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	/ɒ́/
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	yq	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 ʙ	ə
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 ɽ ɻ ɹ ɭ j ɰ ʟ ʎ ʟ	l
d͡ʒ ʒ	ʃ
q ɢ x ɣ χ	g
ɸ β ð ɫ ʒ	θ
ʂ ʐ ç ʝ	s
ħ ʕ ɦ ɦ hw ʋ	w

Glossing

The English literal description of ki is called a "gloss". Apostrophes (') are prefixed to mark optional genres, double quotes (") are suffixed to Multi-/Omni-Roots, and commas (,) are suffixed to mark verbs.

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

- It is optional, but recommended, to put a space between all words except roots in the same Multi-/Omni-Root

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…
(draft) SVPOVP.	S does V1 to P who does V2 with O to P
SVOOVP.	S does V1 to O's P does V2 to O's
SVOOVPOO	S does V1 to O1's P does V2 to O2's with O1's
PVObyVPO	P1 does V1 to O1 by P2 doing V2 to O2
SVOPV.	S does V1 to O which P does V2 to
(draft) SVOPVPOO	

- pronoun ambiguity

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

*Examples

PVObyVPO – I show, work 'good 'by speak, him
it

I show good work by him saying about it

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!).

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 n̲umeric'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 -16^{16} to 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				
■ Form more complex pronouns like "me you"				
00	pi	me/I/my	am/is	thanks
01	pj	you/your/hello	are/is_plu	please
02	pe	they/them/their/her/him/his		
03	pa	me_you_them		
04	pq			
05	po			
06	pu	self		
07	ph	each_other		
Articles				
08	pí	obj_near_me/this		a/an
09	pì	obj_near_you		the
0A	pé	obj_near_us/this/it	make/create/make_exist	this/it
0B	pá	obj_far_us/that		that
0C	pò	plu_near_me/		plural

R	O	Noun	Verb	Adjective
		these		
0D	pó	plu_near_you		plu_the
0E	pú	plu_near_us/these	make_happen	these
0F	pù	plu_far_us/those		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/question	ask	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

R	O	Noun	Verb	Adjective
1F	tù	future	will_become	future
20	ki	ki/said	say/speak	said
21	kj	existence	exist	exists
22	ke			
23	ka	yes/true	make_true	true
24	kq	no/false	make_false	false/not/negative
25	ko			
26	ku	want	want	wanted
27	kh	need	need	needed
28	kí	ability		able
29	kì	success	succeed	successful
2A	ké	challenge	challenge	challenging
2B	ká			
2C	kò			
2D	kó			
2E	kú			
2F	kù			
30	fu	fact	know_fact	known
31	fh	display/show/vista	display/show	viewable
32	fí	clock	watch	watched
33	fì	word	write	
34	fé	book		
35	fá	thought/belief	believe/think	thought/believed

R	O	Noun	Verb	Adjective
36	fò	history/story		
37	fó			
38	fú	house	have	homely/comfortable
39	fù			
3A	yi	person	know_person	public
3B	yj	meeting	meet	met
3C	ye	class	class	classed
3D	ya	education	teach	learned
3E	yq	village		
3F	yo			
40	yu			
41	yh	female		
42	yí	male		
43	yì	child		young
44	yé	adult		old
45	yá	body		
46	yò			
47	yó			
48	yú			
49	yù			
4A	si	life/animal		alive
4B	sj	mind		
4C	se	work	work	result
4D	sa	time		little
4E	sq	space	feel	same
4F	so	random		other

R	O	Noun	Verb	Adjective
50	su	plant	grow	
51	sh	world	see	good
52	sí	sky	fly	big
53	sì	mountain		
54	sé	air/wind	blow	windy
55	sá	movement	move	moved
56	sò			
57	só			
58	sú	heat	take/recieve	hot
59	sù	cold	give	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			

R	O	Noun	Verb	Adjective
6B	cá			
6C	cò			
6D	có			
6E	cú			
6F	cù			

Multi-Roots

R	O	Noun	Verb	Adjective
70	wi	m_grammar		m_grammar
71	wj			
72	we	m_travel		m_travel
73	wa	m_emotion		m_emotion
74	wq	m_verbs		m_verbs

Special & Omni- Roots

R	O	Noun	Verb	Adjective
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	o_taxonomy		

Null & Period

R	O	Noun	Verb	Adjective
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
Comparison				
09	pì	negative	make_negative	not
0A	pé	equative, copula	make_equal	equal

R	O	Noun	Verb	Adjective
0B	pá	comparative/comparison	compare	more_than
0C	pò	superlative	make_most	most
0D	pó	sublative	make_least	least
0E	pú	similarity	make_similar	like, as
0F	pù			

Mood & Condition

R	O	Noun	Verb	Adjective
10	ti	condition		if_then/if
11	tj			would
12	te	deduction		should/ought
13	ta	ability		can
14	tq	determination		will/shall
15	to	offer/invite	invite/offer	can/shall/will
16	tu	request	request	could
17	th	possibility		could/may/maybe/might
18	tí	slight possibility		
19	tì	permission	permit/allow/let	can/could/may
1A	té	prohibition	prohibit	don't/avoid
1B	tá	obligation	obligate	must
1C	tò	advice/suggestion	advise/suggest	should/ought/shall
1D	tó	intention	intend	intended
1E	tú			
1F	tù			

Preposition

R	O	Noun	Verb	Adjective
20	ki	because		
21	kj	of, about		
22	ke	for		
23	ka	by		
24	kq	but/however		
Number & Size				
25	ko	plural		see 'plu_near_me'
26	ku	paucal/something		some
27	kh	none/nothing		none
28	kí	all/everything		all/every
29	kì	any/anything		any
2A	ké	much		much
2B	ká	little		see 'time'
2C	kò	many		many
2D	kó	few		few
2E	kú	big		see 'sky'
2F	kù	small		small
Arithmetic				
30	fi	open_bracket		
31	fj	ordinal/power		
32	fe	division		
33	fa	multiplication		
34	fq	addition		
35	fo	subtraction		
36	fu	modulo		

R	O	Noun	Verb	Adjective
37	fh	num_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	num_inequal		
40				
41				

Multi-Roots

- Adhere to normal syntax

- Glossed as <word">

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, & Travel

First root is "m_travel", then one word.

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

O	Noun	Verb	Adj
fi	here		
fii	there		
fj	anywhere		
fjj	nowhere		
fe	source		
fee	destination		
fa	among		
fq	inclusion/with	include	with/included
yi	in		
yii	out		
yj	above		high
yjj	below		low
ye	beside		
yee	opposite		
ya	on/over		
yaa	off		
Mixed			
si	start/go		
sii	stop		
sj	continue		
se	up		
sa	down		
sq	up to/until		
so	before/previously		
su	after/next		
ci	in front		

O	Noun	Verb	Adj
cii	behind		
cj	middle/between		
ce	left		
ca	right		
cq	to/toward		
co	from/away		
cu	at/upon		
wi	beyond		
wii	against		
wj	along		
we	across/around		
wa	through		
wq	far		
wo	close/near		
wu	succession		

Verbs

- First root "m_verbs"

- Contains roots with strong, abstract verbs

O	Noun	Verb	Adj
pi	application	apply	applied
pj	document	document	documented
pe	carry	carry	carried

Generic

- Uses pre-existing Mono-Roots

Roots	Noun	Adjective
sky cold	hell	
person education	teacher	
word word	sentence	
word life	language	
word life word	translation	
time move	speed/pace	fast/quick
work false	cheat	cheating/cheaty
class word	article (lingustics)	
word time	speech	
time word	fluency	fluent
word below	subtitle	subtitled
life random	fortune	fortunate

Roots	Noun	Adjective
person water	hero	heroic
person plant	farmer	farmable/arable
possession success	prize	
mind old	wisdom	wise
mind village	fame	famous
child plant	seed	
child air	pollen	
child sky	star	
heat animal sky	feather	feathered
mountain body	chest	
mountain body female	breast	

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·m^2·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

Life forms are categorised by superficial traits, and then encoded into a 3 morpheme word, first root being "o_taxonomy".

Bitfield Morphology: **XAS**MKKFF **X**0000000

Underlined show unique identifier.

Abb.	Name	Data
X	---	(Part of normal morphology)
A	Age	0 young, 1 adult
S	Society	0 collective, 1 individual
M	Amicibility	0 amicible, 1 hostile
K	Kingdom	00 plant, 01 insect, 10 animal, 01 microscopic
F	Features	00 walks, 01 flies, 10 swims, 11 burrows
0	ID number	Unique identifier

MKKFF	#	English	MKKFF	#	English
Insects					
00101	**pi**	bee	**10101**	**pi**	wasp
00111	**pi**	black_ant	**10111**	**pi**	red_ant
Animals					

MKKFF	#	English	MKKFF	#	English
01000	pi	dog			
01000	pj	cat			

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,

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

ka fó vó ki, pe gi mi,

Does anyone have a sentence for me to translate?

person 'who have, word word make, me translation"

yi lidi dí, fìfì pé, pi dacida

My biggest success is me being alive

'success my 'most is, 'alive me

■ Note how the adjective is applied to the verb

gjj pi libò pe, zi pi

Thirty plus sixteen is fourty-six

30 plus, 16 'equals 46

I don't include many

I include", 'few

- Note how <include> is spread across both the adjective and the verb to form the verb

pi ljfq, ca