The Wrath of Rahu: Remarks on the Observation of Solar and Lunar Eclipses

Michael J. Khoo and Tsering Norbu Martse

This paper examines the representation of eclipses in Ladakhi Buddhist cosmology. Eclipses are attributed to Rahu, who represents various aspects of these cosmological events. We look at some of these aspects, including: Rahu in the context of Ladakhi Buddhist cosmology; Rahu’s depiction in Vedic mythology; Rahu as a ‘node’ of the moon, a way of calculating eclipses in Sanskrit and Tibetan cosmology; Rahu as a deity in the Tibetan pantheon; and Rahu as a planet. Eclipses are described in the annual Tibetan language almanac, the lo tho, and we present extracts from three of these lo tho regarding the total solar eclipse of October 1995, which passed over India and which was approximately 85 percent total over Ladakh. Finally, an account of the observation of this partial eclipse in Ladakh is presented by Michael Khoo.

1. Introduction

In Ladakhi Buddhist cosmology, solar and lunar eclipses are attributed to the activities of Rahu, the enemy of the sun and moon, who also represents the mathematical and astronomical concepts associated with the calculation of eclipses. In this matter, as is generally the case with the celestial sciences, Buddhist Ladakh follows the Tibetan system of calculation, known as skar rtsis. Rather than employing the Western distinction between astronomy and astrology, skar rtsis is instead composed of the elements of dkar rtsis or Indian and Eastern concepts of the movements of celestial bodies, and elements of nag rtsis or Chinese cosmology (interpretations of those movements).

Skar rtsis is used in many situations in which the world of humans has to be brought into harmony with the wider cosmos. It can provide auspicious or inauspicious times, dates and directions for a wide range of activities; and it can also, in the form of the annual almanac known as the lo tho, provide a wealth of information regarding the many cosmological cycles which flow through each day. The movements and stages of these cycles can be interpreted, and prognostications and diagnoses made, regarding many aspects of life, such as births, marriages, deaths, auspicious times to move house, plough a field, go on a journey, and so on. The lo tho also carries other cosmological information, for instance the position of the sun and moon in relation to the stars; and when an eclipse is forecast for the coming year, the lo tho will describe when that eclipse will occur. This paper provides three examples of such predictions, one from a lo tho published in Leh, and two from lo thos published in Lahaul.

2. Background

Before we get to the texts themselves, we will provide some background in Western astronomy, Tibetan cosmology, and Vedic mythology and cosmology.

2.1. Eclipses: cosmic order, cosmic anomaly

Solar and lunar eclipses manifest different phenomena, with solar eclipses being the more dramatic. Partial solar eclipses may pass almost unnoticed and total eclipses are noticeable for less than an hour; their onset and resolution are sudden, with a rapid dropping off and restoration of light and ambient temperatures. Totality — the period when the sun’s disc is completely hidden — lasts an absolute maximum of some seven minutes. Lunar eclipses are apparent to naked eye observation for their complete duration, perhaps between three and four hours, with totality lasting between half an hour and an hour. Unlike a solar eclipse, it is possible to

1. This paper would not have been possible without the generous support and cooperation of T.T. Namgyal of Hemis Shukpachen. Only Ladakhi Buddhist cosmology is discussed as no material on eclipses from Muslim communities was collected.


follow every stage of the progress of the earth’s shadow across the face of the moon. Solar and lunar eclipses look different; the sun appears to turn black, while the moon can be observed as a deep copper colour, appearing three dimensional, rather than as its usual flat disc.

In eclipses, we have examples of anomalous cosmological events, the portents of which are heightened if we consider them within the ordered cosmology found in Tibet. Tibetan models of the cosmos are complex symmetries, many-layered, and interwoven. They are often divided into four quarters in each of the cardinal directions; and they are sometimes further subdivided into six, nine, twelve, thirty-six, or three hundred and sixty parts. They reproduce, in the terrestrial realm, the perfection apparent in the celestial realms, where all the stars wheel through the sky about a single point, celestial north. While the cosmology is syncretic, deriving much from older Chinese and Sanskrit traditions, it is not disorganised; highly developed, codified, and sophisticated, its basic structures underpin Tibetan ideas regarding the structure of the world, the calendar, the legal system, maps, the psyche, and the body. There are many representations of these ideas, including Mount Meru, Sipa Khorlo (the ‘Wheel of Life’), Sipa Ho (srid pa’i ho), mandalas, and other representations of time and space.*

It is impossible here to convey the subtleties of such structures, and the reader is encouraged to consult the references in the footnote. Instead, we would like to emphasise the many-ordered complexities of the images themselves. Any event which disturbs this order poses a threat, both in an immediate sense, that of direct injury, as well as in an indirect sense, in that if the cosmic balance is not restored, then future disruption is also possible. In Tibetan cosmology, eclipses occupy a position half-way between, on the one hand, truly disturbing and unpredictable phenomena, such as comets, meteors, earthquakes, and violent storms, and on the other hand, wholly predictable phenomena, such as the solar, lunar, and stellar cycles. They are calculable and thus seem to be, if this is not too much of a contradiction, predictable anomalies.

---


---

Fig. 1. The symbols associated with the planets and the days of the week. From the top: gza’ nyi ma (Sun, Sunday), gza’ zla ba (Moon, Monday), gza’ mig dmar (Mars, Tuesday), gza’ Ihag pa (Mercury, Wednesday), gza’ phur bu (Jupiter, Thursday), gza’ pa sangs (Venus, Friday), gza’ spen ba (Saturn, Saturday), and Rahu. From Waddell 1895 (1972): 455.
2.2. Eclipses and Rahu

In Tibetan cosmology, eclipses are associated with Rahu. But exactly who or what is Rahu? The name Rahu refers to at least four related concepts; first, to the mythical astral body who 'devours' the sun or moon at the time of an eclipse; second, to the concept known in Western astronomy and astrology as the 'nodes of the moon', a device used in the calculation of eclipses; third, in various forms, to a deity in the Tibetan pantheon; and fourth, to one of the system of nine planets. These categories are analytical and do not necessarily 'exist' as distinct or discrete realities; Rahu in different situations may combine elements of any of these four features, as well as other nuances not covered here.

2.2.1. Rahu in Vedic cosmology

The personification of Rahu dates back thousands of years to the Vedic myths which form the basis of a tale from the Mahabharata, where we are told how Rahu acquires his reputation for causing eclipses. According to O'Flaherty, in order to obtain ambrosia, the gods and demons uprooted Mount Meru, or Mandara, the cosmic axis, and took it to the ocean, where it was inverted and placed on the back of the supreme tortoise:

The tortoise agreed, and Indra placed the tip of the mountain on his back, fastening it tightly. They made Mandara the churning-stick and the serpent Vasaki the cord, and they began to churn the ocean, the treasure of waters, for ambrosia. The gods acted together with the demons, for they all wished for the ambrosia. The great demons grasped one tail of the king of the serpents, and all the gods held him by the tail. (O’Flaherty: 275)

The churning caused great destruction to the animals and plants living on Mandara and in the ocean, but as it continued, sap from the trees and juices from the herbs on the mountainside started to flow into the ocean: Then the water of the ocean turned to milk as it became mixed with those supreme juices, and from that milk arose clarified butter. Then from the ocean arose Soma, the calm moon, with its cool rays, and the sun of a thousand rays. Finally, the ambrosia appeared; the demons seized it, and the gods tricked it back out of them, whereupon the demons attacked the gods.

As the gods were drinking the ambrosia which they so desired, a demon called Rahu took the form of a god and began to drink, but when the ambrosia reached his throat the moon and the sun reported it, for they wished to help the gods, and the lord Vishnu took his discus and cut off the well-adorned head of that demon who was drinking the ambrosia he had obtained by force. The great head of the demon, which was like the peak of the mountain, fell to the earth as it was cut off by the discus, and it shook the earth. The severed head rose up to the sky, roaring terribly, but the headless torso of the demon fell and split open upon the surface of the earth, causing a tremor throughout the earth with its mountains, forests and islands. Since then there has been a deadly enmity between the head of Rahu and the moon and the sun, and the immortal head swallows them up even today. (O’Flaherty: 278)

The swallowing of Soma by Rahu was the first lunar eclipse; during the subsequent immense battle, which saw the mountains being torn up to be hurled as weapons, the sun ran red with blood — the first solar eclipse. Finally the demons retreated, and the gods were able to replace Mount Mandara in its rightful place, and give the ambrosia to Vishnu for safe-keeping. O’Flaherty notes:

The churning of the ocean is the classic image of creation by means of chaos — the disruption of the serene primeval waters in order that all the oppositional pairs may emerge and meet in creative conflict. In the course of this process, the agents of the churning (the gods and demons) become differentiated, for at first they are united in their task, but then they are opposed. The basic symbolic dialectic is that of liquids, the neutral water which is transmuted into various elixirs — human (milk), ritual (butter) and divine (mead, ambrosia, or Soma) — as well as the reversal of all elixirs — poison. (273)

To this we would also add the symbolism of the inverted cosmic axis placed upon the back of the cosmic tortoise (who represents the solid foundations of the earth), and the cooperation of gods and demons, standing either side of Meru to churn the ocean, before they eventually argue and fight. This last motif — that of a time of primeval harmony being destroyed through the transgressions of one individual, producing discord and differentiation — sums up this conjunction of oppositional elements, of potentiality and actualisation, of positive and negative, and of inversions. Such ferment seems to us to represent something of the nature of eclipses, which are brought in from the realm of ‘outside’ and ‘chaotic’ phenomena, and are integrated into ‘inside’ and ‘ordered’ phenomena.
2.2. Rahu and the nodes of the moon

Eclipses occur when the sun, the earth, and the moon, are aligned in space. As the moon’s orbit is tilted at an angle of five degrees to that of the earth’s, it is only at the point of intersection of these two planes that an eclipse can occur. These two points, which lie opposite each other, are known as the ‘nodes’ (from the Latin for ‘knots’) of the moon. The moon passes through one node in an upwards direction — the ‘ascending’ node — and through the other one in a downwards direction, the ‘descending’ node. Knowledge of the positions of the nodes is fundamental in calculating the occurrence of eclipses, as the sun has to be within fifteen degrees — that is, fifteen days — of a node, at the moment when the moon passes through one of the nodes, for an eclipse to be possible. There are other complicating features of this dynamic, and the reader is referred to Davidson (1985) chapter 7, and Hartmann and Impey (1994) 29 ff. for more information. Based on the observation of these regular, if subtle, cosmological cycles, Vedic astronomers were able to devise calculations which were useful in the prediction of eclipses. These calculations were later codified in the first millennium into the Sanskrit treatise ‘Surya Siddhantha,’ portions of which were adapted and translated by Tibetan cosmologists.

Since early times, the ascending node was known as the Dragon’s Head, and the descending node as the Dragon’s Tail. In Sanskrit cosmology, these became Rahu and Ketu respectively, Rahu being responsible for eclipses, and Ketu for phenomena such as comets, meteors, and falling stars. The names Rahu and Ketu were transliterated into Tibetan, as ra’ hu’ and ke tu’. Ra’ hu’ is also known by the name sgra gcan, and ke tu as du ba mjugs ring:

sgra gcan... 1) name of an Asura demon, who fought with the gods and drank nectar obtained by churning the ocean. 2) fabulous planet of Chinese and Brahminical astrology which exercises malignant influences on the destinies of mankind; specially known by being at enmity with the sun and with the moon, on whom it is continually wreaking vengeance. Eclipses are caused by sgra gcan swallowing the sun or moon.

ke tu’ ... 1) a fabulous planet in Brahmanical as well as in Tibetan astrology. In Tibet the name ke tu’ is generally applied to comets, called also du ba mjugs ring (lit. the long smoke-tailed). 2) a fiery meteor; a shooting star; the descending node. 3) n. [name] of a demon. (Das 1902 [1992]: 331, 31).

gcan does not appear in Das, however gcan gzan denotes a ‘carnivorous animal’, which would accord with ideas of Rahu eating the sun and moon (385).

According to Nebesky-Wojkowitz (1956/1993), Rahu or Rahula is numbered among the dregs pa,

[One of] the multitude of gods and goddesses (dregs pa pho mo) occupying a lower rank; most of these were originally members of the Bon pantheon (253). [Rahu] is the chief of all the planetary gods [...] an Indian deity which had been accepted into the Tibetan pantheon. [He] occupies [...] an important place especially in the pantheon of the rnying ma pa sect. [He has several forms, including:] drang srong chen po gza’ bdud rahula [...] [who] appears in wrathful aspect. He has nine heads, a raven’s head on top, and his body is covered by a thousand eyes. He bares his teeth, and a mist of illnesses issues from his mouth [...] The lower part of his body is the coiled tale of a snake. Rahu dispatches the klu bdud — beings which originated in the union of a klu with a bdud — as his messengers [...] A similar description of Rahu is given in the Vaidurya dkar po, where he is [...] addressed as gnam gyi gza’ chen tha rgod, ‘the wild god, the great planetary deity of the sky …’

9. Sivapriyananda 1990: 75-76; Figures 9, 48 and 49.

12. klu = a subterranean deity, the equivalent of the naga, and bdud = demon.
With his raven-head Rahu guards the religious teachings, and his thousand eyes watch the happenings in the three worlds. A popular tradition claims that Rahu’s raven head is extremely poisonous and that a person, on whom the shadow of this head falls, will suffer a fit of apoplexy.  

According to Nebesky-Wojkowitz, the disease caused by the shadow of Rahu’s raven head is the ‘ki kang illness of the gza’ (380), protection against which is offered by the wearing of the glass beads patterned with circles or ‘eyes’, known as gzi (506). Although Nebesky-Wojkowitz does not mention eclipses, the reference to Rahu’s shadow being poisonous corresponds to similar beliefs regarding the effects of eclipses. A raven-like head is also the symbol used to represent Rahu, for instance in the diagram reproduced in Waddell (Fig. 1).

Both Das and Nebesky-Wojkowitz supply further synonyms for Rahu and Ketu, which are listed in Appendix 1.

2.2.4. Rahu as one of the nine planets

As a last example we would like to consider Rahu as sgra gcarn, one of the nine planets in Tibetan cosmology. The nine planets are:

<table>
<thead>
<tr>
<th>Tibetan Planet</th>
<th>Western Planet</th>
<th>(Tibetan Day: English Day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>nyi ma Sun</td>
<td>(gza’ nyi ma: Sunday)</td>
<td></td>
</tr>
<tr>
<td>zla ba Moon</td>
<td>(gza’ zla ba: Monday)</td>
<td></td>
</tr>
<tr>
<td>mig dniar Mars</td>
<td>(gza’ mig dniar: Tuesday)</td>
<td></td>
</tr>
<tr>
<td>lhag pa Mercury</td>
<td>(gza’ lhag pa: Wednesday)</td>
<td></td>
</tr>
<tr>
<td>phur bu Jupiter</td>
<td>(gza’ phur bu: Thursday)</td>
<td></td>
</tr>
<tr>
<td>pa sangs Venus</td>
<td>(gza’ pa sangs: Friday)</td>
<td></td>
</tr>
<tr>
<td>spen ba Saturn</td>
<td>(gza’ spen ba: Saturday)</td>
<td></td>
</tr>
<tr>
<td>sgra gcarn Asc. node</td>
<td>(Rahu)</td>
<td></td>
</tr>
<tr>
<td>mjugs ring Desc. node</td>
<td>(Ketu)</td>
<td></td>
</tr>
</tbody>
</table>

(Das 1902 [1992]: 1102)

These planets correspond in other ways also: colours, benificent or malificent properties, daily activities, and so on. This Tibetan system was adopted in part from the preceding Sanskrit system, which in turn is yet older. All the planets apart from Ketu appear to be represented by symbols, for instance as illustrated by Waddell (Fig. 1), or in the examples illustrated by Jhampa Khalsang,14 Hummel (1969) and Cassidy (1995b).15

3. Rahu and eclipses in Ladakhi cosmology

3.1. Traditions of Rahu and eclipses

3.1.1.

It is said that at the time of an eclipse, there is a war between the gods and the demi-gods or titans. Rahu wants to see this battle, but cannot, because the light of the sun is too bright, so he obscures the sun with his hand, to make everything dim. This battle is why it is important to offer prayers at the time of an eclipse, for the souls of all the gods and titans who have been killed in the battle (my thanks to Sonam Murup for this).

3.1.2.

One should never look at an eclipse directly (it is said), but either through a smoke blackened glass, or in the reflection in a bowl of water. This bowl should be an offering bowl, preferably made of li, bell metal, an amalgam of precious metals.16 Offering bowls are generally of four types: gold, silver, bronze, and li. Celestial observation via a bowl of water is used in other contexts in Ladakh, for instance in the ‘catching’ of the light of various auspicious heavenly bodies, which preserves the beneficial influence of particular stars (in this case, in the bowl of water) for utilisation at a later time.17 The practice of observation in a bowl of water is widespread in India too, sometimes involving the placing of a lump of dung into the water in order to release oil which then forms a reflective sheen on the surface of the

---


water. In Sri Lanka, turmeric (a substance with strong solar connotations) is sometimes added.

3.2. The eclipse in the lo tho

The lo tho, the Tibetan language almanac used in Ladakh, contains a wealth of highly complex celestial information, details of the many intermeshed cosmological cycles which affect the lives of all sentient beings. Each page of the lo tho is full of cosmological information, interpretation of that information, and advice and prescriptions arising from those interpretations; a guide to the benevolent and malevolent influences pertaining at that particular year, month, day, hour. The complex cycles, harmonies and fluctuations of the universe are worked out in such spheres as one’s environment (for instance, the weather), one’s body and health, and one’s mind. It is wise to plan life in accordance with these cycles, both the major events such as marriages and funerals, and lesser events, such as leaving to go on a journey, or ploughing a field. To go against these cycles runs the risk of upsetting the cosmological order and thus of introducing imbalance and disharmony into one’s life.

Eclipses, as pointed out, can be considered anomalous events. Three different lo tho will now be examined to see how they dealt with the solar eclipse of October 1995, which was total along a path which passed from Rajasthan to Agra to Calcutta, and which was some 80-85% total over Ladakh (Fig. 2). The information is presented in an iambic quadrarmetre, containing 7 syllables followed by a pause equivalent to one syllable; thus they are read: ‘DA da DA da DA da DA (pause) / DA da DA da DA da DA (pause),’ etc., etc. The language is often formulaic and specialised, containing classical and religious Tibetan terms, with many sentences condensed to key syllables or phrases to fit the rhythmic structure. This compressed and idiosyncratic syntax serves the purpose of conveying much information in a small amount of text, while the rhythmic structure aids the practitioner’s memorisation of the lines.

18. Anon. 1995a, 1995b; Sharma 1995. These activities attracted some comment in the widespread Indian media coverage leading up to the event. The reports mainly stressed the dangerous aspects of the practice, and recommended the use of special filter goggles; see Miller 1995.

The material is presented as follows: the transliterated text is presented line by line, followed by a translation, followed by explanatory annotations. Note that the 'English translation' can be a lot longer than the original Tibetan line. Line numbering has been introduced and does not exist in the original texts. Punctuation has been added to the English at the discretion of Michael Khoo. Tibetan (i.e., bod yig) versions are supplied in Appendix C.

3.2.1 Thupstan Shanfan (thub bstan gzan phan)

The first passage is from the only lo tho to be published and widely distributed in Leh and Ladakh, that of Thupstan Shanfan (Fig. 3):

A.1 gza’ ’dzin
eclipse
A.2 na tshod idan pa’i shing phag lo’i
At the time of the wood pig year
A.3 hor zla brgyad pa’i nam stong
in the 8th month of the Tibetan lunar calendar
A.4 spyi zla’i bcu pa’i nyer gsum nyi ma
in 10th month of the foreigner’s [Western] calendar, on the 23rd day
A.5 nyi shar ’brug dus nyi dkyil la
at sun-east [sun-rise], in the dragon time, the sun’s disk
A.6 gsum ca lhag pa phyed lhag tsam
about one third uncovered, about half covered
A.7 ra hu’i lho nub mtshams nas sgrib
by Rahu, who will enter [the sun’s disc] from the south west as a shadow
A.8 kha mdog dmar nag mdog tu snang
of a red-black colour; the colour will appear this way.

20. Note by Michael Khoo: As final editor of this work, responsibility for any error rests solely with myself.
These first seven lines describe the time and appearance of the commencement of the eclipse.

Line A.2: The year ‘wood pig’ is calculated according to the Tibetan cycle which combines the twelve animals of the Chinese zodiac (that is, the Rat, Ox, Tiger, Rabbit, Dragon, Snake, Horse, Sheep, Monkey, Bird, Pig, and Dog) which can be equated with the twelve signs of the Western zodiac. The links between Western and Chinese zodiacs in Tibetan cosmology are evident in the twelve illustrations in Berzin (1991), and around the edge of the ‘cosmic mandala’ (sic) illustrated by Bryant. The twelve animals can further be combined with the five elements, shing (wood), me (fire), sa (earth), lcags (iron), and chu (water), to produce a cycle of 12 x 5 = 60 years.

Line A.5: This refers to a method of dividing the day. Each day comprises twelve double-hours (khyim or rag pa) denoted by the respective time of the day and a certain animal of the zodiac as follows:

<table>
<thead>
<tr>
<th>Time</th>
<th>Animal</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.00</td>
<td>mthsan-phyed byi</td>
</tr>
<tr>
<td>2.00</td>
<td>mthsan-smad glang</td>
</tr>
<tr>
<td>4.00</td>
<td>tho-rangs stag</td>
</tr>
<tr>
<td>6.00</td>
<td>nam-langgs yos</td>
</tr>
<tr>
<td>8.00</td>
<td>nyi-shar ‘brug</td>
</tr>
<tr>
<td>10.00</td>
<td>nyi-dros sbrul</td>
</tr>
<tr>
<td>12.00</td>
<td>nyi-phyed rta</td>
</tr>
<tr>
<td>14.00</td>
<td>phyed-yol lug</td>
</tr>
<tr>
<td>16.00</td>
<td>nji-gyur spre</td>
</tr>
<tr>
<td>18.00</td>
<td>nji-rgas bya</td>
</tr>
<tr>
<td>20.00</td>
<td>sa-rub khyi</td>
</tr>
<tr>
<td>22.00</td>
<td>srod-'khor phag</td>
</tr>
</tbody>
</table>

Line A.7: This refers to the direction from which Rahu will start to cover the sun’s disk. This information is also given in a small diagram which accompanies these lines in the lo tho (Fig. 4). Above is written the date of the eclipse according to the Tibetan calendar, below the date according to the Western calendar. In the middle are given the directions; note that they are inverted from the Western convention, with south at the top, north at the bottom, and east and west to the left and right respectively. The black circle which appears to be lying ‘behind’ represents the sun, which is moving in the direction of the bottom arrow, that is to the north; the partial white circle which appears to be lying in front represents Rahu, the moon’s node, which is seen moving over the face of the sun from the northeast to the southwest, in the direction of the upper arrow. This approximates what Michael Khoo witnessed on the day — with the moon encroaching on the sun from the north and leaving towards the south (see section 3.3 below).

We are told roughly when the eclipse will finish, that is, between 1000 and 1200. The next lines — A.10 to A.13 — give the same information as lines A.2 to A.9, in terms of hours and minutes.

A.10 'khor lo'i chu tsod drug dang ni
By the time of the clock, from six and

A.11 skar ni nyer dgur nas bzung bas
twenty-nine minutes, from this time [the eclipse] will be

---

Khoo did not observe the start of the eclipse; staying in a house in Hemis Shukpa Chen, the sun did not rise over the east ridge until about 8.00 a.m., and when he took his first observation — through thickly smoked glass — at 8.10 am., the eclipse was already well underway. He witnessed last contact at approximately 9.47 a.m., about an hour earlier than predicted in the lo tho.

Lines A.11 and A.12: Note the use of skar, which usually translates as ‘star’, but which in this case means ‘minute’.

A.14 sgrib yun bskyed rdzogs phyag mchod 'bul During the eclipse, make meditations, worship, prostrate, make offerings

A.15 dus bzang spyi la brgya 'gyur la [Remember:] On an auspicious day, these actions are multiplied one hundred times

A.16 zla 'dzin bye ba bdun 'gyur dang during a lunar eclipse, by 70,000,000 times

A.17 nyi 'dzin bye ba 'bum 'gyur gsung and during a solar eclipse, by 10,000,000 times 100,000 times \( = 1,000,000,000,000 \) times, so it is said.

A.18 skabs 'dir dge 'bad sdi g las spang So, during this time do good works and avoid bad ones.

Line A.15: dus bzang, the ‘auspicious times’ or days, are the 8th, 10th, 15th, 25th, or 30th days of the lunar month, when both merit making activity, and bad karma accumulating activity, reap multiplied dividends. Similar behaviour is expected at other times of potential cosmic peril, for instance, around the time of the solstices, when the sun reverses direction in the sky. Clean behaviour, such as a diet without meat and spices, is advocated both for the solstice itself, nyi ma log byes, and for the period of a week or so around the solstice, nyi ma bzhug byes, when the sun appears to sit at the extreme points of its annual voyage across the horizon.\(^ {28} \)

A.19 nyi 'dzin 'bras bu ngan par bshad The eclipse of the sun has evil effects, so it is said [for the following people:]

A.20 sbrun ma sens can rgyal par gnod pregnant women, all animals, kings and royalty, it is bad for all these;

A.21 char med shing tog nyams par 'gyur rain will fall, fruits will spoil and drop of the trees; this will happen.

Line A.20. The deleterious effects of eclipses on pregnant women, who are supposed to avoid going outdoors in an eclipse, is still a strong tradition in India.\(^ {29} \)

Besides the lo tho of Thubstan Shanfan, we have also translated passages from two lo tho which are published in Lahaul. They are similar in content, if somewhat more ornate.

3.2.2. Mifam Giacho Lama (mi pham rgya mtsho bla ma)

B.1 gza' 'dzin eclipse

B.2 mkhyen brise'i chu gter las 'khrungs shing

B.3 lang tsho'ia cha shas rab gang ba

B.4 bdag gi lha mchog ngag dbang lhas

B.5 ngag gi spobs ba dge bar mdzod

Lines B.2 to B.5 are a form of homage to Manjushri, which requests the blessing of Manjushri on the following text and calculations.

B.6 'di na nyi zla'i dkyil 'khor la
from this place, the circles of the sun and moon

B.7 sgra gcan gdon mjug gis sgrub tshul
are covered by Rahu's face and/or tail, as a shadow, in this fashion.

B.8 nor bu'i do shal dgyongs don ltar
My thought will be clear like the diamonds in a necklace

B.9 gan ta'i ri mor shar bzhin' bri
and I will write down here my accurate calculations of the hours [of this event].

Line B.7: Note the Tibetan term for Rahu, sgra gcan.

Line B.9: gan ta'i is a Tibetanised version of a Sanskrit term for hours.

B.10 na mtshod shing phag gnam shar 'di'i
In the wood pig year

B.11 khrums zla'i mar ngo'i gnam gang gi
In the eighth month, in the dark half of the month, at new moon

B.12 res gza' mig dmar nyi shar dus
on Tuesday [the day of Mars], at the time of sunrise

B.13 'brug gi dang por ra' hu yis
during the first part of the dragon time, Rahu

B.14 nyi ma'i dkyil 'khor bar ba las
will start to come in front of the sun.

Line B.10: ma tshod is an alternative name for the wood pig year.

B.15 'khor lo'i chu tshod bdun dang skar nyer gsum
[the eclipse starts] at 7.23

B.16 lho nub riung lha'i phyogs kyi lho nye nas
[Rahu] comes from the south west, blown by the 'wind god,' nearer to the south than to the west.

B.17 nyin mor byed pa'i dkyil 'khor gsum cha gnyis
At this time, during the day, two thirds of the [sun's] disk will be covered

B.18 sgrub bzhin kha mdog sngo nag du wa ltar
with a shadow the colour of blue-black smoke

B.19 chu tshod dus dang dus me srang gi yun
[this is a dangerous time???]

B.20 bde chen lhan cig rol te byang nye nas
[but then thankfully???], then towards the north

Line B.11: khrums zla is an alternative name for the eighth Tibetan month, named after a constellation. Tibetan cosmology uses a series of twenty-eight constellations which lie along the ecliptic, known as the rgyu ska, which correspond to the same as the system of 28 constellations known as the nakshatra in Hindu astronomy. Like the nakshatra, twelve of the rgyu skar lend their names to the lunar month in which the full moon of that month occurs somewhere near the chosen rgyu skar. Thus in the eighth lunar month, the full moon occurs somewhere near the constellations of khrums stod and khrums smad, and thus the month is named after this pair of constellations, that is, khrums zla. 30

Line B.11: mar ngo is a reference to the two 'halves' of the lunar month, from mar, 'lower'. 31

Line B.13: dang po refers to the ‘first’ of the five subdivisions of the ‘dragon time’, more precisely the time from 0800 to 0824. See above.

30. Vogel 1964: Table I, Table II.
Line B.16: The ‘wind which blows the planets’ in their orbits is another concept which Tibetan cosmologists adopted from Vedic cosmology: ‘nyi zla gza’ skar rgyu sa’i riung gi ming,’ the wind which, according to Tibetan astronomers, keeps the sun and the stars moving in space.32

Line B.22: The second period of the time of the snake is from 10.24 a.m. to 10.48 a.m.

B.24  nyi ’dzin yun der dge sdi gang byas kyang
At the time of a solar eclipse, whether good or evil is done,

B.25  bye ba ’bum du gyar bas ’bras bu thob
it will be multiplied 10,000,000 times 100,000 times,
in this way will the fruits of action be achieved.33

B.26  ’khrul med mdo dang rgyud sge gsungs shing ’bad
Be not mistaken, it is talked about [by the Buddha] in the Kangyur, so you should do this [heed this advice and perform good actions]


I watched the eclipse from the house of Namgyal, in Hemis Shukpa Chan. I had arrived a couple of days early, with the intention of visiting the Onpo (dbon po), to see if he would be performing any particular ritual at the time in question; unfortunately, however, he was obliged to help with the funeral of a recently deceased villager, and was busy on the day of the eclipse.

Namgyal outlined to me his plans for October 24th. In contrast to many of the traditional beliefs reported in India by the media there, which emphasised the deleterious effects of Rahu and his shadow upon people, especially pregnant women and children, as well as his effect upon exposed food, and so on, in Ladakh the description of the eclipse in the lo tho stressed quiet behaviour, both the avoidance of activities which might result in the acquisition of bad merit, or pollution, and also the performance of activities which would generate positive merit. The effects of such activities, in terms of merit, are multiplied manyfold during a solar eclipse.

We ate a good meal the evening before, as we would only eat sparingly during the daylight hours the next day. There are several purposes to fasting. Firstly, there is the intention of purifying the body, in that the person fasting is abstaining from impure foods such as alcohol, spices, meat, onions and so on. Secondly, there is the ingestion of pure foods, which can make one stronger. Thirdly, the abstainer is engaged in rigorous mental and spiritual discipline, in that they are placing themselves in a position which requires fortitude against the stresses of hunger and fatigue, while at the same time demanding of themselves that they ignore these trials. To succumb to self-pity, to feel sorry for oneself because one is feeling tired or hungry, is to demonstrate attachment to one’s worldly state and corporeal existence, to continue to believe in an illusion, a practice that will ultimately lead to the accumulation of negative karma and a lower rebirth in the next life.34


34. For a detailed discussion of these and other factors in the context of the fast of smyung gnas in Karsha, Zangskar, and its consideration as a liminal experience, see Kim Gutschow’s paper in this volume. While in Morocco in 1989, Khoo took part in the month-long daylight fast of Ramadan, which although different in form to smyung gnas also produced many of the sensations and altered perceptions which Gutschow describes.
Fasting has other cosmological consequences and rationales. For instance, at such times of disruption such as eclipses it is doubly important to guard against anything which might lower one’s spiritual fortitude or Sparka (spar kha), which would render one vulnerable to the influences of the unsettling cosmic forces around. Such influence can be transmitted directly, for instance through the shadow of Rahu, but it can also be spread harmonically: as noted above, many Tibetan cosmological categories share the same form. Diagrams representing the year, the stars, maps, town plans, monasteries, the legal system, the body, the cycle of dependent arisings, the universe, etc., etc., all share the same form and structures. This is not because they just happen to appear the same; but rather, all these various concepts (and others besides) are all different emanations of the same cosmological principles. This rootedness in similar structures means that there is a concrete link between the heavens, the land, the people, the body, the mind; and that disturbances and aberrations in one are very often the causes or consequences of disturbances in another. Thus caution is recommended during the times of these disturbances, as they represent particularly dangerous times for us.

On the morning of the eclipse, October 24th, we arose early, and Namgyal went up to the mchod khang, to light extra butter lamps, and to perform sets of prostrations. It was dawn, but quite light, as the high mountain ridges to the east of the valley hid the rising sun. We drank butter tea — which is allowed during the fast — and I went up on the roof of the house to observe the eclipse. Everybody else in that particular quarter of the village appeared to be staying indoors, and the normal bucolic rush-hour, of villagers, cows and donkeys going to and from the fields, was absent. According to Namgyal, while knowledge of the eclipse was not widespread in advance — many Ladakhis do not use the complex lo tho on a daily basis, preferring instead to consult a specialist as and when the occasion arises — once people realised that an eclipse was to occur, they made the decision to stay inside for the day, and to follow the instructions in the lo tho. Namgyal himself, a teacher, was interested in the eclipse, and was busy in the kitchen passing pieces of glass over the top of a smoky kerosene lamp, which he eventually brought up to the roof for me to use, before disappearing back inside. Several neighbours were in his kitchen, and one of their sons came up to the roof to see me.

Because of the deep valley in which Hemis Shukpa Chan lies, the sun did not rise above the eastern ridge until about 8.05 a.m. Between 8.10, and the time of the ‘last contact’ of the moon with the sun, that is, the point when the moon finally cleared the sun’s disk at approximately 9.47 a.m., I observed...
the progress of the eclipse (against the advice of the Indian government) through a piece of smoked glass, and made a series of sketches of its progress. The maximum coverage of the sun appeared to be at about 8.37 a.m.

As the eclipse occurred at sunrise, it was initially difficult to tell whether or not the sun was dimmer than usual, although through the piece of smoked glass, now being passed through a series of young hands, and losing a quantity of soot in the progress, it was obvious. However, for about ten minutes either side of maximum coverage, there was a noticeable dimming of the light, and a drop in temperature, an effect enhanced through a combination of Ladakh’s high altitude and thin air and the cool temperatures of the late autumn dawn. Around this time, two or three small boys appeared on the roof terrace of a house above, blowing soorna and banging a cymbal; apparently, if the lamas from the small village gompa (attached to Likir) had still been in the gompa itself, and not at the funeral, then they would have been on the roof of the gompa, making a lot of noise.

After about 9.00 a.m. things appeared to be getting back to normal, although the village was noticeably quieter than usual. Namgyal was downstairs in the kitchen, reading texts. He said that it was better to spend time alone on the day of an eclipse; staying away from other people would lessen the chances of saying or doing anything nasty or unwise, which would generate bad karma. Further, while alone, one would have the time to really concentrate on studying texts, which would generate merit. We passed the whole day this way; I sat up in the guest room on the second floor, working my way through pages from the lo tho, which was seen as particularly appropriate activity for the day. Around midday, we had a meal of plain bread and zho (curd), before returning to our studies. After sunset, it was felt that the eclipse period was over; I went down to the kitchen, where Namgyal was still reading, and we sat in silence before discussing the day quietly. Later that evening we had a full meal.

Bibliography

Anon. 1995c. ‘Asia Plays Host to a Cosmic Rendezvous’. Delhi: Indian Express, October 25th.

Anon. 1995e. ‘Superstition Kept Many Indoors’. The Hindustan Times, Delhi, October 25th.


Appendix B

From the lo tho of Stanzin Chozang (bstan 'dzin chos bzang):
Lines 2 to 9 consist of a number of references to Kalachakra; the rest of the description is similar to that provided in text B. Limitations of space forbid any explanation of this text.

Text A: Thupstan Shanphan (thub bstan gzhon phan).

Text B: Mifam Giacho Lama (mi pham rgya mtsho bla ma).
Csoma Körösi’s Guides in Tibetan Learning from Rdzong Khul Dgon Pa, Zangs Dkar, with Special Reference to Tshul khrims rgya mtsho

P.J. Marczell

Alexander Csoma Körösi (1784?-1842) published in Calcutta An Essay towards a Dictionary Tibetan and English, A Grammar of the Tibetan Language in English and various studies, including abstracts and analyses of the bKa’ ‘gyur and bsTan ‘gyur. Some works of his, like the Sanskrit-Tibetan-English vocabulary being an edition and translation of the Mahavyutpatti, were printed posthumously as late as the 20th century, while some others, like his ‘catalogue raisonné’ of literature in Tibetan transiting through, or acquired by, the Asiatic Society of Bengal, were not published at all and may no longer be extant. He also made diplomatic translations, was asked at least once to act as an interpreter in an important political mission in Bhutan and gave private lessons. Of all these lesser activities, precious little is known. What is certain is his envied reputation of being the only white man in his time in India to read, write, and speak Tibetan and to be truly knowledgeable of the ways of the ‘Roof of the World’.

Csoma stands critically apart from previous pioneers in Tibetan studies by the fact that, despite his long formal training in Protestant theology culminating at the University of Göttingen, Lower Saxony, he was not a missionary and that the intellectual tools which he forged with stubborn heroism were intended by him for the general public, irrespective of their further use.

He also differed markedly from celebrated contemporary colleagues and rivals like H.H. Wilson and B.H. Hodgson, who took advantage of their

1. For their patience in helping me to understand the Tibetan texts discussed in the paper, I wish to thank four mKhan pos in India, viz., the Reverends Losall Tenzing/Sherabling, Kangra, H.P. [interpreter: Sutram, an English monk]; Lobsang/Tashi Jong, Taragarh, Kangra, H.-P. [interpreter: Mr Thupten Jampa, schoolteacher]; Tenzing Phontsok (with lama Tsultrim Sangpo)/Karmapa International Buddhist Area, New Delhi-16; and Stanzin Dorjay/Rangdum Monastery, Kargil, J&K [interpreter Mr Sonam Dorjay, tourist officer]. I am also very grateful to Lonpo Sonam Wangchug, Karsha, his