ki

mini-language documentation

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Rationale

ki is a contructed language, with the primary goal of being the fastest-to-speak language in the world. To try and achieve this I have taken a digital-first approach, ensuring full use of phonological combination. I have taken care to keep the language easy-to-learn, with a small grammar.

Email: phun@pm.me

Works: github.com/phunanon/conlangs

Community: reddit.com/r/conlangs

Dedicated to: Mikhailah Yap Rañada

- Note consonant voicing

Latin Consonants

#	Ch	IPA	#	Ch	IPA
0	p	/p/	8	b	/b/
1	t	/b/	9	d	/d/
2	k	/k/	A	g	/g/
3	f	/f/	B	v	/v/
4	y	/θ/	C	r	/ð/
5	s	/s/	D	z	/z/
6	c	/ʃ/	E	x	/ʒ/
7	w	/w/	F	l	/l/

Latin Vowels

#	Ch	IPA	#	Ch	IPA
0	i i	/i/	8	ii í	/í/
1	j j	/ɪ/	9	jj ì	/í/
2	e e	/ɛ/	A	ee é	/ɛ́/
3	a a	/a/	B	aa á	/á/
4	q q	/ɒ/	C	qq ò	/ɔ́/
5	o o	/o/	D	oo ó	/ó/
6	u u	/u/	E	uu ú	/ú/
7	h h	/ə/	F	hh ù	/ə́/

Native Script

- One consonant & vowel to each native char

pi ᴜ	yq ᴓ	bii �	rqq
tj	so	djj	zoo
ke	cu	gee	xuu
fa	wh	vaa	lhh

*Loans

Foreign words go through phonetic & morphological conversion.

Foreign	ki
y ɨ ɪ ʏ e	i
ø œ ɜ æ	ɛ
ɘ θ ʚ	ə
ɞ ɐ ɶ	a
ɑ ʌ ɔ o	ɒ
ʁ ʊ ɯ ʉ	u

Foreign	ki
t͡ʃ t ɖ c ɟ	t
ɱ	m
ŋ ɲ ŋ ɴ	n
ʙ	b
ɾ ʀ ɾ ɽ ʁ ɻ ɺ j ɰ l ʎ ʟ	l
d͡ʒ ʒ	ʃ
q ɢ x ɣ χ	g
ɸ β ð ɬ ɮ	θ
ʂ ʐ ç ʝ	s
ħ ʕ h ɦ hw ʋ	w

Syntax & Morphology

ki is made of 'sentences'.

Syntax

Sentences are made of three 'genres': <u>noun</u>, <u>verb</u>, <u>adjective</u>. Each is a 'word'. Each sentence has a fixed pattern:

... (noun) noun (adj) verb (adj) noun ...

- Genres in parenthesis are <u>optional</u>, opposed to <u>regular</u>, marked by morphology.

- Until <u>period</u> is reached, the pattern will repeat at the ...

- Optional genres extend while marked

- adj apply to the preceding word

- Multi- and Omni-Roots extend over mulitple words, and generally must fit each word into syntax; Special Lexicon interrupt normal syntax

- Adjacent numerics are treated as a list, by default as a set of separate options

Morphology

Words are made of 'bits', and correspond to a digital 8-bit byte. The first 4 bits is a consonant, the second 4 bits is a vowel.

- The first bit is 1 for optional, otherwise 0. The proceeding 7 bits constitute the 'root'

- Omni-Roots possess more complex morphology than Multi-Roots

- It is optional, but recommended, for speakers to double the length of a verb's vowel, and for writers to append a comma (,) after a verb

Grammar

Semantics

*Genre Semantics

Whereby: (nouns) Subject, Object, Pronoun; (other) Verb, Adjective.

Pattern	Semantics & Transivity
S...VOO...	S does V to O's ...which do V to O's...
SVPOVP	S does V to P who does V with O to P
SVOPV	S does V to O which P does V to

- pronoun ambiguity

- or SVOOV[by]SVOVO..., or OV[by]SVOOVOO..., or SVOPV (e.g. I like her me listen).

Noun Semantics

Contiguous nouns are of their proceeding;

e.g. cat bird = cat of bird | bird's cat

This rule permeates all multi-nouns;

e.g. person school = person of school | teacher

- Default article is definite

Miscellaneous
*Possession

thing my

*Imperative

- Made by stating the possible scenario (e.g. You clean the bath!).

Lexicon

Special Lexicon

- Interrupt regular syntax

Numerics
Protocol 1

First root is "s_numeric0" (KNP10), proceeded by a byte: first bit ('overflow') signifies a proceeding numeric byte. All non-overflow bits constitute a N*7-bit binary value (N = amount of bytes).

Protocol 2.0 & 2.1

First root is "s_numeric1" (base-10, KNP20) or "s_numericA" (base-16, KNP21), proceeded by 4-bits: the numeric's floored logarithm, proceeded by 4-bits: 0x8 for negative or 0x0 for positive; plus 0x4 for decimal. The proceeding log(n) digits are of consonants & vowels by their numeric value. If decimal, the next 4-bits' value expresses amount of precision digits.

- Pad with vowel <i> when necessary

- Expresses 0-16^{16}

Periodic Elements

First root is "o_element", then expressed as the number of protons using KNP20.

Kinship

First root is "o_kinship", then move through relations from subject to kin.

Kinship	Link	C
male	link	b
male	final	p
female	link	d
female	final	t
unknown	link	g
unknown	final	k

Kinship	V
partner	i
sibling	j
parent	e
child	a
friend	o
neighbour	u
stranger	q

*Proper Nouns

Mono-Roots

- Adhere to normal syntax

- <u>R</u>oot value is hexidecimal, regular

- <u>O</u>rthography is Latin word

- Includes frequent grammar roots

R	O	Noun	Verb	Adjective
Pronouns				
00	pi	me/I/my	am	
01	pj	you/your	are	
02	pe	they/them/their	is	
03	pa	me_you		
04	pq	me_they		
05	po	you_they		
06	pu	we_they		
07	ph	each_other		
Articles				
08	pí	obj_near_me		a/an
09	pì	obj_near_you		the
0A	pé	obj_near_us		this
0B	pá	obj_far_us		that
0C	pò	plu_near_me		
0D	pó	plu_near_you		plu_the
0E	pú	plu_near_us		these

R	O	Noun	Verb	Adjective
0F	pù	plu_far_us		those

Descriptors
- 'who' includes all beings ever animate
- Inclusion begs question

R	O	Noun	Verb	Adjective
10	ti	what/who		what/who
11	tj	which		which
12	te	where		where
13	ta	when		when
14	tq	how		how
15	to	why		why
16	tu	much/many		much/many
17	th	really		really/very

Conjunctions & Evidentials

R	O	Noun	Verb	Adjective
18	tí	and/also		evi_direct
19	tì	xor		evi_non_vis
1A	té	or		evi_inferred
1B	tá	nand		evi_speculated
1C	tò	nor		evi_hearsay

Tenses

R	O	Noun	Verb	Adjective
1D	tó	past	became	past
1E	tú	present	becomes	present
1F	tù	future	will_become	future
20	ki	ki	say	
21	kj	existence	exist	exists

R	O	Noun	Verb	Adjective
22	ke			
23	ka	yes/true	make_true	true
24	kq	no/false	make_false	false
25	ko			
26	ku	want	want	wanted
27	kh	need	need	needed
28	kí	ability		able
29	kì	success	succeed	successful
2A	ké			
2B	ká			
2C	kò			
2D	kó			
2E	kú			
2F	kù			
30	fu	fact	know	known
31	fh	display/show/vista	display/show	viewable
32	fí	clock	watch	watched
33	fì	word	write	
34	fé	book	translate	
35	fá			
36	fò			
37	fó			
38	fú	house	have	homely
39	fù			
3A	yi	person		public
3B	yj	meeting	meet	met

R	O	Noun	Verb	Adjective
3C	ye			
3D	ya	school	teach	learned
3E	yq			
3F	yo			
40	yu			
41	yh	female		
42	yí	male		
43	yì	child		
44	yé	adult		
45	yá			
46	yò			
47	yó			
48	yú			
49	yù			
4A	si	life		alive
4B	sj			
4C	se	work	work	
4D	sa			
4E	sq			
4F	so			
50	su	plant		
51	sh			
52	sí	sky		big
53	sì			
54	sé			
55	sá			
56	sò			

16   Lexicon

R	O	Noun	Verb	Adjective
57	só			
58	sú	heat		hot
59	sù	cold		cold
5A	ci			
5B	cj			
5C	ce			
5D	ca			
5E	cq			
5F	co	water	drink	wet
60	cu	food/possession	eat	hungry
61	ch	cooking	cook	cooked
62	cí			
63	cì			
64	cé			
65	cá			
66	cò			
67	có			
68	cú			
69	cù			
6A	cé			
6B	cá			
6C	cò			
6D	có			
6E	cú			
6F	cù			
Multi-Roots				

R	O	Noun	Verb	Adjective
70	wi	m_grammar		
71	wj	m_space_time		
72	we	m_travel		
73	wa	m_emotion		
74	wq			
Special & Omni- Roots				
75	wo	s_numeric0		
76	wu	s_numeric1		
77	wh	s_numericA		
78	wí	s_element		
79	wì	o_colour		
7A	wé	o_precise		
7B	wá	o_datetime		
7C	wò	o_kinship		
7D	wó			
Null & Period				
7E	wú	null		
7F	wù	period		

Grammar Roots

- Begins with root "m_grammar"
- Adhere to normal syntax
- Includes less frequent grammar roots
- Frequent grammar roots are in Mono-Roots

R	O	Noun	Verb	Adjective
Aspects				
00	pi	progressive/ imperfect	do	progressive/ imperfect/ happening
01	pj	perfective	complete	perfective/ complete
02	pe	prospective		prospective/ will_happen
03	pa	inceptive/start	start_act	started_act
04	pq	inchoative	start_be	started_be
05	po	cessative/end	stop_act/ stop_be	stopped_act/ stopped_be
06	pu	habitual/habit		often
07	ph	pausative/pause	pause	paused
08	pí	resumptive/ resumption	resume	resumed
Mood & Condition				
09	pì	condition		if
0A	pé			would

R	O	Noun	Verb	Adjective
0B	pá	deduction		should/ought
0C	pò	ability		can
0D	pó	determination		will/shall
0E	pú	offer/invite	invite/offer	can/shall/will
0F	pù	request	request	could
09	pì	possibility		could/may
0A	pé	slight possibility		might
0B	pá	permission	permit/allow/let	can/could/may
0C	pò	prohibition	prohibit	don't/avoid
0D	pó	obligation	obligate	must
0E	pú	advice/suggestion	advise/suggest	should/ought/shall
0F	pù	intention	intend	intended

Comparison

10	ti			
11	tj			
12	te	negative	make_negative	not
13	ta	equative, copula	make_equal	equal
14	tq	comparative/comparison	compare	more_than
15	to	superlative	make_most	most
16	tu	sublative	make_least	least
17	th	similarity	make_similar	like, as

Preposition

R	O	Noun	Verb	Adjective
18	tí	because		
19	tì	of, about		
1A	té	for		
1B	tá	by		
1C	tò			
1D	tó			
1E	tú			
1F	tù			
Number & Size				
20	ki	plural	-s	plural
21	kj	paucal/something		some
22	ke	none/nothing		none
23	ka	all/everything		all/every
24	kq	any/anything		any
25	ko	much		much
26	ku	little		little
27	kh	many		many
28	kí	few		few
29	kì	big		big
2A	ké	small		small
2B	ká			
2C	kò			
2D	kó			
2E	kú			
2F	kù			

R	O	Noun	Verb	Adjective
Arithmetic				
30	fi	open_bracket		
31	fj	ordinal/power		
32	fe	division		
33	fa	multiplication		
34	fq	addition		
35	fo	subtraction		
36	fu	modulo		
37	fh	equal		
38	fí	close_bracket		
39	fì	greater_than		
3A	fé	less_than		
3B	fá	greater_equal		
3C	fò	less_equal		
3D	fó			
3E	fú			
3F	fù	inequal		

Multi-Roots

■ Adhere to normal syntax

Emotions

First root is "m_emotion", then one word.

English	O	English	O	English	O
happy	pi	sad	ki	bad	yi
optimistic	pj	hurt	kj	tired	yj
peaceful	pe	humiliated	ke	weak	ye
accepted	pa	guilty	ka	stressed	ya
confident	pq	despairing	kq	busy	yq
proud	po	vulnerable	ko	let down	yo
playful	pu	lonely	ku	bored	yu
surprised	ti	fearful	fi	angry	si
excited	tj	scared	fj	mad	sj
amazed	te	anxious	fe	frustrated	se
confused	ta	insecure	fa	disgusted	sa
startled	tq	rejected	fq	sceptical	sq
		nervous	fo	distant	so

Time & Space

First root is "m_space_time", then one word.

Time

English	O	English	O	English	O
now	pi	while/during	ti	start/firstly	ki
instantly	pii	meanwhile	tii	finish/lastly	kii
then	pj	earlier/ago	tj	whenever	kj
suddenly	pjj	later	tjj	N st/nd/rd	ke
again	pe	since	te	N times	ka
soon	pa	finally	ta	eventually	kq
ever	pq	forever	tq	consequently	ku

Space

English	O	English	O
here	fi	in	yi
there	fii	out	yii
anywhere	fj	above	yj
nowhere	fjj	below	yjj
source	fe	beside	ye
destination	fee	opposite	yee
among	fa	on/over	ya
with	fq	off	yaa

Space, Time, Travel

First root is "m_travel", then one word.

English	O	English	O	English	O
start/go	si	in front	ci	beyond	wi
stop	sii	behind	cii	against	wii
continue	sj	middle/between	cj	along	wj
up	se	left	ce	across	we
down	sa	right	ca	through	wa
up to/until	sq	to/toward	cq	far	wq
before/previously	so	from/away	co	close/near/around	wo
after/next	su	at/upon	cu	succession	wu

Generic

■ Uses pre-existing Mono-Roots

Roots	Noun	Verb	Adjective
sky cold	hell		
person school	teacher		
word word	sentence		

Omni-Roots

■ Most adhere to normal syntax

*Colours

First root is "o_colour", one word proceeds.

C	Texture	V	Colour	RGB
p	flat & opaque	i	black	000
t	flat & transparent	j	grey	888
k	reflective	e	white	FFF
f	glittery	a	maroon	800
y	dynamic shadows	q	red	F00
s	sandy/furry/grassy	o	green	080
c	bumpy	u	lime	0F0
w	jagged	h	navy	008
		ii	blue	00F
		jj	olive	880
		ee	yellow	FF0
		aa	teal	088
		qq	aqua	0FF
		oo	purple	808
		uu	fuchsia	F0F
		hh	transparent	- - -

Units & Powers

■ Interrupts normal syntax – must be regular noun

First root is "o_precise", one word proceeds.

The consonant is unit, the vowel is power.

Ch	English	Quantity	C
A	ampere	electric current	p
K	kelvin	temperature	k
s	second	time	s
m	metre	length	m
kg	kilogram	mass	g
cd	candela	luminous intensity	c
mol	mole	substance amount	l
V	volt	W/A	v
W	watt	J/s	w
°C	degree Celcius	K+273.15	d
L	litre	10^{-3} m^3	t
rad	radian	$1/2\pi$	n
°	degree	$\pi/180$	b
J	joule	$kg \cdot m^2 \cdot s^{-2}$	y

English	Power	V	English	Power	V
deca	10^1	i	deci	10^{-1}	ii
hecto	10^2	j	centi	10^{-2}	jj
kilo	10^3	e	milli	10^{-3}	ee
mega	10^6	a	micro	10^{-6}	aa
giga	10^9	q	nano	10^{-9}	qq
tera	10^{12}	o	pico	10^{-12}	oo
peta	10^{15}	u	femto	10^{-15}	uu
exa	10^{18}	h	atto	10^{-18}	hh

Mostly from the *International System of Units*.

*Dates & Time

First root is "o_datetime", then ≥1 morphemes.

Frames

CV	Frame	CV	Frame	Description
Amounts				
pi	minute	pq	month	KNP20 amount proceeds; V+0x8: next (+n), prev (-n)
pj	hour	po	year	
pe	day	pu	decade	
pa	week	ph	century	
Days of the week				
ti	mon	tq	fri	V+0x8: next/prev
tj	tue	to	sat	
te	wed	tu	sun	
ta	thur			
Months				
ki	jan	kii	jul	
kj	feb	kjj	aug	
ke	mar	kee	sept	
ka	apr	kaa	oct	
kq	may	kqq	nov	
ko	jun	koo	dec	

Expressions

yyyymmdd (big endian)

*Taxonomy

young/adult, male/female

Examples

I ate the same food he ate.

How did you get here?

The children said they had eaten the plant

child !the_plu !past say they plant eat

   ka fó vó ki, pe gi mi,

- ■ Note how the subject is made past, and so the whole sentence happened in the past

Does anyone have a sentence for me to translate?

person !any have word !word me translate ! intended

   ti litq dí, da sa pi dq, lipù

My biggest success is me being alive

!success my !most is !alive me

   gjj pi lido pe, zi pi

- ■ Note how the adjective is applied to the verb

Thirty plus sixteen is fourty-six
  30 plus 16 equals 46

■ Note how, lexically, arithmetic fits all genres