## Why Tibetan consonants have five genders

From the 7th Century CE, an indigenous Tibetan tradition of grammatical analysis developed on a Sanskrit model. International scholarship has largely neglected a unique aspect of this tradition: its classification of consonants according to five genders.

In the foundational treatise *The Application of Gender Signs (rtags kyi 'jug pa)*, the thirty syllable onsets ("root consonants") are divided in five groups: masculine (*pho*), non-binary (*ma ning*), feminine (*mo*), very feminine (*shin tu mo*), and barren feminine (*mo gsham*), as shown in the left two columns of Table 1.

Onset letter	Onset gender	Co-occurring prefixes	Genders of prefixes		
k t∫t p ts	masculine	b, d, g	masculine, non-binary		
kh tſh th ph tsh	non-binary	Н, т	very feminine, feminine		
g dʒ d b dz ∫s ʒ z H j w	feminine	b, d, g, m, H	any		
ŋ ɲ n m	very feminine	т	very feminine		
rlh?	barren feminine	n/a	n/a		

Table 1.  $\langle H \rangle$  is used for  $\langle \mathbb{Q} \rangle$ , the phonetic value of which is disputed.

The treatise also presents two further gender classifications: one for the prefix consonants themselves, and one for the ten consonants that serve as syllable codas. *The Application of Gender Signs* and subsequent commentaries describe in detail the possible combinations of root gender and prefix gender, and which enclitic allomorphs occur with each coda gender. The gender of a given consonant may differ depending on whether it is in root (onset), coda, or prefix position (Table 2).

Letter	g	d	b	ŋ	n	m	S	Н	r	1
as onset	F	F	F	VF	VF	VF	F	F	BF	BF
as prefix	NB	NB	M	-	-	VF	-	F	-	-
as coda	M	M	M	F	NB	F	M	F	NB	NB

Table 2.

Subsequent Tibetan and Western scholars have approached this system in various ways. Later Tibetan commentaries add phonetic descriptions, which may or may not reference gender. A few Western linguists present consonant gender (Schmidt 1839, Hannah 1912), but most Western and Tibetan-Western collaborations have avoided discussing it. Writers in the Tibetan tradition continue to teach the system when discussing the orthography, though this is with the understanding that the modern spoken Tibetan varieties differ dramatically. It is noteworthy that later scholars add phonetic descriptions and focus on the thirty onsets, rather than the other positions. This is an understandable result of different interests as well as language change—in modern Tibetan varieties, the prefixes are no longer productive, clusters are often reduced, and enclitics have changed.

I argue that these interpretive shifts have caused researchers to lose sight of the motivation for the gender system, which is to classify consonants as conditioning environments for morphophonological alternations. This can be seen from the fact that the "feminine" and "barren feminine" rows of Table 1 do not form natural classes, but rather represent "elsewhere" and unattested environments. Importantly, this applies only to derived clusters formed by the aspectual prefixes; underlying clusters can violate this pattern, as in *gnyis* 'two' or *dmag* 'war'. Likewise, the fact that gender changes according to position follows from the combinatorial perspective.

But why gender? Aside from the complementarity of biological sex, Tibetan literate culture used gender in other domains. Vajrayana Buddhism makes extensive use of female/male gender to represent inseparability or nonduality of apparently-distinct concepts. Intriguingly, Tibetan medicine uses male, female, and *ma ning* (non-binary) as categories for sexual anatomy, pulse type, and psychospiritual typology, which can be embodied by a person in any combination (Gyatso 2015).. Finally, Verhagen (2000) has suggested a connection with descriptions used in pronunciation manuals for Buddhist mantras. In this context, gender provided a useful basis for describing complex morphophonological alternations.