## THE APPLICATION OF THE TIBETAN SEXAGENARY CYCLE

WITH REFERENCE TO

P. Pelliot, Le cycle sexagénaire dans la chronologie tibétaine (Journal asiatique, Mai-Juin, 1913, pp. 633—667)

BY

## BERTHOLD LAUFER.

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Ch'ang-an cannot have seen any brighter days than Paris when M. Pelliot, a second Hüan Tsang, with his treasures of ancient books, manuscripts, scrolls and statues, returned from his journey in Central Asia which will ever be memorable in the annals of scientific exploration. His archæological material bearing on the languages, literature and history of almost all nations of Central Asia has naturally led him to transgress the boundary stones which were set up by the commonly accepted Monroe doctrine of sinology, and to take deep plunges into Turkish, Mongol, Tungusian, Tibetan, and kindred subjects. In studying the work of previous scholars in these fields, M. Pelliot encountered a great deal that could not pass muster before his scrutinizing eagle eye, and that he was able to enlighten considerably with the solid fund of his superior Chinese and historical knowledge. In the present investigation he turns his searchlight on the prevailing methods of computing the Tibetan years of the sexagenary cycle into our system of time-reckoning; he x-rays the father of this system, ALEXANDER CSOMA, who, in his famous Tibetan Grammar (Calcutta, 1834), expounded a calculation of Tibetan years which ever since has been a sanctified dogma of Tibetan philology (with two exceptions which escaped the atten4

tion of M. Pelliot), and discovers in it two fundamental errors of calculation which gave rise to all subsequent misunderstandings. After careful examination of M. Pelliot's deductions and conclusions, and after testing them also from Tibetan works of chronology and numerous examples of dates furnished by Tibetan books, it is the foremost and pleasant duty of the reviewer to acknowledge without restraint that the results obtained by M. Pelliot are perfectly correct, and that the rectifications proposed and conveniently summed up by him on p. 663 must be generally and immediately adopted.

The nerve of the whole matter is the date of the first year of the first Tibetan cycle. Csoma had calculated it at the year 1026, and M. Pelliot justly reveals the fact that he committed an error of calculation, and that this date must be fixed at 1027.1) This year as the starting-point of the Tibetan reckoning after cycles is moreover confirmed by the working of the system. It should be pointed out that this discovery of M. Pelliot is not entirely original. It was Father A. Desgoding of the Missions Etrangères who as far back as 1899 proposed to fix the beginning of the first year of the Tibetan cycle at the year 1027. In his "Essai de grammaire thibétaine pour le langage parlé," p. 87 (Hongkong, Imprimerie de Nazareth, 1899) Father Desgodins says literally: "Nous avons fait le tableau complet des cycles de 60 ans, en partant de l'année, telle qu'on la compte au Thibet: et nous avons trouvé que la première année du premier cycle thibétain était l'an 1027 de l'ère chrétienne, et non l'an 1026, comme disent Csoma et Mr. Foucaux.

<sup>1)</sup> Despite his wrong calculation, Csoma has converted correctly at least one date. In his translation of a Tibetan passport which was published in Hyde's Historia Religionis Veterum Persarum (J. A. S. B., Vol. II, 1833, p. 202, or J. A. S. B., N. S., Vol. VII, Nº 4, 1911 [containing a reprint of Csoma's papers], p. 26) the date earth-dragon (sa abrug) is justly reduced to 1688, also the Chinese cyclical signs Vú Dhín (wu ch'en) being correctly added in a footnote; but then immediately follows the sentence: "The Tibetan reckoning commences from February, 1926".

Quoi qu'il en soit, lorsqu'on est en pays thibétain, rien de plus facile que de savoir l'année que les Thibétains comptent actuellement; et, partant de là, on se fait un petit tableau pour les années suivantes. Cela suffit pour l'usage ordinaire." In the "Dictionnaire thibétain-latin-français par les Missionnaires Catholiques du Thibet" (Hongkong, 1899) edited by Father Descopins, to whom is due also a large share in the collection of the material, particularly from the native dictionaries, the same statement is repeated twice, -first on p. 932 under the word rab abyun "Cyclus 60 annorum (1<sup>us</sup> annus 1<sup>i</sup> cycli incoepit 1027 post X<sup>um</sup>)," secondly on p. 976 where it is said: "La 1re année du 1er cycle de 60 ans me mo yos correspond à l'an 1027 de l'ère chrétienne." The cyclical determination indicated by the Tibetan words is fire-hare, and this is identical with the one revealed by M. Pelliot (p. 651) from the Reu mig. The writer can himself vouchsafe the correctness of the fact that the first year of the first cycle is designated fire-hare, as he found this indication in Tibetan works on chronology. It is thus obvious, that Father Desgodins, toward the end of the last century, through a process of calculation similar to that of M. Pelliot and through an actual knowledge of the Tibetan chronological system, had arrived at the same result. The merit of M. Pelliot is certainly not lessened by the fact of priority which his countryman may justly claim, for the rectification of the humble missionary, couched in such a modest form, passed unnoticed and did not stir up those concerned in the case. There is not any doubt either that M. Pelliot, independent of his predecessor, has been led to his result by sheer commonsense and the exertion of his own brainpower. As the facts are, Desgodins and Pelliot are the only ones to be incarnations of Manjucri, while all the others, the present writer among them, have been deluded by a temptation of Mara.

While Father Desgodins, as far as I know, never gave in his writings any practical examples of Tibetan dates, there is another scholar who, though he has never stated his opinion on the Tibetan cycle and its application, proves by his method of conversion that he understood it well, - and this is V. VASILYEV. M. Pelliot would have himself traced this fact easily, had he consulted Taranatha together with the translation of Schiefner in that of Vasilyev (and it is always safe to consult the two), or Vasilyev's "Vorrede zu seiner russischen Übersetzung von Taranatha" (translated by Schiefner and published as a separate pamphlet, St. Petersburg, 1869). M. Pelliot (p. 648 note) attributes the correct calculation of the year 1608 as the date of the composition of Taranatha to Schiefner, but this feat is plainly to be credited to Vasilyev (p. xviii). It turns out that VASILYEV was acquainted with the Reu mig of our friend Chandra Das, styled by him (Vasilyev) the Chronological Tables of Sumba Chutuktu (= Sum-pa mk'an-po).1). It is Vasilyev who correctly identifies the earth-monkey year with our year 1608 as the date of Taranatha's work, and (this is the salient point) the wood-pig year with our year 1575 as the date of Taranatha's birth, - both data being taken from the Reu mig where in fact they are so given. Schiefner copied from Vasilyev the date 1608, but changed the other date into 1573. M. Pelliot, who without the knowledge of Vasilyev's indication correctly arrived at the date 1575 by utilizing the statement of the colophon that Taranatha wrote his work in his thirty-fourth year, very generously excuses Schiefner on the ground that 1573 is a simple misprint; I could wish to share this point of view, but to my regret I can not.

<sup>1)</sup> The work Kalpasuvriksha referred to by Schiefner, in which the same dates are said to be contained as those pointed out by Vasilyev, is nothing but the Sanskritized title of the dPag bsam ljon bzak of Sum-pa mk'an-po; and as the chronological table Reu mig forms a portion of the latter work, so also Schiefner indeed speaks of the Reu mig. This seems to have escaped M. Pelliot.

Before me is a copy of the Tibetan text of Reu mig written by Schiefner's unmistakable hand (already referred to by G. HUTH, Z. D. M. G., 1895, p. 280); in this copy, Schiefner has entered after the cyclical determinations the dates of Csoma in each case of a coincidence of events. Of course, this does not prove that Schiefner absolutely believed in the dates established by Csoma; but if we notice that he marked the datum of the journey of bSod-nams rgya-mts'o into Mongolia (fire-ox) = Csoma 1575, he is liable to the suspicion that he found the date for wood-pig two lines above by deducting 2 from 1575, and thus arrived at his date 1573. Taking further into account that Schiefner, as already shown by Pelliot, fell a victim to Schlagintweit, there is good reason to believe that prior to this time he was victimized by Csoma; the one almost necessarily implies the other. It is therefore impossible to assume that the correct calculation 1608 is due to Schiefner whom M. Pelliot will have to put down on his black list.1) Vasilyev, who had made his Tibetan studies among the Lamas during a ten years' seclusion at Peking, had the advantage of being removed from the European contagion which had spread from India. There is no means of ascertaining what opinion was upheld by Vasilyev in regard to Tibetan chronology, and for lack of evidence I should hesitate to confer upon him any posthumous title. The two examples mentioned are the only ones traceable in his works and clearly stand out as exceptions in the history of

<sup>1)</sup> Schiefner has seldom had the opportunity of dealing with dates, and as far as possible kept aloof from the translation of colophons. But to his honor it should not be passed over in silence that in his Eine tibetische Lebensbeschreibung Çākjamuni's (St. Petersburg, 1849, p. 1) he has correctly reduced the date of the authorship of the work, woodtiger, to 1734 (while the date of the print, 40th year of K'ien-lung is not, as stated, 1776 but 1775). The days and months given in both dates are carefully avoided, and the colophon is untranslated. The fact is overlooked that the year of the Jovian cycle dmar ser (Skr. pingala) given in correspondence with wood-tiger does not correspond to it but to fire-serpent, accordingly to 1737; one of the two dates must be wrong.

Russian scholarship. The repetition of Csoma's errors on the pages of our Russian colleagues goes to prove that Vasilyev did not bequeath to them any substantial lesson bearing on this question.

O. Kovalevski (Монгольская Хрестоматія, Vol. II, p. 271, Kasan, 1837), without quoting Csoma, implicitly shows that he believed in his chronology by lining up three dates for the lifetime of bTson-k'a-pa, first the fanciful statement of Georgi 1232—1312, secondly the correct date of Klaproth 1357—1419, and thirdly the date 1355—1417 after Vaidūrya dkar-po, as given by Csoma in 1834; his very manner of expressing himself on this occasion bears out his endorsement of Csoma's dates. 1)

Prof. N. KÜNER at the Oriental Institute of Vladivostok, in his thorough and conscientious work "Description of Tibet"

<sup>1)</sup> It should not be forgotten that Mongol philology was developed in Europe on lines entirely different from Tibetan philology. Russia counted Mongols among her subjects, and Russian Mongolists always plodded along under the auspices of Mongol assistants. If Schmidt and Klaproth were correct in their conversion of Mongol cyclical dates into occidental years, this was by no means an heroic deed but simply due to information received from their Mongol interpreters. Tibet was always secluded and far removed from us, our workers had to push their own plough, and had to forego the privilege of consulting natives of the country. The opportunity and temptation of forming wrong conclusions were thus far greater. It is necessary to insist upon this point of view, in order to observe a correct perspective of judgment. Also the subjects treated on either side were different. In the Mongol branch of research, history was uppermost in the minds of scholars; in Tibetan it was the language, the problems of Sanskrit literature, and the religious side of Lamaism by which students were chiefly attracted, while history was much neglected. Certainly, students of Tibetan did always notice the divergence of their calculations from those of Schmidt and Klaproth (also, as will be shown below, Dr. Huth, contrary to the opinion of M. Pelliot), but what did Schmidt and Klaproth know about Tibetan chronology? They never stated that Tibetan and Mongol year-reckoning agreed with each other, nor that their system of computation should hold good also for the Tibetan cycle. Nor is there reason to wonder that Lama Tsybikov converted correctly the cyclical dates given in the Tibetan text of Hor c'os byun edited by Huth; as a Mongol, he simply adopted the Russian mode in vogue of recalculating Mongol cyclical dates into the years of our era, but there is no visible proof forthcoming that he proceeded on the basis of an intelligent insight into the workings of Tibetan chronology, or on an understanding of the mutual relations of the two cycles. The result of a mathematical problem may often be guessed, or found by means of intuition or imagination; it is the demonstration on which everything depends.

(in Russian, Vol. II, 1, p. 107, Vladivostok, 1908), devotes a brief chapter to time-reckoning, and (invoking Rockhill) states as a fact (p. 108) that the first year of the first Tibetan cycle of sixty years appears in Tibet as late as the year 1026, so that the year 1908 appears as 43rd year of the 15th cycle. 1) It is certainly easy to talk about Bu-ston, and to refer the reader to his "Histoire de la religion f. 23 et suiv. de l'édition xylographe tibétaine (Lhasa)" without giving any chronological and bibliographical references, as M. Th. DE STCHERBATSKOI does. 2) The "wrong" dates which are made after a "system" are then still better than such a blank.

M. Pelliot passes on from Csoma to Huc, Koeppen and Schlagintweit. At this point M. Pelliot does not seem to me to do full justice to the facts in his attempt to trace the history of the case. If the history of this error must be written (and the history of an error is also a contribution to truth and one capable of preventing similar errors in the future), equal justice should be dealt out to all with equal measure. The propagator of Csoma's ideas in Europe was M. Ph. Éd. Foucaux (1811—1894) who published his "Grammaire de la langue tibétaine" in 1858 at a time when he was "professeur de langue tibétaine à l'École Impériale des Langues Orientales". Foucaux was decidedly a superior man, of keen intelligence, of bright and fertile ideas, occumanding a full mastery of Sanskrit and Tibetan; and whoever has worked through his edition and translation of the Tibetan version of the Lalitavistara, will cherish the memory of this hard and patient worker with a

Despite this wrong statement, 1906 is correctly identified with fire-horse, and 1907 with fire-sheep.

<sup>2)</sup> La littérature Yogacara d'après Bouston (Extrait du Muséon, Louvain, 1905).

<sup>3)</sup> One should peruse, for instance, his Discours prononcé à l'ouverture du cours de langue et de littérature tibétaine près à la Bibliothèque Royale, dated at the end Paris, 31 janvier 1842, the preface to his Spécimen du Gya-tcher-rol-pa (Paris, 1841), and the introduction to the translation of Lalitavistara (Paris, 1848). The present writer is proud of owning a copy of the latter work dedicated by Foucaux with his own hand to Jäschke.

profound feeling of reverence and admiration. His grammar, though based on the researches of Csoma, is an original work revealing the independent thinker on almost every page and, up to the present time, is the most useful book for the study of the Tibetan literary language. 1) In fact, every student of Tibetan has made his juvenile start from this book which always enjoyed the highest authority in our academic instruction. Now while Foucaux in this work has carefully considered and sifted all statements and opinions of Csoma, he has embodied in it, without a word of criticism or any re-examination, Csoma's "manière de compter le temps" (p. 146) in its whole range; in particular, he has authorized and sanctioned "le commencement du premier cycle à partir de l'an 1026 de l'ère chrétienne" (p. 148). This step was decisive for the further development of this matter in European science; M. Foucaux had impressed on it the seal of his high academic authority, and since this legalization, the error has been raised into the rank of a dogma and believed to be a fact.

The correctness of this point of view of the matter is corroborated by two facts, — first by a long successive line of illustrious scholars in France following in the trail of Foucaux and all unreservedly accepting his teaching in matters of Tibetan chronology up to recent times (even after the rectification of Father Desgodins), and second by the fact that it was from France that the germ of the error was carried to America. For our great authority on subjects Tibetan, Mr. W. W. Rockhill, was a student of Tibetan under M. Foucaux, and in his fundamental work "Notes on the Ethnology of Tibet" (Report U. S. Nat. Mus. for 1893, p. 721, Washington, 1895) stated: "The first year of the first cycle of sixty years is

The same judgment was pronounced by the writer in 1900 (W.Z.K.M., Vol. XII, p. 297). — The Manuel de tibétain classique of Dr. P. Cordier announced for some time is expected with great interest.

A.D. 1026, consequently 1894 is the twenty-ninth year of the fifteenth cycle, or the 'Wood Horse' (shing ta) year of the fifteenth cycle'. Here, the year 1026 is plainly laid down as a fact 1). The further remark of Mr. Rockhill shows where the root of the evil really lay, for his indication of the year 1894 as being a wood-horse year is perfectly correct and in harmony with the table drawn up by M. Pelliot's). If Mr. Rockhill had had M. Pelliot's table at his disposal at the time when he wrote that paragraph, he would have doubtless noticed that, if the year 1894 was a wood-horse year, the

<sup>1)</sup> Our case is well illustrative of how detrimental to science dogmatism and dogmatic statements are. If Foucaux and Rockhill would have expressed themselves to the effect that "the first year of the first cycle, in the calculation of Csoma, is the year 1026", their statements would be formally correct, while the positive form of their sentences proves them to be in silent agreement with Csoma and makes them share in the responsibility for his material error.

<sup>2)</sup> Where personal inquiry among Tibetans was possible, correct cycle dates have usually been given in recent years. Jäschke (Dictionary, p. 552) correctly says that 1874 was a dog year (but on the same page gives impossible identifications for wood-dog, woodpig, fire-rat and fire-ox years), and CHANDRA DAS (Dictionary, p. 1221) has it correctly that the year 1903 is called c'u yos lo, water-hare year. In Schlagintweit's and Rockhill's joined communication to the Dalai Lama translated into Tibetan under the auspices of Chandra Das, the year 1901 is justly rendered iron-ox (E. Schlagintweit, Bericht über eine Adresse an den Dalai Lama in Lhasa, Abhandlungen der bayerischen Akademie, 1904, p. 666, and plate). In the edition by Chandra Das of the Tibetan prose version of Avadānakalpalatā (dPag bsam ak'ri šini, Bibl. ind.) the year iron-tiger indicated on the Tibetan title-page adequately corresponds to the year 1890 on the English title-page. A good authentic example is furnished by the convention between Great Britain and Tibet signed at Lhasa "this 7th day of September in the year of our Lord 1904, corresponding with the Tibetan date, the 27th day of the seventh month of the Wood-Dragon year" (Parliamentary Blue-books: Further Papers relating to Tibet, No III, p. 271). VIDYāBHUŞAŅA (A Tibetan Almanac for 1906-1907, J. A. S. B., N. S., Vol. II, 1906, p. 455) noted from the very title of this almanac that the year 1906 was fire-horse, and from another one for 1903 that that year was water-hare; nevertheless in his other publications (for example, Gyantse Rock Inscription, ibid., p. 95) he adhered to the chronology of Csoma. A recent publication of the same scholar, an edition of the seventh chapter of Mi-la-ras-pa's life (Darjeeling, 1912) bears on the Tibetan title-page the year water-rat. A new confusion was caused by G. Sandberg (Hand-book of Colloquial Tibetan, p. 159, Calcutta, 1894) who allowed "the cycle now in progress in Tibet to commence in the year 1863", and then gives a wrong table of years running from 1893 to 1906.

Farther above on the same page, M. Specht explains that this period begins in 622 A.D., and that it is perhaps the era of the hegira which the Tibetans adopted, "nous ne savons pas au juste à quelle époque" 1). The date "1355 à 1417 environ" given for the lifetime of bTson-k'a-pa by M. S. Lévi in his excellent work "Le Népal" (Vol. I, p. 169, Paris, 1905) testifies to the fact that also M. Lévi, following the traditions of Foucaux and Feer, sided with the computations of Csoma. Also M. L. DE MILLOUÉ (Bod-youl ou Tibet, p. 185, Annales du Musée Guimet, Vol. XII, 1906) accepts the date 1355 for the birth of bTson-k'a-pa, but on p. 188 sets the date of his death at 1417 or 1419 2) (as he states that the

<sup>1)</sup> Thus, M. Specht pinned his faith on the year 1025, in order to arrive at the year 622, the date of the hegira; but the calculation is wrong. True it is that the Tibetans are acquainted with the Mohammedan era; six practical examples of this kind are found in two Tibetan documents drafted at Tashilhunpo (bKra-šis lhun-po) in 1781 and translated in the appendix to S. Turner, Account of an Embassy to the Court of the Teshoo Lama (p. 449, London, 1800). True it is further that the Arabs (Ma-k'ai kla-klo, the Mleccha of Mecca) play an extensive rôle in the Tibetan speculations on chronology beginning with the Külacakra system (see for the present E. Schlagintweit, Die Berechnung der Lehre, Abhandlungen der bayerischen Akademie, 1896, chiefly pp. 594, 609). The period me k'a rgya-mts'o mentioned by Specht, as the very name implies, is a period of 403 years which, if subtracted from 1027 leads to the year 624 (according to Schlagintweit 623), which according to Tibetan tradition was a wood-monkey year.

<sup>2)</sup> This doubling of years shows the influence of Schlagintweit's "improved" system of chronology (compare Pelliot, pp. 647, 648). - The date of bTson-k'a-pa's life-time has had many varying fortunes. RHYS DAVIDS (Encl. Brit., Vol. XVI, p. 99) adopted Klaproth's date 1357-1419; Yule (article Lhasa, ibid., p. 530), however, dated him 1365-1418, again in his edition of Marco Polo (Vol. I, p. 315) 1357-1419. It would, of course, be preposterous to infer that those adopting the date of Klaproth were actuated by a deep insight into the matter. It is an entirely different question whether the date 1357-1419 is really correct. W. F. MAYERS (The Chinese Government, 3rd ed., pp. 106, 107) set the date of bTson-k'a-pa from 1417 to 1478, and in his essay Illustrations of the Lamaist System in Tibet (J. R. A. S., 1868, p. 303) where also Koeppen is quoted in the case more specifically referred to the Shéng wu ki 聖武記 (by Wei Yüan 魏源, 1842) as his source, without deciding the question of the striking diversity of the Tibetan and Chinese dates. It is evident that Hilarion, who likewise gives 1417 as the year of the birth of the reformer, drew from the same or a similar Chinese source, and that Koep-PEN'S (Die lamaische Hierarchie, p. 108) charge of confusion between the years of birth and death should be directed toward the latter, not toward Hilarion. The Shing wu ki, of

reformer died at the age of 63, he should have consistently assumed 1418). The remark in the foot-note that the date 1429 imparted by Sarat Chandra Das "paraît tardive" is proof for the fact that M. de Milloué, in like manner as the present writer, entertained serious doubts as to the correctness of the prevailing system of computation. For the rest also M. de Milloué could not get away from the firm grasp of traditional convention, and throughout acquiesced in the accepted dates. M. Bonin (Les royaumes des neiges, p. 273, Paris, 1911) derives from the tables of Csoma the date 1071 as that of the foundation of the monastery of Sa-skya.

M. Pelliot laments that Chandra Das does not give the cyclical determination for 1747, the alleged date of the chronological table Reu mig translated by him. The question of the date of this work cannot be decided at a blow, as it is devoid of a colophon, and the colophon is lacking for the reason that the Reu mig is not an independent work of Sum-pa mk'an-po but incorporated in his great historical work dPag bsam ljon bzan. For this reason I regret that M. Pelliot did not turn to the latter, as he evidently knows it from the edition of Chandra Das which, for the rest, is a very meritorious piece of work; M. Pelliot would have then discovered that the Reu mig is not contained in this edition (at least I cannot find there a trace of it), although the editor in the preface to the latter as well as in that of the former expressly assures us that dPag bsam ljon bzan contains the Reu mig. The date of the completion of the latter spontaneously results from the last date given in the list of dates, which is 1746 indicated by me stag, fire-tiger, and as dPag bsam ljon bzan was published in 1748 (earth-dragon), this year must hold good also for the publication of Reu mig. In restoring the dates of this work wrongly reduced by Chandra Das,

course, is a recent work and can hardly be looked upon as a pure source for the life of bTson-k'a-pa. Presumably, the Ming shi may contain the dates of his birth and death.

who simply acted under the hypnotizing influence of Csoma and Schlagintweit, M. Pelliot mainly insists on the dating of bTsonk'a-pa. It is somewhat surprising that as a sinologue he did not notice the fact that Reu mig is replete with data of Chinese history: the dates of the Yuan, Ming and Ts'ing emperors are all completely given and in perfect harmony with the well-known dates of the Chinese, if M. Pelliot's correct point of view in the identification of the Tibetan cycle is adopted, while according to the calculation of Chandra Das the dates are one year behind the Chinese. This argument is very forcible, for we clearly recognize that the cyclical determinations were really understood by the Tibetans in exact agreement with the Chinese (and accordingly with the indications of M. Pelliot) as early as the Yüan and Ming periods, while the practical examples pointed out by M. Pelliot all relate to the age of the Manchu dynasty. It is thus further obvious that the Tibetans entertained correct chronological notions of Chinese events, and this fact must influence our judgment favorably on behalf of their datings of contemporaneous Tibetan events; if the former group of dates is correct, there is a fair chance that the same will be true of the latter. Some examples may illustrate this. In Reu mig (p. 63 of the translation of Chandra Das) we read: "Yunglo became emperor of China 1402." We know from the exact chronology of the Chinese that Yung-lo ascended the throne in 1403. The Tibetan text of Reu mig runs thus: rgyai rgyal-sar gsum-pa Yon-loi c'os rgyal ak'od . . . . c'u lug, "the third (in the series of the emperors of the Ming dynasty), the king of the law (Skr. dharmarāja) Yun-lo was installed on the throne of China . . . . water-sheep." Consulting M. Pelliot's table we find that water-sheep fell indeed in 1403. On the same page of Chandra Das we read the following: "The second Min emperor Hun-wu tsha ascended the throne of China .... 1398," a sentence which must cause every sinologue to shake his head. Everybody knows that Hung-wu was the first Ming emperor and reigned 1368-99, and that the second Ming emperor was his grandson Huei-ti who succeeded to his grandfather in 1399. What Chandra Das takes for a proper name, means in fact "the grandson (ts'a = ts'a-bo) of Hung-wu". The text reads: rgya-nag ran-gi yig-ts'an rnin ltar-na gnis-pa Hun-wu ts'a rgyal-sar ak'od ... sa yos, "according to China's own ancient records, the second (emperor of the Ming dynasty), namely, the grandson of Hung-wu, was installed ... earth-hare", a determination coinciding with 1399. The words omitted in the rendering of Chandra Das are important, for they clearly show that Sum-pa mk'an-po availed himself of a Chinese source or sources in establishing the dates of Chinese occurrences 1). Of Mongol data, the

<sup>1)</sup> The romanizations of the names and Nien-hao of the Chinese emperors in Chandra Das are often inexact; he always neglects to indicate the Tibetan cerebral t (transcribed by him with a dental t) which is the equivalent of Chinese palatal č, - thus Tin-te = Chéng-té 正 德. Bsson-te on p. 65 rests on a misreading of his text which is lia-pa zon-te, the latter being equal to Süan-té. It is important to know the correct Tibetan transcriptions of Chinese Nien-hao and imperial names, especially those of the Yuan and Ming dynasties, as they are frequently made use of in Tibetan literature without any warning or any clear specification to the effect that they are so intended. Tibetan books, for example, printed in the monasteries of Sze-ch'uan and Kan-su at the time of the Ming dynasty, are usually dated in the colophon with the Chinese Nien-hao only, even without the addition of the convenient Ta Ming 大明. A Tibetan version of Jātakamālā printed in the monastery Tai-lun-šen in Sze-ch'uan is dated Zvon-te-i lo lna-pa t'un-mon lo, "fifth year of the period Suan-te (1430), the year t'un-mon (Skr. sadharana)." The latter is a year of the Indian Jovian cycle corresponding to the 44th year of the Tibetan, and the 47th year of the Chinese sexagenary cycle, and answering a metal (or iron)-dog year, and such was the year 1430. As regards the two inadvertences ascribed by M. Pelliot (p. 652, note 1) to Chandra Das in the translation of Reu-mig, the text (at least in Schiefner's copy before me) indeed says that the fourteenth Kulika ascended the throne in 1227 (me p'ag, fire-pig), and the Kulika succeeding in 1527 was indeed the seventeenth (bcu bdun-pa). M. Pelliot's emendations, therefore, hold good. The above omission is not the only one occurring in the translation of Chandra Das; there are others, too, noted by me, and perhaps others not yet noted. For all these reasons, and in view of the fundamental importance of Reu mig, the urgent demand must be made that the very text of this work should be critically edited. It is not long and will hardly occupy in print fifty pages of octavo size. Here is surely a worthy task for the Bibliotheca Buddhica of St. Petersburg.

death of Mangu (Tib. Mun-k'e) 1) in earth-sheep (sa lug) year = 1259, and the death of Kubilai (Tib. Se-c'en, not as Chandra Das writes, Sa-c'en) in fire-monkey (me sprel) year = 1296, may be pointed out.

But it can even be demonstrated that any Chinese dates of whatever period have correctly been reduced by the Tibetans to the years of their cycle. Take, for example, the early Chinese dates occurring in the epilogue to the Sūtra of the Forty-Two Articles translated from Chinese into Tibetan, Mongol and Manchu by order of Emperor K\*ien-lung in 1781 2). There we see on the same page in interlinear print the Chinese date "26th 3") year of King Chao of the Chou dynasty with the cyclical signs kia yin 甲寅"

Compare the interesting study of M. Pelliot, Mängü et Möngkä (\*Móńka) in Journal asiatique, Mars-Avril, 1913, pp. 451—459.

<sup>2)</sup> The edition referred to is the polyglot Peking print, the same as utilized by Huc and Feer. Compare L. Feer, Le Sutra en 42 articles traduit du tibétain, p. 45 (Paris, 1878). Feer has not converted the Chinese and Tibetan dates into their occidental equivalents.

<sup>3)</sup> The text has the error 24, adopted also by Feer, but the 24th year of Chao Wang is B. C. 1029 with the cyclical signs + F. The indication kia yin and the Tibetan conversion based on this plainly shows that B. C. 1027 is intended. The error, however, must be very old, for it occurs as early as in the rGyal rabs where the following is on record: "When the statues of the lord Cakya and of the sandalwood lord had reached the country of China, the annals of the dynasties in the great Chinese archives were opened with the intention of finding as to how the holy faith could be best diffused in the country. They discovered the fact that the former kings of China were the Chou dynasty which was coeval with King Yuddhishthira of India, that after four rulers King Chao Wang ascended the throne, and after twenty-four years of his reign, on the 8th day of the 4th month of the wood male tiger year (there is no agreement in the determination of the two years except that Buddha's lifetime appears as the same in both, but in that manner the date is given in the Chinese records) in the western region light, voices and many other wonderful signs arose which were interpreted by the astrologers of China on due calculation as indicating the birth of Bhagavat." This passage obviously shows that the Tibetans were smart enough to notice the deviation between the two years, which probably has its cause in a different calculation af Buddha's birth in China on the one hand and in Tibet on the other. The author of Grub-mt'a šel-kyi me-lon (compare J. A. S. B., Vol. XLI, 1882, p. 88) who narrates the same event as rGyal rabs correctly imparts the date "26th year of Chao Wang", but adds that some authors believe that it was the 24th year of his reign. In regard to the Chinese date of Buddha's birth see EITEL, Handbook of Chinese Buddhism, p. 136.

(corresponding to B. C. 1027) = Tibetan *Tiu Tou wang-gi lo ñer drug-pa šin p'o stag lo*, repeating the Chinese date and adding wood male tiger year, and such was B. C. 1027, the alleged date of Buddha's birth. Turning to the next page we find "Mu Wang 53d year £ #" 1) (B. C. 949) = Tibetan *Mu wan lo na gsum-pa c'u p'o sprel lo*, water male monkey year, and such was B.C. 949. The next date given "7th year Yung-p'ing of the Han" has no cyclical determination in the Tibetan rendering.

M. Pelliot deserves special thanks for indicating the means of restoring the correct dates in HUTH's translation of Hor c'os byun which is a mine of precious information. But it is not correct to say that Huth, as imputed to him by M. Pellior, has never observed the divergence of a year which he regularly established between his translation and that of Sanang Setsen by Schmidt. HUTH indeed was fully conscious of this discrepancy, as plainly shown by his remark (Z. D. M. G., Vol. XLIX, 1895, p. 281) that "Sanang Setsen (p. 53) states the year of the birth of Rinc'en bzan-po to be in the šim (wood)-dragon 2) year corresponding to 992, or as his chronology is ahead of one year (um ein Jahr voraneili), to the year 991 A.D." HUTH, quite consistently with the wrong chronology which he adopted from Schlagintweit, had formed the opinion that Sanang Setsen's system of computation was deficient by being in excess of one year. He who is acquainted with the opinions of Huth will not be surprised that in "Die Inschriften

<sup>1)</sup> The text has the misprint \( \mu \) \( \mu \) which would correspond to the 41st year of Mu Wang or B. C. 961 and to a metal (iron)-monkey year. The very context shows that \( \mu \) must be the correct reading.

<sup>2)</sup> This is certainly a gross misunderstanding of Sanang Setsen's word šim which does not mean "wood" but is a transcription of the Chinese cyclical character jen — (Tibetan transcription: žiń). The wood-dragon year would be 944 or 1004. Sanang Setsen understands the water-dragon year. A sudden flash of a wrong association of ideas must have crossed Dr. Huth's mind and led him to link Mongol šim with the Tibetan word šiň, "wood".

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von Tsaghan Baišin' he gives three correct identifications of cyclical years (Pellior, p. 697, note 2). These dates occur in a Mongol inscription, and from his point of view, Huth was perfectly logical in applying to it the Mongol system of calculation, presumably by availing himself of Kovalevski's table, while in his study of Tibetan works he utilized what he believed to be the Tibetan system 1).

In the face of all these authorities, what could the students of the present generation do? It is perfectly human that they should accept what they were taught in the classroom. Csoma, soon after his tragical death in the prime of life, was canonized and honored almost with the rites of an ancestral cult. The great Foucaux fully endorsed and upheld him in his chronology. Schlagintweit, by profession a jurist yet for the rest a good and honest man, was not a philologist but what is worse, a bad logician; it was certainly foolish to trust him for a moment. And then - GINZEL entered the arena. Well known is the witty saying of King Ludwig II of Bavaria, "a painter must be able also to paint". And we should justly expect that "a permanent member of the Royal Prussian Institute for Astronomical Calculation" should be able also to calculate. Csoma was not an astronomer and chronologist, but a scientist, about to issue an authoritative handbook on chronology as a safe guide to the historian, plainly had as such the duty of recalculating his precursor's computations and rendering to himself

<sup>1)</sup> There is no reason to assume with M. Pelliot (p. 656) that aJigs-med nam-mk'a, the author of Hor c'os byun, was a Mongol writing in Tibetan. He was a Tibetan by birth, born in a place near the monastery bla-bran bKra-šis ak'yil (Huth, p. 357) in the province of Amdo (political territory of the Chinese province of Kan-su), and after completion of his studies, was called into Mongolia as preacher; later on, he was appointed at Yung ho kung in Peking and at Dalainor (La-ma miao).

and to his readers an account of what the real foundation of this system is. Ginzel's book, with its sanctification of the year 1026, denotes the climax in the singular history of this comedy of errors, and by virtue of its highly authoritative character, indeed proved fatal. The higher must be estimated the merit of M. Pelliot who ultimately possessed enough pluck and wit to point to the very seat of the evil, and to eradicate it with a skilful operation.

I do not wish to be misunderstood. I merely intended on the preceding pages to contribute objectively and historically to the understanding of the development and diffusion of the error in question, as the matter now presents itself to one who for fifteen years has gathered documentary material for writing a history of Tibetan philology. I did not mean, however, to write an apology, or to whitewash anybody entangled in the case, - and least of all myself. Errors are errors, and no matter whether they are small or great, there is no excuse for them, and for myself I can only say stultum me fatuor. The importance of the present case must by no means be underrated. An outsider may easily jump at the conclusion that it makes little difference whether the date of a Tibetan book is accepted as 1818 or 1819. As a matter of principle, it makes a great difference which, if not in that example, yet in many others, may be of grave consequence. Above all it is the total assembly of wrong dates which is distressing, - distressing because it has bred the germs of reflections and conclusions which now turn out to be wholly imaginary, - conclusions which were inherited through three generations. We labored under the belief that the application of the Tibetan cycle differed from that of the Mongols and Chinese, a difference poorly enough explained, and

this alleged diversity certainly gave rise to reflections on the trust-worthiness of Tibetan history. We were ridden by a veritable night-mare which rendered our lives miserable, we were haunted by a fox-spirit which has now been felicitously exorcised by the new Chang Tien-shi. The path is free, the fox has fled, and with a feeling of relief and encouragement we may hope to cope anew with the fascinating problems of the history of Tibet.

In regard to the origin of the Tibetan cycle M. Pelliot entertains some notions to which I am not ready to subscribe. "C'est de ce cycle chinois que le système tibétain par éléments et animaux s'est, de toute évidence, inspiré" (p. 660). This opinion is suggested by the manifest consonance of the two systems, but it is not supported by M. Pellior with any evidence derived from a Chinese or a Tibetan source. On the contrary, all evidence, as far as we know it, speaks against the opinion that the Tibetan cycle is inspired by that of China. Before presenting this evidence, it is justifiable to raise the question, - why, if the Tibetan cycle owes its impetus to China, does it appear so late as 1027, why does it not make its début in Tibet during the Tang epoch when this cycle was perfectly known in China, and when both countries were in close mutual relations? There is no trace of the application of this cycle in the Tibefan inscriptions of the Tang period nor in the colophons of the Kanjur and Tanjur. The only date thus far revealed

<sup>1)</sup> The future historian of science will assuredly remain mindful of the word of Maurice Maeterlinck (Le temple enseveli) that in each error of the past to which we clung tenaciously is usually hidden an excellent truth awaiting its hour of birth. All superstition is ancient science, and all science is modern superstition. Progress advances in zigzags, and error is a potent and necessary factor in the struggle for truth. The man who yielded to his successors the opportunity of revealing an error was also a combatant for the good cause.

in the colophon of a treatise of the Tanjur is worded in a Nepalese era. 1) All the Tibetan historical works, as far as we know them at present, were composed after 1027, and the cyclical dates which we encounter there for the earlier periods certainly are the result of subsequent recalculations.2) The Genealogy of Tibetan Kings (rGyal rabs, written 1328, not 1327, as formerly stated) has it that King Sron-btsan sgam-po received books on time-reckoning from China and Mi-nag, and if the T'ang shu (Bushell, The Early History of Tibet, p. 11) informs us that he invited learned scholars from China to compose his official reports to the emperor, this means to say that a Chinese chancery was attached to the government offices of Lhasa where naturally the system of Chinese Nienhao was employed, but apparently restricted to the official correspondence with China. Ecclesiastic literature marched along in its own way, and fed from the fountainhead of India drew its chronological inspiration from the same quarter. Buddha's Nirvāņa was made the basis of time calculation, and as there was no consensus

<sup>1)</sup> HUTH, Sitzungsberichte der preussischen Akademie, 1895, pp. 276, 282.

<sup>2)</sup> But they are most certainly not the outcome of "the imagination of the historians", as intimated by A. H. FRANCKE (Anthropos, Vol. VII, 1912, p. 264) whose remarks on the chronological question, in my opinion, are not at all to the point. The fact that "the dates in the sexagenary cycle do not come down from the first centuries of Tibetan historiography but from much later times" is as well known to me as to Mr. Francke. The contradictory dates given by the various Tibetan authors for events of earlier history have nothing whatever to do with the sexagenary cycle but have entirely different reasons. After the introduction of the sexagenary cycle in 1027 it was as easy as anything to recalculate any earlier dates, in whatever form they may have been handed down, on the basis of the new system, and as plainly proved by all facts, the Tibetans made these recalculations to perfect satisfaction. The hasty conclusion of Mr. Francke that "the dates occurring in the bTsun-mo bka-t'an refer to the thirteenth [why the thirteenth, and not the eleventh?] century, and not to the eighth or ninth century" is entirely unwarranted. The dates most obviously relate to the time for which they are intended, and have been made by a simple process of correct arithmetical calculation. The imagination, in this case, is not on the part of the Tibetans but exclusively in the mind of Mr. Francke.

on this date, several theories being expounded, different computations of events are met with among Tibetan authors according to the standpoint which they took in that question. The great change came about when in 1027 the Kalacakra system was introduced. In that year the Kalacakra was translated into Tibetan by Ni-ma ak'or-gyi Jo-bo ('the Lord of the Disk of the Sun'); in the next year, 1028, the great commentary to the Kalacakra was translated into Tibetan by Gyi Jo.1) Now we know that 1027 is the first year of the sexagenary cycle, and the coincidence of this event with the introduction of the Kalacakra doctrine is not accidental. Indeed, Kalacakra, "the wheel of time," as already intimated by me in Toung Pao, 1907, p. 403, is nothing but a designation of the sexagenary cycle, and the vast literature on Kalacakra is filled with expositions of this system. As correctly stated by Csoma (J. A. S. B., Vol. II, 1833, p. 57), the Kalacakra was developed in the country of Sambhala,2) introduced into central India in the latter half of the tenth century, and then by way of Kashmir into Tibet. I do not wish to take up again the discussion of the location of Sambhala, which is to be sought in Central Asia. Divested of the later legendary accounts, that country is not at all so fabulous, and viewed in the light of the recent discoveries it is easily disclosed as a country where Iranian and Turkish Buddhism flour-

According to Reu mig in Schiefner's copy. Chandra Das attributes the former translation also to Gyi Jo; I am unable to say whether this is contained in the text from which he translated.

<sup>2)</sup> M. Pelliot (p. 652, note 1), on what authority is not known to me, writes the name Zambhala. The Kalacakra texts embodied in the Tanjur (Palace edition) as well as the extensive later literature on the subject by Tibetan authors throughout follow the spelling Sambhala, and so do Csoma, Jäschke, Desgodins, Chandra Das, and the Petersburg Sanskrit Dictionary. The Tibetan gloss bde byuñ shows that the name was connected with Skr. cambhu.

ished. According to Tibetan tradition, the sexagenary cycle formed by means of the Twelve Animals penetrated into Tibet from a region of Central Asia, not from China. This is all that can be said for the present. The fundamental texts on Kālacakra which are of intense interest must be translated in extenso to reveal to us this chapter of history in detail; giving only a few extracts, though I could, seems to me to be of little avail. Better progress in the study of Central Asia would have been made if the suggestion made by me six years ago (l. c., p. 407) had been carried out, for that literature contains the key to the understanding of many problems which now confront us in this new field. But workers in this line are few, and men possessed of the courage of initiative are rare. So we have to wait.

An important observation made by Mr. ROCKHILL (J. R. A. S.,

<sup>1)</sup> A distinction must be made between the mere knowledge of the series of the Twelve Animals and its utilization for chronological purposes. There are indications that the series of the Twelve Animals was known in Tibet before the year 1027, as shown by the symbolical interpretation of it in the legends of Padmasambhava (T'oung Pao, 1907, p. 400) and in other ancient writings centering around this personage. — Another side of this question is presented by the iconography of the Twelve Animals in Tibet and China which I hope to discuss on another occasion when the necessary illustrative material can be published. It seems to me that the iconographic representation of the Twelve Animals, as figured in the Tibetan works of chronology, is entirely distinct from that of China and decidedly points to another source.

<sup>2)</sup> The study of these texts will place on a solid basis our knowledge of Tibetan chronology which is now very scant. Then we may hope also to understand successfully the native works of chronology. Schlagintweit (Die Berechnung der Lehre, l.c.) has made a remarkable beginning along this line by editing and translating the work of Sureçamatibhadra of 1592. Though the translation is not entirely satisfactory, he has accomplished a great deal in elucidating the difficult terminology of the text, and this work is doubtless the best that the author has left to us. A standard book on astrology and chronology has been printed in Peking under the title rTsis gžuń yań gsał sgron-me, containing numerous tables, calculations, and illustrations. The collected works (gsuń zbum) of the Lamas contain many treatises pertaining to this subject, even one dealing with Chinese chronology.

1891, p. 207, note 1)1) merits to be called to mind in this connection. "Tibet is the only dependency of China on which the imperial Chinese almanac has not been imposed as a proof of its vassalage. The Chinese almanac is sent from Peking on the first of the tenth month of each year to the various provinces and tributary states. See e.g. Peking Gazette, Nov. 19, 1887". A special edition of the calendar for the Mongols was yearly prepared, down to the end of the Manchu dynasty, by the Calendar Section, Shi hien k'o 時 憲 科, of the imperial Board of Astronomy in Peking and sent from Peking into Mongolia. The Tibetan calendar, however, was not made in Peking but in Lhasa. The privilege reserved by Tibet in this matter is a clear index of the fact that there is some kind of a difference between the Chinese and Tibetan calendars; if there were perfect agreement between the two, the request for, and the grant of, such a privilege would be baseless. The existence of a difference was the immediate cause of that privilege. Certainly, this difference does not lie in the application of the cyclical years where perfect harmony obtains. But it exists in the manner of counting the months and days. The Central-Asiatic origin of the Tibetan cycle accounts also for the fact briefly commented on by M. Pelliot (p. 661, note) that the Tibetan reckoning after months and days does not tally with the Chinese system. This fact, M. Pelliot could have easily ascertained from the Wei Tsang t'u shi (ROCKHILL'S translation, J. R. A. S., 1891, p. 207, or Klaproth's Description du Tubet, p. 57) where it is expressly recognized on the part of a Chinese writer that the intercalation of months as well as days is different in Tibet from Chinese practice. For this reason, Tibetan and Chinese New Year do not necessarily fall on the same date, and Tibetan

<sup>1)</sup> See also his The Land of the Lamas, p. 241.

and Chinese datings of months and days cannot agree 1). Father A. Desgodins 2), again, had a correct estimation of this matter when he stated: "Ce que je sais de certain, c'est que tout leur système d'astronomie est emprunté du Turkestan ou heur [intended for the Tibetan word Hor], que les noms des jours de la semaine, ceux des diverses constellations et des figures du zodiaque, etc., sont ceux dont se servent les Turcs, et dont nous nous servons nousmêmes; c'est aussi d'après le comput du Turkestan que le calendrier est publié chaque année". In the same manner I had pointed out (l. c., p. 407) in opposition to Schlagintweit and Ginzel that the basis of the Tibetan calendar is neither Indian nor Chinese but Turkish. This fact is most clearly evidenced by the term Hor zla,

<sup>1)</sup> This may be illustrated by a practical example. In 1906 the Tibetan New Year fell on the 24th of February (Saturday), the Chinese New Year on the 23d of February (Friday). The following Tibetan dates of that year are taken from VIDYBBHUSANA's paper A Tibetan Almanac (J. A. S. B., Vol. II, 1906, p. 456) and given in comparison with the Chinese dates after Calendrier-annuaire pour 1906 published by the Observatoire de Zi-kawei. May 14, 1906 (Monday) = Tib. 21/III = Chin. 21/IV (this example plainly shows that the Tibetan day and month cannot be identified with the same in Chinese, for 21/III in China was April 14, Saturday); June 6 = Tib. 14/IV = Chin. 15/IV intercalary; June 28 = Tib. 6/V = Chin. 7/V; July 9 = Tib. 17/V = Chin. 18/V; July 30 = Tib. 9/VI = Chin. 10/VI; August 31 = Tib. 12/VII = Chin. 12/VII; September 23 = Tib. 5/VIII = Chin. 6/VIII; October 15 = Tib. 27/VIII = Chin. 28/VIII; October 26 = Tib. 9/IX = Chin, 9/IX; November 18 = Tib. 2/X = Chin, 3/X; December 12 = Tib. 26/X = Chin, 27/X; January 15, 1907 = Tib. 1/X1I = Chin. 2/XII; February 8 = Tib. 25/XII = Chin. 26/XII; on February 13, 1907 New Year tallied in Tibet and China, but again March 4, 1907 = Tib. 19/I = Chin. 20/I; April 7 = Tib. 24/II = Chin. 25/II, etc. M. Pelliot certainly is correct in saying that among all peoples who have adopted the hebdomad the same days of the week are in mutual correspondence; when it is Monday in Tibet, it is on the same day Monday in China and throughout the world, but this very same Monday is expressed by a different number in the lunar system of both countries. The tentative experiment of calculation made by M. Pelliot, accordingly, is illusory, for S/IV of waterdragon in Tibetan need not agree (and most probably will not agree) with 8/IV in Chinese of that year.

<sup>2)</sup> In the book published by his brother C. H. Desgodins, Le Thibet d'après la correspondance des missionnaires, 2nd ed., p. 369 (Paris, 1885).

"Turkish month" 1), advisedly used by the Tibetans with reference to their own months of Turkish origin in contradistinction to the Indian and Chinese months whose names are known to their scholars and those employed only in literature. The date of the completion of Grub-mt'a šel-kyi me-lon into which M. Pellior (p. 648) makes an inquiry is indicated in the colophon as the water-dog year of the thirteenth cycle (rab byun bcu gsum-pai c'u k'yi, consequently 1742), on the tenth day of the sixth Hor month. Sometimes three styles of a month are specified, thus in a work of the Fifth Dalai Lama written in 1658 the month is indicated 1. by the Sanskrit name Çravana corresponding to the Tibetan rendering bya sbo, 2. by the Chinese pi ts'a yol (yol = yüe 月), and 3. by the Tibetan way Hor zla bdun-pa, ,,the seventh Hor month" 2).

Those who desire to compute into our reckoning the day and month of a Tibetan date must therefore not fail to ascertain whether it is indicated in Chinese or Tibetan style. The rules to be observed are simple. Is the year expressed by a Nien-hao, month and day are naturally Chinese. For example, a Tibetan work dealing with the Sixteen Arhat, according to the colophon, was printed Tai Crin

<sup>1)</sup> The term Hor zla in this sense is already registered in Csoma's Dictionary of the Tibetan Language (p. 333). Klapsoth (in his edition of Della Penna's Breve notizia del regno del Thibet, p. 24, Paris 1834) remarks on this term: "Il ne peut être question ici des mois des Mongols, qui ont le même calendrier que les Tubétains, tandis que celui des Turcs, et des Mahométans en général, diffère du calendrier de ces derniers". The various meanings of the word Hor are well known (see T'oung Pao, 1907, p. 404) From an interesting passage in the Tibetan Geography of the Minčul Hutuktu (Vasilvev's translation, p. 32, St. Petersburg, 1895) it appears that the word is identified by the Tibetans with Chinese Hu Th; but whether it is really derived from the latter, is another question. At any rate, it is not an ethnic but a geographical term. Different from this word Hor vaguely denoting any peoples living in the north of Tibet is Hor as a tribal name of Tibetan tribes in the Tsaidam and in eastern Tibet.

<sup>2)</sup> See Z. D. M. G., Vol. LV, 1901, p. 124. The year is earth-dog, and as also M. Pelliot will admit, was correctly identified by me with the year 1658; this was facilitated by the addition of the cyclical signs wu zui = \(\infty\). The year is further given with the designation of the Indian Jovian cycle vilamba = Tib. rnam-ap'yan.

Yun-cen rgyal-po lo dgu zla-ba brgyad yar ts'es la, "in the first half of the 8th month of the ninth year of King Yung-chêng of the Great Ts'ing" (1731); on the margin of the page, the same is indicated in Chinese 大清雍正九年八月吉日<sup>1</sup>).

In the Lamaist inscriptions of Peking and Jehol the days, as a rule, are not given but only the months, the Tibetan dates appearing as translations from Chinese, the year of the animal cycle being added to the Chinese Nien-hao. In the great inscription of Yung ho kung (plates 2 and 3 in the forthcoming publication of the Lamaist Inscriptions by Franke and Laufer) Tib. dgun zla dainpoi yar ts'es-la, "in the first part of the first winter month", corresponds to Chin. 孟冬月之上常; ston zla abrin-poi ts'es-la= 仲秋月 (plates 30, 31, 42, 43); ston zla dain-poi ts'es bzain-por = 秋七月之吉 (plates 45, 47); dgun zla abrin-poi ts'es bzain-por = 冬十一月吉日 (plates 22, 23).

Is the year indicated only in the Jovian cycle, so also the month is given with the Sanskrit term. For example, a work on the worship of the Twenty-One Forms of the Goddess Tārā written by the Second Dalai Lama dGe-adan rgya-mts'o dpal bzan-po (1480—1542) is dated rna c'en-gyi lo snron-gyi zla-bai yar-noi ts'es brgyad-la, "on the 8th day in the first half of the month jyeshṭhā (5th month) of the year dundubhi". This year is the 56th year of the Tibetan (59th of the Chinese) cycle answering to water-dog which during the lifetime of the author fell in 1502. Jovian and animal cycle are often combined, day and hour being given in Indian style. The colophon of the biography of Buddha epitomized by Schiefner runs thus: dmar ser žes bya šin p'o stag-gi lo, smin drug-can-gyi

There is sometimes disagreement. A Mahayanasutra printed at Peking in the 8th year of Yung-chêng (1730) imparts in the Tibetan colophon "first part of the fourth month" (zla-ba bži-pa-la yar ts'es-la) where the corresponding date in Chinese offers "the 8th day of the 8th month".

zla-bai ñi-šu gñis, rgyal-ba lha-las byon-pai dus ts'igs-la, "in the hour when the Jina descended from Tushita heaven, on the 22nd day of the month kārttika" (the year has been discussed above p. 573).

Dates with the addition of month and day occasionally appear also in the recording of events of early history; thus, in rGyal rabs, mGar, the minister of King Sron-btsan sgam-po, set out on his mission to China "on the 8th day of the 4th month of the fire male monkey year" (636 A.D.) 1).

M. Pelliot points out that Tibetan chronology, in its principles, is very plain and easy. We do not doubt this for a moment. The principles of Tibetan grammar are still much easier, and yet they are violated every day by experienced Tibetan scholars in their work of translation. Theory and practice are antipodal, and whoever will dive into the study of Tibetan books on chronology and colophons with their often very complicated wordings of parallel dates in Sanskrit, Chinese and native styles, teeming with astrological determinations where the very terminology is still a mystery to us, will soon recognize that it is not exclusively aeroplanes in which it is hazardous to fly 2).

<sup>1)</sup> M. L. Aurousseau (B. E. F. E. O., 1910, p. 698) somewhat rashly accuses Mr. Rockhill, who on one occasion gave the date 635 for this mission of having confounded "la date de la demande en mariage (634) avec celle du mariage lui-même (641)". Mr. Rockhill is not guilty of any confusion in this case and is as familiar with the dates cited as M. Aurousseau who ought to have turned to his The Life of the Buddha, p. 213, where both dates are plainly given. The date 635 (to be converted into 636) which is entirely independent from the Chinese dates is simply that of Tibetan tradition. There are always many sides to every question.

<sup>2)</sup> To those who have the inclination to solve puzzles and can afford the time the following problem may be presented for solution. The Lha-ldan dkar e<sup>\*</sup>ag, a work of the Fifth Dalai Lama, according to the colophon, was composed in 1645 (sa skyoń-gi lo). The day is expressed in a double manner; first, it was the day of Chinese New Year, secondly it was in Tibetan \*sin byed dbań-po gžu k'yim-du he-bar spyod-pai p'yogs sňa-mai bzań-po dań-po | dbyańs ,i ac'ar-bai ts'es-la. What is the Tibetan day, and how does it compare with the Chinese day?

Additional Note. In regard to the employment of Nien-hao on the part of the Tibetans in the Tang period an example is given in Tang shu (ch. 216 F, p. 6) in the case of King Ko-li ko-tsu 可 契 可足 (= Tib. Kri glsug, usually styled Krilde sroil blsan) who reigned under the Chinese title Yi-tai 秦 (compare Busnell, The Early History of Tibet, p. 87, J. R. A. S., 1880). The Nien-hao Cheng-kuan 貞 觀 and King-lung 景龍 are utilized in the text of the Tibetan inscription of 783 published by Mr. Waddell (J. R. d. S., 1909, p. 932).

The fact that Šambhala was a real country is evidenced by the colophon to Kanjur No. 458 (I. J. Schmidt, Der Index des Kanjur, p. 69), a text "collated with a book from Šambhala in the north". The spelling Žambhala is adopted by Grünwedel (Mythologie des Buddhismus, pp. 41, 42, 58, 244), which is not authorized by any Tibetan text known to me; but in Die orientalischen Religionen, p. 161, Grünwedel writes correctly Šambhala. What is more important, Grünwedel concurs with me in the opinion that the calendar of Tibet is derived from Šambhala, and more specifically refers to Atīça as having introduced the present form of the calendar and time-reckoning based on sexagenary cycles (Mythologie, p. 58). Grünwedel is likewise correct in stating (p. 205) that "the saints practising the cult of the sun-chariot" in Šambhala point to Iranian conditions, and this chimes in with his view that the country of this name should be located on the Yaxartes. —

After the above was written, I received, through the courtesy of the Oriental Institute of Vladivostok, Part II of Lama Tsybikov's Lam-rim chen-po containing the Russian translation of the Mongol text published in Part I and with a very interesting introduction.

On p. XIII, Lama Tsybikov, in discussing the date of bTsoń-k'a-pa, alludes to the year 1027 as that of the first year of the first cycle.