

**Morphophonemic Reforms in Thuɔŋjäŋ Orthography: An Excerpt from
“Thuɔŋjäŋ Cïdmënde”**

By

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“Ideas are constructed in specific languages, and if we believe that ideas are important in development, in the determination of relations of wealth, power and values in a society, then ... we cannot divorce issues of language and writing from issues of wealth, power and values” and as such, the contemporary African intellectuals “...will grow their roots in African languages and cultures. They will also learn the best they can from all world languages and cultures. They will view themselves as scouts in foreign linguistic territories and guides in their own linguistic space. In other words, they will take whatever is most advanced in those languages and cultures and translate those ideas into their own languages. They will see their role as that of doing for African languages and cultures what all writers and intellectuals of other cultures and histories have done for theirs”, Ngugi wa Thiong'o

1.0 Introduction

Whereas Thuɔŋjäŋ is arguably one of the few written and well researched South Sudanese languages, a host of orthographic challenges remain unresolved. These challenges are rooted in the unmarked phonemes and inaccurate morphophonemic designations that emanated from earlier missionary work in the language. There is a general consensus among a handful of western linguists, who researched into the language, on the approach that any new orthographic reforms, necessary as most of them content, should follow.

Nevertheless, discussions and proposals for reforms have so far focused on mostly the vowel system (representation of tones and length, having had the breathiness aspect already settled by Dhuruai's unlauded vowels). The morphophonemic anomalies which form part of the reforms proposed in "Thuɔŋjäŋ Cïdmëndë", a radical proposal for a total revision and revam of Thuɔŋjäŋ orthography and grammar, have not been raised or addressed anywhere in the available literature on the language. This note, an excerpt from "Thuɔŋjäŋ Cïdmëndë", provides a brief explanation and illustration on only the morphophonemic reforms on [b, p], [d, t], [dh, th], [k, g], [u, w] and [i, y] as codas in lone morphemes (or single basic word unit) and for [u, w] and [i, y] as nuclei (or median letters in words).

Credibility of these reforms

For the benefit of readers, I would like to, first and foremost, underline that I am not a linguist nor did I have a conventional training in this field to speak with authority on these proposed reforms. But usually linguists work with native speakers of a language in issues like these. Hence, as a passionate and analytical native speaker, I will attempt to illustrate the logic that necessitates these reforms which I believe are necessary to adopt if we are to retain the authenticity and ease the grammar of the language, Thuɔŋjäŋ. Radical as they may be, I hope they will be understandable and sensible to other native speakers.

Furthermore, the proposal on these reforms is a conclusion of observational and intuitive research work done with many Muɔnyjiëŋ/Jiëŋ; those who are literate in other languages as well as Thuɔŋjäŋ and those who are completely illiterate (only monolingual in spoken Thuɔŋjäŋ). While the former group may sometimes have their pronunciations corrupted under the influence of second languages they are literate in, observations from the latter group remarkably manifest and support the validity of these reforms. It is therefore helpful to refer to this group where further investigations and substantiation are needed.

Another point to underscore is that, unlike dialect-specific spelling and other grammatical issues, these observations cut across all dialects and are in no way dialect constrained (at least as far as I have noted from my discussion with speakers of different dialects).

1.2 Significance of the reforms and the position of the linguists

“Thuɔŋjäŋ Cïdmënde” is inspired by the need to write Thuɔŋjäŋ as much exact as the native speak it (what we speak is what we write and what is written is what is spoken). Doing this does not only achieve maximum word clarity possible but it also conserves the natural phonology and phonetics of the language. In part, there is an agreement on this among many linguists and writers who researched into Thuɔŋjäŋ. Duerksen (1994) and Ladd (2012) summarise this into four principles.

Principle 1: “represent linguistic distinctions to the greatest extent possible”.

Principle 2: “don’t change more than necessary”.

Principle 3: “don’t use symbols that may cause technical problems”.

Principle 4: a unified orthography for all dialects

“Thuɔŋjäŋ Cïdmënde” is in accord with Principles 1 and 4, although in a different approach, but disregards the rest on the basis of significance of the reforms. The morphophonemic reforms herein illustrated and the concept of “The New Thuɔŋjäŋ Alphabet” which is based on the Nilerian script (also a new script invented for the purpose of correctly writing South Sudanese languages starting with Thuɔŋjäŋ) are directly and sharply contentious with Principles 2 and 3 respectively. Thus, the radical characterisation others have already made of these reforms.

The Situation and Manifestation

Situation 1: *Misplaced use of devoiced for voiced plosives when they function as codas in lone morphemes, bound morphemes or in compound words containing either lone/bound morphemes or both.*

Situation 2: *Misplaced use of [u] for [w] and [i] for [y] when they function as medians in form of diphthongs words.*

From the Muɔnyjäŋ phonological point of view, there is no logic in the current spelling for the existence of the above situations in the Latin-based Thuɔŋjäŋ orthography. Yet, phonemes or rather letters involved in Situation 1 play a crucial role in Thuɔŋjäŋ grammar as will be shown shortly. Treating them as now done in the current spellings presents enormous morphological challenges in proper and common nouns, for example, Luɛɛth Majök Akuëi (pronounced as Luenh Majöŋ Akuëi) and amadic (from amat yic) respectively.

Situation 1: *Misplaced use of devoiced for voiced plosives when they function as codas in lone morphemes, bound morphemes or in compound words containing either lone/bound morphemes or both.*

This situation will be explained by looking at the devoiced-voiced plosive pair [devoiced, voiced] and the vowel-semivowel pair [vowel, semivowel]. That is, [p, b], [c, j], [t, d], [k, g], [th, dh], [i, y] and [u, w] respectively. The first letter from each of these pairs – [p, b], [c, j], [t, d], [k, g], [th, dh], [i, y] and [u, w] – is currently incorrectly written as a finale in lone words or compound words.

For example:

Lone words: *tiɔp* (pasted soil), *löc* (peg), *dit* (bird), *tiök* (mud), *dhieth* (birth), *luci* (work) and *baau* (lake)

Compound words: *rapdit* (wild corn grass), *apuc̣thiak* (bride), *miɛtpuöü* (happiness), *muööḳmeth* (babysitting), *jiɛthpuöü* (shock), *baaiciɛlic* (courtyard), *akeunhom* (neighbourhood).

According to “Thuɔŋjäŋ Cïdmënde”, these words, considering correction to Situation 1 only, should be spelt as

Lone words: *tiɔb*, *löj*, *did*, *tiög*, *dhiedh*, *lucy* and *baaw*

Compound words: *rabdid*, *apuc̣jthiag*, *miɛdpuöüw*, *muöög̣meth*, *jiɛdhpuöüw*, *baayciɛlij* and *akewnhom*.

Situation 2: Misplaced use of [u] for [w] and [i] for [y] when they function as medians in form of diphthongs in words.

This situation manifests in *kuaj* (leopard), *kuad* (related or ethnic group), *kuej* (refusal), *kuɛdh* (satisfaction), *kuël*, etc. The correct forms of which are *kwaj*, *kwad*, *kwej*, *kwɛdh*, *kwël* respectively.

Combined Corrections for Situation 1 and Situation 2

The above words, after a combined correction of both situations, can be correctly spelt as we speak them as follows: *tyɔb*, *löj*, *did*, *tiög*, *dhyɛdh*, *lwɔy*, *baaw*, *rabdid*, *apwɔjthyag*, *myɛdpwöüw*, *mwöög̣medh*, *jiɛdhpwöüw*, *baayciɛlij*

More examples of new spellings based on these reforms.

[p, b]: Warrab, Alyab, Matyɔb, alyääb, aköb, arob, tab, lab, deb, rub, **yiëb**, alyëb, etc

[c, j]: Kwajjög, Cyëj, Kyëj, Akuj, cwëj, wëj, waj, moj, löj, kɔj, köj, dhij, pij, dɔj, laj, etc

[t, d]: Dud, Aköd, gud, gääd, wid, bud, amad, pwööd, dwöd, adeed, kwɛɛd, awed, etc

[k, g]: Rumbeg, Dug, Gagrial, thög, dhög, dhäg, wag, leg, tig, myög, yög, lug, etc

[th, dh]: thidh, widh, wadh, lwadh, lwɛɛdh, apedh, nyidh, kwɛdh, wëedh, podh, etc

[i, y]: Ayiëy, Byöör, Abyey, Pyök, kwyeɔ, pyën, cyëen, byaar, yay, rwääy, cwaay, etc

[u, w] Twij, Makwëy, Alëw, Ayiy, kwaar, kwööd, kwej, yweg, awöüw, möw, päw, piw, etc

As can be seen, these spellings are obviously strange and may invoke a spontaneous resistance. But if we look carefully, we can realize the logic. For example, Twic is one of the only few old reformed spellings after changing over time from Tuic and now finally to Twij. It is therefore puzzling how the diphthong “ui” was only changed in Twic and the same was not applied in other situations now corrected. Another example is that of Aliab. Clearly, the same situation in Aliab and Twij is just as correct as in other words/names. Of all diphthongs, the only exceptional cases are “uo”, “uo”, “uö”, “uö” where substituting “w” for “u” does not give equal phones, for instance, in Kuol. However, the difference is allophonic just as in English /k/ phoneme in “key” and “cook”. So, it may appear to non-native speakers that these pairs are different when occurring as codas in words but if we examine the spoken sounds of the natives, it can be seen that these pairs exactly form or somewhat make up allophones of the voiced letter. The same thing occurs in Arabic and English where speakers of these languages cannot differentiate between [“b” & “p”] and [“k” & “kh”] respectively. But this case in Thuonjån is unique in two ways; (1) the devoiced-voiced pair form distinct phonemes when occurring as onsets in words but not when codas and (2) while occurring as codas, the voiced letter predominates such as in dhiëdh (birth) and tid (wait). In this case, thus, choosing to end words with voiced letters is more correct and preferable for grammatical reasons and morphological uniformity (simplicity of spellings). Hence, the need to eventually adopt these reforms.

The second exception to the general trend of these reforms occurs when the diphthong containing “i” or “ï” such as “ie”, “ia”, etc follows “y” in a word. In that case “i” or “ï” are written, for example, in yiëb (axe) and Ayiey (name). However, there seem to be dialect differences in this case. That is, in some dialects, these can simply be “yëb” and “Ayëy”. Either way, this becomes a different situation – that of dialects standardisation which is discussed separately outside this note. If, in dialects standardisation work, yiëb and Ayiey are maintained, then the current exception will prevail. Otherwise, yëb and Ayëy will nullify the current exception in which case the trend will be uniform regardless.

2.0 Significance of the proposed morphophonemic reforms

Until this far, a sense may have been made of these reforms or reservations may still persist on how logical and significant they are to adopt them. To shed more light, further elaboration and illustrations are made as follows.

I will begin this with a personal experience which triggered the wondering that eventually led to lending my efforts to seeking solutions to the spelling and pronunciation disparities as in Situations 1 and 2 and other phonemic challenges covered in “Thuonjån Cïdmënde”. There is a misconception among many Thuonjån speakers about knowledge of English alphabet relative to Thuonjån. Many Jiëng, after learning English, think that they can spell Thuonjån words. In fact even though one has learn the alphabets of the two languages, it is still not enough to spell Thuonjån words correctly. One needs to exert a little more reading and writing efforts and when one does so with some keen attention, some anomalies will begin to surface. Here is my trigger; pronunciation of English “foot” and “food”. Without my realization, I used to pronounce both of them as “food”. In fact I pronounced everything that ends with ‘t’ such as ‘cat’, ‘rat’, etc as though they ended with ‘d’. This is not to mention non-Muonyjäng phonemes such as /v/, /f/, /sh/, /z/, /s/ which give

tremendous pronunciation challenges to the Nilotes (esp the Muonyjäŋ, Näädh, Luo, Collo, etc).

2.1 Easing grammar and reading

Figuring out the difference in pronunciation of words that end with “t” and “d” in English made me suspect something unique about our pronunciation of Thuonyjäŋ words that end with “t” or “d” and obviously with words that involve the five phonemes aforementioned. In reality, “t” or “ch” at the end of an English word does not sound the same way as in a Thuonyjäŋ word. Clearly ours is a “d” sound. Some linguists say, it is a weak “t”. Whether or not it is a weak “t”, the fact that we find a “d” phone when we pronounce words such as “amat/amad” in conjunction with another word or bound morpheme such as in “amadic”, is enough for us to take “amad” as the correct spelling. This will save us many morphological variations in words and will definitely make a great advantage for our grammar and reading. This situation with “t” and “d” is exactly the case with the rest of other similar letter pairs (plosives) earlier mentioned. For example no native Jiëŋ pronounces “dhiëth” with the same sound of “th” as in the pronunciation of “birth”. Clearly we have a “dh” sound not a weak “th”.

2.2 Tracing and preserving potential historical and etymological relations between dialects/languages

In another remarkable show of evolution of dialects, Jangawil speakers (Malwal, Abiëm, Koŋdeer, Bwəncwai and Ajak) pronounce the same word as “dhiëd”. This is similar to the Dɔɔg pronunciation of “nom” rather than “nhom” as in most of the dialects. This shows that /d/ and /n/ may have evolved from /dh/ and /nh/ phonemes respectively with the passage of time or it may be the other way round. Since both “d” and “dh” are voiced plosives, it is impalpable to reckon that /d/ evolve from “th”, a devoiced plosive. This reveals to us very important historical and etymological information that will be useful in the studies of variations in dialects and their possible origins. The same can be said of the relation between Thuonyjäŋ and other languages of the Nilotic family. However, if we do not adopt morphophonemic reforms as explained above, then we are running a risk of losing this historical connection between dialects/languages as pronunciations will eventually shift with time in accordance to written form chosen. It is therefore vital that these reforms are adopted however strange they may look.

2.3 Enhancing marking apophony in proper nouns and reducing variety of morphological forms of the same words

Furthermore Situation 1 also provides us with another important observation, how the plosive pairs transform into nasals as shown in Table 1 below.

Table 1: Plosive-Nasal Apophonic changes and phonological buccal positions

(1) Alphabetical Order		Bilabial	Dental	Alveolar	Palatal	Velar
(2) Plosives	Devoiced	p	th	t	c	k
	Voiced	b	dh	d	j	g
(3) Nasals		m	nh	n	ny	ŋ

Where the plosive pairs function as codas in words or morphemes in compound words, it would be grammatically and practically convenient to decide that only the voiced plosives should be codas. With that decided it would be easier to develop means of marking plosive-nasal changes as a result of possessives, adjectives or numbers following proper nouns as in Majak Atëm, ApugPadɔj, GögMacäär, Majögdid and Makethacööd respectively pronounced as Majang Atëm, ApungPadɔj, GöŋMacäär, Majöŋdid and Makɛnhacööd. These changes in proper nouns are summarised in Table 2 below.

Table 2: Markable Apophonic Changes in Proper Nouns

Case	Terminal Plosives	Alternate Letters (Nasals)	Marks Used
1	p, b	M	Mark 1
2	th, dh	Nh	Mark 2
3	c, j	Ny	Mark 3
4	k, g	Ng	Mark 4
5	t, d, w, y, ɣ	N	Mark 5
6	Terminal vowels	N	Mark 5
7	Internal vowels	One vowel omitted	Mark 6
8	Internal vowels	Two vowels omitted	Mark 7

In addressing apophony in proper nouns, seven symbolic marks to represent plosive-nasal apophonic changes are outlined in “Thuɔŋjäŋ Cidmënde”. These marks are much easier to use when, as a general rule, “b”, “dh”, “d”, “j” and “g” are adopted as the only codas instead of their counterparts in their respective pairs. The marks are apically embedded on the letters that change to nasals to virtually tell a reader that a letter with such a mark is read as a particular nasal. Assuming that an apostrophe (‘) is the mark that represents the change in Majag to Majang (g to ŋ), for example, then a “g with apostroph” (g’) is pronounced in two ways; (1) as a “g” when “ŋ” is not required due to absence of the possessive or adjective (when written alone) and (2) as a “ŋ” when it is required accordingly. For instance, Majag’ Atëm Majag and Majag’ Atëm Majag’ Atëm are virtually pronounced as Majang Atëm Majag and Majang Atëm Majang Atëm respectively.

However, these marks are part of the New Thuɔŋjäŋ Alphabet based on the Nilerian script. But they can be extended to the Latin-based orthography since they are only seven. The advantage of using these marks is that they help a reader know where and which nasal should be pronounced while at the same time not significantly changing the form of the name. That is Majag' is a lesser change than Majaŋ and much better than totally ignoring marking the nasal. This would be a great improvement to Thuɔŋjäŋ grammar and at the same a preservation of this unique feature which is now ignored at the expense of its disappearance. Non-native learners of the language will also learn to call Muɔnyjäŋ names correctly unlike now where names of a person, for instance, Majög Maluɛdh Matiob Arou are pronounced as though they are four different people. More on this in "Thuɔŋjäŋ Cïdmënde".

In the rest of the words other than proper nouns, all the different forms of words that arise as a grammatical requirement are written as spoken. For example moj, tig, akew, etc are written exactly in all their various forms. That is moj (mony, mwɔny), tig (tiŋ), akew (akewic).

More Examples

[b] → Ƴög acë la rabiiŋ

→ Jöŋ acë lam ë wen cwed

[th] → Köör acë tãj në kwëdhic

→ Manh a anyaar aciï köör cam

[d] → Piw atöw në gudij

→ Kön a anyaar athieg apɛy

[j] → Dhög acë rej tääw në majij

→ Mony dïd akɔm në way

[g] → Tig ahëëj mäaw në görögij

→ Dhöŋ ë Dëŋ abiöög në thög

[y] → Kôm acë lööny në cwaayij

→ Yan ë Kërismäŋ aye looy akölnin 25 ë Nyedh

[w] → Tɔŋ acë thöör akewij

→ Arwɔn tög yen acë thow arwɔdhiij

2.4 Basis for Thuɔŋjäŋ Alphabetical Order (Abeer ë Kïdjän)

The information in Table 1 above also shows a remarkable trend that was used, in the New Alphabet, to establish Thuɔŋjäŋ Alphabetical Order (Abeer ë Kïdjän), which is lacking in the current alphabet. This order follows the following precedence;

Vowels → Semivowels → Consonants

Within vowels the order goes as [a, ä, e, ë, ε, ê, i, î, o, ö, ɔ, ɔ̃, u] and within consonants, the order follows the buccal positions from lips to back of the mouth (velar) and from devoiced to voiced in each group. That is, w,y, ɣ, b, p, m, th, dh, nh, t, d, n, c, j, ny, k, g, ŋ, l, r. These buccal positions are shown in Figure 1 below.

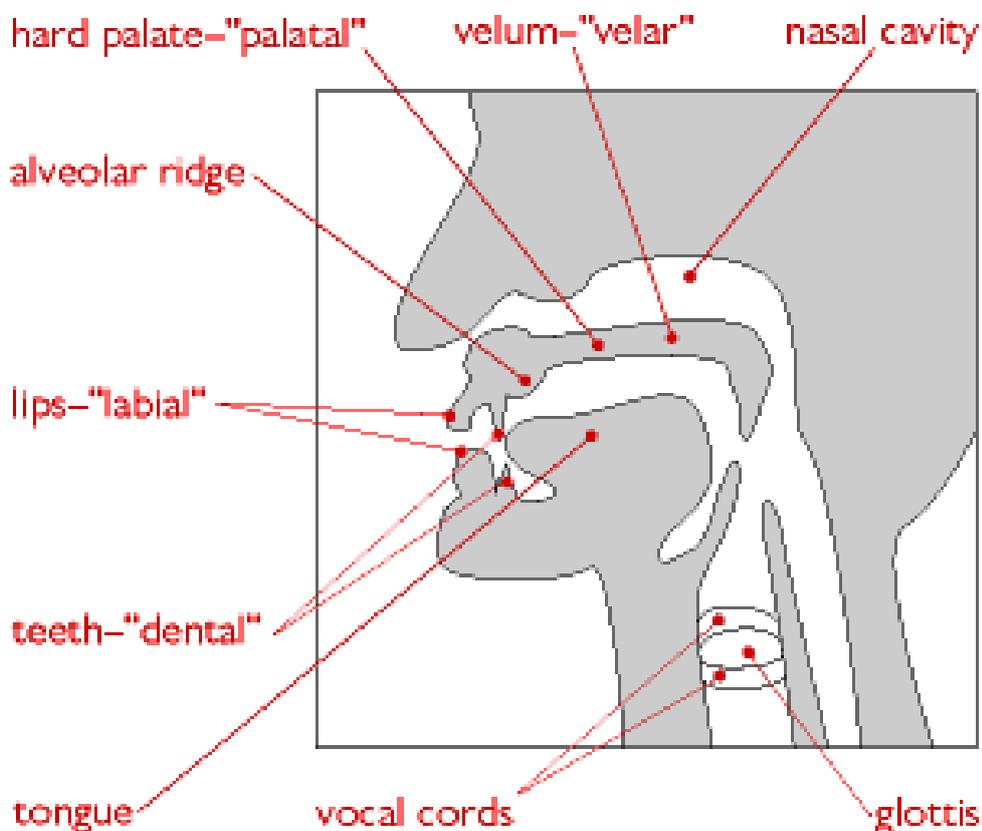


Figure 1: Phonological buccal positions (order from lips to velum)

All together and based on the current 33 letters, Thuɔŋjäŋ Alphabetical Order (Abeer ë Kïdjän) is now established as follows.

a, ä, e, ë, ε, ê, i, î, o, ö, ɔ, ɔ̃, u, w, y, ɣ, b, p, m, th, dh, nh, t, d, n, c, j, ny, k, g, ŋ, l, r

3.0 Other Reforms Covered in “Thuɔŋjäŋ Cïdmënde”

Apart from the morphophonemic reforms discussed here, other orthographic reforms and proposals on approaches towards dialects standardisation are presented. These include the following.

(i) Orthographic Reforms

- a) Nilerian Script based orthography
- b) Representing the unmarked phonemes (tones & vowel length)
- c) Marking Apophony (Nasals) in proper nouns
- d) Morphophonemic reforms in Thuongjang Orthography

(ii) Dialects Standardisation

- a) Harmonising dialect phonemic and semantic differences
- b) Establishing standard grammar and language of formality
- c) Compiling idioms, proverbs, wise sayings & phrasal verbs
- d) Compiling tongue twisters, myths, legends, folklores & short stories

Section (i) (a) addresses the phonemic deficiencies in the current Latin-based alphabet and on top provides a unique opportunity for the adoption of the reforms since the script is new and therefore reforms such as those in 1 (c) and (d) would not be seen as strange as they are in the Latin-based script. The challenge it presents, however, is that of increased number of letters; 46 letters owing to breathiness and vowel length and 72 letters (inclusive of two level tones), 98 letters (inclusive of three level tones) and 124 (inclusive of four level tones). Given the linguistic complexity of tones across different dialects, the Nilerian Script Team currently works on the 46 letter proposal to achieve a reasonable and practical ideal Thuɔŋjäŋ orthography based on the Nilerian script. More on Section (i) and Section (ii) is elaborated in “Thuɔŋjäŋ Cïdmënde” and “The Nilerian Script” forthcoming.

As part of appreciation of breathiness and vowel length at three levels (very long, long and very short), it is recommended that every Thuɔŋjäŋ writer practices writing Job Dhuruai;s unlauded letters and “very long” length, usually indicated by a double vowel. Fortunately, free keyboard software on both computer and smartphone platforms is now available. Thus, instead of Reng, Agar, Bor, Ngok, Mabior, Macar, Madol, etc, these should be correctly written as Rëŋ (or Rëng), Agaar, Boor, Dɔɔg (or Ngɔɔg), Mabiöör, Macääär, Maadöl respectively.

4.0 Conclusion

As shown, the proposed morphophonemic reforms with plosive, radical as they seem, seek to address the spelling and grammatical anomalies which have persisted in the current orthography as a result of the approach followed by the earlier writers and which has not been corrected thus far. The reforms are significant in many ways; correcting and simplifying Thuɔŋjäŋ grammar and reading by the learners, preserving potential historical and etymological relations between dialects/langauges, enhancing marking of apophony in proper nouns and reducing formation of a variety of morphological forms of the same words and forms the basis for Thuɔŋjäŋ Alphabetical Order (Abeer ë Kïdjäŋ). It is therefore imperative to adopt them. The real adoption of these reforms will be achieved once the Nilerian-based orthography is formally endorsed by the speech community and other stakeholders in South Sudan.

To many, the Nilerian-based Thuɔŋjäŋ orthography is the final solution to the orthographic challenges in the language while to others, it could impede literacy in the language. But adopting it is justifiable as can be seen from the reasons and illustrations earlier stated and in “The Nilerian Script”. There is not much of the development in Thuɔŋjäŋ that will be lost once the orthographic shift is made. There are many cases where this was successfully done with already established orthographies, for instance Russia and Bulgaria among others, where orthographies were changed from Latin to Cyrillic. Also many Central Asian countries have gone through multiple orthographic transitions involving Arabic, Latin and Cyrillic. Yet, those languages were more established than Thuɔŋjäŋ. It can therefore be done in Thuɔŋjäŋ.

About Author

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