The Development of a Standard and Practical Orthography for Tiv Language

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Abstract

Tiv orthography was first developed by Rev. W. A. Malherbe who was a member of a religious group, the Dutch Reformed Christian Mission (DRCM). In his Tiv - English Dictionary (1931) he adapted the English orthography to produce an orthography for the Tiv language. Over the years, many people and groups have contributed to the development of the orthography. Some were linguists while others just had a zeal for writing the language. Thus, we have different versions of the orthography. The Tiv Language Studies and Development Association was established to take care of Tiv language matters and has a vested interest in the development of the language. This paper revisits the Tiv orthography as proposed by the National Language Centre, the NKST's Committee, Aper Aku's Committee, Kpamor J. T. Orkar among other scholars to throw more light to the direction of the study. The paper revisits these versions of the orthography and recommends that a standard and acceptable orthography can only emerge after a meeting of all individuals and groups that claim to have an interest in the development of the language.

Keywords: Development, standard, orthography, acceptability, committee.

1. Introduction

There has been increased attention on orthographies in recent years as shown by a great increase in major publications on the topic. Several factors account for this, especially the increased awareness of endangered languages and the positive effects literature and literacy in these languages can have in preserving them.

The history of Tiv orthography dates to the activities of the Dutch Reformed Church Mission (DRCM) who came from South Africa. They arrived in Tiv land on 10th April. 1911. Before this development, there was no earlier attempt at reducing the language to a written form apart from the pioneer efforts of Dr. Carl Kumn who was believed to have attempted writing a few words (or letters) in Tiv language. The credit for the development of Tiv orthography, however, goes to Rev. W. A. Malherbe who developed a practical orthography. The current Tiv orthography has not been a radical departure from what Malherbe developed. Working against the linguistic background of English phonology, Malherbe developed the following twenty-five letters of the Tiv alphabet:

UPPER CASE: A B C D E F G H I J K L M N O Ô P R S T U V W Y Z

LOWER CASE: a b c d e f g h I j k l m n o ô p r s t u v w y z

TRANSCRIPTION: a: ba: t∫a: da e fa ga ha I dʒa ka la ma na o ɔ pa ra sa ta u vawua ya za.

In the notes accompanying his *Tiv-English Dictionary* (1932) Malherbe distinguished the vowels from the consonants thus: Vowels: a, e, o ô, u, ou and consonants: b, ch, d, f, v, w, g, gh, nj, j, k, l, r, m, n, p,

s, t, y, dz. He also wrote a combination of consonants which can be regarded as consonant clusters. These include:

gb	mb	nj	nd	sh
kp	mh	ny	dw	shw
kw	mk	ngb	tw	ty
hw	ng	ngw	sw	dz

Another major contributor to the development of Tiv orthography was Captain R. C. Abraham, an English colonial officer. He tried to improve on the Tiv orthography. Shoja (2010:7) cites the vowels Abraham discovered. These vowels are:

/a/	as in the French 'bal' e.g. 'sha' (on, upon).
/i/	as in the English 'scat' e.g. 'iwa' (dog).
/u/	as in the English 'soon' e.g. 'hura' (weed).
/e/	as in french 'donner' i.e. the sound first heard as the element of the
	diphthong in the English 'fate' e.g. 'de' (leave, or stop).

Professor C. Hoffmann, who was a lecturer at the University of Ibadan, identified six short and long vowels in Tiv. He also found twenty-five simple consonants out of which thirty-five could be derived through palatalization, labialization or pre-nasalisation, giving a total of seventy-two phonemes in Tiv language. His findings were modified by Professor Armstrong. Worthy of note is the immeasurable work by the Armstrong (1980) Ad-Hoc Committee on Tiv language set up by then Gov. Aper Aku which revised the *Orthography of Tiv* in 1980, and some Tiv language scholars including Dr. J. T. Orkar who produced *Ortogerafi u Tiv* in 2005, Mr. Gosogh Ikpa's 1985 publication of *Current Tiv Orthography*, committee set by NKST, National Language Centre (NLC) and that by the Tiv Language Studies and Development Association which is supposed to supersede all others. However, this last one is still under consideration by the Language Centre of the NERDC which approves all issues relating to orthographies.

2. Orthography

Bussmann (1998:805-6) opines that orthography is a derivation from Greek *orthos* 'right, correct', *graphein* 'to write' (also spelling). Orthography is the study and/or instruction of systematic and uniform transcription with letters (graphemes) and punctuation. Cahill and Karan (2008:3) posit that an orthography is a system for representing a language in written from. It encompasses more than the symbols that represent the sounds (often called characters, letters or graphemes). Orthography also covers relative placement of these symbols, word breaks, punctuation, diacritics, capitalization, hyphenation and other aspects which might be regulated in a written standard. As Coulmas (1996:379) notes, "all orthographies are language specific." Orthography is the study of letters of an alphabet and how they occur sequentially in words.

According to Williamson (1984:3), orthography is the correct spelling of words. By this she means that it has to follow conventions and or agreed rules for spelling. Williamson (1984:4) maintains that orthography consists of symbols and rules used in writing a language.' Chalker and Weiner (1994:276) define orthography as 'the study or science of how words are felt.'

Yina (2013:3) attests that orthography of a language involves consideration of the sounds of that language which can be separately recognized and distinguished by human beings in communication. Such sounds that are tied to the meaning system of the language called 'phonemes' and can be represented graphologically by symbols. These symbols are individually referred to as 'letters', and collectively as an 'alphabet.' For example, Tiv language has twenty-five 'letters' representing the different sounds in her 'alphabet.'

Orthography of Tiv language needs to be effective. That is, it needs to be (a) linguistically sound, (b) acceptable to all stakeholders, (c) teachable, and (d) easy to reproduce. These roughly can be thought of as scientific, political, educational, and technical aspects.

3. Principles of Orthography

The orthographic system of a given language is the result of different and, at times, controversial principles.

- a) phonetic principle: every spoken sound should correspond exactly to one written character.
- b) phonological principle: a single written sign should correspond to every phoneme.
- c) Etymological principle (etymology): etymologically related words should be spelled analogously.
- d) Historical principle: orthography should remain static over time.
- e) *Homonymy principle*: different words that sound alike should be spelled differently (thus, the differentiation of 'kaa' and 'kar'.
- f) Principle of economy: superfluous letters should be dropped (e.g. dzwa but zwa 'mouth')
- g) principle of aesthetics: for various reasons, some letter combinations may not be doubled.
- h) *pragmatic principle*: for pragmatic reasons, some words (proper nouns and the pronoun I) are capitalized.

All of these 'principles' are merely tendencies; the numerous non-systematic deviations make learning the orthography of the given language more difficult. Thus, discussions about orthographic form are of interest not only to linguists, but also to those involved in making educational and political decisions because the practical orthography used and required by the speech community often differs from that demanded by linguists.

4. Factors of Choosing the Orthography of Tiv language

Government Policies and Restrictions: Sometimes the national government has regulatory policies that one must follow. These generally restrict the options available in orthography decisions (for example, some countries regulate script choice). Although linguistic analysis should lay a foundation for an orthography, governmental policies, as the law of the land, trump other factors. It is no use proposing an orthography that would, in effect, be illegal.

Linguistic Factors: As a general principle, sounds which contrast in a language should be represented with different symbols. That is, if separate phonemes are established, such as /r I/ based on a contrasting word set such as 'river, liver', these need separate graphemes <r, I> in the orthography. The best orthography is not necessarily the one which uses one symbol for every element which is in phonemic contrast. Phonemic analysis of a language is still foundational to orthography design, but it is only the beginning. There are at least two, and possibly more levels of representation which need to be considered. Working with multitudes of languages in all their complexities, it has seemed useful from a pragmatic point of view to consider models such as Lexical Phonology, and look at the output of the lexical level of phonology. This corresponds to the level of psychological awareness for native speakers of a language.

Levels of Representation for Words in Context: Words are often pronounced differently in isolation than in natural speech flow. Those making orthography decisions need to consider how to symbolize these words - as they occur in isolation or as they are pronounced in context. At one extreme is the phonetic representation, with allophones people are unaware of. An example, 'kese, (khese) – to fetch and 'akese, (åkēsē) meaning baskets. This goes against the idea above of representing only the contrastive elements, the phonemes, of a language. The phones (php) do not contrast, so there need not be two symbols.

Word Divisions: Besides the issues of grapheme choice and level of representation, the question of where to insert word breaks needs to be dealt with. Are two morphemes to be attached to each other or written separately? There are a variety of cases where this type of decision must be made. These include compounds, clitics, pronouns, and prepositions, among others. However, there are other linguistic tests for determining whether a morpheme should be attached to another or not. Sometimes these tests do not all point in the same direction.

Educational Factors: Smalley (1964) and Malone (2004) present lists of criteria for an adequate writing system. Two of the criteria relate to education: (1) learnability and (2) ease of transfer to other languages. These constitute the pedagogical ideal. We will examine these and discuss what would enhance or undermine these ideals.

Ease of Learning: Learnability relates to the inherent ease or difficulty of a system. The teaching and learning of reading and writing become more complicated when there is a mismatch between the spoken and written language. The degree of abstraction inherent in an orthography is referred to as *orthographic depth* in the literature. Shallow orthographies – those with reliable sound-symbol representation are more easily learned than deep orthographies. Deep orthographies result from underrepresentation, overrepresentation (often referred to as over differentiation), inconsistencies in sound-symbol correspondences, silent letters, and loan words retaining unadapted spellings. Deep orthographies bring with them a cost to learners, teachers and education providers. Learners experience a higher level of frustration, resulting in possible demotivation or failure and increased learning time. For the educational system this represents increased investments of time, people resources and funds.

Underrepresentation and overrepresentation: Underrepresentation results when an orthography uses fewer graphemes than there are phonemes. Underrepresentation is never ideal from a linguistic or pedagogical point of view, but there are often sociolinguistic pressures for Underrepresentation. There may be pressure from the national language, which does not provide symbols for sounds found in the local language, or perhaps the local speakers do not want traditional symbols for a variety of reasons.

Tone: Tone marking deserves a special comment here. Much orthography of tonal languages does not mark tone – a classic case of Underrepresentation. Sometimes this is a result of inertia (perhaps other nearby languages do not mark tone) or a reluctance to delve into the details of analysis (Cahill 2001).

Sociolinguistic Factors: It has been said that all orthographies are political, and indeed the influence of the outside world, internal conflicts, as well as other social factors, can end up being the determining factors in an orthography. Multilingualism is a natural part of the social environment for most languages of the world, and few language communities exist in isolation. Thus, there are quite often influences from national or official languages, or neighboring languages. People's attitudes toward these languages may be positive or negative, and the depth of their interaction with these languages may be rare or intensive. Some people see orthography as belonging to a certain group like religious and or political group. This is true with Tiv orthography because it initially belonged to a religious group, the Dutch Reformed Christian Mission (DRCM). The first Tiv orthography was developed by Rev. W. A. Malherbe (*Tiv-English Dictionary*, 1931) and Rev. Gerard Terpstra (*English-Tiv Dictionary*, 1960). Tsumba (2013) observes that 'In their promotion of religious culture designed the Tiv orthography without the letter 'Q' This was replaced with 'K'. This was designed because they felt that 'Q' sounds more like 'ikyur' (vagina), which was forbidden to be called by the DRCM culture, and it was therefore removed on moral grounds.

Practical Production Factors: A major challenge for orthographies in past years was the practical problem of special symbols for adapted Roman alphabet. Symbol options depended on typewriter or local printer capabilities. Rather than using a non-Roman symbol such as $\langle \sigma \rangle$, people resorted to modifying typewritten symbols by underlining, strikethroughs, and so on. In the 1980s, authors were thrilled to be able to order "custom keys" such as η , ε , σ on their new manual typewriters, replacing some more standard symbols.

5. Tiv Orthography and Phonemes

The orthography of Tiv comprises the spelling system, allophonic features, free-variation, tonetic aspects and phonotactics features. For clarity, the contributions of Armstrong, National Language Centre, Committee set by NKST, Committee set by Aper Aku, S. G. Ikpa, J. T. Orkar and Karshima (Kpamor, 2006; Shoja; 2010 and Karshima, 2012) are presented below:

S/N									
	Phonemes	Armstrong	Orkar	NLC	Ikpa	Aku's Comm.	NKST's Comm.	Karshima	Word
1	/a/	a	a	a	a	a	a	a	va
2	/a:/	aa, ar	aa	aa	aa	aa	-	aa	vaa
3	/b/	a	b	b	b	b	b	b	bee
4	/bw/	bw	bw	bw	bw	bw	bw	bw	Abwa
5	/by/	by	by	by	-	-	-	by	byaang

		1	1	1					1
6	/∫s/	c	c	с	с	с	с	c	ca
7	/tsw/	tsw/cw	cw	cw	cw	cw	cw	cw	cwegen
8	/d/	d	d	d	d	d	d	d	doo
9	/dw/	dw	dw	-	-	-	-	dw	dwem
10	/dj/	dy	dy	dy	dy	dy	dy	dy	dyelegh
11	/e/	e	e	e	e	e	e	e	de
12	/e:/	ee	ee	ee	ee	-	-	ee	bee
13	/f/	f	f	f	f	f	f	f	fFa
14	/fj/	fy	fy	fy	fy	fy	fy	fy	fyagh
15	/g/	g	g	g	g	g	g	g	ga
16	/gb/	gb	gb	gb	gb	gb	gb	gb	gba
17	/gbj/	-	gby	-	-	-	-	gby	gbya
18	/gh/, /\/	gh	gh	gh	gh	gh	gh	gh	kwagh
19	/gw/	gw	gw	gw	gw	gw	gw	gw	gwa
20	/gwj/	gy	gwy	-	-	-	-	-	gyande
21	/gj/	g	gy	gy	gy	gy	gy	gy	gyido
22	/h/	h	h	h	h	h	h	h	haa
23	/hm/	-	hm	-	-	-	-	-	hm
24	/hw/	h	hw	hw	hw	hw	hw	hw	hwande
25	/hwj/	-	hwy	-	-	-	-	-	ihwya
26	/hj/	hy	hy	hy	hy	hy	hy	hy	hyande
27	/i/	i	i	i	i	i	i	i	hide
28	/ia/	-	ia	-	-	-	-	-	hia
29	/ie/	-	ie	_	-	-	-	-	shie

	1	1	1	1	1	1		1	
30	/I:/	ii	ii	ii	ii	ii	ii	ii	hii
31	/io/	-	io	-	-	-	-	-	ior
32	/ci/	-	io	-	-	-	-	-	iniondo
33	/iu/	-	iu	_	-	-	-	-	iniu
34	/dzy/	-	j	j	j	j	j	j	-
35	/dzw/	-	jw	jw	jw	jw	jw	jw	ijwe
36	/k/	k	k	k	k	k	k	k	ka
37	/km/	-	km	-	-		-	-	km
38	/kp/	kp	kp	kp	kp	kp	kp	kp	kpa
39	/kpj/	-	kpy	-	-	-	-	kpy	ikpya
40	/kw/	kw	kw	kw	kw	kw	kw	kw	kwagh
41	/kwy/	-	kwy	_	-	-	-	-	ikwye
42	/kj/	ky	ky	ky	ky	ky	ky	ky	ikya
43	/1/	1	1	1	1	1	1	1	lu
44	/lw/	-	lw	_	-	-	lw	lw	lwese
45	/lj/	ly	ly	ly	ly	ly	ly	ly	lyemen
46	/m/	m	m	m	m	m	m	m	m
47	/m/	-	m	-	-	-	-	-	m ngu
48	/mb/	mb	mb	mb	mb	mb	mb	mb	mba
49	/mbw/	-	mbw	-	-	-	-	mbw	imbwa
50	/mbj/	-	mby	-	_	-	-	mby	imbya
51	/mh/	-	mh	-	-	-	-	-	mh
52	/mm/	-	mm	-	-	-	-	-	mm
53	-	-	-	-	-	-	my	-	amyan

	1	I	1	1	1	1		1	
54	/n/	n	n	n	n	n	n	n	na
55	/nd/	nd	nder						
56	/ndw/	-	ndw	-	-	-	-	-	ndwer
57	/ndj/	ndy	ndyar						
58	/ŋ/	ng	nga						
59	/ŋb/	ngb	ingbar						
60	/ŋbj/	-	ngy	-	-	-	-	ngby	ingbye
61	/ŋw/	ngw	ngw	ngw	-	-		ngw	angwe
62	/ŋj//ŋd 3 /	ngy	ngy	ngy	-	-		ngy	ingya
63	/ŋdz/	-	nj	-	-	-		nj	injar
64	/ŋh/	-	nng	nng	-	-	-	ngh	-
65	/nw/	nw	nw	nw	nw	nw	-	nw	nwange
66	/nj/	ny	ny	ny	ny	ny	nj	nj	inya
67	/ndz/	nz	anza						
68	/0/	0	0	0	0	0	0	0	gogo
69	/o:/	00	00	00	00	00	-	00	doo
70	/o/	ô	ô	ô	ô	ô	ô	ô	kô
71	/ɔ:/	ôô	hôô						
72	/p/	p	p	p	p	p	p	p	pande
73	/pw/	pw	pwenem						
74	/pj/	-	ру	-	-	-	ру	ру	ipyaven
75	/r/	r	r	r	r	r	r	r	rumum
76	/r:/	-	rr	-	-	-	-	-	parrparr
77	/rw/	rw	rw	rw	-	rw	-	rw	rwam

	1	1	1	1	1	1	1	1	T
78	/rj/	ry	ry	ry	-	-	-	ry	iryumun
79	/s/	S	S	s	S	S	S	S	se
80	/∫/	sh	sha						
81	/Jw/	shw	ishwa						
82	/sw/	SW	Swem						
83	/t/	t	t	t	t	t	t	t	ta
84	/ts/	ts	tse						
85	/tsw/	tsw	tswen						
86	/tw/	tw	twer						
87	/tj/	ty	ityav						
88	/u/	u	u	u	u	u	u	u	ungwa
89	/ua/	-	ua	_	_	-	_	ua	adua
90	/ue/	-	ue	_	_	-	_	ue	sue
91	/u:/	uu	uu	uu	uu	uu	-	uu	suur
92	/v/	v	v	v	v	v	v	v	va
93	/vv/	-	vv	_	_	-	-	_	bavv
94	/vj/	-	vy	_	_	-	-	_	ivye
95	/w/	w	w	w	w	w	w	w	wa
96	/wj/	wy	wy	_	_	wy	-	_	iwya
97	/j/	у	у	у	у	у	у	у	ya
98	/dz/	Z	z	z	z	z	z	z	za
99	/dzw/	ZW	zwa						

The above table is the representation of Tiv phonemes with their corresponding letters. In the presentation, Orkar has ninety-nine (99) phonemes, the National Language Centre provided sixty-nine (69) phonemes, Ikpa provided sixty-eight (68), Aper Aku's Committee had sixty-four (64) sounds, NKST's Committee discovered sixty (60) phonemes and Armstrong produced seventy-four (74) speech sounds. The number of speech sounds

in Tiv is so alarming. This is because, Tiv phonologists include consonant clusters and other secondary articulatory features like palatalization and labialization. The letters in the above table help in the realization of the sound system of the Tiv language. So, there is a need to come together and agree on what should be included or left out of the orthography. For the time being, it is advisable to use the orthography approved and published by the National Language Centre of the NERDC since they are the government approved authorities on language matters. It is necessary for the different interest groups in the Tiv orthography to meet and iron out differences and present for approval, an orthography that would be generally acceptable.

6. Inconsistencies in Tiv Orthography

Every language has its peculiar shortcomings. The orthography of the Tiv is laced with series of errors. A single word has over two spellings. The orthography of the Tiv language has undergone series of changes. These changes are as a result of deviation from the norm or as a result of language change. Many people feel that the spellings of words in the Tiv Bible should be adopted to represent the standard orthography. This is because the Bible hardly changes, and more people have access to it than any other single book.

There is an interchange between (1) and (r) by most speakers of Tiv extraction. Malherbe (1931) observed that 'r' and 'l' are interchangeable. Words mostly interchanged are:

3.1. Interchanged	Correct	Gloss
Ra/La	la	there
Rwam/lwam	rwam	food
Gbiligh/gbirigh	gbiligh	mark
Icul/icur	icul	forehead

Furthermore, 'y' is omitted in most words that should have 'y'. Most people are now inserting 'y' (j) in such words. For instance, 'Iwanger' – 'iwyanger' (light), 'iveren' – 'ivyeren' (blessing) and 'iwasen' – 'iwyasen' (support) have 'y' consonant in their spellings in the contemporary times.

The absence of a circumflexed 'ô' (ɔ) in spellings can result in phonological ambiguity. 'O' and 'ô' are different vowel sounds in Tiv. However, these sounds are not always indicated in the orthography of Tiv. Thus non-differentiation causes words with open 'o' and circumflexed 'ô' to be pronounced alike. Examples are 'soo' (so:) (like) and 'sôô' (so:) (sting), 'kor' (ko:) (sew) and 'kôr' (ko:) (grate) and 'ko' (ko) (species of fish) and 'kô' (ko) (unripe). The absence or near-absence of (o) or (o:) affects the meaning of words.

In addition, a word like 'shie' (time) is written as 'shighe', 'shien', 'shighen' and 'hegen' (now) is pronounced as 'higen', 'hikôn', 'ahegen', 'ahegôn'. Also there are inconsistencies in the spelling of words that have 'c'. Most people prefer the diagraph 'ch' to represent 'tʃ' to 'c'. these are 'chan' – 'can' (suffering), 'icul' – (forehead) and 'chamegh' – 'camegh' (shea tree).

There is paucity of tone-marking in Tiv language. The attempts made by some linguists are still at the superficial level. Tones, in most cases, are not properly indicated. Tiv words are often mispronounced because tone is not properly indicated. Lack of tonal indication makes it difficult to differentiate lexical

meanings from grammatical meanings. The near absence and wrong representation of tones affects the pronunciation of homographic words.

Considering the cornucopia of inconsistencies in the representation of Tiv words and their pronunciation, it is crystal clear that Tiv phonology is not effective in this regard. The uniform orthography of Tiv is what needed to be done at this time.

6 Relevance of Orthography

The orthography of a given language must specify the phonotactic structure of such a language. The orthography of Tiv has several consonant clusters at the word-initial and word-medial but none at the word-final. For instance, 'ndyar' (ndja:) (to march) and 'tswen' (tswen) 'alone' have cluster at word-initial. 'Anngbyan' (brother) and 'ingbyan' (female) are clustered at word-medial.

The standard orthography of Tiv must indicate tone marks appropriately. The absence of tones may result in unintelligibility of what is being read. Tiv is a tonal language and as a result of that all tone bearing units (vowels and syllabic consonants) should be marked. This marking will help the readers and writers to improve on Tiv language.

The standard orthography specifies the letters that will stand for a phoneme. In the table above, it is clear that 'ar', 'aa' can give rise to (a:) as in 'kaa' (ka:) (fry) and 'mar' (ma:) (bear or give birth); 'ôô' and 'ô' result in (2:) as in 'ôô' (2:) wash and 'Aôr' (å2:) (he/she has said); 'c' or 'ch' is realized as (t) 'cia' (t)ia) (justification or fear) and 'sh' is pronounced (s) as in 'ishima' (lima) (heart) and 'kpash' (kpa) (alas).

Finally, research has shown that learning to spell and learning to read rely on much of the same underlying knowledge – such as the relationships between letters and sounds – and, not surprisingly, that spelling instruction can be designed to help children better understand that key knowledge, resulting in better reading (Ehri, 2000). Snow et al. (2005:86) summarize the real importance of spelling for reading as follows: "Spelling and reading build and rely on the same mental representation of a word. Knowing the spelling of a word makes the representation of it sturdy and accessible for fluent reading." In fact, Ehri and Snowling (2004) found that the ability to read words 'by sight' (i.e. automatically) rests on the ability to map letters and letter combinations to sounds.

7. Conclusion

The spelling origins of words can give rise to the phonemes in Tiv language. Letter 'c' or 'ch' gives (t], 'sh' (J), 'uu' (u:), 'ny' (n), 'gh' (V), and 'ee' (3:). If the writers, readers and speakers of Tiv could recognize that Tiv language has standard orthography words would have been correctly written and pronounced. From the foregoing, several attempts were made by scholars in the study of Tiv orthography. They had divergent views about the orthography and phonemic representation. The total number of phonemes in Tiv is ninety-nine (99). Most of the consonants are phonological processes like abialization, and palatalization. The secondary articulations give rise to consonant clusters. Similarly, some diphthongs can be treated as monophthongs.

The divergent spelling and pronunciation of words indicate that the writers and speakers of Tiv are yet to master the accepted orthography. A word like 'hegen' (now) is written as 'higen', 'higon', 'hekon',

'ahegôn'. It can be concluded that much has to be done in order to standardize Tiv orthography and its phonological counterpart (spoken medium).

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