

Recent Developments in Wakhi Orthography

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1. INTRODUCTION

Wakhi,¹ like other modern Pamiri languages,² exists largely as a spoken language. But for many years, the community of scholars, researchers, poets, and other literary persons, both native and non-native, has been attempting to bring the language into a written form.

The earliest known efforts to write Wakhi were those of British colonial officers, who assembled vocabulary lists of, what was to them, a new language (Burnes 1834, Hayward 1871, Yule 1872). Robert Barklay Shaw, who served as the British Officer on Special Duty in Kashgar in 1874–75, published the first sketch of Wakhi grammar (Shaw 1876). Shaw's romanized transcriptions, although phonemically inaccurate, served as the basis for the monumental Linguistic Survey of India (Grierson 1921).

European linguists investigated Wakhi (Sköld et al. 1936, Klimchitsky 1936, Lorimer 1958), with Georg Morgenstierne making the most detailed study (Morgenstierne 1938). Soviet scholars working in Central Asia (now Tajikistan) contributed substantially to linguistic knowledge and documentation of Wakhi (Pakhalina 1975, 1983, 1987; Sokolova 1953, 1981), including the comprehensive two-volume work

¹ Wakhi people refer to themselves as (wa)ḡ ik, to their language as (wa)ḡ ikwor, and to Wakhan as wuḡ, sharing a common root for the ethnonym, glossonym, and toponym.

² See Mock in this volume for more about Pamiri languages and Wakhi's areal position.

of Grünberg and Steblin-Kamensky (1976). To transcribe Wakhi, these scholars used a Latin-based transcription system (discussed below) that is employed widely among students of Iranian languages.

Wakhi has contrasting pairs of voiceless and voiced retroflex consonants (ṭ ḍ, č ǰ, š ǰ), apparently borrowed from a non-Indo-Aryan substrate that is likely Burushaski (Edelman and Dodykhudoeva 2009: 779–80). Wakhi has a rich set of fricatives (f v, θ ð, s z, š ǰ, x ɣ, x ɣ), in which the development of velar and uvular fricatives (x ɣ, x ɣ) is shared with most of the Eastern Iranian languages (Wendtland 2009: 184).

The thirty-five Wakhi consonants are the same in all four countries. The absence of the glottal fricative /h/ is a shared characteristic of Pamiri languages (Edelman and Dodykhudoeva 2009). Although Beg (2004) and Wakhani (2009) list it as a phoneme in Hunza and Wakhan Wakhi, it occurs only in Arabic and Persian loan words in Wakhan and in Gojal (Pakistan) and also as an unstable breathiness or glide at the beginning of some words with an initial vowel: *ɸp* / *ɸɸp* ‘seven’, *ayem* / *hayem* ‘this’ (Steblyn-Kamensky 1999: 24–5).

Wakhi vowels also show regional variation. The Tajikistan and Wakhan mid-central vowel /ə/ has undergone sound change in Gojal to a mid-front vowel [ɛ], particularly in stressed syllables (Peter Backstrom: personal communication). In unstressed syllables it is still pronounced as /ə/.³ Hence, in Gojal this phoneme is often represented as [ɛ], which is easier for most Gojal Wakhi people to recognize and write.

The diversity of Wakhi phonemes and the diversity of the sociolinguistic context in each of the four countries have engendered a diversity of transcription systems, as discussed below.

Recent linguistic publications on Wakhi (Kieffer 1978; Gao 1985; Buddruss 1986; Payne 1989; Backstrom 1992; Reinhold 1992, 2006; Mock 1998; Steblin-Kamensky 1999; Pakhalina and Lashkarbekov 2000; Bashir 2009) have utilized Latin-based transcription systems (see Table 1). Interestingly, these transcription systems prompted Wakhi intellectuals and artists to write their language, a development that accompanies a resurgence of vitality for the language (Reinhold 1992, Mock 1998, Müller et al. 2008).

³ Examples from Wakhan and Gojal: /kænd/ /kænd/ ‘woman, wife’, /təy/ /tey/ ‘is’, /særk/ /serk/ ‘apricot pit’, /rəçən/ /reçən/ ‘we leave’ (Mock: field notes).

Table 1: Consonant phonemes—Latin-based ‘Iranian’ system

	Labial	Dental	Alveolar	Retroflex	Palatal	Velar	Post- velar
Stop (voiceless)	p		t	ʈ		k	q
Stop (voiced)	b		d	ɖ		g	
Affricate (vl.)			c	ɟ	ç		
Affricate (vd.)			ʒ	ʝ	ʝ		
Fricative (vl.)	f	θ	s	ʂ	ʃ	χ	x
Fricative (vd.)	v	ð	z	ʐ	ʒ	ʝ	ɣ
Flap			r				
Lateral			l				
Nasal	m		n				
Semi-vowel	w		y				(h)

Vowel phonemes—Latin-based ‘Iranian’ system

Wakhan and Tajikistan	i,		u,	ə,	o,	u
Gojal	i,	e,	u,	a,	o,	u

In Pakistan, the efforts of Wakhi intellectuals to write their language began with the Gojal Isma'iliya Students Union's (1980) small booklet that presented a list of Wakhi letters in Perso-Arabic script accompanied by a grammatical sketch and a glossary, written in Urdu. Haqiqat Ali, who worked with Buddruss in northern Pakistan, was the first Wakhi intellectual to publish a primer for writing Wakhi using the Latin-based system (Ali 1980). Ahmed Jami Sakhi (2000) subsequently brought out a Wakhi primer and history of Wakhi language studies, written in Urdu. Jami commented that 'ordinary readers find it [Haqiqat Ali's Latin-based script] impossible to understand.' Jami adapted the Perso-Arabic script for Wakhi (see Table 2).

Table 2: Ahmed Jami Sakhi system—Consonant phonemes

	Labial	Dental	Alveolar	Retroflex	Palatal	Velar	Post- velar
Stop (voiceless)	پ		ت ط	ٹ		ک	ق
Stop (voiced)	ب		د	ڈ		گ	
Affricate (vl.)			ڈ	چ	چ		
Affricate (vd.)			ژ	چ	چ		
Fricative (vl.)	ف	ت	س ص ث	ش	ش	خ	خ
Fricative (vd.)	ف	ذ	ذ ز ض ظ	ژ	ج	ع	غ
Flap			ر				
Lateral			ل				
Nasal	م		ن				
Semi-vowel`	و		ی ے				ہ ح ھ

Vowel phonemes—Ahmed Jami Sakhi system

ی	ؤ	ا	و	ؤ
i	e	a	o	u

In Tajikistan, Boghshoh Lashkarbekov, a native Wakhi scholar, published Wakhi songs and poems in modified Cyrillic script along with a table correlating Cyrillic characters with the Latin-based characters for Wakhi phonemes employed by the Soviet scholars⁴ (Lashkarbekov 1972). The poet and scholar Aziz Mirboboev, however, chose to use only the Latin-based transcription system to publish several poems in Wakhi (Reinhold 1992). Lashkarbekov's subsequent publications (Pakhalina and Lashkarbekov 2000) also utilized the Latin-based system.

When initially introduced in Afghanistan, the Latin-based system attracted Wakhi schoolteachers who had some knowledge of European alphabets, but their students and Wakhi poets and musicians found it confusingly unfamiliar and obtuse (Beg and Mock 2005: field notes). Subsequent efforts focused on developing a Perso-Arabic script to write Wakhi, employing a script similar to that used for Pashto, which shares some phonology with Wakhi. Literacy primers for first and second grade students developed by Mir Ali Wakhani in conjunction with the Ministry of Education and published by the Ministry of Education (Wakhani 2009) are now used in government schools in Wakhan (see Table 3).

The Wakhi community, residing in four countries, is subject to the respective national policies on minority languages. In each country, the national language dominates the educational and cultural spheres, a fact which, to a certain extent, might be expected to threaten Wakhi language survival. In this respect, the development of Wakhi literacy functions as a strategy to buffer the effect of national language policy and hegemony. Wakhi writers have responded to literacy in the national language acquired through the respective educational systems by adapting their literacy skills in the respective scripts to write Wakhi. For example, in Tajikistan, Wakhi speakers look to the Cyrillic script for their national and inter-regional languages (Tajik and Russian). It therefore becomes easy for them to adapt Cyrillic for writing Wakhi. In Afghanistan and Pakistan, Wakhi speakers look to Perso-Arabic script, which is used for writing in Farsi, Pashto, and Urdu, and is readily adapted to Wakhi. In China, a major part of socialization for the Wakhi community is mainly in Uyghur and Mandarin Chinese, although

⁴ Edelman and Dodykhudoeva (2009: 775) present a chart of Cyrillic and Latin characters for transcribing Pamiri languages.

Table 3: Mir Ali system—Consonant phonemes

	Labial	Dental	Alveolar	Retroflex	Palatal	Velar	Post- velar
Stop (voiceless)	پ		ت ط	ٹ		ک	ق
Stop (voiced)	ب		د	ڍ		گ	
Affricate (vl.)			ش	چ	چ		
Affricate (vd.)			خ	ج	ج		
Fricative (vl.)	ف	ث	س ص ث	ش	ش	ہں	خ
Fricative (vd.)	ف	ذ	ز ض ظ	ڑ	ڑ	ڍ	غ
Flap			ر				
Lateral			ل				
Nasal	م		ن				
Semi-vowel	و		ی				ہ ھ

Vowel phonemes—Mir Ali system

ی	ۛ	ا	و	ۛ
i	ʌ	ə	o	u

English has also been introduced in some educational institutions (Beg 2004). Uyghur language is written mainly in Perso-Arabic script, and limited efforts have focused on that script (Beg 2004).

Historically, writing systems for Iranian languages have been 'generally determined by the dominant religion' (Windfuhr 1989). However, twentieth century advances in transportation, communication, and information technologies and a concurrent increase in globalization have altered this paradigm.

In this globalized world, small languages are increasingly vulnerable. An appropriate, logical, and acceptable writing system for unwritten languages with a small population, such as Wakhi, is therefore imperative.

In such circumstances, a key question arises: could there be any effective writing system that may create a uniformity among the Wakhi community and stimulate them towards intellectual productivity and literary contributions in an integrated way? It is a generally accepted fact that one can better express oneself in one's own mother tongue. An affirmative answer to this question requires an enabling environment in the local community. For instance, any writing system must be easy to learn, easy to understand, and easy to transmit to the present and coming generations, and the entire community must receive it with pride. Equally essential is cooperation for language preservation and promotion with local civil society organizations, educational institutions, and government agencies.

The writing systems developed so far for Wakhi are based either on the Latin-based Iranian transcription system produced by international linguists, the Cyrillic alphabet produced by Soviet and Tajik scholars, or the Perso-Arabic *alif-bey* systems produced by native intellectuals. To what extent these three writing systems are adopted and accepted by native speakers remains a question due to the factors that are determinative of an enabling environment for literacy. These include the prevalent educational system and script medium used for instruction, the ease of association of written symbols with the spoken/heard phonemes of the language, and whether a single writing system adequately represents the phonemes of Wakhi as spoken in all four nations.

The Latin-based Iranian system adequately represents Wakhi phonemes and allows for accuracy in representing regional variation,

such as /ə/ in Tajikistan and Wakhan, and [ɛ] or /e/ in Gojal, as discussed above. This transcription system is a modified form of standard 'Indic' transcription using a subscript dot to indicate retroflex consonants and a superscript caron (ˇ) to indicate palatalization. The system uses several Greek characters to indicate phonemes not found in the 'Indic' system and a Cyrillic character / ы / for one non-Indic vowel. Some Wakhi writers continue to use the Cyrillic vowel character ы, but most have replaced it with the IPA character ɯ.⁵

The Latin-based Iranian transcription system is very productive for the international community of linguists and the scientific studies of languages. However, based on the authors' collective experience of more than two decades in reading, writing, and documenting Wakhi in the Latin-based system, what we have observed is that for students, professionals, poets, amateur learners, and intellectuals, this system has not been attractive and effective for their creative work and literary ventures. Many symbols remain either alien or confusing to Wakhi people not formally trained in this system. That is why a majority of the interested native community opted to write Wakhi using their own idiosyncratic transcription method in Perso-Arabic script.

The Perso-Arabic writing system is well known to Wakhi people in Pakistan and Afghanistan. Unlike the Latin-based system, however, there is no universal agreement on the sound values of each symbol. For example, Mir Ali has used the Pashto characters for the retroflex consonants rather than the Urdu characters. This is to be expected in Afghanistan, where Pashto is a national language. The officials at the Ministry of Education were quite insistent on this point. However, their choice of ځ for the voiced interdental fricative /ð/ is based on

⁵ The Cyrillic symbol /ы/ represents a sound in the Russian language which is very similar to that represented by the IPA symbol [ɯ], except that it is produced with the lips in a flat or spread position, rather than a somewhat rounded or pursed position. The IPA symbol /ɯ/ has four advantages for use in writing Gojal Wakhi, as compared to using /ы/: (i) It more accurately represents the sound of this vowel in the Gojal dialect; (ii) The IPA symbol /ɯ/ is more widely recognized internationally than /ы/;(iii) /ɯ/ belongs to the same alphabetic family (Latin) as the other five vowel symbols currently being used for Wakhi in both Tajikistan and Pakistan; and (iv) For those unfamiliar with the Cyrillic script, /ы/ can be confusing because it may appear to be two separate symbols rather than one (Peter Backstrom: personal communication)

the Arabic pronunciation of this letter. Persian, Pashto, and Urdu all render the sound of this letter as /z/, and loan words into Wakhi from those languages that use *z* may result in confusion. The 'Jami' system avoids this by using two dots over the letter to distinguish it from the normal Urdu-Persian pronunciation /z/. However, the 'Jami' system does not distinguish between /ʌ/ and /u/, and uses standard Urdu diacritic marks to indicate short vowels and to distinguish /i/ and /e/. The Mir Ali system also does not fully distinguish vowels. This is not a major obstacle for general use by Wakhi speakers, who recognize the words readily enough, but for non-native speakers, the lack of precision can raise difficulties.

The Latin-based system, despite the difficulty of learning the characters, has found increasing acceptance among Wakhi poets and intellectuals in northern Pakistan. In part, this is indicative of the internationalization of Gilgit-Baltistan as compared to Wakhi population areas in other countries. Access to Gilgit-Baltistan is comparatively good and there is a long history of international research and scholarship in the region. Hence, the Latin-based system has a comparative advantage as a widely used and understood system for representing the unwritten languages of Gilgit-Baltistan.

An additional reason why the Latin-based system has been generally well-received by Wakhi intellectuals is in large part because it resembles English. English is today regarded as an international language and has been spreading and taking root throughout the world. It is established in the countries where the Wakhi community dwells (Pakistan, Afghanistan, Tajikistan, and China). The native Wakhi community in Pakistan is greatly exposed to and prefers English medium education for their children, as it is like an 'international passport' and is an effective language of science and technology. Importantly, English medium education is emphasized by the spiritual leader of the global Wakhi community, His Highness the Aga Khan. All Wakhi community members, wherever they live, are devout Shia Ismailis and followers of Prince Karim Aga Khan. Some people therefore become excited and theologize the language and the people as 'Ismaili language and cultural community'. This shows that there is also a religious perspective of the Wakhi community that motivates learning English and educating their children in English medium.

As previously mentioned, technology has an increasingly significant influence on the development of Wakhi literacy. The Internet has enabled technologically savvy users, and especially the younger generation, to chat with each other through romanized text messages. More interesting are the text messages on mobile cellular phones in which the local Wakhi community writes their messages, whether in Wakhi, Urdu, or Dari, more flexibly in an English-based transcription system than in Perso-Arabic. These indicators show the actual trends and motivations of the local community members, particularly the youngsters, who are the heirs to the heritages of their language and culture.

Several software- and font-based solutions have been developed to make Wakhi easier to write on the computer. One software-based solution using Latin-based characters is the Keyman© Software Package⁶ for Wakhi language. The software is available for purchase and can be used with the freely available fonts⁷ Doulos SIL and Charis SIL. Peter C. Backstrom developed a Wakhi package that assigns specific keys to specific characters. However, Wakhi users find this system difficult to use. It must be purchased, it occasionally crashes, and it requires the user to learn to use the unfamiliar symbols of the Latin-based Iranian system.

Another Latin-based 'Indic' font package that is Unicode compliant and works on both Windows and Macintosh operating systems is IndUni-T, developed by John Smith.⁸ It contains all characters necessary to transcribe all languages of northern Pakistan, Afghanistan, and Tajikistan. Although available for free, it still requires familiarity with the 'Indic' transcription system.

⁶ Keyman is a proprietary keyboarding software engine with fonts for over 1,000 languages developed by Tavultesoft Pty Ltd. The fonts Charis and Doulos were developed by SIL.

⁷ Charis SIL and Doulos SIL are Unicode compliant fonts available free at: <http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&id=ipahome>

⁸ IndUni-T is available online at: <<http://bombay.indology.info/software/fonts/induni/>>

In this situation, Dr Boghshoh Lashkarbekov,⁹ a native Wakhi of Tajik Badakhshan, came up with a creative contribution for the Wakhi communities of all nations by proposing an English-based writing system (see Table 4).

Table 4: Consonant phonemes—‘Boghshoh’ system

	Labial	Dental	Alveolar	Retroflex	Palatal	Velar	Post-velar
Stop (voiceless)	p		t	ṭ		k	q
Stop (voiced)	b		d	ḍ		g	
Affricate (vl.)			c	č h	ch		
Affricate (vd.)			ž	ǰ	j		
Fricative (vl.)	f	th	s	š h	sh	ḫ	x
Fricative (vd.)	v	dh	z	ž h	zh	ḡ h	gh
Flap			r				
Lateral			l				
Nasal	m		n				
Semi-vowel	w		y				(h)

Vowel phonemes—‘Boghshoh’ system

Wakhan and Tajikistan	i,			ũ,	ə,	o,	u
Gojal	i,	e,		ũ,	a,	o,	u

⁹ Dr Lashkarbekov sadly passed away on 2 February 2014. He was a senior researcher at the Institute of Linguistics of the Russian Academy of Sciences in Moscow.

He introduced a simplified orthography that uses a superscript *tilde/madha* (\sim) to indicate all consonants and vowels that were indicated by a subscript dot or superscript caron in the 'Indic' orthography, and uses an additional 'h' to indicate aspiration and some frication. This system simplifies the marking of consonants and is readily understood by most educated Wakhi.

This English-based writing system has several benefits. It does not require any special software or font to be installed on one's computer; rather the normal keys used for English are used with the addition of creating a shortcut for one symbol, the Spanish *tilde/Arabic madha* < \sim > that is superscribed on top of some English letters to indicate contrastive Wakhi sounds. This symbol is readily assigned to a 'shortcut' key. Writing Wakhi on a computer is thus like writing in English language.

Lashkarbekov's creative work is based on English language orthography. All Wakhi phonemes are nicely accommodated within it. Contrastive phonemes that do not exist in English (such as retroflex consonants, velar fricatives, and the vowel /ɣ/ /ʁ/) are indicated through the *tilde/madha* sign < \sim > and the grapheme < h > is used to indicate phonemic aspiration. This was greatly appreciated and taken up by the native speakers, especially the youth in Gilgit, Islamabad, and Karachi.

A Karachi-based student forum, the Gojal Ismaili Students Association (GISAK), organized a brief orientation session on the Wakhi language and its writing system in October 2013. It was interesting to note that the sixty-two participants were very enthusiastic in learning and quickly absorbing the writing system because they knew the English language. They needed to memorize only the *tilde/madha* symbol < \sim > put as a cap on top of the letters that have their closest relations with them, such as < ch > with < $\tilde{c}h$ >, < d > with < \tilde{d} >, < x > with < \tilde{x} >, < u > with < \tilde{u} >, etc.

Although the assignment of the superscript *madha/tilde* < \sim > is arbitrary, it is a convenient and readily understood symbol to indicate Wakhi phonemes not found in standard English. Of course, it could be replaced by any other superscript symbol. However, some of the available symbols already have an assigned value in existing transcription systems, such as the symbols < \checkmark >, < $\hat{\ }>$, and < $\tilde{\ }>$. Some Wakhi people have asked if the Arabic *madha* symbol is

inappropriate, as it has significance in Perso-Arabic script. However, the *madha* sign itself has no specific concept or meaning but rather is just an indicator that shows change or shift of sound from the regular unmarked letters.

There are some drawbacks to writing Wakhi with the shortcut key on the computer. In most word processing systems there is no difficulty, but other applications, such as spreadsheets, email, or web presentation software, lack a shortcut key and do not easily allow insertion of symbols and special characters. This situation therefore poses a challenge to writing Wakhi in other programmes and necessitates that we compromise and write in word processing programmes and then import or copy the text into spreadsheets, email, or web presentation software.

The current development in the Wakhi writing system, based on English orthography, may not be ideal for all Wakhi speakers who want to write their language, but in view of the absence of any other consensus-based and unified writing system for the language, this new system may be a significant step towards a unified and uniform script that is more practicable and easier to understand and write with. No special software and no special fonts are required to be installed first in order to write Wakhi. The English orthography-based Wakhi script is very simple. Users only need to assign a shortcut key to the Arabic *madah*/Spanish *tilde* key < ~ > on the computer keyboard and start working in Wakhi using any Roman font.

Finally, we appreciate and request reader feedback on these questions. Whether you may be a language specialist or a language speaker, we call for an open discussion as to what needs to be done to bring further improvement in unifying and standardizing the Wakhi Pamiri writing system. This question is equally relevant to other Pamiri languages¹⁰ and to their development and survival in the twenty-first century.

¹⁰ Recent email correspondence with Shughni speakers in Tajikistan demonstrates that there is interest in developing a single writing system that can be used with all of the 'Pamiri' languages.

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