



Introducing Qomolangma Tibetan Unicode Fonts and the Qomolangma Wylie Keyboard¹

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Abstract

Over the past two years, Tibetan computer experts from the China Tibetology Research Center and Tibet University have designed and created ten new Tibetan Unicode fonts covering all types of traditional Tibetan typefaces including Drutsa (འབྲུ་ཚེ་) and Chuyig (འབྲུག་ཡིག་). The ten new fonts were named after the typefaces they represent: Uchen Sarchen, Uchen Sarchung, Uchen Sutung, Uchen Suring, Drutsa, Betsu, Tsuring, Tsutong, Tsumachu, and Chuyig. In addition to the font development, the same team also developed a Tibetan input method for Windows Vista and Windows 7 based on the Wylie transliteration scheme. This keyboard thus provides another option for users to type Tibetan in a Windows environment other than the Microsoft Tibetan keyboard.

Introduction

The Background of the Project

Given the absence of a strong financial market for Tibetan language computing resources, Tibetan Unicode font development has lagged behind other scripts in the world. In order to provide more Tibetan font options for users, it was the decision of the China Tibetology Research Center (ཁྲུང་གོ་འབྲུག་རིག་པ་ཞིབ་འཇུག་ཁྱེ་གནས།; 中国藏学研究中心; hereafter CTRC) to develop a new set of Tibetan Unicode fonts. With the release of Windows Vista, and Mac OS X.5, came the opportunity to develop and use very challenging, but also very beautiful Tibetan fonts in a computer system.

Prior to the wide-spread availability of Unicode-compliant operating systems, Tibetan computing relied on *ad hoc* implementations of the language in custom or localized encodings. The result of this was a proliferation of too many different Tibetan encodings in computer systems around the world. The most immediate consequence of this was the difficulty entailed for users who wished to exchange data with each other. With the advent of Unicode and the release of these Unicode fonts, it is our hope that the results of our efforts will encourage more and more people to use Unicode Tibetan and make Tibetan Unicode popular in the Tibetan computing community.

Qomolangma Tibetan Unicode Fonts

Over the past two years, Tibetan calligraphers and Tibetan computer experts from CTCRC, Tibet University, and other institutions have designed and created the Qomolangma Tibetan fonts (རྩོམ་སྒྲུང་མའི་བོད་ཡིག་ཡིག་གཟུགས།; 珠穆朗玛系列藏文字体), a new set of Tibetan Unicode fonts. A total of ten different Tibetan fonts in the “Qomolangma Tibetan Unicode Fonts pack” were created for free public distribution,² named to reflect their individual typefaces:

1. རྩོམ་སྒྲུང་མའི་འབྲུ་ཚ། 珠穆朗玛—珠擦体 Qomolangma-Drutsa
2. རྩོམ་སྒྲུང་མའི་ཚུགས་མ་འབྲུག 珠穆朗玛—簇玛丘体 Qomolangma-Tsumachu
3. རྩོམ་སྒྲུང་མའི་ཚུགས་བྱང་། 珠穆朗玛—簇通体 Qomolangma-Tsutong
4. རྩོམ་སྒྲུང་མའི་དབུ་ཅན་གསར་ཚུང་། 珠穆朗玛—乌金萨琼体 Qomolangma-Uchen Sarchung
5. རྩོམ་སྒྲུང་མའི་དབུ་ཅན་གསར་ཆེན། 珠穆朗玛—乌金萨钦体 Qomolangma-Uchen Sarchen
6. རྩོམ་སྒྲུང་མའི་དཔེ་ཚུགས། 珠穆朗玛—柏簇体 Qomolangma-Betsu
7. རྩོམ་སྒྲུང་མའི་དབུ་ཅན་སྲུག་བྱང་། 珠穆朗玛—乌金苏通体 Qomolangma-Uchen Sutung
8. རྩོམ་སྒྲུང་མའི་དབུ་ཅན་སྲུག་རིང་། 珠穆朗玛—乌金苏仁体 Qomolangma-Uchen Suring
9. རྩོམ་སྒྲུང་མའི་འབྲུག་ཡིག 珠穆朗玛—丘伊体 Qomolangma-Chuyig
10. རྩོམ་སྒྲུང་མའི་ཚུགས་རིང་། 珠穆朗玛—簇仁体 Qomolangma-Tsuring

A comparison of the different typefaces is given in Fig. 1, while samples of each font in use are given in the figures in Appendix I. A comprehensive illustration of the range of characters in the fonts has already been published.^[1]

Features of Qomolangma Fonts

Each of the Qomolangma Tibetan fonts was developed with OpenType font technology based on Unicode specifications. The fonts were designed for cross-platform functionality, such that they could be used on Windows, Apple Macintosh, and Linux systems. Several of these fonts — in particular, the Ume (དབུ་ཅན་) fonts, Qomolangma-Betsu, Qomolangma-Tsuring, Qomolangma-Tsutong, Qomolangma-Tsumachu and Qomolangma-Chuyig — are new typefaces for the computer. With the release of these fonts, all types of traditional Tibetan typefaces, especially these six Ume fonts, are now available for use in desktop publishing applications.

All the fonts were developed based on Tibetan letters, texts, and glyphs written by famous Tibetan calligraphers — both in history and in the present. Specifically, Qomolangma-Uchen Sarchen and Qomolangma-Uchen Sarchung are from the Tibetan calligrapher Amdo Dregua, Qomolangma-Uchen Sutung is from Monlam Gyatso, Qomolangma-Uchen Suring and Qomolangma-Betsu are from Tsenden Shadron, Qomolangma-Drutsa is from Lhaba Tsering, Qomolangma-Tsuring is from Tenzin, Qomolangma-Tsutong is from Gyulme Tsuetrin, Qomolangma-Tsumachu is from Denba Tachue, and Qomolangma-Chuyig is from Tronyig Namgyal.

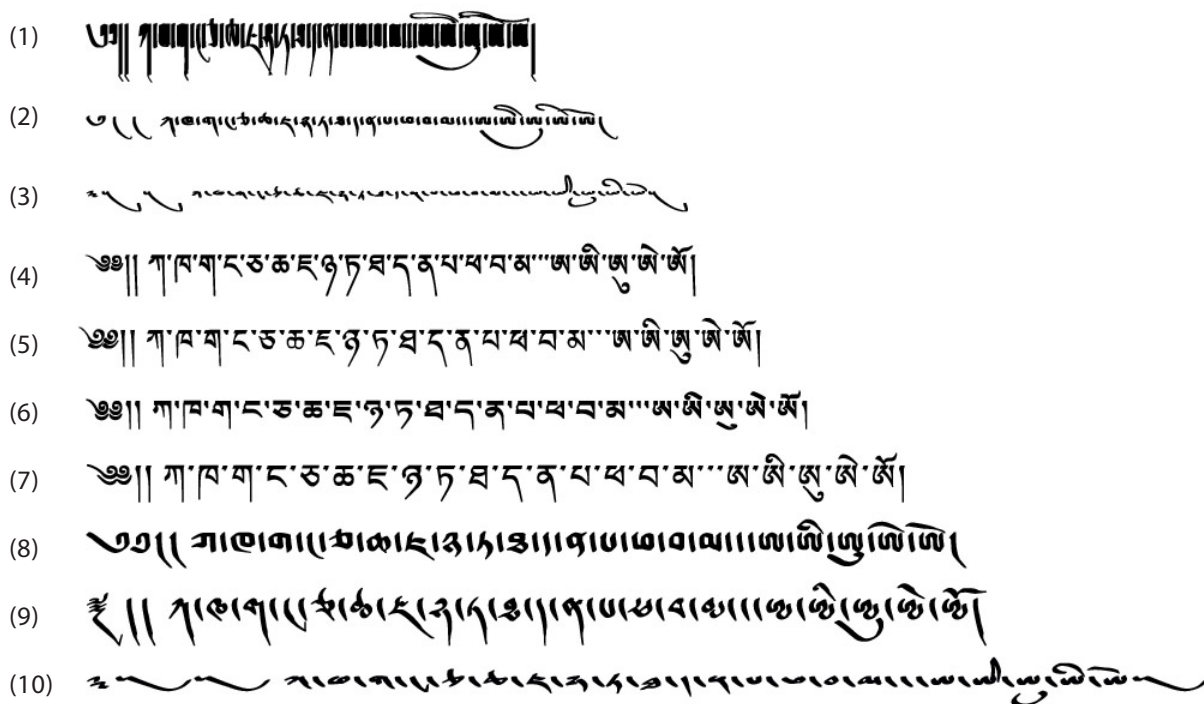


Fig. 1. A comparative sample of the different Qomolangma typefaces at the same point size. In sequence they are: (1) Tsering, (2) Tsutong, (3) Chuyig, (4) UChen Suring, (5) UChen Sutung, (6) UChen Sarchen, (7) UChen Sarchung, (8) Betsu, (9) Drutsa, and (10) Tsumachu.

In addition, the font designers have taken great care to ensure that these fonts can display any Tibetan character, letter, stack, or syllable in an aesthetically pleasing and expected manner. Furthermore, because the fonts have been constructed with broad application in mind, they are able to display arbitrarily deep “stacks” of letters such as occur in Sanskrit transliteration.

Qomolangma Wylie Keyboard

One of the great side-effects of the wide-spread adoption of the Unicode standard has been generalization of keyboard mapping construction. Whereas previously keyboard mappings were intimately tied to custom font encodings, this is no longer the case, and nearly any keyboard mapping can be constructed that points to the same underlying encoding.

In conjunction with the design and construction of the Qomolangma Tibetan Unicode fonts, an accompanying keyboard was designed. The “Qomolangma Wylie Keyboard” was developed and is maintained by CTCRC; it was developed by the same team who designed the fonts. The keyboard is a Tibetan input method intended for use in Windows Vista and Windows 7.

While several of the Tibetan keyboards available for Unicode character input are based on custom schemes, the “Qomolangma Wylie Keyboard” was based on Tibetan transliteration systems. Users who are familiar with Tibetan transliteration systems such as the Wylie transliteration system,^[2] can easily use this keyboard to type Tibetan in Windows system. The keyboard supports both the Wylie system and one other keyboard scheme that is popular

ཀ	ཁ	ག	ང	ཅ	ཆ	ཇ	ཉ	ཏ	ཐ	ད	ན
k	kh	g	ng	c	ch	j	ny	t	th	d	n
པ	ཕ	བ	མ	ཙ	ཛ	ཌ	ཎ	ཞ	ཟ	འ	ཡ
p	ph	b	m	ts	tsh	dz	w	zh	z	'/v	y
ར	ལ	ཤ	ས	ཧ	ཨ	ཨི	ཨུ	ཨེ	ཨོ		ཨྲ
r	l	sh	s	h	a	i	u	e	o		f

Fig. 2. The Qomolangma implementation of the Wylie and Yudaoquan transliteration schemes

in China: the Yudaoquan transliteration system. This was accomplished because there are only two differences between the Wylie and Yudaoquan systems, that is: (1) in Yudaoquan, the Tibetan *a-chung* character is represented by v, not a single quote mark ('), and (2) in Yudaoquan, the Tibetan *ha-pha* character is represented by f. Since the Qomolangma Wylie Keyboard is developed based solely on Unicode, however, it only supports Unicode and cannot be used to enter Tibetan characters with other encodings. Thus, with the Qomolangma Wylie Keyboard, it is possible for a user to enter any arbitrary Unicode Tibetan character, Tibetan letter, Tibetan stack, Tibetan syllable, or Sanskrit transliteration stacks.

Furthermore, because the Qomolangma Wylie Keyboard is developed at the Windows system level using Microsoft Visual C++, it allows users to enter Tibetan not only in Microsoft Word, but also in other Windows applications, as well. At present, the Qomolangma Wylie Keyboard supports Windows Vista and Windows 7, although not earlier versions of the Windows OS.

Full documentation of the keyboard (including “stacking” for Sanskrit) is included with the keyboard installation files.

Conclusion

The developers encourage the Tibetan language community to use and to pass on to others the Qomolangma Tibetan Unicode Fonts and Qomolangma Wylie Keyboard for free. For a link to download the latest versions of the fonts, please visit:

http://www.yalasoo.com/English/docs/yalasoo_en_font.html

for a link to download the latest version of the keyboard, please visit:

http://www.yalasoo.com/English/docs/yalasoo_en_keyboard.html

Notes

1. Credit for the production of these resources is due to:
 Project advisor: Lhaba Puntsok, the director of CTRC;
 Project manager: Tashi Tsering;
 Programmers of the software: Tashi Tsering and Wangdra Gyab;
 Font designers: Tashi Tsering, Wangdra Gyab, Pubu Tenzin, Denkor,
 Achu, Lhaba Tsering, Tenzin, Jurmel Tsering, and Tenba Tachue.
2. Qomolangma Tibetan Unicode Fonts were developed and are maintained under full funding support from CTRC.

References

- [1] བཀྲ་ཤེས་ཚེ་རིང་དང་། དབང་ལྷགས་སྐྱབས། རྫོམ་སྒྲུང་མའི་བོད་ཡིག་ཡིག་གཟུགས། [M.] བེ་ཅིང་། གྲུང་གོའི་བོད་རིག་པ་དཔེ་སྟུན་ཁང་། 2010. [Tashi Tsering, and Wangdra Gyab. *The Qomolangma Tibetan Fonts*. Beijing: China Tibet Nationalities Press, 2010.]
- [2] Turrell Wylie, “A Standard System of Tibetan Transcription,” *Harvard Journal of Asiatic Studies* 22 [1959]: 261-267.

Appendix I

The following figures illustrate usage of the fonts.

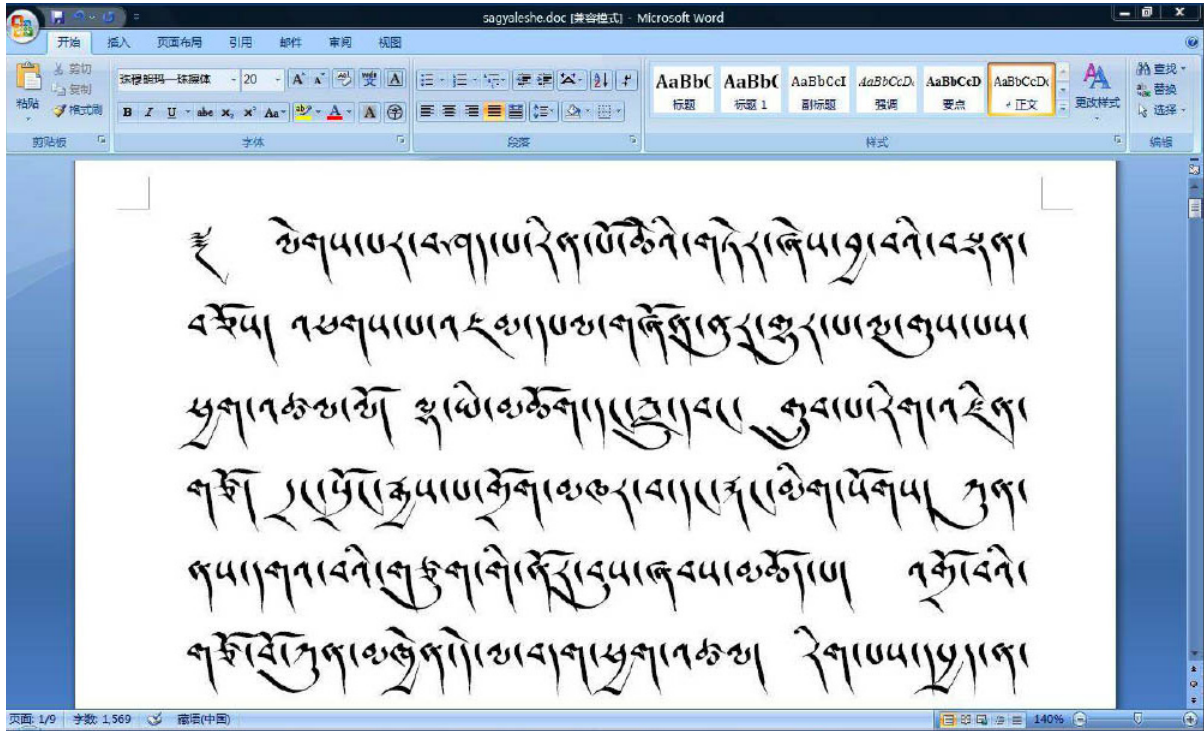


Fig. 3. A Sample of the “Qomolangma-Drutsa” (རྩོམ་སྐད་མཐོང་ལྷོ་མོ་) font in use

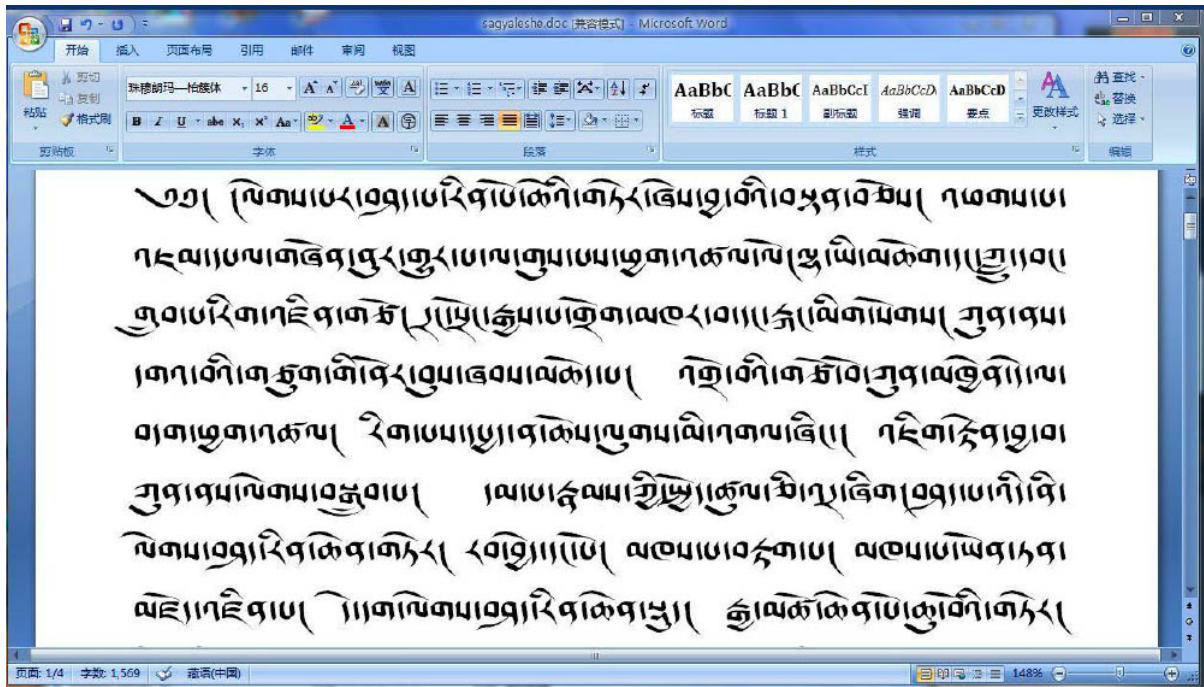


Fig. 4. A Sample of the “Qomolangma-Betsu” (རྩོམ་སྐད་མཐོང་ལྷོ་མོ་) font in use

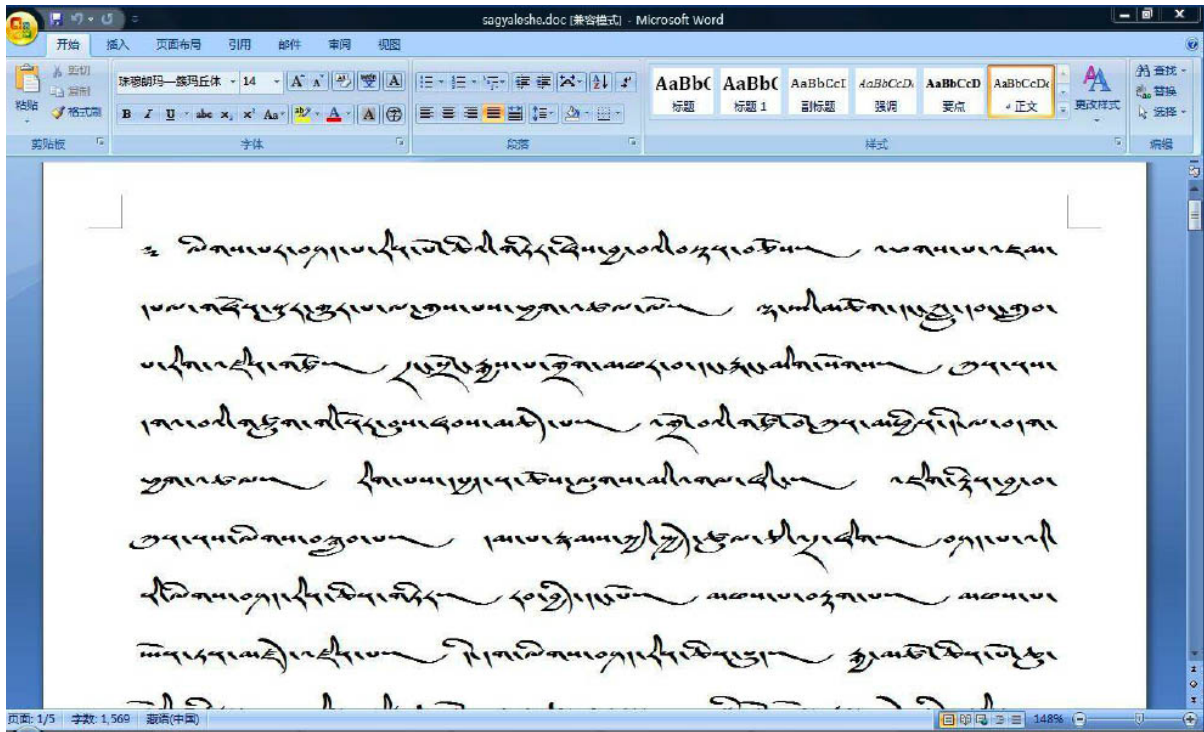


Fig. 5. A Sample of the “Qomolangma-Tsumachu” (རྩ་མོ་སྤང་མའི་ཚུགས་མ་འབྲུག་) font in use

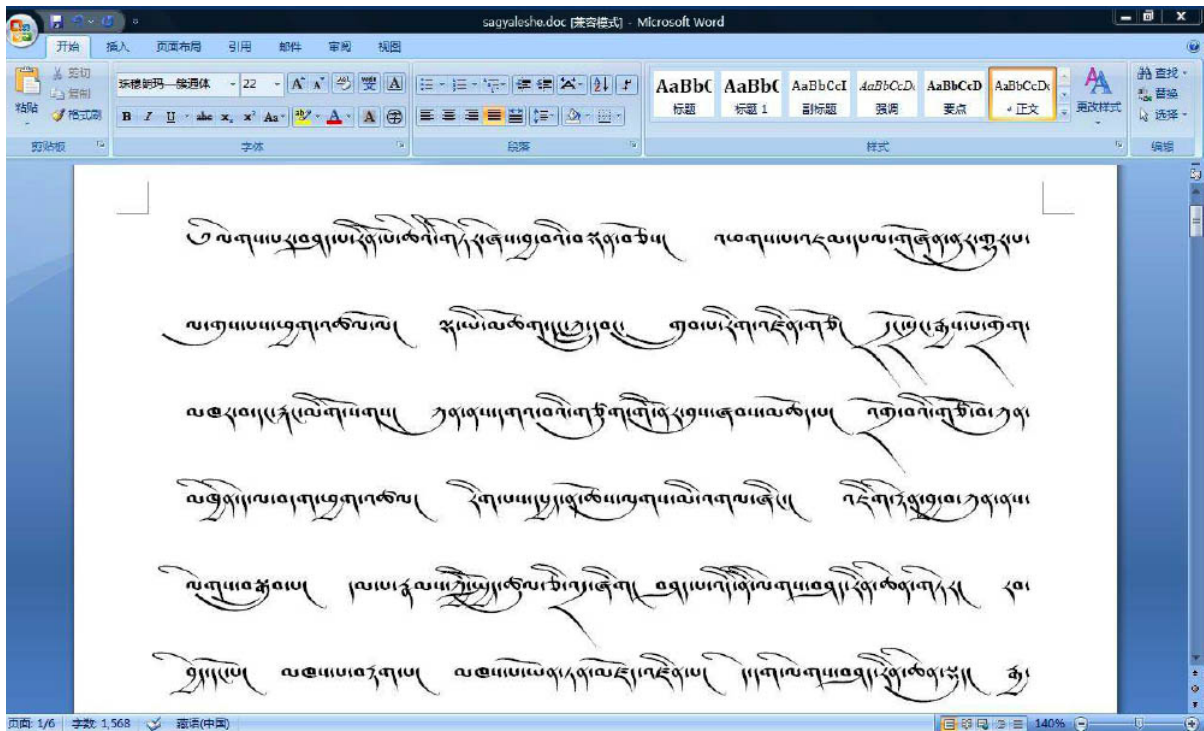


Fig. 6. A Sample of the “Qomolangma-Tsutong” (རྩ་མོ་སྤང་མའི་ཚུགས་སྤྱུང་།) font in use

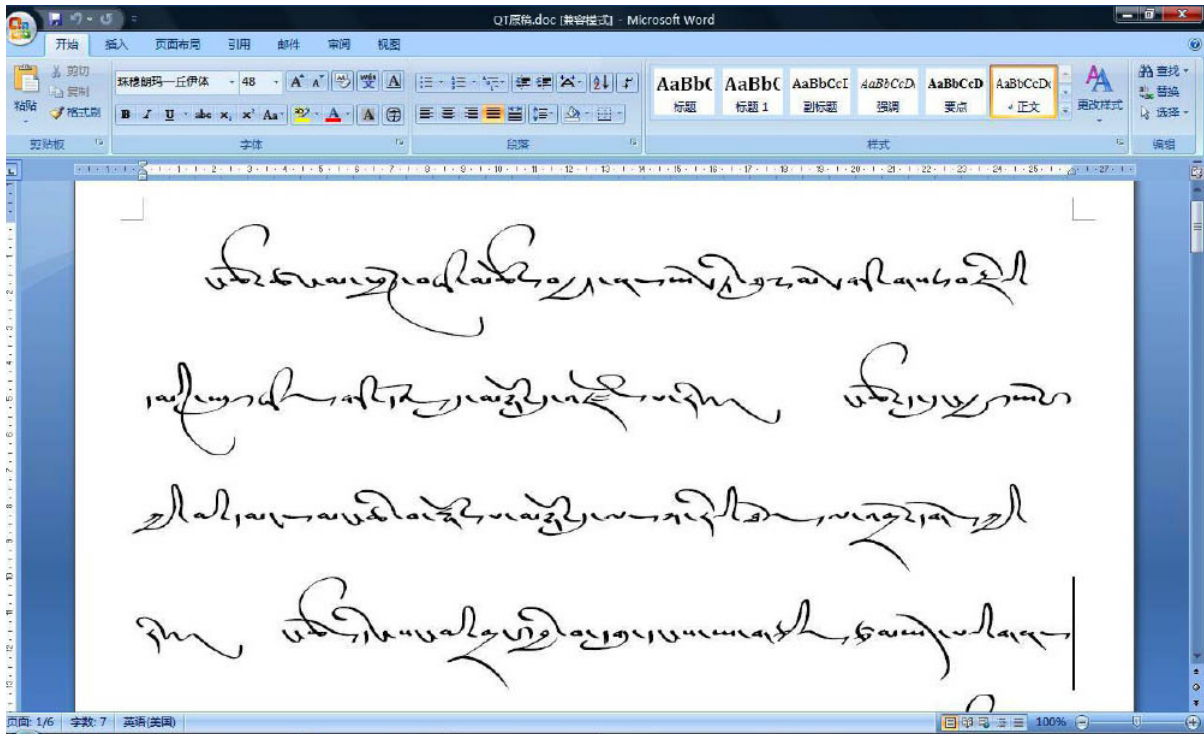


Fig. 7. A Sample of the “Qomolangma-Chuyig” (འོ་ཨོ་སྐང་མའི་འབྲུག་ཡིག) font in use

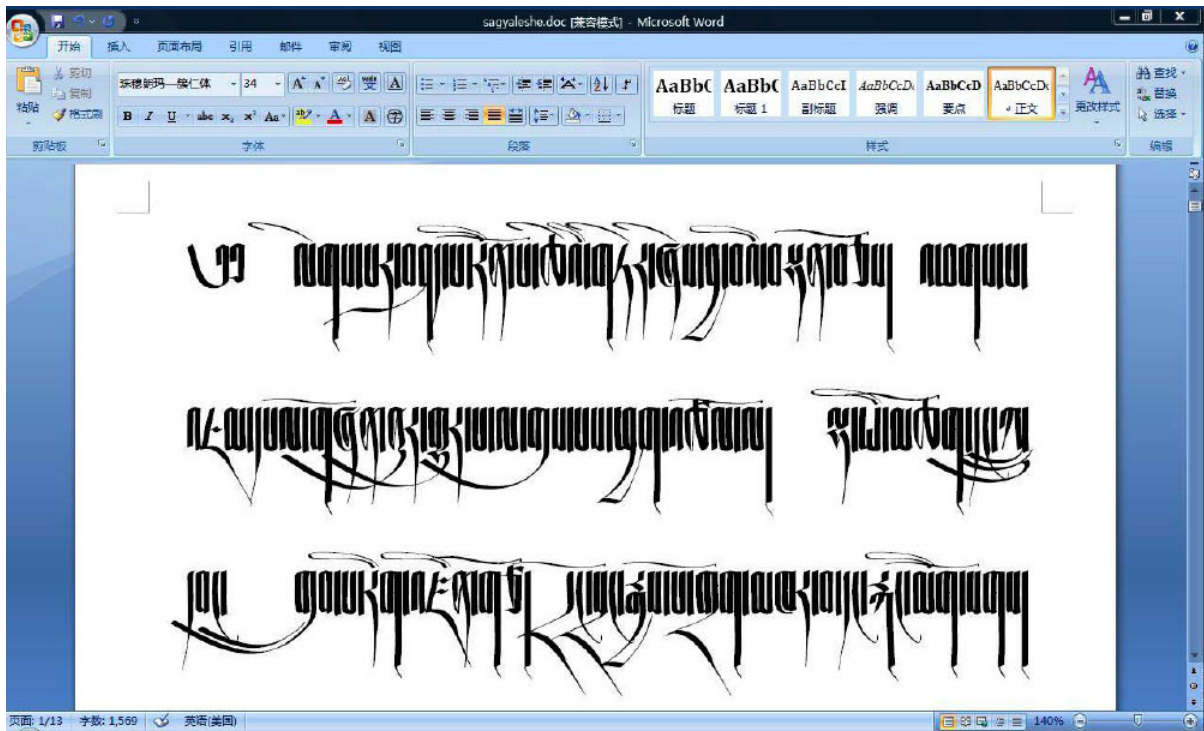


Fig. 8. A Sample of the “Qomolangma-Tsuring” (འོ་ཨོ་སྐང་མའི་ཚུགས་རིང་།) font in use

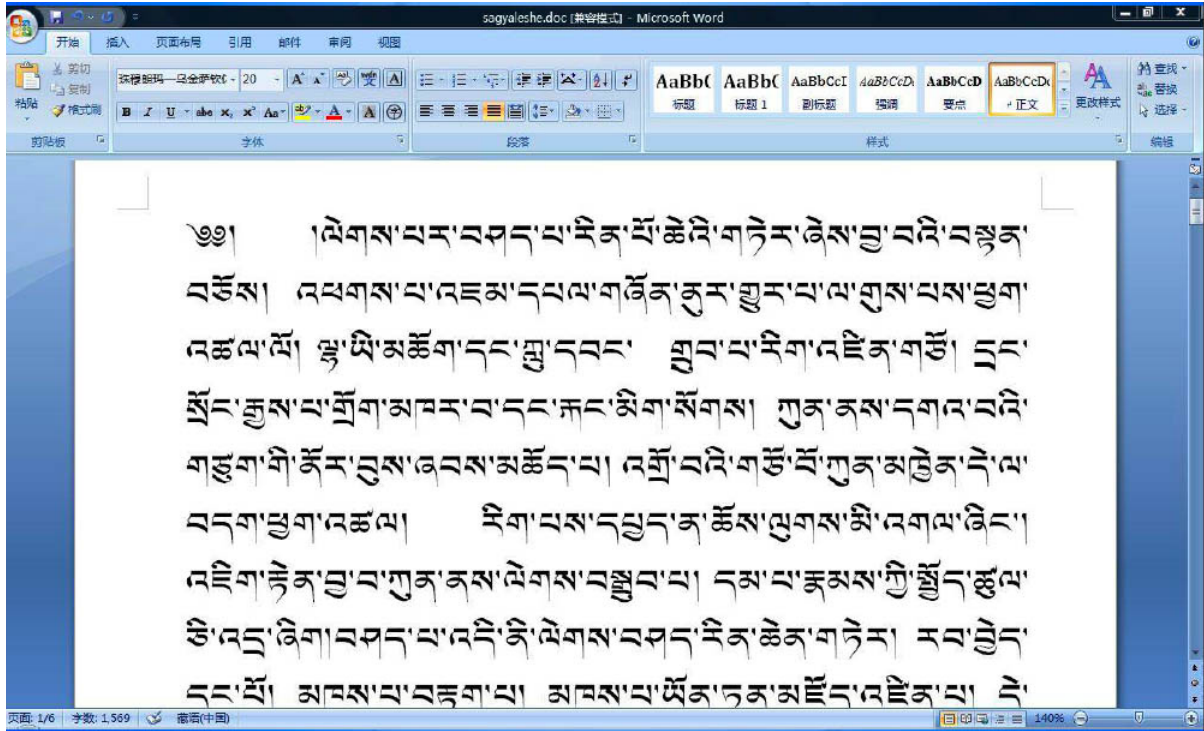


Fig. 9. A Sample of the “Qomolangma-UChen-Sarchen” (རྫོང་མོ་གླང་མའི་དབུ་ཅན་གསར་ཆེན།) font in use

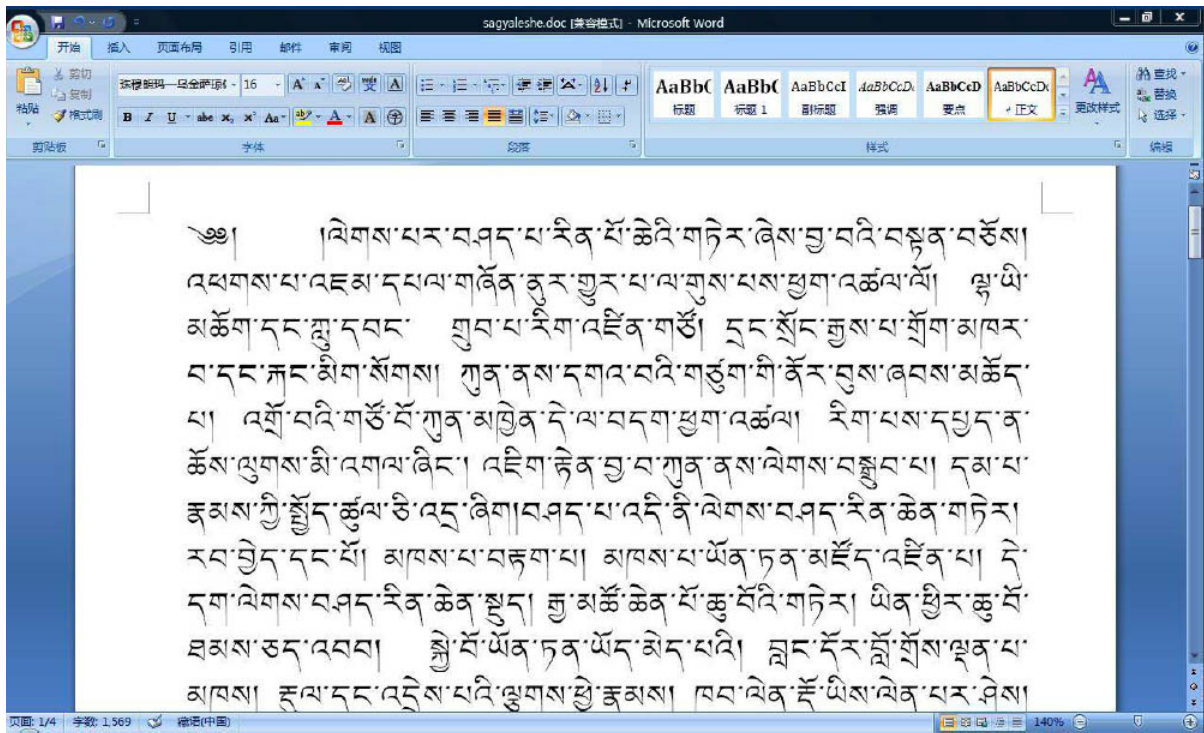


Fig. 10. A Sample of the “Qomolangma-UChen-Sarchung” (རྫོང་མོ་གླང་མའི་དབུ་ཅན་གསར་ཆུང་།) font in use

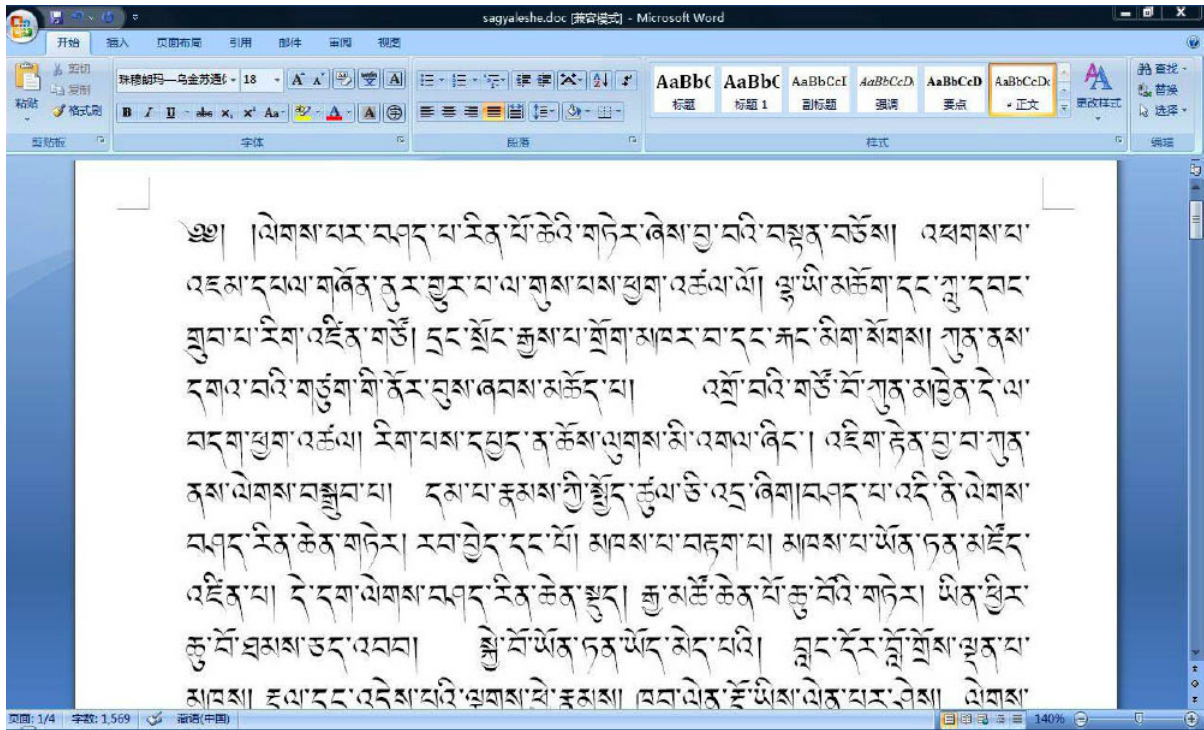


Fig. 11. A Sample of the “Qomolangma-UChen-Sutung” (རྫོ་མོ་གླང་མའི་དབུ་ཅན་སྐྱུག་སྤྱང་།) font in use

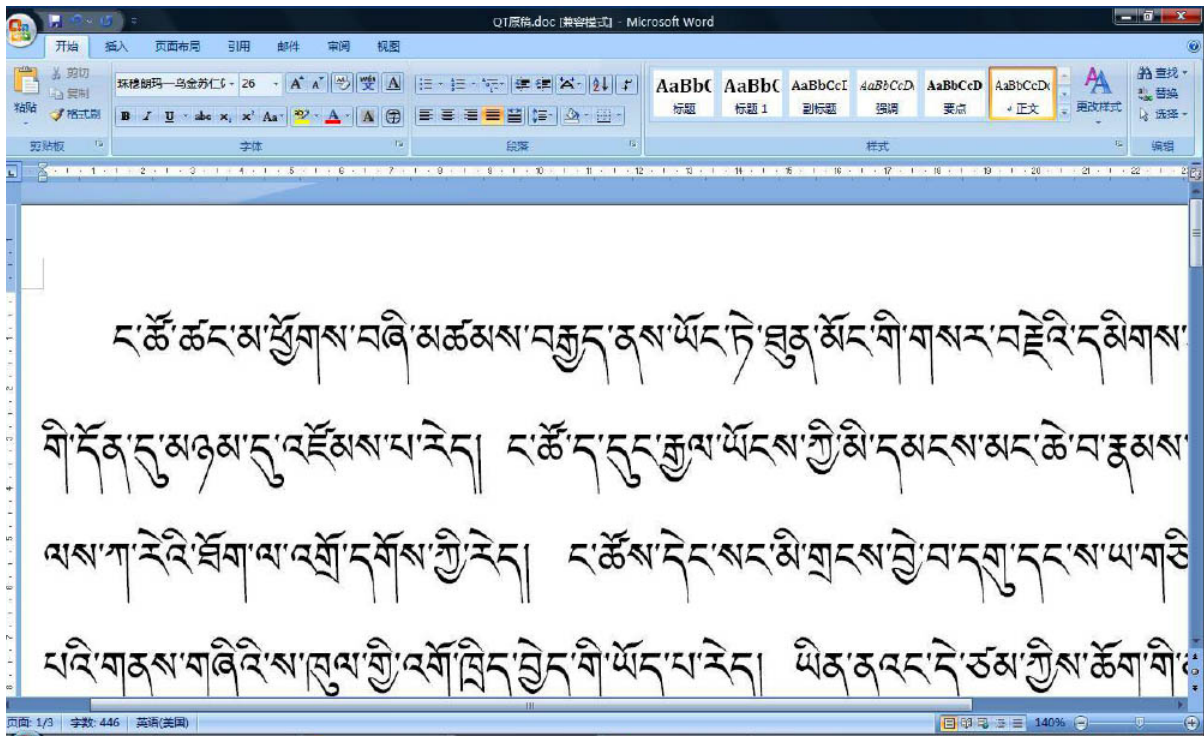


Fig. 12. A Sample of the “Qomolangma-UChen-Suring” (རྫོ་མོ་གླང་མའི་དབུ་ཅན་སྐྱུག་རིང་།) font in use