Wellesley College LING 315 Invented Languages

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The Jaru© Language

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1. Introduction

1.1 Jaru, the Name of My Invented Language

The name of my invented language is "Jaru", or "dzary" in IPA. It refers to both the people and their language. The origin of the word Jaru is unknown. Some argue that it comes from the traditional Jaru herding call, while others believe that it sounds similar to the word "iary" in the old Jaru tongue, which means "to run and be free".

1.2 the Jaru culture

I created the Jaru culture based on my personal background and added some fictional details. Here's a little bit of background: my mother comes from a Mongolian family that has long been assimilated into Chinese society, and so growing up I'm always curious about Mongolian culture. Therefore, I got some inspiration for my language from the traditional nomadic life of the Mongolians, and turned it into a more or less "hippy-queer-pacifist" culture. The Jarus are mostly nomads that move around to find the best grazing ground for their livestocks, and they live mostly on the grasslands. Overtime, the Jarus gradually divided into two large groups - the Jareis and the Jaras - with many smaller tribes in each group. The Jareis maintain a more ancient version of the Jaru language and culture because they live where most of the ancient Jarus did. They also live near deserts and lakes. The modern day Jaras, however, have moved into the mountains and have more contact with the outside world. My language is the Jara dialect, so in this paper I will mostly focus on the Jaras, but I will also introduce some elements of the more ancient Jarei dialect. I will also refer to the Jara dialect as Jaru.

Foraging is a huge part of the Jaru culture. And they mostly forage mushrooms, which is their main source of food. The Jarus even have several mushroom deities and many mushroom-related proverbs and metaphors. Apart from mushrooms, they also eat ostrich eggs and small animals, and maintain a mostly vegetarian diet.

In terms of cultural activities, the Jarus love music and have a rich music tradition. Many of their songs are related to their life in the grassland - mushrooms, horses, etc. They also have a lot of songs related to their Shaman religion (the Jarus believe that most things in nature have spirits) and are sung during rituals. They consider dancing suitable for almost any event and it's a favorite pastime activity as well.

The Jaru social structure is fairly loose and democratic. Though there's no concept of hierarchies, Shaman priests are highly respected. There is no gender in the Jaru society. The Jaru society is neither matriarchal or patriarchal - you might call it non-binary. Because the Jarus are nomads, there are many different Jaru tribes, and each tribe has a council of 7 members that make important decisions. Each council is re-elected every 2 years. Each tribe has a population of anywhere between 50 to 200 people.

2. Phonetics and Phonology

2.1 Phonetics

2.1.1 Consonants

There are 15 pulmonic consonants in Jaru along with two non-pulmonic consonants. I took inspirations from Mandarin, Mongolian, Uyghur, English, and South Asian languages. Here is the IPA chart for the consonants:

	Bilabi al	Labiod ental	Dental	Alveol	Postal veolar	Retrofl ex	alveolo-palatal	Palatal	Velar	Uvular
	aı	Ciitai		ai	VCOIai	CX				
Plosiv				t					k	
e									g	G
Nasal				n						
Tap or				ſ						
Flap				1						
Fricati			θ	S	ſ		E			χ
ve										
Appro				т				j		
ximant				I				J		
Lateral										
Appro				1						
ximant										

Affrica				- Ja		
te				U∠		

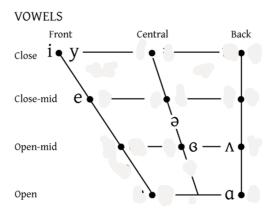
Voiced implosives				
ď				
Dental/alveolar				
g				
Velar				

Two other consonants taken from Mandarin are $/\overline{dz}/$, the voiced alveolo-palatal affricate, and /c/, the voiceless alveolo-palatal fricative. $/\overline{dz}/$ is made by first obstructing air in the mouth before then redirecting it with the tongue. /c/ in particular has a soft and gentle sound due to its voiceless nature. It is made by having the air travel through a crevice formed by the lips and the palate. These two phonemes are very common in east asian languages such as Mandarin, Tibetan, and Japanese. Two non-English pulmonic phonemes I included are the uvular /c/ and $/\chi/$. $/\chi/$ is a phoneme formed when there is air turbulence near the uvula, as in the french word "très" (very).

My intention for the phonetics of my language is to make sure it doesn't sound very much like a European language, which is something I've realized about many different Conlangs in the past such as Esperanto and Lojban. To further diversify my IPA chart, I included two voiced implosives /d/ and /g/. These sounds are made by building a high air pressure in the larynx then releasing the air quickly. These phonemes make a word sound very strong and powerful and help balance the softer phonemes such as /g/ and /ʃ/.

2.1.2 Vowels and Diphthongs

Jaru has 7 vowels and 5 diphthongs. I picked /y/ and /e/ from Mandarin and /a/ from Uyghur. The 5 diphthongs include /ie/, /ie/, /ia/, /ai/, and /ya/. The combination of all the consonants and vowels makes Jaru sound like a mix of Asian and European languages.



Where symbols appear in pairs, the one to the right represents a rounded vowel

2.2 Phonology

2.2.1 Syllable Structure

Jaru has 4 syllable structures: CVC, CV, V, and VC. Here are some examples:

Syllable structure	Jaru	English
CVC	çat	sky
CV	xi	fire
V	е	and
VC	yr	water

An exception to this rule is when suffixes or prefixes made of a single consonant is added to a word that also happens to begin or end with a consonant, forming a CCV, CCVC, VCC, or CVCC structure, though affixes like these are rare. So far, the only affix in Jaru that fits this rule is "ʃ", the plural form for all nouns that refer to humans. For instance, the word "parents" would be "aieyalf".

2.2.2 Phonotactic Restrictions, Stress Rules, and Phonological Rules

For the sake of easier pronunciation, I made some restrictions for certain combinations of consonants and vowels. For instance, /g/and /j/ can't be ending consonants. θ can't be a starting consonant and /I/ can't be followed by /y/ or any diphthongs.

Jaru uses the penultimate stress, which mandates that the stress of a word falls on the second syllable. It also doesn't have tones.

In Jaru, as it is in English, vowels are nasalized when they appear before a nasal, such as /e/ in the word "endedz", which means "Goodbye".

3. Morphology

Jaru morphology is fairly straightforward. The language uses mostly prefixation and suffixation to alter the forms of verbs or add cases to nouns (details in section 4), and other word categories don't involve a lot of morphological changes. The forms of nouns, adjectives, adverbs, etc, tend to stay the same in all syntaxes except when grammar cases are applied and the plural form of nouns that refer to humans. I will go into details about the plural forms in the section on numbers.

4. Syntax

4.1 Word Order

Jaru is an OSV (object-subject-verb) language. This is a fairly rigid structure as Jaru doesn't have many cases to support a flexible word order. Here is an example of a sentence in Jaru. Note that wind is a countable noun in Jaru and there is a special classifier for it.

kaθ aisit gəylya dzia aicyal AfGeθ
3 wind-classifier wind my parent-PL PST-hear
My parents heard three winds.

4.2 Tense

Jaru only has past tense verb conjugations. Present or future tense come in the form of time indicators like "now" or "tomorrow". Past tense comes in the form of a prefix /Δʃ/ that is attached to a verb. For example, the past tense for the word "χαnsy"(sing) is "Δʃχαnsy"(sang). A special exception for this rule is that modal verbs such as "iedlir"(can), "sat"(will), etc, do not

have past tense and only has one form. Future and present tense in Jaru are indicated through modal verbs or time. The word "sat"(will) is used to indicate future tense. Words such as "ɪəjy"(tomorrow), "rai dzy"(next week), etc, can also be used to indicate future tense. Here are two examples:

dzia∫ sat χansy 1-PL will sing We will sing

dzia∫ 19jy χαnsy 1-PL tomorrow sing We will sing tomorrow

The word "cian" (now) can be used to indicate present tense, or, in most cases, no additional words are needed. Here are two examples:

dzia∫ cian ic 1-PL now eat We eat now

dzias is 1-PL eat We eat

While there is no specific rule that mandates the position of the time indicators, they tend to appear before the verbs.

4.3 Mood

Jaru does not involve verb conjugation when it comes to mood. Much like in English, certain words are used to indicate subjunctive mood. For instance, the word "rygta" (if) is usually used at the beginning of a sentence to indicate an imaginary scenario. Other words like agxiak (wish), x = agxiak (hope), etc can also be used to indicate subjunctive mood. Sentences are default to indicative in the absence of subjunctive mood indicators. Here is an example of expressing subjunctive mood in Jaru:

rygtn ie dzia dyla

4.4 Aspect

The imperfective aspect in Jaru are achieved through verb conjugation as well. The prefix /sək/ is added in front of a verb to indicate an imperfective aspect. Perfective aspect is indicated through words like ies (already), and the perfective aspect indicators typically appear in front of a verb. In verb conjugation, tense prefixes come before aspect prefixes. Here is an example of the using imperfective aspect in Jaru:

Here is an example of using perfective aspect in Jaru:

4.5 Summary of Tense, Aspect, Mood Verb Conjugation

Here is a table of conjugating the verb "χαnsy" (sing) based on different tenses, aspects, and moods. The first table focuses on verb conjugation in indicative mood and the second on subjunctive mood. The columns refer to different tenses and the rows refer to different aspects.

Indicative	Past	Present	Future
Perfective	/Λ∫χαnsy/ - sang	/χαnsy/ - sing	/χαnsy/ - will sing
Imperfective	/Aʃsəkҳansy/ - was singing	/səkҳansy/ - is singing	/səkҳansy/ - will be singing

Subjunctive	Past	Present	Future

Perfective	/Λ∫χαnsy/ - sang	/χαnsy/ - sing	/χαnsy/ - will sing
Imperfective	/Asəkxansy/ - were singing	/səkҳansy/ - were singing	/səkxansy/ - ifwere to be singing

4.6 Person, Number and Gender on Nouns

Jaru has three types of pronouns: first person, second person, and third person. Here's a table explaining the singular and plural forms of the pronouns. The lack of concept of gender in the Jaru society has also influenced the Jaru language to lack gender in its nouns and pronouns. While the genitive cases of pronouns in English stand as independent words, Jaru makes no exception for genitive cases, so the genitive cases of Jaru pronouns are not listed here and will be discussed later in the case section.

I/me	dzia
you/you	в
they/them	ie
we/us	d͡zia∫
you/you(plural)	હ્
they/them(plural)	ie∫

The Jarus use both the decimal and vigesimal system to count. The Vigesimal system is commonly used when counting livestocks and a large number of things, because the Jarus keep many ostriches, horses, and sheep. There are both count and mass nouns in Jaru. Nouns don't necessarily need to be used with numbers. When there is a need to specify the number of something, the number typically precedes the noun. And if the noun is a mass noun, there will also be a classifier inserted between the number and the noun. For instance, both of the following sentences are grammatically correct in Jaru.

$$\Lambda\theta$$
 dzia dyla Crane 1-SG see

I see crane(s).

$$kh\theta$$
 edz $h\theta$ $dzia$ $dyl\theta$ 3 animal-CLF crane 1-SG see I see three cranes.

Jaru has a diverse range of noun classifiers. Some classifiers have their own meanings when used alone while others simply serve as classifiers. There are some classifiers in Jaru based on the shape of the nouns they are used with. For example, there's a classifier for things that are flat. There are also special classifiers that only apply to certain nouns because those nouns refer to things that are considered precious or holy. Below is a table on some of the commonly used mass nouns in Jaru.

		Corresponding	
Mass nouns		Classifiers	
water	dia	drop	tiaəge
air	aiggie	blob	elnydz
fire	ſiaɗie	stick	ke
sand	e∫nat	mountain	gec
earth	agəs	sea	təe
information	saiar	parchment	лdziek
lightning	ΛS	strand	nyaie
thunder	lya	army	siəgA
grass	yar	handful	gyaaχ
pastry	syieθα	cut	lidz
		long things	
snake	пвеθіα	classifier	у

sheep	degig	livestock classifier	edz
		round things	
ball	kaiieln	classifier	λ gθie
		flat things	
blanket	aefia	classifier	χу
grassland	tegaig	big things classifier	dieлχл
prayer	dzyajyarıs	prayer classifier	χyniεd͡z
song	σίακλχγασ	song classifier	Λ
		sharp things	
knife	ya	classifier	χίσαχσ
		horse (classifier for	
luggage	gətaijiss	piles)	kyeχ
		square things	
tent	dz ə dz	classifier	ilsiek
hair	ſʌɑigi	hair classifier	gyayra
meat	keyk	meat classifier	gyas
star	kai	star classifier	yk
moon	kiey	moon classifier	kyan
wind	gəylya	wind classifier	aisit

Jaru only has the plural form for nouns that refer to humans. The plural form comes in as a suffix (-f) attached to the nouns. For instance, the plural form of the word ry (priest) is ryf (priests). Nouns that refer to animals, plants, etc, don't have plural forms.

4.7 Articles and Determiners

Jaru doesn't have definite articles. As seen from the sentence examples in section 4.6, nouns can be used on their own. The number "or" (one) is used as an indefinite article when needed and it precedes the noun. Here is an example:

or ide dzia di
One sibling 1-SG have
I have a sibling.

There are two determiners in Jaru: <code>gaiyxia</code> (this/these) and <code>ad</code> (that/those). Determiners also appear before nouns. There is no distinction between determiners for singular and plural nouns.

4.8 Case System

Jaru has a relatively simple case system. It doesn't have case markers for nominative and accusative words and nor does it have case markers for the subjects of transitive and intransitive verbs. Jaru does have an accusative case marker "rie" for the object of transitive verbs but the marker is only used in relative clauses. The marker is added as a suffix. In sentences without relative clauses, the OSV word order helps mark the subject and object. In this situation, the word order of a sentence composed only of a noun phrase and a verb phrase will be considered SV by default, which means that a sentence made of an object noun phrase and a verb phrase is not allowed. If there is an object in a stand alone sentence, there has to be a subject. The reason why an accusative case marker is needed in relative clause is because if there's only a subject and a verb or an object and a verb in the relative clause, without any case marker, it will be impossible to know if the noun in the relative clause is a subject or an object due to the OSV word order of Jaru. Here is an example of using the accusative marker in a relative clause:

or ecdzədric ryas ait ai.ei

One ostrich-ACC ride relative-clause child

The child who rides an ostrich

Besides that, Jaru has five other cases - genitive, dative, locative, instrumental, and passive. The first four case markers appear as suffixes attached to nouns, and the passive case marker is a prefix attached to a verb. When the noun that the case marker is attached to is not a subjective or a verb, the position of that noun is relatively flexible. The genitive case in Jaru is

adding the suffix /le/ to a noun. The genitive case denotes the possessor of an item or knowledge. Here is an example:

The dative case in Jaru is the suffix $/\widehat{dz}y/$, which is added to a noun. The dative case refers to the recipient of an action. Here is an example:

er
$$\Lambda$$
 diak Λ xyag ie Λ fxansy dziadzy 1 song-CLF song 3-SG PST-sing 1-SG-DAT They(Sin.) sang a song for me

The locative case in Jaru is the suffix $/\widehat{dz}ia\theta$, which is added to a noun. The locative case means that something took place at a certain place. Here is an example:

The instrumental case in Jaru is the suffix $/\widehat{dz}e/$, which is added to a noun. The instrumental case means that something is used as a tool or instrument in order to achieve a goal, and the instrumental marker is added to that tool or instrument. Here is an example:

The passive case in Jaru is the prefix /ial θ ə/, which is added to a verb and it comes before the tense marker. Here is an example:

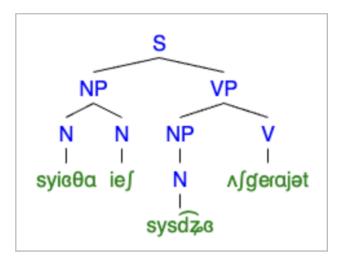
ie **ialθə**λ∫iaχgs 3-SG PASS-PST-find

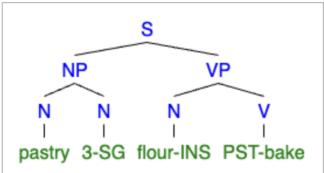
They (singular) were found

4.9 Syntax Tree

Here is a syntax tree of the sentence and its equivalent tree in English glossing $syie\theta\alpha \ ie \int sysd \overline{z} e \ \Lambda f der \alpha jet$ Pastry 3-PL flour-INS PST-bake

They baked pastry with flour





4.10 Relative Clause Adjectives, Adverbs, and Negation

Relative clause is a phrase used to modify nouns in a sentence. In Jaru, the word "ait" is inserted in front of a noun to indicate a relative clause. Using the same example from the case marker section, the phrase "the child who rides an ostrich" would be

or eddzədrio ryas ait aisei
One ostrich-ACC ride relative-clause child
The child who rides an ostrich

Everything in the relative clause comes before the relative clause marker. Note that the word "one" in this phrase refers to the ostrich, not the child, because there is no definite article in Jaru. Here is another example:

dzia Λſαgχiak ait kyex dziale aicyalſ gied Λſtia
1-SG PST-want REL horse 1-SG-GEN parent-PL NEG PST-buy
My parents didn't buy the horse that I wanted.

Note that in this case the accusative marker is not needed because the first person pronoun is a subject in the relative clause.

Adjectives and adverbs typically come before a noun or a verb in Jaru. Here are some examples. Note that in the first example, the adjective functions like an object.

ia ie enat Smart 3-SG be They are smart

ie gyalθe kaχ3-SG fast runThey (singular) run fast

er diencen dyagte \widehat{dz} d \widehat{dz} ai One big-things-CLF beautiful tent 1-SG have

I have a beautiful tent

Negation in Jaru comes in the form of a pre-verbal word "gied". It is normally inserted directly in front of the verb. However, if there are auxiliary verbs such as "will" or "can", the negation marker will be inserted in front of the auxiliary verb. Here are two examples:

When there is no verb present in a phrase, the negation marker will be inserted in front of an adjective or an adverb. If there's only one word in a sentence besides the negation marker, the negation marker will be inserted in front of that word. Here are some examples:

er dience gied keggasail ait
$$\widehat{dz}$$
 \widehat{dz} One big-things-CLF NEG big REL tent A tent that is not very big

5. Sociolinguistics, Historical Linguistics, Metaphors, and Honorifics

5.1 Sociolinguistics

^{*} Although this tent is not big, the classifier for big objects is still used because tents are big by default, so this classifier has become the classifier for tents.

There are mainly two groups of Jaru people - the Jareis and the Jaras. While the grassland is still an important part of Jaru territories, the Jareis are less mobile than the Jaras, and they tend to stick to one area for an extended period of time. The Jareis are known to be found near deserts and lakes, and are relatively isolated from the outside world. The Jaras, on the other hand, have gradually migrated into more hilly areas where they came into contact with many different cultures. Although both groups speak the same language, each group has their own dialect. It is also worth noting that the two groups are not completely separated, as they tend to gather for important festivals and events. All the linguistic elements, lexicon, and cultural elements discussed in the paper are based on the Jara dialect and culture.

Compared to Jara, the Jarei dialect has a smaller lexicon. This is due to the fact that the Jaras come into frequent contact with alien concepts not present in the Jaru culture. For example, the word "tower" is not present in the Jarei vocabulary, because the Jareis simply don't build very tall architectures and have never come into contact with cultures that build towers.

The Jarei dialect has also obtained some ancient Jaru phonemes that are no longer present in the Jara dialect. For instance, the voiceless uvular fricative $/\chi$ / in Jara actually used to be the voiceless velar fricative /x/, and the latter phoneme is still present in the Jarei dialect. Jara also went through diphthongization, where the diphthongs $/y\alpha$ / and /ie/ used to be separate vowels and are still pronounced separately in Jarei.

Finally, the Jareis and Jaras have very different proverbs and metaphors due to the differences in their living environment. The Jareis have many ostrich-related metaphors because ostriches are a very important part of their nomadic life. The Jaras, on the other hand, have many mushroom-related metaphors because the mountains have an abundance of mushrooms. Details on the metaphors will be discussed in section 5.3. Please also note that throughout the paper the "Jaru" language refers to the Jara dialect.

5.2 Historical Linguistics

The focus of this section will be on the Jara dialect. Since moving to the mountains, the Jaras have experienced a series of phonological and semantic changes in their language. The phonological changes in Jaru are caused mainly by the change of topography. Since sound doesn't carry as well in the mountains as it does in open spaces of the grassland, Jaru has

undergone vowel lowering so that words can be heard more clearly in the mountains. The phoneme /a/ in Jaru actually used to be the phoneme /æ/, and the latter is still used in Jarei.

Jaru has also undergone some semantic changes such as widening and narrowing. For instance, the word "yar" means "grass" in Jaru, but it also means "outside", because the Jarus have lived mostly on the grassland and grass covers most of the land they know. Whenever someone walks out of their tent, all they see is grass. An example of semantic narrowing is the word for mushroom in Jaru. Because mushrooms are such a big part of the Jara's dialect since they moved to the mountains, "ee", the word for food, has come to mean mushrooms.

5.3 Metaphors

Many Jaru metaphors are related to their everyday nomadic life and nature. As mentioned earlier, the Jarei metaphors center on ostriches whereas the Jara metaphors focus on mushrooms. Here are two examples.

Jarei

esdzəd eddze er edz giedθa εyaiedzya Ostrich feather one animal-CLF chicken wear

A chicken covered in ostrich feather

This is to say that someone pretends to be great at what they do but actually has no real talent at all.

Jara

Adies ec

Poisonous mushroom

Poisonous mushroom

This is to say that someone seems to have good intentions but actually has something else planned.

Here are a few more metaphors in Jaru:

ec istisl sis

Mushroom after rain

Mushroom after rain

This is to say that someone is very vibrant and full of energy, like mushrooms that grow very fast after a rainfall.

dziale sirgai dzia gied dylə 1-SG-GEN finger I NEG see I don't see my fingers.

This means that it's very dark and you can't see anything.

 \widehat{dz} iale $\alpha\theta$ le \widehat{dz} ia θ gəylya \widehat{dz} ə θ lie 1-SG-GEN ears-LOC wind blow Wind blows in my ears.

This means that it's very noisy and you can't hear anything.

5.4 Honorifics

The relatively free nature of the Jarus is reflected in their language. Jaru has only one rule for honorifics, which applies to sentences whose subject is a priest or priests. In this scenario, a suffix $/\gamma\alpha$ is added to a verb, and this suffix comes after any other suffixes. Here is an example:

ry∫ səkχansyχa
priest-PL IMPV-sing-HON
The priests are singing
* HON refers to "honorifics" in my glossing

6. Short Story

Below is a short story I've written on the origin of the nomadic tradition of the Jarus. It is called "Alle dzen", or "Land of the Crane". In the recording, I also added a folk song based on this story, and the lyrics are taken from line 11 of this story. The tune of the song is based on a Tibetan folk song called "White Crane", whose original lyrics come from poems written by the 6th Dalai Lama. A link to the original Tibetan song is in the references.

kianeya, er giedfy afyı iegey dzendziaθ dznryſ nſni Long-time-ago, one barren name Yegxu place-LOC Jarus PST-live Long time ago, the Jarus lived on a barren land called Yegxu,

diəki \widehat{dz}_{Λ} syaagie \widehat{dz}_{en} ə $\widehat{edz}_{ia}\theta$ Afenat ief AfkA And same other places world-LOC PST-be 3-PL PST-think and they thought other places in the world were the same.

agsas gigaik gales iegys iek ies iedlir iaχge azarys asie any plant or small creature 3-PL can find Jaru-PL PST-eat. The Jarus ate whatever plants or small creatures they could find.

or airef, cate, yakdiec, fak,
One child, Xiate, there-be, however.
There was, however, a child called Xiate.

de a ie Λsenat, dieki dyle e diaedzie ie Λsagxiak Always curious 3-SG PST-be, and see world in-person 3-SG PST-want They were always curious, and wanted to see the world with their own eyes.

iestex esdzəd eate Asəkgai, When ostrich Xiate PST-IPFV-herd, When herding the ostriches,

er dieλχλ taidzsy geedziaθ ie λſείεθ dieki λſdyle engê

one big-things-classifier tall mountain-LOC 3-SG PST-climb and PST-look distance, Xiate would climb to the tallest mountain and look into the distance,

dîəki sietgya iegey əe Afek and beyond Yegxu world PST-wonder and wonder about the world beyond Yegxu.

yaεγχ e er kegyasail dəs ie Aſkia Sometimes turn-into one big bird 3-SG PST-imagine Sometimes they imagined turning into a big bird.

er yaeyar, gee əecaidzian cate ascient diaki yajgadzy assyaras. One night, mountain top-LOC Xiate PST-climb and moon-goddess-DAT PST-pray. One night, Xiate again climbed to the top of a mountain and prayed to the moon goddess. Yah-iga.

yaj $\[\int \]$ sieige sie $\]$ dziadzy $\]$ $\]$ if sieige sie dziadzy $\]$ $\]$ if sieige sie dziadzy $\]$ $\]$ if sieige sie dziadzy $\]$ $\]$ if so that fly and explore world I can "moon-goddess, give me a pair of wings so I could fly and explore the world".

catele dzyajyars yajgs sfeθ Xiate-GEN prayer moon-goddess PST-hear The moon goddess heard Xiate's prayer.

eate, $\Lambda\theta d\overline{z}y$ yaj $d\Lambda$ $\Lambda fya\chi$ esta or yacyar diəki or doc o $d\overline{z}ia$ e "Xiate," crane-DAT goddess PST-say, "duration one night and one day you I turn-into" "Xiate," said the goddess to the crane, "I will turn you into a crane for one night for one day"

diaki Asies Aθ Asdzas

And so crane PST-leave.

And so the crane took off.

enykya Inr dienχη geedziaθ ie nflai Several hundred big-things-classifier mountain-LOC 3-SG PST-fly, they flew across hundreds of mountains,

diaki renχy εηγίε ie ηχυθει ετ dienχη dyagte tegaigdziaθ and by dawn, 3-SG PST-arrive one big-things-classifier beautiful grassland-LOC and by dawn, they had arrived at a beautiful grassland.

ektyg $\Lambda\theta$ $\Lambda \int lai$ diəki ie $\Lambda \int dy$ lə ie $\Lambda \int nai$ $G\Lambda \mathcal{E} \mathcal{Y} \int dz \mathcal{Y}$ Home crane PST-fly, and 3-SG PST-see 3-SG PST-tell elder-PL-DAT The crane flew home and they told what they saw to the elders,

diaki ysjie iaχge gaiyχia ερίεθη dznrys ηsdza. And to find this paradise jaru-PL PST-leave and the Jarus set on a new journey to find this paradise.

catele Adzgiesidze esta ciacieer dec dzarys as a Xiate-GEN guidance-INS, duration 81 day Jaru-PL PST-travel With Xiate's guidance, the Jarus traveled for 81 days,

diəki " $\Lambda\theta$ le dzen" ief Λ fxyger and "crane-GEN land" 3-PL PST-reach, and they reached "the land of the crane",

dz ry na ieθeθle ne fragyas liegre dzen Jaru culture-GEN most sacred place the most sacred place of Jaru culture.

7. Lexicon

7.1 English to Jaru

English	Jaru
about	กใกนี้z
acc	rie
across	ίαχθy
after	istisl
again	kyferec
against	ίαχϳy
air	aiggis
along	əl
already	ie∫
always	(dzə
among	saniesəs
and	diəki
animal/creature	iek
any/whatever	agfas
army	siəga
around	rilian
as	əgαiθ
at-a-time	enrə
back	siayakis
bake	gerajət
ball	kaiiela
barren	giedgy

barren-land-name	івдєу
bathe	ſy
be	enat
beautiful	dyagte
because	γαιγχ
before	iecedz
begin	yſəɗ
beside	giθχy
between	īĠĹ
beyond	sietgya
big	kegyasail
big-things-classfier	dieλχλ
bird	dəs
bitumen	dycai
blanket	aegia
blob	elnydz
blow	dzəθlie
brick	yagaç
bright	iekkeχ
broccoli	ſya
build	αgyθ
burn	kysə
but	∫∧k
buy	tia

by	гелху
bye	endedz
call	iad
calm	ciajdzai
can	iedlir
celebrated	siega
chicken	giedθα
child	airei
children	aiɹei∫
city	tidei
climb	cieθ
cold	Gəθyagar
come	θεЪ
confusing	eθjya
continue	təyacy
cook	tie
cooked	gerge
crane	Λθ
culture	ກαιεθεθ
curious	¢Λ
cut	lidz
dance	χαtyα
dark	ətnyar
dawn	ensie

day	dec
dinner	i
discover	αίχεί
distance	əngə
do	sy
down	iedz
drop	tiaəge
duration	esta
during	dzieegi
each_other	gyaɗia
ear	αθΙε
earth	agəs
east	gedθs
eat	ie
egg	Э
eight	sia
eighty	siagie
elder	GAGY
enough	ίεχλθ
entire	nai
everyone	yag[s
everywhere	9869
except	rya
explore	jyyθαi

fast	gyalθe
fat/wide	iadz
fear	niagax
feather	eddze
feel	ર્ગ
fifty	kiekgie
fight	χλGλk
find	ίαχgε
finger	sirgai
fire	ſiadie
five	kiek
flat things classifier	ху
flour	sys
flower	ίχ
fly	lai
food	уЈху
for	airer
forest	ienſʌl
four	de∫
fourty	desgie
fresh	gigeciet
from	niensy
full	əltə
gen	le

give	sig
go	χet
good	Gvagaii
gradual	Уχ
grass	yar
grassland	tegaig
guidance	vgseier
hair	∫∧aigi
hair classifier	gyayra
handful	gίγααχ
have	ai
heart	n.ityae
herd	gai
here	ſyal
hit	gak
home	ektyg
hope	χəliαd͡z
horse (classifier for piles)	kyex
hot	əg
however	∫∧k
hug	∫yng∧
human	dəgge
hundred	JVL
hunt	nyat
	-

i	azia
ice	iθyas
imagine	kia
immediate	tialec
in	gie
in_person	diaedzia
information	saiar
ins	d̄ z e
into	лg
invite	∫e
jaru	d̄zʌɾy
joy	esdzal
knife	ya
lack	∫əase
lake	la
land	dzen
language	Gexev
laugh	γ. γ
leave	g zar
let	tet
lightning	AS
like	ia
listen/hear	Geθ
live	ni

livestock classifier	edz
loc	d͡ziαθ
long things classifier	У
long-time-ago	kiaλεγα
look	ɗylə
love	naic
luggage	gətaijise
make	kenjn
many/much	χyα
meat	keyk
meat classifier	gyas
melt	ҳәј
mile	e.mie
miscellaneous	yrd͡zyχ
moon	kiey
moon classifier	kyan
moon_goddess	yajga
more	jəienn
morning	sia
mortar	iag
most	nesngyas
mountain	gee
mushroom	ec
name	agyı

neg	gied
next	rai
night	yacyar
nine	ak
ninety	akgie
no	jac
nomadic	gieiegai
now	cian
on	las
one	GL
or	gnles
ostrich	egdzəd
other	syaagie
pair	αθείατ
paradise/oasis	εθία
parchment	лdziek
parent	aicyal
pass	iαlθə
pastry	syieθα
person	iet
pick	Asyar
pl	ſ
place	dzen
plain	egjaig

plant	gigaik
play	dəta
poinsonous	ſΛ
poisonous	adies
possesive	tə
possible	siedzyr
pray	jyaras
prayer	dzyajyarıs
prayer classifier	χynisd͡z
priest	ry
pst	Λſ
rain	Jie
raw	dzie
reach/arrive	ххдет
read	ɗylə
rel	ait
rely	әклαθ
remember	ret
repeat	aidzried
return	εχία
ride	ryas
river	jiakgi
round things classifier	λ gθie
run	kaχ

sacred	liegre
same	$\widehat{\mathrm{dz}}$
sand	esnat
say	γαχ
scatter	gieſıʌ
sea	təe
see	ɗylə
self	ədzied
set	de
seven	at
seventy	atgie
several/some	єлукуа
sharp things classifier	χίσαχσ
sheep	deglig
shoot	raik
show	gar
sibling	iae
sing	χαnsy
six	aic
sixty	aiggie
skin	yaɗ
sky	aties
sleep	χίαη
slow	iek

small	iegys
smart	ia
snake	ทระθία
so	εχαε
so_that	Asies
sometimes	Ιναενχ
song	σίακλχγας
song classifier	Λ
speak	tneai
sqaure things classifier	ilsiek
stale	tier
star	kai
star classifier	yk
start/beginning	iedzix
stay	na
stick	ke
stone	eiae
stop	iagiar
strand	nyaie
strong	yassiet
subjunctive	rygtn
suddenly	lal
surface	kaitlia
talk	ɗyl

tall	taidzsy
taste	tiky
ten	gie
tent	zbezb
thanks	kiarai
that	ad
them	ie
then	ceaiθə
then/slim/narrow	rəliedzed
there	nədz
there_be	yakdiec
they	ie
they.pl	ie∫
thing	ienʃie
think	kΛ
thirty	kлθgie
this	gαiyχiα
thousand	er
three	kлθ
through	iαgieχ
thunder	lya
tickle	gəyga
to	ysjie
tomorrow	лэју

top	əccai
toward	iſıa
tower	taisie
tradition	nien
travel	α
turn-verb-phrase-into-adj	gyrai
turn/change	e
twenty	iʃgie
two	iſ
under	Jade
understand	dyade
up	Gəg
us	d͡zia∫
use	J ya.i
valley	aceyg
walk	dzyt
want	αgχiαk
warrior	ietaic
water	dia
wave	gie
we	azia∫
wear	eyaiedzya
week	dzy
when	ie∫ιeχ

edaix
sat
gəylya
aisit
çieige
eage
ek
gejak
96
lie
eat
В
e)

7.2 Jaru to English

Jaru	English
a	travel
aegia	blanket
ad	that
agəs	earth
αgyθ	build
agxiak	want
aceyg	valley
agſas	any/whatever

agyı	name
ai	have
aic	six
aiccie	sixty
aicyal	parent
aidzried	repeat
aiggis	air
airei	child
airei	children
airer	for
aisit	wind classifier
ait	rel
αίχεί	discover
εχε	return
ak	nine
akgie	ninety
at	seven
atgie	seventy
aties	sky
αθείατ	pair
αθΙε	ear
eat	yes
ceaiθə	then
сәge	wish(noun)

εθίαθη	paradise/oasis
cia	eight
eiae	stone
ciagie	eighty
ciajazai	calm
cian	now
cieiga	wing
είσθ	climb
GΛ	curious
ελ∫ie	dawn
слукуа	several/some
eyaisdzya	wear
dzaı	leave
dzə	always
dzədz	tent
d̄zəθlie	blow
dzs	ins
d̂zen	land
dzen	place
dzia	i
(dzia∫	us
dzia s	we
d̄ziaθ	loc
dzie	raw

dz ieegi	during
$\widehat{\mathrm{dz}}$	same
d z ₁ Ary	jaru
dzy	week
dzyajyarıs	prayer
d zyt	walk
de	set
deſ	four
desGie	fourty
dəgge	human
dəs	bird
dəta	play
θεЪ	come
dec	day
degig	sheep
dia	water
diaedzie	in_person
diakλχγας	song
dieлχл	big-things-classfier
dîəki	and
dyade	understand
dyagte	beautiful
dyeai	bitumen
ɗyl	talk

dylə	look
ɗylə	read
ɗylə	see
e	turn/change
ec	mushroom
eddze	feather
ecdzod	ostrich
egjaig	plain
ek	wonder
ektyg	home
enat	be
enrə	at-a-time
emie	mile
er	thousand
esta	duration
esnat	sand
eθjya	confusing
εχας	so
Э	egg
96	world
əccai	top
peizied	self
əg	hot
əgαiθ	as

әклаθ	rely
əl	along
əltə	full
əngə	distance
əscə	everywhere
ર્ગ	feel
ətnyar	dark
G	you
edz	livestock classifier
εdαiχ	where
elnydz	blob
endedz	bye
Gt	one
esdzal	joy
eſ	you.pl
Сеθ	listen/hear
gerge	cooked
gətaijise	luggage
gəylya	wind
gedθs	east
gejak	word
gied	neg
giedgy	barren
giedθα	chicken

gieiegai	nomadic
gigaik	plant
gigaciet	fresh
giθχy	beside
gales	or
gar	show
gyas	meat classifier
gyaɗia	each_other
Gexev	language
Gəg	up
сэθуадаг	cold
gie	ten
GACY	elder
Gvdaii	good
gai	herd
gaiyχia	this
gak	hit
gerajət	bake
gəygn	tickle
gec	mountain
gie	wave
giesia	scatter
gie	in
gyaaχ	handful

gyαlθe	fast
gyayra	hair classifier
gyrai	turn-verb-phrase-into-adj
i	dinner
ia	like
ia	smart
iac	sibling
iadz	fat/wide
iad	call
iag	mortar
iagiex	through
iagiar	stop
iαlθə	pass
ίαχgε	find
ίαχϳy	against
ι αχθ y	across
ie	them
ie	they
ied͡ziχ	start/beginning
iedlir	can
iek	slow
iekkeχ	bright
ien∫∧l	forest
ie∫	they.pl

ie∫ισχ	when
iet	person
ietaic	warrior
ίεχηθ	enough
ie	eat
iedz	down
iegey	barren-land-name
iecedz	before
iegys	small
iek	animal/creature
ienʃie	thing
ieſ	already
ietiel	after
ilsiek	sqaure things classifier
iſ	two
iʃGie	twenty
isia	toward
iθyas	ice
iχ	flower
jac	no
jəienл	more
jiakgi	river
jyarns	pray
jyyθαi	explore

kai	star
kaiiela	ball
kaitlia	surface
kaχ	run
ke	stick
келјл	make
kegyasail	big
keyk	meat
kia	imagine
kiarai	thanks
kianeya	long-time-ago
kiey	moon
kiek	five
kiekgie	fifty
kл	think
kлθ	three
k _Λ θgie	thirty
kyan	moon classifier
kyex	horse (classifier for piles)
kysə	burn
kyſerec	again
la	lake
lai	fly
le	gen

lidz	cut
lie	write
liegre	sacred
lal	suddenly
las	on
lya	thunder
Ιναενχ	sometimes
nai	entire
naic	love
ກαιεθεθ	culture
nədz	there
пзеθіα	snake
nesagyas	most
ni	live
niagax	fear
nien	tradition
піелѕу	from
na	stay
nyais	strand
nyat	hunt
лэју	tomorrow
Tel	between
JVľ	hundred
rai	next

raik	shoot
гелху	by
rəliedzed	then/slim/narrow
ret	remember
uis	acc
rilian	around
ſΛ	poinsonous
ry	priest
rya	except
ryas	ride
rygtA	subjunctive
saniscəs	among
sat	will
sia	morning
siayakie	back
siedzyr	possible
sietgya	beyond
siəga	army
sig	give
siega	celebrated
sirgai	finger
sniar	information
sy	do
syaagie	other

syieθα	pastry
sys	flour
ſ	pl
Sadis	under
ſe	invite
∫əase	lack
ſiadie	fire
โ เธ	rain
ſλαigi	hair
ſΛk	but
ſΛk	however
ſу	bathe
ſуa	broccoli
ſyal	here
ſyaı	use
∫упдл	hug
taidzsy	tall
taisie	tower
tə	possesive
tee	sea
təyacy	continue
tegaig	grassland
tet	let
tia	buy

tiaege	drop
tialec	immediate
tide.i	city
tie	cook
tier	stale
tiky	taste
τλεαί	speak
Λ	song classifier
vgseiei	guidance
лdziek	parchment
ndies	poisonous
лg	into
ngθie	round things classifier
nlndz	about
Aityac	heart
AS	lightning
Asyar	pick
Λſ	pst
asies	so_that
Λθ	crane
У	long things classifier
ya	knife
yacyar	night
yaɗ	skin

yagse	everyone
yagaç	brick
yajga	moon_goddess
yakdiec	there_be
yar	grass
γαιγχ	because
yassiet	strong
γαχ	say
yk	star classifier
yrdzyχ	miscellaneous
ysjie	to
yʃəɗ	begin
у∫ху	food
Уχ	gradual
χαnsy	sing
χαtyα	dance
χәј	melt
χəliαd͡z	hope
χet	go
χian	sleep
χίσαχο	sharp things classifier
χлgлk	fight
εχλχ	laugh
ху	flat things classifier

χνα	many/much
ххдет	reach/arrive
χyniedz	prayer classifier

8. Tower of Babel Translation

Tower of Babel axel taifie

 \widehat{dz} A GexeA diəki er de gejak yagse təyacy Astacai same language and one set word everyone continue speak. Now all the earth continued to be of one language and of one set of words.

ies sedθe ies as a seyg essaig sinardziaθ ies as a seyg essai

diəki $n \ni dz dz ia\theta$ ief $afy f \ni d$ ni and there-LOC* 3-PL PST-begin live and they began dwelling there. $\frac{3}{2}$

* In Jaru, "there" also needs a locative case marker

ceaiθə ysjic gyadia ief Λ∫yaχ then to each-other 3-PL PST-say Then they said to one another:

"dəθ! yagaç tet dzias kenjn diəki ies siadiedze gerajət."
"Come! Brick let 1-PL make and 3-PL fire-INS bake."
"Come! Let us make bricks and bake them with fire."

exac yacac gied ciac ief Affyaı diəki dycai əgaiθ iag Affyaı so brick NEG stone 3-PL PST-use, and bitumen as mortar PST-use. So they used bricks instead of stone, and bitumen as mortar.

"də θ er tidei diəki əccai atiesdzia θ ait taisie tet dzias agy θ dzias ədzieddzy." cian ies Asyax.

"Come! One city and top sky-LOC REL tower* let 1-PL build 1-PL self-DAT." now 3-PL PST-say.

They now said: "Come! Let us build a city for ourselves and a tower with its top in the heavens,

*There is actually no word for "Tower" in Jaru because the Jarus are nomads and they don't build any towers. The word for tower here is a shortened version of the phrase "tall thing", or "taidzsy ienfie", taking the first syllable of the first verb and the last syllable of the second verb.

diaki er siega afyı tet dziaf kenjn dziaf adzieddzy and one celebrated name let 1-PL make 1-PL self-DAT, and let us make a celebrated name for ourselves,

exacad nai agəs kaitliadziaθ dziaf gied sat ialθəgiefin So-that entire earth surface-LOC 2-PL NEG* will PASS-scatter. so that we will not be scattered over the entire face of the earth."

ceai θ ə dəggele aixeif Λ fagy θ ait tidex diəki taifie iexea iedz Λ fxet dylə then human-GEN child-PL PST-build REL city and tower Jehovah down PST-go see Then Jehovah went down to see the city and the tower that the sons of men had built.

"dylə! er λιτγας ief enat diəki er geχελ ief αi." ceαiθə ieχεα λ∫γαχ. "Look! One heart 3-PL be and one language 3-PL have." then Jehovah PST-say. Jehovah then said: "Look! They are one people with one language,

diaki ief Afysad sy ait iensief gaiyxia enat and 3-PL PST-start do REL thing* this be. and this is what they have started to do.

* the word "thing" in Jaru functions similarly to the word "what" in the English sentence. A paraphrase would be "this is the thing they have started to do"

eian ief agxiak sy sak gied siedzyr ait iensie gied yakdiee.

now 3-PL want do but NEG possible REL thing NEG there_be.

Now there is nothing that they may have in mind to do that will be impossible for them. ²

dəθ! nədz tet dzias iedz xet diəki iedzy gexen dzias kenjn eθjya exacad Come! There let 1-PL down go and 3-DAT language 1-PL make confusing so-that gyadials gexen ies gied iedlir dyade each_other-GEN language 3-PL NEG can understand.

Come! Let us<u>+</u> go down there and confuse their language in order that they may not understand one another's language." &

exac ief niersy nədz ysjie nai agəs kaitliadziaθ iexea rafgiefin so 3-PL from there to entire earth surface-LOC Jehovah PST-scatter So Jehovah scattered them from there over the entire face of the earth,

diəki agy θ tidər ief yx Afiagiar and build city 3-PL gradual* PST-stop. and they gradually left off building the city. 2

* adverbs in Jaru take the same form as adjectives, and they always appear in front of a verb.

yaryχ nədzdziaθ iatge agəslə gexen iexəa afkenin eθjya exac ie because there-LOC all earth-GEN language Jehovah PST-make confusing, so 3-SG ietf iad axəl person-PL call Babel.

That is why it was named Ba'bel, because there Jehovah confused the language of all the earth,

diəki ief niensy nə \widehat{dz} ysjis nai agəs kaitliad \widehat{z} ia θ iexea nfgliefin. and 3-PL from there to entire earth surface-LOC Jehovah PST-scatter

and Jehovah scattered them from there over the entire face of the earth.

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