Tibetan calendar

The **Tibetan calendar** (Tibetan: ལོ་ཐོ, Wylie: *lo-tho*), or **Tibetan lunar calendar**, is a lunisolar calendar, that is, the Tibetan year is composed of either 12 or 13 lunar months, each beginning and ending with a new moon. A thirteenth month is added every two or three years, so that an average Tibetan year is equal to the solar year.

The Tibetan New Year celebration is Losar (Tibetan: ལོ་གསར་, Wylie: *lo-gsar*). According to almanacs the year starts with the third Hor month. There were many different traditions in Tibet to fix the beginning of the year. The dates of Mongolian calendar are the same as the Tibetan calendar.

Every month, certain dates in the Tibetan calendar have special significance for Buddhist practices. Likewise, certain months also have significance.

Contents

Years

There were different traditions of naming years (Tibetan: ལོ་, Wylie: *lo*) in Tibet. From the 12th century onwards, we observe the usage of two sixty-year cycles. The 60-year cycle is known as the Vṛhaspati cycle and was first introduced into Tibet by an Indian Buddhist by the name of Chandranath and Tsilu Pandit in 1025 CE.[1] The first cycle is the *rabjyung* (Tibetan: རབ་འབྱུང་།, Wylie: *rab byung*) cycle. The first year of the first *rabjyung* cycle started in 1027. This cycle was adopted from India. The second cycle was derived from China and was called *Drukchu kor* (Tibetan: འབྲུག་ཅུ་སྐོར།, Wylie: *drug cu skor*, Sanskrit *Vrhaspati*). The first year of the first *Drukchu kor* cycle started in 1024. The cycles were counted by ordinal numbers, but the years within the cycles were never counted but referred to by special names. The structure of the *drukchu kor* was as follows: Each year is associated with an animal and an element, similar to the Chinese zodiac. Animals have the following order:

Hare	Dragon	Snake	Horse	Sheep	Monkey	Bird	Dog	Boar	Rat	Ox	Tiger

Elements have the following order:

Fire	Earth	Iron	Water	Wood

Each element is associated with two consecutive years, first in its male aspect, then in its female aspect. For example, a **male Earth-Dragon** year is followed by a **female Earth-Snake** year, then by a **male Iron-Horse** year. The sex may be omitted, as it can be inferred from the animal.

The element-animal designations recur in cycles of 60 years (a Sexagenary cycle), starting with a (male) **Wood-Rat** year. These large cycles are numbered, the first cycle starting in 1024. Therefore, 2005 roughly corresponds to the (female) **Wood-Rooster** year of the 17th cycle. The first year of the sixty-year cycle of Indian origin (1027) is called *rab-byung* (same name as the designation of the cycle) and is equivalent to the (female) fire-Rabbit year.

Year (Gregorian)	Year according to *rabjyung*	Wylie	Element	Animal	Sex
2008	*rabjyung* 17 *lo* 22	*sa mo glang*	Earth	Rat	male
2009	*rabjyung* 17 *lo* 23	*sa pho khyi*	Earth	Ox	female
2010	*rabjyung* 17 *lo* 24	*lcags pho stag*	Iron	Tiger	male
2011	*rabjyung* 17 *lo* 25	*lcags mo yos*	Iron	Hare	female
2012	*rabjyung* 17 *lo* 26	*chu pho 'brug*	Water	Dragon	male
2013	*rabjyung* 17 *lo* 27	*chu mo sbrul*	Water	Snake	female
2014	*rabjyung* 17 *lo* 28	*shing pho rta*	Wood	Horse	male
2015	*rabjyung* 17 *lo* 29	*shing mo lug*	Wood	Sheep	female

Years with cardinal numbers

Three relatively modern notations of cardinal numbers are used for Tibetan years.

On Tibetan banknotes from the first half of the 20th century cardinal numbers can be seen, with year 1 in 255 CE, which is a reference to the legendary 28th Emperor of Tibet, Thothori Nyantsen.

Since the second half of the 20th century another year notation has been used, where the year of, for example, 2023 A.D. coincides with the Tibetan year of 2150. This relatively modern year notation is referred to as *Bö Gyello* (*bod rgyal lo*). In this era the first year is 127 BCE, dated to the legendary progenitor of the Yarlung dynasty, Nyatri Tsenpo.

In Tibetan calendars of the second half of the 20th century and on Tibetan coins cardinal year numbers are found with the indication of *raplo*, where the first year coincides with the first year of the *rabjyung*-cycle, that is 1027. *Rab lo* 928, for example, is the year of 1954 on the western Gregorian calendar.

Year (Gregorian)	Epoch 127 BCE	Epoch 255	Epoch 1027
From about February/March 2009	2136	1755	983
From about February/March 2010	2137	1756	984
From about February/March 2011	2138	1757	985
From about February/March 2012	2139	1758	986

Months

During the time of the Tibetan Empire (7th – 9th century) Tibetan months (Tibetan: ཟླ་བ་, Wylie: *zla ba*, THL: *dawa*) were named according to the four seasons:

> First spring month (*dpyid zla ra ba*), middle spring month (*dpyid zla 'bring po*), last spring month (*dpyid zla mtha' chung*),
> first summer month (*dbyar zla ra ba*), middle summer month (*dbyar zla 'bring po*), last summer month (*dbyar zla mtha' chung*),
> first autumn month (*ston zla ra ba*), middle autumn month (*ston-zla 'bring-po*), last autumn month (*ston zla mtha' chung*),
> first winter month (*dgun zla ra ba*), middle winter month (*dgun-zla 'bring-po*) and last winter month (*dgun zla mtha' chung*).

From the 12th century onwards each month has been named by the 12 animals of the Chinese zodiac:

> *taag* (Tiger),

ye (Hare), *'drug* (Dragon), *drul* (Snake), *ta* (Horse), *lug* (Sheep),

> *te* (Monkey),

tshya (Bird), *kyi* (Dog), *phag* (Boar), *tshyiwa* (Rat) and *lang* (Ox).

With the introduction of the calendar of the *Kalacakratantra* in the second half of the 11th century, months were also named via lunar mansions within which, roughly speaking, a full moon took place each month:

> 1st: Chu (*mchu*, Skt. *māgha*)
> 2nd: Wo (*dbo*, Skt. *phālguna*)
> 3rd: Nagpa (*nag pa*, Skt. *caitra*)
> 4th: Saga (*sa ga*, Skt. *vaiśākha*)
> 5th: Non (*snron*, Skt. *jyeṣṭha*)
> 6th: Chuto (*chu stod*, Skt. *āṣāḍha*)
> 7th: Drozhin (*gro bzhin*, Skt. *śrāvaṇa*)
> 8th: Trum (*khrums*, Skt. *bhādrapada*)
> 9th: Takar (*tha skar*, Skt. *āśvina*)
> 10th: Mindrug (*smin drug*, Skt. *kārttika*)
> 11th: Go (*mgo*, Skt. *mārgaśīrṣa*)
> 12th: Gyal (*rgyal*, Skt. *pauṣa*)

In the second half of the 13th century the famous ruler Drogön Chögyal Phagpa introduced the system of counting the month by ordinal numbers, the so-called *Hor* "Mongolian" month:

1st Hor month (*hor-zla dang-po*)	7th Hor month (*hor-zla bdun-pa*)
2nd Hor month (*hor-zla gnyis-pa*)	8th Hor month (*hor-zla brgyad-pa*)
3rd Hor month (*hor-zla gsum-pa*)	9th Hor month (*hor-zla dgu-pa*)
4th Hor month (*hor-zla bzhi-pa*)	10th Hor month (*hor-zla bcu-pa*)
5th Hor month (*hor-zla lnga-pa*)	11th Hor month (*hor-zla bcu-gcig-pa*)
6th Hor month (*hor-zla drug-pa*)	12th Hor month (*hor-zla bcu-gnyis-pa*)

All these systems of counting or naming months were used up to modern times.

Days

There are three different types of days (*zhag*), the *khyim zhag*, the *tshes zhag* and the *nyin zhag*.

The first two of these days are astronomical days. The time needed for the mean sun to pass through one of the twelve traditional signs of the zodiac (the twelve *khyim*) is called *khyim zla* (solar month). One-thirtieth of one solar month (*khyim zla*) is one *khyim zhag*, which might be called a zodiacal day, because there is no equivalent name in Western terminology.

The time needed by the moon to elongate 12 degrees from the sun and every 12 degrees thereafter is one tithi (*tshes zhag*, "lunar day"). The lengths of such lunar days vary considerably due to variations in the movements of the moon and sun.

Thirty lunar days form one lunar or synodic month (*tshes zla*), the period from new moon to new moon. This is equal to the time needed for the moon to elongate 360 degrees from the sun (sun to sun). The natural day (*nyin zhag*) is defined by Tibetans as the period from dawn to dawn. Strictly speaking, the months appearing in a Tibetan almanac, called by us Tibetan calendar months, are not the same as lunar or synodic months (*tshes zla*), which can begin and end at any time of day. In Tibetan, there is no special term for a calendar month containing whole days. These calendar months are just called *zla ba* (month).

A Tibetan calendar month normally starts with the week day or natural day (*gza'* or *nyin zhag*) in which the first tithi (*tshes zhag*) ends. A Tibetan calendar month normally ends with the week day or natural day (*gza'* or *nyin zhag*) in which the 30th *tithi* (*tshes zhag*) ends. In consequence, a Tibetan calendar month (*zla ba*) comprises 29 or 30 natural days. In the sequence of natural days or week days, there are no omitted days or days that occur twice. But since these days are also named by the term *tshes* together with a cardinal number, it happens that certain numbers or dates (the corresponding tithi) do not occur at all (*chad*) or appear twice (*lhag*). The *tithi* are counted from 1 to 30 and it can happen that a Monday with the lunar day number 1 (*tshes gcig*) is followed by a Tuesday with the moon day number 3 (*tshes gsum*). On the other hand, a Monday with the lunar day number 1 (*tshes gcig*) may be followed by a Tuesday with the lunar day number 1 (*tshes gcig*). In other words, it happens quite often that certain dates do not appear in the Tibetan almanac and certain dates occur twice. But there are no natural days or week days that occur twice or which are omitted.

The days of the week (Tibetan: གཟའ་, Wylie: *gza'*) are named for astronomical objects.

Day	Tibetan (Wylie)	Phonetic transcription	Object
Sunday	གཟའ་ཉི་མ་ (*gza' nyi ma*)	*nyima*	Sun
Monday	གཟའ་ཟླ་བ་ (*gza' zla wa*)	*dawa*	Moon
Tuesday	གཟའ་མིག་དམར་ (*gza' mig dmar*)	*Mikmar*	Mars
Wednesday	གཟའ་ལྷག་པ་ (*gza' lhak pa*)	*Lhakpa*	Mercury
Thursday	གཟའ་ཕུར་བུ། (*gza' phur bu*)	*Purbu*	Jupiter
Friday	གཟའ་པ་སངས་ (*gza' pa sangs*)	*Pasang*	Venus
Saturday	གཟའ་སྤེན་པ་ (*gza' spen ba*)	*Penba*	Saturn

Nyima "Sun", *Dawa* "Moon" and *Lhakpa* "Mercury" are common personal names for people born on Sunday, Monday or Wednesday respectively.

History

During the time of the Yarlung dynasty, years were named after the 12 animals common in the Chinese zodiac. The months were named according to the four seasons of a year and the year started in summer.

The translation of the *Kalachakratantra* in the second half of the 11th century CE marked the beginning of a complete change for the calendar in Tibet. The first chapter of this book contains among others a description of an Indian astronomical calendar and descriptions of the calculations to determine the progression of the five planets and the sun and moon eclipses.

According to the Buddhist tradition, the original teachings of the Kalacakra were taught by Buddha himself. Nevertheless, it took more than two hundred years until the Kalacakra calendar was officially introduced as the Tibetan calendar by the ruler Drogön Chögyal Phagpa in the second half of the 13th century. Although this calendar was changed many times during the subsequent centuries, it kept its original character as a luni-solar calendar of Indian origin.

See also

- Buddhist calendar

- Horology

Notes

1. Sarat Chandra Das, *A Tibetan-English dictionary: with Sanskrit synonyms* (https://books.google.com/books?id=YNm2kWddMNQC&pg=PR8), p. viii (accessed: October 25, 2009).

Primary sources

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- sde-srid Sangs-rgyas rgya-mtsho: Phug-lugs rtsis kyi legs-bshad mkhas-pa'i mgul-rgyan vaidur dkar-po'i do-shal dpyod-ldan snying-nor
- karma Nges-legs bstan-'jin: gTsug-lag rtsis-rigs tshang-ma'i lag-len 'khrul-med mun-sel nyi-ma ñer-mkho'i 'dod-pa 'jo-ba'i bum-bzang

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