used for forming the diminutive of animal terms.
- Here the adjective jūre 'good' stand alone without its head vōmen, essentially meaning 'the good ones, the tasty ones.' It is common for Aeranir to drop words which are understood through context.
(9) Ustā cīסient parillae cur mārcastamō colīs sulentō jūre auhentō.

\begin{tabular}{ccccc} 
ust-ā & cī \(\delta\)-ient & parill-ae & cur & mārcastam-ō \\
PROX-CYC.ABL.SG & cut-3PL & firewood-ACC.PL & with & \(\operatorname{dog}-\) DAT.SG
\end{tabular}
col-īs sul-ent-ō jūr-e auh-ent-ō
side-LOC.SG sit-PCP-TEM.DAT.SG good-ETE.ACC.SG see-PCP-TEM.DAT.SG
"The old man then chopped firewood, and the dog sat by his side, guarding the fish."
- No notes here, a fairly unremarkable sentence filled with unremarkable words.

\section*{(10) Cāsiā marītus pāsus eci cur.}
['kâ:și.a' ma'rِîituos 'pâ:șus 'éki kur]

- Here we see cāsia again, signifying the evening. Note that, like nespis in (7)., it appears in the locative case plural number. The locative is used frequently for expressions of time as part of a cross-linguistically common time = space metaphor. The plural here denotes repeated action; the action described here takes place again and again over multiple evenings. Contrast this to the adverbial usage of auster 'morning' in (6), which also has a multiple-event reading (here translated as 'every morning'), but with with a stronger force. The adverbial requires a reading of 'every,' or 'all,' whereas the locative plural simply implies that the action took place during some of the relevant timespans.
- The verb marīce 'to salt' is a denominative, unsurprisingly, from mare 'salt' LMR2118A, from Proto-Iscaric *mari, from Proto-Maro-Ephenian *mór \({ }_{1} \mathbf{i}\) 'saltwater, seawater.'
(11) Cunṇt am parillīs formīs cālman torendō.

\begin{tabular}{ccccc} 
cun- unt & an & parill- īs & form- īs & cālm-an \\
sleep-3PL & near & firewood-LOC.SG & warm-CYC.LOC.SG & cold-ACC.SG \\
tor- end-ō & & & \\
turn away-GER-DAT & &
\end{tabular}
"They slept by the warm fire to keep away the bitter cold."
- The term parilla, seen in (9) with the meaning 'firewood,' can also refer to a (domestic) fire itself.
(12) Saiē tam juncumnus, mārcastamī mentīs, jūrērur vester.


"His life was simple, but so long as he had his dog, the old man was happy."
- Back in (2) we saw the middle voice of junce 'to stick' used to mean 'to live,' 'to subsist.' Here, we see the phrase saiē juncesse lit. 'to live small-ly,' which translates along the lines of 'to live simply,' 'to have a simple life.'
- The particle tam appears in the second position of the phrase it modifies, thus saie tam juncumnus 'although his life was simple.'
- The locative gerund is used to signify a span or period of time, see again the time = space metaphor.
- The verb jūrēsse can be used to mean 'good,' 'tasty,' or 'happy,' deriving from a term meaning 'salty' (unrelated to mare).

\section*{Challenge} (Modern Gallaecian)

\author{
by Christian Evans
}

\section*{A translation of an adaptation of a short story}

There's no way to introduce this in a unique way since we were tasked with translating the same thing. Anyways, the target text was:
'An old man lived alone with his dog on a small, rocky island. They lived in a wooden hut covered in moss. The sky was always gray and it rained often. The old man had gray hair and a thick, wiry beard. The dog was big with a long, brown coat.

Each morning, the old man drank a bitter tea and shared cold leftovers with his dog. In the afternoon, he walked to the shore to catch some fish. The dog chased away seagulls that wanted to steal the tasty fish. The old man then chopped firewood, and the dog sat by his side, guarding the fish. In the evening, the man salted and cooked the fish, and ate them with the dog. They slept by the warm fire to keep away the bitter cold.

His life was simple, but so long as he had his dog, the old man was happy.'
Nothing about the story is out of the realm of possibility, since Modern Gallaecian is meant to be an indigenous language of Galicia in northwestern Spain. Maybe this fellow has a cabin out on the Cíes Islands where the campgrounds are in the real world? Anyways, here's the story retold in Gallaecian (note that if case isn't indicated, it's nominative; if number isn't indicated, it's singular):
'Vero sen co so suen eque so cun var eñise vique garexai bevas. En do in cabane o gureno veilede co muso bevasuz. Tas en quelo llaso endreve, eque dade llava en minque. Tas valdo lido eque barba zugai deu co'm vero sen. Tas en cun maro, valdagh eque dono.

Quave bare, em vero sen té suerbo is, eque cozas vazile urra co'n so cuñe. Ame'n darde, do'n tareito querse do deluñe rai iscos. En cun velanas xas doussuz a ozoguñe'nn iscos blasosos. Taran seno, em vero sen cureno gerrase eque'n cun ame'n so ledo sesse, anconde'nn iscos. Ame'n usero, em vero enn isco salzeise eque e coite, eque
lede'n cun esse. Ame'n teneze briso costuz do conquevuñe'nn urro cañonde in maese.
Sa vevadus simple tas, eito tara bue co'n so cun, em vero sen launo tas.'
There was definitely some weirdness with the coinages I had to make for this translation both for words and for idioms. Let's go through line by line and see if we can't sort out that weirdness.
(1) Vero sen co so suen eque so cun var eñise vique garexai bevas.


I could've used the adjective oñagh 'alone' in an adverbial construction here, but I think I like repeated use of the possessive adjective more for the sentence. If it had just been the man without any dog, Vero sen en oñagh bevas "An old man lived alone" would've been the way I'd have chosen instead. Less to do with linguistics, but it makes it feel more like the dog is on the same level with the way I've translated.

The word suen is also fun. It's a direct cognate to Irish féin 'self, own' and is derived from the Proto-Celtic pronoun *swesin, comprised of a reflexive bit (swe) and a pronoun formant (sin). When I stumbled onto it, I actually got really excited because it looks like a potential source of an attested Gaulish pronoun sosin, as well. More useful for another project of mine, but still cool.

After that, eñise 'island' is a directly related to Welsh ynys and Irish inis. It's modifiers bear soft mutation since the noun is feminine, hence vique instead of the equivalent masculine singular dative form bico and garexai instead of the equivalent carexagh. The endings of that last adjective were also new; since I've been reworking most of Modern Gallaecian to try and make it a bit more historically sound, I scrapped my old forms of the extremely common Proto-Celtic *-äkos suffix. The new sound changes have turned this common suffix into one of the more irregular ones as well.

The verb bevas 'he/she/it lived' shows off another change I've made. The past tense of verbs used to be hyper regular, but after doing some digging and a lot of reading (so much of it contradictory as is the way with Celtic linguistics), I came up with the patterns that would give rise to variant past tense forms, just like the extant Celtic languages. This verb is an example of one with an s-preterite, meaning that, originally, it would've ended with the sigmatic aorist marker from PIE and the primary ending set, meaning it would've looked something like *beweH-s-t (the original root stems from PIE \(g^{w} e y h_{3}\), Brythonic verbs include a \(<\mathrm{w}>\), suggesting it maybe was influenced by the related adjective *biwos "alive"). Whereas in other verbs, that aorist marker would've just disappeared between the final consonant and the person marker, the laryngeal makes the root essentially end in a vowel once it hits the Proto-Celtic stage (something like *bewāst). The final sounds would merge, giving the form from the example. This kind of verb can be seen in Gaulish with words like prinas 'he/she/it bought'.

\section*{(2) En do in cabane o gureno veilede co muso bevasuz.}


Rather than translate it using 'they', I opted to use 'the two' to emphasize that they're on their own. The verb veiluñe 'to cover', seen in the sentence as a present participle, is technically related to the English word veil, which I thought was pretty fun.

\section*{(3) Tas en quelo llaso endreve, eque dade llava en minque.}
\begin{tabular}{lllllllll} 
Ta-s & en & quelo & llaso & endreve eque dade & llava en \\
be \(-3 . S G . P S T ~\) & DEF & sky & gray.M.SG & always & and & give.3.SG.PST & rain & DEF \\
\(\quad\) minque & & & & & & & & \\
\(\quad\) frequent & & & & & & &
\end{tabular}
"The sky was always gray and it rained often."

Forming any tense besides the present of the copulas was one of the biggest nightmares in redeveloping Gallaecian. There is just so much conflicting information about them online. What I ended up doing was just following the normal pattern of tacking on that aorist -s-, which made it conjugate like bevañe 'to live' in the previous sentences.

The word quelo 'sky' is a loan from Latin caelum 'sky' that displaced the original word nemo and relegated it to the meaning 'clouds, heaven'. I'd reckon it could still be used to mean sky, depending on the person.

For gray, I used the word llaso 'gray, blue, green', which is the Gallaecian version of everyone's favorite Breton word glas, which they used for gray eyes and the color of the sea. It's also related to the Welsh word glas 'blue', which can be used to describe the color of verdant plants like grass or to describe the color of slate. It's also related to the Irish word glas 'green, gray', which can be used to describe plants, but can also be used in the same way as blue in English when referencing the coats of animals. The Gallaecian word can be used in all of these extended ways.

It was a journey trying to coin a word for 'always'. The Welsh strategy is either wastad 'always', which comes from a noun gwastad 'plain, flat piece of land', so sort of like 'steadily' or 'straight' in English, or it's bob amser 'always', which literally means 'each time'. In Irish, it's \(i\) gcónaí 'always', which is literally 'in place', where cónai is less 'place' and more 'home, dwelling'. I decided to split the difference by using the Irish strategy, but I took 'home' from the same Proto-Celtic root that the Brythonic languages do, trebā 'dwelling'. That root actually enters Gallaecian on its own as terba 'house, home', but merged with the preposition before metathesis to give endreve 'always'.

\section*{(4) Tasaz valdo lido eque barba zugai deu co'm vero sen.}
\begin{tabular}{lllllllll} 
Ta-saz & valdo & lido & eque barba zugai deu & co \(=\mathrm{m}\) & vero & sen \\
be-3.PL.PST & hair & gray.M.SG & and & beard ugly & thick & with \(=\mathrm{DEF}\) & man & old \\
"The old man had gray hair and a thick, wiry beard."
\end{tabular}

Unlike the word llaso 'gray, blue, green' in the previous example, the word lido 'gray, ashen, pallid' is much more narrow in the colors it can represent and is perfect for the gray-white hair of an older person or ashes left in a fireplace.

Rather than use a word to mean 'wiry', I opted for how I think the description would translate into Iberian Romance languages. That was partially motivated by expected cultural exchange, but also by the fact that there wasn't anything I could really find to get at the meaning of 'wiry' without a lot of excess digging, save a term like 'sparse' - but this old fella may or may not have a patchy beard. Maybe it's just scratchy. In any case, in the same way a Spanish speaker might say Tiene una barba fea 'He has an ugly beard', a Gallaecian speaker will say Ta barba zugai co e 'He has an ugly beard'.

This sentence also exhibits the Celtic strategy for expressing 'having' using the temporary copula tañe 'to be' and the preposition co 'with' followed by the person who has things. The preposition used in this structure varies between Brythonic and Goidelic languages, so I decided to opt for the more obvious choice of 'with' for Gallaecian.

\section*{(5) Tas en cun maro, valdagh eque dono.}
\begin{tabular}{llllll} 
Ta-s & en & cun maro, & valdagh & eque dono \\
be-3.SG.PST & DEF & dog & big.M.SG & shaggy.M.SG & and \\
"The dog was & big, shaggy & and brown."
\end{tabular}

There isn't anything terribly interesting about this sentence, though I can note that the word valdagh 'shaggy' is an adjective built off of the word valdo 'hair' in the previous example.

Quave bare, em vero sen té suerbo is, eque cozas vazile urra co'n so cuñe.
\begin{tabular}{lllllll} 
Quav-e & bar -e, & em vero sen té suerbo is, \\
each-F.SG.DAT & morning-F.SG.DAT & DEF & man old tea bitter drink.3.SG.PST
\end{tabular}
\begin{tabular}{lllllll} 
eque & coza \(-s\) & vazile & urr -a & co \(=\mathrm{n}\) & so & cuñe \\
and & share-3.SG.PST & leftovers & cold-F.SG & with \(=\) DEF & his.M.SG & dog-DAT
\end{tabular}
"Each morning, the old man drank a bitter tea and shared cold leftovers with his dog."

I'm not satisfied with the word is 'he/she/it drank' and I'm quite likely to change it as I continue to work on the language. The problem with it is that it shouldn't be a s-preterite verb, because it's got a clear, consonant-final root in Proto-Celtic * \(\Phi\) ib- 'drink'. The trouble comes when you tack on that preterite ending to get * \(\Phi i b-s-t \times\) he/she/it drank'. That cluster would most likely cause the final consonant of the root to devoice and the \(s\) would drop out, but that would leave it undergoing further change to either * \(\Phi i x t\) or * \(\Phi i \phi t\), depending on whether this occurs before or after the assimilation to \(x\). If I go with the former or the latter, the word would surface in Gallaecian as *it. I floated the idea of having that late occurring \(\phi\) just run right into \(f\), which would lead to a Gallaecian *ift, but I'm still actively trying to avoid all the \(f\) I can. The other idea I'm considering is extending the root and applying the s-preterite to keep the root clear and still indicate the past, which is something that apparently happened with some verbs in both the Brythonic and Goidelic branches. That option would come out surface as *ivas, which might be the best option (always open to feedback!)

After chatting with u /Lysimachiakis about how speakers of Spanish can use the verb tomar 'to take' in reference to drinking as well, I've seen some other paths too. In Galician, there appear to be three verbs that can be used to refer to drinking: beber 'to drink', tomar 'to take', and trincar 'to drink alcohol'. With that in mind, there was a point in its history where Irish had two words for drinking, one related to mine ibid and another derived from the original verbal noun for ibid, which was ól from Proto-Celtic *фotlom. Welsh apparently has a more recent borrowing from English 'whiff' to refer to drinking liquor as well in chwiffio 'to whiff, smoke'.

That all makes me think that I could have a distinct word for drinking alcohol for the purpose of getting drunk (maybe something like *trincañe or *ochañe), that I could turn ivuñe 'to drink' into a suppletive verb and replace forms where the root is no longer identifiable with either an extended form *ivas (which seems to be what Breton has done with its verb evañ 'to drink' being evas in the third person preterite), with something derived from Proto-Celtic *\$otlom (aka *ochas 'he/she/it drank'), or with something continuing the unreduplicated PIE root \({ }^{*}\) peh \(_{3}\) - as either a root-aorist \({ }^{*} p^{2} h_{3} t>\) Proto-Celtic *\(\phi \bar{u} t>\) Gallaecian *u, or sigmatic aorist \({ }^{*}\) peh \(_{3}-s-t>\) Proto-Celtic * \(\phi u \overline{s s}>\) Gallaecian *us.

Or I could just take tomar as *tomañe and call it good, since the etymology isn't clear. It's a problem for future me, so cheers to that!

\section*{(7) Ame'n darde, do'n tareito querse do deluñe rai iscos.}
\begin{tabular}{llllllll} 
Ame \(=\mathrm{n}\) & darde, & do \(=\mathrm{n}\) & tareito & quer-se & do & del -uñe & rai \\
around= DEF & afternoon & to \(=\mathrm{DEF}\) & shore & walk-3.SG.PST & to & catch-INF & some
\end{tabular}
"In the afternoon, he walked to the shore to catch some fish."

Strange right of the bat, rather than using the preposition in 'in' to tell the time of day, we see ame 'around' instead. The same preposition would be used if we swapped out tarde 'afternoon' for bare 'morning' or noite 'night (DAT)'.

The inflected verb querse 'he/she/it walked' has another form of the s-preterite. For this verb, the underlying verb root in Proto-Celtic is *kerd- and with the chain of endings to form the third person preterite, we get *kerd-s-t. That TsT cluster at the end (where T is an alveolar plosive) simplifies in all cases to plain old \(s\). However, a final consonant cluster like \(r s\), so that final \(-e\) is brought in from the other preterite paradigms.
(8) En cun velanas xas doussuz a ozoguñe'nn iscos blasosos.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline En & cun & velana -s & xa -s & dous -suz & a & ozog - uñe \(=\) nn & isco-s \\
\hline DEF & dog & seagull -PL & REL.F - \(P\) l & want-3.PL.PST & C & steal - INF = DEF & fish -PL \\
\hline & \[
\begin{aligned}
& \text { soso } \\
& \text { orfu }
\end{aligned}
\] & \[
\begin{aligned}
& -\mathrm{S} \\
& -\mathrm{PL}
\end{aligned}
\] & & & & & \\
\hline
\end{tabular}
"The dog chased away seagulls that wanted to steal the flavorful fish."

This sentence is quite straightforward. There are two fun things to note though: the word velana 'seagull' is related to Welsh gwylan 'seagull' and to whatever Brythonic language or dialect gave English the word gull-and all of these stem from a Proto-Celtic word *wailannā,
which Peter C. H. Schrijver explains as 'the wailer, the wailing one' in the 1995 Studies in British Celtic historical phonology; the word blasoso 'flavorful' is of mixed origin, blending the Celtic blaso 'taste, flavor' with a suffix of Latin origin -oso from -osus.
(9) Taran seno, em vero sen cureno gerrase eque'n cun ame'n so ledo sesse, anconde'nn iscos.

Taran seno, em vero sen cureno gerra-se eque=n cun ame beyond that DEF man old wood chop-3.SG.PST and =DEF dog around
\[
\begin{array}{lllllll}
=\mathrm{n} & \text { so } & \text { ledo } & \text { sess }-\mathrm{e}, & \text { anconde }=\mathrm{nn} & \text { isco }-\mathrm{s} \\
\text { =DEF } & \text { his.M.SG } & \text { side } & \text { sit.PST }-3 . \mathrm{SG} & \text { guarding }=\mathrm{DEF} & \text { fish }-\mathrm{PL}
\end{array}
\]
"After that, the old man chopped wood, and the dog sat by his side, guarding the fish."

Rather than using then as an adverb, as in the original story, I opted to instead introduce the sentence with something comparable in meaning. Apart from that, with everything described in previous examples, there isn't anything terribly difficult to understand in this sentence.
(10) Ame'n usero, em vero enn isco salzeise eque e coite, eque lede'n cun esse.
\begin{tabular}{llllllllll} 
Ame \(=\mathrm{n}\) & usero, & em & vero & enn & isco & salze-ise & eque & e \\
around \(=\mathrm{DEF}\) & evening & DEF & man & DEF & fish & salt & \(-3 . \mathrm{SG} . \mathrm{PST}\) & and & he \\
cook.PST
\end{tabular}
\[
\begin{array}{llllll}
-\mathrm{e}, & \text { eque } & \text { led }-\mathrm{e}=\mathrm{n} & \text { cun } & \text { ess } & -\mathrm{e} \\
-3 . \mathrm{SG} & \text { and } & \text { side }-\mathrm{LOC}=\mathrm{DEF} & \text { dog } & \text { eat.PST-3.SG }
\end{array}
\]
"In the evening, the man salted and cooked the fish, and ate them with the dog."

There's a lot going on in this one. The verb salzeuñe 'to salt' is a de-adjectival verb, identifiable in part due to that -euñe ending in the infinitive. These verbs were originally adjectives with a verbal piece -sagyeti / sagyetor attached to them, which was then heavily reduced. However, the effects of that morpheme still linger in the way that these verbs are inflected-for example, the unique s-preterite form seen in this sentence.

The verb coite 'he/she/it cooked' has an infinitive form coguñe 'to cook'. It's one example of the historical phonological process than turned plosives before \(s\) and \(t\) into \(x\) and then more recently into \(j\). The \(e\) at the tail end is an extension to avoid a final consonant.

Rather than the more common co 'with', this sentence employs lede 'with, alongside', which is a frozen form of the noun ledo 'side, width, breadth' in the nearly unused locative case. This word has commitative use, whereas co is used for nearly everything else.
(11) Ame'n teneze briso costuz do conquevuñe'nn urro cañonde in maese.
\begin{tabular}{llllllll} 
Ame \(=\mathrm{n}\) & teneze & briso & cos -tuz & do & conquev -uñe \(=\mathrm{nn}\) & urro \\
around \(=\mathrm{DEF}\) & fire.DAT & warm & sleep-3.PL.PST & to & keep & -INF \(=\mathrm{DEF}\) & cold
\end{tabular}
"They slept by the warm fire to keep away the bitter cold."

The phrasing of keeping away is a little weird, I'll admit. I derived the verb conquevuñe by looking at the Old Irish word congaib 'to keep, contain' and worked backwards to land at a Proto-Celtic *kom-gabyeti. The piece that means 'away' actually means more literally 'in field' and it was based on the Welsh (i) ffordd 'away'.

Instead of 'bitter', I opted for 'biting'. It felt more visceral and I'd already used 'bitter' earlier, so I'm not sorry about the swap.
(12) Sa vevadus simple tas, eito tara bue co'n so cun, em vero sen launo tas.
\begin{tabular}{lllllll} 
Sa & vevadus & simple ta -s, & eito tara bue & co \(=\mathrm{n}\) \\
his.F.SG & life & & simple & be-3.SG.PST & but while & be.3.SG.SBJV
\end{tabular} with= DEF
"His life was simple, but so long as he had his dog, the old man was happy."

All I can do for this one is again complain about the small number of sources about the Celtic copula and all of the work I put into trying to figure out the roots I should be using for different voices and tenses.

And with that, the tale is done! If you've made it this far, thank you for reading! I hope you enjoyed reading through it and my thoughts, as much as I enjoyed translating the story.

\section*{Razas do ume oilo!}

\section*{14 Darâb Crîp v9}

\author{
by +merlan \#flirora
}

\section*{Translation Challenge}
minae šidrêr cerjârmeca'r vistop vôr nôras cadils vala. seros dočilen enimen cereperin es valan. šesos onos lêcba epime faras mêvan têmu. šidrêr lêcben loras poros flarpf• omei uc gentop'ce tonveła. cermjôr mervime cajosatren lora'oc darna.
cintef ros šidrêr gelfan rilan mênčame casgen ceron cermjôli'cil têyon dopelra. siljof os c•eppat roc grapas note. cermjôr ifomas vôr telon mirat rendan taljen nelrirp domagre. ea šidrêr šorcrinôlon astrime cermjôr telop roћarb anfan searna. meðotef šidrêr telon esnemarb cpascame cerjârmeca mênčelo. vesran os ercen rohat roc doayaras nasenals fan rilpan.
mevjel serpepes nedo cermjôr a lasce gepit tesara.
An old man lived alone with his dog on a small, rocky island. They lived in a wooden hut covered in moss. The sky was always gray and it rained often. The old man had gray hair and a thick, wiry beard. The dog was big with a long, brown coat.

Each morning, the old man drank a bitter tea and shared cold leftovers with his dog. In the afternoon, he walked to the shore to catch some fish. The dog chased away seagulls that wanted to steal the tasty fish. The old man then chopped firewood, and the dog sat by his side, guarding the fish. In the evening, the man salted and cooked the fish, and ate them with the dog. They slept by the warm fire to keep away the bitter cold.

His life was simple, but so long as he had his dog, the old man was happy.

\section*{Gloss}
(1) minae šidrêr cerjârmeca'r vistop vôr nôras cadils vala.
\begin{tabular}{lllll} 
mina - e & šidr -êr & cerjârm - eca & ='r & vist \\
alone - REL.NOM,NOM.SG & elder -NOM.SG & \(d o g\) & -INSTR.SG & \(=\) POSS.3.HUM
\end{tabular} stone




\[
\begin{aligned}
& \text { Fx21xx } \lambda_{x} x_{l}
\end{aligned}
\]

2JGsxc jx

打 ك





Figure 1: The passage in the Cenvos script.
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-op vôr nôr -as cad -ils val -a.
-DAT.COL full_of small-REL.NOM,DAT.CEL island-DAT.SG reside-3SG

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＂An old man lived alone with his dog on a small，rocky island．＂

To begin with，⿹arâb Crîb does not have gendered terms for people such as for＇man＇or ＇woman＇．It has terms for＇male＇（＊moganit）and＇female＇（＊sedapat）\({ }^{1}\) ，but it is not idiomatic to describe every person as male or female．The most idiomatic solution is to leave the person＇s gender unspecified．

The word cermjôr＇dog＇（appearing in the instrumental singular as cerjârmeca）comes from cerep＇house＇plus mjôr＇wolf＇．These roots in turn come from the Necarasso Cryssesa words ceress and mjoros＇ibid．＇Syllabic compression was a common process when Necarasso Cryssesa v6 words were adapted into ⿹arâp Crîp v7，resulting in creaky－voiced（low－tone in v9）vowels．

Introduced to ⿹arâb Crîp v9 since the publication of Segments \＃03 is the concept of clareb， a lexical property of the noun that governs which numbers it may take．Singular nouns may take direct（as singular），dual，plural，or generic number；collective nouns may take direct （as collective），singulative，or generic number；and mass nouns may take only the direct or generic．vistos＇stone＇is one instance of a collective noun．
vôr is a relational defined as＇（ \(O\) ）is abundant within（ \(S\) ）＇，or more briefly，＇abounding with＇ or＇full of＇．This relational is derived from Necarasso Cryssesa voro＇full＇，with similar syllabic compression．It has an adnominal bias；in other words，adnominal usage is unmarked，while the suffix－al is required to use it adverbially．

Verbs in Øarâp Crîp can be used in their participle forms to form relative clauses．Participle conjugation involves the following parameters：
－Rcase，the case of the common argument in the embedded clause
－Hcase，the case of the common argument in the main clause
－One of hgender or hnumber，depending on the genus of the verb，which describe the gender or number of the common argument in the main clause
minait is a species－2e verb defined as＇（ \(S\) ）is not accompanied by anyone else＇．It originates （through v7）from the long numeral mina＇one＇（nominative），which in turn is related to VE \({ }^{4}\) ENCS myn＇ibid．＇Since it is in genus 2，its participle forms conjugate for hnumber instead of hgender．
nôrit is a species－0c verb defined as＇（ \(S\) ）is small＇．It is derived（through v7）from the Necarasso Cryssesa adjective endora＇small＇．Since it is in genus 0 ，its participle forms conjugate for hgender instead of hnumber．Thus，minae agrees with šidrêr in number，but nôras agrees with cadils in gender．

Necarasso Cryssesa endora is related to the diminuitive prefix e－in ⿹arâp Crîb v7 and v9．This prefix is accompanied by initial voicing to the root；while this process is similar to eclipsis，it is considered distinct and affects onsets that are not changed by eclipsis．It is found in the word edva＇penny＇，the diminuitive of tfara \({ }^{2}\)＇coin＇．

\footnotetext{
\({ }^{1}\) The symbol＊here represents the nef marker，which marks foreign words，not that the word is recon－ structed．
\({ }^{2}\) Note that this word would not be affected by eclipsis because it contains an initial stop－fricative cluster．
}
valit is a species－1e verb defined as＇（ \(S\) ）resides in or at（I）＇．The place of residence is in the dative case；it does not need to be in the locative instead－thus nôras cadils，not nôres cedelt．It is conjugated in the imperfective since the state of living on the island is background information that encompasses the story．Tense in narratives is relative to what is considered the present in the story．

\section*{（2）seros dočilen enimen cereperin es valan．}
\begin{tabular}{llllll} 
ser－os & do－čil－en & enim－en & cerep－erin & es & val－an． \\
moss - －DAT．DIR & INV－on－ADN & wood－GEN．DIR & hut & －DAT．ST & inside
\end{tabular} reside－3DU
cereperin＇hut，shack＇is a diminuitive of cerep＇house＇，using a different diminuitive affix －in．Since it is a diminuitive，it has collective clarep and appears in the singulative here．
čil is another relational indicating location on a vertical surface．It is distinguished from il，which indicates location on top of a horizontal surface．Originally，Necarasso Cryssesa had only yr（changed to \(\mathbf{y l}\) in VE \({ }^{4}\) ENCS，which allowed－1 codas）for both senses，but NCS5 split the semantic space into yl and čyl．Since čil has an adverbial bias in ⿹arâb Crîp v9，it gains a suffix－en when used adnominally．The prefix do－，when on an attributive relational， reverses the roles of the subject and object of the relational，such that dočil means＇\((O)\) is on（ \(S\) ）＇or equivalently，＇\((S\) ）is covered with（ \(O\) ）＇．

There is a similar verb nâgrat＇cover，hide＇，which originally was nagrat in v7，from NCS6 nagarat but was changed to be distinct from another nagrat＇catch，win＇．However，this verb has the implication of preventing the object from being visible．Unless the moss covered the house entirely to the point that none of the wood was visible，this is not the appropriate word to use．
（3）šesos onos lêcba epime faras mêvan têmu．
\begin{tabular}{lllllll} 
šes－os & on－os & lêcp－a & ep－ime & far－as & mêv \\
always－LOC．DIR & sky－LOC．DIR & gray－NOM．DIR & exist－and & often－LOC．DIR & rain
\end{tabular}
\begin{tabular}{ll}
－an & têm \(\quad\)－u． \\
－ACC．COL & precipitate－3GC
\end{tabular}
＂The sky was always gray and it rained often．＂

The pronoun šison＇always＇（appearing as šesos）comes from Necarasso Cryssesa šyson ＇ibid．＇It did not exist in ⿹arâb Crîb v7；in that version，the ordinary universal quantifier šino＇all，everything＇would be put in the locative．This practice posed a problem since the same construction could be used to mean＇everywhere＇．

In ⿹arâp Crîp，most color terms are nouns，including lêcpa＇gray＇．In most cases，predicat－ ing a color with a nominal term would use a finite form of the relational čil，but since the sky is not a solid object，the verb epit is used with anor＇sky＇in the locative direct form．

The noun mêva＇rain＇，which comes from NCS emeva，forms a minimal pair with meva ＇sea＇（＜meva），demonstrating that tone is phonemic in ฤCv9．

The verb têmit is glossed as＇（ \(S\) ）causes（ \(O\) ）to precipitate on（ \(I\) ）＇and covers any kind of precipitation．It is distinct from the words for＇to fall＇（cjašit）or＇to come＇（cehit）．It is conjugated in the generic number here because the subject is unspecified．

\section*{(4) šidrêr lêcben loras poros flarpf•omei uc gentop'ce tonveła.}
\begin{tabular}{lllll} 
šidr -êr & lêcp -en & lor -as & por -os & flarpf•om \\
elder-NOM.SG & gray-GEN.SG & hair-DAT.cOL & thick-REL.NOM,DAT.TER & wire
\end{tabular} -ei uc gent -op ='ce ton-veła. -DAT.PL like beard-DAT.SG = and ORN-exist.3SG
"The old man had gray hair and a thick, wiry beard."

In this sentence, lêcpa is used again, now attributively in the genitive case.
The verb porat means '( \(S\) ) has a large cross-section' (i.e. 'thick') but also '( \(S\) ) has a large body mass' (i.e. 'fat'). It should be distinguished from vrelat '(S) (lamina) is thick; (S) (voice) is deep'.
flarpf•ome 'wire (made of metal)' is a straightforward compound of flarp 'metal' and fome 'string, thread, yarn'. Both of these nouns were introduced in v7, with the NCS6 equivalents being fyrno and lysas. The latter has a cognate in ØCv7, lisa 'string on which coins are threaded'.

The relational uc 'resembling, like' supplants the semblative I case of ⿹arâp Crîp v7. We also see an instance of a relational (ton, marking the ornative) being used predicatively by attaching it to the scaffolding verb epit.
(5) cermjôr mervime cajosatren lora'oc darna. cermjôr- \(\varnothing\) merv-ime cajosatr-en lor -a ='oc darn dog -NOM.SG large -and brown -GEN.DIR hair-NOM.COL=POSS.3.TER long -a.
-3sG
"The dog was big with a long, brown coat."
cajosatra 'brown' is a compound of cajos 'ground, soil' plus atra 'color'. The latter was atrân in ØCv7, but it was changed to fall into one of the ØCv9 noun paradigms. Similarly, catrjân 'crow' was changed to catra.
lora can be used to refer to hair (as in (4)) or fur (as in (5)).
(6) cintef ros šidrêr gelfan rilan mênčame casgen ceron cermjôli'cil têyon dopelra.

"Each morning, the old man drank a bitter tea and shared cold leftovers with his dog."
ruf 'each' is an irregular noun; because it is derived from v7 rom, the accusative form romon, dative romos, and genitive romel have a 'stem' ending in -m. (In v9, -m codas
are found only in a few words such as om, the distal terrestrial demonstrative determiner.) ruf is used somewhere after the noun phrase being described in the same case and direct number.
mênčat, as the gloss suggest, refers to both eating and drinking, as well as taking medicine. It is also used to mean 'to tolerate'. This verb is derived from NCS mentead.
casgit was used to translate 'cold' in the sentence. This verb refers to the state of once being heated but no longer so (e.g. if the object is now at room temperature). In contrast, ercit refers to having a low temperature in general. To use ercit instead of casgit would imply that (listing one possibility) the food was refrigerated.

The participles of the verbs casgit and cerit 'remain, survive' are separated from their head, têyon by the word cermjôli'cil. Such hyperbaton is allowed because participles agree with their heads; it was done in this case to avoid adjacent rhyming words.

Coordination of noun phrases has an \(A B=c o\) order, where the coordinator is attached as a clitic to all but the first coordinand. If the first coordinand is pronominal, then it can be fused with the coordinator. ='cil is a fusion of a third-person pronoun (without any gender or number distinction) and = 'ce 'and'.

The nominative argument of the verb pelrit 'be divided or shared' describes the object being divided, while its dative argument describes the entities among which it is divided. It is used here in the causative voice to demote the nominative argument to the accusative and introduce the cause in the nominative. Thus, the end of the sentence translates literally to "he causes cold leftovers to be shared between him and the dog".

\section*{(7) siljof os c•eppat roc grapas note.}
\begin{tabular}{lllllll} 
silj -of & os & c•epp - at & roc & grap -as & not -e. \\
afternoon-LOC.GC & INF.DAT & catch_fish-INF & in_order_to & shore-DAT.SG & walk-3SG \\
"In the afternoon, he walked to the shore to catch some fish."
\end{tabular}
ceppat is a verb used to refer to catching fish specifically. It can take an accusative argument but does not do so here.
roc is a relational showing a beneficiary or goal; it can be glossed as 'on behalf of' or 'in order to'.
(8) cermjôr ifomas vôr telon mirat rendan taljen nelrirp domagre.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline cermjôr & - \(\varnothing\) & ifom -as & vôr & & -on & mir -at & ren \\
\hline dog & - NOM.SG & taste - DAT.DIR & full_of & & - ACC.COL & take - INF & want_to \\
\hline -an & & talj -en & nelr & irb & do-ma & & \\
\hline -REL & NOM, ACC. & L gull-ACC.COL & chase & SER & CAUS-flee & -3SG & \\
\hline
\end{tabular}
"The dog chased away seagulls that wanted to steal the tasty fish."

This sentence uses a serial verb construction: nelrit 'chase' is put into the 'emergent coordinate' form; since it precedes a word starting with a plosive plus a vowel, the ending -irp is used over -ip. The second verb consists of the causative prefix plus magrit 'flee'. That is, the chasing and causing to flee are seen as one larger action.
ea šidrêr šorcrinôlon astrime cermjôr telop roharb anfan searna.
\begin{tabular}{llllll} 
ea šidr -êr & šorcrinôl-on & astr-ime cermjôr- \(\varnothing\) & tel -op \\
then & elder-NOM.SG & firewood-ACC.COL & cut & -and & dog
\end{tabular} -NOM.SG \begin{tabular}{llll} 
fish-DAT.COL
\end{tabular}
"The old man then chopped firewood, and the dog sat by his side, guarding the fish."
ea is a head particle with two uses: to link a cause and effect ('thus, therefore') or to add information to a previous independent clause phrase ('in addition, then'). Its colloquial form is \(\mathrm{j} \mathbf{a}\).
šorcrinôr 'firewood' is a compound of šorcrit 'be burnt' and inoros 'stick, branch' (instead of the typical word for 'wood', enima). inoros comes from NCS ynoros; šorcrit, on the other hand, was šīcrit in ØCv7 from NCS šyncryd.
astrit means 'cut into a more prepared form' and is the verb used to refer to chopping firewood. It is also used to refer to cutting food.
rohat 'guard, defend, protect' is a ditransitive verb that takes both an accusative and a dative argument. In this case, the dative argument describes what is being protected, and the accusative argument refers to what is threatening that thing in the first place. As a result, distinguishing the two cases is crucial. This verb is perhaps derived from NCS ervead, with the same meaning but, like other NCS verbs, an underspecified (and probably different) case frame.

The relational fan 'next to' appears here with a pronominal prefix an-, indicating a thirdperson singular human referent.
(10) meðotef šidrêr telon esnemarb cbascame cerjârmeca mênčelo.
\(\begin{array}{llllll}\text { meðot -ef } & \text { šidr -êr } & \text { tel -on } & \text { esnem-arp } & \text { cbasc-ame } & \text { cerjârm } \\ \text { evening-LOC.GC } & \text { elder-NOM.SG } & \text { fish-ACC.COL } & \text { salt } & \text {-SER } & \text { cook -and } \\ \text { dog }\end{array}\) -eca mênč-e -lo.
-INSTR.SG eat -3SG-3PL
"In the evening, the man salted and cooked the fish, and ate them with the dog."
esnemat 'preserve by salting' comes from NCS esnema 'salt', to which sînma 'ibid.' is a cognate. cbascat refers to cooking meat.
(11) vesran os ercen rohat roc doayaras nasenals fan rilpan.
\begin{tabular}{lllllll} 
vesr - an & os & erc & -en & roh & -at & roc \\
strong - REL.NOM,ACC.CEL & INF.DAT & coldness -ACC.DIR & guard -INF & in_order_to
\end{tabular}
vesran can mean not only 'physically strong' but also 'concentrated' or 'intense'. This verb is derived from NCS vesro, an adjective used in the former sense.
ercerb is a quality noun derived from ercit＇cold＇．As a noun derived from a verb，its principal parts can be derived from its verbal conjugations．
rohat is used here again，specifying the accusative argument instead．
ayarit＇warm＇is used with a causative prefix，since the fire itself does not have a high yet pleasant temperature．
nasenar refers specifically to a manmade fire，especially one made for warmth，as opposed to senar，which refers to a fire in general．

\section*{（12）mevjel serpepes nedo cermjôr a lasce gepit tesara．}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & －jel & serp & －epes & nedo & cermjôr & －\(\varnothing\) & a \\
\hline simple & －GEN．DIR & lifestyle & －DAT．DIR & despite & dog & －NOM．SG & INF．LOC \\
\hline las & & \(\mathrm{g} \backslash\) & ep－it & tesar & & & \\
\hline & 3sG．HUM．İ & TR（INF） & \ exist－ & happy & & & \\
\hline
\end{tabular}
mevel is a terrestrial mass noun that is usually used in the genitive case．It is polysemous， with the following definitions listed：

1．The quality of being free of decorations，especially when the object did not previously have such decorations．\(\rightarrow\) bare，undecorated，plain
2．The quality of being free of complications．\(\rightarrow\) simple，simplicity，straightforward，uncom－ plicated
3．Of clothing，the state of not having any patterns．
4．Of a musical scale，the state of containing only the original notes．
5．Of music，the state of not having any accompaniment．
6．Of language，the quality of being concise．\(\rightarrow\) concise
7．In the genitive，having any of the above qualities．
8．In the instrumental，clearly and without any doubt．
In this context，the second definition is used．
serpep is defined as＇the collective actions that make up（GEN）＇s way of life＇．It should be distinguished from both espel＇the period from（GEN）＇s birth to（GEN）＇s death；the experience that（GEN）has during their existence＇and varon＇the state of being alive rather than dead；vital force causing（GEN）to be alive＇．

\section*{Conclusion}

The main thing I took from this challenge was thinking of the precise way the different terms translating to＇life＇are used．Writing complete definitions for words has made me more aware of this problem，which I might have overlooked several years ago．Explaining how ⿹arâb Crîb works is another important aspect of the challenge．

Even after this challenge，however，Øarâb Crîp will undergo major changes leading it toward the apex \({ }^{3}\) ，some of which will be apparent when Segments \＃05 is published．Still， change is far from new to ⿹arâb Crîp，which has been under construction since 2013.

\footnotetext{
\({ }^{3}\) For the curious，the ⿹arâp Crîp v9 grammar is 141 pages long（in its PDF form）as of 2022－01－01， 15 of which are taken by the glossary．In comparison，Isorakatheđ＇s grammar of Drsk currently sits at 492 pages， and he has agreed that it could exceed a thousand pages by the time it is completed．
}

In the days of ⿹arâb Crîp v7, I have noticed that the more I worked on the language, the more time I spent discovering things about it compared to creating them. In fact, some features, such as trivalent relationals in ØCv9, have been added in response to such discoveries, usually of some inadequacy in the existing system. Translation exercises such as this one are a crucial part of this process.

\section*{15 Amungasi}

\author{
by Lysimachiakis
}

\section*{Translation}

\section*{Introduction}

Amuygasi is my latest conlanging project, intended to be a personal language for use in journaling and such. The name goes back a long way in my time as a conlanger. Many years ago, I found myself part of a community conlanging project over Discord, and we made a language family together called Cuni / \(\chi\) uni/. We spent a long time developing the language, making daughter languages, and trying to plot them all together in a collaborative world. I've been conlanging my whole life, but that was the first time I had ever felt like part of a community with regards to this hobby. In Cuni, amuygasi meant 'traveller; wanderer.' And for whatever reason, that word has stuck with me. One night, years after the Cuni project, I had a dream in which that word featured prominently. And so what better way to honor this word, which represents so much to me both personally and in my conlanging experience, than to name a personal language after it?

Being myself a New Englander through and through, I imagine this language being spoken in a land with a very similar climate and ecology: thick forests, varied seasons with hot summers and frigid winters, a landscape dotted with endless lakes and ponds, and a mountain range running through the interior of the region. As I envision it, the region is much more sparsely populated than contemporary New England, with communities small and scattered.

The speakers, taking after their namesake, value travel and stories above all else. They live in small communities on the shores of lakes and the banks of rivers, and most every community member undertakes a pilgrimage of sorts when they come of age, in which they travel to a distant locale to hear stories from others and to experience firsthand their own adventures. After at least a year of travel, the Amuygasi return to their communities, and amidst a great feast, they share stories they heard, tales they experienced, wonders they beheld, and ultimately what those stories and experiences taught them about the world. This return feast is typically where young Amungasi meet their partners, for their tales and
stories are said to reflect on their character, and being given such a stage, some view this ritual as a returning Amuygasi's way to advertise themselves to potential love interests.

The hope with this translation exercise is that I might be able to work out how this cultural background will interact with the language. As I am still relatively early in this language's development, I am also hoping to use this as a practice for certain grammatical features that I have still been figuring out, and of course, this will be a great tool for coining some much-needed vocabulary.

\section*{The Text}

\section*{Original English}

An old man lived alone with his dog on a small, rocky island. They lived in a wooden hut covered in moss. The sky was always gray and it rained often. The old man had gray hair and a thick, wiry beard. The dog was big with a long, brown coat.
Each morning, the old man drank a bitter tea and shared cold leftovers with his dog. In the afternoon, he walked to the shore to catch some fish. The dog chased away seagulls that wanted to steal the tasty fish. The old man then chopped firewood, and the dog sat by his side, guarding the fish. In the evening, the man salted and cooked the fish, and ate them with the dog. They slept by the warm fire to keep away the bitter cold.
His life was simple, but so long as he had his dog, the old man was happy.

\section*{Amungasi}

La ponji la guwe nene sə ki cumə śińimumpe ’ə ka la dan tele. Neyeli śińińofe 'ə ka pəy sinte xə ka la liwaśey. La śen wəwśe, la yaca ra dan imu. Əŋkey se ponji fe ficəyən xə se \(\eta\) gise ka la sə gweliy. La cumə jəwn la əŋkə se dwey xani xə granəwne.

Øgayewi se ponji mən jəyde prekuməŋ sə 'ə rəwəw, la wawa i sə cumə sə ki śəy la. Tem nteli se riəjen pə fəwle sə ntwoy gani. Fiyanańə la ra'e sə cumə se yiyiri ka əŋkə sə fendi pə sə ka deronańə fe śipwe wixa. Sa de wekrey se ponji se sinte te riəŋnen de okana la soŋna fe śipwe. Wixa jey fe kwə fe śipwe la rom la yga sə ki cunə sə ’ə mole. Rege хə yeńə sə riəŋen pə wecuni sə ntwoy ra'e sə dəw xija.
La jan gare ncuyi, te ni musə ne sə ki cumə, la ni mixi.

\section*{Glossing \& Commentary}

\section*{(1) La ponji la guwe nene sə ki cumə śińimumpe ’ə ka la dan tele.}

\begin{tabular}{llllllllll} 
la & ponji & la & guwe & ne \(\sim\) ne & sə & ki & cumə & sini-mumpe & 'ə \\
there.is & elder & ss & alone & stay \(\sim\) stay & DEF.G2 & with & dog & small-island & on that
\end{tabular}
\begin{tabular}{lll} 
la & dan & tele \\
there.is & many & stone
\end{tabular}
"An elder lived alone with his dog on a small island covered in stones."
lit. "There was an elder and he lived alone with the dog on a small island that many stones cover it."

Alright, right off the bat there are some neat things to discuss here! First, ponji 'elder' takes the place of 'old man;' using that phrase kwə sexə would be considered rude. If by 'old man', we mean someone advanced in years with much wisdom, then ponji would always be the more appropriate choice. The noun is introduced using la, an existential verb, and this is the default way of introducing an indefinite subject.

Onto the main verb: nene! It is a reduplicated form of ne 'to stay,' and that intensifying reduplication takes it from 'stay' to 'live; reside,' or 'staying in a place for a while.' I think of this as an instance of culture influencing language; since the Amuygasi are travelers, staying in one place is not always the norm.

We see a few examples of a prominent characteristic of the language: second-position particles (2PP). These are particles, or adpositions, which consistently will appear following the first meaning-bearing word in a noun phrase. In sə ki cumə 'with the dog,' the 'with' adposition appears following the definite article sə. In śinimumpe 'e, the 'on' adposition appears following the noun, as there are no elements in the phrase that precede it in that clause.

\section*{(2) Neyeli śińińofe ’ə ka pəy sinte xə ka la liwaśey.}

ne -yeli śińi-ńofe 'ə ka pəy sinte xə ka la liwaśen
stay-c1.c6 small-house on that be.made.of wood and that there.is moss
"They lived in a wooden hut covered in moss."
lit. "They stayed in a small house made of wood and mossy."

Here, while we have 'live' again, it felt inappropriate to use the reduplicated nene. I felt that while one may live in an area, residence within a house is not considered as permanent, and so 'stay' would likely be the best choice for this translation.

With this sentence, I did have to contend with my first example of two relative clauses modifying the same noun. I had not dealt with that before in this language. The two relative clauses, 'that it is made of wood' and 'that there is moss' are connected with a general connective conjunction \(\mathbf{x}\). This differs from, say, la, which is used between verbal clauses to indicate that the same subject is assumed for both. Additionally, I got to flesh out a bit more of the relative clause structure with this example. As can be seen, pəy takes no marking whatsoever, which is atypical for Amungasi verbs. I determined that in relative
clauses, the noun they modify is assumed to be the subject, and only in cases where that is not true would verbal marking be needed.

\section*{(3) La śen wəwśe, la yaca ra dan imwə.}
[lä \(\int \varepsilon n\) 'wəữfe lä 'jätfä rä dän imwə]
la śen wowśe la yaca ra dan imu
there.is sky gray ss frequent drop many water
"The sky was always gray and it rained often."
lit. "There was a gray sky, and it often dropped much water."

The existential la can function as a copula-like verb as well, with 'the sky was gray' and 'there was a gray sky' both being acceptable translations. Both śen and imu are considered to be higher animacy words than the class system might indicate on the surface, but they both pattern with class 3 nouns, typically reserved for animals and non-human high-animacy things. So, were ra to be class-marked, it would take the c3.c3 marker -nańə.

For discussing weather, the sky is almost always the subject. For rain, the sky drops water. For snow, the sky sheds ice. For thunder, the sky screams. For night, the sky rests. This reflects a conceptual metaphor that THE SKY IS A LIVING BEING, and so the language reflects the sky as if it were a being with agency. It's not uncommon to hear an Amungasi cursing the sky for causing bad weather, though they have long since accepted that the sky cannot be tamed by any means they are aware of.
(4) Əŋkey se ponji fe ficəyən xə se ggise ka la sə gwelin.

\(ə ŋ k\)-eŋ se ponji fe ficəyən xə se ŋgise ka la
wear-C1.C5 DEF.G1 elder DEF.G3 gray.hair and DEF.G1 beard that there.is
sə gweliy
DEF.G2 thicket
"The old man had gray hair and a thick, wiry beard."
lit. "The elder wore the gray hair and the beard that was like thickets."

Physical traits in Amungasi are thought of as things that are worn. Your wear your clothes, you wear your emotions, and you wear your external features, such as hair, eye color, etc. Gray hair has its own lexical item in Amuygasi, ficəyən. And like in sentence (2), we again see ka la being used to indicate that something is characterized by something else. This can have two interpretations. In (2), it was used to indicate that the hut was characterized as having moss or being mossy. In this case, its different: the beard is not characterized by having thickets, but by being like thickets, tightly woven together in an impenetrable mess. Adverbs could be used to clarify which interpretation is intended, but it's not necessary in most cases.

\section*{(5) La cumə jəwn la əŋkə se dwey xani xə granəwne.}

la cumə jəwn la
there.is dog
big SS wear-E \begin{tabular}{llllll} 
se & deF.G1 & hair & xani & xə & granəwne \\
and & brown
\end{tabular}

Not much to say here, really. Just two comments. First, jəwn 'big' is only encountered in these kinds of copula-like clauses; typically, like śińi- in sentences (1) and (2), a prefixed form is preferred. Second, dwey 'hair' is the same for humans and animals.
(6) Jgayewi se ponji mən jəyde prekuməŋ sə ’ə rəwəw, la wawa i sə cumə sə ki śəy la.
 lä]
\begin{tabular}{clllllllllll} 
nga-yewi & se & ponji & mən & jəyde & prekumə & sə & ’ə & rəwəw & la \\
eat -C1.C4 & DEF.G1 & elder & some & tea & rough & DEF.G2 & on & awaken & sS \\
wawa & i & sə & cumə & sə & ki & śəy & la & & & \\
together & give & DEF.G2 & dog & DEF.G2 & with & still & there.is & & &
\end{tabular}
"Each morning, the old man drank a bitter tea and shared cold leftovers with his dog."
lit. "The elder consumed some rough tea on the awakening, and together gave the dog with the still-existing."

This sentence was definitely more complicated, and involved a few design decisions, so I'll take this one bit by bit. First, yga 'to eat' is probably better translated as 'to consume,' and is used with both solids and liquids. Pretty straightforward. Next up, the concept of 'bitter' involved another choice. I ended up going with the idea that something that is bitter is rough on the palate, typically a bit tough to eat or drink without some acclimation, so I went with prekuməy 'rough.' Then we have our first little example of nominalization, which is not very complex. Using a bare verb root with a definite article is enough to nominalize it, here forming 'awakening,' used to indicate the morning. Lastly, the idea of sharing is expressed by 'giving together.'

\section*{(7) \\ Tem nteli se riəjen pə fəwle sə ntwoy gani.}
[tem \({ }^{\text {In }}\) teli \(s \varepsilon\) 'riə
tem nt -eli se riəŋen pə fəwle sə ntwon gani
feet go.to-C1.C6 DEF.G1 edge of river DEF.G2 for fish
"In the afternoon, he walked to the shore to catch some fish."
lit. "He went on foot to the edge of the river for the fishing."

Amuygasi has a few directional verbs, but manner is typically indicated by putting a noun into an adverbial position (before the verb). The destination is considered the object of the verb. The shoreline is lexicalized as the edge of the river. And to indicate a purpose, the word ntwoy 'reason' is used as a 2PP together with a nominalized verb.
(8) Fiyanańə la ra’e sə cumə se yiyiri ka əŋkə sə fendi pə sə ka deronańə fe śipwe wixa.

\begin{tabular}{cllllllllll} 
fiya -nańə & la & ra'e & sə & cumə & se & yiyiri & ka & əŋk & \(-ə\) & sə \\
push-c3.C3 & ss & flee & DEF.G2 & dog & DEF.G1 & gull & that & wear-E & DEF.G2 & want \\
pə sə & ka & deron-nańə & fe & śipo & wixa & & & \\
of DEF.G2 & that & steal -c3.C3 & DEF.G3 & fish & delicious & &
\end{tabular}
"The dog chased away seagulls that wanted to steal the tasty fish." lit. "The dog pushed the gull that wore desire of stealing the tasty fish to flee."
fiya 'push' is used as a kind of causative, and together with ra'e 'flee' means 'chase.' Grammatically, the verb \(\boldsymbol{\partial y k}\) doesn't take any marking, as the subject is 'gull,' but we do see marking on deron later, as it is modifying 'want,' and the gull subject needed to be reintroduced.

\section*{(9) Sa de wekren se ponji se sinte te riəŋen de okana la soŋwa fe śipwe.}

\begin{tabular}{cllllllllll} 
sa de wekr-en & se & ponji & se & sinte te riənen de oka-na la \\
after cut -C1.C5 & DEF.G1 & elder & DEF.G1 & wood & DS & side & ADV sit -c3 & ss
\end{tabular}
"The old man then chopped firewood, and the dog sat by his side, guarding the fish." lit. "Afterwards the elder cut the wood, and the dog sat by the side and guarded the fish."

For expressing sequences, as with the 'then' in this sentence, a temporal noun sato is used with the adverbial de. This expression has become so routinized that it is often shortened to sa de, as above. Amungasi doesn't have any explicit difference between verbs like cut and chop, with one verb wekr- used to express any action that cleanly cuts things into two pieces. I suppose you could use intensifying reduplication, but that normally wouldn't need to be done here.

This sentence also shows one of the few examples in this text of the switch reference conjunction te, which just indicates that the subject is different between the two clauses. Class marking typically disambiguates without any issues, but it is often assumed that the object of the preceding clause has become the subject. I'm actually debating if I should make te only mean that, and then have a third conjunction for when there's some totally new subject appearing. We'll see. Design decisions still in progress there.

\section*{(10) Wixa jey fe kwə fe śipwe la rom la yga sə ki cunə sə ’ə mole.}

wixa je -y fe ku fe śipo la rom la yga sə
delicious change-C1.C5 DEF.G3 man DEF.G3 fish ss cook sS eat DEF.G2
\begin{tabular}{lllll} 
ki & cunə & Sə & 'ə & mole \\
with & dog & DEF.G2 & on & rest
\end{tabular}
"In the evening, the man salted and cooked the fish, and ate them with the dog." lit. "The man made the fish tasty and cooked and ate them with the dog in the resting."

This sentence makes use of a fun little pattern I'm working on for the language, and I haven't yet figured out the edge cases, so it's still a work in progress. The feature is a type of resultative, in which the resulting state is placed pre-verbally, and the instigator of said result is the subject of the verb, while the thing being placed into said state is the object. So here we have 'the man changed the fish (to be) delicious' to mean that the man salted/prepared the fish for eating. This specific instance, wixa je-, has been lexicalized a bit to just mean 'prepare food.'

We also have another temporal expression sə 'ə mole used here. mole, meaning 'to rest,' is used to express nightfall. As noted earlier, the sky is anthropomorphized in many ways, and the sky darkening is viewed as a time when the sky is going to rest. So nominalizing mole with a definite article sə and a locative 2pp 'ə is how this time is expressed.

\section*{(11) Rege xə yeńə sə riəŋen pə wecuni sə ntwoy ra’e sə dəw xija.}

```

reg -e xə y -eńə sə riə\etaen pə wecuni sə ntwon ra'e sə
sleep-C1 and do-C3 DEF.G2 edge of fire DEF.G2 for flee DEF.G2
dəw xija
cold sharp

```
"They slept by the warm fire to keep away the bitter cold."
lit. "He and it both slept at the side of the fire for fleeing the sharp cold."

This was an interesting sentence! This is the only one where the man and the dog are both subjects of the verb. And in Amungasi this presents an interesting problem: given that the language makes use of a rigid class system for nouns and has verbal affixes for each class, representing a pairing of subject-object, how does one deal with a subject that might belong to multiple classes, in this case the man (class 1) and the dog (class 3)? My solution to this problem was to have the higher class be marked on main verb, and the lower class be marked on an auxiliary do-verb. So, the end result here is "He slept and it did (too)...." This case made my life easier by being intransitive. I think the same structure would work fine for transitives too, but it might feel too 'heavy.' Further thinking to be done on that one!

We again see riəyen used here. This word is pretty versatile. Obstensibly, it means 'edge,' but it ends up meaning 'edge; side; nearby; next to' etc. Pretty handy. I'm likely to make a reduced form that appears with the adverbial de for modifying verbs, but we'll see!
(12) La jan gare ncuyi, te ni musə ne sə ki cumə, la ni mixi.

la jan gare ncuyi te ni musə ne -e sə ki cumə la
there.is C1.POSS path clear DS INV from stay-C1 DEF.G2 with dog sS
ni mixi
INV be.happy
"His life was simple, but so long as he had his dog, the old man was happy." lit. "His path was clear, but if he stayed with his dog, he would be happy."

There isn't any clean way to translate 'life' in this context, but the conceptual metaphor LIFE IS TRAVELING extends such that it can be translated as 'path' or 'road.' Rather than viewing an easy life as a simple path, they envision it as being a clear one, one free of obstacles, pitfalls, or detours.

Conditional if-then clauses and counterfactuals are expressed by a conjunction together with the inverse marker ni, which is usually seen with verbs to switch subjects and objects. That is, it is indicating that the expected relationship is reversed. This is the logic that is used here, as the relationship expressed by the conjunction is now inverted from indicative to conditional.

\section*{Final Thoughts}

Well, there you have it! This is my first big foray into Amungasi. I've worked out a small grammar document for my own personal use at the moment, and I've been attempting to participate in the 5moyds, as well as the Telephone Game to help build up my vocabulary and my grammar through explicit examples. I think my core grammar is still a little shaky, so all of what's included in this article is definitely still an active work-in-progress, but I'm pretty pleased with it so far, and I'm looking forward to developing the language further! Special thanks to miacomet for his assistance with feedback! You can find me at /u/Lysimachiakis on Reddit, or at Lysimachiakis\#3713 on Discord.

Thanks for reading! Bjark'ümii Translation Challenge

\author{
by Lichen
}

\section*{With Discussion of Selected Lexical Items}

This article will be examining some lexical items that appear in the Bjark'ümii translation of the Segments translation challenge. In the following gloss the first line is the original text, then the Bjark'ümii, then the morpheme breakdown, then the gloss, and lastly a more literal rendering of the Bjark'ümii. However, two sentences from the original were not translated: "The dog was big with a long, brown coat" and "His life was simple, but so long as he had his dog, the old man was happy."

\section*{Translation \& Gloss}
(1) Kiváíze fijáa k'úrkavańa sotíŕii sotźkjiíí sámmazŕuu ukimáákwa vattú.
\begin{tabular}{clllll} 
ki-váíze & fijáa & k'úrkavańa & so-tí́rii & so-tźkjíín sámmazŕuu \\
H.SG.PROX-live.VOL & old.person & island & LCN-small & LCN-rocky & dog
\end{tabular}
"An old man lived alone with his dog on a small, rocky island."
lit. "An old man lived on an island small and rocky, (his) dog accompanied him, just the two of them."
(2) T’ńváíze 'wáńuhiliraisks sobjarŕmjií.
\begin{tabular}{clc} 
t'ń-vaíze & 'wáńuhiliraisk & \(=s\) \\
H.DU-live.VOL & stick.hut & \(=\) LOC \\
LCN- bjar -ŕmjí́ \\
LCoss - covered
\end{tabular}
"They lived in a wooden hut covered in moss."
lit. "The two lived in a moss-covered stick hut."
(3) Máttaloz tlk'üm somúaistuŕmjíí źani stustu jeináí zizi.
\begin{tabular}{llccccc} 
máttaloz & tlk'üm & so-mú'aistu -ŕmjíí & źa \(=\) ni & stu \(\sim\) stu & je-ináí \\
always & sky & LCN- raincloud-covered & CONJ \(=C\) & being \(\sim\) ITR & AN.PL-fall.NVL
\end{tabular}

\section*{Bjark'ümii}
zizi
rain
"The sky was always gray and it rained often."
lit. "Always the sky was cloud-covered, and rain fell again and again."
(4) Fijáa kibṛfii źani lutwíí lukzínjii.
\(\begin{array}{lccrr}\text { fijáa } & \text { ki-brfii } & \text { źa }=\text { ni } & \text { lu-twí́ } & \text { lu-kzínjii } \\ \text { old.person } & \text { H.SG.PROX-bearded } & \text { CONJ=C } & \text { INAN.PL-thick } & \text { INAN.PL-coarse }\end{array}\)
old.person H.SG.PROX-bearded CONJ=C INAN.PL-thick INAN.PL-coarse
"The old man had gray hair and a thick, wiry beard."
lit. "The old man was bearded and (the hairs) were thick and coarse."
(5) Kibáálamáa fijáa káfu múshmanjiliwánzu tabz'íí źani sámmazŕuut kazu lńkwilib luhlíí.

"Each morning, the old man drank a bitter tea and shared cold leftovers with his dog."
lit. "He would do in each morning by drinking bitter tea and sharing with the dog cold leftovers."
(6) Kińááfamáa tzáju kzuk'úmbatwańa sni kiuháára fésuzŕuulet.
\[
\begin{array}{clllr}
\text { ki- ńááfa } & \text {-máa tzáju } & \text { kzuk'úmbatwańa } & \begin{array}{l}
\text { s = ni } \\
\text { LOC }=\text { C }
\end{array} \\
\text { H.SG.PROX-do.in.afternoon.voL } & \text {-all } & \text { going.thither } & \begin{array}{l}
\text { seashore }
\end{array} & \\
\text { ki- u-háára } & \text { fésuzŕuu-le }=\mathrm{t}
\end{array}
\]
"In the afternoon, he walked to the shore to catch some fish."
lit. "He would do in each afternoon by going thither to the seashore (in order) to hunt fish."
(7) Sámmazŕuu ujebáája kahanent jezáíhe nákku fésuzŕuule luk'vjíi.

"The dog chased away seagulls that wanted to steal the tasty fish." lit. "The dog made the seagulls go (far) away, they wanted to steal the tasty (dead) fish"
(8) Butlíí nus, fijáa kitatááka ńuhok kitańááha, sámmazŕuu uslááhje uwánzwe uluváázŕa fésuzŕuule.
bu-tlíí nus fijáa ki- ta-tááka ńuhok ki-
ABST-rise here old.person H.SG.PROX-INAN.SG-cut.VOL woodblock H.SG.PROX-
ta-ńááha sámmazŕuu u-slááhje u-wánzwe u-
INAN.SG-burn.VOL dog AN.SG-sit.VOL AN.SG-border AN.SG-
\[
\begin{array}{cll}
\text { lu-váázŕa } & \text { fésuzŕuu-le } \\
\text { INAN.PL-guard.vOL } & \text { fish } & \text {-PL }
\end{array}
\]
"The old man then chopped firewood, and the dog sat by his side, guarding the fish." lit. "Above here, the old man chopped a woodblock, he (will) burn it, the dog sat next to him guarding the (dead) fish"
(9) Kiráúzjamáa, fijáa mútümássju źańáhaju fésuzŕuule źani t'ńluhjááta sámmazŕuu.
\begin{tabular}{cllcc} 
ki- ráúzja & -máa & fijáa & mútü-mássju & źa \(=\) ńáhaju \\
H.SG.PROX-do.in.evening.voL -all & old.person & salt-sprinkling & CONJ \(=\) cooking
\end{tabular}
\begin{tabular}{llcccl} 
fésuzŕuu-le & źa \(=\) ni & t'ń- & lu-hjááta & sámmazŕuu \\
fish & -PL & CONJ \(=\mathrm{C}\) & H.DU-INAN.PL-eat.VOL & dog
\end{tabular}
"In the evening, the man salted and cooked the fish, and ate them with the dog." lit. "The old man would do in the evening by sprinkling-with-salt and cooking the fish, and (with) the dog, they two would eat them."
(10) T’ńznáí t'ńwánswe aks ukinnáá sni bunviitaj suŕú.
\begin{tabular}{cclll} 
t'ń- znáí & t'ń- wánswe & ak \(=s\) & u-kinnáá \\
H.DU-sleep.NVL & H.DU-border.vOL & fire \(=\) LOC & AN.SG- make.bright.dry.warm.NVL \\
s= ni & bu-nvii - taj & suŕún & \\
LOC \(=\) C & ABST-be.here - NEG & cold.wet.darkness
\end{tabular}
"They slept by the warm fire to keep away the bitter cold."
lit. "They two slept by the fire, it was bright and drying and warming, so that the cold-wet-darkness would not be here."

\section*{Commentary}

This article will not look at all the words and morphemes of the translation, but a selected subset, including where appropriate a discussion as to the item's meaning and derivation.

\section*{kivaize /kivaize/ 'he lives, he inhabits'}

This word means '(s)he lives' and is composed of two morphemes, ki- and -vaize. The prefix ki- is used for the subjects and agents of singular human referents that are highly salient to the discourse, which here is the old man of the story. -vaize is a verb from the root \(\mathbf{v - i z}\) which covers the semantic realm of being alive or inhabitation. This verb is in the volitional form -vaize as opposed to the nonvolitional -vizai because the story describes the active mode of the old man's life, as opposed to the mere fact that he is alive instead of dead. To live somewhere requires conscious action, and thus the volitional form of the verb is used.

\section*{k'urkavańa /k'úrkavana/ 'island'}

This word means 'island.' It comes from the verbal root k'-urk meaning 'to stick out (of),' with a historical augmentative suffix *-?, and a nominalizer -ańa. Bjak'ümii has a set of nominalizers for locations depending on the size of the place. The -ańa nominalizer is generally used for places that do not extend beyond the horizon, though over time k'urkavańa has come to refer to islands of all sizes. As such, k'urkavańa could be loosely translated as 'a place that sticks out greatly (of the water)'-or more succinctly, an island.

\section*{Bjark'ümii}

\section*{sotźkjíí /sotjkjí:/ [sołjkií:] 'rocky, barren, desolate'}

This word is composed of two morphemes, so- and -tźkjíi. The prefix so- is an agreement marker for the location class of nouns. \({ }^{1}\) The adjective (or more strictly speaking, stative verb) comes from the root tź-kj, which, while used as a translation for 'rocky' also contains overtones of a particular kind of desolation, especially a sparseness or lack of vegetation.

\section*{sámmazŕuu /sám:azru:/ 'dog'}

This word means 'dog.' It comes from the verbal root s-m meaning 'to help,' with a diminutive suffix \({ }^{2}\) that was historically \(*-h\), and a nominalising suffix -zŕuu that creates animate (non-human) singular agents from transitive verbs. Given that dogs are used in Bjark'ümii culture for all sorts of work-hunting, dragging goods, guarding houses-it is unsurprising that they would be lexified as helpers.

\section*{ukimáákwa /ukimá:kwa/ 'it accompanying him'}

Translating 'with his dog' was difficult, as Bjark'ümii has only paltry prepositions, none of which cover a comitative sense. As such, this needed to be translated with a verb máákwa 'to accompany.'Morpheme-by-morpheme ukimáákwa is u-ki-máákwa, where uis the animate singular subject agreement prefix referring to the dog; ki- being the human singular object agreement prefix referring back to the old man; and -máákwa being the verb.

\section*{vattú /vat:ú/ 'just as two'}

In the story of the old man, 'alone' is functioning as an adverb to modify 'lived.'Alas, in Bjark'ümii there are no adverbs (in the sense of a separate class of word used to modify adjectives or verbs \({ }^{3}\) ). Rather, nouns of abstractions are used. Normally the word used for 'alone' is kikŕu, which more accurately means 'one-ness' or, when used adverbially, '(just) as one.' It comes from the root kj-h 'one' with the augmentative we have seen before \({ }^{*}-\mathbf{R}\) and a nominaliser for abstractions -u.

However, given that the old man is not alone by himself but rather with his dog, the more appropriate word is vattú '(just) as two,' formed in a similar way to kikŕu: the root v-t meaning 'two' with the augmentative we have seen before *- r and a nominaliser for abstractions -u.

\section*{'wáńuhiliraisk /Pwánuhiliraisk/ 'hut made of sticks'}

The original text speaks of a 'wooden hut,' so I decided to use the word 'wáńuhiliraisk, a hut built by taking many reasonably straight sticks or branches and putting them into the ground in a circle, with one edge of the circle missing for the entranceway, and thereafter laying branches over the top to make a pointed roof usually covered in leaves. 'Wáńuhiliraisk is a compound composed of the morphemes 'wa-ńuh-ili-raisk. -ńuh- is from the root ńw-h which pertains to wood. -ili is a nominalising suffix for plural inanimates. Inanimate

\footnotetext{
\({ }^{1}\) Bjark'ümii has a system of noun classes, which create agreement structures in verbs (and adjectives): human singular, human dual, human plural, animate singular, animate plural, inanimate singular, inanimate plural, location, abstraction.
\({ }^{2}\) While this suffix is known as the "diminutive," it can modify a verbal root in several ways, including covering iterative actions, 'reduced' actions, and culturally desirable actions. Some examples of transformations include: eat > nibble, drink > sip, burn > cook.
\({ }^{3}\) There is a whole discussion to be had whether 'adverb' is even a valid or useful category, but this will not be addressed in this article.
}
nouns in Bjark'ümii commonly take a shape-classifying prefix, and 'wa- is the prefix for items that are long and hard, usually rodlike. As such, 'wańuhili means 'sticks.'

However, sticks alone do not an abode make. They must be arranged, and the verb raiskaa means 'to arrange/make (something) into an abode.' Bjark'ümii culture is not sedentary, so it is common for impermanent structures like stick-huts or tents or caves to be used as shelter. The compound 'wáńuhiliraisk comes from a truncated relative clause in Old Bjark'ümii, meaning "sticks that have been made into an abode."

\section*{sobjarŕmjíí /sobjarrmií:/ 'moss-covered'}

As we have seen hereabove, the so- prefix indicates agreement with the location class of nouns <LCN >. bjar is a noun meaning 'moss,' while the stative verb -ŕmjíí 'covered' comes from the transitive verb -ŕáámja 'to cover.' The alternation between S-arguments and Parguments in the stative and transitive forms of a verb is widespread in Bjark'ümii, and is indeed the default (with the only exceptions being verbs of motion \({ }^{4}\) ). It is worth noting that the use of -ŕmjíí implies that the covering of the hut in moss was deliberate, perhaps as a form of waterproofing or insulation, as opposed to the moss growing upon the hut.

The phrase 'covered with moss' could be translated with an adjunct instead, rendering:

> soŕmjíí bjarb
so- ŕmjíí bjar \(=\mathrm{b}\)
LCN- covered moss = INST
covered with moss
or even with a relative clause as:
kisoŕáámjaŕmjii bjarb
\(\begin{array}{rrllll}\text { ki- } & \text { so- } & \text { ŕáámja } & \text {-ŕmjii } & \text { bjar } & =\mathrm{b} \\ \text { H.SG.PROX- } & \text { LCN- } & \text { cover } & \text {-covered } & \text { moss } & =\text { INST }\end{array}\) (which) he (had) covered with moss

However, having a non-incorporated noun would suggest the moss is somehow special, or that the act of covering a hut in moss is unusual; while the incorporated form creates a sense of a generic activity with a non-specific moss.

\section*{máttaloz /mát:aloz/ 'always'}

This word is broken down into: map-, a prefix meaning 'all' or 'every'; and taloz meaning 'rising' or 'time' (from the root \(\mathbf{t}-1\), which covers upwards position or upwards movement; and a historial nominaliser for abstractions). There is a cognitive metaphor in Bjark'ümii where time is seen to flow upwards, such that future events are conceptualised (and lexicalised) using spatial referents 'above' the speaker, while the past is 'below.' The word taloz could be translated as 'that which rises,' but a simpler translation is 'time.'

\section*{tlk'üm /tllk'ym/ 'sky'}

This word contains the same root \(\mathrm{t}-1\) as máttaloz pertaining to aboveness, with a nominalising suffix -k'üm which designates locations, specifically locations that are so large they extend beyond the edge of what someone can physically perceive (usually the horizon). This

\footnotetext{
\({ }^{4}\) This is probably due to the fact that S-arguments of verbs of motion are highly agentlike, so preserve their 'agentness' when transmuted into the transitive form of the verb.
}

\section*{Bjark'ümii}
large-location nominaliser also appears in the endonym bjark'ümii (along with an adjectival suffix -ii), which refers to the expanse of land the Bjark'ümii live on.

\section*{stustu /stustu/ 'constantly'}

This word's root is s-t, which concerns existence, and is the verbal noun with the suffix \(-\mathbf{u}\) that has then been reduplicated. Literally, one might translate it as 'being-being,' but it means 'constantly' or perhaps 'again and again.'

\section*{kibṛfii /kibṛ́fi:/ 'bearded'}

This word is the human singular proximal agreement prefix ki- attached to the stative verb -bṛfii meaning 'to have a beard.' There are a great number of these 'cosmetic' adjectives, that cover a range of appearances and injuries:
\begin{tabular}{ll} 
White-haired & -húnii \\
One-eyed & -ksirtíí \\
Blind & -dńíí \\
Limping & -kíl'ii
\end{tabular}

Having a beard is a notable feature in Bjark'ümii culture as well because men are only allowed to have beards after they have become married by joining a mantab 'marriage line.' This suggests that the old man's isolation in the story is either due to his having run away from his mantab, or that all of them have perished in some disaster or disease.

You might have noticed that in the gloss the beard is then described with adjectives prefixed with the inanimate plural marker, without overt reference to a noun 'beard' appearing at all. This is because beards are conceptualized as inanimate plural entities, composed (as they are) of many individual hairs.

\title{
kibáálamáa /kibá:lamâ:/ 'to do every morning' \\ kińááfamáa /kiŋá:famâ:/ 'to do every afternoon' \\ kiráúzjamáa /kiráúzjamâ:/ 'to do every evening'
}

Actions taking place at a particular time of day or night, or within a day or two of the present, tend to be lexicalised as verbs in their own right, with an oblique adjunct to describe the particular action in question. These three verbs all have that ki- agreement prefix we have seen before; and all have the -máa morpheme which we have seen in the word máttaloz; while the roots b-l, ń-f, and r-zj refer respectively to the morning, afternoon, and evening.

\section*{múshmanjiliwánzu /músmianjiliwánzu/ tea}

This word is very long for 'tea,' and most Bjark'ümii speakers would probably use the loanword tśai or kśai. However, while tśai/kśai refers to the drink made from Camellia sinensis, múshmanjiliwánzu refers to any drink made of steeped leaves, and in contradistinction to tśai/kśai refers to traditional steeped drinks of the Bjark'ümii.

The word itself is a combination of mú-, the amorphous classifier (used, among other things, for liquids); shmanjili, 'leaves'; and -wánzu 'to steep'-this is a kind of truncated relative clause, as seen hereabove. So in a literal sense it simply means 'liquid of steeped leaves.' However, the word shmanjili 'leaf' is itself composed of the morphemes s-, the
shape classifier for flat things; hm-nj, the verbal root concerning growth out of something (as in, towards the periphery); and -ili, a derivational suffix for plural inanimates. Thus, if we wanted to be extra literal and translate morpheme-by-morpheme, we could say that mushmaniliwánzu means 'liquid from steeping flat things that grow out (of other things)'; though I think it is more succinct to say 'tea.'

\section*{tzaju /tzaju/ 'going there'}

\section*{ujebáája /ujebá:ja/ 'it made/makes them go yonder'}

Bjark'ümii has a three-way deictic distinction for spatial distances, as given by these roots: \(\mathbf{n - w}\) 'here'; tz-ij 'there'; and b-j 'yonder.' Roughly speaking, n-w covers anything within tangible distance, so about a stone's throw; tz-ij is between \(\mathbf{n}-\mathbf{w}\) and the edge of one's perception (usually hearing or sight); and b-j for all distances beyond that. Because each of these concepts has its own root, they can be permutated into stative, intransitive, or causative verbs.
```

-nwii 'to be here'
-nwai/náwe 'to come here'
-nááwaa 'to bring here'
-tzjii 'to be there'
-tzjai/tzáje 'to go there'
-tzáájaa 'to put there/make go there'
-bjii 'to be yonder'
-bjai/báje 'to go yonder'
-báájaa 'to put yonder/make go yonder'

```

Tzaju is the verbal noun as the oblique argument modifying kińááfamáa, and it implies that the old man could see (or hear) the shore from where he was previously busy with tea and leftovers. Likewise, the verb -báájaa implies that the dog made the seagulls go so far away that they were out of sight.

\section*{nákku /nák:u/ 'stealing'}

This comes from the root \(\mathbf{n - k}\) 'to take' with the augmentative derivation we have seen earlier. Recall that the augmentative can create a reading that the action is undesirable (from a Bjark'ümii cultural perspective), thus giving us \(\mathbf{n}-\mathbf{k k}\) as the root concerned with stealing. The word nákku is again a verbal noun, acting as the complement for the verb jezáíhe 'they want.' Worth noting here too that the root z-ih concerns both wanting and needing, and gives these readings depending on whether the verb is in the volitional or nonvolitional forms respectively.

\section*{butlií nus /butđí: nus/ 'above here; then'}

As mentioned, the Bjark'ümii conception of time flows upwards, so while we might reckon an event to be 'after' another event, the Bjark'ümii reckon an event to be 'above' another event. This is why I decided to translate the 'then' in the original as meaning approximately the same as 'after this,' and then adjusted it vertically. You might recognise that nus 'here' contains the \(\mathbf{n}-\mathbf{w}\) root for 'nearby-ness,' and has a fossilised noun class ending for locations -s . The word butlií has the adjective -tlií 'above, raised' from the root t-1 (same as in máttaloz and tlk'üm), and the abstract noun class agreement prefix bu-. The abstract noun agreement is used to refer back to the whole preceding phrase (or narrative).

\section*{Bjark'ümii}

\section*{źańáhaju /jaŋáhaju/ 'and cooking'}

The root in this word is ń-h which concerns burning, as we saw in ńuhok kitańááhaa 'the woodblock he would burn,' but with the diminutive derivation added before being nominalised. The diminutive covers not only reduced actions, but those that are desirable, so 'cooking' is seen to be a smaller, more desirable form of burning. \({ }^{5}\)

\section*{ukinnáá /ukin:á:/ 'it brightens, warms, and dries nicely'}

\section*{suŕú /surú/ 'cold, wet darkness'}

There is a refined nexus of sound symbolism in Bjark'ümii to describe one's ambient environment. It has three axes: humidity, temperature, and brightness, and these can be combined to create roots of highly specific meaning.

In this nexus, all roots beginning with \(\mathbf{k}\) concern heat; while those beginning with \(\mathbf{s}\) concern cold. Then one might specify dryness by palatalising that initial consonant; or wetness by labialising it. Lastly, the second radical of the root specifies brightness with a nasal (usually at the same place of articulation as the initial consonant), or a trill for specifying darkness. If no brightness is specified, the first consonant is used again in the root. Temperature must be specified.
\begin{tabular}{l|l|l|l|l} 
& & - & BRIGHT & DARK \\
\hline \multirow{3}{*}{ HOT } & - & \(k-k\) & \(k-n\) & \(k-\dot{r}\) \\
\cline { 2 - 5 } & DRY & \(k j-k j\) & \(k j-n\) & \(k j-r\) \\
\cline { 2 - 5 } & WET & \(k w-k w\) & \(k w-m\) & \(k w-\dot{r}\) \\
\hline \multirow{3}{*}{ COLD } & - & \(t-s\) & \(s-n\) & \(s-r\) \\
\cline { 2 - 5 } & DRY & \(\dot{j}-s j\) & \(s j-n\) & \(s j-r\) \\
\cline { 2 - 4 } & WET & \(t w-s w\) & \(s w-m\) & \(s w-\dot{r}\)
\end{tabular}

There is some \(t s\) alternation above, due to modern /s/deriving from an older /* \(\mathrm{t}^{\mathrm{h}} /\) that underwent deaspirating dissimulation in some circumstances. Some climatic words derive from these too, like kuŕk'úm 'jungle' and sṇk'üm 'Arctic summer.'

In the text we have the verb ukinnáá, which has the animate singular agreement prefix u- because it agrees with ak 'fire' and fire falls into the animate class, as do many natural phenomena. That leaves us with the verb stem, -kinnáá which has the root kj-n meaning 'hot, dry, bright.' It is also in the diminutive form, which is what causes that geminate -nn-, and is a transitive verb. Altogether it means 'to make (nice and) warm, dry, and bright.'

Rather poetically, this root kj-n is the exact opposite of the root sw-ŕ that appears in the word suŕú, which is the verbal noun from the intransitive verb -suŕíí 'to be dark, cold, and wet' and as such could be translate as 'cold, wet darkness' or 'dark, cold wetness' or 'wet, dark coldness.' Our old man and dog live on what seems to be a bleak and rainy island, so it seems fitting that they would aim to keep the suŕú at bay with a nice kinnáá fire.

\footnotetext{
\({ }^{5}\) I say "is seen" rather blithely, as native speakers are for the most part unaware of the transmutations of roots between their neutral, augmented, and diminished forms; though they are delighted to have it pointed out to them and often remark that the relatedness of words like ńáhu and ńáhaju is obvious in hindsight.
}

\section*{Conclusion}

I used the generator Lexifer to help me generate roots for this, and I chose the derivational morphology more or less haphazardly, like the -k'üm for immense locations and -ańa for slightly smaller locations, but some pieces were chosen more carefully like the augmentative being a glottal stop and the diminutive being a glottal fricative as these have interesting phonological consequences when evolved. However, the greatest thing I learned from doing this translation exercise is that, in the end, I actually do not like the language as it is. There are certainly elements I like, like the sound symbolism nexus and using verbs to denote what time of day something is done, but ultimately I did not like the wordshapes and sounds in the narrative overall. I also realised I needed to revisit the grammar concerning incorporated nouns and applicatives. As such, while I enjoyed the exercise of translating and discussing the lexicon, almost none of what you see hereabove will be kept. But that is the nature of art-it is all sketches and revisions, until one is left with a piece one likes.

\section*{Coming Attractions}

Thank you for reading Segments! We hope you will join us again for Issue \#05:

\section*{Adjectives, Adverbs, and Modifiers}

The submission period will open in March 2022!
Keep your eyes out for announcements in different conlang communities with more details on content guides, submission guidelines, deadlines, and more!

In the meantime, you can start thinking about how modifiers work in your language, and what topic within that realm might be interesting to explore for an article!

See you next time!

\section*{Attribution}

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For instance, using Miacomet's article about Mwanele in Issue \#01:
| Miacomet, (2021). "Mwane!̣e Phonology," Segments (01-02), April 2021.

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\section*{Segments}

\author{
PROJECT MANAGER Lysimachiakis \\ EDITORS Lysimachiakis \\ Miacomet \\ LAYOUT ARTIST Slorany \\ INITIAL REVIEWERS Lysimachiakis \\ Miacomet \\ PROOFREADERS Lysimachiakis \\ Miacomet
}

Intended as both an educational resource and a way to showcase the best work the r/conlangs community had to offer, Segments. was started in 2020 on an initiative by u/Lysimachiakis and u/Slorany, with great amounts of help from the rest of the subreddit's moderation team.```


[^0]:    ${ }^{1} \mathrm{~A}$ concept I shall define shortly.

[^1]:    ${ }^{2}$ Vosvótin is the singular of the adjective, vosvótu the plural. The abstract noun, seen earlier, is vosvótas.

[^2]:    ${ }^{3}$ Franz Boas (1858-1942), who observed that while any language will let you say what you really need to say, languages do differ in what they oblige you to say.
    ${ }^{4}$ Herbert Paul Grice (1913-1988), whose four conversational maxims provide a framework to understand the occasionally surprising difference between what is said and what is meant. The maxim of quantity says that what you say should be as informative as is required for the current conversation, no more and no less. The maxims are routinely violated to make some other point.
    ${ }^{5}$ On the other hand, a mass of obligatory distinctions is an excellent way to generate huge verbs, if you're into that.
    ${ }^{6}$ Please see https://lingweenie.org/conlang/diary.html for the arguments in favor.
    ${ }^{7}$ This means 'worldview-internal, theory-internal'. It refers to beliefs or actions so thoroughly steeped in a particular thought system that they may not be comprehensible to people outside that conceptual ecosystem.

[^3]:    ${ }^{8}$ I gave a talk about these at LCC 9, if you want to dig into this idea in more detail: https://lingweenie. org/conlang/LCC2021/

[^4]:    ${ }^{9}$ It is possible Kílta is oversupplied with fungal metaphor.
    ${ }^{10}$ For many years I complained about the word 'louse' in the Swadesh list, because this is not a word I need much. A fellow conlanger pointed out that once you become a parent the importance of the word becomes more obvious.

[^5]:    ${ }^{11}$ Very reasonable objections!
    ${ }^{12}$ Also mixed in with rather basic things like negation and polar question marking.

[^6]:    ${ }^{13}$ Not that I've ever hesitated to converse with myself, sotto voce, when there is need.
    ${ }^{15}$ The postverbal particle hwí marks a state of affairs as something the speaker approves of or is otherwise happy about.

[^7]:    ${ }^{1}$ If you want a quick intro for conlangers, check out my Conlangs University lesson and if you're interested in a longer discussion check out Metaphors We Live By by George Lakoff and Mark Johnson.

[^8]:    ${ }^{2}$ That'd be Lexember 2020 Day 15: Cognition.

[^9]:    ${ }^{3} \mathrm{u}$ /gufferdk's Interesting Sentences \#2 activity is what got me thinking about this.

[^10]:    ${ }^{1}$ Scalise, Sergio. 1984. Generative Morphology. Dordrecht: Foris Publications.
    ${ }^{2}$ Bauer, Laurie. 1997. Evaluative Morphology: In Search of Universals. John Benjamins Publishing Company.
    ${ }^{3}$ My knowledge of Sotho is very poor and I could not find a way to denote the concord system of Sotho very well.

