sitelen kalama - a phonetic script for *toki pona*

(A modest proposal)

There are many scripts for *toki pona*.

Since there are so few words in the language, logographic scripts are the best, in my opinion. My preferred one is the *sitelen pona*, which, thanks to its simplicity, can be very easily learned, written and read. Actually, its shapes are so easily recognized that I can understand the text probably faster than written in the *latin* script, because the meaning of a word and also the structure of a sentence is clear immediately, without actually reading them in the *toki pona* (similarly to *Blissymbolics*).

The *sitelen sitelen*, on the other hand, is so cool and beautiful, that it is a pleasure to play with.

Thanks to *toki pona*'s very simple phonology, almost any alphabet, abugida, syllabary, etc., can be used very effectively. By default, the *latin* alphabet is used, and it works, but also *cyrillics*, *korean Hangul*, etc., are fine. So why would anyone invent another one?

Well, it is fun. Plus, I had a feeling, that *toki pona* could use its own phonetic script. The logographic ones do not carry the phonetic information, and one has to apply various tricks to write non-standard words, names, etc. I saw several apriori invented scripts, but the reasons for using them were weak. They were just mangled alphabets.

I personally was inclined to use something very simple and intuitive. My favorite was *Hangul*, in my opinion THE best writing system. Its characters are mnemotechnically shaped - they symbolically represent the position of mouth and tongue while producing a particular sound. They can be learned in very short time - like in an hour or so.

However, for *toki pona*, *Hangul* is actually unnecessarily powerful and more complex than necessary. Plus, I wanted to be able to form one glyph for one word - so the structure of a sentence would be easily decipherable on the first glance. I did not want to reproduce the typical alphabet style of a linear writing (for that *latin* is good).

So, inspired by *Hangul*, I designed very simple shapes for the 9 consonants, based mostly on the shapes of mouth. Then I added simple shapes for 5 vowels. By combining those, a simple set of possible syllables can be defined (similar to the *sitelen sitelen* syllabary). Then, up to 4 syllables can be combined in one glyph to represent one word (similar to Hangul, where, however, up to only two syllables are typically combined in one glyph).

And so, *toki pona* sentences can be written in these word glyphs, which carry also the phonetic information, and are (in my opinion) very easily learnable.

Table 1. basic shapes

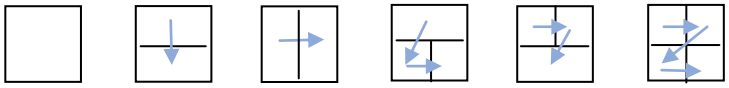
phoneme	symbol	origin	remark
k		Hangul, shape of tongue	
l		Hangul-like, as tongue for retroflex „l“	
m		Hangul, closed mouth	
n		Hangul, tongue rising to the teeth	
p		Hangul-like, as „m“ with bottom opening, also resembles the greek „pi“	
t		Hangul	
s		Hangul, the tongue rising to the palate	
w		Rounded mouth, Latin „U“	
j		Glide, Latin „J“	
i		Hangul/Latin „i“, it is rarely written	Only at the beginning of the word, otherwise omitted
e		Latin „e“	If after a consonant, placed inside it
a		Latin „A“	If after a consonant, placed inside it
o		Latin „o“	If after a consonant, placed inside it
u		Latin „u“	If after a consonant, placed inside it
Nasal „n“ at the end of syllable		Inside the preceding vowel, or next to „i“	If after a consonant, placed inside it

Table 2. All possible syllables in , including those forbidden by *toki pona* phonotactics

	i	**e**	**a**	**o**	**u**
-	i in	e en	a an	o on	u un
k	ki kin	ke ken	ka kan	ko kon	ku kun
l	li lin	le len	la lan	lo lon	lu lun
m	mi min	me men	ma man	mo mon	mu mun
n	ni nin	ne nen	na nan	no non	nu nun
p	pi pin	pe pen	pa pan	po pon	pu pun
t	(ti) (tin)	te ten	ta tan	to ton	tu tun
s	si sin	se sen	sa san	so son	su sun
w	wi win	we wen	wa wan	(wo) (won)	(wu) (wun)
j	(ji) (jin)	je jen	ja jan	jo jon	ju jun

While „a“ is the most frequent vowel in the vocabulary, in a continuous text „i“ tends to be the most frequent vowel, partially because it is in the grammatical particles like "li", "pi", and word "ni". That is why it is considered present in a syllable by default, and if it goes after a consonant, it is omitted. So, if a syllable is written without a vowel – the vowel is "i". "i" is written only at the beginning of words.

Writing goes from left to right, from top to bottom. One word should be written as one single square glyph. Syllables then can be stretched or squeezed as necessary – as in korean Hangul. All "pu" words are at most 3 syllables long. Moreover, if I am not mistaken, all the extended vocabulary in *toki pona* contains at most 4 syllable words, with the single exception of "kijetensantakalu". So, except that one, all can fit to a square (1-4 syllable) pattern:



Then, within a word glyph, the syllables are read following the arrows. The shapes are very simple and forgiving for handwriting.

1 **a**

2 **akesi**

3 **ala**

4 **alasa**

5 **ali**

6 **anpa**

7 **ante**

8 **anu**

9 **awen**

10 **e**

11 **en**

12 **esun**

13 **ijo**

14 **ike**

15 **ilo**

16 **insa**

17 **jaki**

18 **jan**

19 **jelo**

20 **jo**

21 **kala**

22 **kalama**

23 **kama**

24 **kasi**

25 **ken**

26 **kepeken**

27 **kili**

28 **kin**

29 **kiwen**

30 **ko**

31 **kon**

32 **kule**

33 **kulupu**

34 **kute**

35 **la**

36 **lape**

37 **laso**

38 **lawa**

39 **len**

40 **lete**

41 **li**

42 **lili**

43 **linja**

44 **lipu**

45 **loje**

46 **lon**

47 **luka**

48 **lukin**

49 **lupa**

50 **ma**

51 **mama**

52 **mani**

53 **meli**

54 **mi**

55 **mije**

56 **moku**

57 **moli**

58 **monsi**

59 **mu**

60 **mun**

61 **musi**

62 **mute**

63 **namako**

64 **nanpa**

65 **nasa**

66 **nasin**

67 **nena**

68 **ni**

69 **nimi**

70 **noka**

71 **o**

72 **oko**

73 **olin**

74 **ona**

75	**open**	
76	**pakala**	
77	**pali**	
78	**palisa**	
79	**pan**	
80	**pana**	
81	**pi**	
82	**pilin**	
83	**pimeja**	
84	**pini**	
85	**pipi**	
86	**poka**	
87	**poki**	
88	**pona**	
89	**pu**	
90	**sama**	
91	**seli**	
92	**selo**	
93	**seme**	
94	**sewi**	
95	**sijelo**	
96	**sike**	
97	**sin**	
98	**sina**	
99	**sinpin**	
100	**sitelen**	
101	**sona**	
102	**soweli**	
103	**suli**	
104	**suno**	
105	**supa**	
106	**suwi**	
107	**tan**	
108	**taso**	
109	**tawa**	
110	**telo**	
111	**tenpo**	
112	**toki**	
113	**tomo**	
114	**tu**	
115	**unpa**	
116	**uta**	
117	**utala**	
118	**walo**	
119	**wan**	
120	**waso**	
121	**wawa**	
122	**weka**	
123	**wile**	

Examples:

Toki ! (Hello!) 

sina jan pona mi. (You are my friend.) 

mi wile moku e telo. (I want to consume water.) 

soweli pi mi mute li moli. (Our cow has died.) 

The proper names are written in cartouches, same as in the *sitelen pona*:

ma Kanata li suli. (Canada is large.) 

jan Sonja li jan pali. (Sonja is the creator.) 

Container glyphs

The proposed *sitelen kalama* glyphs can be used in a simple linear way but the shapes of some particles like "li" , "pi" , "e" offer a possibility to use them as containers, similar to the *sitelen pona "long pi"*, or the *sitelen sitelen* style.

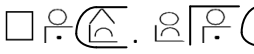
Examples:

mi pilin e ni: (I think this:) 

ma Kanata li suli. (Canada is large.) 

tomo pi telo nasa (a bar) 

pipi lili li moku li wile pakala e tomo pi jan pona mi. (Ants eat and want to destroy my friend's house.) 

mi olin e sina. ona li olin e mi. 

However, this container thing is not necessary, I am not sure about it.

Personal remarks:

My feeling is that the glyphs are easily written, understood, and fun to read. The shapes are simple, so they allow for a lot of variation of handwriting (like *Hangul*). The characters here seem to be very straight and rectangular, but it is only because it is easier to draw them this way on the computer, they do not have to be like that.

A disadvantage is that since it is an apriori script, it is not easily written on a computer (for now).

jan Pali, sike suno nanpa