

SINO-TIBETAN STUDIES

VOLUME II

BERTHOLD LAUFER



COLLECTED BY
HARTMUT WALRAVENS

PREFACED BY
LOKESH CHANDRA

SINO-TIBETAN STUDIES

Selected papers on the art, folklore, history, linguistics
and prehistory of sciences in China and Tibet

by

BERTHOLD LAUFER

Collected by HARTMUT WALRAVENS

Preface by LOKESH CHANDRA

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THE APPLICATION OF THE TIBETAN SEXAGENARY CYCLE

WITH REFERENCE TO

P. PELLIOU, *Le cycle sexagenaire dans la chronologie tibetaine*
(*Journal asiatique*, Mai-Juin, 1913, pp. 633—667)

BY

BERTHOLD LAUFER.



Ch'ang-an cannot have seen any brighter days than Paris when M. Pelliot, a second Hūan 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 atten-

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. DESGODINS of the *Missions Étrangères* 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.

1) 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, N° 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* (*rom ch'em*) being correctly added in a footnote; but then immediately follows the sentence: "The Tibetan reckoning commences from February, 1026".

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 DESGODINS, 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^{us} annus 1ⁱ cycli incoepit 1027 post X^{um})," secondly on p. 976 where it is said: "La 1^{re} année du 1^{er} 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. PELLIOU (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 Mañjuçrī, while all the others, the present writer among them, have been deluded by a temptation of Māra.

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 Taranātha 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 Taranātha" (translated by SCHIEFNER and published as a separate pamphlet, St. Petersburg, 1869). M. PELLIOU (p. 648 note) attributes the correct calculation of the year 1608 as the date of the composition of Taranātha 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 Taranātha's work, and (this is the salient point) the *wood-pig* year with our year 1575 as the date of Taranātha'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 Taranātha 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.

1) The work Kalpasuvṛkṣha 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 bzah* 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. HUTN, *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

1) 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 (dKjamuni's)* (St. Petersburg, 1849, p. 1) he has correctly reduced the date of the authorship of the work, *wood-tiger*, 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 *amar-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 Хрестоматия, 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 Klapproth 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"

1) 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 Klapproth 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 Klapproth (also, as will be shown below, Dr. Huth, contrary to the opinion of M. Pelliot), but what did Schmidt and Klapproth 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 SICHERBATSKOI does.²⁾ The "wrong" dates which are made after a "system" are then still better than such a blank.

M. PÉLLIOT passes on from Csoma to Huc, Koeppen and Schlagintweit. At this point M. PÉLLIOT 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,³⁾ commanding 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

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

2) *La littérature Yogācāra d'après Boustou* (Extrait du *Muséon*, Louvain, 1906).

3) One should peruse, for instance, his *Discours prononcé à l'ouverture de 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-tsher-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

1) 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 fact¹). 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. Pelliot²). 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

1) 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.

2) 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*, *wood-pig*, *fire-rat* and *fire-ox* years), and CHANDRA DAS (Dictionary, p. 1221) has it correctly that the year 1903 is called *c'u gos 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 žiri*, 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*, N° III, p. 271). VIDYĀBHUṢAḌA (*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.

first year of the first cycle could not have been 1026, but 1027. Thus, the fact crops out that such a table as now offered by M. Pelliot has never before existed in this form. The tables made up from the Chinese point of view do not contain the names of the animals, though, of course, it would have been easy to supply them¹⁾. The tables made up from the Mongol point of view, as, for example, accompanying the Mongol Chrestomathy of Kovalevski, were rejected by students of Tibetan, because the conviction gradually gained ground that there was a divergence in the application of the cycle between Mougols and Tibetans.

If M. Pelliot subjects the chronological table of Mr. WADDELL²⁾ to a critical analysis, it would have been a matter of justice to refer also to the table of historical dates appended by M. L. FÉER to his *opuscule de vulgarisation* which under the title "Le Tibet, le pays, le peuple, la religion" appeared in Paris (Maisonneuve), 1886. All dates there given (pp. 99, 100) down to 1650 are literally copied from Csoma, and even the year 1025 is retained as that of the first year of the cycle of sixty years. The fact that M. FÉER made this opinion his own is clearly proved by his statement in "La Grande Encyclopédie" (Vol. VII, p. 604) to the effect that "c'est de l'introduction parmi eux d'un des livres du Tantra, le Kâlatchakra que les Tibétains font dater le commencement de leur ère (en 1025 de la nôtre)". In this opinion he was fully joined by M. ED. SPECHT who in the same cyclopædia (Vol. XXXI, p. 63) states: "A cette époque (1025), les Tibétains adoptèrent le cycle de soixante ans". M. SPECHT evidently had an additional reason for this belief, for he adds immediately: "La période Mekha gya tsho finit en 1024".

1) A comparative view of the twelve Chinese "branches" and the twelve Tibetan animals has been given by KLAPROTH (*Description du Tibet*, p. 56, Paris, 1831).

2) In justice to Mr. Waddell it should be mentioned also that in his book *Lhasa and its Mysteries* (p. 450, London, 1906) he gives a correct table of the cycle from 1863 to 1927.

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

1) Thus, M. Specht pinned his faith on the year 1026, 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-ñis lhun-po) in 1751 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 Kālacakra 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.

2) 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. RHYE 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. MATERS (*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 KOEPPEN'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 *Shéng 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. PELLIOR 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 Soum-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 1746 (*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 bTeon-k'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 Yüan, 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*) Yün-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 Miñ emperor Huñ-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 riññ ltār-na gñis-pa Huñ-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'au-po availed himself of a Chinese source or sources in establishing the dates of Chinese occurrences¹). Of Mongol data, the

1) 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 Yüan 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-luñ-šen in Sze-ch'uan is dated *Zvon-te-i lo lia-pa t'un-moñ lo*, "fifth year of the period *Süan-té* (1430), the year *t'un-moñ* (Skr. *sādhāraṇa*)."
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. PELLIOU (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 Maugu (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 spral)* 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 1781²⁾. There we see on the same page in interlinear print the Chinese date "26th³⁾ year of King Chao of the Chou dynasty with the cyclical signs *kia yin* 甲寅"

1) Compare the interesting study of M. PELLLOT, *Mängü et Mönkä* (*Monks) in *Journal asiatique*, Mars-Avril, 1913, pp. 451—459.

2) 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.

3) 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 壬子. 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 Çakya 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 Yuddhishtira 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 of Buddha's birth in China on the one hand and in Tibet on the other. The author of *Grub-mt'a kel-kyi me-loñ* (compare *J. A. S. B.*, Vol. XLJ, 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 壬申" ¹⁾ (B. C. 949) = Tibetan *Mu wan lo ña 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. PÉLLIOT deserves special thanks for indicating the means of restoring the correct dates in HUTH's translation of *Hor c'os byuñ* which is a mine of precious information. But it is not correct to say that Huth, as imputed to him by M. PÉLLIOT, 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 Riuc'eu 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 voraneilt*), 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

1) The text has the misprint 庚申 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 壬 must be the correct reading.

2) 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 壬 (Tibetan transcription: *šin*). 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 *šin*, "wood".

von Tsaghan Baiših" he gives three correct identifications of cyclical years (PELLIOT, 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 system¹).

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

1) There is no reason to assume with M. PELLIOT (p. 656) that aJigs-med nam-mk'a, the author of *Hor c'os byuñ*, was a Mongol writing in Tibetan. He was a Tibetan by birth, born in a place near the monastery bla-bran bKra-šis aḡk'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 Dalainör (La-ma miao).

and to his readers an account of what the real foundation of this system is. Ginzels 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 trustworthiness of Tibetan history. We were ridden by a veritable nightmare which rendered our lives miserable, we were haunted by a fox-spirit which has now been felicitously exorcised by the new Chang T'ien-shi.¹⁾ 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. PÉLLIOT 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. PÉLLIOT 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 T'ang 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 Tibetan inscriptions of the T'ang period nor in the colophons of the Kanjur and Tanjur. The only date thus far revealed

1) 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 Nien-hao 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 Nirvāṇa was made the basis of time calculation, and as there was no consensus

1) HUTH, *Sitzungsberichte der preussischen Akademie*, 1895, pp. 276, 282.

2) 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 *ḅTsun-mo ḅka-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 Kālacakra system was introduced. In that year the Kalacakra was translated into Tibetan by Ñi-ma ṅk'or-gyi Jo-bo ('the Lord of the Disk of the Sun'); in the next year, 1028, the great commentary to the Kālacakra 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, Kālacakra, "the wheel of time," as already intimated by me in *T'oung 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 Kālacakra was developed in the country of Śambhala,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-

1) According to *Rev 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.

2) M. PELLLOT (p. 652, note 1), on what authority is not known to me, writes the name Śambhala. 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 *bdce byun'i* shows that the name was connected with Skr. *caṁḍāka*.

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.¹⁾ This is all that can be said for the present. The fundamental texts on Kalacakra which are of intense interest must be translated *in extenso* to reveal to us this chapter of history in detail;²⁾ 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.*,

1) 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.

2) 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. SCHLAGINTWERT (*Die Berechnung der Lehre, l. c.*) has made a remarkable beginning along this line by editing and translating the work of Sureçamati-tibhadra 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 gžwaŋ yaŋ gsal sgron-me*, containing numerous tables, calculations, and illustrations. The collected works (*gsun abum*) 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. PELLIOU (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 Tibet*, 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

1) See also his *The Land of the Lamas*, p. 241.

and Chinese datings of months and days cannot agree ¹). Father A. DESGOUINS 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 nous-mêmes; 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 sla*,

1) 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 VIDYASINGH'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-ka-wei. 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/XII = 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. PELLICOT 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. PELLICOT, accordingly, is illusory, for 8/IV of *water-dragon* in Tibetan need not agree (and most probably will not agree) with 8/IV in Chinese of that year.

2) In the book published by his brother C. H. DESGOUINS, *Le Tibet d'après la correspondance des missionnaires*, 2nd ed., p. 369 (Paris, 1886).

"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-loñ* into which M. PELLIOU (p. 648) makes an inquiry is indicated in the colophon as the *water-dog* year of the thirteenth cycle (*rab byuñ 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 Çravaṇa 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 C'in*

1) The term *Hor zla* in this sense is already registered in Csoma's *Dictionary of the Tibetan Language* (p. 333). KLAPROTH (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 Miačul Hutuktu (VASILJEV's translation, p. 32, St. Petersburg, 1896) it appears that the word is identified by the Tibetans with Chinese *Hu* 胡; 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.

2) 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 = 戊戌*. The year is further given with the designation of the Indian Jovian cycle *vilamba = 'tib. ram-sp'yaś*.

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 Kiug Yuug-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¹⁾.

In the Lamaist inscriptions of Peking and Jehol the days, as a rule, are not given but only the months, the Tibetau dates appearing as translations from Chinese, the year of the animal cycle being added to the Chinese Nieu-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 daii-poi yar ts'es-la*, "in the first part of the first winter month", corresponds to Chin. 孟冬月之上澣; *ston zla abrii-poi ts'es-la* = 仲秋月 (plates 30, 31, 42, 43); *ston zla daii-poi ts'es bzai-por* = 秋七月之吉 (plates 45, 47); *dgun zla abrii-poi ts'es bzai-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-ānun rgya-mts'o dpal bzai-po (1480—1542) is dated *rna c'en-gyi lo snron-gyi zla-bai yar-ñoi ts'es brgyad-la*, "on the 8th day in the first half of the month *jyeshthā* (5th month) of the year *dandubhi*". This year is the 56th year of the Tibetau (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 zes bya šii p'o stag-gi lo, smin drug-can-gyi*

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

zla-bai ñi-ñu 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 fly²).

1) 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. Arousseau 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.

2) To those who have the inclination to solve puzzles and can afford the time the following problem may be presented for solution. The *Lha-lwan dkar c'ag*, a work of the Fifth Dalai Lama, according to the colophon, was composed in 1645 (*sa skyon-gi lo*). The day is expressed in a double manner; first, it was the day of Chinese New Year, secondly it was in Tibetan *ñin byed dban-po gzu k'yim-du ñe-bar spyod-pai p'yogs sas-mai dzan-po dan-po | dbyans ,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 T'ang period an example is given in *T'ang shu* (ch. 216 F, p. 6) in the case of King *K'o-li k'o-tsu* 可黎可足 (= Tib. *K'ri gtsug*, usually styled *K'ri lde sroni blsan*) who reigned under the Chinese title *Yi-t'ai* 彝泰 (compare BUSHELL, *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. A. S.*, 1909, p. 932). —

The fact that Śambhala 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 Śambhala in the north". The spelling Śambhala 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 Sāmbhala. What is more important, Grünwedel concurs with me in the opinion that the calendar of Tibet is derived from Śambhala, and more specifically refers to Atiça 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 Śambhala 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 bTson-k'a-pa, alludes to the year 1027 as that of the first year of the first cycle.

MÉLANGES.



The Sexagenary Cycle Once More.

I have to apologize for having given in my notice (*T'oung Pao*, 1913, p. 569) wrong references on p. 594 to the plates in FRANKE and LAUFER (*Lamaistische Klosterinschriften aus Peking, Jehol und Si-ngan*). My references were based on a set of proofs sent to me at that time from Berlin; meanwhile, however, technical reasons demanded a rearrangement and renumbering of the plates. I therefore beg to enter the following corrections on p. 594 of the preceding volume: "plates 2 and 3" should read "plates 4 and 7;" "plates 30, 31, 42, 43" should read "plates 27, 28, 52, 53;" "plates 45, 47" should read "plates 48, 50;" and "plates 22, 23" should read "plates 24, 25."

I avail myself of this opportunity to add a few remarks to my previous notes. The attitude of Schiefner toward the application of the Tibetan sexagenary cycle seems to me to merit a renewed examination. In his translation of Tāranātha SCHIEFNER has made three independent chronological calculations based on the *Reu mig*, and all three turn out to be erroneous. He states (on p. vi) that Dol-bu šer rgyan was born in 1290 and died in 1353. Chandra Das in his translation of *Reu mig* (p. 57) gives the same year 1290 as the date of his birth, which is sufficient to show that 1291 is intended. Indeed, the cyclical date indicated in *Reu mig* is *c'u abrug* ("water dragon") and answers to the year 1291. The year 1353 is not only a formal, but a substantial error; the year intended is 1354, but in that year Dol-bu šer rgyan was fully alive: what the *Reu mig* states under this year is that the monastery Nām-riñ was repaired with his approbation. According to *Reu mig*, he died only in 1361 (Chandra Das: 1360). On p. vii Schiefner allows Kun-dga grol-mc'og to live from 1493 to 1566; in fact, however, he lived from 1495 to 1565 (Chandra Das: from 1494 to 1564). Neither this nor the previous date is found in Vasilyev's introduction to the Russian translation of Tāranātha; accordingly, we here have examples of Schiefner's own computations. On p. 60, note 2, Schiefner makes gZon-nu dpal from aGos die in 1480, and again agrees in this date with Chandra Das (p. 68); in fact, he died in 1481, the year being *lcags glañ* ("iron ox"). It is not Vasilyev who made this wrong calculation, for

Vasilyev in his translation (p. 65), while giving the same date, remarks that he adopted it from Schiefner, although he should have known better. These three cases settle the question definitely and show Schiefner's inability to convert Tibetan dates correctly. They further demonstrate that he applied not one but two (or even three) wrong methods (the case of 1493 for 1495 being identical with his wrong date 1573 for 1575 of Tāranātha's birth), and it is difficult to say by what principles he was guided. Thus, also, my previous impression that the correct computation of the years of Tāranātha's birth and History of Buddhism is solely due to Vasilyev is fully confirmed.¹

My statement in regard to Kanjur and Tanjur (p. 587) should have been made with the modification that cyclical dates do not appear in the colophons of the older translations, that is, those made prior to the year 1027. Many translations incorporated in the Tanjur having been made after this date, it is not only possible that such dates are employed in the colophons, but these, though rarely, do indeed occur. Thus, HUTH² has indicated a "female earth hog" year in the colophon of Tanjur, Sūtra, Vol. 123, No. 17; the cycle, however, not being determined, the date is beyond computation. In the seventy volumes of the Tanjur analyzed by P. Cordier no dates seem to be given. Different from the case mentioned is the reference to a "tiger" year in the colophon No. 11 of the same volume of the Tanjur.³ This case I had intentionally left out of consideration, because the plain "tiger" year is characteristic of a duodenary cycle, and the subject of my article was the sexagenary cycle only. The time for discussing the former is not yet ripe, but the discussion is bound to come in the near future when the Tibetan documents discovered by A. Stein on his last journey will be laid before us. A. H. FRANCKE⁴ has asserted that dates expressed in a duodenary cycle frequently appear in these, and quite recently repeats the same statement.⁵ But not a single example of such a date has as yet been given us. It remains to be seen when reproductions of the documents in question will be published.

In regard to the Tibetan reckoning of days and months I should have mentioned that M. JAMETEL⁶ had already ventilated this question by pointing to a comment of Wei Yüan in his *Shêng wu ki* and to a passage in a work styled by him *Chu êrh hai*.

B. LAUFER.

¹ Among the adherents of the old chronology not mentioned by M. Pelliot or me, there are also T. DE LACOUPERIE (*Beginnings of Writing*, p. 59, London, 1894, and *The Silver Coinage of Tibet in Numismatic Chronicle*, 1881, p. 346) and P. CORDIER who derived his dates from Chandra Das as established in his translation of *Reu mig* (*B. E. F. E. O.*, Vol. III, 1903, pp. 617, 627).

² *Sitzungsberichte der preussischen Akademie*, 1895, p. 274.

³ *L. c.*, p. 273.

⁴ *Antropos*, 1912, p. 264.

⁵ *J. R. A. S.*, 1914, p. 47.

⁶ In his article *Histoire de la pacification du Tibet* (*Revue de l'Extrême-Orient*, Vol. 1, 1882, p. 588, note).

BIRD DIVINATION AMONG THE TIBETANS

(NOTES ON DOCUMENT PELLIOT No. 3530, WITH A STUDY OF
TIBETAN PHONOLOGY OF THE NINTH CENTURY).

BY

BERTHOLD LAUFER.

*Et illud quidam etiam his notum, avium voces
volatusque interrogare.*

TACITUS, *Germania* X.

Among the Tibetan manuscripts discovered by M. Paul Pelliot there is a roll of strong paper (provisional number 3530 of the *Bibliothèque Nationale*) measuring 0.85×0.31 m and containing a table of divination. This document has recently been published and translated by M. J. BACOT.¹⁾ This gentleman has furnished proof of possessing a good knowledge of Tibetan in a former publication,²⁾ in which he gives a most useful list of 710 abbreviations occurring in the cursive style of writing (*dbu-med*) of the Tibetans, from a manuscript obtained by him on his journeys in eastern Tibet. It is gratifying to note that the tradition gloriously inaugurated in France by Abel-Rémusat, Burnouf and Foucaux, and worthily continued by L. Feer and S. Lévi, reincarnates itself in a young and fresh representative of the Tibetan field, who has enough

1) *La table des présages signifiés par l'éclair*. Texte tibétain, publié et traduit. . . (*Journal asiatique*, Mars-Avril, 1913, pp. 445—449, with one plate).

2) *L'écriture cursive tibétaine* (*ibid.*, Janvier-Février, 1912, pp. 1—78). M. BACOT is also the author of a pamphlet *L'art tibétain* (Châlon-sur-Saône, 1911), and of two interesting books of travel *Dans les marches tibétaines* (Paris, 1909) and *Le Tibet révolté* (Paris, 1912).

courage and initiative to attack original problems. It is likewise matter of congratulation to us that the wonderful discoveries of M. Pelliot will considerably enrich Tibetan research and reanimate with new life this woefully neglected science. The volumes of the ancient Kanjur edition discovered by him in the Cave of the Thousand Buddhas (*Ts'ien fu tung*) of Kan-su and dating at the latest from the tenth, and more probably even from the ninth century, together with many Tibetan book-rolls from the same place, ¹⁾ are materials bound to signal a new departure in the study of Tibetan philology, hitherto depending exclusively on the recent prints of the last centuries. We therefore feel justified in looking forward with great expectations to the elaboration of these important sources. The text published by M. BACOT is the first Tibetan document of the *Mission Pelliot* made accessible to science, and there is every reason to be grateful for this early publication and the pioneer work conscientiously performed by M. BACOT. It is a document of great interest, both from a philological and a religious point of view. The merit of M. BACOT in the editing and rendering of this text is considerable. First of all, he has honorably accomplished the difficult task of transcribing the cursive form of the original into the standard character (*dbu-can*), and, as far as can be judged by one who has not had the opportunity of viewing the original, generally in a convincing manner; he has recognized also some of the archaic forms of spelling, and correctly identified them with their modern equivalents; and above all, aside from minor details, he has made a correct translation of the divination table proper.

There are, however, two points of prime importance on which my opinion differs from the one expressed by M. BACOT. These points are the interpretation of the meaning of the Table, and the

1) Compare P. PELLIOU, *La mission Pelliot en Asie centrale*, pp. 25, 26 (*Annales de la société de géographie commerciale*, Fasc. 4, Hanoi, 1909) and *B. E. F. E. O.*, Vol. VIII, 1908, p. 507.

rendering of the introductory note prefacing the Table. In regard to the latter, M. BACOT is inclined to view it as a series of rebuses which seem to have the raven as their subject. He consequently takes every verse (the entire preface is composed of twenty-nine verses, each consisting of a dactyl and two trochees, — a metre peculiarly Tibetan and not based on any Sanskrit model) as a single unit; while in my opinion the verses are mutually connected, and their interrelation brings out a coherent account furnishing the explanation for the divination table. As indicated by the very title of his essay, M. BACOT regards the latter as a list of forebodings announced by lightning; and in column I of the Table worked up by him, we meet the translation *en cas d'éclair à l'est*, etc. The Tibetan equivalent for this rendering is *ñan zer na*, which literally means, "if there is evil speaking." No authority, native or foreign, is known to me which would justify the translation of this phrase by anything like "flash of lightning;" it simply means "to utter bad words," which may augur misfortune; hence *ñan*, as JÄSCHKE (*Dictionary*, p. 126) says, has the further meaning of "evil, imprecation." The phrase *ñan smras* is rendered in the dictionary *Zla-bai od-snañ* (fol. 29b, Peking, 1838) into Mongol *maghu kaläksän*. In the present case, the term *ñan zer* refers to the unpleasant and unlucky sounds of the voice of the crow or raven, which indeed, as expressly stated in the prefatory note, is the subject of divination in this Table. Moreover, the preface leaves no doubt as to who the recipient of the offerings is. It is plainly told there in Verse 8 (4 in the numbering of M. BACOT): *gtor-ma ni bya-la gtor*, "the offering is made to the bird," and this bird certainly is the raven (*p^co-rog*)¹) spoken of in Verse 1, again mentioned in Verse 17, their various tones being described in V. 25—29.

In this Table, it is, accordingly, the question only of the raven,

1) The differentiation of the Tibetan words for "raven" and "crow" is explained below, in the first note relating to the translation of the preface.

not of lightning; no word for lightning (*ylog* or *t'og*) occurs either in the Table or in the preface.¹⁾ The fact that this interpretation

1) It must be said, in opposition to M. BACOR's explanation, also that neither the Tibetans nor the Indians seem to have offerings to lightning, nor do I know that good or bad predictions are inferred in Tibet from the manner in which a flash of lightning strikes. M. BACOR assures us that analogous tables for divination from lightning are still in use in Tibet and Mongolia. It would be interesting to see such a table referred to by M. BACOR. In India, lightnings were classified according to color, a yellow lightning pointing to rain, a white one to famine, etc. (A. HILLEBRANDT, *Ritual-Litteratur. Vedische Opfer und Zauber*, p. 184, Straasburg, 1897). M. BLOOMFIELD (*The Atharvaveda*, p. 80, Straasburg, 1899) speaks of a "goddess lightning" who is conciliated by charms to cause her to spare the stores of grain; but then, again, he identifies the divine eagle with lightning. Among the Romans, the lightning-flash was a solicited portent of great significance, not, however, for the divination of the magistrates, but for certain priestly ceremonies of the augurs (HASTINGS, *Encyclopaedia of Religion*, Vol. IV, p. 823). — In regard to thunder, a series of omens regulated according to the quarters exists among the Mongols. P. S. PALLAS (*Sammlungen historischer Nachrichten über die mongolischen Völkerschaften*, Vol. II, p. 318, St. Petersburg, 1801) has extracted the following from a Mongol book styled by him *Jerrien-Gassool*: "When in the spring it thunders in the south, this is a good sign for every kind of cattle. When it thunders straight from an easterly direction, this signifies an inundation threatening the crops. When it thunders from the north, this is a good sign for all creatures. When it thunders in the north-west, this means much slush and wet weather in the spring; and, moreover, many new and strange reports will be heard throughout the world. When it thunders from the west very early, a very dry spring will follow. When it thunders early in the south-west, this means unclean diseases to men. When it thunders early in the south-east, locusts will destroy the grass." In regard to auguries, PALLAS states that the bird of augury among the Kalmuk is the whitish buzzard called *taaghan chuldu*; when it flies to the right of a tramping Kalmuk, he takes it to be a happy omen, thanking it with bows; when, however, it flies to his left, he turns his eyes away and dreads a disaster. They say that the right wing of this bird is directed by a *Burehan* or good spirit, the left one by an aerial demon, and nobody dares shoot this bird. According to Pallas, the flight of the eagle, the raven, and other birds, has no significance among the Kalmuk. The white owl is much noted by them, and looked upon as a felicitous bird. — Abou Bekr Abdesselam Ben Choaïb (*La divination par le tonnerre d'après le manuscrit marocain intitulé Er-Ra'adiya*, *Revue d'ethnographie et de sociologie*, 1913, pp. 90—99) translates a Moroccan manuscript (date not given) treating of divination from thunder-peals, according to their occurrence in the twelve months of the year. Also the Malays draw omens from thunder (W. W. SKELT, *Malay Magic*, p. 561) and lightning (p. 665). — The field of Tibetan divination and astrology is a subject as wide as ungrateful and unpleasant for research. It has been slightly touched upon in the general books on Tibetan Buddhism by E. SCHACHTWEIT and L. A. WADDELL. Some special contributions are by A. WEBER, *Ueber eine magische Gebetsformel aus Tibet* (*Sitzungsberichte der preussischen Akademie*, 1884, pp. 77—83, 1 plate), and WADDELL, *Some Ancient Indian Charms*

is to the point, will be especially gleaned from the text of the *Kākajariti* given below. The first column of M. BACOT's Table finds its explanation in the last clause of this text, where it is said: "When an omen causing fear is observed, a strewing oblation must be offered to the crow" (*ajigs-pai rtags mt'on-na, byu-roy-la gtor-ma dbul-bar byao*), and the flesh of the frog is the most essential of these offerings. The crow does not receive offerings in each and every case when an oracle is desired from its sounds, but only when it emits disastrous notes pointing to some calamity, and the object of the offering is the prevention of the threatening disaster. It is therefore logical to find in the first column of our Table, headed "the method of offerings," and indicating the kind of offerings for the nine (out of the ten) points of the compass, the conditional restriction *nian zer na*, for example, "when in the east (the crow) should utter unlucky sounds, milk must be offered," etc. The crow is believed to fly up in one of the nine points of the compass, and exactly the same situation is described in the beginning of the *Kākajariti*.

Among the offerings (*gtor-ma*, Skr. *bali*) enumerated in our Table, there are two distinctly revealing Indian influence, — the white mustard (Tib. *yuis-kar*, Skr. *sarshapa*), and *guggula*, itself a Sanskrit word.¹) The question must naturally be raised, Is this practice

from the Tibetan (*Journal Anthrop. Institute*, Vol. XXIV, 1895, pp. 41—44, 1 plate). The most common method of fortune-telling is practised by means of dice (*śo*) in connection with divinatory charts. Interesting remarks on this subject are found in the excellent works of STEWART CULIN, *Chinese Games with Dice and Dominoes* (*Report of U. S. Nat. Mus. for 1893*, p. 536, Washington, 1895), and *Chess and Playing-Cards* (*ibid.*, for 1896, pp. 821—822, Wash., 1898). Also this practice doubtless originates in India, and should be studied some day with reference to the Indian dice games and oracles (compare A. WEBER, *Ueber ein indisches Würfel-Orakel*, *Monatsberichte Berl. Ak.*, 1859; A. F. R. HOENLE, *The Bower Manuscript*, pp. 209, 210, 214; J. E. SCHRÖTER, *Pāçakakevali*, Ein indisches Würfelorakel, Borna, 1900; and chiefly H. LÜDERS, *Das Würfelspiel im alten Indien*, *Abhandl. der K. Ges. der Wiss. zu Göttingen*, Berlin, 1907). There are several Tibetan books treating especially of dice oracles (see also E. H. WALSH, *Tibetan Game of de śho*, *Proc. A. S. B.*, 1903, p. 129).

1) Also rice and flowers are Indian offerings, the same as occur likewise in Burma

of divination from the notes of a crow of indigenous Tibetan origin, or is it rather a loan; received from India? The Tibetan *Tanjur* contains

among the offerings to the Nat (L. VOSSON, *Nat-worship among the Burmese*, p. 4, reprint from *Journal American Folk-Lore*, 1891), and the whole series of offerings may confidently be stated to be derived from Indian practice. "After bathing, with hands circled by swaying bracelets, she herself gave to the birds an offering of curds and boiled rice placed in a silver cup; ... she greatly honored the directions of fortune-tellers; she frequented all the soothsayers learned in signs; she showed all respect to those who understood the omens of birds" (*The Kādambārī of Būṇa* translated by Miss C. M. RIDDING, p. 56, London, 1896). — M. BAOR accepts the rendering *bois d'aigle* for *guggula* (Tibetanised *gu-gul*) given in the Tibetan Dictionary of the French Missionaries. But this is not correct. *Guggula* or *guggulu* is not at all a wood but a gum resin obtained from a tree (*Boswellia serrata*, sometimes called the Indian Olibanum tree) and utilized as incense (W. ROXBOROUGH, *Flora Indica*, p. 365; G. WATT, *Dictionary of the Economic Products of India*, Vol. I, p. 515). In more recent times this name has been extended also to the produce of *Balsamodendron Mukul*, which became known to the Greeks under the name βδέλλα (thus in *Periplus*, ed. FABRICIUS, pp. 76, 78, 90), then Grecized βδέλλιον (first in DIOSCORIDES, Latinized *bdellium* in PLINY, *Nat. Hist.* XII, 9, 19, ed. MATHOFF, Vol. II, p. 388; compare LASSEN, *Indische Altertumskunde*, Vol. I, p. 290, and H. BRETZL, *Botanische Forschungen des Alexandersuges*, pp. 282–4, Leipzig, 1903) and to the Arabs under the word *moql* *جوس* (L. LECLERC, *Traité des simples*, Vol. III, p. 331, Paris, 1863, and J. LÖW, *Aramäische Pflanzennamen*, p. 359, Leipzig, 1881). The meaning 'bdellion' is exclusively given for *guggula* in the Sanskrit dictionaries of St. Petersburg; this, however, is not the original but merely a subsequent (and probably erroneous) application of the word, nor is the identity of *bdellion* with *guggula*, as established by J. JOLLY (*Medicin*, p. 18, *Grundriss d. indo-ar. Phil.*), correct. WATT says advisedly, "Care must be taken not to confuse this gum resin (*guggula*) with the olibanum or frankincense of commerce, or with *Mukul*. The true Sanskrit name for this plant is most probably *Sallaki*." The Sanskrit name which Watt has in mind is *çallakī* or *sillakī*, *Boswellia thurifera*, yielding frankincense which is called *silla* (Tib. *si-la*). The Greek words *bdella* and *bdellion* are derived from Hebrew *bdolah*, *bdolah*; but "what it was remains very doubtful" (YULE and BURNELL, *Hobson-Jobson*, pp. 76, 386). Regarding the Chinese names of *guggula* see PELLIOT, *T'oung Pao*, 1912, p. 480. In his study of the names of perfumes occurring in Chao Ju-kue, M. PELLIOT (*ibid.*, p. 474) alludes to the *Mahāvīryupatti* as one of the sources to be utilized for such research; I may be allowed to point out that the Sanskrit and Tibetan list of the thirteen names of perfumes contained in that dictionary was published by me in *Zeitschrift für Ethnologie*, 1896, *Verhandlungen*, p. 397, in connection with the Tibetan text and translation of the *Dhūpayogaratnamālā*; this certainly was *uno opere de jeunesse* on which I could now easily improve. The most important source for our purposes doubtless is the *Hiang p'u* 香譜 by Hung Ch'a 洪芻 of the Sung period, reprinted in *T'an; Sung ts'ung shu*. BRETSCHNEIDER (*Bot. Sin.*, pt. 1, No. 153) mentions a work of the same title, but from the hand of Ye T'ing-kuei 葉廷珪 of the Sung.

a small treatise under the title *Kākajariti* indicated by G. HUTU.¹⁾ The Indian method of divining from the calls of the crow is briefly expounded therein, and for this reason a literal translation of it may first be given. It will be recognized that the thoughts of this text move on the same line as the *document Pelliot*, and it will furnish to us the foundation for some further remarks on the latter. In order to facilitate immediate comparison of the two texts, I have numbered, in the Table published by M. BACOT, the series of the first vertical column with the Roman figures I—XI, and the nine series yielded by the nine quarters with the Arabic figures 1—9, so that by the combination of the two any of the ninety squares of the Table may be readily found. The references to the squares of this Table, placed in parentheses in the following text, indicate thought identity or analogy in the two documents.²⁾

Translation of *Kākajariti*.

'Tanjur, Section Sutra (*mdo*), Vol. 123, Fol. 221 (edition of Narthang).

1) *Sitzungsberichte der preussischen Akademie*, 1895, p. 275. HUTU refers to "Schiefner in Weber's *Indische Streifen* I 275," which I have never seen, and which is not accessible to me.

2) After my translation was made from the Narthang edition of the 'Tanjur, I found that A. SCHIEFNER (*Ueber ein indisches Krähenorakel, Mélanges asiatiques*, Vol. IV, St. Petersburg, 1863, pp. 1—14) had already edited and translated the same work. In collating my rendering with that of SCHIEFNER, it turned out that I differed from him in a number of points which are discussed in the footnotes. SCHIEFNER's text (apparently based on the Palace edition) and translation are generally good, though the mark is missed in several passages; I have to express my acknowledgment especially to his text edition, as my copy of the Narthang print, which is difficult to read, left several points obscure. On the other hand, whoever will take the trouble to check my version with that of my predecessor, will doubtless recognize the independence of my work. As the principal point in the present case is to reveal the inward connection between the *Kākajariti* and the *document Pelliot*, it was, at any rate, necessary to place a complete version of that text before the reader, and not everybody may have access to the publication in which SCHIEFNER's study is contained.

In Sanskrit: *Kākajariti* ("On the Sounds of the Crow").¹⁾

In Tibetan: *Bya-roq-gi skad brtag-par bya-ba* ("Examination of the Sounds of the Crow").

This matter is as follows. The crows are divided into four castes; namely, Brāhmaṇa, Kshatriya, Vaiçya, and Çūdra. A crow of intelligent mind²⁾ belongs to the Brāhmaṇa caste, a red-eyed

1) The Sanskrit title is thought by SCHIEFNER to be corrupt. He made two conjectures,—first, in a communication to Weber, by restoring the title into *kākarutani*, which he soon rejected; second, he accepted as foundation of the disfigured Sanskrit title the words *bya-roq-gi spyod-pa* occurring at the end of the treatise, which he took in the sense of *kūkacaritra* or °*carita*, and he assumed that this title may have arisen through a retranslation from Tibetan into Sanskrit, at a time when the Sanskrit original no longer existed. Again, on p. 14, he conjectures *spyod-pa* to be an error for *dpyod-pa* = Skr. *vicāraya*, "examination," and thus unconsciously contradicts his previous surmise on p. 1. I can see no valid reason for any of these conjectures. The final words taken for the title do not in fact represent it, but only refer to the third and last part of the treatise, which is plainly divided into three sections: 1. Omens obtained from a combination of orientation and the time divisions of the day; 2. Omens to be heeded by a traveller; 3. Omens obtained from the orientation of the crow's nest. The *spyod-pa* of the crows refers to the peculiar activity or behavior of the birds in building their nests. Besides, the title of the work is simply enough indicated in its Tibetan translation, "Examination of the Sounds (or Cries) of the Crow (or Crows)," and the restoration of the Sanskrit title should be attempted only on this basis. It is evident that it is defective, and that a word corresponding to Tib. *brtag-par bya-ba* is wanting, which, judging from analogies of titles in the Tanjur, it may be supposed, was *parīkṣā*. The word *jarati*, corresponding to Tib. *skad*, seems to be a derivation from the root *jar*, *jarate*, "to call, to invoke."

2) Tib. *žo-la rtsi-ba*. SCHIEFNER (p. 12) remarks on this passage which he renders *die in Karsha's rechnenden Brahmanen*: "The Tibetan text is not quite without blemish. Some passages of the original are wholly misunderstood; to these belongs the passage in question. I suspect a misunderstanding of *kārshya*, 'blackness.' As Weber observes, this supposition is confirmed by a classification of the Brahmins among the crows occurring elsewhere." This interpretation seems to me to be rather artificial; I think *žo* is a clerical error for *žo*, and take *žo-la rtsi-ba* in the sense of "to calculate in their minds." The crow is the object of divinatory calculation on the part of observing man, and the bird which, owing to its superior intelligence, easily adapts itself to this process, is considered to rank among the highest caste. The ability for calculation and divination is directly transferred to the bird. The division into castes is found also among the Nūga and the spirits called *ghan* (see SCHIEFNER, *Ueber das Bonpo-Sūtra*, *Mém. Acad. de St. Pé.*, Vol. XXVIII, N^o. 1, 1880, pp. 3, 26 *et passim*; *Mém. Soc. finno-ougrienne*, Vol. XI, 1898, p. 105; *Denkschriften Wiener Akademie*, Vol. XLVI, 1900, p. 31).

one to the Kshatriya caste, one flapping its wings to the Vaiçya caste, one shaped like a fish to the Çūdra caste, one subsisting on filthy food and craving for flesh belongs likewise to the latter.

The following holds good for the different kinds of tones emitted by the crow. The layman must pronounce the affair the truth of which he wishes to ascertain simultaneously with the flight of the crow).¹⁾

1. When in the first watch (*t'un dai-po la*),²⁾ in the east, a crow sounds its notes, the wishes of men will be fulfilled.

When in the south-east it sounds its notes, an enemy will approach (Table II, 9, and V, 2).³⁾

1) SCHIEFNER translates: „Die verschiedenen Arten ihres Geschreis sind folgende, (welche) der Hausherr einmal wahrgenommen verkünden muss.“ But this mode of rendering the passage does not do justice to the text (*k'yim-bdag-gis cig-car bden-par aggur-ba ni b'jud-par bya-ste*). Stress is laid on the phrase *cig-car*, alluding to the fact, which repeats itself in all systems of omens, that the wish must be uttered at the same moment when the phenomenon from which the oracle is taken occurs. SCHIEFNER overlooks the force of *bden par aggur-ba*, which is not *wahrgenommen*, but *was bewahrheitet werden soll*. Only he who seeks an oracle will naturally pay attention to the flight of the crow, and he must loudly proclaim his question, addressing the bird at the moment when it flies into the open.

2) SCHIEFNER takes the term *t'un* (Skr. *yāma*) in the sense of night-watch. This, in my opinion, is impossible. In this first section of the treatise, divination is detailed to five divisions of time, the fifth and last of which is designated as the sunset. Consequently the four preceding divisions must refer to the time of the day; both *t'un* and *yāma* apply to the day as well as to the night, and simply signify a certain length of time (usually identified with a period of three hours in our mode of reckoning) of the twenty-four hour day. The five watches named in our text would accordingly yield an average term of fifteen hours, the usual length of a day in India. It is also natural to watch crows in the daytime, and not at night, when, like others of their kind, they are asleep in their nests. The same division of the day into five parts, probably derived from India, exists also in Java (RAFFLES, *A History of Java*, Vol. I, p. 530, London, 1830).

3) The crow's prophecy of war is linked with the rapacious and bellicose character of the bird. This notion appears as early as in the Assyrian inscriptions of Sennacherib, where we meet such comparisons as “like the coming of many ravens swiftly moving over the country to do him harm,” and “like an invasion of many ravens on the face of the country forcibly they came to make battle” (F. DELITZSCH, *Assyrische Thiernamen*, p. 102, Leipzig, 1874; and W. HOUGHTON, *The Birds of the Assyrian Monuments*, *Trans. Soc. Bibl. Arch.*, Vol. VIII, 1884, p. 80). In Teutonic divination, the raven believed to possess wisdom and knowledge of events was especially connected with battle: should one be heard thrice screaming on the roof, it boded death to warriors; while the appearance of ravens

When in the south, etc., a friend will visit (Table VIII, 6; X, 3).

When in the south-west, etc., unexpected profit will accrue.

When in the west, etc., a great wind will rise (Table V, 4).

When in the north-west, etc., a stranger (guest) will appear. ¹⁾

When in the north, etc., property scattered here and there (*nor gtor-ba*) will be found (Table X, 2).

When in the north-east, etc., a woman will come (Table VII, 8; IX, 5).

When in the abode of Brahma (zenith), ²⁾ etc., a demon will

following a host or a single warrior would bring good luck in battle (HASTINGS, *Encyclopaedia of Religion*, Vol. IV, p. 827).

1) In southern India, if a crow keeps on cawing incessantly in a house, it is believed to foretell the coming of a guest. The belief is so strong, that some women prepare more food than is required for the household (E. THURSTON, *Ethnographic Notes in Southern India*, p. 276, Madras, 1906). Among the Pārāi (J. J. MODI, *Omens among the Parsees*, in his *Anthropological Papers*, p. 4, Bombay, no year) the cawing of a crow portends good as well as evil. A peculiar sound called "a full noise" portends good. Such a noise is also considered to foretell the arrival of a guest or the receipt of a letter from a relative in some distant country. If a good event occurs after the peculiar cawing which portends good, they present some sweets to a crow. Another peculiar kind of cawing, especially that of the *kūgrī*, the female crow, portends some evil. A crow making such a peculiar noise is generally driven away with the remark, "Go away, bring some good news!"

2) The four cardinal points (*p'yogs bzi*) are expressed by the common words *šar*, *thu*, *nub*, *byañ*. The four intermediate points are designated *me* ("fire"), south-east; *bden bral*, south-west; *riñi* ("wind"), north-west; and *dbari-lan*, north-east. These names are derived from those of the Ten Guardians of the World (see *Mañāvyaṅgīpatti*, ed. of MINAYEV and MINONOV, p. 102; ed. of CsOMA and ROSS, pt. 1, p. 57). The ninth point, Brāhmi, is there rendered by *steñ-gi p'yogs*, the direction above, which is expressed in our text by *Ts'ani-pai gnas*, the place of Brahma. In the Table published by M. BACOT (II, 9) the term *nam-ka* (= *k'a*, *mk'a*) *ldiñ* is used in lieu of that one; this means literally "floating or soaring in the sky" (it occurs as a frequent name of the Garuḍa), and here "soaring in straight direction toward the sky," that is, the zenith. It will thus be seen that the nine points of the compass (out of the typical ten, *daçadik*, which were assumed), as enumerated in the above text, are the same and occur in the same succession, as in M. BACOT's Table. The tenth point, naturally, is here out of the question, as crows cannot fly up in the nadir of a person. In the introductory to M. Pelliot's roll the fact of nine cardinal points is distinctly alluded to in two verses (6 and 24), and M. BACOT, quite correctly, has recognized there the eight quarters, making nine with the zenith. — The connection of crow auguries with the cardinal points may have arisen from the very ancient observation

come (Table X, 1).¹)

End of the cycle of the first watch.

II. When in the second watch (*t'un gñis-pa-la*), in the east, a crow sounds its notes, near relatives will come (Table VI, 4).²)

of the crow's sense of locality, and its utilization in discovering land. Indian navigators kept birds on board ship for the purpose of despatching them in search of land. In the *Bīḍaru-Jātaka* (No. 839 of the series) it is a crow, in the *Kevaddhasutta* (in *Dighanikāya*) it is a "land-spying bird." J. MINAYEV (*Mélanges asiatiques*, Vol. VI, 1872, p. 597), who was the first to edit the former text, explained the word for the crow *disākūka*, as it occurs there, as possibly meaning "a crow serving to direct navigators in the four quarters" (while the opinion of WEBER, added by him, that it might be an ordinary crow, as it occurs in all quarters, — seems forced). In my opinion, MINAYEV is correct: *disākūka* is the crow, whose flight is affiliated with the quarters, both in navigation and divination. GRÜNWEDEL (*Veröff. Mus. für Völkerkunde*, Vol. V, 1897, p. 105) has published an allied text from the Biography of Padmasambhava, where the land-seeking bird of the navigators is designated "pigeon" (Tib. *p'ag-ron*). This will doubtless go back to some unknown Indian text where pigeons are mentioned in this capacity. PLINY (*Nat. Hist.* VI, 22, 83, ed. MAYHOFF, Vol. I, p. 465) relates that the seafarers of Taprobane (Ceylon) did not observe the stars for the purpose of navigation, but carried birds out to sea, which they sent off from time to time, and then followed the course of the birds flying in the direction of the land (*siderum in navigando nulla observatio: septentrio non cernitur, volucres secum vehunt emittentes saepius meatumque earum terram petentium comitantur*). The connection of this practice with that described in the Babylonian and Hebrew traditions of the Deluge was long ago recognized. In the Babylonian record (H. ZIMMERN, *Kleinigkeiten und Bibel*, p. 7) a pigeon, a swallow, and a raven are sent out successively to ascertain how far the waters have abated. When the people of Thera emigrated to Libya, ravens flew along with them ahead of the ships to show the way. The Viking, sailing from Norway in the ninth century, maintained birds on board, which were set free in the open sea from time to time, and discovered Iceland with their assistance (O. KELLER, *Die antike Tierwelt*, Vol. II, p. 102). According to JUSTIN (XXIV. iv. 4), who says that the Celts were skilled beyond other peoples in the science of augury, it was by the flight of birds that the Gauls who invaded Illyricum were guided (DOTTIN in HASTINGS, *Encyclopaedia of Religion*, Vol. IV, p. 787). In the *Ise-fudoki*, Emperor Jimmu engaged in a war expedition, and marched under the guidance of the gold-colored raven (K. FLORENZ, *Japanische Mythologie*, p. 299). On the sending of pheasant and raven in ancient Japan see especially A. PFIZMAIER, *Zu der Sage von Owo-kuni-nushi* (*Sitzungsberichte Wiener Akademie*, Vol. LIV, 1866, pp. 50—52).

1) SCHIEFNER reads *agron-po*, and accordingly translates "guest." But it seems unlikely that the same should be repeated here that was said a few lines before in regard to the north-west. The Narthang print plainly has *agon-po*, which I think is mistaken for *agon-po*, "demon." The analogous case in Table X, 1, where the word *adre gdon* is used, confirms this supposition.

2) In the Kanjur, a little story is told of a crow uttering agreeable sounds auguring

[A reference in regard to the south-east is lacking in the text.]

When in the south it sounds its notes, you will obtain flowers and areca-nuts. ¹⁾

When in the south-west, etc., there will be numerous offspring (*rgyud-pa ap'el-bar agyur-ro*).

When in the west, etc., you will have to set out on a distant journey (*t'ag rins-su agro-bar agyur-ro*; compare Table II, 2; IX, 3).

When in the north-west, etc., this is a prognostic of the king being replaced by another one (*rgyal-po gžan-du agyur-bai rtags*; compare Table VIII, 1). ²⁾

When in the north, etc., you will receive good news to hear (Table III, 8; VII, 7). ³⁾

for the safe return of a woman's absent husband, and being rewarded by her with a golden cap (A. SCHIEFNER, *Tibetan Tales*, English ed. by RALSTON, p. 355). J. J. MODI (*Anthropological Papers*, p. 28) quotes the following lines, which he overheard a Hindu woman speak to a crow: "Oh crow, oh crow! (I will give thee) golden rings on thy feet, a ball prepared of curd and rice, a piece of silken cloth to cover thy loins, and pickles in thy mouth." A peculiar noise made by a crow, continues this author, is supposed to indicate the arrival of a dear relation or at least of a letter from him. When they hear a crow make that peculiar noise, they promise it all the above good things if its prediction turn out true. In this case they fulfill their promise by serving it some sweets, but withhold the ornaments and clothes. — The following custom is observed in Cambodja. "Lorsque quelqu'un de la maison est en pays lointain, si le corbeau vient gazouiller dans le voisinage, la face tournée dans la direction de l'absent, il annonce son prompt retour. Dans toute autre direction, il annonce un malheur" (É. AYMONIER, *Revue indo-chinoise*, 1883, p. 148).

1) Tib. *me-tog dat go-la t'ob-pa*. SCHIEFNER renders *go-la* by "betel;" but *go-la* is the areca-nut, which is chewed together with the leaf of betel, *piper betel* L. (see CHANDRA DAS, *Dictionary*, p. 227). We may justly raise the question whether anything so insipid was contained in the Sanskrit original, and whether the text is not rather corrupted here. The Table contains nothing to this effect. I venture to think that *go*, "rank, position," was intended. In Table I, 6, flowers are mentioned as offerings to the birds, and this may give a clue as to how the confusion came about.

2) In the text of the Table: *rgyal-po ajig-par ston*, "this indicates the overthrow or ruin of the king" (but not *indique un danger pour le roi*). I do not agree with SCHIEFNER's rendering: „Ein Zeichen, dass der König sich anderswohin wendet."

3) Tib. *ap'rin-las legs-par t'os-par agyur-ro*. *P'rin*, "news," will probably be the proper reading. In the text of M. BACOT *p'rin byan* is printed, and translated *un courrier de nouvelles*. M. BACOT presumably had in mind the word *bya-ma-rta*, "a courier," but there is no word *byan* with this meaning. We doubtless have to read *p'rin bzai*, "good news, good message."

When in the north-east, etc., disorder ¹⁾ will break out (Table V, 7).

When in the zenith, etc., you will obtain the fulfilment of your wishes. ²⁾

End of the cycle of the second watch.

III. When in the third watch, in the east, a crow sounds its notes, you will obtain property (Table X, 2).

When in the south-east a crow sounds its notes, a battle (*at'ab-mo*) will arise (Table V, 7).

When in the south, etc., a storm will come (Table V, 4).

When in the south-west, etc., an enemy will come (see above, I, south-east).

When in the west, etc., a woman will come (see above, I, north-east).

When in the north-west, etc., a relative will come (see above, II, east).

When in the north, etc., a good friend will come (Table VIII, 6; X, 3).

When in the north-east, etc., a conflagration will break out (*mes ats'ig-par agyur-ro*; Table VI, 7).

When in the zenith, etc., you will gain profit from being taken care of by the king. ³⁾

End of the cycle of the third watch.

1) Tib. *ak'rug-pa* exactly corresponds in its various shades of meaning to Chinese *luan* 亂, "disorder, tumult, insurrections, war," etc. This rendering is indeed given for the Tibetan word in the Tibetan-Chinese vocabulary of *Hua i yi yü* (Ch. 11, p. 33 b; Hirth's copy in Royal Library of Berlin). In the Table, the word *t'ab-mo*, "fight, battle," is used.

2) Tib. *adod-pai ajug-pa rñed-par agyur-ro*. SCHIEFNER translates: „Wird sich die gewünschte Gelegenheit finden.“

3) SCHIEFNER's translation „wird der König den im Gemüth befestigten Gewinn finden“ is unintelligible. The text reads: *rgyal-po t'ugs-la brtags-pai rñed-pa t'ob-par agyur-ro*. Schiefner's correction of *brtags* into *btags* is perfectly justifiable; indeed, the confusion of these two words is frequent. But *t'ugs-la adogs-pa* is a common phrase correctly explained by JÄSCHKE (*Dictionary*, p. 280) "to interest one's self in, to take care of." It should not be forgotten, of course, that, at the time when Schiefner wrote, this dictionary was not published.

IV. When in the fourth watch, in the east, a crow sounds its notes, it is a prognostic of great fear (*ajigs-pa c'e-bai rtags-so*; Table V, 6; IX, 1).

When in the south-east a crow sounds its notes, it is a prognostic of large gain.

When in the south, etc., a stranger (guest) will come (see above, I, north-west).

When in the south-west, etc., a storm will rise in seven days.

When in the west, etc., rain and wind will come (Table V, 4, 5).¹⁾

When in the north-west, etc., you will find property which is scattered here and there (*nor glor-ba*).

When in the north, etc., a king will appear.

When in the north-east, etc., you will obtain rank.²⁾

When in the zenith, etc., it is a prognostic of hunger.

End of the cycle of the three watches and a half.

V. When at the time of sunset (*ñi-ma nub-pai ts'e*; compare Table X), in the east, a crow sounds its notes, an enemy will appear on the road.

When in the south-east a crow sounds its notes, a treasure will come to you.

When in the south, etc., you will die of a disease (Table V, 8).³⁾

1) The ability attributed to crow and raven of possessing a foreknowledge of coming rain has chiefly made them preëminently prophetic birds (*augur aquae* in Horace). The ancients observed that these birds used to caw with peculiar notes when rain was to fall, and that, if a storm was imminent, they were running to and fro on the beach with great restlessness, and bathing their heads (compare O. KELLER, *Die antike Tierwelt*, Vol. II, p. 98).

2) Tib. *go-la* (as above) *rñed-par agyur-ro*. The correction *go rñed-par* may here be allowed to pass, as the finding of areca-nuts seems such a gross stupidity.

3) In the story "The Death of the Magpie," translated from a manuscript of the India Office by A. SCHIEFNER (*Mélanges asiatiques*, Vol. VIII, p. 630), the raven has the attributes "the Uncle, the Judge of the Dead" (in Schiefner's rendering; the original is not known to me), and the following verses are addressed to it (p. 631): "Be kind to the nephews here, bestow fortune upon the children, direct the government of the country,

When in the south-west, ¹⁾ etc., the wishes of one's heart will be fulfilled.

When in the west, etc., relatives will come.

When in the north-west, etc., it is a prognostic of obtaining property.

When in the north, etc, homage will be done to the king.

[A reference to the north-east is lacking in the text.]

When in the zenith, etc., you will obtain an advantage for which you had hoped.

End of the cycle of the fourth watch.

End of the description of such-like cries of the crow.

We shall now discuss the import of the crow's tones when one is travelling. When along dams and river-banks, on a tree, in a ravine, ²⁾ or on cross-roads, a crow sounds its voice on your right-hand side, you may know that this journey is good. When, at the time of wandering on the road, a crow sounds its voice behind your back, you will obtain the *siddhi*. When, during a journey, a crow flapping its wings ³⁾ sounds its voice, a great acci-

lead expression to good plans." In connection with these ideas of the raven as a bird of death, it is worthy of note that in two texts of the Tanjur, *Mahākāla* appears in the form of the Raven-faced one (Skr. *kākasya*, Tib. *bya-roq gdoi-can*), likewise the goddess *Kālt* (Tib. *k'va gdoi-ma*); see P. CORDIER, *Cat. du fonds tibétain de la Bibl. Nat.*, Vol. II, pp. 124, 127. The raven-faced *Mahākāla* is illustrated in the "Three Hundred Gods of Narthang" (section *Rin abyuñi*, fol. 121). The raven as a bird announcing death is widely known in classical antiquity and mediæval Europe (O. KELLER, *Die antike Tierwelt*, Vol. II, p. 97; E. A. POE's poem *The Raven*). The imminent deaths of Tiberius, Gracchus, Cicero, and Sejan. were prophesied by ravens.

1) Is expressed in this passage by *srin-poi mts'ams*, "the intermediate space of the *Itākshasa*."

2) Tib. *grog stod*, as plainly written in the Narthang print. SCHIEFFNER read *grog ston*, and corrected *grog ston*, with the translation "on an ant-heap," regarding *grog* as *grog-ma*, *grog-mo*, "ant." I prefer to conceive *grog* as *grog-po* (related to *roñi*), "ravine," which is more plausible in view of the other designations of localities which are here grouped together. Moreover, I do not believe that crows go near ant-hills or feed on ants. The reading *stod* is then perfectly good, the significance being "in the upper part of the ravine."

3) According to the introduction, one of the *Kahatriya* caste.

dent will befall one. When, during a journey, a crow pulling human hair with its beak ¹⁾ sounds its voice, it is an omen that one will die at that time. When, during a journey, a crow eating filthy food ²⁾ sounds its voice, it is an omen of food and drink being about to come (Table VIII, 9).

When, during a journey, a crow perching on a thorn-bush sounds its voice, it should be known that there is occasion to fear an enemy. When, during a journey, a crow perching on a tree with milky sap ³⁾ sounds its voice, milk-rice (*o t'ug-gi bza-ba*) will fall to your lot at that time. When a crow perching on a withered tree ⁴⁾ sounds its voice, it is a prognostication of the lack of food and drink at that time. When a crow perching on a palace sounds its voice, you will find an excellent halting-place. ⁵⁾ When a crow

1) Tib. *skra mc'us gziñs-ñiñ*. According to JÄSCHKE (*Dictionary*, p. 464) *skra adsiñs-pa* or *gziñ-ba* is an adjective with the meaning "bristly, rugged, shaggy" (*Dictionary of the French Missionaries*, p. 832: *crines disjecti, cheveux épars*). The verbal particle *ciñ* and the instrumentalis *mc'u-s* ("with the beak") indicate that *gziñs* is a verbal form belonging to a stem *dziñs*, *adziñs*, and means "pulling about hair in such a way that it appears rugged." Below, we find the same expression *mc'us gos gziñs-ñiñ*, "pulling a dress with its beak." The word *adsiñs-pa* is used also of interlaced trees or thick-set vegetation, as indicated by the Polyglot Dictionary of K'ien-lung, according to which it is the equivalent of *ts'ao ma ts'ung tsa* 草木叢雜. Manchu *gubalehebi*, Mongol *küghünüldüji* (*s'entre-lacer*); we find there, further, the phrase *sgro adsiñs = ling ch'i ts'an küo* 翎翅殘缺, "with broken wings," Mongol *sämtüräji, so briser* (the Tibetan equivalent in KOVALEVSKI is a misprint). SCHIEFNER (p. 14) remarks that the form *gziñs* is new to him, and questions its correctness; he takes it as identical with *bzun*, and translates it by *anfassen*. This derivation is not correct, it is merely surmised. The passage evidently means more than that the crow simply seizes human hair; it is torn to pieces, and this destructive work has a distinct relation to the foreboding of death.

2) Tib. *mi gtsañ-ba za žiñ*, the same expression as used in the introduction to denote a crow of the Čundra caste. Compare *Subhāshitaratnanidhi* 37 (ed. CSOMA).

3) Tib. *o-ma-can-gyi žiñ* (Skr. *kshirikā, kshiripi*). Indian medicine recognizes five trees presumed to yield a milky sap. These are, according to HORNLE (*The Bower Manuscript*, p. 20), the nyagrodha (*Ficus bengalensis*), udumbara (*Ficus glomerata*), aṣvattha (*Ficus religiosa*), plaksha (*Ficus tjakela*), and pārisha (*Thespesia populnea*).

4) As often in the Indian stories (SCHIEFNER, *Mélanges asiatiques*, Vol. VIII, 1877, p. 96; or RALSTON, *Tibetan Tales*, p. 32).

5) SCHIEFNER translates erroneously, "When you betook yourself to the royal palace."

perching on a divan sounds its note, an enemy will come. When a crow facing the door sounds its voice, it should be known that a peril will threaten from the frontier (*mts'ams-kyi gjigs-par bes-par byao*). When a crow pulling a dress (*gos*) with its beak sounds its voice, you will find a dress (*gos*). When, during a journey, a crow perching on the cranium of a corpse¹⁾ sounds its notes, it is a prognostication of death. When a crow seizing a red thread and perching on the roof of a house sounds its notes, this house will be destroyed by fire (Table VI, 7). When, in the morning (*enia-droi dus-su*, Table V), many crows assemble, a great storm will arise (Table V, 3).²⁾

When, at the time of a journey, a crow seizing with its beak a piece of wood sounds its voice, some advantage will fall to your lot. When, at the time of a journey, at sunrise (*ni-ma šar dus-su*, Table IV), a crow sounds its voice, you will obtain property. When, at the time of a journey, it sounds its voice,³⁾ one's wishes will be fulfilled.

and when the crow then sounds its cries, you will receive a good seat." But it is the question of a traveller who, on his journey, happens to pass by a palace, and it is the crow which is sitting on the roof of the palace (the verb *gnas* means "to dwell, remain," but never expresses any act of motion); in the same manner as the crow has found a good resting-place, so the weary wanderer will find good quarters for the night. The text runs thus: *p'o-bran-la gnas-nas gan-gi ts'e skad sgrogs-na, dei ts'e sdod sa bran-po rhad-par aggur-ro*. The word *sdod sa* does not mean "a seat," but a place where a traveller stops for the night, "halting-place." Likewise, in the two following sentences, SCHIEFNER refers the phrases *gdan-la gnas-nas* and *sgo lta žiri* to the man instead of to the crow.

1) SCHIEFNER: „eine Krähe auf der Kopfbinde sich befindend." This is due to a confusion of the two words *t'od* and *t'od-pa*; the former means "turban;" but the text has *t'od-pa* meaning "the skull of a dead person," and this only makes sense of the passage. Crows congregate and feed on carrion, and are therefore conceived of as birds of death. The turban, for the rest, is out of the question in this text, as it was introduced into India only by the Mohammedans.

2) O. KELLER (*Die antike Tierwelt*, Vol. II, p. 109, Leipzig, 1913), who concludes his interesting chapter on crow and raven in classical antiquity with an extract from Schiefner's translation, observes on this sentence that it is based on a fact, and that such grains of truth hidden among these superstitions account for the fact that they could survive for centuries.

3) Apparently there is here a gap in the text, no definition of the activity of the crow being given.

End of the signs of the journey (*lam-gyi mts'an-ñid*).

The symptoms (or omens) of the nest-building of the crow are as follows. 1) When a crow has built its nest in a branch on the east side of a tree, a good year and rain will then be the result of it. When it has built its nest on a southern branch, the crops will then be bad. When it has built its nest on a branch in the middle of a tree, a great fright will then be the result of it (Table V, 6). When it makes its nest below, fear of the army of one's adversary will be the result of it. When it makes its nest on a wall, on the ground, or on a river, the king will be healed [from a disease]. 2)

Further, the following explanation is to be noted. When a crow sounds the tone *ka-ka*, you will obtain property. When a crow sounds the tone *da-da*, misery will befall you. When a crow sounds the tone *ta-ta*, you will find a dress. When a crow sounds the tone *gha-gha*, a state of happiness will be attained. 3) When a crow sounds the tone *gha-ga*, a failure will be the result of it. 4)

1) In the first section of the treatise the crow is in motion, and the person demanding the oracle is stationary. In the second section both the crow and the person are in motion. In this one, the third section, both the crow and the person are stationary; hence the text says: *gnas-pai bya-ro-gi ts'ai-gi mts'an-ñid*, "the crows when they are settled. . ."

2) Tib. *ats'o-bar agyur-ro*, translated by SCHIEFNER „so wird der König leben," which gives no sense. Of course, the word *ats'o-ba* means "to live," but also "to recover from sickness." Here the Table (IX, 2) comes to our rescue, where we meet the plain wording *nad-pa soz-par ston*, "it indicates cure from disease." — Among the Greeks, the crow, owing to the belief in the long life of the bird, was an emblem of Asklepios (O. KELLER, *Die antike Tierwelt*, Vol. II, p. 105); compare Hesiod's famous riddle on the age of the crow and raven (W. SCHULTZ, *Rätsel aus dem hellenischen Kulturkreise*, p. 143, Leipzig, 1912; and K. OHLERT, *Rätsel und Rätselspiele der alten Griechen*, 2d ed., p. 146, Berlin, 1912). The idea of the longevity of the crow was entertained also in India (Skr. *dirghāyus*, Tib. *na-ts'od-can*, attribute of the crow given in the *Dictionary of the French Missionaries*, p. 86); it is striking that this quality of the crow is not alluded to in our text.

3) Tib. *don agrub-par agyur-ro*. SCHIEFNER translates: „so geht die Sache in Erfüllung."

4) Tib. *nor oii-bar agyur-ro*. SCHIEFNER, „so wird ein Schatz kommen," which is certainly correct, as far as the meaning of these words is concerned; but I doubt very much whether this is the true significance intended by the author, for what SCHIEFNER trans-

When an omen causing fear is observed, a strewing oblation must be offered to the crow. As the flesh of a frog pleases the crow, no accidents will occur when frog-flesh is offered. ¹⁾

Oṃ mi-ri mi-ri vajra tudate gilam grīṇa gi svāhā!

End of the description of such-like behavior of the crow.

Translated by the Mahāpaṇḍita Dānaçīla in the monastery T'an-po-c'e of Yar-klun in the province of dBus.

The translator Dānaçīla has been dated by HUTN in the ninth century, on the ground that he is made a contemporary of King K'ri-lde sroñ-btsan of Tibet in the work *sGra sbyor* in Tanjur, Sūtra, Vol. 124. This fact is correct, as may be vouchsafed from a copy made by me of this work. Dānaçīla figures there, together with such well-known names as Jinamitra, Surendrabodhi, Çrilendra-bodhi, Bodhimitra, the Tibetan Ratnarakshita, Dharmataçīla, Jūānāsena, Jayarakshita, Mañjuçrivarman and Ratnendraçīla. Dānaçīla is well known as translator of many works in the Kanjur ²⁾ and Tanjur. From the colophon of a work in the latter collection it appears that he hailed from Varendrajigatāla, that is, Jigatāla

lates is exactly the same as what is said above in regard to the tone *ka-ka*. Further, the tone *gha-ga* stands in opposition to the preceding tone *gha-gha*; it thus becomes clear that *nor* stands for *nor-ba*, "to err, to fail," and is expressive of the contrary of *don agrub-pa*, "to reach one's aim, to obtain one's end, to attain to happiness." This case reminds one of the grammatical as well as other subtleties of the Indian mind. — Also the ancients seem to have distinguished between various kinds of raven's cries, judging from PLINY's words that they imply the worst omen when the birds swallow their voice, as if they were being choked (*pesima eorum significatio, cum gluttiant vocem velut strangulati. Nat. Hist., X, 12, § 32; ed. MAYHOFF, Vol. II, p. 229*). The crow, according to PLINY (*ibid.*, § 30), is a bird *inauspiciatæ garrulitatis, a quibusdam tamen laudata*.

1) In the belief of the Tibetans, the crow is fond of frogs; compare the jolly story "The Frog and the Crow" in W. F. O'CONNOR, *Folk Tales from Tibet*, p. 43 (London, 1906).

2) FREN, *Annales du Musée Guimet*, Vol. II, p. 406.

(Jagaddala) in Varendra, in eastern India. ¹⁾ Then we meet him in Kaçmīra, where Tāranātha ²⁾ knows him together with Jinamitra and Sarvajñadeva, in accordance with *dPag bsam ljon bzai* (ed. CHANDRA DAS, p. 115); while *rGyal rabs* has the triad Jinamitra, Çrilendrabodhi, and Dānaçila. ³⁾ It may therefore be granted that the *Kākajariti* ⁴⁾ was translated and known in Tibet in the first part of the ninth century. The original Sanskrit manuscript from which the Tibetan translation was made in all probability was defective, for three gaps in it could unmistakably be pointed out.

What is the position of *K.* in the history of Indian divination? H. JACOBI (in HASTINGS, *Encyclopaedia of Religion*, Vol. IV, p. 799) has formulated the result of his study of this subject in these words: "In India, divination has gone through two phases of development. Originally it seems to have been practised chiefly with the intention of obviating the evil consequences of omens and portents; in the later period, rather to ascertain the exact nature of the good or evil which those signs were supposed to indicate." In the Vedic Samhitās, birds are invoked to be auspicious, and certain birds, especially pigeons or owls, are said to be messengers

1) P. CORDIER, *Cat. du fonds tibétain de la Bibl. Nat.* II, pp. 63, 122, 138 (Paris, 1909), and VIDYABHUSANA (the name of this author appears in his publications in four different ways of spelling, °bhusan, °bhusana, °bhušana, °bhušana: which is the bibliographer supposed to choose?) *Buddha-Stotra-Samgrahaḥ*, pp. XVIII, XIX (Calcutta, 1909). Mr. V. states that it is said at the end of the *Ekajajisūdhana* that the worship of Tūrū originated from China, but that it is not clear whether this refers to Ekajajī Tūrū alone or to Tūrū of all classes. I fear that neither the one nor the other is the case. The Tibetan text plainly says, "The work *Tārāsūdhana* which has come from China (*scil.* in a Chinese translation) is in a perfect condition." This implies that the Tibetan translator availed himself of a Chinese version. The worship of Tūrū most assuredly originated in India, not in China.

2) SCHIEFNER's translation, p. 226.

3) SCHLAGINTWEIT, *Könige von Tibet*, p. 349; also ROCKHILL, *The Life of the Buddha*, p. 224.

4) Henceforth abbreviated *K.*

of death (Nirṛti, Yama).¹) But all these are no more than scant

1) The best investigation of the history of bird omens in India is found in the monograph of E. HULTZSCH (*Prolegomena zu des Vasantarāja Śākuna nebst Textproben*, Leipzig, 1879). The beginnings of bird augury in India may be traced back to the Vedic period. In the R̥gveda occur the so-called śākuna, charms against pigeons, owls, and other black birds whose appearance or contact forebodes evil, or defiles (M. BLOOMFIELD, *The Atharva-veda*, p. 85, Strassburg, 1899). According to MACDONELL and KERTI (*Vedic Index of Names and Subjects*, Vol. II, p. 347, London, 1912) there are the two words, *śākuna*, usually denoting a large bird, or a bird which gives omens, and *śākuni*, used practically like the former, but with a much clearer reference to divination, giving signs and foretelling ill-luck; later the falcon is so called, but the raven may be intended; the commentator on the *Taittirīya Saṃhitā* thinks that it is the crow. Oracles obtained from an observation of crows seem to be contained particularly in the *Kaupika Śūtra*. When the rite serving the purpose of securing a husband has been performed on behalf of a girl, the suitor is supposed to appear from the direction from which the crows come (H. OLDENBURG, *Die Religion des Veda*, p. 511, Berlin, 1894). Contact with a crow was regarded as unlucky and defiling. He who was touched by a crow was thrice turned around himself, from the left to the right, by the sorcerer holding a burning torch (V. HENRY, *La magie dans l'Inde antique*, p. 176, 2d ed., Paris, 1909; E. THURSTON, *Ethnographic Notes in Southern India*, p. 277, Madras, 1906). A. HILLEBRANDT (*Ritual-Litteratur. Vedische Opfer und Zauber*, p. 153, Strassburg, 1897) believes he finds the explanation for this idea of bird omens in a passage of Baudhāyana, according to which the birds are the likenesses of the manes; but it seems rather doubtful whether the latter notion could receive such a generalized interpretation, and whether it is sufficient to account for the augural practice in its entire range. The latter would naturally presuppose the idea of the bird being animated with a soul and being gifted with supernatural powers or instigated by some divine force; but Hillebrandt's opinion leaves the reason unexplained why the bird, even though it should represent a mane in every case, possesses the ability of divination. True it is, as shown by W. CALAND (*Die altindischen Todten- und Bestattungsgebräuche*, p. 78, Amsterdam, 1896), that especially the crows were conceived of as embodying the souls of the departed, as messengers of Yama, who, after the funery repast (*śrāddha*), draw near, greedy for food (compare the Raven Spirit in the Lamaist mystery plays who attempts to slich the strewing oblation, and who is chased away by two stick-brandishing Atsara, the skeleton ghosts!); but plainly, in this case, no process of divination is in question. CALAND, on this occasion, quotes DUNOIS on the modern practice that the chief of the funeral offers boiled rice and pease to the crows, — if they should refuse to eat, it is taken as an evil presage of the future state of the deceased; but this evidently is quite a different affair from that described in his above reference to Baudhāyana. Some authors allow the whole practice of auguries to go back into the prehistoric epoch of the Indo-European peoples (H. HIRT, *Die Indogermanen*, Vol. II, p. 518, Strassburg, 1907; and S. FEIST, *Kultur*, etc., *der Indogermanen*, p. 326, Berlin, 1913), the latter even going so far as to speculate that the idea of a soul flying along in the shape of a bird was not foreign to the *arvōk*, since this augural divination is based on the transformation of the souls into birds. I am very skeptical regarding such conclusions and constructions, and must confess that

allusions; neither in the Vedic nor in the early Brahmanic epoch do we find anything like an elaborate augural system, as in *K.*, in which future events are predicted, — Jacobi's second stage. The same author tells us that the whole art of divination became independent of religion when Greek astronomy and astrology were introduced into India in the early centuries of our era; the Indian astrologer then took up divination, hitherto practised by the Atharva priest. It is of especial interest for our present case that in the *Bṛihat Saṁhitā* by Varāhamihira (505—587), written about the middle of the sixth century, in which a summary of the Indian arts of divination is given, the auspicious or unlucky movements of crows are mentioned.¹⁾ A work of the type of *K.*, ac.

I even belong to those heretics who are still far from being convinced of the existence of such a thing as the *indogermanische urzeit*, — at least in that purely mechanical and subjective formula in which it is generally conceived. The work of FAIST, however, is a laudable exception, perhaps the first sensible book written on this subject, and I read it from beginning to end with real pleasure. — In regard to the crow or raven, we find also other ideas connected with them than those of a soul-bird, in India as well as among other Indo-European peoples. In a legend connected with Rāma, an Asura disguised as a crow appears to peck at Sītā's breast (E. THURSTON, *l. c.*, p. 276, and *Omens and Superstitions of Southern India*, p. 87, London, 1912). Among the southern Slavs, the crows are believed to be transformed witches (F. S. KRAUSS, *Slavische Volksforschungen*, pp. 57, 60, Leipzig, 1908); and in mediæval legends, the devil occasionally assumes the shape of a raven. In Greek legend Apollo repeatedly appears in the disguise of a raven (O. KELLER, *Die antike Tierwelt*, Vol. II, p. 103). These various examples demonstrate that the raven as a divine bird cannot be solely explained as the embodiment of an ancestral soul. It seems to me that H. OLDENBERG (*Die Religion des Veda*, pp. 76, 510) is right in assuming that the animals sent by the gods were those of a weird, demoniacal nature, and were, for this reason, themselves deified, while at a later time they became mere stewards to divine mandators. "The bird crying in the quarter of the fathers" (the south), mentioned in the *Rigveda*, according to OLDENBERG, should be understood as one being despatched by the fathers. The document Pelliot lends substantial force to this argument. It is there expressed in plain and unmistakable words that the raven is a divine bird of celestial origin and supernatural qualities, and the messenger who announces the will of a deity, the Venerable One of the Gods (*Lha btsun*); compare the Preface to the Table, translated below.

1) Ch. XIV is taken up by the auguries obtained from the wagtails (see H. KERN'S translation in his *Verspreide geschriften*, Vol. I, p. 299, 's-Gravenhage, 1913; on crows, *ibid.*, pp. 130, 178). Regarding Varāhamihira's date of birth MUKENJI in *J. A. S. B.*, 1912, pp. 275—8.

cordingly, must have been known at that time; but was it much earlier? I am under the impression that *K.* is hardly earlier than the sixth or seventh century, perhaps contemporaneous with the *Çākuna* of Vasantarāja, which, according to HULTZACH (p. 27), is posterior to Varāhamihira; the striking lack of thought and imagination, and the somewhat flat treatment of the subject, plainly stamp *K.* as a late production. The absence of any mythological detail is a decided drawback; the religious function of the crow is not even set forth, and we remain entirely in the dark as to the religious concept of the bird in the India of that period. SCHIEFNER designated the little work a Buddhist retouch (*Überarbeitung*) of a Brahmanic text. It seems to me to be neither the one nor the other. It cannot be yoked to any definite religious system; it takes root in the domain of folk-lore, and closely affiliates with those manifold branches of divination which, independent of any particular form of religion, are widely diffused from the shores of the Mediterranean to almost the whole of continental Asia and the Malayau world.¹⁾ The tone and tenor of this text are not Buddhistic, nor

1) T. S. RAFFLES (*The History of Java*, Vol. II, p. 70, London, 1830) tells, in regard to the ancient Javanese, that when the crop was gathered and the accustomed devotions performed, the chief appointed the mode and time of the departure of the horde from one place to another. On these occasions, the horde, after offering their sacrifices and feasting in an open plain, left the remains of their repast to attract the bird *śūluggīya* (supposed to have been a crow or raven); and the young men shook the *in克蘭* (a rude instrument of music still in use), and set up a shout in imitation of its cry. If the bird did not eat of the meal offered to it, or if it afterwards remained hovering in the air, perched quietly on a tree, or in its flight took a course opposite to that which the horde wished to pursue, their departure was deferred, and their prayers and sacrifices renewed. But when the bird, having eaten of its meal, flew in the direction of their intended journey, the ceremony was concluded by slaying and burning a lamb, a kid, or the young of some other animal, as an offering of gratitude to the deity. RAFFLES adds that the Dayak of Borneo still hold particular kinds of birds in high veneration, and draw omens from their flight and the sounds which they utter. Before entering on a journey or engaging in war, head-hunting, or any matter of importance, they procure omens from a species of white-headed kite, and invite its approach by screaming songs, and scattering rice before it.

is there a particle of Buddhist color admixed with it. Nor is there in it much that could be styled specifically Indian, with the exception, of course, of the outward garb in which it is clothed; but most of the oracles could as well have been conceived in Greece or Rome. ¹⁾

We may justly assume that *K.* was not the only work of its class, and that other Sanskrit books of an allied character may

If these birds take their flight in the direction they wish to go, it is regarded as a favorable omen; but if they take another direction, they consider it as unfavorable, and delay the business until the omens are more suitable to their wishes. See now HOSZ and McDOUGALL, *The Pagan Tribes of Borneo*, Vol. I, pp. 168—170, Vol. II, p. 74 (London, 1912). Omens are taken either from the flight or the cries of certain birds, such as the night-owl, the crow, etc. (W. W. SEAT, *Malay Magic*, p. 535, London, 1900). Among the tribes of the Philippines, bird omens play an extensive rôle. My colleague F. C. COLE, who has studied to a great extent their religious notions, kindly imparts the following information on the subject: "With the Batak, a pigmy people living in northern Palawan, the small sun bird known as *sagwaysagway* is considered the messenger of Diwata [evidently Skr. *devatā*] Mendusa, the greatest of the nature spirits. Should this bird sing while they are on the trail, the Batak will return home, for evil is sure to follow if they continue their journey that day. Should the bird enter a dwelling and sing, the place is deserted. When a man desires to make a clearing in the jungle, he first addresses the sun bird, asking it to sing and give him the sign if it is a bad place to plant, but to be silent if it is a good plot for him to cultivate. Similar beliefs are entertained by the Tagbanua tribe which inhabits the greater part of Palawan." Further information will be found in the publication of F. C. COLE, *The Wild Tribes of Davao District, Mindanao*, pp. 63, 108, 153, 173 (*Field Museum Anthr. Ser.*, Vol. XII, 1913).

1) The Greeks distinguished five kinds of divination (*οἰωνιστική*) headed by auguration (*τὸ ὀρνιθοσκοπεῖν*); Telegonos was the first to write on this subject (H. DIELS, *Beiträge zur Zuckungsliteratur des Okzidents und Orients I, Abhandl. preuss. Akad.*, 1908, p. 4). The typical Homeric method of foretelling the future was by the actions and cries of omen-birds. In Homer, the omen-bird is generally an eagle, and is always sent by Zeus, Apollo, or Athene. Its actions are symbolical, and need no complicated augury for their interpretation (HASTINGS, *Encyclopaedia of Religion*, Vol. IV, p. 787). In Aristophanes' *Birds*, Euelpides inquires what road is advised by a crow purchased at three obols. According to Virgil and Horace, a crow coming from the left-hand side is of ill omen. In *Works and Days* by Hesiod it is said, "Do not let a house incomplete, otherwise a garrulous crow will perch on it and caw." Even Epiktet believed in the correctness of the evil prophecies of a raven (O. KELLER, *Die antike Tierwelt*, Vol. II, p. 97). Compare L. HOFF, *Tierorakel und Orakelliere in aller und neuer Zeit* (Stuttgart, 1888); and W. R. HALLIDAY, *Greek Divination, a Study of its Methods and Principles* (London, 1913).

then have existed in Tibet; ¹⁾ for, with all the coincidences prevailing between *K.* and the *document Pelliot*, there are, on the other hand, far-reaching deviations extant in the latter which cannot be explained from *K.* First of all, however, the interdependence of the two texts should be insisted upon. The main subject of the two is identical; it is the method of obtaining omens from crows which is treated in both on the same principle. This principle is based on a combination of two elements, — orientation of the augur and time-reckoning according to the hours of the day; divination is determined by space and time. In regard to the division of space, the coincidence in the two documents is perfect; the nine ²⁾ points of the compass forming the framework in both are one and the same. Time calculation is likewise the same in principle, except that *K.* follows the Indian, the Table the Tibetan method, — a point discussed farther on. The ideas expressed by the oracles show far-reaching agreements in both, and move within the narrow boundaries of a restricted area; no great imagination is displayed in them, they are rather commonplace and philistine, even puerile, but this is all that could be expected from this class of prophecy intended for the *profanum vulgus*. Another feature which *K.* and the document of Pelliot have in common is the method of divining from the nature of the cries of the crow, independent of space and

1) Writings of similar contents are still extant in modern Tibetan literature. BRIAN H. HOBSON (*The Phoenix*, Vol. I, 1870, p. 94), in a notice on the *Literature of Tibet*, mentions a book "Ditakh, by Chopallah [C'os dpal?] Lama, at Urasikh; to interpret the ominous croaking of crows, and other inauspicious birds."

2) The number nine plays a great rôle in systems of divination. In southern India, the belief prevails that ill luck will follow should an owl sit on the house-top, or perch on the bough of a tree near the house. One screech forebodes death; two screeches, success in any approaching undertaking; three, the addition by marriage of a girl to the family; four, a disturbance; five, that the hearer will travel. Six screeches foretell the coming of guests; seven, mental distress; eight, sudden death; and nine signify favorable results (E. THURSTON, *Ethnographic Notes in Southern India*, p. 281, Madras, 1906; and *Omens and Superstitions of Southern India*, p. 66, London, 1912).

time. The last six verses (24—29) of the prefatory note correspond in meaning to the conclusion of *K.*: "When a crow sounds the tone *ka-ka*," etc. It is a notable coincidence that in both texts five notes of the bird are enumerated in words imitative of its sounds, in *K.* conceived from an Indian point of view, in *document Pelliot* nationalized in a Tibetan garb. 1) The character and quality of these tones, as well as the distinction between good and bad omens, necessarily lead to an effort toward reconciling the evil spirit which speaks through the organ of the bird. Offerings may counterbalance the mischievous effects of unlucky omens, — again a point on which the two texts are in harmony.

The differentiation of the two, in the first place, is due to a technical feature. The text of *K.* is a literary production and an analytic account. What is offered in the *document Pelliot* is an abstract of this divinatory wisdom worked up into convenient tabular form, manifestly with a view to handy and practical use. Any one who had encountered the necessary experience by observing a crow in a certain direction at a certain time of the day was enabled to

1) The number five is evidently suggested by the five elements, as shown by the five cries of the *piñgalū*, a kind of owl, distinguished according to the five elements in the *Çakma* of Vasantarāja (HULTZSCH, *Prolegomena*, p. 70). The beliefs in the omens of the owl in modern India are well set forth by E. THURSTON (*Omens and Superstitions of Southern India*, pp. 65—67). The cumity between crow and owl in Indian folk-lore deserves a word of comment in this connection. JÄSCHKE (*Dictionary*, p. 374) refers to *Suvarṇa-prabhasasūtra* as describing the crow as an inveterate enemy of the owl. In the *Prajñidāṇḍu* ascribed to Nāgārjuna (ed. CHANDRA DAS, p. 9, Darjeeling, 1896) occurs the saying: "Those formerly vanquished by an enemy do not wish any longer for friendship. Look how the crows set fire to the cave filled with owls and burn them to death." In the same book (p. 8), the crows are credited with the killing of snakes. Compare also *Subhūshita-ratnamidhi* 185 (ed. CSOMA). The animosity of the crow toward the owl seems to be based on the observation of a natural fact. C. B. COY (*The Birds of Illinois and Wisconsin*, p. 548) has the following to say: "They seem to entertain an intense dislike to certain animals, especially an owl. Often the peaceful quiet of the woods is suddenly broken by the harsh excited 'cawing' of a flock of crows, who have discovered a bird of that species quietly enjoying his diurnal siesta, and the din rarely ceases until the hated bird has been driven from his concealment and forced to seek other quarters."

read from this Table at a moment's notice what consequence this event would entail on his person. The subject-matter, therefore, was arranged here somewhat differently; the offerings placed at the very end of *K.* make here the very opening, and justly so, because, in accordance with the practical purpose of the Table, it was essential for the layman, or rather the priest acting on his behalf, to ascertain the kind of reconciliatory offering in case of threatening ill luck.

The greater fulness of the Table constitutes one of the principal divergences from *K.* In the latter, only five divisions of day-time are presented, while the Table offers double this number. This is infallible proof for the fact that the divination process revealed by the *document Pelliot* has been Tibetanized; it is by no means a translation from Sanskrit, but an adaptation based on some Sanskrit work or works of the type of *K.*, and freely assimilated to Tibetan thought. The Indian division of the day is abandoned; and the designations of the Tibetan colloquial language, as they are still partially in use,¹⁾ have been introduced into the Table. It is self-evident that these ten periods are not equivalents of the three-hour Indian *yāma*, but correspond to a double hour as found in China. In logical sequence these determinations run from about one o'clock at night to about nine o'clock in the evening. The plain Tibetan names for the points of the compass are all retained, while the fancy Indian names appearing in *K.* are all dropped. An attempt at adaptation to Tibetan taste has been made in the oracles. The killing of a yak and heavy snowfalls, for instance, are affairs peculiar to Tibet. It is manifest also that the prognostics given in

1) See G. SANDBERG, *Hand-book of Colloquial Tibetan*, p. 162 (Calcutta, 1894), and C. A. BELL, *Manual of Colloquial Tibetan*, p. 110 (Calcutta, 1905), where other terms also are included; also A. DESGOMINS, *Essai de grammaire tibétaine*, pp. 90—91 (Hong-kong, 1899).

the Table, in a number of cases, are more definite and specific than those of *K.*, which are rather monotonous and wearisome by frequent repetition of the same statement. Such repetitions, it is true, occur also in the Table (II, 2 = IX, 3; II, 4 = IV, 7 = VII, 4; V, 6 = IX, 1; VIII, 6 = X, 3), and there is certainly no waste of inventive power or exertion of ingenuity in this whole system. Apparently it appealed to the people of Tibet, where kindred ideas may have been in vogue in times prior to the infusion of Indian culture, ¹⁾ and it is to this popularity that we owe the composition

1) For the inhabitants of the Western and Eastern Women Kingdom, the latter a branch of the K'iang, perhaps akin to the Tibetans, were in possession of a system of bird divination, *niao pu* 鳥卜 (*Sui shu*, Ch. 83, and *T'ang shu*, Ch. 122; the two passages are translated by ROCKHILL, *The Land of the Lamas*, pp. 339, 341, the former also by BUSHELL, *The Early History of Tibet*, p. 97, *J. R. A. S.*, 1880), which was based on the examination of a pheasant's crop, — a process of divination certainly differing from what is described in our Tibetan texts. Nevertheless we may infer that the shamans of those peoples, especially as the *T'ang shu* states that to divine they go in the tenth month into the mountains scattering grain about and calling a flock of birds, paid a great deal of attention to birds. (Whether the inhabitants of the two Women Kingdoms spoke a Tibetan language seems doubtful. The *T'ang shu* has preserved to us three words of the language of the Eastern one: *pin-tsin* 賓就 "sovereign" 王, *kao-pa-ti* 高霸黎 "minister" 宰相, and *su-yi* 鞞鞞 "shoe" 履. None of these is traceable to a Tibetan word known to us. The vocabulary is so widely different in the present Tibetan dialects that this may have been the case even in ancient times; at any rate, these three examples are not sufficient evidence for pronouncing a verdict. The word *su-yi* (not contained in GILES and PALLADIUS) is explained by the *Sshi ming* as quoted in K'ang-hi's Dictionary 胡中所名也 "a word employed among the *Hu*"). The *T'ang shu* (Ch. 216 F, p. 6a) relates that the great sorcerers *po ch'ê pu* 鉢掣逋 (exactly corresponding to Tib. *aba c's-po*, "great sorcerer"), taking their place on the right-hand side of the Tibetan king, wore, during their prayer ceremonies, head-dresses in the shape of birds and girdles of tiger-skin (巫祝鳥冠虎帶), while beating drums. They certainly were shamans, as indicated by the very Chinese word *wu* and the style of their costume, and it is difficult to see what made BUSHELL (*The Early History of Tibet*, p. 101, note 81) think that the *po ch'ê pu* would appear to have been a Buddhist. — Among the adherents of the Bon religion, transfiguration of saints into birds, and observation of and divination from birds' voices, are prominent (see *rGyal rabs bon-gyi ab-yun gnas*, pp. 12, 13; regarding this work compare *T'oung Pao*, 1901, p. 24); there the verse occurs, "Omens are derived from birds, trees, the four elements, hills and rocks; from these the voices of the Bon doctrine have arisen."

of this divination table in the colloquial language. This point marks the fundamental importance of the *document Pelliot*, which thus becomes the earliest document of the Tibetan vernacular that we have at present. And it is no small surprise to notice that the style of this text is thoroughly identical with that of the living language of the present day. Any one familiar with it will testify to the fact that he can perfectly understand this Table through the medium of his knowledge of colloquial Tibetan. The safest criterion for the correctness of this diagnosis is furnished by M. BACOR himself, who had doubtless mastered Tibetan conversation during his journeyings in the country, and, I venture to assume, was considerably aided by this knowledge in grasping correctly the meaning of the oracles in the Table. But let us not wholly rely on such impressionistic opinions, when the text of *K.*, written in the Tibetan *wên li*, the style of the early Buddhist translators, offers such a tempting opportunity for comparing analogous sentences of the two texts. In *T.* (Table) all oracles are concluded with the plain verb *ston*; in *K.* *rtags-so* or the periphrastic future tense with *agyur-ro* are used, which do not occur in *T.* In *K.* we read *mes atsig-par agyur-ro*, "a conflagration will break out;" the same is plainly expressed in *T.* by the words *mye nan žig oñ-bar ston*. In *K.* *ran-gi ñe-bo oñ-bar agyur-ro*; the same in *T.* *gñen žig oñ-bar ston*. In *K.* *rluñ c'en-po abyuñ-bar agyur-ro*; the same in *T.* *rluñ ldan-bar ston*, etc. *T.* has the plain and popular words throughout, as *t'ab-mo* for *ak'rug-pa*, *bza bca* ("food and drink") for *bza dan skom-pa* in *K.*, and, as shown, in the names of the quarters and divisions of the day. Note that the termination *o* denoting the stop, and restricted to the written language (discussed farther on), is absent in *document Pelliot*; there is always *ston*, not *ston-no*, and at the end of the preface *ston yin*.

As to the time of the authorship of *document Pelliot*, there can be no doubt that in the same manner as *K.* it is a production of the ninth century. This is, first of all, proved by the date of *K.*, which at the time of its introduction and translation was a live source impressing the minds of the people, and hence gave the impetus to further developments of the subject in a manner tangible and palatable to the nation. Only at a time when the impression of these things was deep, and the practice of such beliefs was still fresh and vigorous, was the cast of these notions in the direct and plastic language of the people possible. Secondly, the antiquity of our document is evidenced by palaeographic and phonetic traits (discussed hereafter) occurring in other writings of equal age; it ranges in that period of language which is styled by the scholars of Tibet "old language" (*brda rñin*). Thirdly, there is the circumstantial evidence, the discovery of the document in the cave of Tun-huang by M. Pelliot (see p. 2).

Let us note *en passant* that the Indian system of crow augury has been transmitted also to China. H. DORÉ in his excellent book "Recherches sur les superstitions en Chine" (pt. 1, Vol. II, p. 257, Shanghai, 1912), has revealed a Chinese text on bird divination which plainly betrays its connection with *K.* It is based in the same manner on the division of the day into five parts and on the local orientation of the cardinal points, eight of which are given by DORÉ. The presages are identical in tone with those of *K.* and *document Pelliot*; we meet predictions of wind and rain, disputes, threatening of a disaster, reception of a visit, death of a domestic animal, recovery of a lost object, malady, happy events, growth of fortune, gifts, arrival of a friend or a stranger, etc., without reference to any specific Chinese traits. ¹⁾

1) In regard to beliefs in crow and raven in China, the reader may be referred to DE GROOF, *The Religious System of China*, Vol. V, pp. 638—640; J. F. DAVIS, *China*.

The Preface to the Table.

As M. BACOT'S rendering of the preface accompanying the Table is in need of a revision, I take the liberty to offer a new translation of it, ¹⁾ discussing in the notes the chief points in which my opinion deviates from that of M. BACOT. A Lama, bsTan-pa du-ldan by name, has been consulted by this gentleman, and has jotted down for him a number of notes, explaining certain phrases in the colloquial language. These notes are reproduced on pp. 447—448 of the essay of M. BACOT, but apparently have not been utilized. Most of the Lama's comments are correct, a few are wrong, and some, though wrong, are yet interesting. Anything of interest in his explanations is embodied in the notes which follow. It may not be amiss to give here a transliteration of the text, in order to enable the reader to compare my translation with it immediately. In M. BACOT'S edition, the text (in Tibetan characters) appears as prose; but it is very essential to recognize its metrical composition. The metre is rigorously adhered to in the twenty-nine verses, and is — ∪ ∪ — ∪ ∪ — ∪ ∪, a dactyl followed by two trochees (the signs — and ∪ denote merely accentuated and unaccentuated, not long

Vol. II, p. 98 (London, 1857); J. DOOLITTLE, *Social Life of the Chinese*, p. 571 (London, 1868). The subject is still in need of special investigation. Crows and ravens are certainly very far from being exclusively birds of ill omen or productive of evil, as DE GUORC is inclined to think; on the contrary, the raven was even the emblem of filial piety, and the appearance of one of red color was a lucky augury, foreboding the success of the Chou dynasty (CHAVANNES, *Les mémoires historiques de Se-ma Ts'ien*, Vol. I, p. 226). Other augur birds, as the mainah (LEGG, *The Chinese Classics*, Vol. V, pt. II, p. 709; WATTEWS, *Essays on the Chinese Language*, p. 444; and FORKE, *Lun-héng*, pt. II, p. 3) and the magpie, who knows the future (FORKE, *l. c.*, pt. I, p. 358; pt. II, p. 126), must be equally taken into consideration.

1) In a bibliographical notice of M. BACOT'S study (*Revue de l'histoire des religions*, 1913, p. 122) it is remarked, "Un curieux préambule mériterait d'être tiré au clair; mais il ne semble plus compris aujourd'hui."

and short syllables). 1) A. H. FRANCKE 2) observes that in Ladakhi poetry the dactyl is rather frequent, arising from a dissyllabic compound with a suffix. This certainly holds good of all Tibetan dialects and also of the written language. In this composition, all the dactyls are formed by the particle *ni* coupled with a trochaic element. It is curious that all verses are constructed in the same manner, having this *ni* in the third syllable (compare note to V. 19). At the same time, there is obviously a cesura after *ni*. 3)

Text of the Preface.

(The accents denote the metre.)

- 1 p[˘]ó-roḡ ni myí-i mḡón
- 2 drán-sroñ ni lhá-i bká
- 3 byáñ aḡbroḡ ni aḡbroñ ša-i rkyén
- 4 yúl-gi ni dbús m[˘]il dú
- 5 lhá btsun ni bdá (+ a) 4) skad skyél
- 6 p[˘]yóḡs brgyad ni ltén dañ dḡí
- 7 ,án toñ ni t[˘]ábs ḡsum ḡsíñis
- 8 ḡtór-ma ni byá-la ḡtór

1) On Tibetan metrics compare H. ВЕСКН, *Beiträge zur tibetischen Grammatik, Lexikographie und Metrik* (Anhang zu den *Abhandl. der preussischen Akademie*, 1908, pp. 53—63). The author justly emphasizes that in the study of Tibetan works the metre is to be investigated in the first line, and that it should be kept in mind in all text-critical and grammatical questions; but he overlooks the fact that this principle had been fully brought into effect by the present writer in *Ein Sühngedicht der Bonpo* (*Denkschriften Wiener Akademie*, 1900), where textual criticism is fundamentally based on metrical considerations and statistical tables of the various metres.

2) *Sketch of Ladakhi Grammar*, p. 7 (Calcutta, 1901).

3) My reading of the text is based only on the edition of M. BACOT, the general accuracy of which there is no reason to doubt. Not having had the privilege of checking it with the original, I do not hold myself responsible for eventual errors which may have crept in there. In V. 20, *ḡsani*, printed in M. BACOT's text, is apparently a misprint for *ḡsan*; *lhiñ* (V. 24), for *ltén* (as in V. 6).

4) This graphic peculiarity is explained below, under the heading "Palaeographic Traits."

- 9 *ts'ó-ts'ó ni yóns-su gyís*
 10 *lhá-i ni p'yág-du ubíl*
 11 *grágs dgu-r ni ltás myi bltá (+ a) ¹⁾*
 12 *bzán ñan ni ltás-su gsíñ*
 13 *drán-eron ni lhá adsin lá*
 14 *lhá ston ni gñén-bai byá (+ a) ¹⁾*
 15 *mú sman ni gñén-gis gsíñs*
 16 *drán žiñ ni brtán-por stón*
 17 *p'ó-rog ni dgún-gi byá*
 18 *adáb drug ni gšóg drug pá (+ a) ¹⁾*
 19 *lhá yul ni mt'ó-du p'yín*
 20 *dmyíg rno ni sñán gsan bás*
 21 *lhá-i ni mán-ñag stón*
 22 *myi rtog ni gcíg-ma mc'ís*
 23 *yíd c'es ni séms rton cíg*
 24 *p'yóys brgyad ni ltén dan; dgú*
 25 *lhoñ lhoñ ni bzán-por stón*
 26 *t'ág t'ag ni abriñ-du stón*
 27 *krág krag ni rñs-par stón*
 28 *króg krog ni gróg yóns smrá*
 29 *,iú ,iu ni búr ston yín.*

'Translation.

- 1 The Raven is the protector of men,
- 2 And the officiating priest (carries out) the order of the gods.
- 4 (Sending him, the Raven) into the middle of the country,
- 3 Where he has occasion for feeding on yak-flesh in the out-lying pasture-lands,
- 5 The Venerable of the Gods conveys (his will) by means of the sound-language (of the Raven).

¹⁾ This graphic peculiarity is explained below under the heading "Palaeographic Traits."

- 6 When in the eight quarters, making nine with the addition of the zenith,
- 7 He (the Raven) sounds his notes, the three means (to be observed) are explained as follows:
- 8 The offering must be presented to the bird (the Raven),
- 9 And it should be a complete feeding in each instance.
- 10 (In this manner, the offering) is given into the hands of the god (or gods).
- 11 As to the omens, they are not drawn from the mere cries (of the Raven),
- 12 But in the announcement of the omens a distinction is made between good and evil cries.
- 13 The officiating priest is in possession of the knowledge of the gods,
- 14 He teaches (the orders of) the gods, and it is the bird who is his helpmate (in this task).
- 15 The remedies for warding off the demons are announced by the helpmate.
- 16 Truthful in his speech, he proves trustworthy,
- 17 For the Raven is a bird of Heaven;
- 18 He is possessed of six wings and six pinions.
- 19 Thanks to his visits above in the land of the gods,
- 20 His sense of sight is keen, and his hearing is sharp.
- 21 (Hence he is able) to teach (mankind) the directions of the gods.
- 22 There is for man but one method of examining (the sounds of the Raven),
- 23 And may you hence have faith and confidence (in his auguries)!
- 24 In the eight quarters, making nine with the addition of the zenith, (the following sounds of the Raven occur:)
- 25 The sound *lhoi lhoi* foretells a lucky omen.
- 26 The sound *t'ag t'ag* forebodes an omen of middle quality.

- 27 The sound *krag krag* foretells the coming of a person from a distance.
- 28 The sound *krog krog* announces the arrival of a friend.
- 29 The sound *,iu ,iu* is an augury of any future event (as indicated in the Table).

NOTES.

V. 1. The raven *p'o-rog* is still called *c'os skyon* (Skr. *dharmapāla*), "protector of religion" (G. SANDBERG, *Hand-book of Colloquial Tibetan*, p. 170). The word *ngon* is employed in the sense of Sanskrit *nātha*. Our text gives the word only in the form *p'o-rog*, while in *K.* the form *bya-rog* is used exclusively. The latter, as shown by *Mahāvvyutpatti*, seems to be the recognized form of the written language, while *p'o-rog* seems to be more popular; the latter occurs, for example, in the Tibetan prose version of the *Avadāna-kalpalatā*, which has been written for children. The distinction of *bya-rog* as "crow," and *p'o-rog* as "raven," is based on the Sanskrit-Tibetan dictionary *Amarakosha* (T. ZACHARIAE, *Die indischen Wörterbücher*, p. 18), where Tib. *bya-rog* is the equivalent of Skr. *vāyasa* ("crow"), and Tib. *p'o-rog* that of Skr. *droṇa* ("raven"), the two words being treated in different stanzas (ed. of Vidyābhūṣaṇa, *Bibl. ind.*, p. 134, Calcutta, 1911).

The word *bya-rog* appears twice in the *Mahāvvyutpatti*, section on birds (Tanjur, *Sūtra*, Vol. 123, fols. 265b, 266a, Palace edition), — first, as translation of Skr. *dhvāṅkṣa*, "crow" (in *Amarakosha* rendered by *sgra ldan*), where the synonyms *spyi-brtol-can* (the Palace edition writes *sbyi-rtol-can*), "the impudent one," and *k'va*, are added; second, as rendering of Skr. *dronakūka*, "raven," while the Skr. *kāka* and *vāyasa* are rendered by Tib. *wa* (not noted with this meaning in our dictionaries), evidently an imitative sound, in the same manner as Tib. *k'va*, *k'va-ta*, and *k'a-ta*, "raven," and *ko-wag*, a word expressive of the voice of the raven. In *Se t'i ts'ing wën kien* 四體清文鑑 (Ch. 30, p. 25) the following distinctions are made: *k'a-ta* corresponds to *wu-ya* 烏鴉, Manchu *gaha*, Mongol *kāryā*; Tib. *bya-rog*, to *ts'e-ya* 慈鴉, Manchu *holon gaha*, Mongol *khong kāryā*; Tib. *p'o-rog*, to *hua po ya* 花脖鴉 ("raven with colored neck"), Manchu *ayan gaha*, Mongol *torok kāryā*. In the Appendix to this dictionary (Ch. 4, p. 12) we find Tib. *bya-rog* = *kuan* 瞿 (according to GILES a species of stork), Manchu *šungkeri giwara* (according to SACHAROV a kind of large horned owl); and Tib. *ka-ka* = *hu k'ua ying* 呼跨鷹, Manchu *turkun giwara*. In these two cases the Tibetan names seem to be artificial productions made *ad hoc* in order to

translate the Manchu words. The *Polyglot List of Birds in Turki, Manchu and Chinese*, published by E. D. Ross (*Mem. A. S. B.*, Vol. II, No. 9, 1909), though in general a useful work, is incomplete in that the Appendix of the Polyglot Dictionary, containing about two hundred more names of birds, has not been utilized at all. For future work of this kind the following suggestions may be offered in regard to the methods of obtaining identifications of bird-names. In my opinion, it is an incorrect procedure, in most cases, to try to identify any Oriental bird-name with a *species* of our own ornithological nomenclature, because our scientific research¹ has made out infinitely more species of birds than there are words for the species in any language; all we can hope for, at the best, is to establish the *genus*, and in many cases we have to be content to ascertain the family. Take, for example, the case of crow or raven, a popular name embracing a large family of birds, *Corvidae*. In 1877 A. DAVID and M. E. OUSTALET (*Les oiseaux de la Chine*, p. 366) stated that nearly two hundred species of it were known on the globe, and twenty-seven from China. At present we certainly know many more in addition. (A. LAUBMANN, *Wissenschaftliche Ergebnisse der Reise von G. Merzbacher, Abhandlungen der bayerischen Akademie*, 1913, pp. 37—42, enumerates ten genera of the family *Corvidae* from the region of the T'ien Shan.) Who can name those twenty-seven species in Chinese? Nobody. Our species are made from points of view which are entirely foreign to the minds of Oriental peoples. They see different "kinds," where our ornithologist may establish one species; and they may have one word, where we are forced to admit different species, and even *genera*; and they may even take the male and female of the same species for two distinct birds. It is further necessary to disillusion our minds regarding the production of the K'ien-lung lexicographers, which must be handled with great caution and pitiless criticism: it teems with artificial makeshifts in Manchu, Tibetan, and Mongol, which are not genuine constituents of these languages, and is vitiated by numerous blunders in spelling, which are to be corrected. The compilers were philologists, not zoologists; and their combinations of bird-names in the various languages offer no guaranty that these refer to really identical *genera*, not to speak of *species*, the greater probability in each case being that the species are entirely different (thus, for instance, as may be determined, in the majority of Tibetan and Chinese bird-names). — Tib. *bya rog* means "the black bird," and *p'o-rog* "the male black one." There is a dialectic form *,o-rog*, *,o-lug* (WALSH, *Vocabulary of the Tromowa Dialect of Tibetan*, pp. 11, 28, Calcutta, 1905), with the prefixed *,a* (here *,o* in consequence of vowel-attraction) forming nouns (SCHIEFNER, *Mélanges asiatiques*, Vol. I, p. 362; and MAINWARING, *Grammar of the Hóng [Lepchu] Language*, p. 111). In meaning and grammatical formation this *,o-rog* corresponds to Lolo *a-nye*, "the black one," i. e. the raven (*T'oung Pao*, 1912, p. 13). The common raven, somewhat larger than the European species, is ubiquitous in

Tibet. Some remarks on it are made by P. LANDON (*Lhasa*, Vol. I, p. 404, London, 1905). According to H. v. SCHLAGINTWEIT (*J. R. A. S.*, 1863, p. 15), it occurs even in the ice-regions of the greatest elevation of the Himālaya: "some of the species of *corvus tibetanus* accompanied us during our ascent of the Ibi Gamin peak up to our highest encampment at 19,326 feet." Of especial interest with reference to the present case is the following observation of THOMAS MANNING, who travelled in Tibet 1811-12 (C. R. MARKHAM, *Narratives of the Mission of George Bogle to Tibet, etc.*, p. 249, London, 1876): "Many of the ravens about this lake, and many in Lhasa, emit a peculiar and extraordinary sound, which I call metallic. It is as if their throat was a metal tube, with a stiff metal elastic musical spring fixed in it, which, pulled aside and let go, should give a vibrating note, sounding like the pronunciation of the word *poing*, or *scroong*, with the lips protruded, and with a certain musical accent. The other is similar to that of the ravens in Europe, yet still has something of the metallic sound in it. Whether there be two species of ravens here, or whether it be that the male and female of the same species have each their peculiar note, I cannot say."

V. 2. Who is the *drañ-sroñ* (corresponding to Skr. *ṛishī*)? The Lamas bsTan-pa du-ldan, whose explanatory notes in Tibetan have been published by M. BACOT, on p. 447 comments that the raven *p'o-rog* is "the raven staying near the head of Vishṇu," and that Vishṇu should be understood by the term *ṛishī*. It is certainly the mythical bird Garuḍa, being the vehicle (*vāhana*) of Vishṇu, which crossed the Lama's mind, and it will be demonstrated farther on (V. 18) that an assimilation between Raven and Garuḍa has indeed taken place in Tibet (in the *ākuna* of Vasantarāja the Garuḍa commands the *kuba* as an omen-bird: HULTZSCH, *Prolegomena*, p. 41). The beginnings of such an adjustment are visible even in our text when, in V. 17-18, it is said that the Raven is a bird of Heaven, and possessed of six wings and six pinions; he is, in a word, looked upon as a solar bird. Nevertheless, he is not identical with the Garuḍa, and I do not believe that the Lama's explanation is correct. Above all, *drañ-sroñ* cannot be identified with Vishṇu or any other god; for he is the person who executes the orders of the gods (V. 2; in this sense, at least, it seems to me, the passage should be understood), who has the knowledge of the gods (*lha ḡdsin*, V. 13), and who teaches the gods (*lha ston*, V. 14). The Raven is his helpmate (*gñien-pa*, V. 14), and he announces the will and the wishes of the gods transmitted by the divine bird. The *drañ-sroñ*, accordingly, is a person with a priestly function; and I should almost feel tempted to propose for the word, in this case, the translation "seer" or "augur." It is the *sūkunika* of the Sanskrit texts who is designated also *guru* and *ūcārya* (HULTZSCH, *Prolegomena*, p. 6). Moreover, we know that the word *drañ-sroñ* has obtained among the Lamas a meaning like "officiating priest, sacrificant."

JÄSCHKE (*Dictionary*, p. 261) states *sub voce*, "At present the Lama that offers *sbyin-sreg* [a burnt-offering, Skr. *homa*] is stated to bear that name, and while he is attending to the sacred rites, he is not allowed to eat anything but *dkar-zas* [white food, like milk, curd, cheese, or butter]." Inevitably we must assume that our Table was not directly used by the laity, but that it was placed in charge of a priest who had due control over supernatural events. The layman who had encountered the vision of a raven applied to him for the proper oracle to be ascertained from the chart, and particularly, if necessary, for the making of the required offering, which was a ritual act along established rules. The Lama who fulfilled this function was called the *drañ-sroñ*. The origin of this word is explained in the work *sGra sbyor* (quoted above, p. 19; Tanjur, Sūtra, Vol. 124, fol. 6b) by the sentence *kāya-vāk-manobhir-ṛiju-çete iti ṛishi*, rendered into Tibetan thus: *lus dañ ñag dañ yid droñ-por gnas-ñiñ sroñ-bas-na drañ-sroñ c'en-po zes btags*, "he who in regard to his body (actions), speech, and heart, remains straight and keeps them straight, is designated a great Ṛishi." Hence it follows that in the minds of the Tibetans the compound *drañ-sroñ* is formed of the words *drañ-po* (Skr. *ṛiju*, "straight," in the literal and moral sense) and the verb *sroñ-ba*, "to straighten," and that the Tibetan interpretation is "one who is straight, upright in his conduct." Another definition given in the same work is "one who is possessed of knowledge" (*šes-pa-dañ-ldan-pa*). The notion of "hermit" given in our Tibetan dictionaries is apparently not implied in the Tibetan definitions. It will thus be noticed that the literal interpretation of the word, "one who straightens out affairs in a straight manner," could result in the development of the notion "one who straightens out affairs relating to sacrifice, augury or divination."

V. 3. Tib. *byañ a broq* is identified by M. BACOT with the well-known term *byañ t'añ*, "the northern table-lands." The two expressions are evidently synonymous (compare VASILYEV, *Geography of Tibet*, in Russian, p. 11, St. Pet., 1895). *Byañ a broq* appears as one of the thirteen districts assigned by the Mongol emperors to the hierarchs of Sa-skya (*dPag bsam ljon bzaiñ*, p. 159, l. 1); but I do not believe that a definite locality in the geographical sense is here intended, any more than I believe that the word *dbus* ("centre") in the following verse need refer particularly to the Tibetan province of that name. The term *byañ t'añ* is also a general designation for uncultivated pastoral high lands (the proper meaning of *t'añ* is not "plain, steppe," as given in our dictionaries, but "plateau"), in opposition to *roñ t'añ*, the low lands of the valleys. The former is the habitat of pastoral tribes; the latter, the seat of the agriculturists. The first element in *byañ t'añ*, in all likelihood, was not originally the word *byañ*, "north," but the word *ljañ*, "green" (*byañ* and *ljañ* are both sounded *jañ*; *ljañ t'añ*, "green plateau," is the name of a province in

mNa-ris aK'or-gsum, according to H. v. SCHLAGINTWEIT, *Glossary of Tibetan Geographical Terms*, J. R. A. S., Vol. XX, 1863, p. 13); for in Ladakh, for instance, the people apply the word *byan fan* to the district of Ru-tog, situated on their eastern border, in the sense that it is more bleak and unreclaimed than their own sheltered and less elevated valleys (compare H. STRACHEY, *J. A. S. B.*, Vol. XVII, 1848, p. 331). The same evidently holds good for our text, for, in understanding *byan abrog* literally, it would be unintelligible why the Raven despatched into the centre of the country should be supposed to gain his livelihood in the pastures of the north. The "centre," it should be understood, may be any settlement in Tibet with a sedentary farming population; and the term *byan abrog* may refer to any nomadic district in its proximity where the Raven stands a better chance for his food than among the husbandmen. The word "centre" is probably chosen in view of the nine quarters which come into question for the Raven's flight; he has to start from a centre to make for the various directions. In regard to man, the cultivated land is conceived of as being centrally located, and surrounded on its outskirts by the wild mountains with their grassy plateaus suitable for cattle-raising. The tribal and social division of the Tibetan people into these two distinct groups of agriculturists and cattle-breeders meets its outward expression in the juxtaposition of the word-groups denoting „valley" and „mountain" („pasture," „plateau"), the one pertaining to cultivation, the other to everything uncultivated or of wild nature. The "valley pig" (*luñ p'ag*) is the domestic pig, a sedentary animal found only among the farmers, but never among the nomads: while the "mountain pig" (*ri p'ag*) is the wild boar: hence *ri* and abbreviated into the prefix *r-*, with predilection, enters into the names of wild animals (*W. Z. K. M.*, Vol. XIII, 1900, p. 206).

In regard to the yak-flesh we may remember the passage of the *T'ang shu* (BUSHELL, *The Early History of Tibet*, p. 7): "When they entertain envoys from foreign countries, they always bring out a yak for the guest himself to shoot, the flesh of which is afterwards served at the banquet." In the legends of the Buryat, the crow is invited by people to take part in a meal furnished by a slaughtered ox (CHANGALOV and ЗАТОПЛАУЕВ, *Бурятскія сказки и поутря*, pp. 17, 21, Irkutsk, 1889).

V. 5. Tib. *tha btsun*, correctly translated by M. BACOT "le dieu vénérable," would correspond to Skr. *devabhadanta*. It is notable that the coming of *tha btsun* is the very first prediction appearing in the Table when the raven's voice sounds in the east during the first watch. His name appears again in Table VII, 6, where it is said that "the helper, or the assistance of the Venerable One (*btsun-pai-gñen*), will come." (I do not believe with M. BACOT that these words mean „un parent de distinction." In fact, M. BACOT sides with me in this opinion, for in Table V, 3, he very aptly and correctly renders the term

gñen lha by „dieu protecteur”). The helper is referred to in V. 15 (*gñen*), and the expression *gñen-bai bya* (“the helping bird”) in V. 14 leaves no doubt that the raven is meant. It seems futile for the present to speculate on the nature of this deity called *lha btsun*. All we may infer from this text is, that he seems to be a supreme god presiding over the *lha*, that he resides in the region of the gods (*lha yul*, V. 19), and that he reveals his will to mankind through the Raven, his messenger, whom he sends down on earth. On the whole, I am inclined to regard this deity as a native Tibetan concept, not as an adaptation to an Indian notion; possibly he is identical with the Spirit of Heaven 天神 invoked by the Tibetan shamans, according to *Kiu Tang shu* (Ch. 196 上, p. 1b). — As regards the name *lha btsun*, an analogous expression is met in Taoism in the name of the deity T'ien tsun 天尊 (or Yuan shi T'ien tsun, the first of the three divinities forming the trinity of the Three Pure Ones 三清); Tib. *lha* and Chin. *t'ien* correspond in meaning, both serving for the translation of Skr. *deva*; and Tib. *btsun* and Chin. *tsun*, as already recognized by ABEL-RÉMUSAT and SCHIEFFNER (*Mélanges asiatiques*, Vol. I, p. 340), are identical words.

M. BACOT translates, “Le dieu vénérable accompagne la parole qu'il prend avec lui,” by taking *bda* for the verb *bda-ba*. Even granted that the latter could have this meaning, the construction of the sentence remains ungrammatical, and the rendering gives no sense. In these ancient texts we must be mindful of the fact that spellings at variance with modern usage occur, or, in other words, that different phonetic conditions are fixed in writing. There is no difficulty in seeing that *bda* here stands for the common mode of writing *brda*; and *brda skad* is a very frequent compound, which, as correctly interpreted by ЯСОНКЕ, means (1) language expressed by signs or gestures, (2) language expressed by words. Here it refers to the prophetic sounds or language of the Raven by means of which the Venerable One of the Gods conveys (*skyel*) his will and wishes.

V. 6. In the commentary of the Lama (p. 447), where the verses of the text, which are explained, are repeated in larger type, this verse terminates with the word *bcu*, so that the Lama brings out ten quarters, adding the nadir (“the region of the *klu*, the land below”) as the tenth; but this is evidently a slip which occurred in the copy taken by or for the Lama.

V. 7. The expression *,aṅ toṅ* presents some difficulties, as it is evidently an archaic and antiquated term not recorded in our dictionaries. The Lama maintains silence about it. M. BACOT has tentatively proposed to take it in the sense of *,aṅ daṅ-po*, and renders the sentence, “Le meilleur est d'énoncer les trois moyens.” But this is an entirely un-Tibetan way of speaking, and M. BACOT's conception of the sentence contradicts the iron rules of Tibetan

word-position. Such a translation would only be permissible if the reading were *t'abs gsum gsuñs ,aṅ dañ-po* (red). Aside from this, the identification of *,aṅ toiñ* with *,aṅ dañ* is hardly acceptable; it is not supported by any native dictionary, nor can it be upheld by any phonetic law. Further, the Sanskrit-Tibetan hybrid, in the written language usually *,aṅ-gi dañ-po* (more rarely *,aṅ dañ*), has only the meaning of the ordinal numeral "the first" (in the enumeration of a series), while in the sense of "first quality, best," it is a very vulgar expression of the colloquial language, about the equivalent of Pidgin-English "number one." A few considerations may place us on the right track as to the meaning of the phrase. The preceding verse, "in the eight quarters etc.," demands a verb; in looking up the parallel passages of *K.*, we notice that each of the determinations of the quarters is followed there by the words *skad sgrugs na*, "if (the crow) sounds its voice," and this is what is apparently required and intended in this passage. In this case we recognize in *toiñ* the verb *gtoñ* (compare *sod* for *gsod* in Table II, 8; VI, 2, and the phonetic remarks below), which, as shown by JÄSCHKE (*Dictionary*, pp 19a, 200a), is indeed used in this sense in Ladākhī: *skad tañ-ce*, "to utter sounds;" *ku-co, bō-ra taiñ-ce*, "to raise, to set up a cry." But the phrase in question occurs also in writing, like many others given by JÄSCHKE as dialectic expressions; a number of those could be compiled from the prose version of *Avadānakalpalasā*. The word *,aṅ* (probably derived from the Sanskrit particle *aṅga*, *pw*. "anru-tend oder auffordernd") means "cry, clamor." SARAT CHANDRA DAS (*Dictionary*, p. 1347) cites an example of this kind, without translating it, in the sentence *mi-yis bos kyañ ,aṅ mi k'ug*, which evidently means, "Although the man called, his cries did not draw any attention." GOLSTUNSKI, in his *Монгольско-русский словарь* (Vol. I, p. 7b), assigns to Mongol *aṅ*, which has several other meanings, also the significance "shouting of fighters, cries of camels and donkeys." It is the same thing when JÄSCHKE quotes *,aṅ* as an interjection with the meaning "well, then! now, then! eh bien!" It is an exclamation. Another use of *,aṅ* not noticed heretofore seems to be traceable to the same origin. *,Aṅ* appears as a particle joined to the imperative with or without *ciy*, as well as to the prohibitive. In *Bya c'os* (see note to V. 28), p. 39, we meet five times with *sog ,aṅ*. In *sLob gñer byed ts'ul-gyi bslab bya le ts'an gñis*, a small work published by the monastery Kumbum (*sKu ḅum*), we have *sgrims ḅiy ,aṅ* (fol. 6), *gnas-par gyis ḅiy ,aṅ* (fol. 7), *ma byed ,aṅ* (fol. 10), *ma rgyugs ,aṅ* (fol. 14), and many other examples. The meaning seems to correspond to French *donc* (German *doch*) in connection with an imperative, and this application seems to be derived from the original significance "cry, exclamation." In the case above, *,aṅ* is used as a noun synonymous with the word *skad* of *K.* and refers to the cries of the raven which he emits (*gtoñ*) in his flight toward the various quarters. The phrase *,aṅ toiñ* linked to the preceding verse is the psychological subject governed by *t'abs gsum gsuñs*: the augury derived from

the sounds of the raven voiced in the eight quarters is explained as consisting of three means or modes of procedure. The explanation is inspired by the Venerable of the Gods. The three means are the offering (*gtor-ma*, Skr. *buti*), the discrimination between good and evil cries (and accordingly auguries), and the oracle proclaimed by the priest, with his superior knowledge of the supernatural.

V. 8. Tib. *gtor-ma gtor-ba* (as *llas lla-ba* in V. 11) is a hendiadys favorite in Tibetan and other Indo-Chinese languages. A. CONRADY (*Eine indo-chinesische Causativ-Denominativ-Bildung*, p. 81, Leipzig, 1896) has given a number of good examples of this kind; others occur in *Ein Sühngedicht der Bonpo*, l. c., p. 27. Compare the synonyms of the crow given in *Amarakosha* (l. c.), — *balipushṭa* and *balibhuj*, — and the Tibetan synonyms *gtor-mas rgyas* and *gtor-a* in the "Dictionary of the French Missionaries," p. 86. Several others enumerated in the latter may be explained from *Amarakosha*: as *ac'i-med* = *arishta*; *gžan gso* = *parabhṛid*; *lan cig skyes* = *sukṛitpraja*, which accordingly does not mean "né une seule fois," but "one bearing young but once a year;" *bdag sgrog* (in the translation of *Amarakosha*, *sgrogs-pai bdag-ñid-can*) = *ātmaghosha*.

V. 9. M. BACOT translates, "Plus il y en a d'espèces, mieux cela vaut." He seems to have thought of *ts'o* ("number, host"), but, as already remarked by JÄSCHKE, this word hardly ever stands alone; in fact, it is only used as a suffix denoting a plural. As shown by the context, *ts'o* is written for *at's'o* ("to feed, nourish"), and the duplication indicates the repeated action. Also the Lama, as shown by the wording of his comment, takes *ts'o* as a verb by saying that all birds *ts'o-nas* eat the offering; but, as he merely repeats *ts'o* in the same spelling as in the text, it is not clear in which sense he understands the verb. *Gyis* certainly is the imperative of *hgyid-pa*. V. 8 and 10 have been correctly rendered by M. BACOT.

V. 10. The Lama understands this verse, "The raven is a bird soaring in the sky" (*nam ldii-gi bya*), and possibly thinks again of the Garuda. It seems to me that the Raven as a bird of Heaven is understood to be the messenger sent down from heaven, as previously set forth, and it implies also that he is of celestial origin, as specified in V. 19.

V. 11. Tib. *grags* is not used here in the sense of „glory," but with the literal meaning "cry, outcry, clamor;" it is derived from the verb *s-grog-pa*, ("to call, to shout"), which is identical with Chinese *kiao* 叫 ("to call out; the cries of certain animals and birds"), in the same manner as Tib. *s-grog-pa* ("to bind") = Chin. *kiao* 絞 ("to bind"), and Tib. *a-grogs-pa* (from *grogs*,

“friend, to be associated”) = Chin. *kiao* 交, “to be united, friendship, intercourse” (compare A. CONRADY, *Eine indochinesische Causativ-Denominativ-Bildung*, pp. VII, VIII, Leipzig, 1896). *Hua i yi yü* (Hirth’s copy in the Royal Library of Berlin, Ch. 11, p. 67b) correctly renders Tibetan *grag* by 鳴. — Tib. *dgur* is not the word “crooked,” as M. BACOT thinks, but is to be analyzed into *dgu-r*, terminative of *dgu* (“nine, many”, and particle expressing the plural (FOUCAUX, *Grammaire de la langue tibétaine*, p. 27; A. SCHIEFNER, *Ueber Pluralbezeichnungen im Tibetischen*, § 23, in *Mém. Acad. de St.-Petersbourg*, Vol. XXV, N^o. 1, 1877). The question may be raised whether *grags-dgu* denotes the various kinds of cries of the raven, of an indefinite number, or whether exactly nine sounds are understood. It would be rather tempting to assume the latter possibility, and to set the nine sounds in relation with the nine quarters; but at the end of the Preface only five sounds of the raven are enumerated in accordance with *K*. Again, the fact that this section of the Preface is preceded by the verse, “In the eight quarters, making nine with the zenith,” leads one to think that, besides the series of five, a series of nine sounds, corresponding to the nine quarters, may have simultaneously existed, and that the matter is confused in this text. A positive decision on this point, however, cannot be reached, and I prefer to regard *dgu* as a mere designation of the plural.

V. 12. As plainly stated in the first horizontal column of the Table, an offering is necessary whenever the voice of the Raven sounds ill luck. M. BACOT translates this verse, “Le bon et le mauvais, après qu’on l’a vu, qui en parle?” He accordingly accepts *su* as interrogative pronoun, while it is evidently the particle of the terminative belonging to *las*. Such slips are certainly excusable, and have been committed by other translators. Thus, for example, E. SCHLAGINTWEIT (*Die Lebensbeschreibung von Padma Sambhava II, Abhandl. der bayerischen Akad.*, 1903, p. 547) took the final *s-o*, denoting the stop, as the noun *so* (“tooth”), and translated the sentence *paṅḍita-rnamṣ kun-gyis ma t’ub grags-so mts’ams aḅyed-pas*, “All pandits praised him as the powerful one of the Abhidharma; if a tooth is hollow, its removal is desirable.” There is nothing to this effect in the Tibetan words, which simply mean, “He is known under the name ‘the One Unexcelled by all Pandits;’ he began solitary meditation,” etc. In the same author’s *Die tibetischen Handschriften der k. Hof- und Staatsbibliothek zu München (Sitzungsberichte der bayerischen Akad.*, 1875, p. 73) occurs, in the title of a book, “the tooth of the fulfilment of the great Lama Rig-ḅsin;” the Tibetan *bskaiṣ-so*, of course, is a mere graphic variant of *bskaiṣ-so*, and means “the fulfilment of vows.”

V. 14. M. BACOT takes *gñen-bai bya* in the sense of “devoir des parents.” It may be granted that these words could have such a meaning, though as a

rule *bya-ba* retains its suffix, when it has the rôle of the word assigned to it by M. BACOT. But the point is that such a viewing of the matter has no sense in this context. I should think that *bya* is simply "bird," as it occurred in V. 8; while the suffix *bai* or *pai* sufficiently indicates the verbal character of *gñen*, "to help, assist" (in its sense somewhat synonymous with *myon*, V. 1). The whole term is to be construed like a Sanskrit Bahuvrihi: the *Drañ-sroñ* is one having the bird as a helper. The fact that the helper refers to the Raven is manifest also from the following verse.

V. 15. M. BACOT translates, "remède de douleur, parole des parents." The meaning of *gñen* (V. 5) has been explained. The construction of the sentence is simple: in regard to the remedies, they are announced or explained by the helper (the Raven). The only difficulty is presented by the word *mu* preceding *smān*. Also M. BACOT has clearly seen that the word *mu* ("border, limit," etc.) cannot here come into question. In my opinion, we have to apply the rule laid down under V. 5, that a prefix has been dropped in *mu*; and I should like to propose to read *dmu* or *rmu* "evil demon," which befits the case very well; *dmu* is a demon causing blindness, dropsy, and other infirmities. In the Table (X, 1) the coming of demons is indicated as an oracle, and the augur is certainly obliged also to announce the means of escaping the evil effects or consequences of an oracle. In a wider sense, *mu smān*, accordingly, signifies the remedies releasing the person concerned from any threatening calamity in consequence of a prediction.

V. 16. This verse is explained by our Lama commentator (p. 442), "He who does not tell lies is reckoned as good by all men," which fairly reproduces the general sense, while the translation of M. BACOT is untenable. He takes *drañ žiñ* in the sense of "en conduisant," and accordingly derives it from the verb *ḡdren-pa*; but "en conduisant" could be expressed only by *ḡdren žiñ*. The descriptive particle *ciñ* is hardly ever joined to a future tense (no example from literature is known to me), usually to a present tense, in the majority of cases to an adjective, rarely to a past tense (compare the examples in the grammars of FOUCAUX, p. 19, and JÄSCHKE, p. 56). The chances, as a rule, are that the word preceding *ciñ* is an adjective with verbal force. As such it is used here, *drañ* standing for *drañ-po* (any suffixes may be dropped in verse), "honest, upright, truthful," and this attribute refers to the truthful sound-language of the raven. The phrase *bṛtan-por ston* cannot mean "on montre sa fermeté;" *ston-pa* with the terminative means "to show one's self as, to prove as, to furnish proof of being," etc. The word *bṛtan-po* or *bṛtan-pa* (also *rton-pa*, as in V. 23, *bṛton-pa*), with or without *yid*, means "to place confidence in a person" (JÄSCHKE, *Dictionary*, p. 215a); *bṛtan-po*, more specifically, refers to a permanency of condition in which a person continues to

enjoy the confidence once obtained, while *brtan-pa* signifies a temporary action. It occurs in *Saddharmapundarikā*, where FOUCAUX (*Parabole de l'enfant égaré*, p. 54, Paris, 1854) renders it by "homme digne de confiance," and in *Bharatae responsa* (ed. SCHIEFNER, p. 46: *fidem habere*). The sense of this verse, accordingly, is, "(Le corbeau), en disant la vérité (ou, parce que ses augures sont véritables), se prouve digne de confiance."

V. 18. The two Tibetan expressions would theoretically correspond to Skr. *shatpaksha*, *shatparṇa*, but such Sanskrit terms do not exist. The whole idea apparently is not Indian. (M. BACOT's rendering, "six plumes devinrent six ailes," is not justified by the text, and yields no significance.) Here we must briefly touch on the religious ideas revealed by our text. Our knowledge of Tibetan folk-lore, and particularly of that of the past, is certainly still so scanty that for some time to come all speculations on such-like subjects must remain of a more or less tentative character. But with all their brevity, the twenty-nine verses of this Preface contain a good deal, and also, from the viewpoint of religious history, present a document of some importance. Above all, we notice that the ideas expressed by it are absent from the text of *Kāka-jariti*, and aptly fill the gap which we were obliged to point out there. It is the rôle of the Raven as a bird of divination which is here depicted. At first sight it is tempting to regard this description as breathing a certain Tibetan spirit. We know that the Raven plays a part in the sacred pantomimic dances of the Tibetan Lamas performed at the time of the New Year; he makes attempts at stealing the strewing oblation (*glor-ma*), and is driven away with long sticks by two Atsara, skeleton ghouls, a skeleton being designed on their white cotton garbs, and their masks having the appearance of skulls. The mask of the Raven, though it is styled *bya-roq* by the Tibetans, has not at all the form of this bird, but that of the Indian Garuḍa, with big curved and hooked beak (while the raven's beak is straight). A specimen in the Field Museum, where are complete sets of Tibetan masks, shows the Raven's mask of dark-green color, with red bill, a blue eye of wisdom on his forehead, flamed eyebrows, and gold painted flames protruding from his jaws. The entire make-up is so unlike a raven, that the Chinese workman of Peking who manufactures the masks for the Lama temples of the capital styles it a parrot (*ying wu*). In the *Veda* the eagle carries off the *soma* or *amṛita* for Indra, and in the *Kūthaka* it is Indra himself who in the form of an eagle captures the beverage (A. A. MACDONELL, *Vedic Mythology*, p. 152; and H. OLDENBERG, *Die Religion des Veda*, p. 176). The *Mahābhārata* (*Āstikaparvan* XXXII) tells how Garuḍa, in order to take hold of the *amṛita*, defeats the host of the Deva, kills the guardians, and extinguishes the fire surrounding the *amṛita*. This Indian tradition seems to me in some way or other to be responsible for the cast of the Raven in the Tibetan sacred dances, and for certain elements of a sun-bird

attached to the Raven in our text. The Indian source which has transmitted these ideas to Tibet certainly remains to be pointed out. If the raven was made the substitute of the Garuda in Tibet, this may be due to the world-wide reputation of that bird as a clever pilferer. The ancients regarded him as an all-round thief, particularly of sacrificial meat. In the sacred groves of Greece many ravens subsisted on the flesh which they seized from the altars and consumed in the trees (O. KELLER, *Die antike Tierwelt*, Vol. II, p. 93). The Kachin of Burma look upon the raven as the very first thief who subsequently was duly imitated by man (GILHOODES, *Anthropos*, Vol. IV, 1909 p. 134).

On the other hand, the Tibetan mask of the Raven reminds us of the first of the seven degrees of initiation which the mystic successively assumed in the Mithraic cult, — the name of Raven (*corax*); the others being Occult, Soldier, Lion, Persian, Runner of the Sun, and Father (F. CUMONT, *The Mysteries of Mithra*, p. 152). CUMONT regards these as animal disguises going back to a prehistoric period when the deities themselves were represented under the forms of animals, and when the worshipper, in taking the name and semblance of his gods, believed that he identified himself with them. To the primitive titles of Raven and Lion others were afterward added for the purpose of attaining the sacred number seven, the seven degrees of initiation answering to the seven planetary spheres which the soul was forced to traverse in order to reach the abode of the blessed. It is in the Tibetan mystery-plays that we find the masks of the Raven and the Lion. In the belief of the Persians, the Raven was sacred to the God of Light and the Sun. On the Mithraic monuments he sits behind Mithras, sacrificing a bull, and, according to O. KELLER (*Die antike Tierwelt*, Vol. II, p. 104), the idea of the sacred Ravens assigned to Helios in Thessalia may have originated from Persia. The "six wings and six pinions" assigned in our text to the Raven in his quality as a bird of Heaven cannot be accounted for by any Indian notions, and it may well be doubted whether this feature is due to a creation of Tibetan mythology. It seems to me that also this trait savors of Mithraic elements, somehow inspired by the grotesque monsters of West-Asiatic imagination, particularly the winged griffins (see, for example, PEYROT and CHAPIEZ, *History of Art in Persia*, Figs. 71, 72, 158, also 187; another Tibeto-Mithraic parallel is pointed out by GRÜNWEDEL, *Baessler-Archiv*, Vol. III, 1912, p. 15). The Persian influence on Tibetan religion is established, though it remains for the future to work up the details of the problem (GRÜNWEDEL, *Mythologie des Buddhismus*, p. 205, note 38). The historical foundation of the Bon religion of Tibet, as shown by me (*Young Pao*, 1908, p. 13), is Persian. The most significant feature revealed by this Preface, as already pointed out, is the Raven's function as the messenger of a god, so that his predictions appear as the expression of divine will. The Raven as a heavenly messenger is conscious of his presages. The same idea is expressed by PLINY (*Nat. Hist.*, X, 12, § 32:

ed. MAYHOFF, Vol. II, p. 229): corvi in auspiciis soli videntur intellectum habere significationum suarum.

V. 19. M. BACOT renders this verse, "La terre des dieux arrive au ciel." He has apparently been led into error (the same matter occurs in V. 3, 6, 7, 11, 12, 18) by assuming that the particle *ni* distinguishes the subject of the sentence. This was the erroneous view of I. J. SCHMIDT, which was refuted by SCHIEFNER (*Mélanges asiatiques*, Vol. I, p. 384). *Ni* is simply an emphatic particle added to any word or group of words in order to single them out (JÄSCHKE, *Tibetan Grammar*, p. 66). It may follow any adverb and any phrase expressing space or time, the genitive, dative, instrumentalis, or locative; and in metrical composition, it may take any place where a syllable is to be filled in (a peculiar case not discussed in our grammars is *na ni* forming the unreal conditional sentence). There are assuredly numerous cases where stress is laid upon the subject by the addition of this particle, then corresponding in meaning to Japanese *wa* and *ga*; but this rule must not be turned into the opposite, that wherever *ni* is employed, the subject is hinted at. Our text is very instructive as to the application of *ni*, since in each verse it occurs in the third syllable with intentional regularity, and lends to the style a somewhat oracular tinge. First of all, it is employed because of the metre to produce a dactyl in the first foot of each verse: simultaneously, certain words, as *p'o-rag* and *drai-sroñ* in V. 1 and 2, are singled out with strong emphasis by its presence. In V. 4, 10, 11, 16, 21, 23, it is entirely superfluous and merely a rhythmic factor. As to V. 3 and 19, we should have *na* in its place in a prose text, in V. 9 *nas*, in V. 18 *dañ*. If the author should have pinned his faith to a purely trochaic metre, which is the most frequent in Tibetan, he could easily have accomplished his purpose by dropping all the *ni*, and yet the sense of his words would have remained exactly the same.

V. 22. M. BACOT renders this verse, "Homme et raison ne font pas un." Whatever this may mean, it is evident that the Tibetan people do not indulge in metaphysical speculations of that sort, and that such a sentence has no *raison d'être* in this context. We notice that this text is a plain account of the Raven as a bird of augury, and that everything logically refers to it in a palpably concrete manner. For this reason we are justified in seeking the interpretation of the verb *rtog-pa* in the same direction. We met it in the Tibetan title of the *Kākajariti*, where it is used in regard to the "examination" of the sounds or cries of the crow, and I believe it is here used in exactly the same sense. The word *myi* preceding it is in parallel opposition to *lhai* of the previous verse, and, like the latter, may be construed as a genitive ("examination of the auguries on the part of man") or in the sense of a dative depending on *meñis* ("to man . . . there is"). The particle *ma* can, of course, be looked upon

as the negation, as M. BACOT considers it, but this does not make sense. I prefer to read *gcig-ma*, "unity, oneness," (regarding *-ma* with words denoting space, time, etc. see SCHIEFNER, *Mélanges asiatiques*, Vol. I. pp. 385, 386), and understand the verse to the effect that there is for man only one and the same method of examining the forebodings of the Raven, that is, the method laid down in the Table. This interpretation seems to be in keeping with the spirit of the text. If the Raven is a heavenly bird, a messenger of the gods, and the herald of their commands, if he is truthful and trustworthy, it is logical that there should be but one way of studying and interpreting his notes. The comment furnished by the Lama is quite in harmony with this point of view. He likewise understands the words *gcig ma mc'is* in a positive sense by transcribing them *gcig adra byed*, "make like one, might be one," and his note *mi t'ams-cad rtog-pa ni* sufficiently indicates that these words mean an examination referring to all men, and that *rtog-pa* is not intended for *rtogs-pa*, "knowledge, perception." The copula *mc'is* belongs to the *estilo culto*.

Analogous examples for the use of *gcig-ma* are *rkañ gcig-ma* "one-footed," *rkañ gñis-ma* "two-footed" (SCHIEFNER, *Mélanges asiatiques*, Vol. III, p. 12); *ral gcig-ma* = Skr. *ekajaṭā* (P. CORDIER, *l. c.*, pp. 122, 194, 195); *skad cig-ma* "a moment," *skad gcig-ma* "instantaneousness" (in the philosophy of the Sautrāntika: VASILYEV, *Der Buddhismus*, p. 305); and *skad cig-ma-ñid*, "the short (instantaneous) duration of life" (in the commentary of *Suhṛit-lekha*). The title of a small treatise describing the offerings to Vajrabhairava is *drug bcu-pa-ma*. The title *ratnamālā* is once translated in the Tanjur *rin c'en p'reñ-ba-ma* (usually *p'reñ-ba*), where *ma* is to express the feminine gender of Sanskrit; and so it may be concluded that the influence of Sanskrit is responsible also for the other cases of this kind.

V. 23. M. BACOT translates, "Croyance et confiance de l'esprit font un." This is in contradiction to an elementary rule of Tibetan grammar. The final *cig* does not mean "one," but is the well-known sign of the imperative: besides, the form *rton* is an imperative in itself (from *rten-pa*), and also the Lama has plainly indicated another imperative form, *t'ob cig*. The phrase *sems rten* (*rton*) in this passage corroborates the interpretation given for *brtan-pa* in V. 16. *Yid c'es* may be taken as *adverbialis* ("with faith, faithfully"), or as a verb to be supplemented by the following *cig* ("have faith and" . . .). The Lama explains this faith as "prayer to the gods" (*lha-la gsol*), which is hardly necessary. Both faith and confidence, first of all, refer to the Raven and his auguries, as presented in the Table; and faith in him naturally implies faith in the gods who sent him.

V. 27. In Table IV, 1, M. BACOT translates the sentence *riñs-pa ñig ön-bar ston* by "indique qu'une personne vient en hâte." But *riñs-pa ñig* is the

subject of the sentence, and means "a distant one, a person coming from a distance." True it is, *riñs-pa* means also "swift, speedy." The spelling, however, must never lead us astray: it is here intended for *riñ-ba*, meaning "distant" as to space and time, hence "long" (the K'ien-lung Polyglot Dictionary confronts it with *yüan* 遠 and Manchu *goro*). The word *riñs-par* in V. 27, in my opinion, contains an allusion to the passage of the Table quoted. M. Bacot's translation, "est signe de rapidité," has no meaning. Also the Lama is on my side when he interprets *mi yon*, "a man will come." — Compare *Subāshitaratnanidhi* 66 (ed. CSOMA, *J. A. S. B.*, Vol. VII, 1912, Extra No., p. 116): *rin c'en gliñ-du riñ-nas adu*, "they flock from a distance to the Island of Jewels."

V. 28. The foretelling of the arrival of a friend, in all likelihood, is fraught with a deeper significance than may appear on the surface. In the Table (VIII, 6; and X, 3) we find twice the prophecy of a meeting with a great friend. The word used in each case is *groj*, which is pronounced and written also *rog*, *rogs*. Now, the Tibetans, for this reason, pun the word (*bya*-)*roj*, "raven" with *rog*, *groj*, "friend." An excellent example of this fact is furnished by the interesting little work *Bya c'os rin c'en ap'reñ-ba*, "The Precious Wreath (*ratnamālā*) of the Teachings of Birds," the text of which has been edited by S. CHANDRA VIDYABHUSAN under the title *Bya-Chos or the Religion of Birds: being an Old Tibetan Story*, Calcutta, 1903 (40 p.). JASONKE (*Dictionary*, p. 372) mentions this graceful work, styling it also *Bya skad*, "Bird Voices," or *Bya sgruñs*, "Bird Stories," and characterizing it as a book of satirical fables, in which birds are introduced as speaking. I am under the impression that no satire is veiled under this text, at least not in the edition quoted, and that it belongs to the class of *Nitiçāstra*, as indicated by its very title. In order to teach the birds the tenets of the Buddhist doctrine, Avalokiteçvara transforms himself into the king of the birds, the large cuckoo (*kokila*), and finally attracts the attention of the other birds by his meditation carried on for many years in a sandal-tree. The birds congregate around him, and each recites in its language a number of stanzas in praise or support of Buddhist ethical teachings (compare *Mantic Uttair ou le langage des oiseaux*, poème de philosophie religieuse traduit du persan de Farid Uddin Attar par M. GARCIN DE TASSY, Paris, 1863, and the same author's *La poésie philosophique et religieuse chez les Persans d'après le Mantic Uttair*, Paris, 1864; this Persian work has doubtless received its impetus from that genre of Buddhist literature, as I hope to demonstrate in a future translation of the Tibetan book). The *Bya c'os* is not a translation from Sanskrit, but a witty Tibetan production, though fundamentally based on Indian thought; it is full of fun and pun. The verses recited by the birds terminate in a refrain, and this refrain consists of a catchword forming a pun upon the name of the par-

ticular bird. The snipe (*tiñ-tiñ-ma*), for instance, puns upon *gtiñ riñ*, "a deep abyss," in this style: "The ocean of the misery of Samsāra is a deep abyss, the hell of Māra is a deep abyss," etc. Or the jack-daw (*skyuñ-ka*) puns upon the verb *skyuñ-ba*, "to leave behind;" the owl (*ug-pa*), on *u-sdug* (= *u-t'ug*), "destitute;" the ptarmigan (*gon-mo*), on *go-dka*, "difficult to understand." And the watchword of the raven (*p'o-rog*) is *grogg yon grogg yon*, "a friend will come, a friend will come," exactly as in the above verse of the *document Pelliot*. In this case, the coming of the friend is interpreted in the figurative sense of Buddhist blessings. The Raven speaks thus:

"When moral obligations have been fulfilled, happiness will come as a friend.

"When alms have been distributed, wealth will come in the future as a friend.

"When religious functions have been performed, thy tutelary deity will come as a friend.

"When the vows are pure, the delight of heaven will come as a friend.

"When the sacrificial feast was vigorous, the Protector of Religion (*dharmapāla*) will come as a friend.

"When thy achievements correspond to the length of thy life, Buddha, in the future, will come as a friend.

"This *siddhi* of 'the friend who will come' take to heart and keep in mind!"

The coming of the friend appears also in *K.* (I, south; III, north), and from the viewpoint of Sanskrit, a play upon words can hardly be intended. We might therefore infer that simply the transmission of this Indian idea gave rise in Tibet to the formation of the quibble "raven — friend," which is apparent in *Bya c'os* (compare also the identical formations *a-rog*, "friend," and *o-rog*, "raven"). The date of this work is unfortunately unknown; the mention of the Siddha Saraha in the introduction, in a measure, may yield a *terminus a quo*. At any rate, *Bya c'os* is far posterior to *K.* and *document Pelliot*. Does the prophecy *grog yon* in the latter imply an allusion to the name of the raven? The case would be interesting from a philological point of view; if the allusion could be established as a positive fact, it would prove that the word *grog* was sounded *rog* as early as the ninth century, for only under this condition is the *bon mot* possible; or another possibility would be that the two forms *grog* and *rog* co-existed at that time. At any rate, there is in our text an obvious relation between the sound *krog krog* and the word *grog*, accordingly a divination founded on punning (*krog krog* is a recognized word of the language and recorded as such in *Za-ma-tog: Studien zur Sprachwissenschaft der Tibeter*, p. 574). This etymological kind of augury finds an interesting analogy among the Arabs, among whom the appearance of a raven indicates parting or pilgrimage, as the word for raven comes from a root meaning "to be a stranger;" the name for the hoopoe suggests "guidance," whence its appearance is of good omen to the wanderer (HASTINGS, *Encyclopaedia of Religion*, Vol. IV, p. 816). Among birds, the ancient Arabic poets most fre-

quently mention a black and white spotted species of crow and a black one which it is disastrous to scare, and whose croaking signifies separation from a mistress (G. JACOB, *Altarabisches Beduinenleben*, p. 22, Berlin, 1897). Another explanation than the above is given by D. C. PHILLOTT (*Note on the Common Raven*, *J. A. S. B.*, N. S., Vol. III, 1908, p. 115); the Arabs, according to him, call the raven "raven of separation," because it separated itself from Noah and failed to return. This bird of ill omen alights on the deserted habitations of men; it mourns like one afflicted; when it sees friends together, it croaks, and its croaking foretells "separation;" and when it sees well-peopled habitations, it announces their ruin and desolation. If it croaks thrice, the omen is evil; but if twice, it is good. Possibly the two explanations exist side by side. — Similar etymological punning in augury takes place in Annam with reference to the bird *khéc*. "Le mot *khách*, étranger, devient par corruption putoise, *khéc*, comme le nom de l'oiseau. De là un jeu de mots sur le nom de l'oiseau: Si le *khéc* crie à la porte d'entrée, c'est signe de l'arrivée de visiteurs venant de loin: s'il crie derrière la maison, ce sont des parents qui vont arriver" (L. CADIÈRE, *B. E. F. E. O.*, Vol. I, 1901, p. 196).

V. 29. M. BACOT translates "est signe d'intermédiaire." I do not believe that this is the sense intended, as omens of middle quality (*abritii*) are referred to in V. 26. The Lama understands that "the sound ,iu ,iu is continually his (the raven's) note." It is not intelligible to me how he arrives at this view of the matter. The phrase *bar ston* is somewhat embarrassing. I should be inclined to construe *bar* as an abbreviation of *bar-c'ad*, "accident, calamity," and as referring to the prophecy of calamities given in K., where this word is used; but the fact remains that it does not occur in our Table, and it is certainly to this our Table that we have to look for the interpretation of the term, as in the two preceding verses. There we observe that the greater number of oracles close with the words *oi bar ston*, and that in fact each of the ninety oracles ends in the two syllables *bar ston*, or, what is practically the same, *par ston*. This typical formula, I believe, should be recognized in the *bar ston* of V. 29, which accordingly means that the sound ,iu ,iu points to any of the ninety oracles enumerated in the Table, and therewith the Preface is happily closed with a direct appeal to the latter. This conception of the matter is satisfactory also from a grammatical point of view; for *bar* in this case is *ba + r*, and the terminative is required in connection with *ston*, as shown by V. 25—27 and the ninety examples of the Table, while *bar* taken in the sense of "intermediate, middle," would be the formless *casus indefinitus*, and decidedly present a grammatical anomaly.

Palæographic Traits.

The plain consonant, according to the rules of Tibeto-Indian writing, implies the vowel *a*. In seven cases we find an additional letter *a* following a consonant in this document, where no *a* is admissible in modern writing. The word *dgra* is four times written this way (Table II, 9; IV, 4; V, 2; VIII, 8); further, the suffix *pa* in V. 18, *blta* in V. 11, and *bya* in V. 14. Mr. BARNETT (in A. Stein, *Ancient Khotan*, Vol. I, p. 549) has made a similar observation in the fragments of the *Çālistambasūtra*. He says that before a short pause a final *a* sometimes appears to be lengthened to *ā*, the letter *a* being added on the line; and on p. 500 he adds in a note that this lengthening seems due to the short pause following. I regret being unable to share this opinion; I can see no reason (and Mr. BARNETT gives none) why this addition of *a* should indicate a lengthening of the vowel. True it is, a subjoined *a* (the so-called *a* *adogs*) denotes *ā* in the Tibetan transcription of Sanskrit words; and it may even be granted with reserve that in the word *gso* (p. 553, note 6), as Mr. BARNETT is inclined to think, the subjoined letter *a* may be intended to give the phonetic value of long *ō*.¹⁾ But there must be some difference between *a* written beneath and *a* written alongside a consonant. Why, if the lengthening of the vowel is intended, is the letter *a* not subscribed too in the other

1) An analogous case is known to me in the Tibetan version of the *Jātakamālā*, a print of 1430, where (vol. II, fol. 9) the word *rgya-mts'o* is equipped with an additional letter *a* under the letter *ts'*. — The subscribed letter *a* occurs also in Tibetan transcriptions of Chinese words; and it would be wrong to conclude, that, because it denotes length in Sanskrit words, it does so also in the case of Chinese, which has no long vowels. In the Tibetan inscription of 822, line 15 (see plate in BUSIRELL, *The Early History of Tibet*), we have Tib. *δus δu* (each with subjoined *a*) as transcriptions of Chin. 文武 *wén wu* (Japanese *δus δu*). Most certainly, the additional *a* was not intended by the Tibetans to express a Chinese *u*, but a peculiar Chinese timbre of *u*, which was not sufficiently reproduced by the plain Tibetan *u*.

cases mentioned? The further question arises, If the ancient Tibetan language should have made a clear distinction between short and long *a*, and if an attempt at discrimination between the two in writing should have been contemplated, why is this distinction not carried through with regular and convincing persistency? Why does it only appear in a few isolated cases? And if this project were once set on foot, how could it happen that it was dropped so soon, as not a trace of it has survived in later literature? Considerations like these should render us cautious in accepting the view of Mr. BARNETT. It is highly improbable that long *ā* (and in general long vowels) existed in Tibetan. It seems to me that long vowels are in Tibetan merely of secondary origin, being the outcome of a fusion of two joining vowels, or arising from the elision of final consonants.¹⁾ In our text we notice that the word *bya*,

1) JÄSCHKE (*Tibetan Grammar*, p. 4), who assuredly possessed a good ear, expressly states, "It ought to be specially remarked that all vowels, including *e* and *o* (unlike the Sanskrit vowels from which they have taken their signs) are short, since no long vowels at all occur in the Tibetan language, except under particular circumstances mentioned below." Compare the same author's *Ueber die Phonetik der tibetischen Sprache* (*Monatsberichte Berliner Akademie*, 1866, p. 152). For the same reason I am unable to share the opinion of Mr. WADDELL (*J. R. A. S.*, 1909, p. 945) when he tries to make out short and long *i* in the Tibetan inscription of A. D. 788. The short *i* following its Indian Devanāgarī prototype, according to Mr. WADDELL, is represented there by a reversion of the tail of the superposed sign to the left, which is not found in modern Tibetan manuscripts. But what evidence is there that the letter *i* with tail to the left should denote in Tibetan a short, and *i* with tail to the right a long vowel? This is an arbitrary and unfounded opinion. Why should — taking the examples from the text of the inscription as transcribed by Mr. Waddell — *gyi*, *kyi*, *srid*, *myi*, *ni*, *gin*, *riñ*, *k'rima*, *adi*, etc., have a short *i*, but *bris*, *ñiñ*, *gcig* (*gtsig* in line 2 is a misprint), *dygis*, *ñiñ*, *ñkris*, *bñi*, *ñiñ*, *ñi-ñi*, *k'rim*, *drin*, *p'gin*, *p'rin*, *rñiñ*, *ñi*, etc., have a long *i*, — words which at present are all pronounced with the vowel short? There are, further, several inconsistencies due either to the original or to Mr. Waddell's transcript. The interrogative pronoun *ci* has the long vowel in line 3, the short vowel in line 45; the particle of the genitive *kyi*, otherwise short, becomes long in line 68; *rñiñ* is long in line 55, but short in line 60; *-i*, the sign of the genitive, is usually long, but short in line 60. The author remarks that the distinction of the short *i* by reversal of the superscribed limb has not been noted in every instance. On p. 1276, where two other inscriptions are transcribed, he says, "In this copy

“bird,” is followed by the letter *a* in but a single case (V. 14), while in two other cases (V. 8 and 17) it is written without it. Why should it be *byā* in the one, and *byā* in the two other cases? In fact, however, the vowel of *bya* is not long, but short or quite indeterminate in regard to length. Nor can it be argued with Mr. BARNETT that the juxtaposition of *a* and the alleged vocalic lengthening are due to the pause, for we have *bya + a* at the close of V. 14, and *bya* without *a* at the close of V. 17. Now, what is

the distinction between the long and short *i* has not been recorded.” An important palaeographic and phonetic fact is revealed by these inscriptions: in the one case it is dealt with in a perfectly arbitrary manner, as suits the author’s convenience; in the other case it is simply suppressed. This is a singular method of editing texts. The student who is desirous of investigating this phenomenon will therefore turn away from these artifacts and for the time being have recourse to the facsimile reproduction of the Tibeto-Chinese inscription of A. D. 822 appended to Dr. BUSHNELL’S *Early History of Tibet*, where the same distinction of the two *i*’s occurs. The inscriptions published by Mr. WADDELL, for this and several other reasons, will have to be studied anew in the future, on the basis of facsimile rubbings actually taken from the stones. In regard to this peculiar form of *i*, Mr. WADDELL is wrong in asserting that it is not found in modern Tibetan manuscripts. It occurs in all good manuscripts and prints denoting the vocalic *r* and *l* of Sanskrit words, as may be seen, for example, in pl. I of CHANDRA DAS, *The Sacred and Ornamental Characters of Tibet* (J. A. S. B., Vol. LVII, pt. 1, 1888); and this is the only positive fact which we thus far know about the meaning of this sign in Tibetan. It is frequently employed in *P’yi robs mi-la tsab bya*, a manuscript of the India Office Library alluded to by SCHIFFNER (*Mélanges asiatiques*, Vol. VIII, p. 624), in words as *mi*, *yin*, *p’yis*, *k’ri*, *adi*, and in the particles of the genitive *kyi* and *-i*, but with no apparent regularity. The sign, further, occurs in the rock-carved inscriptions of Ladakh published by A. H. FRANCE (*Indian Antiquary*, Vol. XXXII, 1903, pp. 361—363, pl. VIII); there we meet it in the endings of the genitive, *gi* and *-i*, which proves how unfounded Waddell’s opinion is, for the supposition that the genitive sign *-i* should be short in Ladakh and long in Central Tibet would be absurd. The distinction of the two *i*’s, in my opinion, does not relate to quantity, which did not exist, but was made to express two different phonetic values or timbres of *i*, which are determined farther on. The vowel system of Tibetan, also at the time of the introduction of writing, was far richer than it appears from the five main vowels *a*, *e*, *i*, *o*, *u*, the only ones expressed in writing; and for a certain length of time an attempt at discriminating between two values of *i* seems to have been made. — The inverted sign *i* is still employed also, for typographical reasons, in cases where there is no space for the ordinary vowel-sign; as occurs, for instance, when in the line above a word with the vowel-sign *u* (especially the combinations *-yu*, *-ru* hanging beneath the line proper) is printed.

the rule? Our material is certainly still too scanty to admit of positive conclusions. We have to wait till more ancient documents turn up. Meanwhile it is incumbent upon us to record all peculiarities *le cas échéant*, and to beware of premature and generalized judgments, which will do more harm than good to the future student, and which may be exploded at any moment by the reading of a new document. A conclusion as to the existence of long and short vowels in ancient Tibetan is certainly a case of importance, not only for Tibetan but also for Indo-Chinese philology, as the latter is vitally affected by the former; but such a case must be founded on facts, not on guesswork. Basing my opinion on the document *Pelliot*, I am under the impression that the addition of the letter *a* is not charged with a phonetic value, but has a mere graphic function. The writing of such words as *dgra* and *blta* with an additional *a* moves along the same line as words like *dya*, *bka*, *mk^śa*, *dma*, etc., where the vowel *a* is still expressed by the presence of the letter *a* to avoid ambiguity, as without it the readings *dag*, *bak*, *dam*, would be possible (*Csoma, Grammar of the Tibetan Language*, p. 17). Writing was then in its initial stage; and the rule as to when the letter *a* was a necessity, and when it could be dispensed with, was not yet clearly developed. To all appearances it was then granted a wider latitude; and for the sake of greater distinctness, the *a* was rather added than omitted. In other cases it is neglected where it is demanded by modern rule: thus, in the *Çalistasambasūtra*, the word *mk^śa* is once expressed by the two letters *mk^ś* (*Ancient Khotan*, p. 552, D 9). One point is clear, that at the time when, and in those localities where, the *da drag* was still in vogue, the rule necessarily had to meet a more extensive application; for there the word *brda*, for instance, if unaccompanied by the letter *a*, could have as well been read *bard*. As this word is written *bda* in our text, it was certainly necessary to add the

letter *a*; but it is just this word *brda* which even in modern prints is spelled with *a* as well as without it; the spelling with *a* is, for example, the rule in K'ien-lung's *Dictionary in Four Languages*. If it should turn out through further investigations that this *a* occurs with special predilection in the suffixes *pa*, *ba*, etc., at the end of a sentence, it may very well be that it is a graphic sign employed to mark a certain stress or emphasis,¹ or to denote a stop.

Our text is characterized by two negative features, — the absence of the final *o*, which may be explained by the fact that this text is written in colloquial style, whereas the final *o* is restricted to the written language;¹) and the lack of the so-called *da drag*.

1) It is in full swing in the Stein fragments of the *Mustambasūtra* and in the graffiti of Endere, as well as in the ancient inscriptions of Lhasa, — all documents of the written language. The origin and meaning of this final *o* have not yet been explained. A. CSOMA (*Grammar of the Tibetan Language*, p. 84) has merely noticed the fact. When FOUCAUX (*Grammaire de la langue tibétaine*, p. 17) observes that the particle *o* has the signification of the verbs "to be, to have, to make," this is only to the point in that the sentence, in some instances, may thus be translated by *us*, but it is not correct from a Tibetan viewpoint. From JÄSCHKE (*Tibetan Grammar*, p. 45) it only appears that the principal verb of a sentence closing it receives in written Tibetan in most cases the mark *o*, by which the end of a period may be known. This *o*, in my opinion, is identical with the now antiquated demonstrative pronoun *o* (compare Lepcha *o-re*) which, according to SCHIEFNER (*Ergänzungen*, etc., p. 49), very rarely occurs. He points out *padma o-si*, "this lotus," in the Kanjur (Vol. 74, fol. 46), and *gron-k'yer o-sir agro*, "to go into that town," in *aDsans-blun* (compare also *Mélanges asiatiques*, Vol. I, p. 385; and *Ueber Pluralbezeichnungen*, l. c., §§ 21, 22). In the Tibetan prose version of *Avadāmakalpalatā* (p. 262, line 20) we find, *k'ysd ni . . . lus so jiri bžin skam-pa ad srid*, "this your body seems to be dried up like wood;" and (p. 134, line 19), *o ri-dvags gser-logs adi-o žes*, "this one here is that gazelle gSer-logs by name." The latter example is very instructive in showing the pronoun *o* preceding a noun, and again at the end of the sentence linked to the related pronoun *adi*, *adi-o* apparently meaning "this is." The frequent phrase *o-na*, abbreviated into *on*, embodies a survival of this pronoun, the literal meaning being "if this is so." The pronoun *o* itself represents the remains of the entire vowel series which must have originally had pronominal significance. In Ladākhī (A. H. FRANCKE, *Sketch of Ladākhī Grammar*, p. 23, Calcutta, 1901) we have *i* or *i-bo*, "this," and *a* or *a-bo*, "that." In eastern Tibet we have *o*, for example *e-de ni*, "that man" (beside *o-de*; A. DESGODINS, *Essai de grammaire tibétaine*, p. 39, Hongkong, 1899), and in Tsang and Sikkim *u-di* (JÄSCHKE, *Dictionary*, p. 499, and G. SANDBERG, p. 85; also according to the writer's own observation), with the survival *u-sir*, *o-sir*, "hither," in the written language. Also the

This term means "strong *d*" or "strengthening *d*." A. Csoma was already acquainted with the occurrence of this phenomenon in ancient orthography, as shown by the spellings *stond-ka*, *dbyard-ka*, *rgyald-ka* (*Grammar of the Tibetan Language*, p. 28); *gsand-tam*, *k⁶yerd-tam*, *gsold-tam* (p. 29); *gsand-to*, *gyurd-to*, *gsold-to* (p. 30), and his note on p. 11. FOUCAUX (*Grammaire de la langue tibétaine*, p. 14), in accordance with Csoma, speaks of three ancient double affixes, — *nd* or *nt*, *rd* or *rt*, *ld* or *lt* (the *d* was evidently pronounced with *auslautschärfung*, as the final media in many modern dialects), — and adds that this *d* is now omitted, and that probably, under the influence of this ancient spelling, *gyur-to*, *gyur-tam*, *zin-to*, are still written. The terminations *to* and *tam* cannot be considered as survivals; for the dental is nothing but the very *da drag* itself, the terminations proper being *o* (see the note below) and *am*. It is therefore wrong to say that the *dra drag* is obsolete: it is obsolete only as a graphic element, in that it is no longer actually written;

personal pronouns *u-cag*, *u-bu-cag*, *o-cag*, *o-stok*, etc. must be explained from this demonstrative pronoun. In the same manner, there was extant in a primeval period of the language a complete vowel series in the *d* group of the demonstrative pronoun, of which only *adi* and *de* have survived. But we have such remnants as *da nad* and *da rads*, "this morning;" *da lo*, "this year;" *do nub*, "this evening;" *do gdon*, "to-night;" *do zag* or *do mod*, "to-day," — examples in which *da* and *do* doubtless have the function of a demonstrative pronoun. — The Tibetan verb is, strictly speaking, a verbal noun, which for this reason could easily be connected with a demonstrative pronoun: the sentence *nas m'ovi-no* literally means "by me this seeing (is done)." The fact that this final *o* is not a verbal particle proper follows from its association with any word category; it may be joined to a noun, an adjective, a pronoun, a numeral, the original function of the demonstrative pronoun still being in prominence, with the significance of a completed action or description (hence the Tibetan name for this final is *rdsoys ts'ig*, "word of completion," while its other designation, *slar bodu-ba*, refers to its position at the end of the sentence). There is, for instance, *batan bcos agyur-r-o-cog* (LAUFER, *Dokumente*, 1, p. 49), and such combinations appear as subject or object within a sentence; compare *gsol-l-o mc'ad-d-o srwi skyab mdaod* (A. H. FRANCKE, *Der Wintermythus der Kasserage*, p. 9), "guard these prayers and these offerings!" (where FRANCKE, p. 66, comments that "the termination *o* is here inexplicable, unless it may have arisen from the emphatic articles *do*, *po*"). — It is noteworthy that at the conclusion of the Preface we find, not *ston-no*, but the popular *ston gin*.

but it is fully alive phonetically, as soon as certain affixes, to which also *cin*, *ces*, and *cig* belong (*Studien zur Sprachwissenschaft der Tibeter, Sitzungsberichte der bayerischen Akad.*, 1898, p. 584), are joined to the word. We are easily deceived by the appearance of writing. In the Tibetan alphabet is developed the principle of writing separately each syllable of a word and of any composite formation; this, however, does not mean at all that what is separated by the use of the syllabic dot in writing presents also an independent part phonetically. If dissyllabic words, as *me-tog*, *me-loi*, *mu-ge*, *p'o-ña*, *t'a-ga(-pa)*, are written in two syllables for the mere reason that the monosyllable is the basic principle of Tibetan writing, it does not follow that these words are compounds; on the contrary, they are stem words consisting of two syllables, and should phonetically be written *metog*, *meloi*, *muge*, *p'oña*, *t'aga* (from *t'ag*, "to weave"). In the same manner we find *rdsoqs-so* written in two syllables, and *rdsoqs* written in one graphic syllable; the pronunciation is not *rdsoqs so*, but *rdsoqs-o*. In other words, this is not a case of phonetic, but merely of graphic reduplication, caused by the principle of writing. Likewise it does not make any difference from a phonetic viewpoint whether the Tibetan spells *gyurd-to* or *gyur-to*; phonetically it is neither the one nor the other, but *gyurt-o*. Consequently the rule as expressed by JÄSCHKE (*Tibetan Grammar*, p. 45, and *Dictionary*, p. 246) — "*du drag* is a term used by grammarians for the now obsolete *d* as second final, after *n*, *r*, *l*, e. g. in *kund*, changing the termination *du* into *tu*; *no*, *ro*, *lo* into *to*; *nam*, *ram*, *lam* into *tam*" — is, from a scientific standpoint, wrong. The rule ought to be formulated that a number of stems at present terminating in *n*, *r*, *l*, were formerly capable of assuming a final *d* sharpened into *t*, and quite regularly assumed the terminations *-u*, *-o*, and *-am*; of course, the proper form of the particle denoting the terminative is *-u*, and not

ru, tu, du, su, as our grammars merely state for practical purposes, the consonants *r, t*, and *d* being inserted for euphonic reasons, and *su* joined to a word with final *s* being solely a graphic picture of no phonetic value (e. g., *nags-su* of writing = *nags-u* phonetically). The presence of the *da drag* was known to us for a long time only through the medium of the native grammarians, till Mr. BARNETT (*J. R. A. S.*, 1903, p. 110, and *Ancient Khotan*, Vol. I, p. 549) found it written in a large number of cases in the Stein fragments of *Çalistambasūtra*. But, Mr. BARNETT observes, "in isolated instances it is omitted in our MS. from roots that elsewhere have it, a fact indicating that it was already beginning to be dropped in actual speech." This is a point which I venture to challenge. Spelling and speech are in Tibetan two matters distinct; and, as shown above, spelling is not a true mirror of the phonetic state in the present case. The vacillating spelling in the *Çalistambasūtra* simply proves that there was no hard and fast rule for the application of this *d* in writing; but it does not at all prove that if or because it was not written, it was not sounded, at least in many cases.¹⁾ In other cases when it was omitted, there was surely no necessity for it; and the problem, after all, amounts to this, — What is the significance of this additional *d*? This question is raised neither by Mr. BARNETT, nor by Mr. A. H. FRANCKE (*Ancient Khotan*, p. 564), nor by Mr. WADDELL (*J. R. A. S.*, 1900,

1) There is a practical example in our Preface from which it may be demonstrated that the *da drag*, though not fixed in writing, nevertheless may have been sounded (see note on p. 61). Further, Mr. Barnett may be refuted with examples furnished by his own text. In D 3 (p. 551) occurs the writing *rkycu adi*, and in the next line *rkycnd adi*. Now, should this indicate two different pronunciations co-existing at that time? Certainly not. The pronunciation simply was *rkycndi* in either case. The two spellings solely indicate two modes of writing these words in that period; they could be written either way, say, for instance, in the same manner as we have the two systems of Webster and Worcester in English spelling, and the latter days' questionable boon of simplified spelling.

pp. 942, 1250), who notes the absence of *da drag* in the inscription of A. D. 783 and its occurrence in another inscription from the first part of the ninth century. The latter document, according to Mr. WADDELL, retained the old popular [why popular?] style of orthography, while it is lacking in the older inscription, because it was revised by the staff of scholarly Indian and Tibetan monks working under the orders of King K'ri-sroñ lde-btsan [there is no evidence for such a statement]. The *document Pelliot* is highly popular and even written in the language of the people, and shows no trace of the writing of a *da drag*. The whole argumentation of Mr. Waddell, owing to its subjective character, is not convincing; 1) and it is difficult to see how anybody could argue out this case with any chance of success, without previously examining what a *da drag* is.

First, we have to note that the application of this sign is not quite so obsolete as heretofore stated. It is upheld, no doubt under the force of tradition, in many manuscripts; I observed it repeatedly, for instance, in eighteenth century gold and silver written manuscripts of the *Ashtasāhasrikāprajñāpāramitā* with the Tibetan title *šes-rab-kyi p'a rold tu p'yin-pa*. The mere occurrence of a *da drag* is therefore no absolute valid proof for the antiquity of a

1) On this occasion Mr. WADDELL remarks that the *drag* "has always [?] been recognized by the English lexicographers of Tibetan as a genuine archaism." The English lexicographers of Tibetan! — I regret that they are unknown to me. The first Tibetan dictionary edited by SCHRÖTER (Serampore, 1826) is based on the materials of a Roman Catholic missionary, Father Juvenal (see *The Academy*, 1893, pp. 465, 590; Father FELLIX, *J. A. S. B.*, Vol. VIII, 1912, p. 385, without knowledge of this article, attributes the materials of this dictionary to Orazio delle Penna). Caoma, as known to everybody, was a Hungarian. I. J. Schmidt, A. Schiefner, H. A. Jäschke, were Germans. Vasilyev, to whom also Tibetan lexicography owes much, was a Russian. "Les missionnaires catholiques du Thibet," figuring as the authors on the title-page of the Tibetan-Latin-French Dictionary published at Hongkong in 1899, were assuredly not Englishmen; and Sarat Chandra Das is a Bengali. Or does Mr. Waddell's philosophy include every English-speaking or English-writing person in the category of Englishmen?

manuscript; nor does its suppression constitute evidence against antiquity, as demonstrated by the *document Pelliot* and the inscription of 783. Secondly, we have to consult the Tibetan grammarians, and to study what they know anent the subject. The most complete native grammar is *Si-tui sum-rtags*, edited in 1743 by gṬsug-lag c̣os-kyi snañ-ba of Si-tu in the province of Ḳamṛ, and reprinted by the Bengal Secretariat Press in 1895.¹⁾ In this work, grammatical rules are illustrated by numerous examples, and the *da drag*, wherever applicable, is strictly maintained. Thus we meet on p. 19 the forms *kund-tu*, *p̣a-rol-d-tu*, *mtṣard-tu*, *ḡdsind-la*,²⁾ *ḡdsind-na*, *ḡdserd-la*, *ḡdserd-na*, *stsald-la*, *stsald-na*; on p. 24, *ḡbrel-d*; on p. 30, *bstand kyañ*, *ḡbyord kyañ*, *stsald kyañ*; on p. 33, *gyurd tam*, *ḡtṣald tam*; on p. 102, *bstand*, *bkand*, *bkard*, *bstard*, *bcald*, *mnand*, *bgard*, *bsald*, *mḳyend*, *mtṣard*, *ḡḳruld*, *ḡdund byed*, *ḡdserd byed*, *ḡsold byed*, *mṭard byed*, *ḡp̣end byed*, *bstund ḅzin-pa*, *ḡsold ḅzin-pa*, etc., but *gnon ḅzin-pa*, *gtor ḅzin-pa*; on p. 103, *rtsald*, *rold*, *sbrand*, *zind*, *smind*, *byind*, *p̣yind*, *ṭard*, *tṣard*, but *dul*, *šar*, *bor*, *tṣor*, *ṭal*, further *stond*, *stend*, *rtend*, *sbyind*, *skurd*, *spruld*, *speld*, *lend*, *smond*, *seld*, *ñand*, but *sgrun*, *snron*, *sgyur*, *ḳur*; on p. 108, *stond-ka* ('autumn'), *berd-ka* ('staff'), *mḳyend-pa*, *p̣and-pa*, *p̣yind-pa*, *stond-pa*; and on p. 110, *dkond-cog*, *rind-c̣en*, *lhand cig*. On pp. 15 and 16 the part played by this *d* is explained

1) This work is mentioned by A. Csoma, *Enumeration of Historical and Grammatical Works to be met with in Tibet* (*J. A. S. B.*, Vol. VII, 1838, p. 152); but Situ or lDom-bu-pa are not the names of the author, as stated by Csoma, but merely titles. He is styled "the great Paṇḍita of Situ" (compare *Si-tui sum rtags*, p. 137, and CHANDRA Das, *Dictionary*, pp. XXXI and 1372).

2) While the preface of *document Pelliot* (V. 13) has *ḡdsin-la*. In V. 3 *rkyen*, while *rkyend* is repeatedly found in the fragments of *Ālistambasūtra*; in V. 14 *ston ni* instead of *stond ni*; in V. 23 *rton cig* instead of *rtond cig*. But in the latter example, *cig* in the place of *ḡig*, as required by the present rule, is testimony of the effect of a *da drag*; the palatal *c* or *č* is certainly a composite sound of the value of *ṭi*, and, though not actually written, the *da drag* may have nevertheless been actually sounded — *rtont-ṭig*.

as purely euphonic (*brjod bde-ba*), and there is surely much in favor of such a view, at least in the final stage of the development of the matter, though this does not exclude the idea that in a former period of the language a more specific function of a formative character may have been attached to it. When in the fragments of the *Çālistambasūtra* the adverb *on kyañ* is written *ond kyañ*, we doubtless have here a wholly secondary application suggested by analogy where no other than a euphonic reason for the presence of *d* can be given; for the element *on* has arisen from *o-na* ("if this is so"), hence the *d* cannot have originally inhered in it, but must be a later addition to facilitate pronunciation (comparable to the French euphonic *t* in *a-t-il*, etc.). The euphonic character of *da drag* is visible also in its restriction to stems terminating in *n*, *r*, *l*; and even in these limited groups a certain selection seems to take place, in that certain stems are not capable of receiving it, as evidenced by the examples quoted, and many others occurring in literature. Thus, *t^car-ba* forms only *t^car-ro*, never *t^car-to*. while *skul-ba* always forms *bskul-to*. An interesting case is presented by the verb *skur-ba*, which in the sense "to abuse" forms *skur-ro*, but in the sense "to send" *skur-to*. Here we almost gain the impression that the additional *d* was resorted to in order to discriminate between two different homophonous words.

In questioning the formative elements of the language, we observe that there is an affix *-d* forming transitive verbs from intransitive or nominal roots: for example, *skye-ba*, "to be born," — *skye-d-pa*, "to beget;" *nu-ma*, "breast," — *nu-d-pa*, "to suckle;" *ṛbye-ba*, "to open" (intr.), *ṛbye-d-pa*, "to open" (tr.); *ṛdu-ba*, "to assemble" (intr.) — *sdu-d-pa*, "to assemble, gather" (tr.); *ṛbu-ba*, "to be lighted, kindled," — *ṛbu-d-pa*, "to blow;" *ḍma*, "low," — *sma-d*

(*dmo-d*)-*pa*, "to blame, contempt." ¹⁾ Also *byed-pa*, "to do," compared with *bya*, "to be done, action," belongs here; and I am inclined to think that *byed* (phonetically *byōd* or *b'ōd*) has arisen from a contraction of *bya + yod*, *lit.* "he is doing." It is conceivable that this final *-d* may in general be a remnant of the copula *yod*: as, for instance, *sgo abye*, "the door is open;" *sgo abyed* (= *abye + yod*, *abyōd*), "(I am) opening the door." This possible origin of the transitive *-d* would account also for the fact that formations with *-d* denote a state or condition, as there are *rga-d-pa*, "old man," from *rga-ba*, "to be old;" *na-d*, "disease," from *na-ba*, "to be sick." If this *-d* is a survival of a former *yod*, then *nad* formed of *na + yod* is "the state of being ill;" *rgad* formed of *rga + yod* is literally "one being old." Likewise we have *agro-ba* and *agrod-pa* (also *bgrod-pa*), "to go, travel," without apparent distinction of meaning at present, while the latter originally meant "to be on a journey."

The conclusions to be derived from these considerations may be summed up as follows. It is probable that the so-called *da drag*, in the beginning, was a formative element of grammatical character, or at least derived from such an element. In the earliest period of literature, this significance had entirely vanished from the consciousness of the speakers; and we then find the *d* applied in the *n*, *r*, and *l* stems inserted between stem and suffix for purely euphonic reasons. The degree to which the euphonic *d* was culti-

1) Compare SHTSHERBATSKOI in *Collection of Articles in Honor of Lamanski* (Vol. I, p. 646, St. Petersburg, 1907). The author who abstains from indicating what he owes to his predecessors is neither the discoverer of this law nor others propounded by him. The case under consideration has already been treated by A. CONRADY (*Eine indochinesische Causativ-Denominativ-Bildung*, p. 45); before the time when Professor Conrady published his fundamental book, I enjoyed the privilege, in the course of over a year, of being engaged with him in so many discussions of the Tibetan verb, that I am no longer conscious of what is originally due to him or to me.

vated must have varied in different localities, or, what amounts to the same, dialects; it was not a stable or an indispensable constituent of the language, but could be used with a certain amount of freedom. This accounts for its uncertainty in writing, being omitted in some ancient documents, and being fixed in others, and even in these not consistently. The state of writing, in this case, does not allow of any safe inferences as to phonetic facts. In the spellings *t-o*, *t-am*, *t-u*, still in vogue in the modern written language, the *da drag* is practically preserved, the alteration inspired by simplification being of a graphic, not phonetic nature. For this reason it is justifiable to conclude that also in other cases the *da drag*, without its specification in writing, may have continued to be articulated.

Phonology of the Tibetan Language of the Ninth Century.

The Tibetan scholars distinguish two main periods in the development of their language, which they designate as "old language" (*brda rñin*) and "new language" (*brda gsar*).¹⁾ The difference between the two is largely lexicographical and phonetical, the latter distinction being reflected in the mode of spelling; the grammatical differences are but slight, while stylistic variation commands a wide latitude. The existence of a large number of archaic terms in the older writings, no longer understood at present, has led the Tibetans to prepare extensive glossaries, in which those words and

1) The translations "old and new orthography" proposed by JÄSCHKE (*Dictionary*, p. 298) take the meaning of these terms in too narrow a sense. Questions of spelling in Tibetan are at the same time those of phonetics and grammar, and in the native glossaries the two terms strictly refer to old and new words. They consequently bear on grammar and lexicography, and comprise the language in its total range. For the distinctions made by Mr. WADDILL (*J. R. A. S.*, 1909, pp. 1269, 1275) of pre-classic and classic periods (even "fully-fledged classical style," and semi-classic, p. 945) I see no necessity; the Tibetan division is clear and to the point, and is quite sufficient.

phrases are defined in modern language. The most useful of these works is the *Li-šii gur k'an*.¹⁾ The well-known dictionary *rTogs-par sla-ba*²⁾ contains a long list of such words in verses; and the |Cañ-skya Hutuktur of Peking, Rol-pai rdo-rje (Lalitavajra), a voluminous writer, who has composed a number of special glossaries for various departments of literature, offers in this series a "List of ancient compared with the modern words" (*brda gsar rñii-gi skor*).³⁾ There is, further, a work under the title *Bod yul-gyi skad gzar rñii-gi rnam-par dbye-ba rta bdun snan-ba*, which has been carefully utilized in the "Dictionnaire thibétain-latin-français par les Missionnaires catholiques du Thibet" (Hongkong, 1899).⁴⁾ It is a particular merit of this dictionary that the words and phrases of the ancient style are clearly indicated as such, and identified with the corresponding terms of the modern style (by the reference *A = R*, *ancien = récent*). This as well as another feature, the treatment of synonyms, constitutes a point in which the French work is superior to Jäschke. JÄSCHKE, it is true, includes a goodly number of archaisms (though far from being complete), but in most cases does not indicate them as such. As regards spelling, the

1) SCHMIDT and BOEHLINGEK's *Verzeichniss*, p. 64; SCHLEFFNER, *Mélanges asiatiques*, Vol. I, p. 3. There is a good Peking edition (26 fols) with interlinear Mongol version, printed in 1741.

2) *Keleti szemle*, 1907, p. 181.

3) It is published in Vol. 7 of his Collected Works (*govi abum*) printed in Peking (compare *Mélanges asiatiques*, Vol. I, p. 411).

4) According to kind information given by Father A. DESGODINS in a letter dated from Hongkong, October 7, 1901. Father Desgodins, with whom I was in correspondence on Tibetan subjects from 1897 to 1901, and whose memory is very dear to me, was good enough to furnish me with a list of the seven Tibetan dictionaries compiled for his great enterprise. It was at my instigation that Father Desgodins consented to send to Europe the single sheets of his Dictionary as they left the press, so that I was in a position to make practical use of his material in my work as early as 1897 and 1898. It seems singular that, perhaps with the sole exception of Mr. v. Zach, I have thus far remained alone in recognizing the special importance of this dictionary and the way of using it.

system now generally adopted is traced by Tibetan tradition to the reform of two scholars, dPal-brtsegs (Çrikūṭa) from sKa-ba, ¹⁾ and kLui rgyal-mts'an (Nāgadhvaṣa) from Cog-ro, ²⁾ assisted by a staff of scholars, at the time of King K'ri-lde sron-btsan (first part of the ninth century; according to *T'ang shu*, his reign began in 816).³⁾ Prior to this time, as we are informed by Rin-c'en c'os skyoñ bzañ-po (1440—1526) in his remarkable work *Za-ma-tog*, there were different systems of spelling in vogue, but all traceable

1) dPal-brtsegs took part in the redaction of the first catalogue of the Tibetan Tripiṭaka (*Dokumente*, I, pp. 50—51), was familiar with the Chinese language (*Roman*, p. 4), and figures as translator in the Kanjur (*Annales du Musée Guimet*, Vol. II, pp. 182, 233, 337). In the Tanjur, for instance, he cooperated with Sarvajñadeva in the translation of Nāgārjuna's Subhillekha (translated by H. WENZEL, p. 32), and in that of Candragomin's Çikshalekha (ed. by A. IVANOVSKI, *Zap.*, Vol. IV, pp. 53—81). His portrait is in GRÜNWEDEL, *Mythologie des Buddhismus*, p. 49.

2) This name occurs in the list of names of the Tibetan ministers in the Lhasa inscription of 822 reproduced by BUSHELL (*The Early History of Tibet*, J. R. A. S., 1880); he belonged to the Board of Ministers of Foreign Affairs (*p'yi bloṅ bka-la gtoṅ-pa*). The name Cog (or Čog) -ro is transcribed in Chinese *Shu-lu* 屬盧, which indicates that the former character was sounded in the T'ang period čuk (compare Hakka *čuk*, Yang-chou *čuk*, Hokk. *čuk*, and CONRADY, *Eine indoehinesische Causativ-Denominativ-Bildung*, p. 165). An analogous case occurs in *Yüan shi*: 搆思 = Tib. c'os, indicated by PELLIOT (*Journal asiatique*, Mars-Avril, 1913, p. 456), and formerly by E. v. ZACH (*China Review*, Vol. XXIV, 1900, p. 256b). Compare p. 75, No. 14.

3) This king was honored with the epithet *Ral-pa-can* (Skr. *kesarin*), "wearing long hair," because he wore his hair in long flowing locks. F. KÜPPEN (*Die lamaische Hierarchie und Kirche*, p. 72), with his sarcastic humor, has described how the weak and bigot monarch became a plaything in the hands of the clergy and allowed the Lamas to sit on the ribbons fastened to his locks; he intended, of course, to imbibe the strength and holiness of the clergy. Mr. WADDELL (*J. R. A. S.*, 1909, p. 1253) tries to establish two new facts, — first that the king wore a cue, and secondly that the cue is a Chinese custom introduced by the king into Tibet (the undignified vernacular word "pigtail" used by Mr. Waddell, in my opinion, is out of place in an historical treatise). The attribution of a cue to the king is a rather inconsiderate invention. No Tibetan tradition ascribes to him a cue or its introduction from China; on the contrary, it is expressly related that the ribbons mentioned above were fastened to the hair of his head (*dbu skra*, see *dPag bsaṃ tjon bzañ*, p. 176, line 14). The difference between wearing long hair and a cue is self-evident. Neither could the king have introduced any cue from China, since in the age of the T'ang dynasty, as known to every one, the Chinese did not wear cues; nor is the cue a Chinese invention at all.

to the teachings of T'on-mi Saṃbhoṭa, who, during the reign of King Sron-btsan sgam-po (seventh century), introduced writing from India to Tibet.¹⁾ That reform of the language is expressly recorded in Tibetan history. I. J. SCHMIDT²⁾ has already pointed out this fact from the *Bodhi-mōr*, the Kalmuk version of the Tibetan *rGyal rabs*, where it is said that at the time of King K'ri-lde sron-btsan (the name as given by SCHMIDT is erroneous), besides the new translations, also all previous translations were "recast and rendered clearer according to a more recent and corrected language." In *dPag bsam ljon bzañ* (p. 175, line 12) the same is told still more distinctly in the words that the translations were made afresh (*gsar-du an*) in a newly cast language. The reflex of this tradition is conspicuous in the colophons of numerous treatises of the Kanjur translated at that period, where we meet the same phrase, *skad gsar cad kyiis kyañ bcos-nas gtan-la p'ab-pa*.

In order to study successfully the phonology of a Tibetan text of the ninth century, it is an essential point to form a correct idea of the condition of the language in that period. This task has not yet been attempted. The material for the solution of this

1) It is known to what fanciful conclusions Messrs. BARNETT (*J. R. A. S.*, 1903, p. 112) and FRANCKE (*Ancient Khotan*, p. 565; *Indian Antiquary*, 1903, p. 363; *Mem. A. S. B.*, Vol. I, 1905, p. 44) have been driven in regard to the introduction of Tibetan writing. Mr. BARNETT, sensibly enough, later withdrew his former view; while Mr. FRANCKE, who stamps as a myth, without any historical criticism, every Tibetan account not suiting his fancy, continues to create his own mythology. There is no reason to dwell on these fantasies, or to waste time in their discussion. Mr. WADDELL (*J. R. A. S.*, 1909, pp. 945—947) has already risen against these views with what seems to me to be perfect justice, and it gives me pleasure to acknowledge that I fully concur in Mr. WADDELL's opinion on this point.

2) *Geschichte der Ost-Mongolen*, p. 358. The passage of *rGyal rabs* (fol. 89) runs thus: *c'os t'ams-cad skad gsar bcad-kyis gtan-la p'ab*, "all religious treatises were cast into a new language and re-edited." JÄSCHKE translates the phrase *gsar gcod-pa* by "to inquire into, investigate, examine;" but the literal significance is "to cut anew, to do something from a fresh start, to recast." An examination of the language of the texts would have sense only if alterations in the language, its style, phonology, and spelling, were to be made.

problem is deposited in the Tibeto-Chinese inscriptions of the T'ang period and in the Chinese transcriptions of Tibetan words embodied in the Chinese Annals of the T'ang Dynasty. The bilingual epigraphical material in which Tibetan words are recorded, in comparison with their renderings in Chinese characters reproducing the contemporaneous Tibetan pronunciation of the language of Lhasa, is of primary importance; for it enables us to frame certain conclusions as to the Chinese method of transcribing Tibetan sounds, and to restore the Tibetan pronunciation of the ninth century on the basis of the ancient Chinese sounds. Thus equipped with a certain fund of laws, we may hope to attack the Tibetan words in the T'ang Annals. The most important document for our purpose is the sworn treaty concluded between Tibet and China in 821, and commemorated on stone in 822, known to the Chinese archæologists under the name *T'ang T'u-po hui méng pei* 唐吐蕃會盟碑. This inscription has been made the object of a remarkable study by the eminent scholar Lo Chên-yü 羅振玉 in No. 7 of the journal *Shên chou kuo kuang tsi* (Shanghai, 1909).¹⁾ This article is accompanied by two half-tone plates reproducing the four sides of the stone monument erected in Lhasa, which is 14 feet 7 inches (Chinese) high and 3 feet 1½ inches wide. The recto contains a parallel Tibetan and Chinese text; the verso, a Tibetan text exclusively. The lateral surfaces are covered with the names of the ministers who swore to the treaty. There were seventeen Tibetan and seventeen Chinese officials participating in the ratification. The names of the Tibetan officials are grouped on one of the small sides; those of the Chinese, on the other. Both series of names are given in interlinear versions, — the Tibetan names being transcribed in Chinese, the Chinese names in Tibetan. It is obvious that from

1) Compare P. PELLLOT, *B. E. F. E. O.*, Vol. IX, 1909, p. 578.

a philological point of view, material of the first order is here offered to us. From the reproductions of Lo Chên-yü it follows that BUSHELL, ¹⁾ who has given a translation of the Chinese text, ²⁾ merely reproduced half of the stone. The first plate attached to his paper contains the list of the Tibetan ministers, which is, accordingly, one of the small sides of the stone; this part is not translated by Bushell or referred to in his text; his second plate gives the recto of the stone, while the verso and the other small side with the names of the Chinese ministers are wanting. Bushell's photolithographic reproduction is very readable, and my reading of the Tibetan names is based on his Plate I. The Chinese reproduction is too much reduced, and the glossy paper on which it is printed considerably enhances the difficulty of reading. But Lo Chên-yü deserves our thanks for having added in print a transcript of the entire Chinese portion of the monument, inclusive of the thirty-four names as far as decipherable; this part of his work proved to me of great utility, as Bushell's small scale reproduction, in many

1) *The Early History of Tibet* (J. R. A. S., 1880).

2) A drawback to BUSHELL's translation is that it appears as a solid coherent account, without indication of the many gaps in the text. Bushell filled these from the text as published in the *Ta Ts'ing i t'ung chi*. As the notes of Lo Chên-yü rectify and supplement this edition of the text on several points, a new translation of this important monument would not be a futile task, if made on the basis of Lo Chên-yü's transcript, in which the lacunae are exactly indicated. — A. H. FRANCKE (*Epigraphia Indica*, Vol. X, 1909—19, pp. 89—93) has given, after BUSHELL's rubbing (Pl. II), a transcript of the Tibetan version, and what, from a Tibetan point of view, he believes to be a translation of it. BUSHELL's Plate I, the list of the Tibetan officials, is not mentioned by Francke. It goes without saying that this Tibetan text, as well as the other Tibetan epigraphical documents of the T'ang period, cannot be translated merely by the aid of our imperfect Tibetan dictionaries; sinology is somewhat needed to do them. These documents were drafted in the Tibeto-Chinese government chancery of Lhasa; and the Tibetan phraseology is to some extent modelled after the Chinese documentary style, and must be carefully studied in the light of the latter. BUSHELL (p. 102), it seems to me, is not correct in stating that the Chinese text of the monument is a translation of the Tibetan original; the question as to which of the two is the original is immaterial. Both express the same sense, and were drafted simultaneously by the Tibeto-Chinese clerical staff of Lhasa.

passages, left me in the lurch. The account of the erection of the monument as given in the Tibetan annals (*rGyal rabs*, fol. 92) may be of some interest. "During the reign of King Ral-pa-can, the son-in-law and father-in-law [the sovereigns of Tibet and China] were still in a state of war, and the Tibetan army, several tens of thousands, conquered all fortified places of China. The Ho-shang of China and the clergy of Tibet intervened and concluded a sworn pact. The son-in-law despatched pleasing gifts, and an honest agreement was reached. In the frontier-post rMe-ru in China, the two sovereigns each erected a temple and had a design of sun and moon engraved on a boulder, which was to symbolize that, as sun and moon form a pair in the sky, so the sovereign son-in-law and father-in-law are on earth. It was agreed that the Tibetan army should not advance below rMe-ru in China, or the Chinese army above this place. In order to preserve the boundary-line, they erected visible landmarks in the shape of earth-mounds where earth was available, or stone-heaps where stone was available. Then they fixed regulations vouching for the prosperity of Tibet and China, and invoking as witnesses the Triratna, Sun and Moon, Stars and Planets, and the gods of vengeance,¹⁾

1) This passage occurs in the inscription 三寶及諸賢聖日月星辰請爲知 (BUSHELL: 和) 證. Tib. (line 62) *dkon mc'oy gsum dan ap'ags-pai dam-pa-rnams gñi zla dan gza skar-la yan dpañ-du gsol-te*, "the Three Precious Ones (Skr. *triratna*), the Venerable Saints, Sun and Moon, Planets and Stars they invoked as witnesses." Mr. FRANCKE (*l. c.*, p. 93) translates, "The three gods (l), the august heaven, etc., are asked to witness it." He has the wrong reading *ap'ags-pai nam-k'a* where *dam-pa*, "holy," is clearly in the text; the plural suffix *rnams* is inferred by me from the context (the stone is mutilated in this spot). The Tibetan phrase, as read by me, exactly corresponds in meaning to the Chinese *chu Aien shêng*, "the holy sages." There is no word for "heaven" in the Chinese text, nor a Tibetan word for "heaven" in the above corresponding passage in *rGyal rabs*; consequently *nam-k'a* cannot be sought in the Tibetan version of the inscription, either. The gods of vengeance (*lha gñan rnams*) are omitted in the inscription, presumably for the reason that no exact Chinese equivalent for this Tibetan term could be found. The interpretation as above given is derived from JÄSCHKE (*Dictionary*, p. 192), with whom I. J. SCHMIDT (*Geschichte der Ost-Mongolen*, p. 361), translating from the *Rodhi-mör* ("die rühenden Tenggeri"), agrees. The *gñan* are a class

the two sovereigns swore a solemn oath by their heads.¹⁾ The text of

of demons whose specific nature is still somewhat uncertain; in the Bon religion they form a triad with the *klu* and *sa bdag* (see the writer's *Ein Sühngedicht der Bonpo*). The word *gñan* means also a species of wild sheep, argali (*Ovis ammon* L. or *Ovis Hodgsoni* Blyth., see M. DAUVENNE, *Bull. Musée d'hist. nat.*, Vol. IV, 1898, p. 216; the definition of CHANDRA DAS [*Dictionary*, p. 490] — “not the *Ovis ammon* but the *Ovis Hodgsoni*” — is wrong, as both names, in fact, refer to the same species). Now, we read in *Kiu T'ang shu* (Ch. 196 上, p. 1b), in regard to the ancient T'u-po, 事獯豷之神, “they serve the spirits of *nguan ti*,” *nguan* (this reading is given in the Glossary of *T'ang shu*, Ch. 28, by the characters 吾官 *ngu kuan*; Tib. *gñan* and Chin. *nguan* are perhaps allied words; *Erk ya* reads *yüan* 元) likewise refers to a species of wild sheep or argali, and *ti* is a ram. We know nothing to the effect that the Tibetans ever worshipped argali, nor can the Chinese words be explained as the transcription of a Tibetan word. It seems to me that Chin. *nguan ti* is a literal translation of a Tib. *gñan-p'o* (or *-p'a*, “male of an animal”) caused by the double significance of the Tibetan word *gñan*, and that the Chinese annalist means to convey the idea that the Tibetans worship a class of spirits styled *gñan*. On two former occasions it was pointed out by me that the word *gñan*, presumably for euphemistic reasons, is frequently written *gñen* (“friend, helper”). In the Table of *document Pelliot* (V, 3) we meet the oracle, *gñen lha skyes-po-la als'-ba-zig ci-bar ston*, where I am under the impression that *gñen lha* should be taken in the sense of *gñan lha*, and accordingly be translated, “It indicates that a terrific spirit doing harm to men will come” (the injury is not done to the god, as M. BACOR translates).

1) Tib. *dbu bsñuñ dari bro bor-ro*. JÄSCHKE (*Dictionary*, p. 882a) has already given the correct translation of this phrase. Mr. WADDELL (*J. R. A. S.*, 1909, p. 1270) has misunderstood it by translating *dbu sñuñ gñan-ste* “(the king) was sick with his head.” The word *sñuñ* in this passage has nothing to do with the word *sñuñ*, “disease,” but is the verb *sñuñ-ba* (causative from *sñuñ-ba*, “small”), “to make small, diminish, reduce.” The phrase *dbu sñuñ* is a form of adjuration corresponding to our “I will lose my head, if . . .” The beginning of the inscription therefore is, “Laud was granted (*sa gñan*, which does not mean ‘honor be given’) . . . The father, the sovereign K'ri-sroñ lde-btsan [the translation “the king's father's father” is wrong; the father, *yab*, is a well-known attribute of King K'ri-sroñ] formerly made the grant under his oath.” On this mistranslation the following speculation is based (p. 1268): “King K'ri-sroñ lde-btsan is stigmatized as being of unsound mind — a condition regarding which there never has been the slightest hint in the national histories — and the rule of the kings generally is declared to have caused a cycle of misfortunes to the country.” The entire “historical” interpretation of this inscription is unfortunately not based on the national histories, but is a dream of the author. There is nothing in the text of “the Sacred Cross of the Bon,” which is plainly a Svastika designed on the silver patent (*dnul-gyi yi-ge*, translation of *yin p'ai* 銀牌), nor is there “the P'an country of the Secret Presence of the Bon deity,” which simply means “the district of *aPan* in *sñu sñuñ*” (name of a locality). Neither the translation nor the explanation of this inscription can be accepted.

the treaty was inscribed on three stone tablets. On the two large surfaces was written the text containing the sworn treaty concluded between the two sovereigns; on the two small sides of the stone was written the list of the names of the Tibetan and Chinese officials who were accredited as ministers of state. One of these stone monuments was erected at Lhasa, another in front of the palace of the Chinese emperor, another at rMe-ru on the frontier of China and Tibet. 'If regardless of the text of this treaty, the Tibetans should march their army into China, the Chinese should read three times the text of the inscription in front of the palace of the emperor of China, — then the Tibetans will all be vanquished. On the other hand, if the Chinese should march their army into Tibet, all Chinese will be vanquished in case the text of the inscription of Lhasa should three times be read,' — this oath was stipulated between the state ministers of Tibet and China and sealed with the signets of the two sovereigns."

The purpose of the following study is purely philological, not epigraphical or historical, though it simultaneously furnishes a not unimportant contribution to the then existing offices in Tibet; the latter subject, however, calls for a special investigation, for which also the numerous references in the Tibetan annals must be utilized, and it is therefore here discarded for the time being. The inquiry is restricted to the Chinese transcriptions of Tibetan words; their pronunciation is ascertained by restoring, as far as possible, the Chinese sounds, such as were in vogue during the T^cang period. It will be recognized that the Chinese applied a rigorous and logical method to their transcriptions of Tibetan words, and that in this manner a solid basis is obtained for framing a number of

1) Tib. *myi rus*. The same expression written *myi rus* occurs likewise in the inscription of 823 (compare No. 12, p. 74), where it corresponds to Chin. *ming wei* 名位.

important conclusions as to the state of Tibetan phonology in the ninth century, with entirely convincing results, which are fully confirmed by the conditions of the ancient Tibetan documents. First the material itself is reviewed, to place everybody in a position to form his own opinion, then the conclusions to be drawn from it are discussed. The single items are numbered in the same manner as has been done by Lo Chên-yü. Nos. 1—3 contain no transcriptions, and are therefore of no avail for our purpose; in Nos. 4—8, the Tibetan text, with the exception of a few words, is hopelessly destroyed. Nos. 9—20 run as follows:

9. *C'ab-srid-kyi* ¹⁾ *blon-po c'en-po žan k'ri btsan* ²⁾ *k'od ne stan* =
宰相同平章事尙綺立贊窟寧思當 *ts'ai siang t'unj*
p'ing chang shi shang k'i li tsan k'u(t) ning se tang. The name of this minister, accordingly, was sounded *k'ri tsan k'od(t) ne* ³⁾ *stan*. His Tibetan title means "great minister of state," rendered into Chinese "minister and superintendent of affairs." ⁴⁾

10. *C'ab-srid-kyi blon-po c'en-po žan k'ri bžer lta mt'oii* =
宰相同平章事尙綺立熱 ⁵⁾ 貪通 *ts'ai siang t'ung*
p'ing chang shi shang k'i li že (je) t'am (tan) t'ung. The Tibetan name of this minister, accordingly, was articulated *k'ri že(r) tam-t'oii* (for explanation see farther on).

1) By the transcription ; the inverted vowel sign i commented on p. 53 should be understood. Its phonetic value will be discussed hereafter.

2) The two words *k'ri btsan* are destroyed on the stone, but can be correctly restored on the basis of the Chinese equivalents *k'i li tsan*; Chin. *k'i li* corresponds to Tib. *k'ri* in No. 10, and Chin. *tsan* is the frequent and regular transcription of Tib. *btsan*.

3) As indicated by Chin. *ning*, the vowel of Tib. *ne* was nasalized (pronounced like French *nain*).

4) See GILLES, *Dictionary*, 2d ed., p. 1132b.

5) Lo Chên-yü transcribes this character 熱, but this is an error. The reproduction of BUSHELL shows that the character is as given above, and this is the one required for the rendering of the Tibetan sound. This reading, moreover, is confirmed by *Kin Tang shu* (Ch. 196 下, p. 11b), where exactly the same personage is mentioned 尙綺立熱 who in 825 was sent on a friendly mission to the Chinese Court.

11. *C'ab-srid-kyi blon-po c'en-po blon rgyal bzai (udus kuñ¹) =*
 宰相同平章事論煩藏弩思恭 *ts'ai siang t'ung p'iny*
chang shi lun kia(p) (γ'ap) tsang²) nu³) se kuñ. The name of this
 unminister was pronounced *g'al* (or *γ'al*) *zai dus kuñ*.

12. *Bod c'en-poi blon-po ts'al-gyi t'abs dai myiñ rus =* 大蕃
 諸寮案登壇者名位 *Ta Po chu liao ngan têng t'an che*
ming wei. The Tibetan is a free translation from Chinese, the phrase
têng t'an, "those who ascended the altar" (in order to swear to the
 treaty) being omitted. Note that *Bod c'en-po*, "Great *Bod*," does
 not occur in Tibetan records, but is only a stock phrase modelled
 in the Tibeto-Chinese chancery of Lhasa after the Great T'ang
 Dynasty 大唐.

13. *nai blon mc'ims zai rgyal bzer k'on ne btsan =* 曩論琛
 尙煩熱窟寧贊 *nang lun ch'ém (ch'én) shang kia(p) (γ'ap)*
že (je) k'u(t) ning tsan. In the name of the Minister of the Interior
 we note the pronunciations *c'im* (or *č'in*) for *mc'ims*, *že* for *bzer*,
 and again the nasalized vowel in *ne*.

14. *p'yi blon bka-la gtoys-pa Cog-ro | blon btsan bzer lto gon =*

1) In Bushell's reproduction, *kuñ*. But the rubbing was sharply cut off around these
 last two words, so that the sign *u* may have been lost during this process. The Chinese
 transcription *kung* calls for a Tibetan *kong* or *kung*.

2) It doubtless represents an ancient **zang* (**dzang*); compare the Japanese reading *so*.
 Also in *Yüan shi* Tib. *bzai-po* is transcribed 藏卜 and Tib. *blo bzai* 羅藏
 (E. v. ZACH, *Tibetica, China Review*, Vol. XXIV, 1900, p. 256a). The character 藏 *tsang*
 serves in *T'ang shu* (Ch. 216 下, p. 6a) to render Tib. *gtsan*, the name of the main
 river of Central Tibet.

3) *Nu* 弩 seems to have had the phonetic value *du* (Japanese *du*), and *du se* is
 intended for Tib. *adus*. An analogous example occurs in *Kiu T'ang shu* in the name of
 the Tibetan king *K'i nu si lung* 器弩悉弄 answering to Tib. *K'ri du sron*
 (usually styled *Du sron mui-po*). Compare *lo* 羅 transcribing Turkish *dü* (CHAVANNES
 and PELLIOT, *Journal asiatique*, 1913, No. 1, p. 175). The character *lie* 獵 rendering
 Tib. *lde* (pronounced *de* in the ninth century) in the name of King *K'ri sron lde btsan*
 乞黎蘇籠 | 贊 (*Kiu T'ang shu*, Ch. 196 上, p. 8b), offers another instance
 of Chinese initial *l* corresponding to *d* in a foreign language.

紕論伽羅篤波屬盧論贊熱土公 $p^{\prime}i\ lun\ kia\ lo^1) tu(k)$
 $po\ šu\ (čuk)\ lu\ lun\ tsan\ že\ (je)\ t^{\prime}u\ kung$. The Tibetan words were
 accordingly articulated at that time, $p^{\prime}i\ lon\ ka-la\ tog-pa$ (the Minister
 of Foreign Affairs) $čog-ro\ lon\ tsan\ že(r)\ to\ goi$.

15. $snam\ p^{\prime}yi-pa\ mčims\ žai\ brtan\ bžer\ snag^2) cig =$ 思南
 紕波琛尙旦熱思諾市 $se\ nam\ (nan)\ p^{\prime}i\ po\ ch^{\prime}em\ (ch^{\prime}en)$
 $shang\ tan\ že\ (je)\ se\ nak\ (no)\ shi$. Tibetan pronunciation, $snam\ p^{\prime}i-$
 $pa\ čim\ žai\ tan\ že(r)\ snag(k)\ ci^?$.

16. $mian\ pon\ bai-so\ o-cog\ gi\ blo\ abal\ blon\ kru\ bžai\ gyes\ rma =$
 岸奔猛蘇戶屬勃羅末論矩立藏○摩³⁾ $ngan\ pčn$
 $(pön, pun)\ mong$ (Cantonese and Hakka *mang*, Japanese *bō*) $su\ lu$
 (Cantonese *u*, Ningpo *wu*, Japanese *o*)⁴⁾ $šu\ (*čuk)\ pu\ lo\ mo$ (Hakka

1) Sounded *la*; see VOLPICELLI, *Prononciation ancienne du chinois*, pp. 161, 181, 183 (*Actes XIe Congrès Or.*, Paris, 1698).

2) Written as if it were *stag*, but the seeming *t* may have been intended for *n* which is required by the Chinese transcript; likewise in No. 17. The palaeographic features of Tibetan epigraphy of the T'ang period remain to be studied in detail. — The character 諾 is sounded *nak* in Korean, *naku* in Japanese. The phonetic element 若 has the value *nik*; in the Manichean treatise translated by M. CHAVANNES and M. PELLIER (*Journal asiatique*, 1911, No. 3, p. 538) it is combined with the radical 口 into a character which otherwise does not occur; but as the Pahlavi equivalent rendered by it is *nag*, this artificial character must have had also the sound *nak*, in the same manner as 諾.

3) Lo Chên-yü transcribes the last two characters 名○. The first of these does not seem to be 名, though I cannot make it out in the reproduction of BUSHELL, which is too much reduced; but 名 cannot be the correct reading, as the sound *ming* is incapable of reproducing anything like Tib. *gyes*. The second character left a blank by Lo, I distinctly read *mo* (anciently *ma*), as above, in BUSHELL's plate, and this very well answers as transcription of Tib. *rma* (sounded *ma*).

4) The equation 戶 = Tib. *o* allows us to restore theoretically the name (姓) of King *K'ri sron lde btsan* given in *T'ang shu* (Ch. 216 下, p. 1b) in the form *Hu lu t'i* 戶盧提 into Tib. *O ro lde*. Chin. *lu* = Tib. *ro* we had in No. 14. The ancient sounds of *t'i* were **lc, de* (Japanese *tei, dei*), hence Tib. *de* or *lde* frequently occurring in the names of the kings may be inferred (it occurs likewise in the name of the ancestor 祖 of the Tibetans, *Hu t'i pu si ye* 鶻提勃悉野 where *t'i pu* corresponds to Tib. *de-po* or *lde-po*; the other elements of this name are treated farther on). A name of the form *O ro lde*, however, does not occur in Tibetan records; but in

mat, Korean *mal*; ancient sounds **mwat* and *mwar* ¹⁾) *lun kü li tsang*
 ○ *mo* (*ma*). The sign of the genitive, *gi*, is not transcribed in Chinese. Tib. *mñan*, accordingly, was sounded *ñan*; *blo* was sounded *blo* (Chin. *pu-lo*), not *lo*, as at present; *abal* was sounded *bal*, or possibly *mbal* or *mwal*; *kru* was sounded *kru* (Chiu. *kü-li*), not as now *tru* or *tu*; *rma* was sounded *ma*. Tib. *mñan pon* must be a compound written for *mña dpon* ("rulers and lords"), the prefix *d* being altered into *n* under the influence of the initial guttural nasal *ñ* and then pronounced and written *ñan pon*. The meaning of the above passage is, "The minister *Kru bzai gyes rma*, who was in charge of the sepulchres of the sovereigns and lords." It was hitherto unknown that such an office existed in Tibet, and this fact is of great culture-historical interest. We know that the ancient kings of Tibet were buried under elevated tumuli, and the *rGyal rabs* has carefully recorded the exact locality and its name where each king was interred.²⁾ The *T'ang shu* (Ch. 216 下, p. 6) imparts a

the inscription of 783 edited and translated by Mr. WADDELL (*J. R. A. S.*, 1909, p. 931) the name of a primeval king *O lde spu rgyal* is mentioned. I am therefore inclined to regard the Chinese transcription *Hu lu t'i* as a reproduction of Tib. *O lde*, the Chinese syllable *lu* rendering the prefix *l* in *lde*, which was sounded on account of the preceding vowel, as still at present the prefix is articulated in the second element of a compound when the first terminates in a vowel. The name *O lde* has not yet been pointed out as a name or title of King *K'ri-sron* in any Tibetan document; it remains to be seen whether it will be confirmed. The comment made by Mr. WADDELL (p. 933) on the king named *O lde spu rgyal* is erroneous; he does not follow the Seven Celestial Rulers in Tibetan tradition. This king whom Mr. WADDELL has in mind is styled in *rGyal rabs* "*Spu de gñi rgyal*" (mentioned also by ROCKHILL, *The Life of the Buddha*, p. 209, but the name does not mean "the tiger-haired king"), but there is no reason to assume that he is identical with *O lde spu rgyal*. Although Mr. WADDELL (p. 949, note 3) expressly states that there seemed no trace of a final *d* in the word *o*, Mr. A. H. FRANCKE (*J. A. S. B.*, Vol. VI, 1910, p. 94) boldly and arbitrarily alters this name into *Od lde spu rgyal*, and translates this *Od lde* by "beautiful light," which is pure fancy, as is the whole article in which Mr. FRANCKE, to his great satisfaction, shifts the theatre of action of Tibetan tradition connected with King *gÑa k'ri btsan-po* from central to western Tibet.

1) CHAVANNES and PELLIOU, *Journal asiatique*, 1911, No. 3, p. 519.

2) The interment of King *Sron-btsan sgam-po* is thus described in *rGyal rabs* (Ch.

vivid description of the sepulchral mounds 丘墓 of the Tibetan nobles scattered along the upper course of the Huang-ho, white tigers being painted on the red-plastered walls of the buildings belonging to the tombs; when alive, they donned a tigers-kiu in battle, so the tiger was the emblem of their valor after death.

17. *bkaḡ p^crin blon c^een¹) ka²) blon snag bžer ha ñen* = 給事
中勃 ○ 伽論思諾熱合軋 *ki shi chung p^o (pu) ○ kia*
lun se nak(no) že(je) ha(ho) yen.

18. *rtsis-pa c^een-po ○³) blon stag zigs rgan k^ood* = 資思
波折逋額論思 ○⁴) 昔幹窟 *tse-se po ch^é pu ngo(k) lun*

18, fol. 76): "His sepulchre (*ban-so*) was erected at *uC'oñ-po* (in Yar-lun), being a mile all around. It was quadrangular in shape, and there was a vault made in the centre. The body of the great king of the law (Skr. *dharmarāja*) was laid in a composition of loam, silk and paper, placed on a chariot, and to the accompaniment of music interred in the sepulchre. The vault in the interior was entirely filled with treasures, hence the sepulchre became known under the name *Nai brygan* ('Having ornaments in the interior'). Five chapels were set up in the interior, and the erection of quadrangular sepulchres took its origin from that time. They are styled *sKu-ri smug-po* ('red grave-mounds')." I. J. SCHMIDT (*Geschichte der Ost-Mongolen*, p. 347), translating from *Bodhi-mür*, the Kalmuk version of *rGyal rabs*, erroneously writes the latter name *sMuri*, and makes an image of the king fashioned from clay and buried in the tomb, while the burial of the body is not mentioned. The Kalmuk version is not accessible to me; the Tibetan text is clearly worded as translated above. The same work (fol. 87) imparts the following information on the tomb of King K'ri-sroñ lde-btsan: "His sepulchre was erected on Ma-ra mountain, in the rear, and to the right, of that of his father. The king had it built during his lifetime. The posthumous name *aPrul ri gtsug sman* was conferred upon him. At the foot of his sepulchre there is a memorial inscription in stone. The sepulchre became known by the name *P'yi rgyan can* ('Ornamented in the exterior')."

1) See *dPag bsam ljon bzah*, p. 151, l. 25. This term is not explained in our Tibetan dictionaries. The Chinese rendering shows that it is the question of supervising censors.

2) For *bka*.

3) This word is badly mutilated in the stone. The Chinese parallel is *ego(k)*, so that I infer Tib. *rriog*, a well-known clan name. The Tibetans have no family names but clan names (Tib. *rus*, Chin. *tsu* 族; compare the account on the Tang-hiang in *T'ang shu*, ROCKHILL's translation in *The Land of the Lamas*, p. 398) named for the localities from which the clans originated.

4) This lacune corresponds to Tib. *stag*. The character 答 *ta* may be inferred from the name *Lun si ta je* 論悉答熱 (Tib. *blon stag rje*) in *T'ang shu* (Ch. 216 下, p. 6a).

se ○ *si(k) han*¹⁾ *k'u(t)*. The word *rtsis-pa* was accordingly sounded *tsis-pa*. The Chinese transcription of this ministry (instead of translation as in the preceding cases) indicates that there was no correlate institution for it in China. In the modern administration of Tibet, the *rtsis dpon* had charge of the accounts,²⁾ from which it may be inferred that the *rtsis-pa c'en-po* of the T'ang period had a similar function.

19. *p'yi blon abro žan* (the remainder is almost destroyed and cannot be positively deciphered) = 紕論沒盧尙 *p'i lun mu-lu shang*. The transcription *mu* (compare Japanese *hotsu*)-*lu* hints at a pronunciation *bro* for 'Tib. *abro*.

20. *žal-ce-ba*³⁾ *c'en-po žal-ce* ○ ○ *god(?) blon rgyud nan li btsan* = 刑部尙書 ○ 論結研歷贊 *hing pu shang shu* ○ *lun kie (γ'et) ngan (yen) li tsan*. The transcription of *rgyud* is of importance; it was sounded *g'ut* or *γ'ut*, the prefix *r* being silent.

1) Chin. *han*, accordingly, renders Tib. *rgan*, which, after the elimination of the prefix *r*, was presumably sounded *χan*. In a passage of *Yüan shi*, the same Tibetan word is transcribed *han* 罕 (E. v. ZACH, *l. c.*, p. 255). Chin. *h*, therefore, in transcriptions, does not usually correspond to Tib. *h*, but to Tib. *g* with or without prefix. The following case is of especial interest. Tib. *la p'ug*, "radish," is a Chinese loan word derived from *lo p'o* 蘿蔔 (see BRETSCHNEIDER, *Bot. Sin.*, pt. 2, No. 39); consequently also Tib. *gwi la p'ug*, "carrot," must be the equivalent of Chin. *hu lo p'o* 胡蘿蔔 of the same meaning: so that we obtain the equation Chin. *hu* 胡 (Japanese *ko*) = Tib. *gwi*. For this reason we are justified in identifying also the name *Hu 鶻* with Tib. *Gwi* in the name of the ancestor of the Tibetans mentioned on p. 75, note 4; and *Gwi rgyal*, as correctly stated by CHANDRA DAS (*Dictionary*, p. 221), according to Tibetan tradition, is the name of one of the early kings of Tibet (the same name occurs also in *Gwi ri gwi btsan*, son and successor of King *K'ri-sron*, and in *Spu de gwi btsan*).

2) ROCKHILL, *J. R. A. S.*, 1891, p. 220.

3) JÄSCHKE writes this word *žal c'e*, which is a secondary development; it is properly *žal lee* ("mouth and tongue"), thus written, for instance, *Avadānakalpalatū* (Tibetan prose ed., p. 71, 7) and CHANDRA DAS (*Dictionary*, p. 1068). The Table (II, 6) offers the spelling *ža-lee*, which, together with the spelling of the inscription, shows that the word was pronounced *žal-ce* in the ninth century. As proved by the Chinese translation 刑, it had, besides the meanings "lawsuit, litigation, judgment," also the significance of "punishment." Tib. *c'en-po*, "the great one," appears as rendering of Chin. *shang shu*.

There are, further, in the inscription, two interesting parallels of geographical names. In line 44 we meet Tib. *stse žui č'eg* (or *ts'eg*) transcribing Chin. *tsiang kūn ku* 將軍谷 ("Valley of the General"), and in line 46 Tib. *čen ku hyvan* transcribing Chin. *ts'ing šui hien* 清水縣. The Tibetan word *stse* was pronounced *tsj* (the sign *e* including also nasalized *o*). The addition of the prefixed sibilant *s-* does not prove that this *s* was sounded, but, as in so many other cases, it owes its existence only to the tendency of preserving the high tone which indeed is inherent in the Chinese word *tsiang*. The Tibetan word *tse* without the prefix would have the deep tone, while the prefix indicates that it is to be read in the high tone; the Chinese equivalent *tsiang* (Cantonese *tsōng*, Hakka *tsiong*) undeniably proves that the palatal sibilant was also the initial intended in the Tibetan word. It is entirely out of the question to regard the *s-* in *stse* as the articulated initial consonant, and only the desire for regulating the tone can be made responsible for the presence of the prefixed *s*.¹⁾ We have here, accordingly, unassailable evidence for the fact that the tone system existed in the language of Lhasa at least as early as the first

1) An analogous example is presented by Tib. *spar k'a* being a transcription of Chin. *pa kua* 八卦. Chin. **pat, par* (compare Tib. *pir* = Chin. *pi* 筆) never had an initial *s*, and there is no reason whatever why the Tibetans should articulate *spar* a Chinese *par*; of course, they did not, nor do they do so, but say *par*; the unprotected *par*, however, has with them the deep tone, while, if the prefix *s* is superscribed, it receives the high tone, and the high tone is required by the Chinese word; the letter *s* is simply a graphic index of the high tone. Also the high-toned aspirate *k'a* instead of *ka*, which we should expect, seems to be somehow conditioned by the tone of Chin. *kua*. *Vice versa*, Chin. *mo-mo* 饜 | with the even lower tone is written in Tibetan *mog-mog* ("steamed meat-balls"), having likewise the low tone, but not *smog*, which would indicate *mog* in the high tone. — Another interesting loan-word is *lcog-tse* (*rtse*), "table," derived from Chin. *cho(k)-tse* 桌子; the final *g* indicates that the loan is old. The prefix *l* merely has the function of expressing the high tone of the Chinese word; the Tibetans certainly pronounced only *čog-tse* (later spellings are *cog-ts'e* and *cog-ts'o*, the latter in *Li-šii gur-k'an*, fol. 23).

part of the ninth century, and the reason for its coming into existence will immediately be recognized from our general discussion of the phonetic condition of the language in that period. Another interesting example of the presence and effect of tone at that time will be given hereafter in dealing with the word *žan*. Tib. *žun* as equivalent for *kün* 軍 is conceivable only when the Tibetans heard or understood the latter word as *čun* or *šun* with a similar pronunciation, as still existing in the dialects of Wên-chou, Ning-po, and Yang-chou (compare W. *ciung*, N. *cüing*, Y. *chüng*, given in GILES's *Dictionary*); for Tib. *ž* and *j* are regular equivalents of the Chinese palatals *č* and *š* (compare Tib. *kong jo* = Chin. *kung ču* 公主, Tib. *žo* transcribed in Chin. *šo*).¹⁾

The word *c^éeg* (or *ts^éeg*) is a Tibetan word, and has nothing to do with Chinese *ku*. The Tibetan transcription *čen* for Chin. *ts^éing* is striking; it is not known to me whether the latter word may have had an initial tenuis in the T^{ang} period. *Shui* 水 was then doubtless sounded *šu* or *žu*; we shall have to come back to the question why the Tibetan transcription is *šu*. The Tibetan *hyvan*²⁾ consists in writing of initial *h* with subscribed *y* (*ya btags*) and following *va zur* which is the semi-vowel *y*; phonetically, the word is *h^uan*, so that the pronunciation of 縣 must then have been something like the Korean reading *hiön*, or like *hiuan*.³⁾

1) The case is fully discussed farther on, where more examples will be found.

2) BUSHELL (*l. c.*, p. 105, note *f*) has wrongly printed it *hvan*.

3) It has been asserted that Chin. *Lo sic* 邏些 (*Kin Tung shu*, Ch. 196 a, p. 1 b) and *Lo so* 邏娑 (*T'ang shu*, Ch. 216 a, p. 1) are intended to render *Lha-sa*, the capital of Tibet (BUSHELL, *l. c.*, p. 93, note 6; ROCKHILL, *J. R. A. S.*, 1891, p. 190; and CHAVANNES, *Documents*, p. 178). This identification seems to me rather improbable. The Tibetan word *lha* is phonetically *χla*; the initial *χ* is not a prefix which could be dropped, but an integral part of the stem, which is still preserved in all dialects. It is not likely that the form *χla* would be rendered in Chinese exclusively by the one syllable *la* (formerly *la*, *ra*). The strict reconstruction of *Lo sic* and *Lo so* is *Ra sa*; and *Ra sa* ("Goat's Land"), as is well known, is the ancient name of the city of Lhasa, before it

In connection with this list of Tibetan offices and officials it may be appropriate to examine the designations of the Tibetan Boards of Ministry, as handed down in *T'ang shu* (Ch. 216 上, p. 1). Not only are the Tibetan names here transcribed, but also their meaning is added in Chinese, so that for the restoration of the Tibetan originals a double test is afforded, — phonetic and semasiological. Nine ministries are distinguished:

1. *lun ch'i* 論 菴, styled also *ta lun* 大論 (that is, "great *lun*," Tib. *blon c'en*) with the meaning 大相, "great minister." BUSHELL (*l. c.*, p. 6) transcribes the title *lunch'ai*, although the Glossary of the *T'ang shu* (Ch. 23) indicates the reading of the character 菴 as *ch'i* (昌止). From the double interpretation of the term *lun ch'i* it follows that it represents Tib. *blon c'e*, "great minister."

2. *lun ch'i hu mang* | | 扈莽, styled also *siao lun* 小論 (that is, "small *lun*," Tib. *blon c'ui*) with the meaning 副相, "assistant minister." Chin. *mang* strictly corresponds to Tib. *man*, "many." Chin. initial *h*, as noticed above under No. 18, represents Tib. *g* with or without prefix, and Chin. *u* represents Tib. *o*, so that Chin. *hu*, I am inclined to think, is the equivalent of Tib. *mgo*, "head." In this manner we obtain Tib. *blon c'e mgo man*, "the many heads (assistants) of the great minister." I have not yet been able to trace this expression in any Tibetan record, but it may turn up some day.

received the latter name (CHANDRA DAS, *Dictionary*, p. 1161). The Chinese, as shown by their mode of transcription, were acquainted with the name *Ra-sa*, and perpetuated it even after the change of the name in Tibet. KOEPPEN (*Die lamaische Hierarchie*, p. 332) indicates *Julsung* as a designation of the city after VIGNE, and explains this *yul gsuñ*, "land of the teaching." This, of course, is impossible: those words could mean only "teaching, or words of the land." But the reconstruction is erroneous: VIGNE's transcription is intended for *yul gzuñ*, "centre, capital of the land."

3. *si(t) pien ch'é pu* 悉編掣¹⁾ 逋 with the significance *tu lu* 都護, "commander-in-chief," corresponding to Tib. *srid*²⁾ *dpon c'e-po* (*srid*, "government, ruler, commander;" *dpon*, "master, lord;" *c'e-po*, "the great one"), "the great commander."

4. *nang lun ch'é pu* 囊論掣逋 with the meaning *nei ta siang* 內大相, "chief minister of the interior," corresponding to Tib. *nai blon* (exactly so in the inscription No. 13) *c'e-po*, "great minister of the interior."³⁾

1) In the inscription 折.

2) Another explanation is possible. Chin. *si* 悉 is also capable of rendering a Tibetan initial *s*, when followed by a consonant, as shown by *si lung* 悉弄 = Tib. *sron* in the name of *K'ri du sron* mentioned on p. 74. Theoretically we should thus arrive at a Tibetan word **spon* (= Chin. *si pien*), which would represent the equivalent of *dpon*. While this alternation between prefixed *d* and *s* is possible, there is as yet no evidence that *dpon* was also anciently sounded **spon*; but the case deserves consideration, if such a reading should ever occur in an ancient text. Provisionally I therefore prefer to adhere to the restitution *srid dpon*.

3) He is styled also *lun mai je* 論莽熱. The latter word is repeatedly utilized in the inscription to render Tib. *dz̄er*, which I think is an ancient form of *rje*, "lord." The Tib. *blon mai dz̄er* or *rje*, accordingly, would mean "the first among the many ministers." This expression appears also as the title of military officers, as in *T'ang shu* (Ch. 216 下, p. 4 b): 南道元帥論莽熱沒籠乞悉篋, "the commander-in-chief of the Southern Circuit *Mo lung k'i si pi* (probably Tib. *Mod sron k'ri spyi*), with the title *blon mai rje*." *Kiu T'ang shu* imparts only his title without his name. In this respect great caution is necessary, in that the T'ang Annuals frequently designate Tibetan officials merely by their titles, not by their names. The commander in question was captured in 802 by Wei Kao, and sent on to the Chinese emperor, who gave him a house to live in. On this occasion it is repeated in *Kiu T'ang shu* (Ch. 196 下, p. 8 b) that *mang je* denotes with the Tibetans the great minister of the interior. The title *mai rje*, indeed, occurs in Tibetan: a contemporary of King *K'ri sron* was *Sva mai rje gsal* (*dPag bsam ljon bz̄an*, p. 171), and the son of King *Mai sron* was *aDus sron mai rje* (*ibid.*, p. 150). Analogous titles are *mai sron*, *mai blsun*, *mai bza* (title of a consort of King *Sron blsan*). — In the following passage a gloss is imparted for the word *je*. In *T'ang shu* (Ch. 216 上, p. 7 a) mention is made of a general *Shang k'ung je* 尚恐熱, military governor of *Lo mén ch'uan* 落門川, with the family name *Mo* 末, and the name (名) *Nung li je* 農力熱, "which is like the Chinese title *lung* ('gentleman') 猶中國號郎." Chin. *mo* (ancient sounds **mwal* and **mwar*), I am inclined to think, is intended for the Tibetan local and clan name *Mai* or

5. *nang lun mi ling pu* 囊論覓零逋 with the meaning 副相, "assistant minister" (that is, of No. 4). The sound *mi* was anciently *bi* (compare the Japanese reading *beki*). Since the ministers of the interior are divided into three classes, the first and the third of which are designated as "great" and "small," the Chinese transcription *bi-ling-pu* naturally refers to the Tibetan word *ʼabriñ-po*, "the middle one of three." We arrive at the result: Tib. *nañ blon ʼabriñ-po*, "the middle minister of the interior," or "the minister of middle rank."

6. *nang lun ch'ung* 囊論充 with the meaning 小相, "small minister," corresponding to Tib. *nañ blon c'uñ*, "small minister of the interior." 1)

7. *yü xan (han) po ch'è pu* 喻寒波掣逋 meaning 整事大相 (translated by BUSHELL [*l. c.*, p. 6] "chief

aBal (Inscription N^o. 16); the words *nung li je* seem to represent Tib. *luñ ri rje*, "the lord of valleys and mountains," and it is this Tibetan word *rje* to which the Chinese gloss *lang* refers. The words *shang k'ung je* (Tib. *žai k'oñ* [?] *rje*) are certainly not part of the name, but a title. In *Sung shi* (Ch. 492, p. 1) we meet under the year 1020 the title of a Tibetan minister *Lun k'ung je* 論恐熱 (Tib. *blom k'oñ* [?] *rje*).

1) It is notable that both Tib. *c'uñ* and Chin. 充 agree in tone, which is the high tone. The importance of the tone for Tibeto-Chinese transcriptions is discussed on pp. 79 and 105. — In 751 and 754 the Chinese vanquished Ko-lo-fêng, king of Nan-chao, who took refuge with the Tibetans. These conferred upon him the title *tsan p'u chung* 贊普鍾, that is, "younger brother of the *tsan-p'o*" (not *po*, as is always wrongly restored; see the note on this subject farther on), *chung* in the language of the "barbarians" signifying "younger brother." M. PELLIOF (*B. E. F. E. O.*, Vol. IV, 1904, p. 153), who has translated this passage, observes, "C'est probablement le *chung* tibétain." This is not quite exact. The Tibetan word here intended is *gcuñ* (*gcuñ*, pronounced *cuñ* in the high tone), the respectful word (*že-sai skad*) for a younger brother (otherwise *mu-bo*), with which Chin. 鍾 exactly harmonizes in sound and tone; this equation (as many other examples in the inscription) proves that the prefixed *g* was not then articulated. The Tibetan word *c'uñ* (*c'uñ*), "small, young," may denote the younger of two brothers, but cannot be rendered by the Chinese palatal tenuis, only by the aspirate, as proved by the above case Tib. *c'uñ*, "small," = Chin. 充 *ch'ung*. A Tibetan initial aspirate is regularly reproduced by the corresponding Chinese aspirate.

consulting minister'), corresponding to Tib. *yul* 1) *rgan-po c'e-po*. Chin. *han* answers to Tib. *rgan*, as we saw in the inscription No. 18; *rgan-po* is still the elder or head man of a village, and the Tibetan term relates to local (*yul*) administration.

8 and 9 do not require any further discussion. They are Tib. *yul rgan a-brin-po* (Chin. *yü han mi ling pu*), "the middle minister of local administration;" and Tib. *yul rgan-po c'uñ* (Chin. *yü han po ch'ung*), "the small minister of local administration."

These nine Boards are styled collectively *shang lun ch'ê pu t'u kiü* 尙論掣逋突瞿, which is considered by me as a transcription of Tib. *zan blon c'e-po dgu*, "the Nine Great Ministers." The word *zan* is fully discussed on p. 104. The word *t'u* 突 formerly had the initial *d* (Japanese reading *dochi*, Annamese *dout*), the word *kiü* 瞿 had the initial *g* (Japanese *gu*). 2)

The phonetic phenomena to be inferred from the Chinese transcriptions of Tibetan words may be summed up as follows.

We gain an important clew as to the determination of the two vowel signs for *i*, the graphic differentiation of which in the ancient texts has been discussed above (p. 53). The inverted *i*, transcribed by me *î*, occurs in four examples: *myîi* (= moderu *miî*) = 名, *p^cyi* = 紕, *k^cri* = 綺立, *zîgs* = 昔 *sik*. 3) Hence it fol-

1) Chin. *yu* 喻 = Tib. *yul* occurs likewise in proper names. The *Sung shi* (Ch. 492, p. 2) mentions under the year 991 a governor (折逋 = Tib. *c'e-po*, "great") of Si Liang-chou 西涼州, by name *Ngo yü tan* 阿喻丹, corresponding to Tib. *mNa* (compare 阿里 = Tib. *mNa-ri(s)*) *yul brtan*; and under 994 a governor *Yü lung* 喻龍波, being Tib. *Yul sron-po*.

2) It renders the syllable *go* in *Gotama* (T. WATTERS, *Essays on the Chinese Language*, p. 388), in *Gopāla* (*Life of Ilüan Tsang*) and *Suvarṇagotra* (*Memoirs of Hüan Tsang*).

3) A fifth example is afforded by 悉 *sit* transcribing Tib. *srid* in the third Ministerial Board mentioned in *T'ang shu*, and *srid* is written with inverted *î* in the sworn treaty of 822 (9—11).

lows that the ancient Tibetan sound *i* exactly corresponded to the plain, short Chinese *i*. For the vowel *i* written in the regular modern form we have three examples; namely, *mc'ims* = 琛 *c'üm*, *rtsis* = 資思 *tse (tsi)-se*, and *cig* = 市 *ši*. These varying Chinese transcriptions prove that this Tibetan vowel did not sound to the Chinese ear like a definite *i*, but must have been of somewhat indistinct value, something between *i*, *i*, ¹⁾ and *ö*.

The comparison of allied words which Tibetan and Chinese have in common is apt to confirm this result. There are Chinese *sp* 四 ("four") corresponding to Tibetan (*b*)*ži*, Chinese *sp* 死 ("to die") corresponding to Tibetan *ši*, indicating that Tibetan *i* was an equivalent of this indistinct Chinese vowel *ɛ*. The two Tibetan signs for *i*, therefore, have great significance in the comparative study of Indo-Chinese languages; and their distinction in the ancient monuments must be conscientiously noted and registered, instead of being neglected,²⁾ as was done by Mr. WADDELL. The inscription of 822 indicates that the two timbres of *i* were still fairly discriminated, but that they were already on the verge of a mutual fusion, as shown by a certain wavering in the employment of the two signs. Thus we find in line 43 *gñis*, but in line 50 *gñis*; in line 43 *kyi*, in line 50 *kyi*; and other inconsistencies. Perhaps the phonetic differentiation was already wiped out at that period, and only the graphic distinction upheld on traditional grounds.

1) Compare SCHAANE, *Ancient Chinese Phonetics* (T'oung Pao, Vol. VIII, 1897, p. 369). — On the other hand, Chin. *i* is rendered by Tib. *e* in the nien-hao *King lung* 景龍 transcribed Tib. *Ken lun* (in the inscription of 783), probably sounded *Kün* (compare *cön kuan* 貞觀 = Tib. *čei kuan* [*ibid.*; accordingly, Tib. *e* = Chin. *ü*]). For this reason it is possible that Chin. *king*, as heard at that time by the Tibetans, was sounded *k'üŋ* (compare Korean *kyüŋ*). Chin. *ti* 帝 (in *kuang ti*) is transcribed by Tib. *te* (compare Jap. *tei*, Annamese *de*). *Vice versa*, Tib. *ne* in the inscription (above, Nos. 9 and 13) is rendered by Chin. *ning* (but Hakka *len*, Korean *yöŋ*), which, in my opinion, goes to show that Tib. *ne* was nasalized: *ne(ŋ)* or *nö*.

2) The hypothesis of the two *i*'s serving for the distinction of short and long *i* is herewith exploded once for all.

The most signal fact to be gleaned from the Tibeto-Chinese concordances is that phonetic decomposition, which was hitherto regarded as a comparatively recent process of the language, was in full swing as early as the first half of the ninth century. The superscribed and prefixed letters were already mute at that time in the dialect of Lhasa: *blon* was articulated *lon*, *btsan* was *tsan*, *bzan* was *zan*, *bžer* was *žer*, *bka* was *ku*, *lta* was *ta*, *lto* was *to*, *gtoqs* was *toq*, *rqyal* was *gyal*, *rgan* was *gan* (probably *χan*); *brtan* was even sounded *tan* 𑄠. Superscribed *s*, however, seems to have been preserved throughout: the pronunciation of *stang* and *snam* is indicated as *stang* and *snam*, that of *snag* and *stag* as *snag* and *stag*. *P'yi* was sounded *p'ï*; the alteration of the palatalized (*mouillé*) labials into palatal *č* and *č'* had apparently not yet taken effect. In the combination of two monosyllables into a unit, the prefix of the second element, when the first terminates in a vowel, was articulated and connected into a syllable with the first element, exactly in the same manner as at present. This is exemplified by the interesting transcription *t'am-t'ung* for Tib. *lta mt'oï* (No. 10), which simultaneously proves that the word *mt'oï* when isolated was pronounced *t'oï*, and by the transcription *ngan pên* for Tib. *mña dpon* (No. 16).¹⁾ Compare in recent times the name of the monastery *dGa-ldan*, pronounced *Gan-dan*, hence Chin. *Kan-tan* 甘丹; and Tib. *skye dman* ("woman"), pronounced *kyen* (or *kyer*) *män*, hence transcribed *king mien* 京面 in the Tibetan vocabulary inserted in *T'ao-chou t'ing chi* 洮州廳志, 1907 (Ch. 16, p. 48).

Of final consonants, *d*,²⁾ *g*, *n*, and *ñ* were sounded. Final *s* was

1) Compare also the above *žan blon c'e dyu*, which, judging from the Chinese mode of transcription, must have been articulated *c'et-yu*.

2) Final *d* was pronounced in *Bod*, as indicated by the transcription 蕃 **pat, pot, pön*. It is incorrect, as Mr. ROCKHILL (*J. R. A. S.*, Vol. XXIII, 1901, p. 5) asserts, to say that "the word *Bod* is now, and probably always has been, pronounced like the French *peu*."

sounded when it followed a vowel (*adus*), but it was eliminated when following a consonant (*mc^cims* was sounded *c^cim*, *zigs* as *zik*).¹⁾

In regard to final *l*, I feel somewhat doubtful. If my identification of 喻 *yü*, which had no final consonant, with Tib. *yul*, holds good, this would rather indicate that final Tib. *l* was not sounded, or but indistinctly. The transcription 烟 *kiap* (*γ'ap*) for *ryyal* in the inscription No. 11, however, may point to a pronunciation *gyal* (*g'al*, *γ'al*). On the other hand, in the list of royal names in *T'ang shu* (Cb. 216 上, p. 2a) we find the word *ryyal* rendered by 羆 *lia* (BUSHELL [*l. c.*, p. 9] transcribes *hsia*; Glossary of *T'ang shu* 古牙 *ku ya*) in the first of King Sroñ btsan's an-

JASCHKE, in the Phonetic Tables of his *Dictionary* (p. XVI), indicates the pronunciation *bhod* for Spiti, *wod* for K'ams, *bho'* for Tsang and Ü. In the latter the initial is an aspirate media, and, besides, the word has the deep tone; it has accordingly nothing in common with French *peu*. Mr. ROCKHILL himself (p. 6) indicates that in the tenth and eleventh centuries the sound *peu* was transcribed 不德 *pu-té* and 字 (or 伯) 特 *po t'é*; but surely it was not the sound *peu*, but the sound *bod*, which is clearly enough indicated by these transcriptions. If *bod* was thus sounded in the tenth and eleventh centuries, we are bound to presume that this pronunciation held its ground also in the preceding T'ang period. Skr. *Bhoṭa* and Ptolemy's *Bzūrai* afford additional evidence for an ancient indigenous *Bod* sounded *bot*.

1) In final *s* a distinction must be drawn between the suffix *-s* (called Tib. *yañ ajug*) and radical *s* inhering in the stem. The latter seems to have survived until comparatively recent times, if we may rely upon the transcription 烏思藏 *Wu-se tsang* of the *Ming shi* for Tib. *dBus gTsai* (the two large provinces of Central Tibet); the Chinese equivalent must be based on a Tibetan pronunciation *vus tsai* during the Ming period, while the new transcription 衛 *Wei*, rendering the word *dBus* in the age of the Manchu, clearly indicates that the final phonetic decay resulting in the modern *vui*, *vü*, *ü*, is an after-Ming event. On the other hand, the name of the temple *δSam-yas* is transcribed *Sam-ye* 三耶 by the Chinese pilgrim Ki-ye in the latter part of the tenth century (CHAVANNES, *B. E. F. E. O.*, Vol. IV, 1904, p. 81, who did not identify this locality; this implies that Ki-ye made his return from India to China by way of Nepal and Tibet). Tib. *yas* is *ya + s* of the instrumental case (the temple was fine "beyond imagination," *bsam-yas*); *sam-ya* is still the current pronunciation in Central Tibet (JASCHKE, *Tibetan Grammar*, p. 6); but as the ancient pronunciation of 耶 was *ya* (compare 耶婆 *Yava*), it is necessary to assume that Ki-ye, at the time of his sojourn in the famous monastery, heard the pronunciation *Sam-ya*. If he had heard *yas*, he could easily have expressed it by the addition of 悉, as it occurs in 耶悉茗 *yasmin*, "jessamino."

cestors, 癩悉董摩 *Kiu si tung mo*, which I provisionally take as reproducing Tib. *rgyal ston-mo*; further, 夜 *ye* in 弗夜 corresponding to Tib. *Bod rgyal*, "king of Tibet," as title of King *Sron btsan*, and 野 *ye* in 罕勃野 *Su p'o ye = Su p'o rgyal*, the Tibetan name and title of Fan-ni, and in 鶻提勃悉野 *Hu* (Tib. *Gun*) *t'i* (**de* = Tib. *lde*) *p'o si ye* (= Tib. *rgyal*), the ancestor of the Tibetans. The Chinese symbols employed in these cases, *kie* and *ye*, correspond to an ancient pronunciation **gia* (*γ'a*) (Annamese *gia*, *ja*), without a final consonant, so that they seem to be indicative of a Tibetan sound *gya'* (*g'a'*, *γ'a*). Final *l* was articulated in the tribal name *Bal-ti* (*rGyal rabs: sbal-ti*), as shown by the Chinese rendering *Pu-lü* 勃律 (CHAVANNES, *Documents*, p. 149), the ancient sounds of this *pu* being **ba* and **b'a* (Ningpo *ba*, Japanese *botsu*, Korean *pal*; it renders the syllable *bha* in Skr. *Bhamātra*), so that *Pu-lü* appears as a reproduction of Tib. *Bal*.¹⁾

An interesting example of the treatment of Tib. final *l* in Chinese is afforded by the Chinese word *p'êng sha*, "carbonate of soda, natron" (*natrium carbonicum*), which has not yet been explained. Li Shi-chên (*Pên ts'ao kang mu*, 石部, Ch. 11, p. 12) confesses his ignorance in the matter (名義未解); and WATTERS (*Essays on the Chinese Language*, p. 378) is wrong in deriving the Chinese word from Tib. *ba tsa* (to which it has not the slightest similarity), "called also *pen-cha*," which is certainly nothing but the Chinese, and not a Tibetan word. The first and oldest mention of the term, as far as I know, is made in *Kiu Wu Tai shi* (Ch. 138, p. 1b), where *ta p'êng sha* 大鵬砂 ("sand of the great rukh") is enumerated among the products of the T'u-po. This very name is suggestive of being the transcription of a foreign word (the

1) In *T'oung Pao*, 1908, p. 3, *Po-lü* was connected by me with *Bolor*, the ancient name of Baltistan; but *Bolor* seems to be derived from *Bal*.

character 礪 certainly is an artificial formation, the two other characters given by WATERS are taken from the *Pên ts'ao*. The ancient sounds of the phonetic element *p'êng* 朋 are *bung, and the Tibetan word answering in sense to the Chinese is *bul* (JÄSCHKE, *Dictionary*, p. 370), so that Chin. *p'êng* (*bung*) appears as a reproduction of Tib. *bul*,¹⁾ simultaneously proving that the final *l* in *bul* was sounded; both words agree also in the low tone.²⁾

1) Also in the ancient allied words of the two languages, Tib. final *l* corresponds to a final nasal in Chinese: for instance, *d'aul*, "silver" = Hakka *ngyin*, Fukien *ng'ing* 銀 (*yin*); Tib. (*s*)*brul*, "snake" = Cantonese and Hakka *mung* 蟒 (*mung*, Jap. *bū*). In other cases Tib. final *g* is the equivalent of Chin. final nasal, as Tib. (*u*)*brug*, "dragon" = Chin. *lung* (Jap. *riū*) 龍. But Tib. *bun(-ba)*, "bee" = Chin. *fung* (Korean *pong*) 蜂; Tib. *ris-bon* (*mon*), "camel" = Chin. *pong, fong* 峯, "hump of a camel" (Tib. *ris* is related to *riog*, "hump"); Tib. *man*, "many" = Chin. *mang* 茫 and 龐; Tib. *opyan(-tu)*, "wolf" = Chin. *mang* 虬 (Korean *paug*, Jap. *bū*), "Tibetan mastiff."

2) On *p'eng sha* see P. CIBOT (*Mém. conc. les Chinois*, Vol. XI, pp. 343—346); KLAPROTH (*Asiat. Magazin*, Vol. II, pp. 256—261, Weimar, 1803); SOUBEIRAN, *Études sur la matière médicale chinoise (minéraux)*, p. 13 (Paris, 1866); F. DE MÉLY, *Les lapidaires chinois*, p. 141; H. H. HAYDEN, *Geology of the Provinces of Tsang and Ü in Central Tibet (Memoirs Geological Survey of India, Vol. XXXVI, pt. 2, 1907, p. 65)*. — The Chinese loan-words in Tibetan have not yet been studied, and are hardly indicated in our Tibetan dictionaries. Some of them are even passed off as Sanskrit: for instance, *pi-wan* or *pi-ban*, "guitar," is said to be derived from Skr. *pīṇā*, which is impossible; in fact, it is to be connected with Chin. 琵琶 *p'i-p'a*, ancient sounds **bi-ba* (Japanese *bi-wa*, Mongol *biba*). The nasalization of the final vowel *wa* or *ba* is a peculiarity of Tibetan sometimes practised in foreign words (compare *pi-pi-lin*, "pepper" = Skr. *pippalī*). The *Tang hiang* 党項, a Tibetan tribe in the region of the Kukuor, according to *Sui shu* (Ch. 83, p. 3), were in possession of *p'i-p'a*; according to Chinese tradition, the instrument originated among the *Hu* 胡, a vague expression generally referring to peoples of Central Asia, Iranians and Turks. GILES (*Biographical Dictionary*, p. 839) ascribes its introduction into China to the Princess of Wu-sun. The Djagatai word for it is *piik* (*Keleti Szemle*, 1902, p. 161). The fact that the Tibetan and Chinese words refer to the same object is evidenced by the Polyglot Dictionary of K'ien-lung. In the latter we meet also Tib. *con*, "bell" = Chin. *chung* 鐘. There are, further, Tib. *p'iā*, "pitcher, cup" = Chin. *p'ing* 瓶; Tib. *la-c'a*, "sealing-wax," from Chin. *la* 蠟, "wax;" Tib. *mog(-ba)*, "mushroom" = Chin. *mo-tu* 蘑菇; Tib. *ts'w* (the double *s* indicates the fourth tone of Chinese), "vinegar" = Chin. *ts'w* 醋; Tib. *gis* (*gi-wan* (*dam*), "bozoar" = Chin. *niu huang* 牛黃 (Jap. *giu-kwō*); Tib. *kan*, "watermelon" = Chin. *ku* 瓜; Tib. *wan*, "ounce" = Chin. *liang* 兩 (Korean *riang*, Jap. *riō*). Tib. *pi-pi*, "flute," and *bid-bid*, "hautboy"

On the whole, the probability is greater that the final *l* was

reed," must be connected with *pi* 筚 (**bi, bit*; Korean *p'it*), originally a horn used by the K'iang to frighten horses (definition of *Samo w'in*), but then in the compound *pi-li* 筚篥 a pipe (A. C. MOULE, *Chinese Musical Instruments*, *J. Ch. Br. R. A. S.*, 1908, p. 84), in *Huang ch'ao li k'i t'u shi* (Ch. 9, p. 53) figured and described as a reed flute with three holes, metal mouthpiece and broadening funnel, 5.37 inches long, used for dance music by the Turkish tribe *Warka* 瓦爾喀. The word, therefore, is presumably of Turkish origin, but it is much older than the eighteenth century. We meet it in the transcription *pei-li* 貝聶 in the chapter on music in *Kiu T'ang shu* (Ch. 29, p. 8 b), where it is defined as a copper horn 銅角, two feet long, of the shape of an u-horn, in use among the Western Jung 西戎. According to another tradition, it originated in Kucha, 'Turkistan' (*Ko chi king yuan*, Ch. 47, p. 6 b). The original Turkish form seems to have been *beri* or *büri* (H. VÁMBÉRY, *Die primitive Cultur des turko-tatarischen Volkes*, p. 145, notes a word *bornu*, "trumpet," properly "reed"); and we find this word in Mongol *büriyü*, "trumpet," from which Manchu *buren* and *buleri* seem to be derived. The latter corresponds in the Polyglot Dictionary to Chin. *la-pa* 喇叭, Mongol *ghülin büriyü*, "brass trumpet," and Tib. *zaw duu*. The Mongol word *rapal* given in the first edition of GILES, and repeated by MOULE, does not exist (Mongol has neither initial *r* nor a *p*); nor can Chin. *la-pa* be derived from Manchu *luba*, as stated in the second edition, the latter being merely a transcript of Chinese, as already pointed out by SACHAROV. *La-pa* is neither Mongol nor Tibetan; it is listed among the musical instruments of Turkistan in *Hui k'uang chi* 回疆誌 (Ch. 2, p. 8), published 1772 (WYLIE, Notes, p. 64). The musical instrument *kan tung* 干動, left unexplained by MOULE (*l. c.*, p. 103), is Tib. *rkan duu*, the well-known trumpet made from a human thigh-bone; I met also the transcription 剛洞. Among the interesting loan-words of cultivated plants, we have Tib. *se-(t)bru* (pronounced *se-ru*), "pomegranate" (*punica granatum* L.), derived from Chiu. 石榴 *shi-lin*, anciently *se(shi)-ru* (Japanese *-ro*). The pomegranate does not thrive in Tibet, and, as is well known, was introduced into China by General Chang K'ien (BRETSCHNEIDER, *Bot. sin.*, pt. 1, p. 25, pt. 3, No. 280; HIARTII, *T'oung Pao*, Vol. VI, 1895, p. 439; *Pén ts'ao kang mu* 果部, Ch. 30, p. 8). Whether Chin. *ru, ro*, is connected with Greek *ῥοά* or Arabic *rūmūn*, Amharic *rūmūn* (SCHRAEDER in HEHN, *Kulturpflanzen und Haustiere*, 8th ed., p. 247), I do not venture to decide. The Tibetan word must be regarded as a loan from Chinese, and not as indigenous, as W. SCHOTT (*Entwurf einer Beschreibung der chinesischen Litteratur*, p. 123, note, Berlin, 1854) was inclined to believe, who explained the word as being composed of Tib. *se*, "rose," and *(t)bru*, "grain, seed." These Tibetan words (the meanings "pomegranate" and "rosebush" interchange in South-Slavic) were doubtless chosen as elements of the transcription, because they conveyed to the national mind some tangible significance with reference to the object (in the same manner as there are numerous analogous cases in the Chinese transcriptions of foreign words). The Central-Tibetan pronunciation *sen-tu* and Ladākhī *sem-ru* represent secondary developments suggested by the mode of spelling, and application of phonetic laws based thereon (nasalization of the prefix *ŋ*, transcribed *nen* 恩 in *Hua i yi yü*).

articulated than that it was suppressed, and the same remark holds good of final *r*. For the latter we have the only example in the word *bžer*, transcribed by Chin. *žer* (Nos. 10, 13—15, above). In this case the Chinese transcription certainly is not conclusive, since Chinese lacks final *r*, and, taking into consideration that the other finals were heard, there seems good reason to assume that *bžer* was pronounced *žer* at that period.

The subjoined *r* was still clearly sounded in the guttural and labial series. The word *k'ri*, as evidenced by the Chinese transcription *k'i-li*,¹⁾ was actually heard as *k'ri* (not as at present, *č'i*); Lolo *sebuma* (P. VIAL, *Dict. français-lolo*, p. 176, Hongkong, 1909) possibly points to a former Tibetan articulation *seb-ru*.

1) The T'ang Annals employ various methods of transcribing the word *k'ri* ("throne") in the beginning of the names of the Tibetan kings. 乞黎, 乞立, 棄隸 (*k'i li*), and also only 棄 and 器 (*k'i*). Probably also *k'o* (*ka*) *li* 可黎 in the name *K'o li k'o tsu* 可黎可足 (being identical with the Tibetan king *K'ri-lde sron-btsan*) is the equivalent of Tib. *k'ri*. The Chinese rendering of his name has not yet been explained. The elements *lde sron btsan*, the Chinese equivalents of which are well known to us, cannot be made responsible for Chin. *k'o tsu* (ancient sounds *ka tsuk*). In *rGyal rabs* this king is designated also *K'ri gtsug lde btsan Ral-pa-can*; so that we are bound to assume that the Chinese name *K'o-li ka-tsuk* is intended for the first two elements of this Tibetan name, *K'ri gtsug*. It is singular, however, at first sight, that in this case the prefixed *g* is expressed by the Chinese syllable *k'o* (*ka*), while in another royal name Tib. *gtsug* is transcribed in Chinese regardless of the prefix (see p. 92, note 2). The Tibetan prefix is often preserved in the second element of a compound if the first word terminates in a vowel; the words *k'ri gtsug* could be sounded *k'rik-tsug*, and hence the Chinese mode of transcription. The case is analogous to that of *lla m'oi* pointed out on p. 86. An interesting Chinese transcription of a Tibetan word showing the preservation of *r* is the word *p'u-lu* 普魯, "woollen cloth," a reproduction of Tib. *p'rag*. As far as I know, the Chinese term does not occur in the T'ang period, but only from under the Yüan. The mode of writing (Manchu *p'uru*) presupposes a Tibetan pronunciation *p'ru*, for the phonetic element *lu* 魯 is devoid of a final consonant. In the age of the T'ang, when the word sounded *p'rag* also in the dialect of Lhasa, a complement sounding *luk*, for instance 祿, would have doubtless been chosen in forming the second character in the word. The very mode of transcription thus betrays a post-T'ang origin, but it must result from a time when the initials *p'r* were still in full swing and had not yet undergone the *lautverschiebung* into the cerebrals *f'r*, *f'* (see also KLAPROTH, *Description du Tibet*, p. 50, Paris, 1831; T. WATERS, *Essays on the Chinese Language*, p. 378).

kru (*kü-li*) was sounded *kru*; the word *ibro* (No. 19) was sounded *bro*, and *ibriin*, as shown by the Chinese transcription *bi-liin*, was articulated *brin*,¹⁾ and *blo* was *blo*. In the combination *sr*, the *r* seems to have been dropped, if the identification of 悉 *sit* in T'ang *shu* with Tib. *sril* holds good.²⁾

1) Another good example of the initials *br* being sounded with perfect clearness is presented by the word 拂廬 *fu-lu* (**bu-ro*), imparted in the T'ang Annals as a gloss for the Tibetan word meaning "a felt tent." The word intended apparently is Tib. *sora*, "felt tent," still sounded *bra* in western Tibet and so likewise in the T'ang period. The Chinese syllable *bu* reproduces the initial *b*, and the syllable *lu* the Tib. *ra*. It is strange, however, that the Chinese did not choose in this case an element *ra*, *la*; but this may be easily accounted for by the fact that the above Chinese word *lu* means "a hut, a hovel," and also the tent erected for the wedding ceremony. As in so many other cases, the Chinese selected a word approximately imitative of the foreign sound, and simultaneously indicative of the significance of the foreign word. The Tibetan word *gur*, "tent," can certainly not be sought in the Chinese transcription, as 拂 never had the sounds *gu* or *ku*. A good modern example of Chinese rendering of Tib. *br* is 老木郎 = Tib. *Lha-bran*; in this compound the second element is still pronounced *bran* (but never *lan*) throughout Tibet, while *p'o-bran*, "palace," is always *p'o-lan*. These two elements *bran*, therefore, seem to be two words of different origin.

2) But the word *srön* in the names of several kings was doubtless articulated *srön*, as evidenced by the transcriptions in the T'ang Annals 宗 (tsung; Japanese *su*, *su*) 弄 (lung), *si lung* 悉弄, *su lung* 蘇籠 and *si lung* 悉籠. Mr. ROCKHILL (*The Life of the Buddha*, p. 211) is inclined to think that Chin. *K'ci tsung lung tsun* renders Tib. *K'ri ldan srön blsan*; but Chin. *tsung* cannot reproduce Tib. *ldan* (pronounced *dan*). In my opinion, the Chinese words are intended only for *K'ri srön blsan*. In regard to the name of King *K'ci li so tsan* 棄隸跖贊, Mr. ROCKHILL (p. 217) takes it as "giving a quite correct pronunciation of the four first syllables of his Tibetan name," that is, *K'ri lde gteug blsan*. But Chin. *li* cannot represent an equivalent of Tib. (*lde*, which, as pointed out on p. 74, is rendered by Chin. *lie* 獵). The Chinese words exactly reproduce the Tibetan words *K'ri (g)tsung (b)lsan*. The character 跖 is sounded in Cantonese *shuk*, Korean *suk*, *čuk*, Japanese *shuku*, and seems to have had in the T'ang period the value of **tsuk*, **dzuk*. BUSHELL (*The Early History of Tibet*) unfortunately availed himself of the Wade system in the transcription of Tibetan names, so that they are useless for the purpose of identification, and wrote names sometimes consisting of five and six syllables into one solid word without divisions, which led his successors into error; for instance, HERBERT MUELLER (*Tibet in seiner geschichtlichen Entwicklung, Z. f. vergl. Rechtswissenschaft*, Vol. XX, p. 325), who transcribes *Ch'ia-s-hai-lung* instead of *K'ci su si lung*. An error of transcription was committed by BUSHELL (pp. 3, 39) in the name written by him after *Kim T'ang shu Sohsilunglichtsan* (and so repeated by ROCKHILL, p. 219, and MUELLER, *l. c.*), where *P'o* (婆, confounded with

Initial and final consonants, in general, were still intact, but prefixed consonants were doomed to being silent. It is natural that tones began to be developed in consequence of this phonetic disintegration (p. 79); for we know, particularly from CONRADY'S researches,

娑) *si lung lie tsan* (corresponding to Tib. *P^o sroñ lde btsan*) must be read. The *T'ang shu* (Ch. 216 上, p. 8a) writes the same name 娑悉籠臘贊 *So* (ancient sound *sa*) *si lung la tsan*; nevertheless BUSHELL'S *So si lung lie tsan* remains incorrect, as we have either *P^o si lung lie tsan* of the *Kin T'ang shu* or *So si lung la tsan* of the *T'ang shu*. The latter spelling, however, is erroneous. The historical observation inserted by Mr. ROCKHILL shows that this is a case of importance, as, according to him, this name has not yet been traced in Tibetan history. But if names are wrongly transcribed and inaccurately restored, any attempt at identification is naturally hopeless at the outset. All the Tibetan words and names encountered in the *T'ang Annals* are capable of rigorous philological research; and when this is properly carried through, much of the alleged diversity between Chinese and Tibetan traditions (BUSHELL, p. 4) will be blown up into the air. Mr. ROCKHILL'S conclusion that in the *T'ang shu* the king *So si lung lie tsan* is inserted between *K'ci li so tsan* and *K'ci li tsan*, whereas all Tibetan histories are unanimous in affirming that *K'ri sroñ* succeeded his father on the throne, is not at all to the point; likewise BUSHELL (p. 5) is wrong in making *So si lung lie tsan* and *K'ci li tsan* two individuals and two different kings. They designate, indeed, one and the same personage, who is none other than the Tibetan king *K'ri sroñ lde btsan*. This name appears in both *T'ang shu* as that of the king who died in 765 (BUSHELL, p. 39), but this is the same king previously styled *K'ci li so tsan* (*K'ri gtsang btsan*), so that it is evident beyond cavil that it is simply a clerical error which here crept in when the annalist copied from his state documents. It was *K'ri gtsang btsan* who died in that year, and it was his son *K'ri sroñ lde btsan* who succeeded to him, and who was styled — the annalist meant or ought to say — also *P^o sroñ*. This reading of *Kin T'ang shu* is doubtless correct, whereas the *so* of the *New Annals* must be a clerical error. Tib. *p^o*, "the male," is an ancient title occurring in the names of the Tibetan kings, as will be seen below in a discussion of the word *btsan-po*, which had originally the form *btsan p^o*, "the warlike one, the male." Likewise *rgyal-po*, "the king," was originally *rgyal p^o*, "the victorious male" (compare WADDELL, *J. R. A. S.*, 1909, p. 1268, whose explanation is certainly a fantasy; the title *p^o* implies nothing derogatory). It is worthy of note that also the chief consort of the king, *P^o yon* (or *yyon*) *bza*, bore the title *p^o* in her name, whereas his other wives were not entitled to this privilege. In the transcription 勃弄若 *P^o lung* (BUSHELL, p. 9, *mung*) *jo* (= Tib. *jo*) the same title *P^o sroñ* appears in the name of the fifth of King *Sroñ btsan*'s ancestors (*T'ang shu*, Ch. 216 上, p. 2a). The title *P^o rgyal* occurs in the name 宰勃野 *Su p^o ye* (*gia*), adopted by Fan Ni 樊尼 on his election as king of the Tu-fa (BUSHELL, p. 6), and in the name of the ancestor 祖 of the Tu-po, 鶻提勃悉野 *Hu* (Tib. *gwi*) *t'i* (Tib. *lde*) *p'u* (Tib. (*p^o*) *si* (possibly Tib. *srid*) *ye* (Tib. *rgyal*) = Tib. *Gwi* (see p. 78) *lde p^o srid rgyal*.

that tones are the substitutes of eliminated consonants. Presuming that writing, when introduced in the first half of the seventh century, rather faithfully fixed the condition of the language as then spoken, we are confronted by the fact that the first stage in the process inaugurating the remarkable phonetic decomposition of the Tibetan language took place within a period of hardly a century and a half. In the first part of the ninth century a deep gulf was yawning between the methods of writing and speaking, and due regard must be taken of this fact in our studies of the manuscripts of that epoch. The natural tendency of writing words in the same manner as they came from the lips of the speakers was then steadily growing. The inscription of 822 (above, No. 17) furnishes a curious example in writing the word *bka* with the single letter *k*, which, even more than the Chinese transcription *kia*, is undubitable proof that it was sounded simply *ka*.¹⁾

1) For the present I refrain from a discussion of the laws underlying the Chinese method of transcribing Tibetan words, as several intricate points remain to be cleared up. It will be observed that this method in some respects differs from what we are wont to have in the case of Sanskrit, Turkish, and Persian transcriptions, and that in the face of Tibetan the Chinese were compelled to struggle with difficulties which they did not encounter in other foreign languages. It is manifest that the Chinese transcriptions, as we have them now, were recorded at the time when the decomposition of the Tibetan prefixes and initials had set in, and when the tone system sprang into existence. The tones could not escape the Chinese ear, and were bound to influence their manner of transcribing. The fact that the new initials were affected by the eliminations of the prefixed consonants, most of which were grammatical elements of formative functions, is evident from what we observe in the modern dialects; thus far, however, we are not in a position to frame any definite conclusions in regard to such changes during the ninth century. Nevertheless they must have taken place, as we see from several parallels in the inscription of 822. Whereas all the Tibetan true initial aspirates are exactly reproduced by the corresponding Chinese aspirate, we notice that Chinese has an aspirate where Tibetan offers a tenuis + silent prefix; for instance, Tib. (*l*)*ta* = Chin. *t'an* 貪 (No. 10), and Tib. (*l*)*to* = Chin. *t'u* 土 (No. 14). Whether Tib. *t* was really aspirated or changed into the aspirate media *d'*, I do not venture to decide; but the Chinese transcriptions are a clear index of the fact that the tenuis had undergone some sort of revolution prompted by the elision of the prefixed *l*. In other instances, judging from

Phonology of Document Pelliot.

We now enter into a discussion of the phonology of the text of document Pelliot. M. BACOT himself has noted the addition of

the Chinese transcriptions, the tenais remained unaffected; as, *glogs* = *tuk* 篤, *brtan* = *tan* 旦. This case is of importance when we meet Tibetan names in the Chinese annals and are intent on restoring them to their original forms. Take, for instance, the name of the king 陀土度 *T'o t'u tu(k)* (*T'ang shu*, Ch. 216 上, p. 2 a), the second in the series of the ancestors of King *Sron btsan*. At first sight, I felt much tempted to recognize in the first two elements the Tib. *t'o t'o* occurring in the name of King *Lha t'o t'ori* of Tibetan tradition, but due regard paid to the case just cited makes me skeptical: the Chinese dental aspirate may correspond to this sound in Tibetan, but it may express also Tib. *lt* (hence also *rt*, and probably *st*). Since 土 in the inscription is the equivalent of *lto*, it may very well be that this is the case also in the above name, which may be restored *T'o lto bdag* (度 **dak*; Japanese *taku, do*; Korean *t'ak*). This consideration has a bearing also on the interpretation of the tribal name 吐蕃 *T'u po (fan)*, the second element of which has correctly been identified with Tib. *bod*; for the first element, Tib. *stod*, "upper," and *mt'o*, "high," have been proposed (the various theories are clearly set forth by L. FEER, *Étymologie, histoire, orthographe du mot Tibet, Verh. VII. Or.-Congr.*, pp. 33—81; and YULE and HURNELL, *Hobson-Jobson*, p. 917). The first objection to be raised to these identifications is that they are merely based on guesswork, and not on any actual name of Tibet found in Tibetan records. Neither in *rGyal rabs* nor in any other Tibetan history did I ever come across such a name as *stod bod* or *mt'o bod*, but Tibet and Tibetans are simply called *Bod*, with or without the usual suffixes. It is true, Mr. ROCKHILL (*J. R. A. S.*, 1891, p. 5) is very positive in his assertion that "Tibetans from Central Tibet have at all times spoken of that portion of the country as *Ten-Peu* (*stod bod*) or 'Upper Tibet,' it being along the upper courses of the principal rivers which flow eastward into China or the Indian Ocean" (in his *The Life of the Buddha*, p. 216, he still adhered to the fanciful *t'ub-p'od* etymology of SCHIEFNER), but no documentary evidence for this statement is presented; and, as long as such is not forthcoming, I decline to believe in such invented geographical names as *stod bod* and *mt'o bod*, alleged to have resulted in the Chinese word *T'u-po* of the T'ang period. From a philological point of view, it is entirely impossible to restore Chin. *t'u* 吐 to Tib. *stod*, for in the same manner as its phonetic element 土, it was never provided with a final consonant; it may be restored to a Tib. *t'o, lto* or *sto* (*mt'o* seems very doubtful). The T'ang Annals impart an alleged older name 秃髮 *T'u-fa*, which was subsequently corrupted 語訛 into *T'u-po*. Mr. ROCKHILL (*l.c.*, p. 190) comments on this name that "the old sound of *fa* in *T'u-fa* was *bat* or *pat*; consequently *T'u-fa* represents *Ten-pen* (*stod bod*), our Tibet." I regret being unable to follow this demonstration; *t'u* cannot represent *tü*, and *pat* does not represent *bod*. The word *t'u* 秃 was anciently possessed of a final *t*, so that we have *t'uk pat*, which certainly has nothing to do with *stod bod* or *mt'o bod*, or anything like it. It is clearly indicated in the T'ang Annals that the word *T'u-fa*

the subscribed letter *y* after *m* when followed by the vowels *e* or *i*. We find here *myed* = *med*, "there is not;" *bud-myed* = *bud-med*, "woman;"¹⁾ *mye* = *me*, "fire;" *myi* = *mi*, "man;" *myi* =

(apparently a nickname) was not of Tibetan origin, but derived from Li Lu-ku 利鹿孤 of the Southern Liang dynasty and carried over to the K^ciang tribes by his son Fan Ni 樊尼. The name *T^cu-fa*, accordingly, is not capable of restitution into Tibetan, and the alleged change of the tribal name from *T^uk-pat* into *T^cu-pot* is merely inspired by a certain resemblance of these names. Nor can the Arabic designation تبت of Ištakhri, Khordādba, etc., which has been variously spelled Tobbat, Tibbat, etc., be set in relation with this alleged *T^cu(k)-pat*, as only the consonants are expressed by Arabic writing, and the vowels are optional; it offers no valid proof for the attempt at restoring the original Tibetan form, but it shows in the case of Ištakhri that a name for Tibet with the consonants *Tbt* existed toward the end of the sixth century. *T^cu-po* must be regarded as the correct and original tribal designation; but as to the proper Tibetan equivalent of 吐, we have to await thorough evidence. It is hoped that a Tibetan gloss for it will turn up in some *document Pelliot*. — The identification of Tibetan proper names in the T^cang annals with those of the Tibetan annals is beset with difficulties, as many names of the Chinese annals are not mentioned by the Tibetans or given by them in a form not identical with the Chinese. The famous minister *mGar*, as already recognized by ROCKHILL (*The Life of the Buddha*, p. 216), is identical with *Lu tung tsan* 祿東贊 with the name *Kū 苾氏* in *Kiu T^cang shu* (BUSHELL, *l. c.*, p. 12). Theoretically I should restore *Lu tung tsan* to 'Tib. *Lug ston btsan*, but *rGyal rabs* has preserved to us this name in the form *Se le ston btsan* (SCHMIDT, *Geschichte der Ost-Mongolen*, p. 359, transcribes according to *Bodhi-mōr: Ssele sDong bDsan*); *Se le*, nevertheless, cannot be the model of Chiu. *lu(k)*. *Lu tung tsan* had five sons, — *Tsan si jo* 贊悉若, K^cin ling 欽陵 (perhaps 'Tib. *dKon glin*), *Tsan p'o* 贊婆 (Tib. *bTsan-p'o*), *Si to kan* 悉多干, *Po lun* 勃論 (Tib. *Po-blun*). The third and fifth are not names, but mere titles. In *rGyal rabs* (fol. 77) I find only two sons of the minister mentioned, — *gÑa* (in another passage *sÑan*) *btsan ldem-bu* and *sTag-ra k'oñ lod*. Except the element *btsan*, there is nothing in these names that could be identified with any part of the Chinese transcriptions.

1) The word *bud-med* has been interpreted by A. SCHIEFNER (*Mélanges asiatiques*, Vol. I, p. 358) as meaning "the powerless one" (*die kraftlose*) on the mere assumption that the element *bud* has developed from *bod*, and that *bod* is a *verdünnung* of the verb *p^ood*, "to be able, capable," which, according to him, holds good also for the word *Bod*, "Tibet." These far-fetched etymologies are based on a now outgrown view of things phonetic. The vowel *u* has not arisen from *o* owing to *trübung*, as assumed by SCHIEFNER, nor is there anything like a *schwächung* of an aspirate sound to a media. *Bud*, *bod*, and *p^ood* are three co-existing, distinct matters of independent valuation, and without mutual phonetic relationship. There is no phonetic law to connect them. The whole explanation is not prompted by any rigorous application of phonology, but doubtless inspired by the

mi, "not;" *dmyig* = *miḡ*, "eye." The same phenomenon has been observed in the fragments of the *Çālistambasūtra* found by A. Stein (*Ancient Khotan*, Vol. I, pp. 549, 564; observations of BARNETT and FRANCKE) and in the inscription of King K'ri-sroñ lde-btsan of the year A. D. 783 (WADDELL, *J. R. A. S.*, 1909, p. 945).¹⁾ These authors merely point out this case as an instance of archaic orthography, as also M. BACOT speaks of "certains archaïsmes de graphie et d'orthographe." But it should be understood that this peculiar way of writing naturally corresponds to a phonetic phenomenon; the subjoined letter *y* (called in Tibetan *ya btags*) indicates the palatalization of the consonant to which it is attached. How this process came about is easily to be seen in the case of the negative copula *mḡed*, formed of the negation *ma* + the copula *yod*, yielding *myōd*, in phonetic writing *m'ōd*. The letter *e* covers

Sanskrit word *abalā* given as a synonym of the word "woman" in *Amarakoṣha* (ed. *Bibl. ind.*, p. 140). But we only have to cast our eyes on the Tibetan version to see that *abalā* corresponds, not to Tib. *bud-med*, but to Tib. *stobs-med*, while Tib. *bud-med* appears as equivalent of Skr. *strī*. Consequently Skr. *abalā* cannot be made responsible for Tib. *bud-med*; there is no relation between the two; Tib. *stobs-med* is an artificial rendering of Skr. *abalā*. The main objection to be raised to SCHIEFNER's etymology, however, is that it flatly contradicts the natural facts. The Tibetan woman is very far from being weak or without strength, but is physically well developed, — an observation made by all travellers, nor did it escape the Chinese writers on Tibet. "Tibetan women are robust and the men weak, and one may frequently see women performing in the place of their husbands the so-called services which the people owe" (ROCKHILL, *J. R. A. S.*, 1891, p. 230). It is not necessary to expand on this subject, but "the weak sex" would be applicable in Tibet only to man. A more plausible explanation of the word may now be offered. It was, of course, doubtful whether the second element *med* was really identical with the negative copula *med*; it may have been, after all, a different word. But the old form *bud-myed* confirms the opinion that this *med* has arisen from *myōd*, *ma yod*. In the first element the word *bu* ("child, son;" *bu-mo*, "girl, daughter") may clearly be recognized, and *bud* (as other monosyllables terminating in *d*) is a contraction of *bu + yod*, "the condition of being a child or girl." *Bud-med*, accordingly, means "one who is no longer a girl, an adult woman," and in this sense the word is indeed utilized.

1) It occurs likewise in the inscription of 822, presenting the interesting example *myiñ rus*. As has been pointed out, this expression is employed on the same occasion in *rGyal rabs* in the form *miñ rus*, so that the identification of *myiñ* with *miñ* is absolutely certain.

also the vocalic timbre δ .¹⁾ The word *myi* accords in sound with Russian мн.²⁾

This alternation between hard and palatalized consonants, restricted to the guttural and labial series and to dental *n*, is still conspicuous in the modern language, and has already been noted by A. SCHIEFNER in his "Tibetische Studien."³⁾ As to *m*, SCHIEFNER refers to the pairs *miñ* — *myiñ*, "name;" *mid* — *myad*, "gullet;" *smig* — *smyig*, "reed." He correctly compares Tib. *mig*, "eye," with Burmese *myak*, and he also knows that the older forms *myed* and *myin* have been preserved along with *med* and *min*; there are such alternations as *k^cem* — *k^cyem*, *k^cab* — *k^cyab*, *gon* — *gyon*, *abo* — *abyo*, *p^ce* — *p^cye*, *nag* — *ñag*, *rnil* — *rñil*, and many others. In Ladāk and Lahūl we find the labial tenues, aspirates and mediae; where the written language offers the corresponding palatalized sounds, as may be gleaned from the Phonetic Table preceding JÄSCHKE'S *Dictionary* (p. XVIII) and F. B. SHAWE.⁴⁾

The verb *gsod*, "to kill," appears as *sod* without the prefix twice (Table II, 8; VI, 2) and with it once (XI, 3), which indicates that the spelling was as vacillating at that time as it is now.⁵⁾ The stem of the verb is *sad* (Ladākhi *sat*), as shown also by Burmese *sat* and Chinese *šat* 殺. Likewise we have *toiñ* in lieu of *gtoiñ* in V. 7. Also in this case the stem is *tañ* or *toiñ*.⁶⁾

1) This is best attested by the Tibetan transcription *ceñ* (*ceñ*) of Chin. *čōñ* 貞 (in the nien-hao *Chéng-kuan*) in the inscription of 783 (WADDELL, *J. R. A. S.*, 1909, p. 960, l. 29; the writing *ceñ na kwan* must be due to a slip in copying the text of the inscription).

2) The Chinese transcriptions assist us again. Compare above under No. 20 Tib. *rgyud* = Chin. *g'ut*, *γ'ut*.

3) *Mélanges asiatiques*, Vol. I, pp. 370—371.

4) *J. A. S. B.*, Vol. LXIII, pt. 1, 1894, p. 12.

5) LAUFER, *Ein Sühngedicht der Bonpo*, l. c., p. 21.

6) Compare such cases as occurring in the inscription, *m^coiñ* sounded *l'oiñ*, *glog^s* sounded *log*, etc.

These spellings cannot therefore be explained as irregularities or negligence on the part of the writer. From a grammatical standpoint they are perfectly legitimate, for the prefixes *g* and *b* are purely formative elements indicating tenses of the verb. The Tibetan grammarians are fully conscious of this process, as shown by me on a former occasion;¹⁾ the prefix *b* denotes the past and the active, the prefixes *g* and *d* the present, the prefix *a* the passive and future, the prefix *m* an invariable state.

The prefix *r* is omitted in *bda* = *brda* (V. 5), the prefix *a* in *ts'o ts'o* (V. 9), the prefix *d* (or *r*) in *mu* (V. 15). We accordingly meet symptoms of simplified spelling prompted, as we saw above, by the phonetic conditions prevailing at that time.

The prefix *l* appears in *lten* (V. 6, 24) in the place of *s* (*sten*); compare *ldib-pa* and *sdib-pa*, *lia*, "five," in Ladakhi *šna*, *lga* and *sga*, "ginger," *lbu-ba* and *sbu-ba*, "bubble."

The sound *n* in lieu of *l* appears in *nam nanis*, "daybreak," for the normal *nam lanis*. SCHIEFNER²⁾ has pointed out the same form in the *aDsanis-blun* (where also *lanis* occurs), and considers both forms as equally legitimate.

In Table I, 6, we meet the word *me-tog*, "flower," in the form *men-tog*, which, according to JÄSCHKE, still occurs in the West Tibetan dialects; but it is heard also in eastern Tibet. Mr. BARNETT³⁾ has pointed out the form *me-t'og* in the fragments of the *Çālistambasūtra*, and, as the *m* is not palatalized, arrays it as an exception among the palatalized *m*. The assumption that *men* presents the older form may account for the preservation of the hard *m*.

Of great interest is the form *nam-ka*, "heaven" (Table I, 9),

1) *Studien zur Sprachwissenschaft der Tibeter*, pp. 529, 543.

2) *Ergänzungen und Berichtigungen zu Schmidt's Ausgabe des Dsanglun*, p. 9, St. Pet., 1852.

3) *Ancient Khotan*, p. 549.

which occurs also once in the fragments of the *Çālistambasūtra* found by A. Stein (*Ancient Khotan*, p. 555), while in other cases it is written *nam-mk^ca*. This case is of importance, because the word has been looked upon as a loan from Sanskrit. O. BOEHTLINGER¹⁾ was the first to entertain this opinion. W. SCHOTT²⁾ explained *namk^ca* as developed from *nabk^ca*, "since evidently it has arisen from the combination of two Sanskrit synonyms for 'air' and 'heaven,' *nab^cas* and *k^ca*." In a rather dogmatic form the same question is taken up again by Mr. WADDELL,³⁾ who makes the statement, "For the conception of heaven in the Indian and Western sense the Tibetans use the word *mk^ca*, which they clearly borrowed from the Sanskrit *k^ca*, as they evidently had no indigenous word of their own to express it." The somewhat generous application of "clearly" and "evidently" does not appeal to everybody; what is evident to one is not always so to another, as opinions largely vary on the nature and quality of evidence. The *Kiu T^cang shu* (Ch. 196 上, p. 1) informs us that the shamans of the Tibetans invoke the gods of Heaven and Earth (令巫者告于天地), and that in the prayer during sacrifice the spirit of Heaven 天神 is implored.⁴⁾ If the Tibetan shamans invoked the deity of Heaven, they must "evidently" have possessed a word by which to call it; and that

1) In his article *Ueber eine tibetische Uebersetzung des Amarakosha* (*Bull. de l'Acad. de St. Pétersbourg*, Vol. III, No. 14, pp. 209—219).

2) *Allaische Studien I* (*Abhandlungen Berliner Akademie*, 1860, p. 614, note 2). The occasion for this observation is afforded by the Manchu word *abku*, which SCHOTT, on hardly plausible grounds, considers as a corruption of Tib. *namk^ca*.

3) *J. E. A. S.*, 1909, p. 931, note 3.

4) Compare HUSHELL, *The Early History of Tibet*, p. 7; and F. GRENAUD, *Mission scientifique dans la haute Asie*, Vol. II, p. 404 (Paris, 1898). Also the *Tang kiang* 党项, a Tibetan tribe inhabiting the southwestern part of Kan-su and the region of the Kuku-nor, worshipped Heaven with sacrifices of oxen and sheep every three years at a gathering of their clans (三年一聚會殺牛羊以祭天. *Sui shu*, Ch. 83, p. 3). Any Buddhist or Indian influence is here excluded in view of the period in question (569—618).

this word was of Sanskrit origin, is highly improbable. The Chinese account shows us that the Tibetans, in the same manner as the Turkish, Mongol, and other tribes of Asia, in times prior to Indian influence, had a well established worship of Heaven and Earth (as well as of the astral bodies), and this implies the fact that an indigenous word for "heaven" was theirs. This word was *gnam*, *nam*, or *nam-ka*, and there is no reason, from its phonetic make-up, why it should not plainly be a Tibetan word. The Tibetan lexicographers are very familiar with Sanskrit loan-words, and never fail to point them out in every case; this is not done, however, in the case of the word for "heaven." The archaic form *nari-ka* bears out the fact that *nam* is a good native word, for the suffix *ka* is never attached to a Sanskrit loan-word. ¹⁾ In the same manner as the prefix *g* is noteworthy in *gnam*, so the prefix *n* must not be overlooked in the word *mk^ca*; the spelling *nam-k^ca* (but frequently enough also *nam-mk^ca*) is a purely graphic expediency, and the outward resemblance to Skr. *kha* is accidental. SCHIEFNER ²⁾ compared Tib. *mk^ca* with Chin. *kⁱ* 氣; this equation is untenable chiefly for the reason that Tib. *a* cannot correspond to Chin. *i*, but it shows that Schiefner had sense enough to regard *mk^ca* as a truly Tibetan word. It is widely diffused in the allied languages. ³⁾ Lolo *muk^ciai* (*ai* = *ä*) ⁴⁾ presents a counterpart to Tib. *namk^ca*.

The word *žai lon* occurs three times in the Table. In one passage (IV, 3), M. BACOT takes it in the sense of "minister" and accordingly accepts it as an equivalent of *žai blon*. In III, 5, he translates it "news;" and in XI, 5, we read "indique que l'oncle viendra

1) On the suffix *ka* (*k^ca*, *ga*) see SCHIEFNER, *Mélanges asiatiques*, Vol. I, p. 380.

2) *L. c.*, p. 340.

3) Compare the list of words for "heaven" in Mission D'OLLONE, *Langues des peuples non chinois de la Chine*, p. 24, Paris, 1912, particularly such forms as *hé ka*, *mu ko*, *m'keuk*, *nakamu*, *mongkele*.

4) P. VIAL, *Dictionnaire français-lolo*, p. 83 (Hongkong, 1909).

aux nouvelles," where the text offers *bdog žaṅ lon-du oi-bar ston*. In the latter case, M. BACOT separates the compound, and assumes *žaṅ-(po)* = maternal uncle, and *lon* = tidings, message; but this is no very possible. Further, the word *bdag* ¹⁾ must not be overlooked in this sentence, and *oi-ba* in connection with the terminative means "to become;" so that I think the sense of the sentence is, "It indicates that I shall become a *žaṅ lon*." It goes without saying that in the three passages this word is one and the same, and can but have the same significance. The word *lon*, accordingly, is written without the prefix *b*. This way of writing cannot be considered an anomaly, but exactly corresponds to the pronunciation of the word at that period, as we established on the basis of the transcription *lun* 論 (= Tib. *blon*) furnished by the Annals of the T'ang Dynasty (*Kiu T'ang shu*, Ch. 196 上, p. 1; *T'ang shu*, Ch. 216 上, p. 1) and the inscription of 822. The word *btsan*, the title of the kings of Tibet, was likewise sounded *tsan*, as evidenced by the Chinese transcription *tsan* 贊. ²⁾ The prefixed media

1) The word *bdag*, the personal pronoun of the first person, occurs several times in the answers of the Table (VII, 1; VIII, 7, 8; XI, 7). In this connection it should be remembered that *bdag sgrog*, "crying *bdag*," is one of the synonyms of the raven (given in the Dictionary of the French Missionaries, p. 86); it is evidently an imitation of Skr. *ātmaḡhoshā*, a synonym of the crow, which is rendered in the Tibetan version of *Amara-kosha* (ed. *Bibl. ind.*, p. 134) *sgrogs-pai bdag-ñid-can*.

2) It has been asserted that the Chinese term *tsan pu* 贊普 corresponds to Tibetan *btsan-po* (BUSHELL, *The Early History of Tibet*, p. 104, note a; CHAVANNES, *Documents*, pp. 150, 186). But this identification is not exact; the Chinese words very accurately reproduce the Tibetan form (*b*)*tsan-p'o*, as is evidenced first by the presence of the labial aspirate in the Chinese word *p'u*, and secondly by the gloss expressly given in *T'ang shu* (Ch. 216 上, p. 1): 丈夫曰普 "a man is called in Tibetan *p'u*." This explanation leaves no doubt that the Tibetan noun *p'o* "man," and not the mere suffix *po*, is intended, which, by the way, is transcribed in Chinese *pu* 逋, as shown by many examples in *T'ang shu*; for instance, in the titles of the ministers, as *rang lun ch'o pu* 囊論掣逋 = Tib. *nan blon c'e-po*, "great minister of the interior." This reading (*b*)*tsan-p'o* is confirmed by a Lhasa inscription of the ninth century published by Mr. WADDELL (*J. R. A. S.*, 1909, pp. 1269, 1280), where the word is written twice *btsan-p'o*; it

b, accordingly, is not an integral part of these two stems, but an additional prefix which must have a grammatical function; and this, in my opinion, is that it forms *nomina actionis*, in a similar manner as it designates a past action in connection with verbal roots. The stem *tsan* means "powerful, warlike, heroic;" *b-tsan*, "one having the title or dignity of *tsan*"; *b-lon*, "one who has the function of, or acts as, minister." What is a *žan lon*?¹⁾ Mr. WADDELL (*J. R. A. S.*, 1909, p. 1274) explains that this term means "uncle-minister," and designates "a sort of privy councillor, a title previously borne apparently only by the highest ministers, some or

certainly does not mean, as alleged by Mr. WADDELL, "the mighty father" (father is *p'a*; *p'o* never means "father," but only "male, man"), but "the martial man," "the male hero" (*tsan*, as *T'ang shu* says, means *kiang kiung* 疆雄). The stress laid on the word "male" is very natural, as there always were, and still are, also queens ruling Tibetan tribes (compare the account of the Tibetan Women's Kingdom in *Sui shu*, Ch. 83). The contrast is clearly enough expressed in the *T'ang shu*, which adds, "The wife of the Tsan-p'u is called *mo mung* 末蒙." Whatever the latter element may represent, it is evident that the first is the Tibetan word *mo*, "woman." (A royal consort is called in Tibetan *lcam-mo*, *btsun-mo*, or *c'mi-ma*; probably the Chinese *mo-mung* represents an ancient Tibetan word still unknown to us, which would be *mo-moi*; Chinese *mung* phonetically corresponds to Tib. *moi*, as proved by *Hua i gi yü* [Ch. 13, p. 65], where Tib. *ria-moi* ["camel"] is transliterated in Chinese 兒阿蒙; in *rGyal rabs* [fol. 79] one of the wives of King Sron-btsan is styled *Moi bza k'ri lcam*, which indeed goes to prove that a word *moi* in the sense of "royal consort" must have existed in ancient Tibetan.) The king is therefore styled the "male warrior" in opposition to the attribute "female" appearing in the title of his queen. The inscription of 822 (see the facsimile in BUSHELL's paper, pl. II, line 2) writes the word *btsan-po*; WADDELL sets the date of his inscription on inward evidence in 842—4; so that it must be granted that both ways of writing co-existed at that period. The writing *btsan-p'o* doubtless is the older one, and appears as the index of the ancient matriarchal conditions of Tibet at a stage when masculine power gradually emerged from the institution of female preponderance. When the sway of the Central Tibetan kings was ultimately established in the male line of succession, the plain *btsan-po*, without emphasis of sex, was allowed to take its permanent place. Note that according to *T'ang shu* (BUSHELL, *l. c.*, p. 98) the inhabitants of the Women's Kingdom elected a man as their ruler from 742.

1) JÄSCHKE (*Dictionary*, p. 471) quotes the word from *rGyal rabs*, saying that it seems to be a kind of title given to a minister (or magistrate); wisely enough, he makes it a separate heading, and does not link it with the word *žan-po*, "uncle." So do also the French Missionaries (p. 845).

most of whom were of the blood-royal." This is a surmise which is not founded on any evidence.

The Tibetan administrative system is entirely based on Chinese institutions; and the official style of the Tibetan chancery, as clearly demonstrated by the Tibetan inscriptions of the T^cang period, is modelled on that of China.¹⁾ For the explanation of Tibetan terms relating to officialdom, we have in the majority of cases to look to China. What a *zai lon* is, is plainly stated in *T^cang shu* (*l. c.*), where we meet it in the garb *shang lun* 尙論. The nine Tibetan

1) A feature to which Mr. WADDELL in his *Lhasa Edicts*, and Mr. A. H. FRANCKE in his rendering of the inscription of 822, did not pay attention, wherefore they missed the meaning of several phrases which cannot be derived from a literal translation of the Tibetan words in their ordinary sense, but which must be viewed through Chinese spectacles, and taken as imitations of Chinese documentary and epigraphical style. But this subject calls for a special investigation. To this Chinese official terminology belongs, for example, the Tibetan designation of the people as "black-headed" (*ngo nag*), which is purely and simply copied from Chinese phraseology, as it is likewise when it occurs in the Orkhon inscriptions and among the Mongols. Mr. WADDELL (*J. R. A. S.*, 1909, p. 1255) remarks on this term that it "probably may denote that in those days the Tibetans did not wear caps; indeed, the caps at the present day are all of Chinese pattern and manufactured in China." In this case, Mr. WADDELL must unfortunately forego the claim to originality, for the present writer was the first to advance this explanation, but with reference to ancient China (*T^oung Pao*, 1908, p. 40), and supported it also with good reasons based on the peculiar ceremonial character of Chinese head-gear. With regard to Tibet, however, this interpretation is out of place. There, it is plainly a loan-word, an artificial imitation of Chinese official speech. Further, Mr. WADDELL's observation that all Tibetan caps are of Chinese pattern and manufacture is erroneous, as a glance at ROCKHILL's *Notes on the Ethnology of Tibet* (pp. 688—689, *Report U. S. Nat. Mus.*, 1898) and his plates 3—4 will convince one. The Tibetan nomads living on the high and cold plateaus naturally always wore fur caps and manufactured them themselves, and there is a large variety of types of indigenous head-gear, without Chinese affinities, everywhere in eastern Tibet and in the Kukuṅg region (so also F. GRÉNARD, *Mission scient. dans la haute Asie*, Vol. II, p. 340, Paris, 1898); even the round felt caps made in Peking for the Mongol and Tibetan market do not at all represent a Chinese but a Mongol-Tibetan style of cap. As in so many other cases, the Chinese have taken into their hands an industry of their subjected neighbors, and cater to their taste. Tibetan officials certainly wear the caps of the Chinese official costume made in, and imported from, China, but that is all. And the manifold styles of priestly head-gear, partially like the *paṇṇa* traced to Indian traditions, certainly do not come from China.

Boards of Ministry are there enumerated, which it is said are designated with the general name 尙論掣逋突霍 *shang lun ch'ö pu t'u kiü* (**du gu*), which, as stated, may be taken as transcription of Tibetan *žan* (*b*)*lon c'e-po dgu*, "the Nine Great Boards." The word *žan* cannot be explained through Tibetan, and indeed is nothing but the Tibetan transcription of Chinese *shang* 尙; and *žan* (*b*)*lon*, "chief minister," corresponds in meaning to *shang shu* 尙書, "President of a Board," a term rendered in the inscription (above, No. 20) by Tib. *c'en-po*. Tib. *žan* is a strictly phonetic transcription of 尙, as both agree in tone, *shang*⁴ having the sinking lower tone, and *žan* being low-toned; the Tibetans cannot write Chinese *shang*⁴ with the voiceless palatal sibilant *š*, as all words with this initial sound have the high tone, but for this reason must resort to the deep-toned *ž*.¹⁾ The tone, as pointed out before, is a matter

1) In the Tibetan vocabulary contained in Ch. 11 of *Hua i yi yü* (Hirth's copy in the Royal Library of Berlin), the Tibetan words are all transliterated in Chinese characters according to their Tibetan spelling (the transliterations do not reproduce the Tibetan pronunciation), and the rule is usually observed to transcribe a Tibetan word with initial *ž* by means of a Chinese syllable in the lower tone; for example, Tib. *žin* to be read *šing* 繩, Tib. *žag* to be read *šia* 厦, Tib. *žu* to be read *jo* 熱 or *šau* 熟. If Tib. *žu* renders Chin. *shui* 水 in the inscription of 822 (see above, p. 79), this exception is only seeming, and confirms the rule; for *shui* has the rising upper tone, consequently the Tibetans rendered it with *žu* in the high tone, being their tone nearest to the Chinese, while Tib. *žu* has the deep tone. *Vice versa*, Chinese *š* is transcribed by the Tibetans *ž*, for example, *shéng* 省 "province" being transcribed Tib. *šiu* in *Štanbkalai lam yig* (regarding this work compare *T'oung Pao*, 1907, p. 403), and Tib. *š* is transcribed by Chin. *ž*, for instance, Tib. *žo* = 若 *žo* at the end of royal names, occurring in three names of King *Sron btsan*'s ancestors (*T'ang shu*, Ch. 216 上, p. 3 a): 揭利失若 *Kie* (**kat*, Korean *kal*) *li* *šit*) *žo* = Tib. *Gal* (?) *ri* ("mountain") *šid* (?) *žo*; 勃弄若 *P'o lung žo* = Tib. *P'o sron žo*; and 詎素若 *Kü* (**gio, gu*) *so* (*k*) *žo* = Tib. *Go* (?) *zug* (?) *žo*. There is no doubt of the identification of Chin. *žo* with Tib. *žo*, as this Tibetan word is indeed found with four of the so-called "six terrestrial *Legs*" (*sa-i legs drug*): *O žo*, *De žo*, *T'i žo*, *I žo* (*dPag bsam ljon bžan*, p. 150, l. 13). Then we have allied words in both languages: as Tib. *še*, "flesh, meat" = Chin. *žou* (jou) 肉; Tib. *šes*, "knowledge, to know" = Chin. *č'i* 知 and 智; Tib. (*šes*), "ten" = Chin. *ši*

of importance in the study of Tibeto-Chinese and Chinese-Tibetan transcriptions. The fact that Tibetan *žai* really corresponds to Chinese 尙 is evidenced by the inscription of 822, where the word *žai* in the titles of the Tibetan ministers repeatedly occurs, being rendered in each case by Chin. *shang* (above, Nos. 9, 10, 13, 15, 19). It is therefore beyond any doubt that the equation 'Tib. *žai* = Chin. *shang* 尙' belonged to the permanent equipment of the Tibeto-Chinese chancery in the first part of the ninth century. ¹⁾

The most interesting phonetic phenomenon of our text is the writing *dmyig* for *mig*, "eye." There cannot be any doubt of this identification, as the word is required by the context, as it is determined by the adjective *rno*, "sharp," and the phrase *dmyig rno* is a parallelism to the following *shan gan*, "to have a sharp ear."

十; Tib. *lee*, "tongue" = Chin. 舌 舌. The words *žo*, "milk" = Chin. 乳 乳, and *šig*, "louse" = Chin. 虱 虱, seem to belong to an earlier stage of relationship between the two languages.

1) The word *shang* appears as the first element in the names of three Tibetan generals who attacked China in 765 (*Kin Tang shu*, Ch. 193 上, p. 10 a; BUSHELL, *The Early History of Tibet*, p. 45): *Shang kie si tsan mo* 尙結息贊磨, who died in 797; *Shang si tung tsan* 尙息東贊 (Tib. *Žai ston btsan*); and *Shang ye n* 尙野息 (a fourth is called *Ma chung ying* 馬重英). Under the year 768 (*ibid.*, Ch. 196 下, p. 1) a general *Shang si mo* 尙悉摩 (BUSHELL, p. 48: *Shang tsan mo*) is mentioned. *Tang shu* (Ch. 216 下, p. 6 b) has a Tibetan commander-in-chief *Shang t'a tsang* 尙塔藏 (Tib. *Žai t'a? bzai*). In these cases Chin. *shang* corresponds to Tib. *žai*, which is a well-known clan name based on the district of this name in the province of *gTsan* (CHANDRA DAS, *Dictionary*, p. 1066). One of the ministers of King K'ri-sroñ was *Žai hams bzai* (*dPag bsam ljon bzai*, p. 170); in *rGyal rabs* we meet a minister *Žai dbu rin* and the well-known translator *Bandhe Ye-šes sde* with the clan name *Žai sna-nam*, that is, from *Sna-nam* in *Žai* (CHANDRA DAS, p. 765, is wrong to refer in this case to Samarkand; as a clan name *Sna-nam* relates to a place in the district *Žai* in the province *gTsan*). — In the iconographical work "The Three Hundred Gods of Narthang" (section *Rin abyun*, fols. 112, 113) a deity is represented in three forms under the name *Žai blon rdo-rje bdud adul*. *rDo-rje bdud adul* (with the title and office of *žai blon*), "the Subduer of Māra by means of the Vajra," appears as a sorcerer at the time of K'ri-sroñ lde-btsan (*Roman*, p. 122). — Also the T'u-yü-hua had the office of *shang shu* (*Sui shu*, Ch. 83, p. 1 b).

Also the Lama *bsTan-pa du-ldan* (p. 448, line 3) has perfectly understood the word in the sense of *mig*. The spelling *dmyig* is neither erroneous nor arbitrary, but proves that at the time when, and in the locality where, our text was written, the word was actually articulated *dmyig*, as here spelled; for in the dialect of the Jyarung, ¹⁾ inhabiting the northwestern part of the present Chinese province of Sze-ch'uan, I actually heard the word articulated *dmye*. The form *dmyig* is still found in modern popular texts; for instance, twice in the small work *Sa bdug klu guan-gyi byad grol*, along with the orthography *mig* four times (*Ein Sühngedicht der Bonpo*, l. c., p. 21). It is therefore patent how important it is to observe carefully such

1) The Jyarung styled *Kin-ch'uan* 金川 by the Chinese (see M. JAMETEL, *L'épigraphie chinoise au Tibet*, p. 31, Paris, 1850) are a group of Tibetan tribes inhabiting the high mountain-valleys of Sze-ch'uan Province. The name is written in Tibetan *rgya-ron* which is explained as "Chinese ravines." Of their language we possess only scant vocabularies. B. HODGSON (*Essays on the Languages, etc., of Nepal and Tibet*, pp. 66—92, London, 1874) offers a vocabulary of 176 words. T. DE LACOUPERIE (*Les langues de la Chine avant les Chinois*, pp. 78—80, Paris, 1888) has some remarks on the language. A. V. ROSTHORN has published a vocabulary in a volume of *Z. D. M. G.* (owing to a misplacement of my notes referring to it, I regret being unable for the present to give an exact reference). Jyarung is one of the most archaic Tibetan dialects in which not only the ancient prefixes are still articulated (*rgyal* "king," *ston* "thousand," *sta* "horse"), but also single and even double prefixes appear where literary Tibetan has none at all; they are supermen in prefixes, or, if it is permissible to coin the word, super-prefixists. They say, for example, *drmi* for common Tib. *mi*, "man"; the prefix *d* largely enters the names for the organs of the body; as *dmye* "eye," *deñü* (*sna*) "nose," *desse* (*so*) "tooth," *drnü* (*rna*) "ear," *deimi* (*lce*) "tongue," *demjü* "chin," *demki* (*ske*) "neck." This corroborates my opinion that the prefixes are survivals of ancient numeratives; for this reason they are not stable, but variable, in the various dialects. The Jyarung language not only had numeratives different from standard Tibetan, but also arranged its words under different categories, so that they appear with prefixes entirely at variance with other dialects: thus, *tayák*, "hand" (*p'yag*), *poni*, "silver" (*dant*). The stems, accordingly, are *ni*, *ni* (*Hakka ni*, *Burmese niwe*), *po* and *d* being prefixes. The Jyarung numerals are 1 *ktig* or *kü*, 2 *kni*, 3 *ksam*, 4 *kbi*, 5 *kmu*, 6 *kco*, 7 *kimis*, 8 *vryad*, 9 *khu*, 10 *icü*. The numerals 4—7 and 9, at variance with standard Tibetan, have been raised into the *k*-category in analogy with 1—3, which agree with standard Tibetan. It is of especial interest that in the numeral 3, *ksam*, Jyarung agrees in the *a* vowel with Chinese *sam* where standard Tibetan has *u* (*gsam*), and that in the numeral 5, *kmu*, Jyarung agrees in the *u* vowel with Chinese *mu* where standard Tibetan has *a* (*lma*).

variations of spelling, even in recent manuscripts and prints, and it is obvious also that they cannot always be laid down as clerical errors. This has likewise a bearing upon ancient manuscripts; the mere occurrence of abnormal, obsolete, or dialectic forms is not sufficient evidence for pronouncing the verdict that the said manuscript or work is old, while certainly the total evidence presented by archaisms will always influence our judgment in favor of a greater antiquity. It would be, for example, perfectly conceivable to me that a Jyarung Lama who, owing to the far-reaching divergence of his tongue from the written language, is forced to study the latter thoroughly, as we, for instance, would study Latin, will be inclined to write the word *mi* in the form *dmyig* or *dmig*. Analogous to the latter is the form *dmag-pa* (Table XI, 1) for the more common *mag-pa*; and as the prefix *d* before *m*, in cases where the written language is without a prefix, is a characteristic of the Jyarung dialect, the conclusion may be hazarded that the *document Pelliot* was composed either in a locality where a dialect identical with, or allied to, Jyarung was spoken, or that, regardless of the locality where the composition took place, the author of the document was conversant with a language related in phonology to Jyarung.

What is the meaning of the prefixed dental *d*? In the written language we find such formations as *ma*, "below," — *dma*, "to be low;" *mai*, "many," — *dmai*s, "multitude," and *dmag*, "army;" *mi*g, "eye," — *dmig*, "hole." The formations with the prefix *d* apparently are secondary derivatives from the stem beginning with *m*. Comparison with the allied languages tends to confirm this opinion; *mi*g is the Tibetan stem-word, as shown by Lepcha *a-mik*, Burmese *myak* (*myet*), Kuki-Chin *mit*, *mi(k)*, ¹⁾ Chinese *muk* 目. In all Indo-Chinese languages we observe that nouns are clas-

1) STEN KONOW, *Z. D. M. G.*, Vol. LVI, 1902, p. 506.

sified into certain categories, and that each of these categories is associated with a particular numerative. The numerative is the index or outward symbol of the mental association underlying these categories of ideas. These numeratives, with a few exceptions, have disappeared from modern Tibetan, but they are preserved in many of the so-called prefixes which represent their survivals, and this is the usual function of prefixes in nouns (though they certainly have also other origins and functions). The original significance of the majority of them can no longer be made out, and will probably remain obscure; the numerous variations of prefixes in the dialects indicate that there has been a large number of differing numeratives from remote times. A few examples may serve as illustration. The prefix *m* appears in connection with words denoting organs of the body, and it is curious that there are groups with the same initial sounds. There is a *mc*^c group, — *mc^ced* "body," *mc^ce-ba* "tusk," *mc^cer-pa* "spleen," *mc^cin-pa* "liver," *mc^can* "side of the breast," *mc^cu* "lip," *mc^ci-ma* "tear," *mc^cil-ma* "spittle;" there is a *mg* group, — *mgo* "head," *mgur*, *mgul* "throat," *mgrin-pa* "neck," a *mk*^c group, — *mk^cal-ma* "kidneys," *mk^cris-pa* "bile," *mk^crig-ma* "wrist," *mk^cur-ba* "cheek." The occurrence of the prefix *m* in these fifteen words belonging to the same category of idea cannot be accidental, and the supposition of a former numerative *m* joined to names of bodily parts seems a plausible explanation for its presence. The following groups are also suggestive: *ldad-pa* "to chew," *ldan-pa* "cheek," and *ldag-pa*, "to lick;" *lte-ba* "navel," *lto-ba* "stomach," and *ltogs-pa* "hunger;" *rkan-pa* "foot," *rke* "waist," *rkan* "palate," *rkub* "anus."

The laws of *sandhi*, as established by the Tibetan grammarians,¹⁾

1) The generally adopted metrical versions are given in text and translation in *Studien zur Sprachwissenschaft der Tibeter (Sitzungsberichte der bayerischen Akademie, 1898, pp. 579—587).*

are not strictly observed. The indefinite article *žig* is correctly employed after nouns ending in a vowel, *n* and *m*: *dgra žig*, *gñen žig*, *mye ñan žig*, *gtam žig*; *rton cig* in V. 23 is correct owing to the existing *da drug*; ¹⁾ *cig* correctly in *myi rgod cig*; *ri-dags žig* instead of *šig*. Of designations of the genitive, we find *-i*, *kyi*, and *gi*, but not *gyi*: *lhai*, *p'yogs-kyi*, *bud-myed-kyi*, *dguñ-gi*; but *yul-gi*, *žan-lon-gi*, instead of *gyi*; likewise in the instrumental case, *gñen-gis*, *gcan-zan-gis*. The termination of the terminative is *du*: *žan-lon-du*, *abrin-du*, *p'yag du* (instead of *tu*), *mt'o du* (V. 19) instead of *mt'o-ru* or *mt'or*, but *dgu-r* (V. 11), *bzan-por* (V. 25), *rins-par* (V. 27); also *ltas-su* (V. 12) is a regular formation. The suffix *tu* after vowels occurs in modern manuscripts likewise. ²⁾ The particle *te* of the gerund, with its variants, is utilized according to rule: *š'yer-te*, *k'rid-de*, *r'ied-de*, *ši-ste*.

1) Compare the rule as formulated in *Za-ma-log*, l. c., p. 584; and above, p. 61, note 2.

2) *Ein Sühngedicht der Bonpo*, l. c., p. 22.

ADDITIONAL NOTES. — Regarding the crew of orientation employed by the navigators (p. 11, note), see now also R. OTTO FRANKE (*Dighanikūya*, p. 166, Göttingen, 1913). FRANKE claims for himself the priority in having established the fact of this practice of mariners; but MINAYEV, at any rate, was the first to explain correctly the term *disūbāka*.

On p. 29, after line 21, the following was omitted through an oversight of the printer: In *K.* we meet the sentence *č'ag rin-s-su agro-bar aggyur-ro*, "you will set out on a distant journey;" the same is expressed in the Table in genuinely popular style by *lam rin-por dgos-pa*.

Note on p. 95. In regard to T'u-po see also HIRTH, *Sinologische Beiträge zur Geschichte der Türk-Völker* (*Bull. Ac. St.-Pét.*, 1900, p. 242). The sole object of the note above referred to was to discuss the relation of the Chinese to the Tibetan and alleged Tibetan names.

WAS ODORIC OF PORDENONE EVER IN TIBET?

BY

BERTHOLD LAUFER.



IN January of this year the Hakluyt Society began to re-issue Colonel Sir Henry YULE'S memorable work *Cathay and the Way Thither*, published in 1866. We cannot be grateful enough to Professor H. CORDIER for having taken upon himself the difficult task of thoroughly revising and re-editing this learned work, the republication of which meets a long-felt want, the first edition having been exhausted for at least fifteen years. The additional up-to-date information supplied by the wide erudition of Professor Cordier has increased the bulk of the work to such an extent that in its new garb it will comprise four, instead of the former two, volumes. Volume II, containing the description of the journey of Friar ODORIC of PORDENONE, is the one that has now been issued. In Chapter 45, "Concerning the Realm of Tibet, where dwelleth the Pope of the Idolaters," Professor CORDIER has added a note, taken from L. A. WADDELL'S *Lhasa and its Mysteries* (p. 425), to this effect: "As to Friar Odoric's alleged visit, as the first European to enter Lhasa, it seems to me very doubtful whether the city he visited in the fourteenth century A. D. could have been this one at all, as his description of the place is so different from Lhasa as we now find it... Now none of the streets of Lhasa are paved, although

plenty of stones are locally available for the purpose, and it seems unlikely that a city which was formerly 'very well paved' should have so entirely given up this practice and left no trace of it." The weight of this argument is not very cogent, and hardly presents a sufficient basis in favor of the desired proof. Still more categorically P. LANDON¹ has given vent to his feelings in the words, "It seems clear that he never reached Lhasa." This conclusion, however, is not backed up by any evidence; and for the rest, LANDON adheres to the general view that "Odoric appears to have visited Tibet about 1328." Whatever the foundation of these contentions may be, on reading Odoric's account of Tibet carefully, it seems to me a fitting time now to raise the broader question, Was Odoric of Pordenone ever in Tibet?

It is with a considerable amount of reluctance and *gêne* that this challenge is advanced. No lesser geographer than Colonel Sir Henry Yule has indorsed the tradition that Odoric, starting from Peking, turned westward through Tenduc, the Ordos country, and Shen-si, to Tibet, and its capital Lhasa, where "we lose all indication of his further route, and can only conjecture on very slight hints, added to general probabilities, that his homeward journey led him by Kabul, Khorasan, and the south of the Caspian, to Tabriz, and thence to Venice."² F. v. RICHTHOFEN³ and C. R. MARKHAM⁴ have shared this opinion, and Friar Odoric has thus acquired the fame of having been the first European traveller to visit Tibet and Lhasa. Mr. ROCKHILL⁵ opens a history of the exploration of Tibet in the words: "As far as my knowledge goes, the first European

¹ *Lhasa*, Vol. I, p. 4 (London, 1905).

² *Cathay*, Vol. II, p. 10; again, on p. 23, "We are ignorant of his route from Tibet westward."

³ *China*, Vol. I, p. 617.

⁴ *Narratives of the Mission of George Bogle*, p. XLVI.

⁵ *Diary of a Journey through Mongolia and Tibet*, p. IX.

traveller who entered Tibet was Friar Odoric, who, coming from northwestern China, traversed central Tibet on his way to India in or about 1325, and sojourned some time in its capital, Lhasa." It would seem almost cruel to destroy this nimbus, and to depose the good Friar from the throne which he has so long occupied in the history of geographical discoveries.

His claim to the honor of being the first Tibetan traveller, however, is deserving of serious scrutiny. It means a great deal to strip him of this glory, and such a denial should certainly be placed on more weighty arguments than the mere matter of street pavement. Lhasa may have undergone manifold changes from the fourteenth century down to 1904, and the lack of stone pavement in recent times does not yet exclude the possibility of better street conditions during the middle ages. It seems unfair, at any rate, to throw this stone at the poor Friar; and while I am not inclined to believe that he ever was in Lhasa, I feel perfectly convinced that he was given the information regarding the well-paved streets. There is no doubt that the Tibetans understand the art of cutting stones and making pavement. The excellent Jesuit Father Ippolito DESIDERI, who lived in Tibet from 1715 to 1721, relates that the halls, main rooms, galleries, and terraces, in most houses of Lhasa, were covered with a very fine pavement made from small pebbles of various colors, and well arranged; between these they put resin of pine-trees and various other ingredients, and then for several days they continually beat stones and ingredients together, till the pavement becomes like a veritable porphyry, very smooth and lustrous, so that when cleansed with water it is like a mirror.¹

¹ Le sale, le camere principali, le logge e i terrazzi della maggior parte delle case, hanno un bellissimo pavimento, fatto di pietruzze minutissime, di diversi colori e ben disposte, fra le quali pongono della resina di pino, e varii altri ingredienti, e di poi battono per varii giorni continuamente e pietruzze e ingredienti, fin che il pavimento viene come un intero porfido, molto liscio e molto lustro; di modo che lavato con acqua, diventa come

If the people of Lhasa were capable of work of this sort within their habitations, they could have accomplished the same on their public high-roads.¹ The technical term for this kind of mosaic work is *rtsig nos bstar-ba*.²

All authors seem to be agreed on the one point that Odoric's account of Tibet is a rather thin fabric woven of slender threads, and that it is certainly not what we ought to expect from a man who is reported to have traversed Tibet from one corner to the other, and to have even sojourned at Lhasa. The first question to be brought on the tapis, then, is this, — Is his information that of an eye-witness, or of one who drew it second-hand from the interviews of Chinese or Mongols regarding Tibet? If it contains such striking features as could only come to the notice of a personal observer of things and events, we are compelled to admit that Odoric did dwell within the boundaries of Tibet proper. Odoric, however, imparts nothing that would immediately force upon us such a conclusion: his scant notes could have been gathered at that time in China or as well in Mongolia. Tibet then was subject to the sway of the Great Khan; and Tibetans, those of the clergy and the laity, swarmed at his Court. Plano Carpini, who was not in Tibet, nevertheless had occasion to see Tibetan people, and to observe their custom of plucking out the hairs of their beards with iron tweezers.³ Marco Polo's notice of Tibet is succinct, yet more graphic

uno specchio. — C. PUINI, *Il Tibet*, p. 59 (Roma, 1904). To YULE's note on p. 249, lamenting the loss of the records of Desideri and Samuel van de Putte, it should now be added that Desideri's manuscript has been rediscovered and edited by Puini under the title quoted, and that the remains of Putte's diary have been published by P. J. VAN (De *Nederlandsche reisiger Samuel van de Putte, Tijdschrift van het Aardrijkskundig Genootschap*, 1876, deel II, pp. 5--19).

¹ DESIDERI (l. c., p. 58) speaks of a "cammino largo, e ben fabbricato."

² SCHIEFNER, *Mélanges asiatiques*, Vol. VII, p. 524, note 5.

³ Hi pilos in barba non habent, imo ferrum quoddam in manibus, sicut vidimus, portant, cum quo semper barbam, si forte crinis aliquis in ea crescit, depilant (*Libellus Historicus*, Cap. X).

and lively than Odoric's, and presents the result of border information, presumably picked up at Ya-chou fu or thereabout.¹ Half of Odoric's chapter on Tibet is devoted to a description of the burial-practice; and he tells with manifest interest the story of how the corpses are cut to pieces by the priests and devoured by the eagles and vultures, how the son cooks and eats his father's head and makes his skull into a goblet, from which he and all of the family always drink devoutly to the memory of the deceased father; and they say that by acting in this way they show their great respect for their father.² The same is reported in substance by his predecessors, Plano Carpini (1246) and William of Rubruk (1253), the latter honestly adding that an eye-witness had told it to him.³ Certainly these two writers were not copied by Odoric, but each of the three independently reported a tradition which he had heard from the Mongols. Here we are allowed to apply the same verdict as pronounced by YULE⁴ in regard to Odoric and Marco Polo having in common the story of the Old Man of the Mountain, — "Both related the story in the popular form in which it spread over the East." Their peculiar burial-practice was that characteristic trait of the Tibetans by which their neighbors were most deeply struck, and which also was

¹ YULE and CORDIER, *The Book of Ser Marco Polo*, Vol. II, p. 45.

² This is in striking agreement with what HERODOTUS (IV, 26) relates concerning the Issedonians, who have been identified by W. Tomaschek with the forefathers of the Tibetans (compare also HERODOTUS, IV, 65). Regarding skulls as drinking-cups in the country of Chao and among the Hiung-nu, see CHAVANNEZ (*Les Mémoires Historiques de Se-ma Ts'ien*, Vol. V, pp. 50, 485). Compare R. ANDREK, *Z. d. Vereins für Volkskunde*, 1912, p. 1—33.

³ Plano Carpini (Cap. XI) says, "Hi consuetudinem habent mirabilem, imo potius miserabilem. Cum enim alicuius pater humane naturae solvit debitum, congregant omnem parentelam, et comedunt eum." And William of Rubruk relates, "Post illos sunt Tebet homines solentes comedere parentes suos defunctos, ut causa pietatis non facerent aliud sepulchrum eis nisi viscera sua. Modo tamen hoc dimiserunt, quia abominabiles erant omni nationi. Tamen adhuc faciunt pulchros ciphos de capitibus parentum, ut illis bibentes habeant memoriam eorum in iocunditate sua. Hoc dixit mihi qui viderat."

⁴ *Cathay*, Vol. II, p. 257, note 3.

doubtless exaggerated by them. Carpini's and Rubruk's versions show us that this report was a current story circulating among the Mongols, and Odoric must have derived it from exactly the same source. He simply relates it as "another fashion they have in this country;" but he does not say that this custom came under his own observation, or that it was communicated to him directly by Tibetans. The fact that Odoric shares this part of his information concerning Tibet with Carpini and Rubruk, who had never been in Tibet, constitutes evidence that this account cannot be utilized for a plea in favor of his personal experience with Tibetan affairs.

In analyzing the remaining portion of his chapter, we have to discriminate between statements which are correct, and data which are inexact or out and out wrong. Odoric is perfectly correct on three points: he is acquainted with the geographical location of Tibet on the confines of India proper; he is familiar with the law of Lhasa, prohibiting bloodshed within the precincts of the holy city; ¹ and he knows that "in that city dwelleth the *Abassi*, that is, in their tongue, the Pope, who is the head of all the idolaters, and who has the disposal of all their benefices such as they are after their manner." ² All this is true, but rather general; at any rate,

¹ This law, of course, is merely theoretical, as intimated also by M. CORDIER by the insertion of a note culled from a letter of Desgodins. King gLan-dar-ma was assassinated in Lhasa by a Lama, and civil war shook the city under the rule of the Dalai Lamas. "Executions are conducted in the open street before the people, and apparently culprits suffer not far from the temple, and not outside the city, Buddhist injunctions notwithstanding. When Nain Singh visited Lhasa, he saw a Chinaman beheaded in public" (G. SANDERG, *Tibet and the Tibetans*, p. 191, London, 1906). The holy city has also its meat-market (*la k'rom*). According to E. KAWAGUCHI (*Three Years in Tibet*, p. 286), there is a special place near the monastery aBras-spuns, some miles west from Lhasa, where yaks, goats, and sheep, seven in number, are daily butchered for the table of the Dalai Lama.

² It is a debatable point whether the Sa-skya hierarchs really took up their permanent residence in Lhasa. The famed aP'ags-pa Blo-gros rgyal-mts'an, the spiritual adviser of Kubilai, on his return from China, wended his way back in 1265 to "the great residence dpal-ldan Sa-skya" in southern Tibet, and there he returned again in 1276 after his second

it is not of such a specific or intimate character that it could be explained only through an actual visit to Tibet. All this, and more, could have been learned at that time from the Chinese and the Mongols. It is somewhat a matter of regret that Colonel Sir Henry Yule's note on Odoric's *Abassi* has been allowed to remain. This word has no connection whatever with *lobaes*, *ubashi*, or *bakshi*,¹ nor is it necessary to resort to such extravagances. Odoric plainly states that the word is of the Tibetan language; and it has to be sought, therefore, in Tibetan only. KOEPPEN'S² explanation, overlooked by YULE, remains the only one that is admissible. The Sa-skya hierarchs, who practically ruled Tibet in the age of the Mongols, bore the Tibetan title *ap'ags-pa* ("eminent, excellent"),³

journey (HUTN, *Geschichte des Buddhismus in der Mongolei*, Vol. II, pp. 154, 157). His biography makes no allusion to his residing in Lhasa. Our knowledge of Tibetan historical sources is still so limited that we cannot be positive on this point. The greater probability seems to be that the abode of the Sa-skya was their ancestral seat, the monastery of Sa-skya. Lhasa, nevertheless, may have continued as the capital of political administration.

¹ The word *bakshi* is not, as stated by YULE (also *Marco Polo*, Vol. I, p. 314), connected with Skr. *bhikṣu*. The Tibetans are acquainted with both words, translating the latter by the term *dge-slon*, and writing the former *pag-ji* (JÄSCHKE'S spelling *pa-ji* is incorrect). The Tibetan dictionary *Li-Jii gur k'an*, fol. 23a (see *Toung-Pao*, 1914, p. 65), explains this word by *btoun-pa* ("respectable, reverend"), and states that it is derived from the language of the Turks (*Hor*). The word seems to be, indeed, of Turkish origin (VÁMBÉNY, *Primitive Cultur*, p. 248; RADLOFF, *Wörterbuch der Türk-dialecte*, Vol. IV, col. 1445).

² *Die lamaische Hierarchie*, p. 105. It is notable that BOLLAND'S text in the *Acta Sanctorum*, as quoted by Koepfen, "Abbasi, quod sonat Papa in illa lingua" (M. COORDEN quotes the same reading from the manuscript of Berlin), differs from the texts of Yule (Latin version, "Lo Abassi, id est Papa in lingua sua;" Italian version, "il Atassi, che viene a dire in nostro modo il Papa"). It seems to me much more probable that Bolland has preserved the true, original reading. Odoric means to say that the Tibetan word which is written *ap'ags-pa* (varying in its pronunciation) was heard by him *de-as*, *de-ai*, and sounds in their language also like *papa* (*p'a'-pa*). The comparison with the Pope would almost savor of a heresy in the mouth of the pious Friar, and "the Pope" was no doubt dragged in by the later copyists. — N KUNZE (*Description of Tibet*, in Russian, Vol. I, 1, p. 30) attempts to explain *Abassi* as an incorrect transcription of *bLo-baan las-raḥ*, "a common title of the highest Buddhist clergy." I see no possibility of such an interpretation; this term, moreover, is neither a common title nor a title at all, but merely a personal name.

³ aJi-ga-med nam-mk'a tells a little anecdote in explanation of this title (HUTN,

and were spoken of as the *aPags-pa bLa-ma*. This word, variously articulated *p'ags-pa*, *p'ag-pa*, *p'as-pa*,¹ *p'a'-pa*, is the source of Odoric's Abassi.²

A striking assertion made by the Friar is that "they have in it great plenty of bread and wine as anywhere in the world." Such a statement cannot possibly be advanced by any one who has had but the slightest contact with the Tibetan borderlands and the most superficial acquaintance with Tibetan people. First of all, there is nothing like bread in Tibet, where even the preparation of dough is unknown. Parched barley-flour mixed with tea or milk into a porridge forms the staple food; and the alcoholic beverage called *č'an*, obtained from fermented barley, is neither wine nor beer, but a liquor *sui generis*.³ Even granted that Odoric simply committed a mistake in the choice of his words, and merely intended to say that food and drink abound in Tibet, his statement nevertheless remains very strange. The majority of Tibetans eke out a wretched living as poor shepherds or farmers, and earn enough to be kept from starvation; but emphasis on the food-supplies being as abundant as anywhere in the world is thoroughly out of place for a poor country like Tibet.

The assertion that the women have a couple of tusks as long as those of wild boars has been attributed by Yule to an error of the scribe. I am rather under the impression that it is a bit of information misunderstood on the part of Odoric. Boar's tusks are

Geschichte des Buddhismus in der Mongolei, Vol. II, p. 141). The same is narrated in *Yüan shi* (Ch. 202, p. 1), where the word is written 帕克斯巴.

¹ The spelling *Passapa* appears in the *Lettres édifiantes*, nouv. éd., Vol. XXIV, p. 9 (Paris, 1781). The Mongols pronounce the word *papa* (PALLAS, *Sammlungen*, Vol. II, p. 87).

² Koepfen's theoretical *ap'ags-č'i*, which does not exist, must be discarded.

³ The grape-wine mentioned by Mr. ROCKHILL (*J. R. A. S.*, 1891, p. 227, note 1) as being made in small quantities, and high-priced, is almost restricted to religious offerings, and plays no part in the life of the people. No foreign traveller has ever seen or tasted it.

generally employed by Tibetan women for making the parting of their hair.¹ Odoric's remark that the women have their hair plaited in more than a hundred tresses applies only to the pastoral tribes of northern and north-eastern Tibet;² and if he had really crossed Tibet to Lhasa and beyond, he could not have failed to notice that quite different styles of hair-dressing prevail in other parts of the country. This matter is not very serious, but an error of grave account is the observation that "the folk of that country dwell in tents made of black felt." Certainly the Tibetans understand the art of making felt;³ but the tents inhabited by the pastoral tribes of Tibet, throughout the country, are covered with a black cloth woven from yak-hair.⁴ In this respect, and in its quadrangular structure, the Tibetan tent represents a dwelling-type of its own, which is plainly distinguished from the Mongol circular felt tent. It is impossible to assume that in the days of Odoric there may have been Tibetan nomads living in felt tents, and thus come to the Friar's rescue. The mode of habitation is one of the most permanent and enduring factors in the life of all peoples, which is but very seldom sacrificed to outward influences. The conclusion

¹ I doubt very much the correctness of Yule's statement that the women in Tibet commonly use boar's tusks as ornaments, both attached to the head and hung round the neck. I paid particular attention to ornaments in Tibet, and never saw a woman wearing boar's teeth on her head or neck. Among the nomads of Derge I observed now and then a man wearing a perforated boar's tooth as a protective amulet; sometimes two such teeth are joined together at their bases and held by a brass hoop.

² See, for instance, the plate opposite p. 18 in GRUM-GRŽIMAILO's *Description of a Journey in Western China* (in Russian, Vol. II, St. Petersburg, 1907).

³ The process is described by ROCKHILL (*Notes on the Ethnology of Tibet*, p. 100). F. GRENARD (*Mission scient. dans la haute Asie*, Vol. II, p. 372) is certainly right in saying that Tibetan felt is rather mediocre, and very inferior to the Chinese and Kirgiz specimens.

⁴ See ROCKHILL, *l. c.*, p. 701, and *The Land of the Lamas*, pp. 75—77; GRENARD, *l. c.*, p. 337. I do not concur with Grenard in the view that the Tibetan tent is in every respect much inferior to the Mongol one; for myself, I prefer the Tibetan tent as more practical and durable, and a more efficient means of protection against heat and cold.

prompted by the ethnological point of view, that the Tibetan tents of yak-hair stuffs go back to a venerable age, is fully corroborated by the records of the Chinese. Both *Sui shu* and *T'ang shu* tell in regard to the Tang-hiang 党項, a Tibetan tribe living in south-western Kan-su and in the vicinity of the Kuku-nor, that their habitations are made from weavings of the hair of yak-tails and sheep.¹ The Annals of the T'ang Dynasty relate, in regard to the

織犛牛尾及牯羴毛以爲屋 (*Sui shu*, Ch. 83, p. 2 b)
 織犛尾羊毛覆屋歲一易 (*T'ang shu*, Ch. 221 上, p. 1 b). — When *Kiu T'ang shu* (Ch. 196 上, p. 1 b) asserts that the Tibetan nobles dwell in large felt tents called *su-lu* (貴人處於大氈帳名爲拂廬 [see *T'oung Pao*, 1914, p. 92]), it is not contradictory to the fact, as stated above. In the sentence preceding this one the question is of the houses in which the Tibetan people ordinarily live, covered with flat roofs and reaching a height up to ten feet. In this case, accordingly, it is the sedentary agricultural portion of the populace which is spoken of, but not the pastoral tribes. These Tibetan nobles were not nomads, but warriors, with a stationary residence among the sedentary farmers, and they undoubtedly imitated the custom of the Turkish chieftains (at a later date adopted by the Mongols) of residing in felt tents (*sōra*) as a mode of living better suiting their warlike occupation (compare Tib. *p'yiñ gur* ("felt tent, a Tartar hut") in JASCHKE's *Dictionary*, p. 350). The probability that Odoric might have struck such war-tents is so slight that it merits no discussion. His statement, moreover, is generalized to the effect that the folk of that country dwell in tents made of black felt. — The above word *ku-lü* (*ku* is written also 羴) is recorded both in *Erh ya* and *Shuo wên*. Li Shi-chên (*Pên ts'ao kang mu*, Ch. 50 上, p. 11 b) defines it as a sheep with plenty of hair. K'ou Tsung-shi, in his *Pên ts'ao yen i* of 1116, says that its habitat is in Shen-si and Ho-tung 河東 (Shan-si), and that its hair is very strong, long, and thick. Chinese authors, in their descriptions of Sikkim (*Pai mu jung* 白木戎, transcription of Tib. *a Bras-mo ljon*, pronounced *bä* or *drä mo jun*, "Land of Rice;" the identity of the names has been recognized neither by KLAPROTH, *Description du Tibet*, p. 276, nor by ROCKHILL, *J. R. A. S.*, 1891, p. 131; the latter's identification with Pari-djong is untenable), speak of a species of sheep styled "big *kü-lü* sheep" 大羴羴 (these two characters are not recorded in K'ang-hi) 羊 (*Wei Tsang t'ung chi* 衛藏通志, Ch. 15, p. 13 b, 1896, anonymous, not mentioned by Rockhill). The *Wei Tsang t'ung chi* (Ch. 15, p. 32) calls this animal *kü chao* 羴羴 (ROCKHILL writes 羴羴, and transcribes *chü-shao*; KLAPROTH, "des moutons ou chèvres appelés *kü tchao*;" both without explanation). This is doubtless the barrel sheep (*Ovis montanus*), found in considerable flocks at high altitudes in Sikkim (RUSLEY, *Gazetteer of Sikkim*, p. 239) and throughout Tibet, and called by the Tibetans *gna-ba*, colloquially *na-po*, *nao*, *nan*, Nepalese *nāhur*: hence the zoological *ma-hura* (Jäschke's explanation "antelope" is wrong, Chandra Das is correct), *Lepcha na-ro*. The

Tibetans, that, although they have towns formed by huts, they are loath to live there, but prefer to dwell in tents made from pieces of soft animal hair joined together, and that those styled "big tents" (*ta fu-lu*) are capable of holding several hundred men.¹

From whatever point of China Odoric may have transgressed the Tibetan boundary, he could not have failed to observe the peculiar tents which have struck the eyes of all subsequent travellers, and at none of these points are felt tents to be seen.² It is obvious beyond any doubt that Odoric's observation refers, not to Tibetan, but to Mongol tents, which he may have encountered in the Ordos country³ or while crossing Mongolia on his way back to Europe. It seems to me infinitely more probable that Odoric, coming out of the Ordos and Kan-su, returned by way of Mongolia, on a similar route as Carpini and Rubruk, than that he should

species was first described by B. H. HODGSON (*On the Two Wild Species of Sheep inhabiting the Himalayan Region, J. A. S. B.*, Vol. X, 1841, p. 281), then by W. T. BLANFORD (*Fauna of British India*, p. 499, with illustration). This *kū-lū*, as a word, is perhaps related to *ku-lū*, though the two certainly refer to different animals. The *ku-lū* mentioned above in *Sui shu* must be a domestic sheep, its wool being utilized, while *kū-lū* is a wild sheep. Mr. ROCKHILL remarks that "these characters are used phonetically, they have no meaning in Chinese;" but I can trace no Tibetan or Lepcha word which they could be intended to transcribe.

1 有城廓廬舍不肯處聯毳帳以居號大拂
廬容數百人 (*Tang shu*, Ch. 216 上, p. 1).

² It is a gratuitous speculation of C. PUINI (*Il Tibet*, p. xxv) when he makes Odoric descend from Tenduc to Si-ngan fu, "e di là, per entrare nel Tibet, segui probabilmente la via percorsa da Marco Polo, o se ne tenne forse più a settentrione; ma il nostro frate francescano si spinse assai più oltre, giungendo fino a Lhasa." If Odoric should have taken this beaten track, which is so familiar to me, I should be very positive in denying that he could have found any felt tents on this route. From Ta-tsien-lu to Ba-t'ang and beyond, from Ta-tsien-lu to Derge and Chamdo, further, in north-western and northern Sze-ch'uan, in southern and western Kan-su, and in the region of the Kakanor, — nowhere is there to be met with a single felt tent. Also KÜNZS (*l. c.*) has Odoric travel through Shan-si, Shen-si, Sze-ch'uan, and Tibet.

³ These felt tents are now scarce, the Mongols usually living in houses of plaited wicker-work plastered with clay (see POTANIN, *The Tanguto-Tibetan Borderland of China*, in Russian, Vol. I, p. 108, St. Petersburg, 1898).

have performed the long and fatiguing journey across Tibet. True it is, he himself tells us that he came to a certain great kingdom called Tibet, and there is no reason whatever to question his veracity. Odoric was earnestly and honestly convinced of having come to Tibet, but coming to Tibet does not yet mean entering and crossing Tibet. The geographical notion "Tibet" was always conceded a liberal interpretation on the part of travellers; the days are not so far behind us when men nearing the outskirts of Tibet, touching Ladakh, Darjeeling, Ta-t sien-lu, Ba-t'ang, or Si-ning, had all been "to Tibet;" and the books on Tibet whose authors were around but never in the country are numerous. No doubt Odoric came in contact with Tibetans somewhere in Kan-su¹ or on its borders, but this is the utmost concession that can be made to him. It is incredible that he should have traversed Tibet, nor does he himself make any statement to this effect. He makes no pretence whatever to having been in Lhasa. All these allegations are preposterous inferences of his overzealous admirers. The fact remains that the diary of his travels abruptly closes and absolutely terminates with the first sentence of Chapter 45. What follows it, down to the end of the book, consists, not of observations of the traveller,

¹ I believe that his province called *Kan-su* is rather Kan-su than Shen-si, as explained by Yule; though Yule also is inclined to regard it as Shen-si and Kan-su united, as the two provinces were indeed under the Sung; the name Kan-su appears only from under the Yüan. Odoric's reference to rhubarb as growing in this province, "and in such abundance that you may load an ass with it for less than six groats," fits Kan-su far better than Shen-si. True it is, that rhubarb grows also in Shen-si (PARENIN, *Lettres édifiantes*, nouv. éd., Vol. XIX, p. 807; BRITSCHNEIDER, *Bot. Sin.*, pt. 3, p. 230; *List of Chinese Medicines*, p. 480, Shanghai, 1889), but the output is not so large that it would strike the casual traveller. Kan-su, the adjoining Amdo region, then Sze-ch'uan and Tibet, were always the classical land of rhubarb; and it is in the mountains of Tangut that, according to MARCO POLO (ed. of YULE and CORDIER, Vol. I, p. 217), rhubarb is found in great abundance, and where merchants come to buy it and carry it all over the world. Hence we may take it for granted that likewise Odoric did not hear about rhubarb before reaching the territory of Kan-su.

but of stories reproduced from hearsay. The story of Tibet moves along the same line as the following stories of the rich man in Manzi, the Old Man of the Mountain, the devil exorcisms in Tartary, and the valley of terrors.¹ No principle of geographical order is observed in the arrangement of these concluding chapters, which is sure evidence of the fact that Odoric terminated the narrative of his journey at the moment when he turned his back to Cathay. In Chapter 46 he reverts to the province of Manzi as the theatre of action for the plot of the rich man; and in the next chapter we are told that he reached a certain country which is called Millestorte, the residence of the Old Man of the Mountain, but, very curiously, after he had left the lands of Prester John and was travelling toward the west. Where, then, is Tibet? If he had ever crossed Tibet, he would naturally have located Millestorte to the west of, or beyond, Tibet; but he has forgotten Tibet, and takes us back to Prester John. Tibet has left no profound or lasting impression upon his mind, because he rubbed elbows but superficially with its north-eastern borderland. If the case were further supported by negative circumstantial evidence, it would lead to no end of discussions: he lisps not a word as to the nature and physical conditions of Tibet, and whoever enters Tibet from China is soon aware of being transferred into another world. There is no need, however, of invoking this striking lack of personal experience and observation. Odoric of Pordenone has never traversed Tibet proper,

¹ It is certainly out of the question to utilize the alleged localities of these stories for reconstructing the stages of Odoric's return journey, as attempted, for instance, by PUINI (*l. c.*, p. xxvi), who remarks that Odoric, coming out of Tibet, tells us that, leaving that country, he betook himself to Millestorte. Odoric, of course, does not even express himself in this manner; but he came to Millestorte by journeying towards the west, after leaving the lands of Prester John. — KÜNZER (*l. c.*, notes, p. 25) reads much between the lines when he distils out of Odoric the inference that, according to him, Tibet is situated between the possessions of Prester John and the Old Man of the Mountain.

has never been at Lhasa,¹ — a feat with which he has been unduly credited for so long, and to which he himself lays no claim. The honor of being the first Europeans to have reached Lhasa is justly due to the two Jesuit Fathers Græber and Dorville, who spent two months there in 1661.

¹ He does not even make mention of the very name Lhasa, but speaks only of "the chief and royal city," and "in this city." Only the French version adds, "Elle est appelée Gota;" and M. CORDIER justly annotates that there is no city called Gota. This name certainly is mere fancy. Is it credible that a man who has visited Lhasa should not even record the name of the city? And where does Odoric say that he visited it at all? How did modern writers ever get at the assuring statement that he sojourned there for some time? Surely this is a repetition of the miracles attributed to the good Friar after his death, and of which he himself was innocent.

MÉLANGES.

CHINESE TRANSCRIPTIONS OF TIBETAN NAMES.

I have read with keen interest M. Pelliot's study *Quelques transcriptions chinoises de noms tibétains* (this volume, pp. 1—26), which is as instructive and illuminating as his recent, very important contribution *Les noms propres dans les traductions chinoises du Milindapañha* (*J. A.*, 1914, Sept.-Oct., pp. 379—419). M. Pelliot is an excellent phonetician, and commands an admirable knowledge of ancient Chinese phonology, such as is possessed by no other contemporary. It is only to be hoped that he will publish some day, for the benefit of all of us, an *œuvre d'ensemble* on this complex subject, which is still so much obscured. M. Pelliot's criticism is most assuredly welcome, always founded, as it is, on serious and solid information, and inspired by no other motive than the ideal desire to serve the common cause. It is a privilege and a stimulus to co-operate with such a sympathetic and highly intelligent worker, for whom I have an unbounded admiration, and to be guided by his friendly advice and effectual support. Indeed, without committing an indiscretion, I may say that in the present case this criticism was voluntarily solicited on my part, as I have never flattered myself for a moment that all difficulties presented by the Sino-Tibetan transcriptions have been solved by me; on the contrary, I am wide awake to the fact that my feeble attempt in this direction was merely a tentative beginning, which should be continued and improved by an abler hand. I am very happy that M. Pelliot has taken up this problem with such minute care and unquestionable success, and I need hardly assure him of my keen sense of obligation for his untiring efforts and the inspiring instruction which I have derived from his comments.

What M. Pelliot observes under 1—5 on the transcription of the Tibetan prefixes visible in the Chinese final consonants meets with my heartiest approval; indeed, this is the logical amplification of what I myself had noted on the transcription of *l'am-l'ui* (p. 86, *T'oung Pao*, 1914).

Pelliot No. 5: The Tibetan reading *k'od-ne brtsan* is correct. No. 6: The Tibetan reading *goñ* is justified, and plainly appears as such in Bushell's plate.

In my first draught of the monument, made in Tibetan letters, it is indeed written *gcñ*; I do not know now how it happened that it was printed *kuñ*. No. 7: The last Tibetan word is so indistinct in Bushell's plate that the matter can hardly be decided merely on this basis; but I admit that *čab* or even *tsab* could be read into it, and accordingly that M. Pelliot's conjecture is justifiable. No. 8: I gladly adopt the Tibetan reading *bla qbal blon-kru-bzañ myes-rma*. No. 10: The last Tibetan word may well be *ken*, not *yen*. I am unable to recognize *b* after *ha* in Bushell's plate, but it may be traceable in the original stone or in a rubbing. No. 14: The stone is here in such a hopeless condition that certainty of reading is out of the question; what appears quite certain to me is the letter-combination *rgy*. I regret having had the misfortune of overlooking Col. Waddell's study utilized by M. Pelliot: at the time when I wrote, the volume of the *J. R. A. S.*, in which it is contained, was in the hands of my book-binder, and in this way the accident occurred.

My note on Čog-ro, which M. Pelliot (p. 7) does not well comprehend, seems to me quite plain. Indeed, I do not speak of Čog-ro as the name of a man, as insinuated by M. Pelliot, but simply as a name. I never had any other opinion than that Čog-ro is the designation of a locality, which is adopted by the men hailing from there, and is prefixed to their personal names. The "inadvertance" noted by M. Pelliot (p. 9) in regard to my writing *mñan-pon* and *mñia-dpon* is only seeming: *mñan-pon* is the reading of the Tibetan text in the inscription; and *mñia-dpon*, as explained on p. 76, is the restoration proposed by me. In accordance with the purpose of the passage on p. 86, there was only occasion to cite the latter.

I am not convinced that M. Pelliot's restoration of 鉢掣逋 to *dpal č'en-po* (No. 12) is to be preferred to my proposition *qba č'e-po* (p. 28, *T'oung Pao*, 1914). The character 鉢 was certainly read with a final consonant (*pat*); but there are numerous examples in the transcriptions of Sanskrit where it merely corresponds to *pa* or *ba*, as in *parama*, *utpala*, *pippala*, *pra-* 鉢喇, *udumbara* 優曇鉢羅.¹ In view of Chinese 鉢掣 (M. Pelliot wrongly writes 折, not given in the relevant passage of *Sin T'ang shu*, which has 掣), it is not impossible that in ancient Tibetan the word-formation *č'ed-po, as an equivalent of č'e-po, existed² (for analogous cases of this kind see at the end of this notice). The supposition of a pronunciation č'er-po, proposed by M. Pelliot, is impossible: č'er (č'e-r) is a terminative, and cannot be connected with any suffix like *po* or *pa*.³

¹ See also Baron A. VON STAËL-HOLSTEIN, *Kien-Ch'ui-Fan-Tsan*, p. 177, No. 161 (*Bibl. Buddhica*, Vol. xv).

² My restoration was č'e-po, not, as M. Pelliot makes me say, č'en-po.

³ Compare examples in Jäschke's *Tibetan Dictionary*, p. 161 a, and in the *Dict. tibétain-français*, p. 829 b.

With reference to *tu* 度, M. Pelliot states that it is attested in transcriptions only as *'du*, not as *'dag*. The former is doubtless the rule, but instances of *'dag* nevertheless occur. JULIEN¹ says that in the *Fa yūan chu li*, this character is used in rendering Sanskrit *dakṣiṇa*, and Baron A. VON STAEL-HOLSTEIN² quotes an example where it has the value *da*.

In some cases it had seemed to me advisable, even at the sacrifice of rigid adherence to the Chinese transcriptions, to fall back on realities alive in the Tibetan language or in Tibetan records, rather than to resort to conjectural forms for which there is as yet no evidence. M. Pelliot is certainly right in maintaining that the transcription *fu-lu* 拂廬, in theory, would presuppose a Tibetan form *'p'ru*. I myself had noted on my index-card that it should lead to a dialectic form *'sbru*,³ but did not express this opinion, because such a word is not known at present. All we can say now is that *fu-lu* represents a word of the general or normal type *sbra*, whatever the possible dialectic variations may be. For the aforementioned reason I adopted the reading *p'ö* in the name *Sron-lde-btsan*, because *p'ö* ("the male") is a title actually found in connection with royal names. In adopting the reading *Sa-sron lde-btsan*, proposed by M. Pelliot (No. 23), we face the difficulty that we cannot correlate this with Tibetan historical tradition. Again, if we try to make sense of this, we shall have to change *sron* into *sruñ* (*sa-sruñ*, rendering of Sanskrit *bhūmipāla*); but it is not known to me that the Tibetan kings ever assumed such a title.

M. Pelliot's observations on the name *T'u-fan* are very ingenious, and will no doubt contribute toward a definite solution of this problem in the near future. In regard to his etymology of the word *la-pa*, proof seems to be required that *la-pa* is really evolved from the Chinese loan-word in Uigur-Mongol, *labai*, and that the supposed change of meaning really took place. At the outset, this theory is not very probable. A conch-trumpet (*labai*) and a copper or brass bass-tuba (*la-pa*) are entirely distinct and co-existing types of musical instruments, each of which has had its individual history. We know that the conch-trumpet came from India as a sequel of Buddhism. As to *la-pa*, J. A. VAN AALST (*Chinese Music*, p. 59) has aptly compared it with the *chatzzerah* of the Hebrews and the *tuba* of the Romans. Certainly there is no direct interrelation, but transmission through the medium of Persia and Turkistan seems to me a possibility deserving of consideration. First of all, it would be necessary, of course, to trace the history of the word and the object from Chinese records.

As regards the tones, I have to a certain degree modified my former views, since some time ago I had the opportunity of studying the admirable treatise

¹ *Méthode*, No. 2106.

² *L. c.*, p. 184, No. 222.

³ The interchange of *sb* and *p'* (as well as of *sk* and *k'*, *st* and *t'*) is well known.

of H. Maspero, *Études sur la phonétique historique de la langue annamite*, in which a lucid exposition of the tone system is embodied. MM. Maspero and Pelliot's opinions on the historical development of the tones are very sensible, but in the present state of our knowledge it would be premature to decide positively in favor of the one or the other theory; a great amount of research will be required before we can formulate well-assured deductions.¹

It is interesting to learn that in the *Mantra mudropadeça* to be published by M. Hackin the inverted *i* serves for the expression of long *ī* in Sanskrit words. This, however, would not signify at the outset that the same graphic expedient should denote *ī* in indigenous Tibetan words: what holds good for the writing of Sanskrit need not be applicable to Tibetan. I had occasion to hear six different Tibetan dialects, and am unable to hear an *ī* in any of these. The case alluded to by M. Pelliot remains to be seen.

As to *mo-mun* 末蒙, I can now offer a better equivalent for the first element of this compound. The explanation of the word *bud-med*, which I hazarded on p. 97, note (*T'oung Pao*, 1914), is erroneous. The second element, *med*, has nothing to do with the verb *med* ("not to have"), but is indeed an independent base with the significance "female, woman." This is evidenced by the following facts. In the peculiar Bunan language we have a word *tse-med* ("daughter, girl"), the element *tse* being apparently connected with *tsi-tsi* ("child"), occurring in the same idiom.² The stem *tsi*, *tse*, is encountered in Lisu *tsa-me*, *tsa-mei*, *tsa-mu*, and *tsa* ("woman")³ and A-hi Lo-lo *ma-ča-mo*.⁴ As *mu*, *mo*, *me* ("female"), is joined to this stem, the element *med* in Bu-nan *tse-med* is likely to have the same meaning. In Lepcha we have two stems, *môt* and *mit* ("female"), used with or without the prefix *a*, and a word *mo* parallel with *mot*. In his *Lepcha Dictionary*, which is based on materials collected by Gen. G. B. Mainwaring, A. GRÜNWEDEL (p. 289) tentatively suggested that Lepcha *mit* be regarded as related to *-med* in Tibetan *bud-med*. A differentiation of meaning has been evolved in Lepcha in this manner: that *mit* or *a-mit* particularly refers to women of superior beings (for example, *run-mit*, "goddess"); and *mo*, *môt* or *a-mo*, *a-môt*, to the female of animals (for instance, *hik môt*, "hen"), but sometimes also to human beings.⁵ The

¹ On p. 25 M. Pelliot speaks of an hypothesis of mine regarding the function of certain Tibetan prefixes. This is not my hypothesis, but is merely the reproduction of observations and opinions given by Tibetan grammarians.

² JÄSCHKE, *J. A. S. B.*, Vol. 34, pt. 1, 1865, p. 95.

³ A. ROSE and J. C. BROWN, *Lisu Tribes of the Burma-China Frontier (Mem. As. Soc. Beng.*, Vol. III, p. 275).

⁴ A. LIÉTARD, *T'oung Pao*, 1912, p. 19; and *Bull. de l'École française*, Vol. IX, 1909, p. 552. Lo-lo-p'o *so-me* and P'u-p'a *za-ma* appear to be associated with Mo-so *se-mu kua* and Tibetan *ḍ-za*.

⁵ G. B. MAINWARING, *A Grammar of the Róng (Lepcha) Language*, pp. 24, 25.

forms *mi-t* and *mó-t* represent derivations from the bases *mi* and *mó* by means of the formative suffix *-t*.¹ The same relation exists in Tibetan between *mo* and the element *-med* ('*môt*') contained in *bud-med*. The same word *med* or *môt* may be recognized in the Chinese transcription *mot* 末.² As to the second element of the Sino-Tibetan compound, *moñ*, *muñ*, reference may be made to Miao-tse *mañ* ("spouse"),³ and to a word for "woman" in Kanaurī, that is given by Pandit Joshi as *mun-riñ*, and by Bailey as *mön-riñz*. From the standpoint of Tibetan, *moñ* may very well be *mo-ñ*; that is, a derivative from the base *mo* ("woman") by means of the suffix *-ñ*, so that we should obtain two derivatives from the same base,—*mo-t* and *mo-ñ*. Analogous cases in Tibetan are: *rtsa-ba* ("root"), forming *rtsa-d* and *rtsa-ñ*; *dro* ("warm"), forming *dro-d* ("heat") and *dro-n*; *lêi* ("heavy"), forming *lêi-d* ("weight") and *lêi-n*; *nu-ma* ("breast"), forming *nu-d-pa* and *s-nu-n-pa* ("to suckle"); *rga-ba* ("aged"), forming *rga-d-pa* and *rga-n-pa*. The word *mot-moñ* (in Tibetan presumably written *med-moñ*) preserved in the T'ang Annals, accordingly, is a compound consisting of two synonymes, each meaning "woman."

B. LAUFER.

¹ For examples of such formations in Tibetan see SCHIEFNER, *Mélanges asiatiques*, Vol. I, p. 346.

² In Kanaurī or Kanāwarī, *wed-po* is said to mean "master, owner, proprietor;" and *wed-mo*, "mistress;" both words being borrowed from Tibetan (T. R. JOSHI, *Grammar and Dictionary of Kanāwarī*, p. 103, Calcutta, 1909). In the Kanaurī-English vocabulary published by T. G. BAILEY (*J. R. A. S.*, 1911, pp. 315—364), these words are not given. Our Tibetan dictionaries have not recorded the two words with those meanings; but we know that in Tibetan, *wed-po* means "a man who owns nothing, a pauper," and *wed-mo*, "a penniless woman." The data given by Pandit Joshi, on the contrary, would presuppose a base *wed* with the meaning "to own," which it is difficult to credit. There may be a misunderstanding on the part of the Pandit, or the two words may be peculiar to Kanaurī without bearing any relation to Tibetan.

³ P. VIAL, *Les Lolos*, p. 36.

LOAN-WORDS IN TIBETAN

BY

BERTHOLD LAUFER.

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The following abbreviations are employed in this paper:

Chandra Das = Das, *Tibetan-English Dictionary*.

A. von Le Coq, Turfan = *Sprichwörter und Lieder aus der Gegend von Turfan*.

French Dict. = *Dict. tibétain-tatin-français par les Missionnaires catholiques du Tibet*.

Huth, B. M. = *Geschichte des Buddhismus in der Mongolei*.

Jäschke = J., *Tibetan-English Dictionary*.

Kovalevski = K., *Dict. mongol-russe-français*.

Mong. Pharm. = *Mongol Pharmacopæia* (see p. 443).

- Pol. D. = Polyglot Dictionary, i. e., *Yü é'i se ts'i ts'ii wen kien* 御製四體清文鑑, 36 vols.
- Ramsay = *Western Tibet: a Practical Dictionary of the Language and Customs of the Districts included in the Ladák Wazarat*, by Cap. H Ramsay (Lahore, 1890).
- Roero = *Ricordi dei viaggi al Cashemir, Piccolo e Medio Tibet e Turkestan in varie escursioni fatte da O. Roero dei Marchesi di Cortanze*, 3 vols. (Torino, 1881).
- Tib. Pharm. = Tibetan Pharmacopœia *Fan Han yao mii* 番漢藥名 (see p. 438).
- Vigne = *Travels in Kashmir, Ladak, Iskardo*, by G. F. Vigne, 2 vols. (London, 1842).

INTRODUCTORY.

Originally it was my intention to deal only with Chinese loan-words in Tibetan, but closer investigation brought out the fact that such a limitation would not render full justice to the subject. The mere existence of Chinese elements in Tibetan does not yet signify that these penetrated into Tibet straight from China. The chaos of languages which we encounter in central Asia, and which have been more or less subjected to Chinese influence, is such that Chinese words have also reached Tibet by way of Turkistan through the medium of Turkish idioms: thus *pag-ki* (No. 157), Chinese in its foundation, was adopted by the Tibetans from the Uigur; while *yam-bu* (No. 164), likewise of Chinese origin, came to them from Eastern Tur. Other Chinese terms transmitted to Iran reached the Tibetans even from Persia or India (No. 120). On the other hand, Tibetan words have been claimed as Chinese, like *stod-ja* (No. 107), which in fact is derived from an Indian vernacular. A word like *a-p'im* ("opium;" No. 61) may easily be mistaken for Chinese, while it actually hails from India. This complex state of affairs led to the conclusion that a thorough investigation of all

loan-words to be found in Tibetan would be required if satisfactory results were to be insured. Hence Indian, Persian, Arabic, Uigur, Turkī, Mongol, Manchu, Chinese, and finally Portuguese, Anglo-Indian, and English loan-words in Tibetan, are discussed on the following pages. Only those, however, which are generally used in the Tibetan language, have been treated here. Each dialect naturally has peculiar loan-words, which remain to be studied as our knowledge of dialectic lexicography advances. The outpost languages along the western and southern border-lands are influenced by the respective Indo-Aryan forms of speech prevailing in those regions. According to A. Cunningham, Tibetan *t'u* ("egg") is a Kāçmīrī word, and doubtless there are more Kāçmīrī words to be found in Ladākhi. On the southern frontier of Bhūtān, many words and idiomatic phrases have been adopted from the Assamese, Bengālī, and Hindustānī, while the language spoken on the northern frontier represents a purer form of Tibetan.¹ Also the non-Aryan languages spoken in the Himālaya may have influenced Tibetan dialects. The origin of a word like *be-da* (written *bhe-da* and *abe-dha*), designating a class of professional musicians, usually Mohammedans of Balti extraction, is still unknown.

In the *Li-šii gur k'ani*, a lexicographical work written by bZod-pa and Kun-dga don-grub and printed in 1741, three words are recorded as being derived from the language of Žaň-žun (the ancient name of the province of Guge in western Tibet),—

1. *sle-tres* (*Mong. Pharm.*, No. 49: *sli-tri*; Mongol *liduri*), according to Jäschke, "name of a creeper or climbing plant;"

¹ RENNIE, *Bhotan and the Story of the Dooar War*, p. 25. Thus we have a Tibetan word *la-la* or *la-da*, designating a kind of yarn imported into Tibet from Assam and Bhūtūn; and *abu-ras* or *beu-ras*, the name of a coarse raw silk, likewise imported into Tibet from Assam by Bhūtūn traders.

it is identified with Chinese *k'u-lōn* 苦參, *Sophora flavescens*, the bitter root of which is employed in medicine; Rehmann's description of the root called by him *lidri* agrees with this. ¹

2. *tres-sam* (or *tre-sam*), a medicine in the shape of a powder (equivalent of *p'ye-ma*). The element *tres* occurs also in *kru-kru-tres*, cited in the same work and identified with Sanskrit *citraka*.

3. *čur-nis* (JÄSCHKE: *čur-ni*), flour (only in medical writings).

Chandra Das thinks that this word is derived from Sanskrit.

Among the loan-words received from India, those of purely Sanskrit origin are of secondary importance, while those adopted from the Indian vernaculars are of prime interest. The Apabhraṃṣa loan-words are here clearly distinguished for the first time.

The Iranian loan-words in Tibetan are all derived from Persian, not from Pahlavi or Sogdian. ² The only traceable Pahlavi prototype may be the tribal name Tādžik (Persian Tāzī) that underlies the Tibetan transcription Ta-zig or in more Tibetanized writing sTag-gzig (the Ta-ši [*džik] 大食 of the Chinese). The Tibetan name usually relates to Persia and the Persians, designated, though more rarely, also as Par-sig. Tāranātha employs Ta-zig also with reference to the Moguls of India. It is difficult to determine the route over which the Persian loan-words have migrated. Many may have come from Hindustānī; others may belong to an earlier period, and be due to a direct contact of Persian civilization with western Tibet. Arabic words were partially borrowed from Hindustānī, partially from Persian, or were spread also by Mohammedan traders

¹ See H. LAUFER, *Tib. Med.*, p. 58.

² The only Tibetan word thus far known which is derived from the Pamir languages is *ču-li* (see this volume, p. 82, note 4).

in Tibet. Several loans in Tibetan were formerly taken for Mongol. Now that, owing to the discovery of fresh material in Turkistan, our knowledge of Uigur has considerably advanced, we know that Mongol has borrowed a great deal from the Uigur, and it is certain that several alleged Mongol loan-words in Tibetan are in fact of Uigur origin.

The relation of Tibetan to Mongol words is not always perspicuous. Both languages have a stock of words in common; but while Mongol has borrowed much from Tibetan, and Tibetan a small proportion from Mongol, it is not easy to decide in every case which is the borrower or which the debtor: thus, for instance, in the case of Tibetan *ša-la*, *šal*, *šal-ba*, *šal-bu* ("floor of chunam, earth-pisé"), and Mongol *šala* (Manchu *jelehen*; *Pol. D.*, 20, p. 3).

In the case of Chinese loan-words a clear distinction has been made between Old and Modern Chinese. The former group exhibits the ancient initials and finals, as they were still characteristic of the Chinese language of the T'ang period, and which have apparently survived in Tibetan ever since that time. These words are living witnesses of the former conditions of Chinese phonetics, and are of primary significance for Chinese philology. The attention of sinologists may specially be called to the presence of a final liquida in Tibetan representing Chinese final *t* or *k*: *pir* for **bit* 筆 (No. 229), *par* and *spar* for **pat* 八 (No. 230), *yol* for **yüet* 月 (No. 227), *gur* for **gwok* 國 (No. 228), and the transcription *sar* for **sut* 薩 (see below, p. 419). The same phenomenon is found also in allied words of the two languages, as in Tibetan *dar*, compared with Chinese **dar* 達 (see above, p. 119). While the early loans in Tibetan are fixed according to rigid rules, there is much arbitrariness in the transcription of modern Chinese; many of these are derived

from colloquial Chinese, chiefly from the dialect of Se-č'uan. Most Chinese traders in Tibet hail from this province. ¹ It is of particular interest that we possess several loan-words in two forms, — in an ancient and a modern style of transcription, — thus illustrating the very development of Chinese phonology. Neither in this nor in any other department is an effort made toward completeness: many loan-words had to be set aside for the present, as their parentage has not yet been traced.

In *T'oung Pao* (1914, p. 89) Tibetan *mog* in *mog-ša* ("mushroom") has been compared by me with Chinese *mo-ku* 蘑菇. This equation, however, is improbable, as the element *mo* 摩 was always devoid of a final explosive. The combination *mog-ša*, moreover, is restricted to western Tibet, where Chinese influence could hardly be expected, while the common Tibetan term is *ša-mo*, colloquially also *ša-man*, which appears to be a genuine Tibetan word. Further, Chinese *mo-ku* is probably not of Chinese origin, but, as proposed by F P SCHMIDT, ² may be borrowed from Mongol *mugu*, Kalmuk *mögö* (Solon *mogu*, Tungusian *mogo*, Manchu *megu*). The best mushrooms are still supplied to China from Mongolia.

It is not likely that Tibetan *se* (or *seu*)-*abru* ("pomegranate," *Punica granatum*) ³ is a transcription of Chinese *ši-leu*, as I endeavored to explain in *T'oung Pao* (1914, p. 90). Chinese *ši* 石, formerly with final guttural explosive, yields Tibetan *šik* (see No. 226; and above, p. 118, No. 45). In the *Mahāvvyutpatti* (section of trees), moreover, we find as translation of Sanskrit *dāḍimva* (*duḍima*)-*vriksha* ("pomegranate") Tibetan *bal-poi seu-šii*; that is, *seu* tree of Nepal.

TH. MANNING, who visited Lhasa in 1811, refers to "the common vulgar Chinese at Lhasa, speaking the Szechuen dialect" (C. R. MARKHAM, *Narratives*, p. 260).

¹ *J. Peking Or. Soc.*, Vol. IV, p. 36; and *Mandarin Grammar* (in Russian), p. 94.

² Written *se-abru* in the *Hua i yi yü*.

The plain *seu* is credited by Jäschke with the significance "pomegranate," but the element *se*, *seu*, has a wider application in the nomenclature of Tibetan botany. Its principal meaning is "thorn, thorny shrub:" *se-siü* ("shrub 'good for hedges'"), corresponding to *šan kou nai* 山枸柰 (Manchu *sira mö*, Mongol *ukhana sibtur*; *Pol. D.*, 29, p. 29; not identified, but Chinese 山 indicates clearly that the question is of a wild plant, not of a cultivated species); *se-luü*, "thorns" (*Si yü t'ui wen üi*: E. VON ZACH, *Lexic. Beiträge*, Vol. III, p. 111; *ibid.*, p. 127, we have *se* in the sense of "fruit-tree"); hence the derivations *se-ba* ("rose") and *g-ze-ma* ("caltrop," the spiny fruit of *Tribulus terrestris*, Chinese *tsi-li* 蒺藜: *Pol. D.*, 29, p. 15). The term *seu siü*, further, is identified with Chinese *tu li* 杜李 (a kind of wild pear or berry, *Pyrus baccata*; Manchu *uli*, Buryat *ulir*, Mongol *üril*: *Pol. D.*, 28, p. 54). Moreover, there are *seu dmar t'ui* ("small red *seu*," that is, cherry), answering to Chinese *yü t'ao* 櫻桃, Manchu *ingduri*, Mongol *ingdör* (*Pol. D.*, *ibid.*); *rgya seu* ("Chinese *seu*"), answering to Chinese *hua hui* 花紅 ("apple," *Pyrus malus*), Manchu *nikan uli*, Mongol *kitat üril* (*ibid.*); *dren siü siü* ("hazel-nut"), Chinese *čen-tse* 榛子;¹ and *sba siü* ("a red currant"), Chinese *mao t'ei tse* 茅藤子, Mongol *ükär-ün nidu* ("ox-eye"), Manchu *jali*; *siü nag* ("mulberry-tree"), Chinese *sai* 桑 (*Pol. D.*, 29, p. 22). In view of these various names, we may well assume that *se* or *seu* is an indigenous word, and that *se-äbru* means "se seeds." The term given in the *Mahavyutpatti* may indicate that the pomegranate was introduced to the Tibetans from Nepal.² ROCKHILL (*Diary*, p. 340) gives for the fruit a Tibetan

¹ Tibetan *dren*, *den*, is a transcription of Chinese *čen*. In the modern transliteration, Chinese palatals, if followed by *e* or *ö* and *a*, are reproduced in Tibetan by means of the cerebrals: thus *ten* for *čen* 正, *f'au* for *t'au* 昌. More examples are given further on.

² The following names of products are labelled "Nepallesc:" *bal-po gur-gum* ("Nepallesc

word *supoi* that I cannot explain. The Mongols use the Tibetan word in the form *simbru*; besides, they have adopted *anar* from Persian *anār* انار.

Tibetan *srai* ("ounce") is not necessarily to be connected with Chinese *lián* 兩. As *srai* means also "balance, steelyard, weight," it may be derived from the verb *sroi-ba* ("to straighten, to render straight"), and accordingly be a genuine Tibetan word. The curious term *sa-t'e*, hitherto traced only in Tāranātha, cannot be derived from Chinese *siao t'ai* 小堂, as GRÜNWEDEL¹ is inclined to think; a Chinese *t'ai* would be reproduced only by a corresponding *t'ai* in Tibetan. The term decidedly is not Chinese.

I. SINO-TIBETAN NOTES.

Owing to the geographical position of the country and historical agencies resulting from it, the intellectual culture of Tibet is of a dualistic character in its absorption of foreign ideas which have flooded over its southern border from India, and which have penetrated eastward from China. Of these two currents of outward influence, the infusion of Indian ideas has always been strongly emphasized and placed in the foreground of scientific interest, so much so that Tibetan studies are usually regarded as a mere side-issue or auxiliary department of Sanskrit philology. The investigation of the Chinese share in the framing of Tibetan culture has almost wholly been neglected, and has not yet received the attention which it merits. Even before the days of Csoma, the importance of this subject was

saffron"), *bal srai* ("Nepalese pease"), *bal glai* ("ox of Nepal, elephant"), *bal wda* ("matchlock made in Nepal"), *bal lam* ("Nepalese silver coin;" in opposition to *rgya lam*, "Indian rupee"), *bal niin* or *shins* ("Nepalese rupee"), *bal dril* ("bell," also "cotton stuff made in Nepal"), *bal d'ol* or *sbug* or *bal-poi sbug d'al* ("cymbal manufactured in Nepal").

¹ *Tāranātha's Edelsteinmine*, p. 163 (Petrograd, 1914).

pointed out by the far-sighted Klaproth,¹ who held that Tibetan literature was formed by a blending of the literatures of Tibet and China, and that many Chinese books on history, astronomy, medicine, and other sciences, have been translated into Tibetan, and that the arts came to Tibet from China together with printing. Dr. F. W. Thomas, librarian to the India Office, wrote me in April, 1915: "Information concerning Tibet which is obtainable from Chinese sources is a matter which presents difficulty to those of us who approach Tibetan questions mainly as Indianists or Sanskritists, and in several matters I have myself felt the need of enlightenment from the Chinese side: one cannot but feel that the Chinese influence must in reality be very great." In the same manner as there is a Tibetan-Sanskrit philology, there is also a Sino-Tibetan philology, some problems of which are here briefly discussed by way of introduction to the subject of Chinese loan-words. The sources utilized for this purpose will be indicated at the same time.

Above all, Chinese influence is manifest in Tibetan historiography. India transmitted to Tibet religious thoughts, but, lacking herself the historical spirit, had no lesson to inculcate in the methods of recording history. The Chinese, with their keen sense for the chronicling of events and dates, became the teachers of the Tibetans in historical matters. W. W. Rockhill² expressed the opinion that the Tibetans commenced writing their national history in the reign of Ral-pa-čan (816—838), that he was the first sovereign who appears to have paid any attention to the annals of his country, and that he had all the events of his reign recorded according to the Chinese system

¹ *Nouvelles annales des voyages*, 2me série, Vol. XIV, 1829, p. 275.

² *The Life of the Buddha*, p. 203.

of chronology. ¹ This may now be more exactly determined according to the Tibetan Annals (*rGyal rabs*, fol. 96). ² There we find the following account embodied in the history of King Ral-pa-čan:

"The book dealing with the history of China and Tibet (*rgya bod lo-rgyus deb-t'er*) was compiled by the chronicler Su K'yi-han, ³ who lived at the time of King T'ai-dzuñ ⁴ of China, the events being recorded in the order of their succession. At a later date this work was rendered into Tibetan in the great monastery Šin-kun by the Chinese translator (*lo-tst'a-ba*) U Gyañ-dzu. ⁵ As, however, there were some dates not in harmony in the Tibetan and Chinese histories, and also some discrepancies in the names of persons of that period, the Lama Rin-č'en Grags with the title *kuo ſi* (國師), ⁶ at the time of his sojourn in China, collated the Tibetan and Chinese annals as far as the history of Sino-Tibetan

¹ *The Life of the Buddha*, p. 224. The source for this statement appears to be the *Bodhi-mör* translated by I. J. SCHMIDT (*Geschichte der Ost-Mongolen*, p. 361), but there are several misconceptions in his translation.

² This text closely follows the one translated by the writer in *T'oung Pao*, 1914, pp. 70—72.

³ A Chinese name in Tibetan transcription.

⁴ Thus transcribed in Tibetan. From a phonetic point of view we should regard this name as that of the Emperor T'ai-tsun 太宗 (627—649). It is not likely, however, that under his reign a book on Tibetan and Chinese relations was written, when these were in the initial stage: the year 634 is the first chronicled in the T'ang Annals with regard to Tibetan events. It seems more probable that, with the assumption of a slight clerical error, the Emperor Tai-tsun 代宗 (763—779) is here understood.

⁵ This transcription would seem to correspond to a Chinese *Wu K'ian-ku*; but only a Chinese source could yield the characters with which the name is written. SCHMIDT (*l. c.*, p. 361) writes this name *UK'jangtschi*. A Stupa named Šin-kun is situated in Nepal north-west of Yam-bu (VASILYEV, *Geography of Tibet*, in Russian, pp. 61, 65).

⁶ Tibetan *Gu ſri Rin-č'en Grags* (SCHMIDT: *Kuks'ri Erdeni*). Chinese *ſi* 師 is often confounded or adjusted with Sanskrit *śrī*, and is hence thus written; regarding this title see Glossary (No. 289). In the text the question is not of "Tibetan and Chinese year-books," as translated by SCHMIDT, but a single, individual book is understood; nor did U Gyañ-dzu continue the work and write it in Chinese and Tibetan, but he merely acted as translator into Tibetan of a Chinese book.

interrelations was concerned: in the *wood female fowl year*¹ he published his results in a book in the great monastery Śin-kun, and rendered this work accessible to all. What is offered here² is merely an extract; he who desires to read in detail the history of Sino-Tibetan interrelations and the annals of the Son-in-law and Father-in-law,³ may look up that very book."

The adjustment of Tibetan and Chinese history seems to have taken place under K'ri gtsug lde btsan Ral-pa-čan, for in the chapter devoted to his reign the *rGyal rabs* inserts a somewhat lengthy dissertation on Tibetan events in the same manner as represented in the Chinese annals. In fact, this is a very succinct abstract, ranging from the time of King gNam-ri sroñ-btsan down to Ral-pa-čan, which in all probability is based on the book of Lama Rin-č'en Grags, and partially is in striking agreement with the T'ang Annals. While Su K'yi-han must have utilized for his compilation original documents and state papers of the T'ang dynasty, the Lama Rin-č'en Grags, in his work of collation, seems to have had recourse to the text of the T'ang Annals as we know them at present. The best evidence in support of this opinion is furnished by the date given in this text for the death of King Sroñ-btsan sgam-po, which is fixed in the *iron male dog year* (*lčags p'ō k'yii lo*), answering to the year 650; and this is exactly the year indicated in the T'ang Annals.⁴ The Tibetan Annals allow him to live much longer. Sanang Setsen has him die in

¹ The cycle, as usual, is not indicated. The first year that could come here into question is 865 (as 806 is prior to the reign of Ral-pa-čan), and the latest date to be considered would be 1285, the *rGyal rabs* having been written in 1328.

² That is, the preceding account in the *rGyal rabs* regarding the relations of Tibet with China.

³ That is, the sovereigns of Tibet and China, who were allied by marriage.

⁴ BUSHNELL, *Early History of Tibet*, p. 12 of the reprint.

698.¹ It is noteworthy, however, that the date derived from the Chinese has not exerted any influence upon Tibetan historians, and that also the chapters of the *rGyal rabs* treating of that king's reign do not contain it; this account, indeed, reflects the purely Tibetan tradition. The case, therefore, is not such that the Tibetan Annals (I speak only from my experience with the particular work *rGyal rabs*, and do not mean to generalize on so large a subject) should present a medley of Tibetan and Chinese traditions, but that each group of traditions is dealt with separately. In the beginning of the episode mentioned, a Chinese work² is quoted under the title *žu t'u han č'an*, as furnishing the information that "1566 years after the Nirvāṇa of Buddha the Chinese sovereigns called T'ang arose, contemporaneous with the Tibetan king gNam-ri sron-btsan." The latter clause was presumably not contained in that Chinese book, as this king, the father of Sron-btsan sgam-po, is not mentioned in the T'ang Annals. Then follows in the Tibetan text the passage regarding King Sron-btsan sgam-po and his war against the T'u-lu-hun formerly translated by me.³ The concordance of this text with the corresponding account of the T'ang Annals is so striking, that on renewed examination of the matter the conclusion seems to me inevitable that the Tibetan notice is copied from the Chinese. This is confirmed by the fact that it is followed by the Chinese date of Sron-btsan sgam-po's death, as mentioned above. It is noticeable, however, that there are two statements in the Tibetan account which differ from the two *T'ang šu*,—the one that the king marched to a place called T'un čiu, that is, T'un čou;

¹ SCHMIDT, *l. c.*, p. 37. This is the date given in Bu-ston's *Č'os abyun* (see *dPag bsam ljom bzan*, p. 153, line 20).

² Styled a *ryya deb-t'er č'en-po*, "great Chinese book."

³ *T'oung Pao*, 1901, p. 450.

the other that he put his army in charge of a. official named γ Ya-t'ün, who defeated the T^cu-lu-hun (T^cu-yü-hun). The Chinese text speaks in this place of the tribe Yañ-t'ün 羊同, who united their army with that of the king, and together with him attacked the common enemy. The case is difficult to decide; the similarity of the two names is obvious, but, after all, may be also accidental. Whereas everything else in the Chinese text is correctly understood by the Tibetan, it seems preposterous to turn out against him an indictment of misunderstanding in this particular case. He may have interpolated here a national tradition, or may have fallen back on another Chinese source than the T^cang Annals.

The first work of Tibetan literature which was edited in Europe, *mDzais-blun*, a collection of Jātaka, presents itself as a translation from the Chinese, as expressly stated in the Index of the Kanjur,

¹ De-nas blon-po γ Ya-t'ün bya-ba-la dmag bskur-nas | t'u-lu-hun-gyi yul ajoms-su btan-ba-la.

² Ed. of I. J. SCHMIDT, No. 339: rgya-nag-las agyur-ba snan-no. In the Berlin Kanjur (II. BECKH, *Verzeichnis der tibetischen Handschriften*, Vol. I, p. 67 b) the colophon has been omitted. The colophon in the Index Schmidt does not mean, as erroneously translated by Beckh in imitation of Csoma, "scheint eine Übersetzung aus dem Chinesischen zu sein," but means only, "it has been translated from Chinese." The verb *snan-ba* never has the meaning "to seem," but signifies "to be evident, to appear, to be in a certain condition;" it always implies a positive fact, and takes the place of the copula *god-pa*. In this sense it is still employed in the dialect of Amdo and in eastern Tibet; *zer-ba snan* in Tāranātha, as quoted by Jäschke, means, "it is said." — The Kanjur Index of Derge (fol. 135 b) adds the following colophon to the work: "Translated from Indian and Chinese books by the Locāva Č'os-agrub of aGos." This personage is well known: he appears in the Index of Derge as translator from the Chinese of Ratnakūta, Vol. 2, No. 2; and of Sūtra, Vol. 5, No. 3 (likewise in the Berlin version: BECKH, p. 30 b). The writing Č'os-agrub is but a variant of Č'os-grub. Č'os-grub (the name is thus written in this passage of the Derge Index, fol. 136), further, translated from the Chinese the Sūtra in Vol. 32, No. 8; from the Chinese only, according to Derge, but from Indian and Chinese books, according to the Berlin version (BECKH, p. 70). Also the rendering of the Suvaruaprabhāsa-sūtra (Tantra, Vol. 13, No. 12) from the Chinese into Tibetan is due to him (the colophons of Berlin and Derge closely agree); moreover, three Dhūraṇi relating to Avalokiteṣvara (BECKH, p. 124). P. PELLIOU (*Notes à propos d'un catalogue du Kanjur, Journal asia-*

and, according to the latter, repeated by CsOMA,¹ and SCHIEFNER.² Schiefner recognized also the Chinese influence exerted on the Tibetan renderings of Sanskrit names, and noticed a few Tibetan words as transcriptions (styled by him "corruptions") of Chinese; but, in view of the fact that the phonology of ancient Chinese was wholly unknown in his time, he did not arrive at any result, and in some cases was even led into error. J. TAKAKUSU³ attempted to prove at length that, contrary to his former opinion, according to which the Chinese may be a translation of the Tibetan, the Tibetan text is rendered after the Chinese. He compared a number of Tibetan and Chinese names in the two texts as proof of their interdependence. These comparisons have a decided value from a point of view not entertained by the author. The Tibetan renderings give us interesting

tique, 1914, p. 143, juillet-août), very felicitously, has identified this Tibetan personage with Fa-č'en 法成, of whom he has discovered numerous translations in the caves of Tun-huan. Fa-č'en, "a subject of the great Tibetans," lived in the Temple of the Sūtra (Siu to se 修多寺) of Kan-čou in Kan-su in the first half of the ninth century. It was accordingly at that time that the translation of the *mDzans-blun* from the Chinese into Tibetan was accomplished. As shown by PÉLLIOT (*T'oung Pao*, 1912, p. 356; and *Journal asiatique*, 1914, p. 139, juillet-août), the Chinese text was translated in 445 from a work edited at Kao-č'an (east of Turfan) by eight Buddhist monks, who had memorized the legends at Khotan. We are fortunate in now having the bibliographical history of this work clearly outlined; for the Tibetan work, frequently utilized in Schmidt's translation, has given rise to several unwarranted conclusions. For instance, in discussing the Hebrew and Indian parallels of the story of Solomon's Judgment, R. GARDE (*Indien und das Christentum*, p. 27) expressed the opinion that, as long as merely the Tibetan version in the Kanjur (that is, the *mDzans-blun*) was known, it would have been justifiable to argue that the story had penetrated into Tibet through Christian mediation. Again, he asserted (on p. 29, note) that the story migrated from India by way of Tibet into China. As we now recognize, the route of migration led from India to Khotan and Turfan, from there to Kan-čou, the domicile of Č'os-grub; and from the Chinese the story found its way into Tibetan literature. M. WINTERITZ (*Geschichte der indischen Literatur*, Vol. II, p. 221) wrongly states that our work has been translated from Sanskrit, and that the Sanskrit original has not been preserved.

¹ *Asiatic Researches*, Vol. XX, p. 480.

² *Tib. Lebensbeschreibung*, p. 85.

³ *Tales of the Wise Man and the Fool* (*J.R.A.S.*, 1901, pp. 447-460).

examples of the Tibetan method of transcribing Chinese sounds; and if we did not know the fact that the Tibetan translation was made in the first part of the ninth century, the very form of these transcriptions, which are recorded in full harmony with the phonology of Chinese as it prevailed in the T^{ang} period, would entitle us to the conclusion that the Tibetan translation goes back to the same age. If, for instance, Chinese Po-lo-mo-ta 婆羅摩達 (Sanskrit Brahma-datta) is transcribed in Tibetan Ba-la-ma-dar,¹ we have the actual phonetic state of these syllables as it obtained during the T^{ang} — as exactly, at least, as it could be rendered by Tibetan writing. Unfortunately we have as yet no critical edition of the Tibetan text; Schmidt's edition is very deficient, and the supplementary notes and emendations of Schiefner are not yet the last word in the matter. It would be a real feast to have for comparison a Tibetan manuscript of this work of the ninth century and a Chinese contemporaneous edition. But, with all the mistakes in the present Tibetan editions, it is not a hopeless task to get at, to a certain degree, the primary condition of affairs. The separating dot (*ts^ceg*) is often placed wrongly in Tibetan writing: the name Tsuu-ba-na-ta² must evidently be written Tsuu-ban-ta (probably even Tsuu-pan-ta),³ and renders Čou-li-pan-to 周利槃多 (Sanskrit Cūḍapanthaka).⁴ The same holds good for A-na-ta, which is to be corrected into An-ta, rendering *An-da (Au-t^o) 安陀, Sanskrit Andhra; and Kan (written ka-na)-ja-ni-pa-li,

¹ Erroneously taken by SCHIEFNER (*Ergänzungen*, p. 53) for a "corruption" of Sanskrit Balamitra.

² SCHMIDT's edition, p. 320, line 15.

³ Takakusu's transcription Cūwa-na-ta (*l. c.*, p. 456) is not correct: the double *w* is not intended for *ū*, but is employed to express the diphthong *ow* of the word 周.

⁴ Thus SCHIEFNER, *Lebensbeschreibung*, p. 85. Takakusu proposes Cuddhipanthaka. Probably we have to read 般 *pan* instead of 槃 **bwan*.

rendering *Kan-ja-ni-pa-li 虔闍尼波梨, Sanskrit Kañjani-pali.¹ In the latter example the Tibetan transcription *ja* for 闍 is of especial interest, inasmuch as it affords additional evidence for the pronunciation *ja*, peculiar to this character during the Tang period. Other Tibetan names can be correctly restored on the basis of the Chinese equivalents. SCHIEFNER² was greatly puzzled over the name Ba-mi-su-tra, though he himself, as well as Schmidt, conjectured it as Vasumitra. The corresponding Chinese rendering 婆修密多羅 *Bwa-su-mit-ta-la shows us that the Tibetan must have been originally Ba-su-mi-tra, and that only a later copyist has reversed the syllables *su* and *mi*. In his very valuable supplementary notes on Schmidt's edition, Schiefner has attempted to restore the readings of several names on the basis of their Sanskrit equivalents. It now turns out that these emendations are not always acceptable, and that the names, as offered in Schmidt's text, are correct when viewed in the light of the Chinese models of which they are a transcript. SCHIEFNER³ proposed to read Ši-bi instead of Ši-byi on the ground of the Sanskrit form Āibi. This would be very well, but the Tibetan translator had before his eyes Chinese 尸毘 *šī-b'ī, and with perfect correctness transcribed in Tibetan *šī-byi*. This is by no means a single case, but there are at least three more where Chinese 毗 *b'ī (p^hi) is reproduced as *byi* in the Tibetan text.⁴ These transcriptions tend to confirm the opinion that the subscribed letter *y* serves the purpose of expressing the palatalization of the consonant to which it is attached.⁵ The reading Ši-byi, though rendering Sanskrit Āibi,

¹ *Hien yü yin yüan king* 賢愚因緣經, Ch. 1, p. 3 (edition of Nanking). In Schmidt's edition the name is erroneously printed Ka-na-ši-ni-pa-li.

² *Ergänzungen*, p. 9.

³ *Ibid.*, p. 5.

⁴ TAKAKUSU, *l. c.*, p. 456.

⁵ *Young Pao*, 1914, p. 97; 1915, p. 287, note 5.

is therefore legitimate, and was no doubt contained in the *editio princeps* of the work. For the same reason, I should think, the name Ka-byin or Ka-pyin need not be restored into Ka-p^ci-na¹ (Sanskrit Kappiṇa), but most probably into Ka-p^cyi-na. Chinese 賓 *pin* in Piṇḍoladvāja is transcribed *p^cyin* in Tibetan.

The most interesting of the Tibetan transcriptions is *sar p^cag* for Chinese 薩薄 **sat-pak* or *sat-bak* (*sa po*). Schmidt treated this word as a proper name. SCHIEFNER,² consulting the Mongol version, encountered there *yükü sartawaki*, and hence inferred a Sanskrit mahāsārhavāha ("wholesale-dealer"). Takakusu, who did not avail himself of Schiefner's work, arrived from Chinese *sat-pak* at an hypothetical Sanskrit *satpati* ("good lord"), and took the Tibetan in the sense of "householder" or "lord." At any rate, the Tibetan is a transcription of Chinese, and perhaps was originally *sar pag* (the letters *p* and *p^c* being easily confounded). Schiefner's conclusion is corroborated by the geographical catalogue contained in the Mahā-māyūrī vidya-rājñī, edited and commented by S. Lévi.³ Here we meet the name Sārhavāho,⁴ to which corresponds in the Chinese version Sa-t^co-p^co-ho 薩陀婆訶, defined as *šan čū* 商主 ("chief of the merchants"), and rendered into Tibetan as *ded dpon* ("head of a commercial concern").⁵ Hence it follows that the above Sa-po is abbreviated for Sa-t^co-p^co-ho, and is indeed modelled after Sanskrit sārthavāha.⁶ This Sanskrit word has left

¹ *Ergänzungen*, p. 38.

² *Ibid.*, p. 24.

³ *Journal asiatique*, 1915, janv.-févr., pp. 19—138.

⁴ *L. c.*, p. 37.

⁵ This term means also "sea-captain" (for instance, *mDzans blun*, p. 29, line 4; and *Avadūnakalpalatā*, prose ed., p. 57, line 13). At present *ts'oi dpon* is usually employed in the same sense as *ded dpon* above.

⁶ Compare also PELLIOU, *Bull. de l'École française*, Vol. IV, p. 356, note 1.

a trace in the modern Tibetan word *ḡa-po* or *ḡa-bo*, designating a trade agent, especially applied to Tibetan women living with Chinese merchants and transacting their sales. This word bears no relation to the East-Tibetan word *ḡa-bo* ("friend"), as intimated by ROCKHILL,¹ which would not be applicable to women (*ḡa-mo*, "female friend"). Compare also *ts'oi ḡa-po* ("associé de commerce") in the *French Dictionary*, p. 982.

In chapter XXXVII of Schmidt's edition (text, p. 264; translation, p. 331) a king of Jambudvīpa is mentioned by the name Ba-si-li. A special interest is attached to this name, inasmuch as SCHIEFNER² was inclined to equalize it with Greek βασιλεύς, but recognized that this conclusion was somewhat rash. In the Chinese version³ the king is styled 波塞奇 Po-sai-ki (*Pwa-sik-ki; Sanskrit Vāsuki?), so that it is justifiable to regard the Tibetan transcription Ba-si-li as a modern error for Ba-si-ki. At all events, there is little chance for Schiefner's conjecture to survive. There are several other names which in the modern Tibetan versions appear more or less mutilated,—thus Leu-du-ḡi or Leu-du-ḡ'a, name of a Brahmana, identified by SCHIEFNER⁴ with Rūdrakṣa, the Chinese equivalent being Lao-tu-ḡ'a (*Lo [ro, ru]-dak-dḡa) 勞度差.⁵ Here we have a good example for the fact that, contrary to the opinion of M. Pelliot,⁶ 度 is indeed used in transcriptions with the phonetic value *dak*. The name Kyun-te⁷ has been identified by SCHIEFNER⁸ with Sanskrit

¹ *J. R. A. S.*, 1891, p. 123.

² *Ergänzungen*, p. 56.

³ Ch. 11, p. 24 b.

⁴ *Ergänzungen*, p. 4.

⁵ Ch. 1, p. 3 (edition of Nanking).

⁶ *T'oung Pao*, 1915, p. 24 (compare *ibid.*, p. 422).

⁷ SCHMIDT's translation, p. 168.

⁸ *Lebensbeschreibung*, p. 85; *Ergänzungen*, p. 83.

Cuṇḍa. This is not plausible, for phonetic reasons. Indeed, the Chinese version¹ offers Kiün-t'í (*K'üu-de) 均提, which would rather seem to go back to a Sanskrit prototype Kuṇḍi, Kuṇḍina. The name of the animal *kun-ta*,² not yet traced to its Sanskrit original, is written in the Chinese text³ *kü-t'ó* (*ku-nda) 鋸陀; hence we may presume that the primeval Tibetan transcription was likewise **kun-da*.

It is thus demonstrated that for a future edition of the *mDzai's blun* the Chinese text must be carefully utilized, in particular for the spelling of the proper names. Unfortunately the Chinese text, as we have it at present, has undergone some alterations, and, as Takakusu thinks, also corruptions. I do not concur, however, with this scholar in the opinion that "the Chinese original used by the Tibetan translator seems to have been pretty corrupt, and contained some miswritten characters peculiar to Chinese."⁴ Still less do I believe that his heading "transcriptions by the Tibetan translator done without understanding the original Chinese" is justified. What Takakusu here offers are for the greater part very satisfactory Tibetan transcriptions in harmony with ancient Chinese phonology. If the Tibetan has *Šin-rta č'en-po* ("Great Carriage") as the name of a king, where Chinese now has 摩訶羅檀那 (Sanskrit Mahāratna), the chances are that the Chinese version was also formerly based on the reading Mahāratha. The examples quoted have convinced me that the Tibetan transcriptions of the Buddhist translators were made according to a regular system fixing actual phonetic conditions

¹ Ch. 5, p. 13 b

² SCHMIDT's translation, p. 101.

³ Ch. 3, p. 1.

⁴ The examples cited by Takakusu in support of this verdict, in my opinion, are to be explained as misunderstandings or carelessness on the part of the later Tibetan copyists, but were not necessarily contained in the original edition.

of the Chinese language of the T^cang period; and I am therefore disposed to believe that an early Tibetan edition of the *mDzais blun*, collated with a correspondingly early Chinese version, would reveal a perfect coincidence between the two texts, which in the course of time have naturally become impaired. I hope these observations will prove also that a knowledge of Chinese is indispensable for a successful study of the Tibetan Buddhist works translated from that language.¹

Besides *mDzais blun*, several other works of the Kanjur have been translated from Chinese.² H. BECKH,³ in his useful catalogue of the Berlin manuscript Kanjur, has paid some attention to the Chinese titles given in Tibetan script, and has endeavored to restore them with the assistance of F. W. K. Müller and Hülle. As a matter of principle, Beckh is right in retaining these titles exactly in the form in which they are recorded in the Kanjur edition studied by him. However, we must not halt at that point; when these titles have been correctly restored to their Chinese model, it is always possible to emendate the Tibetan transcriptions, which have certainly been disfigured by a host of copyists. The most frequent and flagrant error committed by them, as already mentioned, is the wrong insertion of the separating dot (*ts^cey*). The interesting fact brought out by the Chinese titles in the Berlin Kanjur is that they belong to a more recent form of transcription than the corresponding titles as given in the Index edited by I. J. Schmidt and in the Analysis of Csoma.⁴ The Tibetan title in Sūtra, Vol. 32,

¹ As to Chinese words occurring in the *mDzais blun*, see Glossary, Nos. 218—220.

² LAUFER, *Dokumente*, I, pp. 51—52. Add Nos. 690, 872, 873.

³ *Handschriften-Verzeichnisse der Königl. Bibliothek zu Berlin*, Vol. XXIV: *Verzeichnis der tibetischen Handschriften*, Vol. I, p. VII.

This portion of my article was written in the summer of 1914, eight months before

No. 7, of the Berlin edition, *Tai p'ai pe na hwa pao din giu*, corresponds to 大方便佛報恩經 (BUNYIU NANJIO, No. 431).¹ Hence it follows that the Tibetan title is to be restored to *Tai p'ai pen hu* (= *hwa*) *pao iin (ien) giu*. Tibetan lacks the fricative *f*, and renders it by means of *p'* or *p'h* when the vowel following is *a*, and by *h* when the vowel is *u* (or *a*). Tibetan *hwa* (pronounced *hu*) transcribes Chinese *fu* 佛, and, accordingly, was recorded at a time when 佛 was no longer sounded *but*, but *fu*. In the Index of Schmidt (No. 351, p. 53) we find, in the same title, this word transcribed *p'ür*² and by Csoma *p'ur*. F. W. K. MÜLLER³ has invoked this transcription as proving the articulation of a final *r* in 佛. At the end of the Tibetan version of the Aparimita-āyurjñāna-mahayānasūtra from Tun-huan, a manuscript from the latter part of the ninth century, an edition of which is being prepared by me, we meet the formula *na-mo 'a-myi-da*⁴ *p'ur*, apparently transcribed from the Chinese 南無阿彌陀佛 ("salutation to Amitābha Buddha"); *p'ur*, accordingly, was in the T'ang period the Tibetan transcription of Chinese **but*, which may have been articulated also *fut*, *fur*.

Pelliot's study *Notes à propos d'un catalogue du Kanjur* appeared, or at least reached me in Chicago. Pelliot has dealt with the same titles and their transcription in Tibetan. I leave the text of my manuscript as it stood, omitting only such matters as have been sufficiently cleared up by Pelliot. Our studies supplement each other.

¹ The translation of the title of this Sūtra, as given by BECKH, is hardly correct. The phrase *t'abs-la mk'as-pa c'en-po* cannot be construed as depending upon *drin lam bsab-pa* ("great dexterity in the retribution of the friendliness of the Buddha"), but is an independent adverbialis, as shown also by the reading *c'en-pos* in the Berlin text and by the use of the punctuation-mark after *c'en-po* in the Narthai edition, and as is confirmed by the Chinese version. Dr. Beckh should not have failed to consult Nanjio's translations.

² Not *ph'ra*, as erroneously written by Beckh, and after him by Pelliot.

³ *Uigurica*, II, p. 94 (*A. P. A. W.*, 1911).

⁴ By *i* the inverted *i* is understood. Aparimita is written throughout in this manuscript *aparimīta*, where the vowel *i* certainly is short. M. Pelliot's generalization based on another manuscript, that the inverted *i* serves for the reproduction of Sanskrit *ī* (*TOMMY PUE*, 1916, p. 2), does not hold good. The case will be fully discussed in my forthcoming edition.

It is more likely that the initial Tibetan aspirate served for the reproduction of Chinese *f*, for Chinese *but* or *bur* could have been easily written and pronounced *bur* by the Tibetans. Index Schmidt and Csoma, which mirror the older stage of transcription, have *byan* (instead of *pen*) for 便, *pou* for 報, 'in for 恩, and *kyen* for 經.

In the Berlin copy the title of the Sūtra is accompanied by the words *ju* (followed by the letter *ŋ*) *p^ŋi ma ti yi*, which have defied the acumen of F. W. K. Müller and Hülle.¹ It is possible, however, to identify these words. In the Index of the Kanjur printed in the monastery of Čo-ne in Kau-su, the Tibetan title closes with the statement, *bam-po bdun-pa leu dgu-pa*, "containing seven sections and nine chapters." This exactly agrees with the statement of Nanjio, "seven fasciculi, nine chapters."² It is therefore obvious that *p^ŋi-ma* is to be read *p^ŋim*, as correctly written by Csoma and in the Index Schmidt,³ and corresponds to Chinese **p^ŋim* (*p^ŋin*) 品, and that *ju p^ŋim* is intended for 九品. The writing *sū* in Csoma and Schmidt, however, seems to be intended for *sū* 序. The words *ti yi* in the Berlin text answer to *dei³yir* in Csoma and Schmidt.⁴ Hence the conclusion is manifest that the Tibetan transcriptions represent Chinese 第一 **di yit* (*ti yi*), the Berlin copy reproducing the modern, the editions of Csoma and Schmidt the ancient, pronunciation of the T'ang period. Again, *dei* is an old transcription of 第, while *ti* of the Berlin copy represents the modern pronunciation.⁵

¹ On p. 192 this addition is indicated by an interrogation-mark.

² But Nanjio is not correct in stating, "least in Tibetan."

³ To which BECKH (p. 69 b, note 2) wrongly ascribes the reading *p^ŋiyim* (also adopted by Pelliot).

⁴ Beckh transcribes *ayir* in the one case, and *iyir* in the other, but the way of writing the word is identical in both texts (the letter 'a with subscribed *y* [*ya-b/ags*] and super-scripted *i*; this graphic combination is never found in the writing of Tibetan words; indeed, this is the only example of its occurrence known to me).

⁵ This distinction between two types of transcription is justly upheld also by Pelliot.

On p. 102 of Beckh's Catalogue we find the transcription of the *Suvarṇaprabhāsa* given thus: *tai č^ciñ gi ma gvañ miñ tsui šin wañ gyi*, to be corrected into *tai č^ciñ gim¹ gvañ miñ tsui šin wañ gyiñ*, transcribing 大乘金光明最勝王經. In the transcriptions, as given in the Index Schmidt and by Csoma, older forms are partially preserved: thus, *šin* and *šii* for 乘, *myau* for 明 (compare Japanese *myō*), where Csoma gives *med*.² *T'ai* in Schmidt for 最 is merely a slip for *tsui*, the vowel-sign *u* being dropped; Csoma's *juai* for this character is very curious; the *va zur* is the semi-vowel *ʒ* or *ʒ*, so that the Tibetan is to be read *jui*. The character 最 appears to have had an initial palatal souant in the T'ang period. Again, 大 is rendered by *dei* in Csoma, *tū* in Schmidt; 經 by *kyan* in the former, *kyin* in the latter.

The fact that the Chinese transcriptions of the Berlin copy of the Kanjur reflect recent phonetic conditions and have consequently been made anew, is clearly attested by the title *Pi du tsⁱ zii giñ* for 北斗七星經, compared with the older *Bī du tsⁱd zii giñ*,³ where *tsⁱd* corresponds to Chinese *tsⁱt* 七, while *tsⁱ* of the Berlin text presents the modern phonetic condition. As the Berlin Kanjur hails from the Lama temple Yun-ho-kuñ in Peking, it is very probable that it was also written there, and that the Chinese transcriptions were somehow adapted to the Peking pronuuciation.

The only point on which I dissent from Pelliot is that I am inclined to identify the *ju* of the Berlin Kanjur with 九 rather than, as proposed by him, with 序.

¹ *Gim* (= 金 *kim*), not *gin*, as Beckh prefers to restore.

² F. W. K. MÜLLER (*Uigurica*, I, p. 11, *A. P. A. W.*, 1909), who was the first to restore the Tibetan title on the basis of Csoma's reading, conjectures *miñ* for *med*; in view of the fact that *i* and *d* are constantly confounded in Tibetan writing, this is quite plausible, but it may not be necessary to change the vowel into *i*; an older transcription *mei* for 明 seems conceivable.

³ *T'oung Pao*, 1907, p. 392.

A chapter from the Lankavatāra-sūtra (Kanjur, Sūtra, Vol. 5, No. 3), according to the colophon, as given in the Index of Derge (fol. 124), has been translated from the Chinese¹ by Āśos-aḡrub of aGos,² in correspondence with a commentary written by the Chinese teacher rBen-hvi. The latter name is written in the Berlin version Wen-hvi, in the Index Schmidt Wan-hvi. This points to a Chinese Wên-hui. In the same manner as Pelliot,³ I have searched in vain for the Chinese personage with whom this name could be identified.

There are probably even more translations from the Chinese in the Kanjur than appear from several editions of it. The Berlin version and Index Schmidt have no colophon to the Atajñānasutra (Sūtra, Vol. 10, No. 3); while the Derge Index annotates, that, according to the Index of IDan-dkar of the ninth century,⁴ it was translated from the Chinese. This goes to show again that as early as the first part of the ninth century Chinese Buddhist works were rendered into Tibetan; and the Derge colophon of the next treatise, which is without a Sanskrit title and a translation from the Chinese, attests the fact that it was originally draughted in "old language."

The Saddharmarāja-sūtra (Sūtra, Vol. 22, No. 1) was likewise translated from the Chinese into "old language," as stated in the Index of Derge (fol. 131 b); but, as it was not transformed into new language, there were those who had their doubts about it. The Dharṃasamudra-sūtra (Sūtra, Vol. 22, No. 12), according to the Derge Index, was translated from the Chinese and edited in

¹ This fact is not contained in the colophon of the Berlin version (Becku, p. 30 b).

² See above, p. 415.

³ *Journal asiatique*, 1914, juillet-août, p. 129.

⁴ *Dokumente*, I, p. 51. This index is contained in the Tanjur, section Sutra, Vol. 126 (P. CORDIER, *Catalogue du fonds tibétain de la Bibl. Nat.*, troisième partie, p. 493).

new language.¹ Again, the Jinaputra-arthasiddhi-sūtra (Sūtra, Vol. 32, No. 5) was first translated from Chinese into "old language."²

In the Tanjur we find a Tibetan translation of the *Yin min zu chen li lun* 因明入正理論 (BUNYIU NANJIO, No. 1216). In the Palace edition the Chinese title is transcribed in Tibetan *g-yen min g-zai* (with following *-a*) *cin lii lun*.³ This attempt is modern; if ancient, the final *p* of 入 would appear in Tibetan. The writing *yen* with the prefix *g* indicates the high tone of 因, while the plain *yen* is deep-toned. The presence of the same prefix, however, in transcribing 入, is an anomaly, as the latter has the deep tone corresponding to initial Tibetan *z*; the vocalization also is doubtful (double *e* [ai?] with following *a*). The double *i* of *lii* seems to mark the rising tone of 理. The *Ta č'ön pai fa min mön lun* 大乘百法明門論 (BUNYIU NANJIO, No. 1213) is likewise translated in the Tanjur under the title *Tai č'in pai hā min mun lun*,⁴ again a transcription of recent times, as neither the initial palatal sonant *dʒ* of 乘, nor the final *k* of 百, is indicated. The letter *h* represents Chinese *f*, a sound which is lacking in Tibetan. Of other works in the Tanjur translated from Chinese, the titles are given only in Tibetan and Sanskrit.⁵

Besides the authorized works of the Canon, there are also uncanonical Buddhist writings translated from the Chinese into Tibetan. J. WEBER and G. HUTH⁶ have edited and translated a Sūtra with the Tibetan title *Sans-rgyas-kyi č'os gsal zin yans-pa snañ brgyad*

¹ The Tibetan title is given there in the form *ap'ags-pa č'os rgya mts'oi mdo*, which is preferable to that of the Berlin version (БЗСКН, p. 55 b).

² Tibetan: *siion rgya las agyur-bai brda rñin-pa-čan*.

³ P. CORDIER, *l. c.*, p. 435.

⁴ *Ibid.*, p. 386.

⁵ *Ibid.*, pp. 322 (No. 27), 352 (No. 71), 478 (No. 16).

⁶ *Das buddhistische Sūtra der "Acht Erscheinungen"* (Z. D. M. G., Vol. XLV, pp. 577—691)

čes bya-bai mdo, "Sūtra, called the eight detailed phenomena, explaining the dharma of Buddha." ¹ The Tibetan title is preceded by the words *rgya gar skad-du | pañ rkyan rkyen*. As Huth recognized the latter as Chinese, he corrected *rgya gar* ("India") into *rgya nag* ("China"), and restored the Tibetan transcription to *p'ân kiān hiñ*, ² which he says corresponds to Tibetan *yanis-pa, gsal, snan*. At the close of the treatise an additional note appears, from which it follows that Huth had meanwhile become doubtful of this supposition. He had encountered No. 463 in the "Verzeichnis" of Schmidt and Böhlingk, where a work with the Sanskrit title *Aryapadayānyadarta* (with the addition of an interrogation-mark) and the Tibetan title *ap'ags-pa gnam-sa snan brgyad čes bya-ba t'eg-pa č'en-poi mdo* ("Venerable Mahāyāna-sūtra, called the eight phenomena of heaven and earth") is listed. If this work should be identical with the above, Huth argued, the above title might be, after all, corrupted Sanskrit; and the work might have been translated from this language, not from Chinese. But he hastened to add that his former supposition is more probable, that the title was originally Chinese, that *rgya nag skad* ("Chinese language") was afterwards confounded with *rgya gar skad* ("language of India"), and that in this manner a scribe was induced to Sanskritize the Chinese title. This puzzle, however, is capable of solution. The Sūtra translated by Weber and Huth plainly reveals Chinese influence, which has been indicated by HUTH himself: ³ Heaven and Earth are opposed to each other, ⁴ and their harmonious union is alluded to, etc.

¹ A work of this title is contained in the Kanjur (Index ed. SCHMIDT, No. 1041), but whether it is identical with the Sūtra of Weber-Huth remains to be determined.

² The Chinese characters are not given, and I do not know what Chinese words Huth had in mind.

³ *L. c.*, p. 588.

⁴ The translation "des Himmels Höhe, der Erde Rechte" cannot be defended; neither

The work, therefore, is a translation from Chinese, and Huth had no reason to yield to another suggestion. The work pointed out by him in the "Verzeichniss" is well known to me from two Peking editions. It differs in contents from the Sūtra of Weber and Huth, but it is likewise a translation from the Chinese. This is well attested by the fact that the Eight Trigrams (*pa kua*) are enumerated in the course of the work, — and these could not have occurred in a Sanskrit production, — and again by the mention in the Tibetan title of heaven and earth (*gnam sa*), which savors of Chinese philosophy. In the edition before me, the book opens with the words, "in Chinese" (*rgya-nag skad-du*), followed by the title *ārya par yan gyad rta* or *ārya pa-ra yan gyad rta*. Now, this "Chinese" title is apparently identical with the alleged Sanskrit title of Schmidt and Böhlingk *āryapada-yanīyadarta*, as given above: we have only to substitute the letter *d* for *r*, both being so frequently confounded, and to insert a dot after *gya*, and the identity is established. What to make of this dog-Sanskrit may be left to the decision of the Sanskritists; for myself, I do not believe that it is Sanskrit at all, except the first word, *arya*. The rest is Tibetanized Chinese, maltreated by ignorant copyists. The resemblance of the two titles to the Chinese title of Huth is apparent. Huth's *yan* corresponds to our *pa-ra*, or *par*; that is, Chinese **pat* 八 ("eight"), which we meet with in the Tibetan translation of the title as *brgyud*. Consequently the next word *yan* (Huth's *rkyan*), perhaps 陽, must be the Chinese equivalent of Tibetan *snan*. Instead of *gyad* we have to read *gyan* (corresponding to Huth's *rkyen*), which is doubtless intended for Chinese *kin* 經 (see Glossary, No. 288). What Chinese word is

gyas nor *gyos* is the correct reading, but *yas* "below." Read, "Heaven above, and Earth below."

intended by *ṛta*, I do not know; in all probability, it is only an addition of the scribe, as the word 經 concludes the title.

In the Tibetan wooden tablets discovered by A. Stein in Turkistan, and, as it seems, chiefly referring to administrative matters, Chinese influence is likewise conspicuous, as far as can be judged at present from the stray notes published by A. H. FRANCKE. ¹ Chinese, surely, are the "many words the meaning of which is still quite uncertain." "To mention only one instance," Francke remarks, "we do not yet know how to explain the local names Bod, Tibet, and Li, Khotan, when they are connected with numerals, — *bod-gnyis*, *li-bzhi*, etc., — as is often the case." Here we certainly face Chinese names of measurements, *li* being a reproduction of Chinese *li* 里 ("league, mile"), while *bod* may represent *pu* (**bu*, *bo*) 步 ("pace, a land measure of five feet"), although the latter never had a final explosive dental. ² The word *šan* does not mean "uncle," ³ but is a transcription of Chinese *šan* 尚. ⁴ Terms of civility found in the documents appear to rest on imitation of Chinese style. If the writer speaks of himself as "I, the bad {one}" (*bdag ṅan-pa*), we are reminded of such Chinese phrases as *kua ṣon* 寡人, *yü* 愚, *pi* 敝, *tsien* 賤, and other 自稱之詞.

An interesting case in the history of Sino-Tibetan is mentioned by CHANDRA DAS. ⁵ The Chinese Buddhist priest, called in Tibetan Zan-t'an šau ši, ⁶ visited the monastery bSam-yas at the invitation

¹ *J. R. A. S.*, 1914, pp. 37—59.

² Such anomalies of transcription indeed occur: in *Pol. D.* (7, p. 33) we meet *bod* as equivalent of Chinese *pu* 部 ("section of a book"), which also is devoid of a final explosive dental.

³ *Ibid.*, p. 43.

⁴ *T'oung Pao*, 1914, p. 105.

⁵ *Sacred and Ornamental Characters of Tibet* (*J. A. S. B.*, Vol. LVII, 1888, p. 43).

⁶ The title *šan ši* appears to be a transcription of Chinese *šan ši* 禪師, "master of meditation" (*dhyāna*).

of King K^cri-sroñ ldeu-btsan, and was so much struck with the capacity of the Tibetan alphabet to express Chinese words that he undertook both to transliterate and to translate some Chinese works into Tibetan and certain Tibetan works into the Chinese language. In an inscription found at bSam-yas it is stated that this priest translated Chinese documents into Tibetan. On plate VI of the article of Das, a copy of this inscription in Chinese and Tibetan is reproduced. The Tibetan portion is clear and intelligible (see No. 285), but the Chinese characters are so disfigured that they defy reading.

Despite the preliminary notice of E. VON ZACH,¹ the Tibetan words hidden in a Chinese garb in the *Yüan K'i* require more profound study. The Sino-Tibetan inscription from the epoch of the Mongols, published and translated by CHAVANNES,² furnishes several interesting examples of Tibetan transcriptions of Chinese words.³

A glance over Tibetan historical works — as, for instance, *Hor c'os byun*, edited and translated by G. HUTH — is sufficient to convince one of the fact that this department of literature teems with transcriptions of Chinese names. Huth recognized these and their importance,⁴ but did not identify them in his translation, as he planned to issue a commentary to it in a separate volume; his premature death unfortunately prevented him from carrying this plan into effect. This is most regrettable, as many of these Chinese names are not self-evident, and in their strange Tibetan garb are

¹ *China Review*, Vol. XXIV, 1900, pp. 256—257.

² *T'oung Pao*, 1908, pp. 418—421, and plates 28—29.

³ See Glossary, Nos. 158, 214, 289, 306, 307. The Tibetan version is a literal rendering of the Chinese text. I hope to publish occasionally a complete transcription of the Tibetan version in comparison with the original.

⁴ *Transactions Ninth Int. Congress of Orientalists*, Vol. II, p. 640 (London, 1893).

not familiar to sinologues, while Tibetan scholars unacquainted with Chinese are not in a position to understand them. The Tibetan transcriptions follow throughout the modern Northern Mandarin, and have therefore no interest from the viewpoint of Chinese phonology. They are not made according to hard and fast rules, but appear arbitrary to a high degree. It is impossible to establish any certain phonetic rules according to which these transcriptions could be identified with their Chinese equivalents. The historical or geographical point of view is the only criterion that may guide us. Nobody, for instance, could say positively what is understood by "the great palace of the park of Yai ho," if this passage were culled from the context. Only the context¹ shows us that Yai ho is intended for Chinese Je ho 熱河 (Jehol).² Yo mi yvan³ seems to be the palace Yüan min yüan 圓明園. Such-like transcriptions seem to be based on inexact hearing rather than on a knowledge of Chinese writing. It would be impossible to recognize in Žuu šu wan⁴ the Emperor Šön-tsun 神宗 of the Ming dynasty but for the year 1616, under which he is mentioned.

A knowledge of Chinese is indispensable for the study of Tibetan numismatics and the exact reading of the legends on the Chinese-Tibetan coins. Mr. E. H. C. WALSH has issued a meritorious work under the title "The Coinage of Tibet,"⁵ in which he figures and

¹ HUTH, *B. M.*, Vol. II, p. 316.

² In other Tibetan works (for instance, in the Kanjur Index of Gö-ne) this name is transcribed ze-hor; in the stages of the journey of the Paṅ-č'en Lama dPal-ldan Ye-šes to Peking it is written Ye-hor (*J. A. S. B.*, 1882, p. 52); *hor* answers to 河兒.

³ HUTH, *ibid.*, p. 321.

⁴ *Ibid.*, p. 244. Huth adds, "mit der Regierungsbezeichnung Tai wan" Such a reign period does not exist, and that of the Emperor Šön-tsun was Wan-li. Tibetan *Tai wan* is transcription of Chinese *ta wan* 大王, and is merely a title.

⁵ *Memoirs A. S. B.*, Vol. II, 1907, pp. 11—23, with 2 plates.

describes (p. 21), among other coins, the Chinese silver *tan-ka*,¹ minted by the Chinese for circulation in Tibet. The first of these issues bears on the reverse the Tibetan legend: "Č'an-luñ gtsañ pau," translated by Mr. Walsh, "the pure money of Chhan Lung." Accordingly, he takes the word *gtsañ* for the adjective *gtsañ-ba*, "clean, pure;" but this is impossible. The Tibetan is merely a transcription of the Chinese legend on the obverse, which runs: 乾隆藏寶. This means, "Precious object (or treasure) of Tsañ (that is, Tibet) of the period K'ien-luñ." The Chinese word Tsañ is a transcription of Tibetan gTsañ, one of the provinces of central Tibet, — a name extended by the Chinese to the whole country. The word gTsañ on this coin, therefore, is not connected with the adjective *gtsañ-ba*.² The Tibetan writing Č'an-luñ for K'ien-luñ approaches the modern Č'ien-luñ, and was perhaps in vogue during the eighteenth century. aJigs-med nam-mk'a, who wrote in 1819, transcribed the name K'yān-luñ.³ The *nien-hao* Kia-k'ün 嘉慶 is written on the coins *bču-qč'in*,⁴ by aJigs-med nam-mk'a Čyā-č'in. Tao-kuan 道光 appears on the coins in the form rDau-kvon.⁵

¹ Regarding this word see Glossary, No. 98.

² The correct explanation of the Tibetan legend has already been given by A. T. DE LACOUPERIE, *The Silver Coinage of Tibet*, p. 351 (*Numismatic Chronicle*, 1881), — a treatise not consulted by Walsh.

³ HUTU, *B. M.*, Vol. II, p. 77. The addition of the subjoined letter *a* seems to be suggested by the high tone of 乾. In the *Pol. D.* (4, p. 16), this word is transcribed in Tibetan *k'yan*. Kiang-nan 江南 is written in Tibetan *kyan-nan* and *šan-nan* in the *Pol. D.*

⁴ Not *ač'en*, as written by Walsh; nor *ats'an*, as written by De Lacouperie, who, however, transcribed *htsin*.

⁵ The work of Mr. Walsh, by the way, is very interesting and has many merits. He is the first to give a correct explanation of the legend on the dGa-ldan *tan-ka*, which runs: "dGa-ldan p'o-bran p'yoga-las nram rgyal," and which is translated by Walsh, "The Ga-den Palace victorious on all sides," the Ga-den Palace being a designation for the seat of Government in Lhasa. Sanskritized, the legend would be "Tushita-prāsūda-dik-vijaya." The same interpretation as offered by Walsh was given me by a Tibetan Lama at Peking

Tibetans are very fond of providing utensils and vessels, particularly those for ritualistic purposes, with brief inscriptions alluding to the character of the object, or containing a sage dictum or sometimes even a date. In Peking and in several places of Mongolia the Chinese have developed special industries to meet the requirements of the Lama temples, and to cater to the taste of the Lamas and wealthy Mongols. Inscriptions on such pieces sometimes are wholly composed of Chinese sentences transcribed in Tibetan. A bronze wine-jar,¹ for example, of most elegant shape and execution, bears on the base the engraved legend "Ta č'en k'an žes nan so." I wonder what Tibetan scholars unfamiliar with Chinese would make of this! Of course, these words yield no sense if taken as Tibetan, but are a transcript of 大清康熙年作 *Ta Ts'in K'an-hi nien tso*, "Made in the years of the period K'an-hi (1662—1722) of the great Ts'in Dynasty."

In 1766 an interesting geographical dictionary in six languages (Chinese, Manchu, Mongol, Tibetan, Kalmuk, and Eastern Turki) was published by order of the Emperor K'ien-lun in eight volumes. It bears the title *K'in-tiü si yü t'un wén č'i* 欽定西域同文志, and contains 3111 geographical names of Central Asia, with their transcriptions in Chinese and Manchu and explanations of their meaning. Klaproth has made use of it in his commentary to

in 1901. DE LACOUPERIE (*l. c.*, p. 345) misunderstood it thoroughly by placing the words in the wrong order, "nam-rgyal dga-ldan p'o-bran p'yoga-las," and taking *nam-ryyal* (Sanskrit vijaya) as the 27th year of the Jovian cycle: he thus arrived at dating the coin in 1771 (instead of 1773, as he dated the first year of the first cycle in 1026). In fact, none of the coins bearing this legend is dated. The reading and explanation of this legend, as given by ROCKHILL (*Notes on the Ethnology of Tibet*, p. 718), are likewise erroneous. It may be added that the floral design in the centre on the reverse, taken by Rockhill to be a lotus, was explained by my Lama informant as a *dpag bsam ljon jin*, "wish-granting tree" (Sanskrit *kalpalata*).

¹ In the collections of Field Museum, Chicago (Cat. No. 122672).

Friar Francesco Orazio's *Breve notizia del regno del Thibet* (also *Description du Tubet*, p. 46). We are indebted to E. VON ZACH for the publication of the portion dealing with 'Tibet.'¹ The entire work, which was out of print long ago, would merit publication, important as it is not only for the geography, but also for the languages of Central Asia. The list of Tibetan names is carefully drawn up: the author who placed them on record was well informed and possessed a fairly good ear. As will be seen, his transcriptions of Tibetan words are made according to a uniform and logical system, and therefore allow of some inferences as to the state of Tibetan phonetics in the eighteenth century, which is confirmed by the transcriptions due to the Jesuit and Capuchin missionaries of the same period. His interpretation of the names appears to be based on local tradition, and generally inspires confidence, although misunderstandings have occasionally slipped in.² The following observations may be based on the transcriptions of Tibetan names:

All prefixes are silent, with the exception of two cases, *abroui* 阿博隆 (Manchu *aborui*) and *l'og* ("tower") 羅爵克 (Manchu *lojiyok*), in another passage, however, sounded *čok* 爵克. The transcription *yi* 伊 for *dbyi* ("lynx") deserves mention, as it agrees with the modern pronunciation.

Prefixes are articulated in composition in certain fixed terms:³

¹ *Lexicographische Beiträge*, Vol. I, pp. 83—98; Vol. III, pp. 108—135.

² For instance, *lyim* is not artemisia, but rhubarb; *dug roi la* is not "pass of the black ravine," but "poisonous ravine;" that is, ravine exhaling poisonous vapors. *Dui la* is not "shell pass," but simply "white pass" (white like a shell). In *nags-gi Dzam-bha* (Jambhala)-ri, *nags* hardly signifies "ox" (Zach: "god of oxen"), but rather "mountain where Jambhala dwells in the forest" *Wa-go*, that cannot be explained according to the Chinese author, apparently means "fox-head."

³ Compare *T'oung Pao*, 1914, pp. 86, 91, note; 1915, pp. 3, 420.

la-rgan (*lar-gan*), old pass, 拉爾干.

rgya-mts'o (*rgyam-ts'o*), sea, 佳木磓.

klu mts'o (*lun-ts'o*), sea of the Nāga, 魯木磓.

glo mč'in (*lom-č'in*), liver, 羅木沁.

rta rdzi (*tar-dzi*), herdsman tending horses, 達爾子.

rta rgod (*tar-god*), wild horse, 達爾果特.

mgo mt'o (*gom-t'o*), high peak, 郭木托.

a-bkra (*ab-ta*) 阿布扎 (Manchu *abja*).

mts'o-ldiñ (*ts'ol-diñ*, not *mts'o lo ldiñ*, as written twice by E. VON ZACH.

Vol. III, p. 134) 磓羅定.

But: *rdo bzaiñ* (*do zaiñ*) 多桑.

bu bču (*bu ču*) 布珠.

mi dpon (*mi pon*) 密本.

gyu mts'o (*gyu ts'o*) 裕磓.

Initial sonants and surds, aspirate and non-aspirate, with following *r* (*ra-btags*), appear to have undergone transformation into the cerebral series, with the sole exception of the sonant and surd labials:

bkra 扎 (*ču*).

k'ra 察 (*č'a*), *k'ri* 赤 (*č'i*), *kr'o* 綽 (*č'o*), *k'rus* 垂 (*č'ui*),

k'rob 綽布 (*č'o-pu*).

[Compare Desideri's transcriptions *trò* for *k'rod*, *tri* for *k'ri*.]

grub 珠布 (*ču-pu*), *grum* 珠木 (*ču-mu*), *gruñ* 莊 (*čuaiñ*),

gri 濟 (*č'i*), *agram* 扎木 (*ča-mu*), *mgron* and *sgron* 準

(*čuñ*). [Compare Desideri: *trang* for *graiñ*, *trubbà* for *grub-pa*,

drovà for *agro-ba*.]

p'ra 察 (*č'a*), *ap'raiñ* 昌 (*č'aiñ*).

dre 德 (*tö*, same character transcribes also *bde*), *dru* 珠 (*ču*),

druñ 中 (*čuñ*), *drin* 眞 (*čön*).

However: *brag* 巴喇克 (*pa-la-ku*, Manchu *barak*), *p'o-braiñ* 坡巴朗

(*p'o-pa-laiñ*, Manchu *po-baraiñ*), *abrog* 博羅克 (*po-lo-ko*).

[Compare Desideri: *breepä* for *abras-bu*.]

sprin 必林 (*pi-lin*).

Note also *srid* 錫里特 (*si-li-t'ö*, Manchu *sirit*).

The Chinese, not having cerebrals, resorted to palatals or dentals, respectively, to render the peculiar Tibetan sounds.¹

Final *g*, *b*, *d*, and *l* were sounded as follows: final *g* is indicated by 克 in *gog*, *l'ag-s*, *stag*, *nags*, *ug*; final *b* is expressed by 布 in *skyab-s*, *skyib-s*, *rgyab*, *bya-ma-leb* ("butterfly"); final *d* is represented by 特 in *bkod*, *skyid*, *brgyad*, *stod*, *t'od*, *dud*, *gnod*, *od*; final *l*, by 勒 in *dkyil*, *agul*, *rgyal*, *yul*. In this case we must not generalize, as it is always likely that geographical names retain in Tibet the old, stereotyped form of pronunciation.

Final *s* was silent and affected the stem-vowel, which was lengthened, or changed into an *i*-diphthong:

ryas (*yai*) 雅衣 (*ya-i*).

yas in *bsam-yas* (*yai*) 崖 (*yai*).

sius (*iai*) 愛 (*iai*).

dios (*ioi*) 衛 (*wei*, Manchu *oi*).

č'os (*č'oi*) 吹 (*č'ui*, Manchu *č'oi*).

dus (*dui*) 堆 (*tui*, Manchu *dui*).

adus (*dui*) 堆 (*tui*).

mdzes-po (*dzē-po*) 澤博 (*tsö-po*, Manchu *tseibo*).

smos (*mōi*) 梅.

¹ As regards initial *my*, Friar Francesco Orazio della Penna (on p. 73 of his *Breve notizia*) speaks of two sorts of fasts styled *gnunnè* and *gnonnè*, two Tibetan words not identified by his editor Klaproth. Italian *gn* denotes the palatal nasal *ñ*. Thus we have *ñun-ne* and *ñen-ne*. The former represents Tibetan *smyuñ gnas* (pronounced *ñui nā*), "the act of fasting;" the latter, Tibetan *bsñen gnas* (pronounced *ñen nā*) with the same meaning. The former corresponds to Sanskrit *uposhadha*; the latter, to Sanskrit *upavāsa* (FOUCAUX, *Lalitavistara*, Vol. II, p. 177). It is interesting to note from the transcription of *smyuñ* that *my* was articulated *ñ* in the beginning of the eighteenth century. Desideri transcribes the word *dmyal-ba* in the form *gnce-va*.

[Compare Desideri: *Sang-ghieè* for *Sais-rgyas*, *kiepi* for *skyes-po*, *soo* for *sos*, *tuu* for *bsdus*, *lee* for *las*, *nee* for *gnas*; Orazio della Penna: *c'ò* for *č'os*; *Alphabetum Tibetanum*: *re* for *ras*, *sre* for *sras*.]

The dictionary in four languages (Manchu, Tibetan, Mongol, and Chinese) published by order of the Emperor K'ien-lun yields a goodly number of Chinese loan-words in Tibetan, but no rational system of transcription is followed there. In the glossary the work is quoted as *Pol. D.* (Polyglot Dictionary). The Tibetan section of the *Hua i yi yü* has also been utilized.

I. J. SCHMIDT and O. BÖHLINGK¹ make mention of a List of Drugs (*smān sna ts'ogs-kyi miñ č'ad*) in Tibetan, Mongol and Chinese, printed in Chinese style. E. BRETSCHNEIDER,² in 1882, gave a fairly accurate description of a list of 365 drugs, in which their names in Tibetan and Chinese are enumerated, the pronunciation of the Chinese characters being added in Tibetan letters. Bretschneider makes a Peking firm, Wan I hao, responsible for this booklet; it may be that this firm in its own commercial interests has issued a special reprint of it under its signature. I have never seen this edition, but know that two editions — one in Chinese, the other in Tibetan book style — have left the press of the Tibetan printing establishment near the temple Sun ōu se, for copies of both are in my possession.³ The same I have seen in the British Museum and in the Royal Library of Berlin. The little work first attracted my attention when in 1900 my brother and myself co-operated in

¹ *Verzeichnis der tib. Handschriften und Holzdrucke im Asiatischen Museum*, Nos. 37—41, on p. 63.

² *Botanicon Sincicum*, pt. 1, p. 104.

³ They bear the title *Fan Han yao miñ* 番漢藥名, "Names of Drugs in Tibetan and Chinese;" in Tibetan: *smān miñ bod dai rgyai skad śan sbyar-ba*; in Mongol: *ām-nū nūrū tibūt kīlat khadamal*. The edition in Chinese style has ten folios, that in Tibetan style fourteen folios. The trilingual edition mentioned above is not known to me.

a study of Tibetan medicine. ¹ Afterwards I prepared a critical text of it, and succeeded also in identifying most of the technical terms, — a task considerably facilitated by the circumstance that I had occasion to make a collection of a great number of these drugs in 1901 at Peking. ² The list in question seemed to have some importance for Tibetan lexicography, as it contains many words not recorded in our current dictionaries; and others of hitherto dubious identification, with a Chinese gloss. In the latter respect, however, a somewhat critical attitude is necessary, as the Tibeto-Chinese equations do not always establish an absolute identity of the articles; in some cases they merely point to similarity, and in others are certainly wrong. ³

In 1908 appeared A. Pozdn'äyev's first volume of a translation from the Mongol of one of the Four Medical Tantra (*man-nag-gi rgyud*). ⁴ On pp. 247—301 of that work we find a list of 381 medicines, with their names in Tibetan and Mongol, the Chinese equivalents being added in the footnotes. The latter have been supplied by Pozdn'äyev from the Peking edition above mentioned; and he has fully recognized that the list of this edition and his text, aside from the surplus in the latter, are identical. Pozdn'äyev's publication happily relieved me from my own plan of publishing

¹ H. LAUFER, *Beiträge zur Kenntnis der tibetischen Medicin*, two parts (Berlin and Leipzig, 1900).

² This collection is in the American Museum of Natural History of New York.

³ He who has perused Bretschneider's notice carefully would expect this, for the firm Wan I hao itself cautions us against the belief that the Tibetan drugs named in this list are exactly the same as the original productions of Tibet bearing these names in that country; but their medical virtues are stated to be similar. A few examples may be given. Chinese *ma nao* 瑪瑙 ("agate") does not correspond to Tibetan *rdo sñin*, but to *mð'oi*. Tibetan *utpal* (Sanskrit *utpala*) has nothing to do with Chinese *shu k'nei-tse* 蜀葵子.

⁴ Учебникъ Тибетской медицины, Vol. I (St. Petersburg, 1908).

this glossary, although little has been done by him in the matter of identification. His work demonstrated at once the source for the above Tibeto-Chinese Pharmacopœia. The firm Wau I hao, therefore, is very far from being able to claim the authorship of the work. In fact, it is derived from this Tibeto-Mongol standard work on medicine; so that the Tibetan text appears as the original, while the Chinese translation is a subsequent addition, made in the interest of the Chinese druggists of Peking trading with Tibet and Mongolia, and with the Tibetans and Mongols living in the capital. In 1913 Dr. Hübotter presented us with a volume in which, on pp. 49—147, the list of drugs mentioned appears autographed by the author's hand. As a beginner, Dr. Hübotter has a just claim to attenuating circumstances; he is very enthusiastic about his subject; like many another beginner, he dates from himself a new era, and looks down with sublime contempt on everything accomplished by his predecessors. With all sympathy for the author's good intentions, however, it must be frankly said, in the interest of Tibetan studies, that he lacks the philological training necessary for such a task, and that his edition is uncritical and valueless. He is content to copy his text; and, moreover, he has copied it badly and carelessly.² The future lexicographer of Tibetan will thus be obliged to base his entries on the originals published in Peking, and may utilize to advantage also Pozdu'ävev's edition.³

¹ *Beiträge zur Kenntnis der chinesischen sowie der tibetisch-mongolischen Pharmakologie* (Berlin and Wien, 1913).

² A few examples may suffice: he writes *dak* (p. 51) instead of *dkar-po*, *ts'ir* (p. 53) for *ts'er*, *kais* (p. 54) for *gais*, *pa-bla* (p. 56) for *ba-bla*, *mtuü rtse dman-bo* (p. 59) for *mtuü rtse dmar-po*, *sug-smal* (p. 69) for *sug-smel*, *nla-ga* (p. 71) for *nā-ga*, *se-ra* (p. 72, twice) for *zi-ra*, *u-sus* (p. 73) for *u-su*, *star-bus* (ib.) for *star-bu*, etc.

³ Further, it must be denied that Dr. Hübotter, as announced on the title-page of his book, has furnished a useful, or even a new, contribution to Tibeto-Mongol pharmacology.

Neither Pozdn'äyev nor Hübötter has endeavored to ascertain the author and the date of the little work. The well-known Sanskrit formula of blessing, *maṅgalam kurvantu*, is taken by Hübötter for the name of the author. The editor of the work was mGon-po skyabs,¹ a teacher at the Tibetan School (*bod-kyi slob-grva*) of Peking, and well known to us from his participation in the translating of Chinese-Buddhist books from Chinese into Tibetan,² which were embodied in the Kanjur. He seems to have lived during the K^cañ-hi period, and probably still under the reign of Yun-č'en. The date

From a modern student of the materia medica of the Chinese, Tibetans, and Hindu, we justly demand that he have an actual knowledge of the drugs under discussion, and that he be at least acquainted with the abundant literature on these subjects disseminated by orientologists, botanists, and pharmacologists. A fundamental work like Hanbury's *Science Papers*, which would have furnished numerous correct identifications, is unknown to Dr. Hübötter. H. LAUFER's results are not utilized, but old errors are repeated; and matters perfectly known to every serious student are treated in an absurd manner, as though they were still mysteries to us. To quote only a few examples: Tibetan *gur-gum* (Chinese *紅花*) is identified with *Carthamus tinctorius* (an error refuted by the writer eighteen years ago); it is the saffron (*Crocus sativus*). Chinese *yan k'i si* 陽起石 (Tib. *rdo rgyus*) is left without determination, being provided with an interrogation-mark, although HANBURY (*l. c.*, p. 218) explains the Chinese term as "asbestos tremolite; silicate of lime and magnesia," and H. LAUFER (*l. c.*, p. 82, note 3) interprets the corresponding Tibetan term correctly as "asbestos." Dr. Hübötter is unable to explain Chinese *ör č'a* 兒茶 (see No. 107), with the Tibetan equivalent *rdo ja* (written by him *rdo rda*), which is catechu,—on the employment of which by Tibetan women so much has been written. Such a well-known affair as *dbyar rtsa dgyan abu* (see p. 445), a parasitic fungus growing on the pupa of a caterpillar (*Corlyceps sinensis*) is taken by Hübötter (p. 135) for "a kind of grass gathered in November and contracting in December, a grass luxuriously thriving in Tibet, notably in Kham." This absurdity is copied (with the error *dbyun* instead of *dgyan*) from the *Tibetan Dictionary* of Chandra Das; while the product is correctly described and well figured in ENGLER's *Natürliche Pflanzenfamilien* (Vol. I, pp. 368, 369), which Dr. Hübötter, as a physician, who was obliged to study natural sciences and pharmacology, certainly ought to know. Gypsum, musk, bear's gall, salt, salpêtre, natrium, etc., are classified by Hübötter among the remedies of the vegetable kingdom.

¹ Styled by BRETSCHNEIDER (*l. c.*) Goubedjan.

² LAUFER, *Dokumente*, I, p. 52, note. See SCHMIDT, *Index des Kanjur*, Nos. 446, 502. In the colophon of the latter, a brief Dhāraṇī, he is titled "the great translator of the present great Ts'ing dynasty."

of his edition is not stated in the colophon; but a re-edition of it, as it is there recorded, took place in 1734 ("twelfth year of Yun-čen, corresponding to a *wood tiger year*").¹

In this medical glossary the Chinese equivalents are transcribed in Tibetan, apparently with the intention of facilitating their reading for Tibetans. These transcriptions have little scientific interest, as they reflect the last stage in the development of Tibetan phonology; but we glean from them the one point, not unimportant for the history of the Tibetan language, that its present phonetic state existed at least as early as the beginning of the eighteenth century, — a fact, as stated previously, confirmed by the contemporaneous romanizations of Tibetan words on the part of the Catholic missionaries. Tibetan transcriptions in the above glossary, like *nas* for Chinese *nai* 奈, *gus* for Chinese *kui* 桂, *wes* for Chinese *wei* 魏, *kus* for Chinese *kui* 鬼, *šus* for *šui* 水, *hus* for *hui* 灰, and many others, show that they were made at a time when final *s* was silent, and affected the preceding vowel (compare p. 437). Very curious is the transcription *k^cy* for the Chinese palatal aspirate, as *k^cyii* for *ts^cii* 青, *k^cyi* for *č^ci* 起, and even *kyii* for *tsii* 精. The value of this glossary for our present purpose does not lie in these transcriptions, which are a mere curiosity, but in the Tibeto-Chinese concordances, which allow us to recognize Chinese loan-words in Tibetan, or Tibetan translations of Chinese terms. For instance, the equation Tibetan *ha-šig*—Chinese *hua šī(k)* 滑石 ("steatite") shows us that the Tibetan word is an old derivation from Chinese

¹ This portion of the colophon giving the date of the second edition is appended only to the print in Tibetan style; that in Chinese style lacks this part, and closes with the mention of mGon-po skyabs.

(No. 226), and that it does not mean "alabaster," as asserted by Jäschke and his copyists.¹

There is a similar pharmacological list containing the names of 179 drugs in Tibetan, Mongol, and Chinese, the Chinese characters being accompanied by a transcription in Manchu. The title of this work is *P^cu tsi tsa fañ* 普濟雜方 (in Tibetan: *Kun p^can sna ts^cogs sman sbyor žes bya ba*), "Various Prescriptions for the Healing of All Complaints." The book is printed on Chinese paper and in Chinese style, and makes a single volume of 66 leaves, ten of which are occupied by the vocabulary. The text is written in Mougol, and is quoted as *Mong. Pharm.*, while the aforementioned book is cited as *Tib. Pharm.*

Tibetan grammarians were conscious of the presence of Chinese elements in their language. The following curious passage in the *Li-šii gur k^cai* (fol. 23 a) relates to this matter, although it is the author's object not to discuss the Chinese loans in Tibetan, but to caution his readers against taking them for "ancient Tibetan," as had apparently been done:

"K^ca-čig-tu rgya-nag-gi skad brda rñiñ-du aḱ^crul-pa snañ-ste | blon-po-la aḡ^cyiñ sañ žes-pa dañ | dñul rdzus-ma-la ha-yañ-ba žes-pa dañ | rgya-la huñ la dañ | gžan yañ grum-rtse dañ | čog-ts^co dañ | lugs rgyu mts^can bsñad-pa-la | γyañ-rtse žes-pa dañ | p^ciñ č^cañ dañ gzan-gyi miñ-la ziu gzau dañ | čiñ p^ciñ dañ | 'as-man gur-gum sogs mañ-du snañ-la | rgyal-poi žal-la gser žal dañ | bañ č^cen la gser yig-pa dañ | gser skyems sogs kyañ rgya-nag-gi brdar snañ žiñ." "Some words which have been mistaken for 'old language' belong to the Chinese language, thus, *aḡ^cyiñ sañ* corresponding in meaning

¹ Neither does *t'od-le-kor* mean "alabaster," but it means likewise "steatite" (*hua šii Pol. D.*, 2, p. 61).

to *blon-po* (see No. 301), *ha-yan-ha* which means 'counterfeit money,'¹ *hwi la* which means 'seal' (No. 236); further, *grum-rtse*,² *čog-ta'o* (No. 225), and *g-yan-rtse* which signifies 'one propounding the foundation of customs' [in the Mongol rendering *yosun-i siltagan ügüläkü*], *p'in-č'an*, *zin gzan* which is the name for a *grun* (?), *čün-p'in*, ³*as-man* ³*gur-gum*, and many others. Chinese phrases, further, are *gser žal* ('gold face') which has the meaning 'face of the king,'⁴ *gser-yig-pa* ('bearer of a gold document')⁵ answering to *ban č'en* ('courier'), and *gser skyems* ('libation-offering'),⁶ and others."

¹ I do not know the Chinese prototype (*kia yin-tse* 假銀子?).

² *grum-rtse* (rendered *dabuskur* in the Mongol translation of the work), "rug, pillow. Jäschke has "*grum-tse*, thick woollen blanket," as occurring in *Mi-la-ras-pa*. I venture to doubt that this is a Chinese word.

³ In Persian *āsmān* آسمان means "heaven." Whether Tibetan *as-man* (otherwise unknown to me) is intended here as an independent word, or whether *as-man gur-gum* denotes a particular variety of saffron, I do not know. It is likewise difficult to guess what the three preceding words, apparently transcriptions of Chinese, are to represent.

⁴ Now it becomes intelligible also why in the document issued in favor of the Capuchins in 1724 the Emperor of China is styled *gser-gyi rgyal-po*, "golden king" (ΓΕΩΡΓΙ, *Alphabetum Tibetanum*, p. 651). Hence ΓΕΩΡΓΙ (p. 654) drew the erroneous inference that *gser* is the general Tibetan designation for China and the foundation for the Seres of the ancients. KLAPROTH (*Leichenstein*, p. 39), in 1811, noted Georgi's error, without explaining its source, however, and, curiously enough, asserted that "in Tibet the western part of the Chinese province of Shen-si is called Sær [in agreement with Georgi, wrongly written in Tibetan letters *gser* or *sar*], which means 'gold,' and that the same region was formerly designated *kin* ('gold') by the Chinese." In the *Hua i yi yü*, the term *gser m'ar* (JÄSCHKE: "imperial castle") is explained as the capital of China, Peking (京城); *gser deb* means "imperial genealogy" (ti hi 帝系), and *gser dan* "genealogical record of the imperial house" (yü tie 玉牒; *Pol. D.*, 3, p. 9); *gser lam*, "imperial road" (yü tao 御道; *ibid.*, 19, p. 48).

⁵ Tibetan *gser yig* translates terms like Chinese *kin p'ai* 金牌, *kin ts'c* 金册, *kin tsu tsu* 金書字 (regarding the last-named see PELLIOT, *Bull. de l'École française*, Vol. IV, p. 241, note 5). The term is applied also to the letters of great personages in Tibet; *gser-yig-pa* was formerly the title of the imperial envoy sent from Peking to Lhasa in order to summon the Dalai Lama to Peking and to accompany him on the journey. In the *Hua i yi yü* it is equalized with *hi č'ön* 使臣.

⁶ The literal meaning is "golden beverage." In our dictionaries various definitions of this term are given. JÄSCHKE interprets it as "beer together with grains of corn, as an offering to the gods for the success of an enterprise, a journey, etc." The *French*

While first transcriptions of Chinese words are enumerated, the last clause contains Sinicisms, renderings into Tibetan of Chinese phrases. Some Sinicisms in Tibetan seem to be of comparatively ancient date, as they occur in ancient translations from Sanskrit. The word *sgrog rus* ("collar-bone") has been traced in the Citralakṣhaṇa: it is a literal translation of Chinese *so-tse ku* 銷子骨 (literally, "chain-bones"); Tibetan *sgrog* meaning "chain," and *rus*, "bone."¹ Also *ngo nag* ("black-headed") as a designation for the common people, and *ñi og* (rendering of *t'ien hia* 天下), are old imitations of Chinese style.

Many hundreds of Sinicisms might be gathered from the *Pol. D.*, but most of these are artificial productions, and have hardly any real life in Tibetan literature. A few examples may suffice:

gas l̄cags zan, tapir (literally, "eater of split iron"); translation of Chinese *nie tie* 齧鐵 (†iron-eater), epithet of the tapir *mo* 貌.

č'u glah, buffalo; translation of *šwi niu* 水牛.

zi mig, cat's eye (precious stone); rendering of *mao tsin* 猫睛.

Manchu *simikte* is derived from the Tibetan word.

rdo snum, petroleum; rendering of *ši yu* 石油.

lha lag ("God's hand"), Citrus medica; based on *fu šou* 佛手.

dbyar rtsa dgun abu, a parasitic fungus growing on the pupa of a caterpillar (*Cordyceps sinensis*), a word-for-word translation of *hia ts'ao tuñ č'uñ* 夏草冬蟲, "plant in the summer, worm in the winter."²

Dictionary determines it as a "gold vase holding libations." According to CHANDUA DAS, it signifies wine offered to royalty, to the gods, and the Grand Lama. An instance of the application of the term is found in the account of the journey into Tibet of the Kalmuk Bāza-bakši (edition and translation of POZDN'AYEV, p. 192). According to Pozdn'ayev, the Tibetan term (in Mougol *ser-č'em*) refers to offerings made to protective local genii and for the greater part consisting of holy water and tea.

¹ Compare the writer's edition, p. 158.

² This appropriate name for that extraordinary combination of animal and vegetable

rta klad (literally, "horse brain"), agate. Reproduction of the popular etymology underlying *ma-nao* 瑪瑙. It is further Tibetanized into *rdo klad*. The real Tibetan word for agate is *č'oi* or *mč'oi*.

ryya-mts'o bzi, the four seas. Used in the same sense as *se hai* 四海.

rus byañ (*Pol. D.*, 19, p. 34), domino (literally, "bone cards"). Translation of Chinese *ku p'ai* 骨牌.

šog byañ (*ibid.*), playing-cards (literally, "paper cards"). Translation of Chinese *či p'ai* 紙牌.

Sometimes entire phrases may be rendered from Chinese into Tibetan. At the end of Tibetan works printed during the K'ien-lun era in the imperial palace we read the formula, *gon-ma č'en-po dguñ-lo k'ri p'rag k'ri p'rag-tu brtan-č'in*, "May the great emperor live ten thousand times ten thousand years!" (the well-known *wan sui wan wan sui* formula.) Tibetan *goi-ma* ("the upper one") is a Sincism based on *šan* 上; *goi sa* = *huan sai* 皇上 (*Pol. D.*, 3, p. 2, where *wan sui* is rendered by Tibetan *k'ri t'id*).

For the present it is sufficient for me to convince the students of Tibetan that, besides the Indian strata, there is also a strong Chinese sphere of influence, and that this Sino-Tibetan merits careful

indeed corresponds to the natural facts: in the dried specimens, as they are traded in commerce, the animal and vegetal portions are still discernible, the lower larger one with its rings and joints belonging to the caterpillar, the upper one closely joined to it being the fungus consisting of a spurred filament of a grayish-brown color. This product is found in considerable quantity in the district of Li-t'an. It is made up into small bundles, weighing each about $\frac{1}{4}$ ounce, bound with red thread. It is highly esteemed as a medicine throughout China, worth at Li-t'an 5 to 6 rupees a catty, the annual export to Ta-taien-lu amounting to about 2400 catties to the value of some 4000 Taels. See ROCKHILL, *J.R.A.S.*, 1891, p. 271, where *ngon bu* is to be corrected into *dgun abu*; G. A. STUART, *Chinese Materia Medica*, p. 126; *List of Chinese Medicines*, p. 442, No. 287 (Shanghai, 1889); A. ENGLER, *Die natürlichen Pflanzenfamilien*, Vol. 1, 1, pp. 368, 369, where also an illustration is given; PABENNIN, *Lettres édifiantes*, nouv. ed., Vol. XIX, pp. 300—303 (Paris, 1781); A. HOSIE, *Journey to the Eastern Frontier of Tibet*, p. 38 (Parliamentary Papers, China, No. 1, 1905).

attention. In the Glossary great stress has been laid upon the names of plants (in particular cultivated plants) and products of industry and commerce. In meeting with such names in Tibetan texts, it must always be ascertained whether we move in a really Tibetan, an Indo-Tibetan, or a Sino-Tibetan atmosphere; for, according to these different conditions, the name in question may assume a different signification. For instance, *wa* used with reference to Tibetan surroundings means the "fox;" in all translations from Sanskrit, however, it signifies the "jackal" (*çrgāla*).¹ Tibetan *sa-rdzi-ka* is a transcription of Sanskrit *sarjikā*, which designates soda (natron) and a soda-yielding plant. In Sino-Tibetan, however, *sa-rdzi-ka* is made to correspond to Chinese *wu mei* 烏梅 ("black-plums," that is, plums gathered half ripe and smoked), as shown by the *Mong. Pharm.* (No. 105). In the same work (No. 32) we find *sa-rtsi dkar* ("white of *sa-rtsi*") as equivalent of *kuan fōn* 官粉 ("fine facial powder"). Tibetan *'ut-pal* is Sanskrit *utpala*, the blue lotus (a species of *Nymphæa*). In Sino-Tibetan it serves for the designation of the Chinese chrysanthemum *kū* 菊 (*Pol. D.*, 29, p. 58). In Lahül, according to Jäschke, the name seems to be transferred to an indigenous plant (*Polemonium cæruleum*). Tibetan *rtsva padma* ("root lotus") renders Chinese *mu-tan* 牡丹 ("peony"). Tibetan *'a-bi-ša* transcribes Sanskrit *aviṣa* ("non-poisonous"), and, according to the medical work *Vaiḍūrya śnon-po*, is the designation of a medicinal herb (*pw: aviṣā*, *Curcuma zedoaria*). In Sino-Tibetan it answers to Chinese *po-ho* 薄荷 (*Mong. Pharm.*, No. 51), *Mentha arvensis*, furnishing peppermint;² but also to *pai-ho ken* 百合根

¹ HIRTH (*B. M.*) has always wrongly translated the word by "fox" in proverbial sayings based on the *Jātaka*.

² I do not know whether *'a-bi-ša* is thus used in literature. The term for the mint in the written language is *byi-rug-pa* (Jäschke says only that it is a medicinal plant).

(the root of a lily) and *šan-tou* 山荳 (*Cajanus indicus*). The term *zar-ma*, as correctly stated by Jäschke, means the seed of sesamum (*Sesamum orientale*) and this is confirmed by the Chinese equivalent (in *Pol. D.*) *hu ma* 胡麻. In the *Mahavyutpatti* (section 228), however, the word is equalized with Sanskrit *ataśi* (*Linum usitatissimum*). The Sino-Tibetan glossaries are of great value also in confirming the results yielded by Sanskrit-Tibetan lexicography. Tibetan *span spos* ("fragrant plant of the meadows"), according to the *Mahavyutpatti*, is the equivalent of Sanskrit *gandhamāmsi*, which led me in 1896 to explain it as the true spikenard. This conclusion is corroborated by the *Tib. Pharm.* (No. 221), where *span spos* is identified with Chinese *kan sui* 甘松, which indeed relates to spikenard.¹ Again, it is interesting to note that the Tibetan term, as observed by Jäschke, with reference to the Alpine regions of Tibet, designates an aromatic composite, *Waldheimia tridactylites*.

In many cases, the Tibetans have not adopted the Chinese names for things Chinese, but have coined new terms for them. Thus, porcelain is styled *kar-yol* ("white pottery"). The jujube-tree (*tsao* 棗, *Zizyphus vulgaris*) is termed *rgya šug* (*Pol. D.*, 28, p. 53), literally, "Chinese juniper." The so-called Chinese olive, *kan-lan* 橄欖 (*Canarium album*), is in Tibetan *rgya ,a-ru-ra* (*ibid.*), literally, "Chinese myrobalan." The term *rgya gul nag* ("black Guggula of China") refers to myrrh (Chinese *mu yao* 沒藥); and *rgya ts'va* ("Chinese salt"), to sal-ammoniac (Chinese *nao-ša* 礞砂).

corresponding to Chinese *po-ko*, Mongol *girakba*, Manchu *farsa* (*Pol. D.*, 27, p. 20). In Ladākh, peppermint is called *p'o-lo-tii*.

¹ G. A. STUART, *Chinese Materia Medica*, p. 278.

II. GLOSSARY.

1. *Indian Loan-Words.*

The number of Sanskrit loan-words in Tibetan is comparatively small. The tendency to translate Sanskrit terms literally into Tibetan or to convey to Tibetan words the meaning of Sanskrit words (*k'yui* = Sanskrit *garuḍa*; *klu* = Sanskrit *nāga*, etc.) is well known. Aside from the learned and purely literary transmission of Sanskrit terminology, we find in Tibetan, partially even in the colloquial language, a comparatively large number of Indian words, which are not derived from Sanskrit, but from the vernaculars, the Prakrits. It is even possible that these loans, at least some of them, were made long before the introduction of Buddhism into Tibet (that is, prior to the age of Tibetan literature) in consequence of the contact of Tibetan with Indian tribes. An exact chronology of these words cannot be established at present. Many of them, in their Tibetan forms, may be apt to enlighten the history and phonology of Indian vernaculars, but they have not yet been studied from this point of view; in fact, they have been neglected by the students of Prākrit. It is hoped that the following list will induce them to pay some attention to this subject. The Tibetan grammarians are perfectly conscious of the fact that these words are not Sanskrit, and style them Apabhraṃṣa (*zur ḥag*; see *S. Bayr. A. W.*, 1898, p. 593). Some go so far as to teach that any deviations from standard Sanskrit must be regarded as Apabhraṃṣa; while others, like the author of the *Li-sii gur k'avi*, discriminate between genuine Apabhraṃṣa words (that is, words derived directly from Indian vernaculars) and Sanskrit words which, for some reason or other, were corrupted by the Tibetans (see Nos. 78—80, 94—97).

The following forty-four words are enumerated and explained in the *Li-xii gur k'ani* as Apabhrañça:

1. 'ap (Sanskrit *ap*), water, *č'u* being given as Tibetan synonyme (*skad dod*).
2. *sto-ka* (Sanskrit, "a drop, a little, a trifle"), explained as *mar č'un* ("a drop of oil"), and synonymous with *č'un-nu* ("a little").
3. *kol-ma* (Sanskrit?), designation for "warm food" (*gzan dron*, JÄSCHKE: *zan dron*).
4. *kulmā-sha* (Sanskrit). Not explained. According to *pa*. "sour juice of fruits."
5. *gar-ba* (Sanskrit *garva*), synonyme of *na rgyal* ("pride").
6. *u-to-pa* (Sanskrit *uṭṭapa*), swelling, abundance, pride.
7. *gin-pa*, servant; *gin p'o*, male servant; *gin mo*, maid. From Sanskrit *kiñkara*, servant, slave (translated into Tibetan: *či bgyi-ste*); Tibetan synonymes are *las byan*, *p'o-ña*, and *gyog*.
8. *t'ul č'e-ba*, gross, thick, coarse. From Sanskrit *sthūla*. Tibetan synonymes are *sbom-po*, *rags-pa*, *č'e-ba*.
9. *rdul*, dust. From Sanskrit *dhūli*. I do not believe in this derivation, but am disposed to think that *rdul* is a Tibetan word.
10. *ap'al-ku* (CSOMA: *ap'al-ga*, "notch, incision"). From Sanskrit *phalka* (*sic*, written *k* with superscribed *l*); that is, *phalaka* ("board for writing or painting upon"). SCHIEFNER (*Mélanges asiatiques*, Vol. I, p. 337) looked in vain for a Sanskrit word *phalka*.
11. *kalpa* or *bs-kal-pa*, "have become 'Tibetan words'" (*bod-kyi brdar mdzad-pa dan*). From Sanskrit *kalpa* (Moungol *kalab*, Uigur *kalb*). The double prefix added in Tibetan may be explained on the assumption that *kalpa*, on account of the ending *pa*, was taken by the Tibetans for a verb, to which

the transitive prefix *s-* and the sign of the past tense *b-* were added, the kalpa being regarded as a period back in the past. This word certainly is not Apabhraṃṣa, but is plain Sanskrit.

12. *Legs smin ka-ra*, said to be Apabhraṃṣa for Sanskrit Lakṣmīkara, which is rendered into Tibetan as *dpal mdzad-de*. In this case *legs smin* ("well ripe") is a Tibetan popular adjustment based on Sanskrit *lakṣmī*.
13. *pe-ña-ba*, pronounced also *pen-da-ha* (not in our dictionaries), alms. From Sanskrit *piṇḍa*, "alms" (*bsod sñom*).
14. *dpe-har*, *dpe-dkar*, monastery (*gtsug lag k'ari*). From Sanskrit *vihara*. We find also the spellings *be-har*, *bi-har*, *be-kar*, *pe-kar*, *pe-dkar*, and *pe-ha-ra*, in the sense of a "tutelary deity of temples and monasteries" (*T'oung Pao*, 1908, p. 30); *dpe-dkar* is a thoroughly Tibetanized mode of writing with prefixes, conveying the meaning "white example." The Sanskrit word appears to have had various modifications in the vernaculars at the time when Buddhism was diffused over Central Asia. In Uigur the word is met in the form *bakar* or *vaxar* (F. W. K. MÜLLER, *Uigurica*, p. 47), and in Mongol as *bukar* (only in the written language). See also GAUTHIOT, *Journ. as.*, 1911, II, p. 53.
15. *anda-rñil* (thus in two prints of *Li-šii* and in *Citralakṣhaṇa*, 959; also *andra-rñil* and *-sñil*), sapphire. From Sanskrit *indranīla* (literally rendered into Tibetan *dbañ sñon-te*). The Tibetan form allows us to conjecture an Apabhraṃṣa **andañil*. According to *Tib. Pharm.* (No. 18), the Chinese equivalent is *yii ts'in* 映青.
16. *A-mi-de-wa*. From Sanskrit Amitābha (Tibetan *Od dpag med*).
17. *Arya-pa-lo*. From Sanskrit *Aryāvalokita* (written *ote*). Both this and the preceding word seem to have been adopted literally from Indian vernaculars.

18. *po-ti*, book, volume. From Sanskrit *pusta*, *pustaka*. Other Tibetan forms are *pu-sti*, *po-sti*, *pu-ti*, *pu-di*, *po-ta*, and even *pot*, *bot* (HUTH, *B. M.*, Vol. II, pp. 335, 357). Also the prototype *pustaka* is employed in Tibetan (see, for instance, *Avadānakalpalatā*, prose ed., p. 383, line 7). According to R. GAUTHIOT (*Mém. soc. de linguistique*, Vol. XIX, 1915, p. 130), the Sanskrit word should be derived from Iranian *pōst* ("skin"). In the form *po-ti*, it has penetrated into the popular language, where it appears in the names of several mountain-passes (*po-ti la*, pass shaped like a book, transcribed in Chinese *po-ti* 博氏 and *po-te* 博德; see E. VON ZACH, *Lexic. Beiträge*, Vol. III, pp. 118, 121). In the colloquial language of Sikkim it is used in the sense of "small volumes" (*French Dict.*, p. 592).
19. *abo-de-tsi* (not in our dictionaries). From Sanskrit *putrajīva*, *Nageia putranjiva roxburghii*.¹ The name is literally rendered into Tibetan as *bui ats'o-ba* ("life of the son"): the nuts of this large and fine tree are strung by parents and placed around the necks of their children to keep them in good health (W. ROXBURGH, *Flora Indica*, p. 716).
20. *ru-rag-ša* (JÄSCHKE and DAS: *ru-rakša*; *French Dict.*: *ru-rak-šu*), a nut (not "a sort of berry") used for rosaries (see L. A. WADDELL, *Lamaic Rosaries*, *J.A.S.B.*, Vol. LXI, 1892, p. 29). From Sanskrit *rudrāksha* (Tibetan rendering: *drag-poi mig*), *Elæocarpus ganitrus*, and other species of *E.*
21. *se-ādur-ra* (indicating an articulation *sendura*), written also *sindhura*, minium, vermilion. From Sanskrit *sindūra*, Tibetan

¹ In Boehtlingk's *Sanskrit Dictionary* the designation of the genus, *Nageia*, has been omitted by some oversight. Schiefner's *Nagelia* (*Mélanges asiatiques*, Vol. I, p. 337) is a misprint.

li k^{ri} (below, p. 456) being given as a synonyme; Apabhraṃṣa *sindūru*; Hindī *sēdūr*, Gujarātī *sīdūr*.

22. *gur-kum*, saffron, alleged to be Apabhraṃṣa for Sanskrit *kuṅkuma* (written *guṅkuma*). This, in my opinion, is wrong (see No. 109).
23. *bug-pa*, hole, alleged to be derived from Sanskrit *bhūka* ("hole"). This derivation, however, seems very doubtful, as we have such Tibetan variants as *bu-ga*, *bu-gu*, *bi-gai*, *bi-yai*, *biy*, which are apparently connected with the verb *u-big-pa* ("to pierce, to bore"). There is no example known where the Tibetan language would form a verb from a Sanskrit or Prākṛit noun.
24. *bram-ze*, a Brāhmaṇa. From Sanskrit *brāhmaṇa*, correctly explained as being derived from Brahma (Tibetan *Ts^{ans}-pa*).
25. *gu-gul*, a gum resin from *Boswellia serrata*. From Sanskrit *guggula* (*T^{oung} Pao*, 1914, p. 6).
26. *ḡbum-pa*, *ḡbi-ḡbi* (that is, *bimbi*), disk, globe, round parts of the body; mirror, image. From Sanskrit *bimba*, explained as *sku gzugs* ("body, form"). The form *ḡbi-ḡbi* is apparently based on Sanskrit *bimbī*.
27. *ḡgan-ḡji-ra* (that is, phonetically, *ganjira*). From Sanskrit *gañjira*, explained as *mdzod ldan-te* ("having a treasury"); hence derivation from *gañja* ("treasury").
28. *ba-dan*, flag, banner. From Sanskrit *patāka*. The equation occurs also in the *Mahāvvyutpatti*.
29. *ts^a-ts^a*, sacred image of clay, clay tablet. From an alleged Sanskrit (but rather Prākṛit) *sāccha*, explained as *dam-pai gzugs brñan*. Other spellings are *ts^a-tsa*, *sa-ts^a*, *sā-ts^a*, *sa-tsa*; in the respectful language *p^{yag} ts^a* (*POZDN'ĀYEV*, *Journey of Būzabakši*, in Russian, p. 239). The Sanskrit prototype seems to be *sāncaka* ("mould").

30. *mu-tig*, pearl. From Sanskrit *muktā*, *muktikā*, explained as *grol-ba-ñan* ("being released"). Hindustani *mōti* موتی, from Apabhraṃṣa *mottiyau*. The final guttural explosive of *mu-tig* is still articulated: Chinese transcription of the eighteenth century *mu-ti-k'u* 木底克 (E. von ZACH, *Lexic. Beiträge*, Vol. III, p. 133). The Tibetan form might allow us to presuppose an Apabhraṃṣa form **muktik*, *mutik*.
31. *ge-sar*, hair, mane. From Sanskrit *kesara*, explained as *ral-ba* ("long hair, mane").
32. *bya-na* (also *bya-nu-ma*, *bya-nan-ja*), sauce, condiment, vegetables eaten with another dish. From Sanskrit *vyāñjana*, explained as *ts'od-ma am zas spags-ma* ("vegetables or ingredients, pickles with food").
33. *sbe-ka*, frog. From Sanskrit *bheka* (in the prints before me written *bhaka*, and thus transcribed also in the Mongol version).
34. *dig-pa* (Chandra Das gives the meaning "to stammer"). From Sanskrit *dhik*, interjection expressive of lamentation, discontent, reproach, or contempt (Tibetan synonyme: *nan-pa*).
35. *Za-hor*, from Sanskrit *Sahora*, explained as the name of a royal family of India (*rgya-gar-gyi rgyal rigs yan gar ba ñig-gi min*).
36. *ka-to-ra*, vessel. From Sanskrit *kaṭora*. The word *snod* is given as synonyme.
37. *la-mo* and *la-gor*, swift, quick. From Sanskrit *laghu* (written *la-hu*). Synonymes are *yan-ba* and *myur-ba*.
38. *ma-he*, buffalo. From Sanskrit *mahirsha*, explained as *sar ñal* ("to couch on the earth"). The word intended is Sanskrit *mahisha*. Sindhī *mēhi*.
39. *udzab*, to murmur prayers. From Sanskrit *japa*, *japti* (synonyme: *bzlas-pa*). The author adds that the conception of the word

as a designation for mantra is erroneous (*adzab ces siags-kyi miñ-du ak^crul-pa dai*). Hence Jäschke's "magic sentence" is to be rectified.

40. *tri-ka*, edge of a well. From Sanskrit *triku* (*pu.*: "a certain contrivance in a well"), explained as *ri-mo us rim* and *k^cron-pai mu k^cyud*.
41. *go-ra*, ball, globe, round. From Sanskrit *gola* (synonyme: *zlum-po*).
42. *zi-k^cyim*, red gold melted together with many precious stones. From Sanskrit *jhaikshim* (?).
43. *gre-ba*, neck, alleged to be Apabhrañça for Sanskrit *grīvā*; in all probability, however, *gre-ba* is a real Tibetan word, derived from the same root as underlies *m-grin-pa* ("neck, throat").
44. *tal-tsam*, lamp. From *talala* (Sanskrit?), *sgron-me* being added as a synonyme.

In fact, the number of these words, especially those designating plants and vegetable products, is far more extensive, as shown by the following list.

45. *ša-ka-ra* and *ka-ra*, sugar. From Sanskrit *çarkarā* (Persian *šakar*, Mongol *šiker*, *šikir*). Tibetan *k^ca-ra*, sugar. From Prākṛit *sakkharā*, Mahārāshṭri *sūkhara*. Tibetan *li ka-ra* or *li k^ca-ra*, a sort of sugar (DAS: a medicinal sugar), sugar from Khotan (Li).¹

¹ In 1881 CHANDRA DAS (*J.A.S.B.*, Vol. L, p. 223) asserted that Li-yul is identified with Nepal by the translators of the Kanjur, and that "he has been able to ascertain that the ancient name of Nepal in Tibetan was Li-yul, while Palpo is the modern name for the monastery of Palpa." In his edition of *Pag Sam Jon Zang* (pt. II, p. x, Calcutta, 1908) we read that Nepal was called Bal-po-Li, because during the Buddhist period there was in Nepal a considerable manufacture of bell-metal called *li* in Tibetan, and that this Li-yul (alleged to mean "country of bell-metal") was different from the Chinese Li-yul which was Kasbgar (sic! read "Khotan"), that is, bell-metal land. There is, however, no

46. *bu-ram*, in composition *bur* (West-Tibetan *gu-ram*, Sikkim *kuram*), raw sugar, treacle, molasses. Jäschke refers only to Hindi *gur*; also Chandra Das gives no Sanskrit equivalent. The foundation, of course, is Sanskrit *gūḍa*, *gulu* (Gypsy *gūlo*, *gūr*); according to *Za-ma-tog* it appears in Tibetan also as *go-la* (equivalent of *hvags*). The word *bu-ram* with the Sanskrit equivalent *gūḍa* is listed in the *Mahāvvyutpatti*; we find there also Tibetan *bur šiñ*, answering to Sanskrit *ikṣu*.
47. *k'an-da*, *k'a-aḍa*, *k'aṅ-ḍa*, treacle, molasses, candy. From Sanskrit *khāṇḍa*. *k'aṅḍa* (*Pol. D.*, 27, p. 48), mixed-fruit cakes; answering in meaning to Chinese *tsa kuo kao* 雜果糕, Mongol *ūrādāsū* (*ūrū*, "fruit"), Manchu *tebse*. Tibetan *sran-mai k'aṅḍa* (*ibid.*, p. 21) even serves for the rendering of Chinese *ton-fu* 豆腐, bean-curd.
48. *k'a-zur*, wild date. From Sanskrit *khajūra* (Phoenix *sylvestris*); Hindustānī *khajūr* کھجور, Hindi *khajūra*; Newārī *khajur*.

Tibetan tradition explaining the word *li* in this connection as "bell-metal," and the misconception of Chandra Das seems to be wholly based on a misunderstanding of the text in *dPag bsam ljon bzau* (pt. II, p. 170, line 26), where the combination *bal-po li* indeed occurs; yet *li* cannot be connected with the preceding *bal-po*, but only with the following *mi'od-rtan*: the question is of a "brass (*li*) Caitya that was restored in Nepal." — It is interesting to note that many Tibetan products are named for the countries from which they hailed, or were at least supposed to come. It is very probable that the word *li* preceding the designations of several products, as already supposed by Schiefner in 1849 (*Lebensbeschreibung*, p. 97), relates to their origin from Khotan. As they are not listed in our Tibetan dictionaries, they may be pointed out here. Aside from the above *li k'a-ra*, we have *li k'ri* (Mongol *likri*, pronounced *li'i*; Sanskrit *sindura*; Chinese *huai tan* 黃丹), "red lead, minium, vermilion;" *li ji* (Mongol *lisi*, *li'i*; Sanskrit *lavanga*), "cloves" (*Myristica moschata*); *li doi-ra* (Sanskrit *nāgara*), a drug (*Cyperus pertenuis*); and *li ga-dur*, identified with Sanskrit *kufannata* (*Calosanthos indica* and *Cyperus rotundus*) and *bhulṛiṅa* (*Andropogon schoenanthus* and name of a fragrant grass), while the plain *ga-dur* is identified (in *Tib. Pharm.*) with Chinese *tsau hui* 蚤休 (*Paris polyphylla*). Similar compounds are formed with *Mon*, that refers to the Himalayan tribes south of Tibet and in a wider sense to northern India, with *Bal* ("Nepal") and *rGya* ("China"); see above, pp. 409 and 448.

49. *ga-bur*, camphor. From Sanskrit *karpūra*.
50. *go-bye-la* (*Mong. Pharm.*, No. 65), *Strychnos nux-vomica* (Jäschke has *go-byi-la* as name of a poisonous medicinal fruit). From Sanskrit *kupīlu* (not yet mentioned by Suçruta or in the Bower Manuscript); Flückiger and Haubury (*Pharmacographia*, p. 429) observe that we have no evidence that it was used in India at an early period, and that Garcia da Orta is entirely silent as to *nux vomica*. Mongol *gojila* (KOVALEVSKI, p. 2557). The corresponding Chinese term is *fan mu pie* 番木鱉 (G. A. STUART, *Chinese Materia Medica*, p. 425). The corresponding Arabic term is *juz* ("nut") *el-kei* جوز القي; other Arabic names are *izaragi*, *khanek-ul-kella*; Persian *fulūzmāhi*, *izarakī*, *kučla*.
51. *go-yu* (Fromowa *ga-ye*, *go-he*; Sikkim *go-he*), areca-palm, areca-nut (*Pol. D.*, 19, p. 18 = Chinese *pin-lai* 檳榔), *Areca catechu*. From Sanskrit *guvāka* (WATT gives *gubak* as Sanskrit word); Bengālī *gavu*, *guā*: Assamese *guā* (*Gua-hāti*, capital of Assam, is said to derive therefrom its name: S. ENDLE, *The Kachāris*, p. 26); Kachāri *goi*. Mongol *guyuk* (*Pol. D.* and KOVALEVSKI, p. 2622); Manchu *niyanicun*; Turki *šipara*. The common Sanskrit word for the areca-nut is *pugaphala*. A large number of Sanskrit synonymes for the tree are enumerated by RÖDIGER and POTT, *Kurdische Studien* (*Z. K. d. Morg.*, Vol. VII, p. 92).
52. *be-ta* (*Pol. D.*, 28, p. 56; also in CHANDRA DAS) coco-nut (*Cocos nucifera*). It answers in meaning to Chinese *ye-tse* 椰子, Mongol *beta*, Manchu *xotoči*, apparently from *xoto*, "skull," an artificial formation based on the Chinese synonyme *Yüe wan t'ou* 越王頭 (see Bretschneider, *Chinese Recorder*, Vol. III, 1870, p. 244). The origin of the Tibetan name is obscure (*nārikela* is the common Sanskrit word for "coco-nut"). According

to Jäschke, Be-ta is a geographical name, probably referring to the Himālaya and occurring in the *Pad-ma t'ai yig* (see also GRÜNWEDEL, *Z.D.M.G.*, Vol. LII, 1898, p. 455). According to Chandra Das, Be-ta is the Tibetan designation of Vidarbha, Bedar, the birth-place of Nāgārjuna.

53. *pi-spal*, *Ficus religiosa*. From Sanskrit *pippala*.
54. *p'o-ba-ri*, *p'o-ba-ris*, black pepper (*Piper nigrum*). Evidently derived from some Indian vernacular, but the origin of the word is still obscure. The corresponding Chinese term is *hu tsiao* 胡椒. The *Tib. Pharm.* (No. 89) gives as Tibetan equivalent for the latter *na-li-šam*.
55. *pi-pi-liñ*, *pi-liñ*, *Piper longum*. From Sanskrit *pippalī*. Chinese **pit-pal* 萹荜.
56. *ša-ka-ma*, saffron, *Crocus sativus* (especially *k'a-č'e ša-ka-ma*, saffron from Kashmir; according to ROCKHILL, *Land of the Lamas*, p. 110, a variety of saffron different from *kur-kum*); *ša-ka-ma spos*, saffron-colored incense (ROCKHILL, *J.R.A.S.*, 1891, p. 274). This word is in general colloquial use, together with *dri b:ai* ("of good fragrance," synonyme for saffron), and is well known to the Peking traders in Tibetan drugs as the Tibetan equivalent of *hwi hua* 紅花 ("red flower,"—saffron). Although Tibetan *ša-ka-ma* would seemingly point to a Sanskrit form *śakama*, such a Sanskrit word for "saffron" has not yet been traced. Yet we possess a Chinese parallel in *č'a-kü-mo* (**ja-ku(gu)-ma*) 茶矩磨, given as the Sanskrit name for "saffron" in the *Fan yi min i tsi* and *Pên ts'ao kai mu*. PÉLLIOT (*Bull. de l'Ecole française*, Vol. III, p. 270, note 4) thinks that this transcription defies restoration, and proposes to emendate *kü* 菊 in the place of *č'a*, in order to arrive at Sanskrit *kumkuma*.

This hypothesis is hardly necessary. It is not difficult to recognize in the Chinese transcription Sanskrit *jāguda*, which is the name of a country and a designation for "saffron." S. Lévi has recently confirmed the identification, first proposed by Watters, of the country *Jāguda*, with the *Tsao-kü-t'ca* mentioned by Hūan Tsan, where, according to the pilgrim, the soil is favorable to the growth of saffron (*Journal asiatique*, 1915, janv.-févr., pp. 83—85). The Chinese transcription certainly leads to a Sanskrit form **jaguma*, in agreement with the termination *-ma* of Tibetan *ša-ka-ma*. This formation was perhaps suggested by the ending of *kuikuma*, **kurkuma* (see No. 109). Tibetan *ša-ka-ma*, in my opinion, is an Apabhraṃṣa word derived from or related to Sanskrit **jaguma*.

57. *bā-hi-ka*, saffron. From Sanskrit *vāhlika* (Amarakosha, ed. Bibl. Ind., p. 170, stanza 123), "originating from Balkh" (Ch. Joret, *Les plantes dans l'antiquité*, Vol. II, *L'Iran et l'Inde*, p. 272). From the text of the *Mahā-mayūri*, edited by S. Lévi, it appears that *vāhlika* is identical with *Pahlava* (Tibetan *Pa-hla-ba*), but I do not know that *vāhlika*, as stated by S. Lévi (*Journal asiatique*, 1915, janv.-févr., pp. 56, 83), is a synonyme of *hingu* ("asafoetida"). The Prākṛit form is *bahaliya* (Boyer, *Journal asiatique*, 1915, mars-avril, p. 288).
58. *šii-kun*, asafoetida. See *T'oung Pao*, 1915, p. 274. Also *hii* (abbreviated from Sanskrit *hingu*) is in use.
59. *si-la*, incense. From Sanskrit *sillakī*. *Li-šii gur k'ai* gives the Tibetan word *sihla*, and states that it is identical in meaning with *turushka*; *sihla* is intended for *silha*, *silhaki* ("incense-tree," *Liquidambar orientale*).
60. *sug-mel*, *sug-rmel*, *sug-smel*, small cardamom (*Alpinia cardamomum*).

From Sanskrit *sūkshmailā*. *Li-šii gur k'ari* writes *sūkshmeta*, and gives as synonyme 'e-la (Sanskrit *elā*) *p'ra-mo*. The same work imparts also a motivation for the abbreviated mode of spelling the word: it was the horror of the numerous letters that brought about the process of simplification (*yi-ge mañ-bai ajigs-pas spros-pa bsduo*). According to Li Ši-čên, the Sanskrit term for cardamom, as given in the *Suvarṇaprabhāsa-sūtra* (金光明經, section 32), is *su-ki-mi-lo-si* 蘇乞迷羅細. This may be mentioned here, as BRETSCHNEIDER (*Bot. Sin.*, pt. 3, p. 121), who quotes this term, has not added the Sanskrit equivalent.

- 61 'a-p'im, opium (Tib. Pharm.), product of *Papaver somniferum*, corresponding to Chinese *ya p'ien* 鴉片. None of our Tibetan dictionaries contains this word. The late lamented Dr. P. CORDIER (*Bull. de l'École française*, Vol. III, p. 628) has revealed a Tibetan word for "opium" in the form 'a-p'i-ma from two medical treatises embodied in Vol. 131 of the section Sūtra of the Tanjur, and translated from Sanskrit. This observation, due to Dr. Cordier, is of great interest. The date of the two translations is unfortunately unknown. A slight historical inference may be based on the fact that this word is absent from the *Mahāvīyutpatti*, translated into Tibetan in the first part of the ninth century. This may either hint at the fact that the word was then not known in Tibet; or it may have been known, but, not being believed to be Sanskrit, was for this reason not incorporated in the Sanskrit dictionary. At any rate, the Tibetan form *a-p'i-ma* must belong to a time ranging from the tenth to the twelfth century, and could not be posterior to the thirteenth century. There is no doubt that P. Cordier

accurately reproduced the word as he read it in the edition that he consulted. The possibility remains that a Tibetan copyist may have punctuated it wrongly, and inserted a dot between the syllables *p^ci* and *ma*. The greater probability is that *a-p^cim* is the original and only correct form. We further find *phim* in Kanauri, and *ap^cim* in Nepal (RAMSAY, p. 113, gives a Ladākhī form *a-fim*). In view of the history of the poppy (*Papaver somniferum*) and the product yielded by it, there are theoretically three possibilities as to how the word could have reached Tibet. It may have come from India, or from Persia, or finally from China. In India, the Arabic word *afyun* افیون (from Greek *δπιον*) appears as late as the middle ages in such transformations as *aphuka*, *ahiphena* (explained as "foam of a snake;" see P. C. RAY, *History of Hindu Chemistry*, 2d ed., Vol. II, p. LXIX), *aphena* ("foamless"), or *aphenaka* (JOLLY, *Medicin*, p. 14). There seems to be little chance that Tibetan *'a-p^cim* (or eventually *'a-p^ci-ma*) is traceable to any of these; Sanskrit *aphenaka* might have resulted in a Tibetan form *'a-p^cen*, but could not be made responsible for the final *m*. Neither in Persian nor in Chinese do we meet any form of the word with final *m*, for Chinese *p^cien* (**b'en*) was never possessed of a final labial nasal. In the vernaculars of India, however, we have *afim* (Hindī, Hindustānī, and Panjābī), and the early European writers on India likewise record forms with final *m*: thus Alboquerque, in 1513, has *oafyain*; and Garcia ab Horto, in 1563, gives as Portuguese name *amfiam*, as Spanish name *ofium*. The Khasi language has *aphim* in addition to *aphin* and *aphin* (U N. SINGH, *Khasi-English Dict.*, p. 3). Thus the evidence points to Tibetan *a-p^cim* being derived from a mediæval Indian vernacular.

The Chinese transcription *a-p'ien* or *ya-p'ien* 鴉片 is difficult to diagnose, as we are ignorant of the time when it came into use. Li Ši-cên (*Pên ts'ao kan mu*, Ch. 23, p. 8 b) does not state in what *Pên ts'uo* the term makes its first appearance, or from what language it is derived; the significance of the name was unknown to him (名義未詳). The opinion of WATERS (*Essays on the Chinese Language*, p. 345), that it represents the Malayan word *apiun*, does not seem to me to be well founded, nor is there reason to believe that the Chinese word is directly modelled on the basis of Arabic or Persian *afyūn*. The Chinese designation shows the same traits as Burmese *a-p'in* or *b'in*, and Siamese *p'in*, and, like the latter, goes back to Sanskrit *aphena* (*a-p'en-a*); compare also Gujarati *aphina*, Tamil *abini*, Telugu *abhini*. I am convinced that the knowledge of preparing opium from the capsules of the poppy, and its medicinal employment, reached China from India overland by way of Yün-nan and Se-č'uan, and that Arabs and Malaysians had no concern with this transaction. There is no account on the part of the Arabs to the effect that they introduced the poppy or opium into China, neither do the Chinese ever assign such a rôle to the Arabs or Malaysians in their traditions regarding the subject. It is a gratuitous assumption that Chinese *a-fu-yui* 阿芙蓉 should represent Arabic *afyūn* (BRETSCHNEIDER in A. de Candolle, *Origin of Cultivated Plants*, p. 400; YULE and BURNELL, *Hobson-Jobson*, p. 641; GILES, *Glossary of Reference*, p. 200). Li Ši-cên, again, is our earliest authority for this word, and plainly says that this name originated from the resemblance in color, of the flowers of the poppy, to those of *fu-yui*, a designation of *Nelumbium speciosum*

(以其花色似芙蓉而得此名也); compare the analogous formation *mu* 木 *fu yui* and *ti* 地 *fu yui* (*Hibiscus mutabilis*). The *a* in *a-fu-yui* may have been suggested by *a-p^cien*. Still less does the third name given by Li Ši-čên, *no* (*ngo*)-*fai* 阿方, bear any relation to *afyün*; the reading *no* for 阿 is especially indicated (阿方音稱我也). G. A. STUART (*Chinese Materia Medica*, p. 307) asserts that Li Ši-čên quotes a contemporary work as saying that the preparation of opium came from T'ien-fan kuo 天方國, and that for this reason it is called "o-fang." This work is the *I lin tsi yao* 醫林集要, by Wan Si 王璽 (he died in 1488), who merely states that in the country T'ien-fan (Arabia) a red poppy-flower is cultivated; but he says nothing about an introduction of this species or opium into China. The generally accepted opinion, that the poppy was introduced into China under the influence of the Arabs, goes back to an unfounded theory propounded by J. EDKINS (*Opium: Historical Note*, p. 5, Shanghai, 1889).¹ He merely quotes the description of the poppy (as preserved in the *Pên ts'ao kai mu*) by Čên Ts'an-k'í, who has not a word to say in this connection about the Arabs or foreign introduction of any kind whatever; he simply notes the plant under the Chinese name *yin-su* 罌粟 after Sun Yan-tse 嵩陽子. In no T'ang or Sung author has a name for opium as yet been traced. Čao Žu-kua makes no mention of opium. — In modern times the Tibetans have adopted in their colloquial language the Chinese word in the form *'a-p^cin* or *ya-bin* (V. C. HENDERSON, *Tibetan*

¹ See also *Final Report of the Royal Commission on Opium*, Vol. VII, pt. 2, pp. 9 and 29 (London, 1895), where the baseless assertion is made, "We know from very early Chinese writers that the Arab merchants brought poppy capsules to China."

- Manual*, p. 81). C. A. BELL (*Manual of Colloquial Tibetan*, p. 289) gives it as *ya-p'in*, and writes it with Tibetan letters *yya-p'in*. Both these authors have also a native formation *ñal t'a-k'a* (presumably "sleeping-tobacco"). HENDERSON (p. 48) has a native colloquial name for the poppy, — *stobs-ldan me-tog* ("strong tower"). RADLOFF (*Wörterbuch der Türk-Dialecte*, Vol. I, col. 614) derives Kirgiz and Tarandī *apin* ("opium") from Persian; it seems to me that the Turkish word goes back rather to Chinese.
62. *'a-ru-ra*, myrobalan (*Terminalia chebula*); from Sanskrit *haritaki*. *ba-ru-ra*, *Terminalia belerica*; from Sanskrit *vibhitaka*. Compare *T'oung Pao*, 1915, p. 275.
63. *sen-ge*, lion. From Sanskrit *siṃha* (see above, p. 81), Apabhrañça *siṅghu*, *siṅghu*.
64. *byi-la* (West-Tibetan *bi-la*, *bi-li*), domestic cat. From Sanskrit *bidāla*, *vidāla* (*Amarakosha*, p. 130, 6); Hindustani *billā* بِلَا. The Tibetan seems to be derived from a Prakrit form **bilā*.¹
65. *ne-le*, *neu-le*, ichneumon. From Sanskrit *nakula*, interpreted in Tibetan as *rigs med* ("without family;" based on the analysis *na-kula*); derived through the medium of a Prākṛit form which corresponds to Hindi *nevlā*, *nevlī*.
66. *rma-bya*, peacock. From Sanskrit *mayūra* (see this volume, p. 80); *bya*, bird, hen.
67. *ne-tso* (colloquially also *nen-tso*), parrot. Presumably of Indian origin, but the prototype is not known to me. At any rate, the word does not seem to be Tibetan, and it could hardly be

¹ *zi-mi*, *zim-bu*, *zim-bu*, is the "wild cat" (*Jäschke's* "domestic cat" is erroneous). *Amarakosha*, p. 130, 6: *zim-bu* = Sanskrit *otus*. In the *Pol. D.* it is the equivalent of Chinese 狸, Mongol *tsogontai*, Manchu *ujirzi*, all referring to a wild cat.

expected that the Tibetans were acquainted with parrots otherwise than through Sanskrit literature.

68. *byi-ru, byu-ru*, coral (see this volume, p. 79). From Sanskrit *vidruma* (through the channel of some Indian vernacular). A Chinese transcription of the Tibetan word, made in the eighteenth century, is *č'i-lu* 集魯 (E. VON ZACH, *Lexic. Beiträge*, Vol. III, p. 130); in the Ming edition of the *Hua i yi yü* it is transcribed *si-lu* 席盧. Kitan *širu* and *šuru*.
69. *bai-du-rya, bai-đur*, a precious stone belonging to the class rock-crystals. Transcribed according to Tibetan pronunciation *bendruie* by ORAZIO DELLA PENNA (*Breve notizia del regno del Thibet*, ed. KLAPROTH, p. 55). Sanskrit *vaidūrya*, Prakrit *veluriya* (Arabic transcription *bīruraj* بِيرُورَج: E. SACHAU, *Indo-arabische Studien*, p. 17). Mongol *binduriya*.
70. *šel* (Mongol *šil*), rock-crystal; glass. Possibly from Sanskrit *čilā*, but this is not certain (see EITEL, *Handbook of Chinese Buddhism*, p. 153).
71. *mar-gad* (written also *ma-rgad*: Tāranātha, p. 173, line 19; and *markad*: *Pol. D.*, 22, p. 66), emerald. From Sanskrit *marakata* (see the writer's *Notes on Turquois*, p. 55).
72. *man-dzi-ra* (Jäschke: "a mineral medicine; perhaps Sanskrit *man-dza-ri*, pearl"), a variety of mica. Sanskrit *mañjarī* means "bunch of flowers, bud; a certain plant; pearl," and can hardly come here into question. Chandra Das gives the word only in the sense of a mineral. My identification with mica rests on the *Tib. Pharm.* (No. 28), where Tibetan *mañdzi-ra* is explained as *lha-ma lhan-tse'er* and equalized with Chinese *yün mu* 雲母 and *p'u-sa šī* 菩薩石. The latter has been identified with mica by Biot on the basis of actual specimens (see F. DE

MÉLY, *Lapidaires chinois*, pp. 67, 260; also GEERTS, *Produits*, p. 478).¹ Tibetan *lhasi-ts'er* denotes mica, a white and black variety being distinguished, the former being the equivalent of *yin tsii ki* 銀精石, the latter that of *muu ki* 礫石.

73. *ke-ke-ru*, a precious stone; cat's eye, chrysoberyl (occurs in the Citralakshana, my ed., p. 162). From Prakrit *kakkerā*; Sanskrit *karkatūṇa*.
74. *ban-de*, *ban-dhe*, a clergyman (*Hua i yi yu* renders it by *ho-lan* 和尚). According to Hodgson, from Sanskrit *vandya* ("reverend"). This derivation seems doubtful to me. Chinese *pan-ti* 班第 (MAYERS, *Chinese Government*, No. 611) is apparently a transcription of this word.
75. *dzo-ki*, *dzvo-ki*, *su-gi* (Mi-la-ras-pa: also *r-dza-ki*), vulgar corruption of Sanskrit *yogin*. This or a similar form appears to have existed in mediæval India, as attested by Marco Polo's *chughi* (ed. of YULE and CORDIER, Vol. II, p. 365) and Ibn Baṭūṭa's *joki* جوكى (ed. of DEFRÉMERY and SANGUINETTI, Vol. IV, p. 62); see also ROCKHILL, *T'oung Pao*, 1915, p. 616.
76. *ĕataraki*, chess. From Sanskrit *caturāṅga*. In Ladākh (Ramsay) *satranj* (Bengālī *satranċ*, Persian *šatranj* شطرنج and *satranj* سطرنج). The Tibetan designations of the chessmen are as follows: *dpon* (Sanskrit *rāja*, "king"), *stag* ("tiger," owing to a misunderstanding of Mongol *bers* [= Persian *fersin*] in the sense of *bars*, "tiger"), *rna-mon* ("camel," corresponds to the elephant, *hastin*, of India, our "bishop"), *rta* (Sanskrit *aṇva*,

¹ A Japanese text translated by Geerts says that the *p'u-sa* stone was formerly brought to Japan by the inhabitants of Amakawa. This is Macao, but not in the Philippines, as annotated by Geerts. A brief text relative to the stone is contained in the *Tsu si yan k'ao* (Ch. 2, p. 6), which lists it as a product of Champa, and states that it was sent as tribute in the period Hien-te (954—959).

"horse," our "knight"), *Yi-rta* (Sanskrit *ratha*, "chariot," our "rook"), *bu* ("boy," Sanskrit *padāti*, "footman;" Mongol *kübün*, "boy;" our "pawn"). Compare A. VAN DER LINDE, *Geschichte und Litteratur des Schachspiels*, Vol. II, pp. 136, 197. Chess is known in Tibet only to the Lamas (see, for instance, G. BOGLE'S *Mission* in C. R. MARKHAM, *Narratives*, pp. 92, 101, 104; and S. TURNER, *Account of an Embassy*, p. 235). A Tibetan word for "chess" is *č'o-lo*; this, however, refers to Chinese chess (*sian k'i* 象棋), not to the Indian game (see *Pol. D.*, 19, p. 33). *Mig-maṅ* or *mig-maṅs* does not denote "chess," as wrongly stated by JÄSCHKE, who followed I. J. SCHMIDT'S translation in *mDzais-blun* (Vol. I, p. 100; Vol. II, p. 124),¹ but is the *ta k'i* 大碁 or *wei* 圍 *k'i* of the Chinese (see K. HIMLY, *T'oung Pao*, Vol. VII, pp. 135—146). The Tibetan term has been adopted into Mongol as *miṅmaṅ* or *miṅman* (KOVALEVSKI, p. 2022), Kalmuk *miṅma* (PALLAS, *Sammlungen*, Vol. I, p. 157), and Turki *mingmā* ما مينك (*Pentaglot Dict. of British Museum*). The chessboard is called *reu mig* (*k'i p'an* 碁盤, Manchu *tonikó*, Mongol *külkä*).

77. *ri bo-ta-la* (Mongol transcription *riotala*), popular pronunciation for *ri-bo po-ta-la*, Mount Potala. According to *Li-šüi gur k'an*, this abbreviation is chosen in order to avoid the double closing of the lips in the production of *b* and *p*. The popular writing occurs in GEORGI'S *Alphabetum Tibetanum*, p. 475.
78. *rī-ram*, corporeal relics of Buddha and saints. From Sanskrit *ṣarīram*. According to *Li-šüi gur k'an* (fol. 22 a), the first syl-

¹ The term is thus carried to the first part of the ninth century, and, in view of the *mDzais-blun* being translated from Chinese, might be regarded as a Sinicism. Another instance of its use occurs in *sGra sbyor* (Tanjur, Sutra, Vol. 124, fol. 56 a), where the plan of a well-built house is compared with the outlines of a *mig-maṅs*.

lable *ṣa* (*śa*) was dropped in Tibetan, because Tibetan *śa* means "flesh" and interfered with the conception of *ṣarīra* as "body, bones." The word *ri-rain* is used in the sense of *rin bsrel* ("relics").

79. *sendha-pa* (Mongol transcription *siwendhaba*). CHANDRA DAS gives for this word the fantastic explanation "probably Tibetanized form of the word Siddha." The correct explanation is found in *Li-ñii gur k'aii* (fol. 21 b): "*Sendha-pa* means what has originated from the sea, and is applied to salt, swords, horses, etc. (*sendha-pa žes-pa rgya-nts'o-las byuñ-ba-ste | ts'va daiñ ral-gri daiñ rta sogs la ajug-pa*)." This definition leads to Sanskrit *sindhuja* (*sindhu*, "river, Indus, sea, ocean"), "originating from the Indus," which according to *pw.* is used with reference to horses and salt. Compare *French D.* (p. 1017): *sin-dhu* (*du*) *skyes*, "e fluvio Indus natus, epitheton pro *lan ts'va sal*."
80. *su-ra k'ui*, pit. According to SCHIEFNER (*Mélanges asiatiques*, Vol. VIII, p. 156), from Sanskrit *suruṅgā*, "mine" (*k'ui*, of course, is the Tibetan word for "pit," corresponding to Chinese *k'ui* 孔, Ahom *kui*, Shan *k'um*). Tibetan *su-ra* presupposes an Apabhraṃṣa form **suruṅga*, for in Marāṭhī, Hindī, and Bibārī we have *suruṅg*, and in Bengālī *suḍaṅg*.

A selection of a few Sanskrit terms naturalized in Tibetan literature, and known also to the educated, or otherwise of especial interest, may here follow:

81. *ka-ra-bi-ra*, oleander (*Nerium odorum*). Sanskrit *karavīra*(*ka*).
82. *kun-du-ru*, incense, frankincense, gum olibanum, resin of *Boiswellia thurifera*. Sanskrit *kundurū*, *kundu*, *kunda*.
83. *nim-ba*, Nim bark, Margosa (from Portuguese *amargoso*, "bitter") bark, *Melia indica* or *azadirachta* L.; *Azadirachta indica* Juss.

- From Sanskrit *nimba*, *nimbaka*. Mongol *nimbaka*. Anglo-Indian *neem*, from Hindustani *nīm* (YULE, *Hobson-Jobson*, p. 622). Regarding a related species in China see STUART, *Chinese Materia Medica*, p. 261; FLÜCKIGER and HANBURY, *Pharmacographia*, p. 154. Another Tibetan term for the same product is *ag-tse*.
84. *bim-pa*, from Sanskrit *bimba*, *Momordica monadelphæ* (*Citralakshana*, V. 671).
85. *bil-ba*, from Sanskrit *bilva*, *Aegle marmelos*, known as *bela*, *bæl* fruit, Indian *bæl*, Bengal quince. In Sino-Tibetan it refers to the quince (*Pyrus cathayensis*), *mu kua* 木瓜 (*Pol. D.*, 28, p. 51).
86. *byi-dan-ga* (*Avadānakalpalatā*, Vol. II, p. 204 [Bibl. Indica], pallava 109, *avadāna* of Kuṇāla; corresponding to *vilāṅga* of the Sanskrit text), *byi-t'an-ka* (Tibetan prose edition of the same work, p. 230, line 13); *bye-dai-ka* (REHMANN, *Beschreibung einer tib. Handapotheke*, No. 28), *byi-tai-ga* (Jäschke: a medicine), *byi-dam-ga* (Chandra Das, in addition to *byi-tai-ga*). From Sanskrit *vilāṅga*. Compare T'oung Pao, 1915, p. 287. The transcription of the *Avadānakalpalatā* is the oldest and correct one, and in a satisfactory manner renders certain the identification with Sanskrit *vilāṅga*. Chandra Das identifies the Tibeto-Indian term with *Erycibe paniculata*, a large climbing shrub related to *Embelia ribes*, and, like the latter, yielding a black berry (W. ROXBURGH, *Flora Indica*, p. 197); as it occurs in Bengal, the home of Chandra Das, it may be that the plant is called there *vilāṅga*. As the berry of *Erycibe* is not employed medically, however, or exported from India, it is not very likely that the Tibetan drug can be identified with it. As formerly stated, the question is of *Embelia ribes*.

87. *ma-ša*, pea. Sanskrit *māṣa*.
88. *ma-ša-ka*, a small gold weight and coin. Sanskrit *māṣaka*.
89. *mal-li-ku*, Jasminum champaca or zambac. Sanskrit *mallika*. Chinese **mat-li* 末利. Also Sanskrit *kunda*, Jasminum pubescens, is found in Tibetan (*kun-da*) and Mongol.
90. *tsan-dan*, sandal-tree. Sanskrit *candana*, Sirium (Santalum) album and myrtifolium; τζανδανά (Cosmas Indicopleustes); Persian *čandan* and *čandal*; Chinese *čun-t'an* (**čan-dan*) 旃檀.
91. *dza-ti*, nutmeg (Myristica moschata). Sanskrit *jāti*; Hindi *jāyā-phala*; Hindustāni *jāzphāl*.
92. *ša-na*, hemp. Sanskrit *çana*.
93. *bhañ-ge*, hemp, charras. From Sanskrit *bhañgū*.
94. *šin-ša-pa* (our dictionaries state, after Cosma only, "a kind of tree or wood"), Dalbergia sissoo (*pw.*). From Sanskrit *çiñçapa*. The *Li-šii gur k'an* (fol. 22 a) has an interesting comment on this word as follows: "A general designation for Agarū [besides Amyris gallocha, aloe-wood, this term refers also to Dalbergia sissoo] is *šin-ša-pa*. As the syllable *šin* is written in Sanskrit with an Anusvara, and is accordingly read with the letter *n*, it is mistaken in Tibetan for the word *šin* ('tree'), so that people say *ša-pai šin* ('ša-pa tree')." — 'A-ga-rui miñ-gi nam-graṅs šim-ša-pa žes-pai šim-gyi klad kor na yig-tu klog-pa | bod skad-kyi šin-du ak^crul-nas ša-pai šin zer-ba dan. An example of the application of the word occurs in Taranūtha's *bKa-babs* (GRÜNWEDEL'S translation, p. 71).
95. *k'a-taiñ-gu*, *k'a-tvam-ga*, *k'a-tra* (pronounced *k'atomga*, *k'ato*), ceremonial trident. From Sanskrit *khātvaṅga*.
96. *ša-ma-ru*, *ša-ru*, ceremonial tambourine. From Sanskrit *šamaru*.

97. *dzam-bu glii*, *dzam glii*, *adzam-bu*, from Sanskrit *Jambudvīpa* (Uigur *čamputivip*).
98. *ṭam-ka*, *ṭai-ka*, *ṭai-k'a*, *toñ-ka*, a silver coin. From Sanskrit *ṭaṅka*, a weight or a coin weighing four māsha or twenty-four raktikā. Compare also WATTERS, *Essays on the Chinese Language*, p. 358; and ROCKHILL, *T'oung Pao*, 1915, pp. 435—436, 448. The word is found also in Persian, *tang* تنگ ("cash, coin") and *dāng*, and in Turkish languages (RADLOFF, Vol. III, col. 1046; and YULE, *Hobson-Jobson*, p. 896).

The following words belong to the most recent phase of the Indo-Aryan languages, and to all appearances have been borrowed from Hindi or Hindustāni.

99. *sa-lai-gi*, a stringed instrument, with nine chords, played upon with a bow. Hindustāni *sāraṅgī* سارنگی. This instrument seems to have originated in Nepal, and is known also in China (M. COUBANT, *Musique classique des Chinois*, p. 182).
100. *ḍan-ḍi*, *ḍan-ḍri* (Lahūli), beam of a pair of scales; a kind of litter. Hindī *ḍanḍī*.
101. *tim-pi* (in Mi-la-ras-pa), kid leather imported from India.
102. *m-do-le*, *ḍo-li* (*Pol. D.*, 26, p. 76), sedan-chair. From Hindi *ḍolī*.
103. *ti-pi* (JÄSCHKE), *tī-bi* (RAMSAY). "The black bag-like patoo cap which hangs down on one side is called *bot teep*, and the close-fitting cap, lined with lambskin, covering the ears, is called *gōnda*; a gun cap is called *topee* or *tubak i topee*" (RAMSAY). Seemingly connected with Hindustāni *ṭopī*, Anglo-Indian *topee* (YULE, *Hobson-Jobson*, p. 935).
104. *t'an*, a piece of cloth. From Hindi *t'ān*.

105. *be-za* (Ladākh), interest. From Hindi *vyāja*; Hindustāni *biyāj* بیاج.
106. *skyes-sdoi*, *skyes-la-sdoi* (pronounced *kyedoi*, *kyeladoi*), banana (only in Sikkim). From Hindustāni *kīlā* کیلا (also in Hindi and Pañjabī), from Apabhraṃṣa *ka(y)alaa* = Sanskrit *kadalaka*, "plantain" (GRIERSON, *Z.D.M.G.*, Vol. XLIX, 1895, p. 418).
107. *rdo-ja*, *stod-ja*, *dwa* (*d* with *va zur*)-*ja* (the latter in *Mong. Pharm.*, No. 40; Mongol *duwa*), catechu, catch, an astringent extract obtained by boiling in caldrons chips of the browu heart-wood of several species of *Acacia* (catechu, suma, sundra, and probably more) and *Areca* until the fluid becomes sirupy, when it is taken out, cooled, and shaped into cakes, which are used as a dye for nets, sails, and other articles. The term corresponds to Chinese *ör ê'a* 兒茶 (BRETSCHNEIDER, *Bot. Sin.*, pt. 3, p. 333; G. A. STUART, *Chinese Materia Medica*, p. 2). W. W. ROCKHILL (*J.R.A.S.*, 1891, p. 226) took the total Tibetan term for a transcription of the Chinese, but it is difficult to reconcile the first element in the Tibetan compound with Chinese *ör*. The vacillating spelling, leading to the same phonetic type *do*, *to*, *tö*, shows well that not a Tibetan word, but an attempt at rendering a foreign element, is involved (JÄSCHKE gives *dwa-ba* as "a plant yielding an acrid drug," and the compounds *da-ts^cod*, *da-rgod*, and *da-yyui*); and this apparently is identical with the *te* in *catechu*, *cate*, of Garcia and Acosta. Besides *cate* and *cacho* (the latter in BARBOSA, *Hakluyt Soc. ed.*, 1866, p. 191), the earlier European writers offer the word also in the form *catchu* (YULE, *Hobson-Jobson*, p. 173), which would seem to have resulted from an Indian term *ca-te-ča*, — the prototype of Tibetan *tö-ja*. In this case

the Tibetan appellation would have been formed in imitation of the Indian, not of the Chinese word; and it is reasonable to conclude that the Chinese terms are also derived from India (*hai'r ě'a* 孩兒茶, from modern Indo-Aryan *khair*, the latter from Apabhraṃṣa *khairu* = Sanskrit *khadira*). The French spelling *cachou* is based on Tamil *kaḍu*. — For the tree *Acacia catechu*, the Tibetans have a native name *sei-ldeñ*, identified in the *Mahāvvyutpatti* with Sanskrit *khadira* (JÄSCHKE quotes "Schiefner" to this effect; this reference occurs in *Mélanges asiatiques*, Vol. VIII, p. 12). Among the names of the mountains we find in the same Sanskrit-Tibetan dictionary *Sei-ldeñ-čan*, corresponding to Sanskrit *Khadiraka*. Regarding the employment of catechu on the part of Tibetan women see ROCKHILL (*Land of the Lamas*, p. 214) and LAUFER (*Globus*, Vol. LXX, 1896, pp. 63—65). See also ROCKHILL, *T'oung Pao*, 1915, p. 463.

108. *gi-gu-ša*, cloisonné enamel, is given in the *Pol. D.* as the equivalent of Chinese *fa-lai* 法瑯. According to a Lama teacher whom I consulted at Peking in 1901, the correct form is *gu-gu-ša*, to which he assigned the meaning "cloisonné enamel." JÄSCHKE says in regard to the latter word that it is peculiar to the province of 'Tsai, and signifies "plate, flat dish." The *French Dict.* (p. 149) attributes to the word (I believe, wrongly) the meaning "porcelain." CHANDRA DAS (p. 219) observes that it refers to enamelled plates, cups, etc., and generally to enamels on copper. HENDERSON (*Tibetan Manual*, p. 39) has it also with the meaning "enamel ware, enamel." JÄSCHKE, further, quotes after Schmidt a word *gi-gu-ša* or *gi-gu-šel* in the sense of "having a white speck

in the eye, wall-eyed (of horses)." In letter No. 4 published by E. H. C. WALSH (*Examples of Tibetan Letters*, Calcutta, 1913) we read of a *gu-la-i spyad-pa* ("enamelled pot").

2. Persian Loan-Words.

109. *kur-kum, gur-kum, gur-gum, saffron* (product of *Crocus sativus*). From Persian *kurkum, karkam, karkum* کَرکَم, derived on its part from Semitic (Assyrian *karkuma* [OPPERT, *L'ambre jaune chez les Assyriens*, pp. 6, 15; and E. BLOCHET, *Sources orientales de la Divine Comédie*, p. 130]; Hebrew *karkôm* קַרְכֹּם: SOLOMON, *Canticles*, IV, 14; Aramaic *kurkama*, Arabic *kurkum*), on which in all likelihood are based also Greek *κρόκος* and Armenian *k'rk'um*. The preservation of *r* is sufficient to place the Tibetan word with the Persian-Semitic forms, not with Sanskrit *kuikuma*; still less is there any reason to conjecture a Tibetan form *gu-i-gum*, as has been done by L. FÉER (*Journal asiatique*, 1865, p. 504). *Kuikuma* is peculiar only to Sanskrit, and is doubtless developed from **kurkuma*. According to CH. JORET (*Les plantes dans l'antiquité*, Vol. II, p. 272), this word has never penetrated into India proper. Saffron was never cultivated in India, but solely in Kashmir, where it appears to have been transplanted from Iran.¹ The *Lian fu* (Ch. 54, p. 7 b) states that saffron (*yü-kin*) is solely produced in Kashmir (see also *Kiu T'an fu*, Ch. 221 B, p. 6 = CHAVANNES, *Documents*, p. 166; HŪAN TSAŪN's account of Kashmir: JULIEN, Vol. II, pp. 40, 131; TAKAKUSU, *I Tsing*, p. 128). The cultivation of saffron in Persia is attested by Iṣṭakhri and Edrisi (A. JAUBERT, *Géographie*,

¹ The Tibetan synonyme *k'a-c'e skyes* does not mean, as stated by WATERS (*Essays*, p. 348), "gift of Kashmir" (he evidently thought of the noun *skyes*, "present, gift"), but "produced by, grown in, Kashmir." It is a literal rendering of Sanskrit *kaśmīrajñman*.

pp. 168, 192); also by the *Sui Yu* (Ch. 83, p. 7 b). HIRTH's opinion (*Chau Ju-kua*, p. 91), that Chinese *yü-kin* (anciently **hat-kam*) should go back to Persian *karkam*, is not entirely convincing, owing to the diverse initials. YULE (*Hobson-Jobson*, p. 780) quotes from Sontheimer's translation of Ibn al-Baitār that the Persians call the root of the saffron *al-hard*. This statement is not found in LECLERC's translation of the work (*Traité des simples*, Vol. II, p. 208). If such a Persian word should exist, Chinese **hat* might possibly correspond to it.

110. *zi-ra*, cummin-seeds (*Cuminum cyminum*). The word is not derived from Sanskrit and Hindī *jīra*, as stated by JÄSCHKE (Sanskrit *jīra* would be transcribed in Tibetan *dzi-ra*), but from Persian *zīra* زیره; ("cummin-seed"), also *zīra* زیره, Grusinian and Ossetian *zira*. Cummin was cultivated by the ancient Persians (CH. JOBERT, *Les plantes dans l'antiquité*, Vol. II, p. 66), and penetrated at a remote period from Iran to Egypt on the one hand and to India on the other (*ibid.*, p. 258): 'Sanskrit *jīra*, *jīraka*, is based on the Persian word, as is likewise Chinese **zi-ra* (si-lo) 時蘿. It is not certain, however, that the plant was brought to China directly from Persia; it seems, rather, that it was introduced from the Malayan Archipelago. C'ên Ts'au-k'î of the T'ang period reports that it grows in Bhoja (Sumatra, 佛耆), and Li Sün 李珣 quotes the *Kuai çou ki* 廣州記 to the effect that it grows in the country Po-se 波斯. If Su Sün 蘇頌 tells us that the plant was cultivated in his time in Liū-nan 嶺南 and the adjoining

¹ According to FLÜCKIGER and HANBURY (*Pharmacographia*, p. 331), the plant is indigenous to the upper regions of the Nile, but was carried at an early period by cultivation to Arabia, India, and China, as well as to the countries bordering on the Mediterranean. See also V. LORÉ, *La flore pharaonique*, p. 72.

- regions, it is not likely that Po-se is intended for Persia, but rather for the Malayan Po-se (*Chinese Clay Figures*, I, p. 145).
111. *ba-dam*, almond (*Amygdalus communis*). From Persian-Hindustānī *bādām* بادام. JÄSCHKE's note, derived from Shakespear and reproduced by WATTERS (*Essays*, p. 349), to the effect that the Persian word is derived from Sanskrit *vātāma* ("wind-mango"), must be discarded as a baseless conjecture. The Sanskrit word is *vātāma* or *bādāma*, which, as also indicated by Boehtlingk, represents a Persian loan (or ultimately from Pahlavī *vadam*). The home of the almond-tree is not in India, but in western Asia (DE CANDOLLE, *Origin of Cultivated Plants*, pp. 219—220). The Tibetan term *p'a-tiü* ("dried apricots") bears no relation to the Persian designation of the almond, as wrongly asserted by WATTERS (*Essays*, p. 348).
112. *se-rag dur-smian* (West-Tibetan, pronounced *sērak turman*), carrot (*Daucus carota*). From Persian *zardak turma* زردك قرمه (*zardak*, "carrot;" *turma*, "radish").
113. *dal čini* (Ladakh: ROERO, Vol. III, p. 230; RAMSAY, p. 21), cinnamon, bark of *Cinnamomum cassia* (in common Tibetan *šii ts'a*, "wooden salt"). From Persian-Hindustānī *dār-čini* دارچینی (Arabic *dār-šini*); that is, wood of *Chius* (*dār* = Sanskrit *duru*, wood, tree). Puštu *dāl čini*. Hindi *dāra-čini*.
114. *kram*, cabbage. From Persian *karamb* کرنب or *kalam* کلم (see this volume, p. 87).
115. *alu-bakara* (Ladakh: ROERO, Vol. III, p. 245), also *bokhara* (VIGNE, Vol. II, p. 457), dried plums and apricots from Bokhāra. Persian *ālū-bokhāra*. YULE, *Hobson-Jobson*, p. 16. In the Tibetan written language Bokhāra is transcribed *Bho-lur* (VASILYEV, *Geography of Minčul Chutuktu*, p. 5).

116. *ʿa-lu* (Ladākh), potato. From Hindustānī *ālu* آلو, which itself comes from Persian.
117. *ʿa-lu-ča* (Ladākh), plum. From Persian *āluča* الرچه.
118. *čob-čini* (Ladākh), root of *Smilax pseudo-china*, Chinese *tʿu-fu-lin* 土茯苓 (see G. A. STUART, *Chinese Materia Medica*, p. 410), known in commerce as China root, and imported from Turkistan to Le, Ladākh (ROERO, Vol. III, p. 12). From Persian *čubi čini* چوبی جینی ("China root").

"In some cases, I was told, that they obtain the benefits of an alterative medicine by the persevering administration of a decoction of Chob-i-Chiui,—the strength of which is increased at intervals of two or three days, until the cure is effected." — G. T. VIGNE, Vol. II, p. 123.

119. *zar-babs* (JÄSCHKE), *zar-baft* (RAMSAY), gold brocade. From Persian *zar-baft* زر بفت (also *zar-bāf* زر باف, *zar-bāfta*; *bāf*, "weaving"). Under another entry JÄSCHKE has *sal-bāb* (West-Tibetan), "gold ornament, gold lace, and the like;" this, of course, is a transcription of the same Persian word. Compare J. FRYER, *New Account of East India and Persia*, Vol. II, p. 167 (ed. of Hakluyt Soc.).
120. *sag-lad*, fine cloth of goat-wool; European broadcloth. From Persian *saglāt* سغلات (see YULE, *Hobson-Jobson*, p. 861; *J.A.S.B.*, 1910, pp. 263—266; W. HEYD, *Histoire du commerce du levant*, Vol. II, p. 700; WATTERS, *Essays*, pp. 341—342).

"All Tibetans admire and value English broadcloth beyond one of our products." — J. D. HOOKER, *Himalayan Journals*, p. 405.

121. *kimkhāb* (Ladākh: RAMSAY); *kincob*, *čincob*, gold brocade. The latter is given as a Tibetan term by W. W. ROCKHILL (*J.R.A.S.*, 1891, p. 125), and said by him to be intended for Chinese *kin kia* 金段 (see also his *Land of the Lamas*, p. 282, note 1); more

probably, the Chinese prototype is *kin hua* (**kim hwa*) 錦花, as, for instance, used by Čao Žu-kua with reference to the brocades of Ta Ts'in. In the History of Ladākḥ Tibetanized in the form *rkyen-k'ab* (K. MARX, *J.A.S.B.*, Vol. LX, 1891, p. 135). The term must have reached the Tibetans from Persia or India, where we find the forms with final *b* (Persian *kimkhāb* كيمخاب; Hindustānī *kamkhāb*, *hamkhwāb*). The earliest Arabic reference to the term seems to occur in Ibn Khordādeh, who wrote between 844 and 848, and recorded it in the form *kimkhāw* كيمخاو (G. FERRAND, *Textes relatifs à l'Extrême-Orient*, Vol. I, p. 31). See YULE, *Cathay* (new ed. by CORDIER, Vol. III, p. 155), and *Hobson-Jobson*, p. 484.

"From Hindustan to Yarkand are carried madder, pearls, English calicoes, Dacca muslins, chintzes, kimkab or golden cloth of Benares" etc.—G. T. VIGNE, Vol. II, p. 345. "Exclusive of tea, the following are among the principal exports from Ta-chien-lu to Tibet: cotton, silks, satins, gold brocades or chinkobs."—ROCKHILL, *Land of the Lamas*, p. 281.

122. *tsa-dar*, *tsa-sar*, *tsa-zar*, *tsa-dir* (Ladākḥ), shawl, plaid. According to JÄSCHKE, from Persian-Hindustānī *čaddar* چدر. The *Persian-English Dictionary* of STEINGASS does not contain this word, but only *čadar* with the meanings "tent, pavilion; mantle, scarf, veil, shroud; table-cloth" (see No. 142).
123. *sag-ri*, *sags-ri*, shagreen. From Persian *sagri* سفری, shagreen. The Persian word denotes properly the croup of a horse or donkey, from which the peculiar granulated leather was originally made (YULE, *Hobson-Jobson*, p. 818; also his edition of *Marco Polo*, Vol. I, p. 395). Mongol *sagari*, *sarisu*; Manchu *sarin*.
124. *pi-ši*, cat (JÄSCHKE: "perhaps from the Persian"). In the first line, this word seems to be connected with such Piçaca forms as *puši*, *piši-r*, *piš*, *pišo*, *pušak*, as enumerated by GRIERSON

- (*Pisāca Languages*, p. 66), and with corresponding Dardu words like *būši*, *puši*, *pušak* (LEITNER, *Languages of Dardistan*, p. 2); and these point to Persiau *pušek*, *pōšek* پوشک (also *pušank*), Afgan *pišō* (compare F. JUSTI, *Les noms d'animaux en kurde*, p. 5, Paris, 1878).
125. *p'o-lad*, steel. From Persian *pūlād* پرلاد (see this volume, p. 82, note 4).
126. *ta-ba*, *tao*, iron рая. From Persian *tāwa* تاروا.
127. *dig*, large kettle. From Persian *dig* دیک (found also in Šugnan: Восточныя Замѣтки, p. 290).
128. *ta-ra-tse* (Ladakh), a small pair of scales, gold weights. From Persian *tarāzū* ترازو (also current in Turkistan: A. VON LE COQ, *Turfan*, p. 86), a balance, scale, weight.
129. *nal* (given in our dictionaries only as the name of a precious stone), balas ruby. From Persiau *lāl* لعل (Mongol *nal ürdüni*, Manchu *langčā*). The Chinese equivalent (*Pol. D.*, 22, p. 66) is *pi-ya-se* 碧璽石, derived from Persiau-Arabic *piyāzaki* پیازکی, balas ruby from *Piyāzak* (see the writer's *Notes on Turquois*, pp. 45—48). CHANDRA DAS has a term *pi-tsu lā-la* as "name of a gem," and designated as Sanskrit, but not identified. I do not know for what Sanskrit word it could be intended; maybe *lā-la* stands for *lāl*, and the whole term refers to a certain variety of balas ruby.
130. *sai-gi-ka* (JÄSCHE with ?), greenish stone of which knife-handles and similar articles are said to be made. It might be permissible to connect this word with Persiau *sang* سنگ ("stone"). On the other hand, there is also a West-Tibetan word of uncertain spelling, *yai-gi-k'a*, said to be the name of a green stone wrought into handles of knives. Another form of this word

- is *yan-tri*, which to all appearances is identical with *g-yan-ti*, the common Tibetan term for "nephrite," as attested by the *Pol. D.* (22, p. 64), where it is equalized with Chinese *yü* 玉.
131. *dambu-ra*, *tambu-ra*, a stringed instrument (*Pol. D.*, 7, p. 18, = Chinese *ēn* 箏, Mongol *yaduga* or *yadaga*, Manchu *yaturan*). From Persian *tambūr* قنبور ("lute, lyre, guitar; a drum"). We find the same instrument and word in Chinese *tan-pu-lu* 丹布拉 (see COURANT, *Essai sur la musique classique des Chinois*, p. 178); in Eastern Turki *dambura*, Osmanli *tambur* and *tambura*; Kirgiz *domru*, *dombra*, *dunbura*, and *dumbra*; Kazan Tatar *dumbra*; Russian *domru* and *dombra* (the latter referring to the Jew's-harp).
132. *sur-na* (Chinese *so-na* 鎖內), hautboy, flageolet. From Persian *surnā* سرنه. The word seems to be known only in western Tibet, for the compilers of the *Pol. D.* (7, p. 16) were ignorant of it, and rendered Chinese *so-na* by *rgya gliñ* ("Chinese flute").
133. *kab-ša*, shoe, boot (the ordinary and general term for shoe in Ladakh). From Persian *kafš* کفش, in all probability adopted into Ladakhī from Hindustanī, as the word refers to the ordinary shoe of Hindustan (RAMSAY, p. 12). *ba-bu*, soft shoe. According to Jäschke, from Persian *pāpōš* پاپوش.
134. *dur-bin*, telescope. From Persian *durbīn* دوربین (literally, "far-seeing").
135. *sai-gin*, bayonet. From Persian *sangin* سنگین.
136. *p'ugs-ta*, *p'ogs-ta*, *pogs-ta* (Ladakh), firm, strong, durable. From Persian *pukhta* پخته.
137. *pe-ban*, graft, scion. From Persian *pewand*, *paiwand* پیوند, relations, allies.

138. *po-la*, *p^cu-la*, *p^co-la* (JÄSCHKE: Ladākh; but known also in Central Tibet), *pilau*, *pilaw*, a dish consisting of boiled rice with fowl or mutton, and spices, the Tibetans adding also butter and dried apricots (*p^ca-tin*); in Ladākh, sweet rice prepared with butter, sugar, and apricots. From Persian and Hindustānī *pulāo*, *pilāv* پلو or پلاو; ¹ RADLOFF (Vol. IV, col. 1337) derives Osmanli *pilaw* from Persian. The word has penetrated also into Slavic: Russian *pilav* (ПИЛАВЪ), *plav* (ПЛАВЪ), and *plov* (ПЛОВЪ). Perhaps also the (Niüçi?) term *pi-lo* 畢羅 ("stuffed pastry") belongs to this type (CHAVANNES, *T^coung Pao*, 1904, p. 168).

"On arriving at a halting place, the traders opened their bazaar, in which the soldiers could buy rolls, meat pasties, pilau and tea."—KUROPATKIN, *Kashgaria*, p. 231.

139. *pai-k^cam-pa* (Tāranātha, translation of SCHIEFNER, p. 80), "the Rishi of the Mleccha" (Mohammedans). From Persian *paigām-bar* پیغمبر, prophet. This identification is due to the ingenuity of ERNST KUHN, *Barlaam und Joasaph* (A. B. A. W., 1893, p. 85).
140. *deb-t'er*, *deb-gter*, *deb-ster*, document, record, book. From Persian *dābtār* دفتر (said to be connected with Old-Persian *dipi*, "writing;"; see P. HORN, *Neupersische Etymologie*, No. 540; according to others, derived from Greek διφθέρα, "leather, parchment for writing upon," see E. BLOCHET, *Inscriptions turques de l'Orkhon*, p. 46). Sogdian *dipēr-t* ("one versed in the Scripture") MÜLLER, *Soghdische Texte*, I, p. 17). The same word has been adopted into Mongol *dābtār* and Manchu *debtelin*

¹ YULE (*Hobson-Jobson*, p. 710) refers also to Sanskrit *pulāka* ("ball of boiled rice;"; properly, a certain cereal), but I do not believe that it should be connected with our word. Regarding the preparation of pilau in Persia see J. FRYER, *New Account of East India and Persia*, Vol. III, p. 147 (Hakluyt Soc., 1915); F. BERNIER, *Travels in the Mogul Empire* (2d ed. by V. A. Smith), p. 121.

("chapter, volume"). Compare W. SCHOTT, *Zur Uigurenfrage*, II, *A.Be.A.W.*, 1875, p. 54; and RÉMUSAT, *Recherches*, p. 137.

141. *p^ce-rai*, *p^ca-rai*, *p^ci-lii* (*rgya p^ci-lii*), *p^co-rai* (GEORGI, *Alphabetum Tibetanum*, p. 654), at present refers to British India, Englishmen, Europe and Europeans (see JÄSCHKE, p. 106, who cites also the derivation from "Feringhi." The opinion that "*p^ci-lii* represents only the more vulgar pronunciation of the genuine Tibetan word *p^cyi glii*, a foreign country and especially Europe," is untenable). The four forms evidently are transcriptions of the same foreign term; and since Tibetan lacks *f* and renders it by a labial surd or sonant, aspirated or non-aspirated, we arrive at *je-rai*, *ja-rai* (or *ja-lai*), *ji-lii*, *jö-lai*. These forms are on a par with Persian *farangi*, *firingi* فرنگی; Arabic *al-faranj*, *ifranji*, *firanji*; Tamil *p^carangi*, Singalese *parangi* (YULE, *Hobson-Jobson*, p. 352; DALGADO, *Vocab. portugais en linguas asiáticas*, p. 10), Neo-Sanskrit *phiraṅga* (*phiraṅgaroṅga*, "Morbus americanus"); Chinese *fu-lai* 佛郎, *fa-lai* 發藍, *fa-lai* 法琅 (Manchu *fa-lai*), *fu-lai-gi* 佛郎機 (compare BRETSCHNEIDER, *Medieval Researches*, Vol. I, pp. 142—144; WATERS, *Essays*, p. 334), — all connected with the term "Frank." It cannot be positively asserted, of course, that the Tibetan terms are derived from Persian, as long as we have not secured their exact history (and this is not possible in our present state of knowledge); but there is a great deal of probability in this assumption.

The Tibetan term *P^ci-lii* has passed into the Chinese history of the Gorkha War: "En ce temps, les Gorkha étaient en mauvais termes avec *P^ci lei*, pays de l'Inde qui est situé au sud des frontières de leur pays, et qui, depuis longtemps, était sous la domination des *Yü-k'i-li* (Anglais)." — M. C. IMBAULT-HUART, *Histoire de la conquête du Népal par les Chinois*, p. 24 (Paris, 1879, extrait du *Journal asiatique*). In

another passage of this work, the same name is applied to Calcutta (*ibid.*, p. 29).

142. *p'ya-t'er* (KOVÁLEVSKI, p. 2104), tent. From Persian *čader* چادر (Uigur *čadir*, Mongol *tsatsar*, Manchu *tsatsari*, Russian *čadra* and *šater*, Polish *szatra*, Magyar *sátor*, etc.).

3. Arabic Loan-Words.

143. *'a-rūg* (RAMSAY: *arak*), alcoholic beverage made from barley; recorded also in *Pol. D.*, 27, p. 35 (Chinese *nai-tse tsiu* 奶子酒). From Arabic *'araq* عرق ("perspiration, exudation or sap drawn from the date palm"), that has become a universal word in Asia. In China this word first appears as *a-la-ki* (*a-ra-ki*) 阿刺吉 in the writers of the Yüan dynasty (see J. DUDGEON, *Beverages of the Chinese*, p. 23, Tientsin, 1895; and WATERS, *Essays*, p. 354). Turkish *rāki*; Mongol *araki*, *ariki*, *arki*; *arača* (*Pol. D.*); Manchu *arčan*. The forms ending in *-ki* are evidently based on Arabic *'araqī* عرقی.

"Among the Horba I saw more drinking than farther north; *nä ch'ang* and a strong spirit distilled from it called *arrak* being the only two liquors in use. The latter is imbibed either cold or warm in Chinese fashion."—ROCKHILL, *Land of the Lamas*, p. 248. "On leaving, in place of tea, we drank some 'arrack,' an extremely potent liquor slightly resembling Kummel in flavor, after which we were able to bid a cheerful good-bye to our rather gruesome hosts."—G. G. RAWLING, *The Great Plateau, being an Account of Explorations in Central Tibet*, p. 187.—From my own experience I can confirm Mr. Rockhill's impression: it is rather difficult to have an opportunity of meeting Horba Tibetans in a sober state. I met Horba Lamas of the Red Sect in a hopeless condition of intoxication.

144. *sa-heb* (colloquially *sab*, *sab*), from Arabic *sāheb* صاحب, formerly title of Moslems of high rank, now address of every white man in India. In the History of Ladākh it is used in connection with the names of the first Englishmen who came to

- Le (K. MARX, *J. A. S. B.*, Vol. LXIII, 1894, p. 104). The Tibetan adaptation *sa-yab* ("earth-father") is interesting in showing how the Tibetans adjust foreign words to their own language. *Sab*, *salām*, and *bakšiš* (a *salām*, in fact, means or calls for *bakšiš*) are the three most important words which are hurled at the European in India daily and hourly, and also from the lips of Tibetans.
145. *bag-šis*, tip, pourboire. From Arabic *bakšiš* بَكشيش, now a universal word in all countries of the Indian ocean.
146. *kab-za*, hilt of a sword. According to Jäschke, from Arabic *kabša* قَبْضَة.
147. *bi-šli-mli*, "the great demon from the clan of the Asura" (*Tāranātha*, p. 63, line 10; SCHIEFNER's translation, p. 79). As Islam is involved in this passage (see E. KUHN, *A. B. A. W.*, 1893, p. 85), Schiefner may be right in deriving this word from the Arabic *bismillāh* بِسْمِ اللّٰهِ ("in the name of God"), or rather the abbreviated formula *bismē* بِسْمِ. In a commentary of the Tanjur, the god of the Kla-klo (Mleccha; that is, Mohammedans) is styled *bi-ši-mil-la* (SCHIEFNER, *ibid.*, p. 304).
148. *ma-si-ta*, a temple of the Mohammedans. SCHIEFNER (*Tāranātha*, p. 128) derives the word from Arabic *masjid* مَسْجِد. It may have come to Tibet from Hindustan. — *mā-šia*, *ma-zid* (Ladakh: RAMSAY), mosque.
149. *gyiñ*, name of a deity (JÄSCHKE), the djinn of the Arabs (in the literature relating to Padmasambhava; see GRÜNSWEDER, *Bastian Festschrift*, p. 465). From Arabic *jinn* جِن. Perhaps also *giñ bdud* ("giñ demon," noted in the *French D.*) is the same word.
150. *da-fan* (Ladakh: RAMSAY), Mohammedan burial. From Arabic *dafan* دَفِن.

151. *ka-bar* (Ladākh: RAMSAY), Mohammedan grave. From Arabic *qaber* قبر.
152. *ma-zār* (Ladākh: RAMSAY), Mohammedan graveyard. From Arabic *mezār* مزار.
153. *kasāba* (RAMSAY), the red turban worn by Argon women.
154. *dāōn* (RAMSAY), the white veil worn over the *kasāba*.
155. *hu-lāl* (čö-čē), to slaughter an animal according to Mohammedan rites. From Arabic (through Hindustānī) *halal* حلال (see JÄSCHKE).
156. *hu-ka*, the hookah pipe. From Arabic *huka* حقه.

4. Uigur Loan-Words.

After discussing the occurrence of Chinese words in Tibetan, the *Li-šii gur k'an* (fol. 23 a) refers to the Uigur language thus: la-la Hor-gyi brdar yañ snañ-ste | btsuu-pa-la pag-ši dañ | dbaṅ č'e-ba-la dar-k'a-č'e dañ | dar rgan byiu sogs mañ la, "Some are words of the Uigur: for instance, *pag-ši*, corresponding to *btsun-pa*; and *dar-k'a-č'e* and *dar-rgan*, which have the meaning 'endowed with great power,' and many others."

157. *pag-ši* (not *pa-ši*, as written by JÄSCHKE), teacher. CHANDRA DAS (p. 777) has justly combined this word with Mongol *bakši*. The "Tibetan Lama of the Karma-pa sect who visited China to preach Buddhism," cited by him, is the so-called Karma Bakši (1204—83), whose life has been narrated by a Jigs-med nam-mk'a (HUTH's translation, p. 136). As observed by O. KOVALEVSKI (*Mongol Chrestomathy*, in Russian, Vol. I, p. 350; Vol. II, p. 247), the Mongol word has the meaning "teacher," and is synonymous with Sanskrit *guru* and *ācārya*. In *T'oung Pao*, 1914 (p. 411), I have given some indications on the word, disconnecting it

from Sanskrit *bhikṣu*, and stating that, according to the Tibetan source above cited, it is derived from the language of the Hor; that is, the Uigur. Indeed, W. RADLOFF (in GRÜNWEDEL, *Bericht über arch. Arbeiten in Idikutschari*, pp. 193, 194; and *Wört. d. Türk-Dialecte*, Vol. IV, col. 1445) read the word in the sense of "Buddhist scholar" in an Uigur inscription from Turfan, written on a wooden pillar (see also F. W. K. MÜLLER, *Uigurica*, pp. 47, 49; and *Zwei Pfahlinschriften*, A.P.A.W., 1915). The word, accordingly, was familiar to the Uigur language; and the Tibetan tradition regarding the Uigur origin of the word, as far as Tibetan literature is concerned, may well be correct. This being the case, there is every reason to assume also that the Mengols received the word, like many others, from the Uigur, and that the Mauchu in their turn adopted it from the Mongols (Manchu *bakṣi*, *bakṣi*, "teacher, sage, scholar, one who knows books, master of any profession," according to SACHAROV; but Mauchu *fakṣi*, "artist, artisan, clever," in all probability, is an independent, indigenous word). The question now arises, What is the origin of the Uigur word? P. P. SCHMIDT (*Essay of a Mandarin Grammar*, in Russian, p. 50, Vladivostok, 1915) has proposed to derive the word *bakṣi* from Chinese *po ṣi* 博士 ("a wide-read scholar, professor"), and this appears to me a happy solution of the problem: *po* was anciently **bak*, and is still *pok* in Cantonese and Hakka (Korean *pak*, Annamese *bak*). Only it seems to me that the Uigur transcription *ṣi* would rather go back to Chinese *ṣi* (**ʃi*) 師 than to *ṣi* (**ʃi*) 士 (compare PELLLOT, *T'oung Pao*, 1911, p. 668); the analogous case of *fa-ṣi* (**fap-ʃi*) 法師 presumably may have exerted some influence on the shaping of *bak-ṣi*. The Chinese terms given by WATTERS (*Essays*, p. 371) are merely modern

transcriptions of the Mongol word *bakši*; but in the *Yüan shi* we meet a transcription *pa-ha-ši* (*baχši*) 八哈失 (PELLIOT, *Journal asiatique*, 1913, mars-avril, p. 456). It is well known that our word has had many vicissitudes and re-interpretations in various languages. Its fate is ably expounded by H. YULE (*Hobson-Jobson*, p. 134). The derivation from Sanskrit *bhikṣhu* (still repeated by VLADIMIRTSOV, *Turkish Elements in the Mongol Language*, in Russian, *Zap.*, Vol. XX, 1911, p. 12; and by J. NÉMETI, *Z.D.M.G.*, 1912, p. 553) must definitely be abandoned. This conclusion was based on the observation that, according to a passage in the *Ain-i Akbarī* (translation of H. S. JARRETT, Vol. III, p. 212), the religious of the Buddhist order are named *bakhši* by the learned among the Persians and Arabs; but this recent text can only prove that in the India of the Moguls an adjustment or confusion between *bhikṣhu* and *bakši* had taken effect. In Central Asia, *bakši* never had the Buddhistic significance "religious mendicant" (*bhikṣhu*), for which notions specific terms are in use; first of all, it is applied to persons able to read and write, and hence it passed into the sense of a clerk (in Comanian *bacsi*, "scribe, secretary"). It remains an open question whether *bakši*, denoting a surgeon among the Moguls, a bard in western Turkistan, and a medicine-man among the Sart, is actually the same word as that under consideration. The Sart word is perhaps connected with or assimilated to the Turkish stem *bag*, "charm, sorcery" (Z. GOMBOCZ, *Bulg.-türk. Lehnwörter*, p. 39). *Bakši* as a military office ("Master of the Horse") under the Mohammedan emperors of India, and the Anglo-Indian *bu.vee* ("paymaster"), are independent words, to be dissociated from the Uigur-Chinese term.

158. *dar-k'a-č'e* (thus transcribed in the Sino-Tibetan inscription of 1341, published by CHAVANNES in *T'oung Pao*, 1908, p. 418,

and plate 28, line 4), *dar-rgan*, empowered with authority, official (see above). The interlinear Mongol translation of the *Li-shi gur k'an* renders the former expression by *darkači*, the latter by *darkan*. In the Orkhon inscriptions, *tarkan* (Djagatai and Osmanli *tarchan*) appears as the designation of a dignity. A. VON LE COQ (*Turfan*, p. 91) says that *dōroya* or *dāroya* (compare Persian *dāroqā*) has in Turfan the meaning "mayor," but that in the western part of Turkistan, from Kuča to Kašgar, it is the title of the lower Turkish officials (soldier or policeman) in the Yamen. Compare, further, Djagatai *darga* ("chief, officer"); and Mongol, Djagatai, and Osmanli *daruga* (see also CHAVANNES, *T'oung Pao*, 1904, p. 389). Our word appears in two official Tibetan documents of 1724 and 1729 as *rduro-ka*, transcribed *ta-ro-kha* (GEORGI, *Alphabetum Tibetanum*, pp. 652, 660), again written *da-ro-ga* (p. 653), and explained as "Tartarorum, idem ac Ciu-phon [*bču dpon*] Tibetensium." For further information see YULE, *Hobson-Jobson*, p. 297; J. FRYER, *Account of East India*, Vol. III, p. 23 (Hakluyt Soc., 1915).

159. *dam-ga*, *dam-ka* (in *r(ryal rabs)*, *t'am-ga*, *t am-ka*, seal. From Uigur *tamyā*, Orkhon inscriptions *tanka*; Mongol *tamaqa*. Originally the word designated among the nomadic tribes a property-mark that was branded on the skin of the animals (see illustrations in POTANIN, *Sketches of North-Western Mongolia*, Vol. IV, plate I); hence seal, mark, stamp (RADLOFF, Vol. III, col. 1003; YULE, *Cathay*, new ed. by CORDIER, Vol. III, p. 143). In composition it is also abbreviated into *t'am*; for instance, *ryal t'am*, "royal seal" (HUTH, *B.M.*, Vol. I, p. 10, line 10), which shows that the Tibetans learned to regard the word as one of their own, and the element *ka* (*ka*, *ga*) as a suffix on a par with their suffix *ka*.

160. *t'em yig* (*Pol. D.*), memoirs, corresponding in meaning to Chinese *ki* 記. Connected with Mongol *tändüglül* (KOVÁLEVSKI, p. 1732; "journal, agenda, memorandum"), derived from *tändäk* ("sign, mark, proof, document, seal"), that seems to be associated with the preceding word *tamaqa*. It is therefore possible that also in this case there is direct connection of Tibetan with Uigur.
161. *dar*, silk. Perhaps anciently connected with Uigur *toryu*, Dja-gatai *torka* (RADLOFF, Vol. III, col. 1183, 1185); Koibal *törga* (CASTRÉN), Mongol *torgan*, *torga*, *torgon*, *torgo* (KOVÁLEVSKI, p. 1891). A. VON LE COQ (*Turjan*, p. 91) notes a Qara-Khöja word *düryü* with the meaning "kind of silk stuff from Kašgar," and *dürdü'n* meaning "inferior silk stuff."
162. *am-č'i*, *em-č'i* (Tromowa and Sikkim *am-ji*), physician. According to Jäschke, a Turkish word. From Uigur *ämči* (F. W. K. MÜLLER, *Uigurica*, I, p. 7), Mongol *ämči*. The word has no connection with Tibetan *sman-byed*, as suggested by W. W. ROCKHILL (*J.R.A.S.*, 1891, p. 234). HODGSON (*The Phoenix*, Vol. III, p. 46) notes a Chepan word *či-me* ("physician"), which apparently is based on Tibetan *sem-či*, the two members being inverted, and *em* being changed into *me*.
163. *g-yer-ma*, the black pepper-like seeds of *Zanthoxylum bungei* and *piperitum*. In all probability, from Uigur *yarma* (KLAPROTH, *Sprache und Schrift der Uiguren*, p. 14), that corresponds in meaning to Chinese *hua tsiao* 花椒. Tibetan *g-yer-ma* is identified with the latter term in the *Hua i yi yü* and in *Pol. D.* (29, p. 25), where Mongol *irma* is added. JÄSCHKE wrongly attributes to the Tibetan word the meaning "Guinea-pepper" (*Capsicum annuum*), likewise his faithful copyist CHANDRA DAS, while the *French Dict.* gives the correct definition. "Guinea-pepper" is out of the question, being an American plant that was introduced into Asia in post-Columbian times. Cf. No. 237.

5. *Turkī Loan-Words.*

164. *yam-bu* (Central Tibet *yam-b'u*), Chinese ingot of silver. From Chinese *yüan pao* 圓寶. The Tibetan form, however, indicates that the word did not come directly from China, but was adopted from Turkī *yam-bō* or *yam-bū* of Central Asia (see YULE, *Hobson-Jobson*, p. 830; N. ELIAS and E. D. ROSS, *The Tarikh-i-Rashidi*, p. 256). The Turkī word *kurus* or *kürs* is used in Ladākḥ beside *yam-bu* (RAMSAY). The Tibetan *yam-bu*, like the Chinese *yüan pao*, has fifty ounces or taels (*srañ*, *šrañ*) silver (about 125—156½ rupees). It is known in Tibetanized garb as *rdo ts'ad* (literally, "weight-measure") or *rta rmig-ma* (*ta mig-ma*, Ladākḥ *star-mik-ma*, "horse's hoof"). There are, further, a "sheep's hoof" (*lug rmig-ma*), an ingot of silver worth 15 rupees, 10 annas; and a "yak's hoof" (*g-yag rmig-ma*), equal to 31 rupees, 4 annas.

"Argento puro in yambou in thibetano, *Kurus* in turki, dalla Kashgaria."—O. ROERO, Vol. III, p. 71; enumerated among the import-articles of Le, Ladākḥ.

"Forty ducats are equal to a *yamb*. *Yamb*s are bars of silver of three different sizes, used by the Chinese in their monetary system. The largest size is about 4¾ lbs. in weight. . . . In Russian money, the exchange being at the rate of 10 per cent on silver, a *yamb* would cost about 130 rubles."—KUROPATKIN, *Kashgaria*, p. 65.

165. *č'u-ba*, *č'u-pa*, *č'o-pa*, a long loose gown (see ROCKHILL, *J.R.A.S.*, 1891, p. 122; and *Notes on the Ethnology of Tibet*, pp. 684—685). Turkī *juba* (Russiau *šuba*, *šubka*; Polish *czuba*; Czeš *čuba*, *šuba*; German *schaube*). Compare also Eastern Turkī *čupan* ("wadded coat with long sleeves") in A. VON LE COQ (*Turfan*, p. 89), and Persian *čapkan* چپکن ("a sort of short coat").
166. *bol-gar* and *bul-ha-ri* (JĀSCHKE: West-Tibetan *bul-gar*, Russian leather, *yufst*), *bu-la-ha-ri* (CHANDRA DAS). ROCKHILL (*Notes*

on the *Ethnology of Tibet*, p. 712) gives *bulgar* as general Tibetan term for Russiau leather. From Turki-Persian *bulgār*, also in Hindustāni. Compare YULE, *Hobson-Jobson*, p. 125; and *Marco Polo*, Vol. I, pp. 6—7, 395. The Swedish captain Ph. J. von STRAHLKNBERG (1676—1747), in his remarkable work *Das nord- und östliche Theil von Europa und Asia* (p. 381, Stockholm, 1730), states in his notice on yufts that the Tatars designate this leather *bulgarie*, perhaps as such leather was first introduced to them from that region (Bulgaria); that is, the Bulgar kingdom on the Volga.

“Pelli o cuoi russi, d’una conica peculiare, chiamati Bulgaro.”—O. ROERO, Vol. III, p. 71.

The Russians imported this leather into China during the eighteenth century (G. CAHEN, *Le livre de comptes de la caravane russe à Pékin*, p. 104). According to P. COUVREUR (*Dict. français-chinois*, p. 364), the Chinese term for yufts is *hian p’i* 香皮 (“fragrant leather”); according to the English-Chinese Dictionary of the Commercial Press, *o-lo-se ko* 我羅斯革 (“Russian leather”).

167. *l-čags-mag*, *b-ča-mag*, steel for striking fire, flint-stone, tinder-box. From Turki *čakmak* چاقماق.
168. *l-čags-p’ra* (Central Tibet), “a kind of musket imported from Rūm (Turkey),” see JÄSCHKE, *Dictionary*, p. 148.¹ The first element is not *l-čags* (“iron”), but is the abbreviation of the preceding Turki word.

¹ *Rum* is given by Jäschke as the name of Turkey, the Ottoman Empire, the site of which is but vaguely known to the Tibetans, though some commodities from thence find their way to Lhasa. He further cites the formations *rum-pa* (“a Turk”) and *Rum-šam* (“Syria”). The authors of the *French Dictionary* are inclined to think that *Rum* designates rather the Roman Empire, and query the rendering “Turkey.” An instance of the application of the name occurs in the Geography of the *Mingul Chutaktu* (VASILYEV’s translation, p. 5), where it follows from the context that the Turkish Empire is understood. It is used also with respect to the Byzantine Empire in a conclusive passage of *B. M.* translated by HURN (p. 29), where Kod-k’ar, the fourth son of Č’agatai, is established as king of the country *Rom* (*Rom yul*), with the capital Stambhola (that is, Stambul).

169. *top* (Ladakh: RAMSAY), cannon. Djagatai and Osmanli *top*; Turki *töp* (A. VON LE COQ, *Turfan*, p. 91); Persian *töb*, *tufan*.
170. *tu-pag* (*tu-hak*), gun. From Turki *tupak* توپك (Buriški *tūmak*).
171. *pi-č'ag*, large butcher-knife (Ramsay: *pīč'ak*, a long dagger-like knife). According to Jäschke, from Turki *čākū* چاکو. The same word occurs also in Persian with the meaning "clasp-knife, pen = knife."
172. *u-lag* (in eastern Tibet pronounced *ūla*), socage service, compulsory post-service, beasts of burden requisitioned for government purposes, courier. From Turkish *ulak* اولاق (also *ulan*, *ulau*, *ulā*), Mongol *ulaga*, Persian (Rashid-eddīn) *ulag* اولاغ (RADLOFF, *Wörterbuch der Türk-Dialecte*, Vol. I, col. 1679; E. BLOCHET, *Djami el-Tévarikh*, Vol. II, p. 312; КЛАРОТН, *Description du Tibet*, p. 75). Manchu *ula*. Regarding *ulu* in Tibet see ROCKHILL, *J.R.A.S.*, 1891, p. 218; as to the Chinese transcriptions of the word, see WATERS, *Essays*, p. 374.
173. *ar-gon* (Ladakh), "an offspring of parents not having the same rank, or the same religion, and not belonging to the same nation" (JÄSCHKE). The proper significance of the word is "half-breed, hybrid," with reference to man and animals. In Le, Ladakh, it is the designation for the offspring of Mohammedan traders from Central Asia and Tibetan women temporarily married by them after the *nikah* ceremony. The condition of these Argon, who speak Tibetan and affect Islam, has been best described by Captain H. RAMSAY in his very useful dictionary *Western Tibet* (pp. 56—57). He renders justice to their character in contradistinction to the grotesque generalizations indulged in by other writers (as cited, for instance, by YULE, *Marco Polo*, Vol. I, p. 290): "A good Argon is the best man in Ladakh; he has more intelligence, more courage, and more enterprise than the Ladakh Buddhist, and so far as I know,

he is not a whit less trustworthy. . . . They are far better traders than the Buddhists. . . . In physique they are certainly equal to them, and in personal appearance, more particularly the women, are far superior to them." There is no doubt that this Mohammedan term of Ladākh is identical with the one applied by Marco Polo to the Argon in the realm of Prester John (YULE, *l. c.*, p. 284), who have "sprung from two different races, to wit, of the race of the Idolaters of Teuduc and of that of the worshippers of Mahomet; they are handsomer men than the other natives of the country, and having more ability, they come to have authority, and they are also capital merchants" (which strikingly agrees with Ramsay's judgment). Certainly Polo's Argon has nothing to do with the Arkawun اركاوون of Rashid-eddin, who are not half-breeds, but Christians, the Ye-li-ko-wen 也里可温 of the Chinese, and the arkaxun of the Mongols (CHAVANNES, *T'oung Pao*, 1904, p. 420). While Yule, in his *Marco Polo*, rejected Klaproth's unfounded opinion connecting the words "Argon" and "Arkawūn," yet he referred to Argon in his translation of Rashid-eddin (*Cathay*, Vol. III, p. 120, new ed., where the additional note on Argon from Ladākh is not justifiable). It is strange that E. BLOCHET (*Djami el-Tévarikh*, Vol. II, p. 470), commenting on Rashid-eddin's Arkawūn, is able to say that Marco Polo writes this word "Argon." According to Yule, Argon is of Turki origin, which seems plausible. Radloff's Dictionary does not contain the term.

6. Mongol Loan-Words.

174. *a-ja-sa*, *a-ja-mo*, edict, diploma (stated by Csoma to be Chinese). From Mongol *dsusak*, *jasak* ("law, government, administration;")

from *dsasa-*, "to govern"). As to the prefix *a* in Tibetan, see *J.R.A.S.*, 1915, p. 784, note). The *Hua i yi yū* gives *ts'ī šu* 勅書 ("credentials, letters patent") as rendering of the Tibetan term, likewise the *Pol. D.* (3, p. 9), where Manchu *ee.ee* and Mongol *jiguku* are added.

175. *mu-či*, province. From Mongol *moji* (see HUTH, *B.M.*, Vol. II, p. 22).
176. *a-jam-mo*, *a-ja-mo* (*Pol. D.*, 19, p. 46), *rtu-zam*, post-station; *rtu-zam-pa*, courier, express estafet. The element *jam*, *zam*, is derived from Uigur and Mongol *jam* (*dzam*, *yam*), post-stage, post-horses (RADLOFF, *Wörterbuch der Türk-Dialecte*, Vol. II, col. 298); *rtu* ("horse") is Tibetan. The Tibetan compound certainly does not mean "horse-bridge," as asserted by Chandra Das. It is more likely that the Tibetan term hails straight from Mongol rather than from Uigur, as it was the Mongol rulers who introduced the relay service into Tibet. Moreover, under the Mongols, Tibet was divided into twenty-seven *jam* ("departments"), a chief officer (*jam dpon*) being appointed in each. I do not share the opinion of E. BLOCHET (*Djami El-Tévarikh*, Vol. II, p. 311) that the Uigur-Mongol word is based on Chinese *yi-ma* 驛馬 ("post-horse"). See particularly PÉLIOT, *Journal asiatique*, 1913, mars-avril, p. 458.
177. *k'a-t'un*, princess, in connection with a female name (SCHLAGINTWEIT, *Könige von Tibet*, p. 867; MAHX, *J.A.S.B.*, Vol. LX, 1891, p. 128) From Mongol *khatun* (Orkon Inscriptions *katun*, Turkish *katin*).
178. *t'ob-č'u*, *t'ob-č'i*, *t'ob-č'e*, *t'eb-č'u*, *tob-č'i*, and *tob-či*, button. From Mongol *tobči* (Teleutic and Altaic *tobčy*, Osmanli *toplu*).
179. *'o-mo-su* (RAMSAY: *omosuk*), stocking. JÄSCHKE states that this is a Mongol word; but neither Kovalevski nor Golstunski has such a Mongol word.

180. *tālai (talai) bla-ma*, Dalai Lama, the Lama of the sea (who is as big as the sea). Mongol *dalai* ("sea"), translating Tibetan *rgya-mts'o*. See WATTERS, *Essays*, p. 370; MAYERS, *Chinese Government*, p. 113.
181. *paṅ č'en' er-te-ni* (instead of the Tibetan form *paṅ č'en rin-po-č'e*; see, for instance, HUTH, *B.M.*, Vol. II, p. 317), title of the hierarch of bKra-šis lhun-po. Mongol *ārdāni*, precious object, precious stone. As *paṅ* is abbreviated for Sanskrit *paṇḍita*, and as *č'en* ("great") is Tibetan, words from three languages are welded in this compound. It is known also in Chinese (WATTERS, *Essays*, p. 370; MAYERS, *l. c.*, p. 115).
182. *bog-to, pog-ta*, holy, venerable, divine, lord. From Mongol *bogda*, first used in the title of Chinggis Khan (HUTH, *B.M.*, Vol. II, pp. 16, 18). The Mongol title *khān (khagān)* is usually translated into Tibetan as *rgyal-po*. E. BLOCHET's derivation of the Mongol word from Persian *bokhta* (*J.R.A.S.*, 1915, p. 308) is not convincing to me,¹ any more than W. SCHOTT's etymology based on Sanskrit *bhakta* (*A.Be.A.W.*, 1877, p. 5). I see no reason why *bogdo* should not be simply a Mongol word.
183. *se-mo-do, se-mo-to* (in *Mi-la-ras-pa*), kind of ornament, for instance, made of pearls. In the *Za-ma-tog*, written in 1514 by Rin-č'en č'os-skyoṅ bzaṅ-po of Ža-lu (1440—1526), the term is explained as a neck lace of precious stones (*rin-po-č'ei do-šal*). CHANDRA DAS assigns to it the specific and probably correct meaning "amber." In my opinion, this word is a hybrid formation composed of Chinese *si* 璽 ("jet, gagate,

¹ There is a strange misconception on his part with respect to Mongol phonetics; he transcribes the word *bokhta*, and thinks that *kh* represents an aspirated guttural. Mongol writing, as is well known, has no signs for expressing aspirates, and the sound in question is a spirant.

- black amber")¹ and Mongol *modo* ("wood"), gagate being justly regarded as a woody formation, and being obtained by the Chinese from Yarkhoto and Turfan (see *P'ên ts'ao kan nu*, Ch. 37; also the writer's *Jottings on Amber*, pp. 222, 231). So far as I know, this presupposed Mongol (or eventually Turkish) word **simodo* or *semodo* has not yet been traced in Mongol (or Turkish). The Mongol term given by Kovalevski as corresponding to Tibetan *se-mo-do* is *sugub-čilagur*.
184. *has 'er-te-ni*, nephrite. From Mongol *khas ärdäni*. See HUTN, *B.M.*, Vol. II, p. 21 (not "jaspis," as translated by him); *ibid.*, p. 16, we meet the transcription *has päu t'a-ma-ga 'er-te-ni* ("precious seal of nephrite"), where *päu* stands for Chinese *pao* 寶.
185. *sku bde rigs* (pronounced *ku-de-ri*), a species of musk (*Moschus sifanicus*). From Mongol *kudäri*. The Tibetanized form of writing is notable; the genuine Tibetan word is *g-la-ba*.
186. *bu-gu* (Amdo), a species of stag (*Cervus eustephanus*). From Mongol *bugu* (Manchu *puku*); according to PALLAS (*Zoographia Rosso-Asiatica*, p. 216), *Cervus elaphus*; see also F. JUSTI, *Les noms d'animaux en kurde*, p. 19.
187. *adzeg-ran*, a species of antelope (*Procapra subgutturosa*). From Mongol *dsägärän*, *dsärän*. This word has been adopted into Russian зерець, fem. зереца. It is the *huan yan* 黃羊 of the Chinese (*Capra flava* of Du Halde; see PALLAS, *l. c.*, p. 251).
188. *rdza-ra* (*za-ra*), a species of hedgehog (*Erinaceus amurensis*, occurring in the Kukulnör region). From Mongol *dsarāga*, *dsarā*. The Tibetan word for "hedgehog" is *rgan*.

¹ I am inclined to regard this word as an imitation of Arabic *sik* سيج, the oldest form of the name for "gagate;" otherwise *sabaj* سباج or *labaj* لباج, Persian *laba* لبه (see RUSKA, *Steinbuch*, p. 55). Spanish *azabache* and Portuguese *azeviche* come from the same Arabic word.

- rdza-bra* (*ža-bra*), another species of *Erinaceus* (Central Tibet). In all probability, this is only another way of writing the same Mongol word, with reference to Tibetan *bra* ("marmot").
189. *sbu-la-k'a*, sable. From Mongol *bulaga*, *bulagan*. According to PALLAS (*l. c.*, p. 83) and JÄSCHKE, *Mustela zibellina*; according to G. SANDBERG (*Tibet and the Tibetans*, p. 294), *Putorius auriventer*.
190. *o-god-no* (*wo-g'ō-no*), *Lagomys ogotona* (occurs in Tsaidam and Amdo). From Mongol *ogotona* (*Lepus ogotona*, see PALLAS, *l. c.*, p. 151);¹ Manchu *oxotono* (according to Sacharov, *Lepus dauricus* and *alpinus*).
191. *tu-la*, *Lepus tolai* (Kuku-nor region, Mongolia, and Transbaikalia). From Mongol *taolai*, *tulai*. PALLAS (*l. c.*, p. 149) adds a "Taugutan" word *rangwo*.
192. *i-man šin* (*Pol. D.*, 29, p. 26), a kind of *Sophora* (Chinese *shan huai* 山槐). From Mongol *iman* (*boro*).
193. *ag-lig* (or *šin wa*:² *Pol. D.*, 29, p. 41). From Mongol *agli*, Manchu *ugeli* (Chinese *šu pao* 樹包), excrescences or knots on the stems of trees, from which is made a decoction for treating the backs of animals galled by riding.
194. *had* (*Pol. D.*, 28, p. 57), a species of wild pear or crabapple (*Pyrus betulæfolia*). From Mongol *khat* (KOVALEVSKI: name of a fruit). The Chinese equivalent, according to *Pol. D.*, is *tū-li* 杜棣, which appears to be identical with the *tu-li* 杜梨 discussed by BRETSCHNEIDER (*Bot. Sin.*, pt. II, p. 304). The Manchu equivalent is *eikte*.
195. *na-ra-su* (*Pol. D.*, *ibid.*), a wild blue berry, the *golubitsa* of the Russians (*Vaccinium uliginosum*). From Mongol *narasu*. The Chinese equivalent is *tsao li-tse* 皂李子 (Manchu *duksi*).

¹ KOVALEVSKI's identification with the striped squirrel (*Tamias striatus*) is not correct.

² JÄSCHKE writes this word *ba*. The combination of the letters *ib* is very similar to *w*.

196. *ya-šel abru dimar* (*Pol. D.*, *ibid.*), a species of wild cherry (?). From Mongol *yāšil* (KOVÁLEVSKI: *Rhamnus frangula*). The Chinese equivalent is *hūn yīn* 紅櫻 (*Manchu fafaza* or *fajuzā*; according to SACHAROV, the fruit of a tree, looking like a peach pressed flat, red of color, and of acid flavor).
197. *šid* (*Pol. D.*, 28, p. 55), hazel-nut (*Corylus heterophylla* and *mandshurica*). From Mongol *šit* (Chinese *čōn-tse* 榛子, *Manchu sisi*). Regarding *čōn-tse* in Tibetan, see above, p. 409. In the *Hua i yi yū*, a curious word for "hazel-nut" is noted as *pe-tog*, which I have not seen elsewhere.
198. *pir-t'i* (*Pol. D.*, 9, p. 43), quick-match. From Mongol *bilta?* (Chinese *huo šōn* 火繩).
199. *beg-tse*, a hidden shirt of mail; name of the God of War. Probably from Mongol *begder* (KOVÁLEVSKI, p. 1125), "cotte de mailles cachées;" but on the following page, Kovalevski gives *begji* side by side with *begder*, and *begji* doubtless transcribes Tibetan *beg-tse*. Cf. Persian *bagtar*, *Djng. bāktār* ("armor").
200. *hom*, felt saddle for a camel. From Mongol *khom* (*Manchu komo*).
201. *Ānātkāk*, the Mongol designation for India, being a transcription of Chinese *Yin-tu kuo* (**Iu-du kwok*). According to ROCKHILL (*J.R.A.S.*, 1891, p. 132), this word is frequently used by Tibetans who have travelled in Mongolia or China.
202. *'O-ro-su*, *'O-lo-su*, *'U-ru-su*, from Mongol *Oros*, *Urus*, Russia. *O-ro-su sram*, Russian (Siberian) sable. *Orosu* means also a "foreigner" in Central Asia. "Olosu Amban," appellation of Przewalski (ROCKHILL, *Land of the Lamas*, p. 163). In *dPag bsam ljon bzañ* (p. 74), Russia is enumerated among the prosperous "barbarous border-countries" (*mt'a ak'ob-pa*) along with Tokhāra, Persia, Turushka, Sog-po (Sogd) and Ho-t'ōn (Khotan). The *Pol. D.* mentions the *'O-ro-sui ra-ba* ("hotel 館 of the Russian Mission in Peking") and the *'O-ro-sui yi-gei gr'a*

("Russian School in Peking;" see J. DUDGON, *Chinese Recorder*, Vol. IV, 1871, p. 37). A real Tibetan designation for Russia is *rgya ser* ("yellow country"), in accordance with the Tibetan color-scheme system referring to the surrounding countries (*rgya gar*, *rgya nag*). Originally, however, the term *rgya ser* in general denoted the regions to the north of Tibet, particularly Sartagol (SCHIEFNER, *Mélanges asiatiques*, Vol. I, p. 426, where some data on Russia are extracted from the Geography of the Jambudvīpa written by Sum-pa mk'an-po in 1717; in this work *rgya ser* is identified with the empire of the 'O-ro-su). Hence it occurs that Sartagol is styled also 'O-ro-swo by aJigs-med nam-mk'a (HUTH's translation, pp. 23, 28). In the Geography of the Minčul Chutaktu (VASILYEV's translation, p. 93), Russia is likewise styled *rgya ser*. In eastern Tibet, a popular designation for Russia is Hor-sog or Hor-ro-sog (*French Dict.*, p. 222), composed of the well-known tribal names Hor and Sog, to which the name 'O-ro-su is wittily adapted.

203. *hor-du*. This term is contained in the *Tibetan Dictionary* of CHANDRA DAS, who explains it thus: "A Mongolian encampment, from *Hor* 'Tartar or Mongolian' and *du* 'smoke.' Each nomad's tent represents a fire-place and chimney, i.e., a family." This would not be so bad if the term in question were really applied to the tents of Mongols only. In fact, however, when Tibet formed a province of China, it was applied by the Mongols with reference to Tibetan families, and served as the unit in drawing up a census of the population of Tibet (compare CHANDRA DAS, *Narrative of a Journey round Lake Yamdo*, p. 63). It is therefore clear that Tibetan *hor-du* is based on Mongol *ordu* ("camp, encampment, tent of the Khan"), and was assimilated by the Tibetans to the tribal name Hor. The Mongol word,

on its part, appears to be derived from the Uigur. For further information see YULE, *Hobson-Jobson*, p. 639; BRETSCHNEIDER, *Medieval Researches*, Vol. I, pp. 18, 58.

7. Manchu Loan-Words.

A few of these occur in Tibetan in consequence of the Manchu organization extended over Tibet by the Ts'in dynasty.

204. 'am-ban, from Manchu *amban* ("great, official, minister"), appellation of the imperial Resident at Lhasa under the Manchu (see WATERS, *Essays*, p. 366). The common Tibetan pronunciation of this word is *ampa*.
205. *ho-šo* (HUTH, *B.M.*, Vol. II, p. 329), explained by Huth from Mongol *khošoi*, that "according to Kovalevski should be the equivalent of Chinese *kho-šo*, province." There is, of course, no Chinese word with this meaning. The word intended appears to be Manchu *xošo* (transcribed in Chinese 和碩), which signifies "corner, region; appanage of a prince," and is connected with the titles of some Manchu princes and princesses (see MAYERS, *Chinese Government*, Nos. 14, 19; BRUNNERT and HAGELSTROM, *Political Organization of China*, Nos. 14, 15, 16, 35, 873). In the passage translated by Huth, the word indeed means "prince." In the *Pol. D.* (3, p. 6) we find Tibetan *hö-šoi koñ jo* (= 和碩公主).

8. Chinese Loan-Words.

A. Old Chinese.

206. *bug-sug* (*French Dict.*, p. 667), alfalfa, lucerne (*Medicago sativa*). In Ladakh (Jäschke), bird's-foot trefoil (*Melilotus*). This is a good and ancient transcription of Chinese **buk-suk* (*mu-su*)

苜蓿, denoting the same plant, the original habitat of which was Iran, and which was introduced from Fergana into China by Čan K'ien. The Iranian equivalent has not yet been discovered. The Chinese word bears no relation to Pahlavī *aspast* (explained as *asp-ast*, "horse-fodder" [NÖLDEKE, *Z.D.M.G.*, Vol. XXXII, 1878, p. 408], that is, lucerne), Persian *uspust*, *aspist*, *ispist* (*supust*, "trefoil, clover"), Balūčī *aspust*, Puštu *spastu*. In my opinion, the Pamir languages will some day yield the word required: in Wakhī we have *wujerk* as designation for "lucerne" (R. B. SHAW, *On the Ghalchah languages*, *J.A.S.B.*, 1876, pp. 221, 231), and in Sariqolī *vurj* for "horse." The etymology *μεδική βοτάνη* noted in the dictionary of Giles is impossible for phonetic and historical reasons, for the Greek designation was certainly not current in Iranian regions. Russian *burkún*, *burkúnčik*, *burundúk*, seem likewise to go back to Iranian. A Tibetan word for "clover" is *ol* (JÄSCHKE: snail-clover, medic, Medicago; RAMSAY: a high-growing kind of clover or lucerne). The *Pol. D.* (29, p. 11) gives two artificial words, *rtswa bsuñ* ("fragrant grass") and *rgya spos*,¹ as equivalents of Chinese *mu-su*; Manchu *morxo* (from *morin*, "horse").

207. *tse-tse*, *či-tse*, *či-ts'e*² (Kunawar *tse-tse*; on the tablets from

¹ The element *rgya*, accordingly, in this case means "Chinese" (*rgya spos*, "Chinese fragrant plant"). Otherwise, however, this compound means "Indian fragrant plant," for we meet it twice in the *Mahāvīyutpatti*; first, in the list of aromatics, where it corresponds to Sanskrit *vāyana*; second, in the list of drugs, where it is identified with Sanskrit *tagara* (*Tabernaemontana coronaria*), a tree indigenous in Atali from the wood of which incense is made (EITEL, *Handbook of Chinese Buddhism*, p. 168). As *tagara* (Chinese 多伽羅 *ta-g'a-ra) is explained in the Chinese glossaries as "putchuk" (根香 or 木香), this meaning also may adhere to the Tibetan term. The usual Tibetan designation for "putchuk" is *ru-rla* (Sanskrit *kuṣṭha*, *Costus speciosus*). Tibetan *rgya spos dkar* is identified with Chinese *žu hian* 乳香, the *olibanum* produced in India.

² While the ending *tse*, *tsi*, or *ts'e* (transcribing Chinese *tse* 子) in some cases is a criterion indicating Chinese loan-words, we must not generalize on this rule, since there is also a genuine Tibetan suffix *tse* (written also *rtse*). Thus we have *k're-tse* (Central

- Turkistan: *či-ts'e* [FRANCKE, *J.R.A.S.*, 1914, p. 54]), millet. From Chinese *tsi-tse* 稷子 (*Panicum miliaceum*, paniced millet). The Tibetan word is listed in the *Mahavyutpatti* (section 228) as corresponding to Sanskrit *anuphala*; further, *či-ts'e nod* (or *k're rgod*) answering to Sanskrit *çyāmāka* (*Panicum frumentaceum*), and *či-ts'e* being the equivalent of Sanskrit *kodrava* (*Paspalum scrobiculatum*).
208. *ske-ts'e* (*Pol. D.*, 27, p. 19), black mustard (*Sinapis ramosa*). From Chinese *kai* (*kiai*) *ts'ai* 芥菜. The fact that the Tibetan loan is old and goes back at least to the ninth century, becomes evident from this word being on record in the *Mahavyutpatti* (section 228), where we find *ske-ts'e-i qbru* = Sanskrit *rājikā* ("black mustard"). It thus appears that the Tibetans received name and object from the Chinese prior to the contact with India. The *Pol. D.* (*ibid.*, p. 30) has *sga-rgod* = *ye kai ts'ai* 野芥菜. Tibetan *sga* is possibly also a transcription of Chinese *kiai*.
209. *bim-pa* (*Pol. D.*, 28, p. 49), apple (*Pyrus malus*). Transcription of Chinese *p'in kuo* 蘋 (櫛) 果 (Manchu *p'ingguri*, Mongol *almurat*), or rather **bim-ba* (*p'in-p'o*) 蘋婆, which itself represents a transcription of Sanskrit *bimba*. Li Ši-čén says that the apple (*nai* 柰) is thus styled in Sanskrit literature, and that this term is employed also by the northerners.
210. *čag šin* (not in our dictionaries), čag tree (*Scirpus tuberosus*), a black eatable tuber, resembling the chestnut in appearance (hence called "water-chestnut"), Chinese *šao* 芍. In the *Pol. D.* (Ch. 29, p. 29) we meet the following equation: Manchu *jak moo*, Tib. *čag šin*, Mongol *jak modo*, Chinese *šao mu* 灼木 (灼 being substituted for 芍). The latter is in

Tibetan *f'o-tso*, "Chinese vermicelli" (from *k're*, "millet"); *tsem-tso* ("scissors"); *kou-rtso* ("jacket"); *kuy-rtse* ("cuckoo"); *bag-tso* ("basket"); *pi-tse* ("sieve"); *t'ag-tso* ("a small grain"); *rag-tso* ("stone in fruits"); *dse-tse* ("vent-hole for smoke").

- Cantonese *čök*, Hakka *čok*, Korean *čak*, Japanese *jaku* and *šaku*. Hence Tibetan *čag* is an ancient transcription of Old Chinese **čak* 芍. In the *T'ai p'in huan yü ki* (Ch. 31, p. 2 b), the plant is mentioned as a product of Yao čou 耀州 in Shen-si.
211. See p. 542.
212. *ram-s*, *ram*, indigo. From Chinese **lam* (*lan*) 藍. E. HUBER (*Bull. de l'Ecole française*, Vol. IX, p. 397) conceived the two words as anciently related, adding Siamese *k'ram* and Diori *thom*; but it seems preferable to me to regard Tibetan *ram-s* as a loan-word.
213. *lá-buk* (Ladakh: RAMSAY); *lá-p'ug* (occurs in the wooden documents from Turkistan: FRANCKE, *J.R.A.S.*, 1914, p. 54), radish (*Raphanus sativus*). From Chinese **la-buk* (*lo-po*) 蘿蔔 (see this volume, p. 83). There can be no doubt that *la-bug* must have been the original Tibetan form, as *bug*, in the same manner as Chinese **buk*, is deep-toned, while Tibetan *p'ug* is high-toned. For this reason I am not yet convinced that the form *la-p'ug*, as asserted by Francke, really occurs in the wooden documents which have not yet been published. If it does occur there, the change from the labial sonant to the aspirate surd must have been brought about at an early date, or *la-p'ug* was derived by the Tibetans from another language than Chinese. In Bunan we have the curious form *am-p'an*, which, as far as the final guttural nasal is concerned, agrees with Mongol *loban*.
214. *guñ la-p'ug* (Tromowa *goñ la-p'up*, Sikkim *goñ-la-pup*), carrot (*Daucus carota*). M. PÉLLIOT (*T'oung Pao*, 1915, p. 11) has proposed to regard this as a transcription of Chinese **yuñ la-buk* 紅蘿蔔. This would be possible if the Tibetans had adopted the Chinese term in the T'ang period, when the word *huñ* 紅 ("red") was indeed sounded *yuñ*, but for historical reasons it is out of the question to admit this possibility.

The carrot was not known in China under the T'ang; it is not mentioned in the herbals of either the T'ang or the Sung. Li Ši-čên states in regard to the carrot (*hu lo-po* 胡蘿蔔) that it began to make its appearance at the time of the Yüan, from the land of the Hu (元時始自胡地夾, see also BRETSCHNEIDER, *Chinese Recorder*, Vol. III, 1871, p. 223), and this opinion appears to be well founded; for in the *Čên lei pên ts'ao* (Ch. 27, fol. 16 b *et seq.*), the herbal of the Sung period, no mention is made of the carrot. Under the Yüan, 紅 was sounded *huñ*, which the Tibetans, in case they should then have received the term from China, would doubtless have transcribed *huñ*: thus, indeed, they transcribe the Chinese word (see Nos. 236, 281). In the Sino-Tibetan inscription of 1341 (*T'oung Pao*, 1908, plate 28, line 12), Chinese *ho* 河 is written in Tibetan *ho* (not *kho*, as transcribed by S. Lévi). Hence M. Pelliot's opinion can hardly be upheld. It is not plausible also for another reason: the term *huñ lo-po* is merely presupposed by him, but in fact does not exist in the Chinese language. The *Pol. D.* of K'ien-luñ enumerates three varieties of *lo-po*,—*ta* 大 *lo-po* = Tibetan *la-p'ug dmar-po* ("red l."), *šui* 水 *lo-po* ("a kind of sweet radish") = Tibetan *la-p'ug dkar-po* ("white l."), and *hu* 胡 *lo-po* = Tibetan *la-p'ug mñar-po* ("sweet l."). These examples show that the Tibetan nomenclature is not based on Chinese. On the other hand, JÄSCHKE (p. 540) tells us that the carrot is colloquially called in Central Tibet also *la-p'ug ser-po* ("yellow l."), and he cites (p. 69) another Central-Tibetan term, *guñ dmar la-p'ug*. As *dmar* is the Tibetan word for "red," it is out of the question that *guñ* should represent the Chinese word for "red:" the Tibetans would certainly not have produced such a monstrosity, for which there is no precedent in their language. At the outset

there is no valid reason to assume that Tibetan *guñ* must transcribe a Chinese word. We know nothing, either, to the effect that the Tibetans received the carrot from China. It may have reached them as well from another region. Indeed, it is evident from the presence of a Persian loan-word (No. 112) in Ladākḥ that the carrot became known there from Irān. If, further, the Tibetans discriminate between *bod la-p'ug* ("Tibetan radish;" that is, the common black radish) and *rgya la-p'ug* ("Chinese radish," a red species of an acidulent taste), the chances are that the word *guñ* in *guñ la-p'ug* likewise hints at a geographical or ethical name connected with the introduction of the vegetable. It may bear no relation to Chinese *hu* 胡, but still less has it anything to do with Chinese *huñ* 紅.—The term *lča-ba*, which according to Jäschke denotes a sort of carrot, is identified with *yü ču* 玉竹 (*Polygonatum officinale*) in the *Tib. Pharm.*

215. *ja* (*dža*), tea. Exact reproduction of ancient Chinese **dža*, *da* (modern *č'a*) 茶, the tea-shrub (*Camelia japonica*). The Chinese word has the even lower tone, and is therefore correctly rendered by the Tibetan deep-toned *ja*, while Tibetan *č'a* is high-toned. It is notable that of the many Asiatic languages which have adopted with the product the Chinese designation for it, Tibetan is the only one that has preserved the ancient initial sonant. Hence the conclusion is justified that the acquaintance of the Tibetans with tea goes as far back as the Tang period. In fact, tea was then exported to the Tibetans and Tañ-hiañ from K'iuñ-čou 卽州 in Se-č'uan, being made up into cakes or bricks of forty ounces each (*T'ai p'ien huan yü ki*, Ch. 75, p. 3).

216. *ja-abiñ* (pronounced *j'am-biñ* in Central Tibet), tea-kettle, tea-pot (respectful language: *gsol abiñ*, pronounced *sol-biñ*).

Tibetan *ja* = Chinese *č'a*, tea; Tibetan *abiñ* = Chinese **biñ* (*p'in*) 瓶, jar, jug, pot. The loan therefore appears to be old. It is interesting that the Tibetans have received the word also in the modern form *p'in* ("earthenware pitcher, cup"), so that a double loan has taken place at different times. In my opinion, Tibetan *p'in* cannot be correlated with Burmese *p'yañ*, as proposed by B. HOUGHTON (*J.R.A.S.*, 1896, p. 45), who believes that this equation testifies to the existence of earthenware before the separation of the Burmese and Tibetans.¹

217. *ben*, *bön*, a large pitcher, jug. According to Jäschke, this word is attested in *rGyal-rabs*. It is apparently derived from **bön*, *bun* (*p'on*) 盆, "basin, bowl, pot." The Tibetan transcription exactly reproduces Chinese **bön*, as the Tibetan letter *e* conveys also the timbre *ö*. Both the Chinese and the Tibetan have the even lower tone. In the same manner as Chinese *p'in*, this word also has been re-imported into Tibet in recent times. JÄSCHKE (p. 487 b) cites *zi-liñ pan-tse* or *bañ-tse*, "basin of tutenague, white copper." HENDERSON (*Tibetan Manual*, p. 64) has *č'u-ban* (pronounced *b'en*), "water-jug, pitcher" (*ibid.*, p. 87, he says that *ban* is from Chinese *p'en*).
218. *don-tse* (the reading *don-rtse* is rejected by SCHIKPNEK, *Ergänzungen*, p. 27), copper coin, especially of Chinese coinage, money (*mDzañs blün*). Transcription of Chinese **duñ-tse* (*t'un-tse*) 銅子. Although Tibetan *don* ("pit, ditch") is anciently related to Chinese **duñ* (*t'un*) 洞, and Tibetan

¹ The word *k'o-ti* (Central Tibetan), "tea-kettle," is accompanied by JÄSCHKE with the note: "Chinese?". WALSH (*Vocabulary of the Tromowa Dialect*, p. 32) spells the word *k'og-tib* (but Tromowa pronunciation *k'u-ti*). The same word *tib* is found in *tib-ril* (respectful language: *gsol-tib*), K'ams *teb-rol*, "tea-pot." In this case *ril* is the Tibetan word *ri*, "globular, globe, ball" (compare *rdza tib*, "earthen tea-pot"), so that *tib* itself has the meaning "tea-pot." As to the word *k'o*, it is almost certain that it merely presents an abbreviation of *k'og*, and that the latter is a Tibetan word (*k'og-ma*, "pot, earthen vessel"). B. HOUGHTON (*J.R.A.S.*, 1896, p. 45) has compared it with Burmese *ö*.

doñ-po, *l-doñ-po* ("tube") to Chinese **duñ* (*t'uñ*) 筒, the word *doñ-tse* represents only a transcription, as outwardly indicated by the Chinese ending *tse*; above all, the Tibetan equivalent of Chinese **duñ* (*t'uñ*) 銅, evolved from **džuñ*, *dzuñ*, is represented by *zañ-s* (see this volume, p. 83). The Mongol word corresponding in meaning is *dsogos*; the Manchu word, *jixa*. In the *Hua i yi yü*, the Tibetan word is translated by *ts'ien* 錢.

219. *kim* (*mDzañs blun*; SCHMIDT's translation, p. 274), guitar. The reading in the unreliable text of Schmidt is *ki-ma*. It was rather tempting to a Tibetan scribe to place the dot (*ts'eg*) wrongly, as the word thus adapted itself to a Tibetan formation with suffix *ma*. SCHIEFNER (*l. c.*, p. 49) recognized correctly that the word is based on Chinese *k'in*, the Mongol translation offering *khugur*. From Chinese **gim* (*k'in*) 琴, "guitar" (this, in fact, is the word used in the Chinese text, Ch. 10, p. 17 b). In all probability, the original Tibetan reading was likewise *gim*. See also PELLLOT, *T'oung Pao*, 1914, p. 258, note 2. The Chinese instrument is usually styled in Tibetan *rgyud bdun-ma* ("seven-stringed").
220. *keu-le*, *-i rgyu*, seal (*mDzañs-blun*, p. 109, line 1). The Chinese version (Ch. 4, p. 17) offers *juñ yin* 封印, which does not help us in explaining the Tibetan term. The Mongol translation made from the Tibetan work renders this term by *kaoli tamaga*, "customary seal" (SCHIEFNER, *l. c.*, p. 27, who thought that *keu-le* might be a corrupted foreign word); we have the same word in Manchu *kōli* ("law, rule, custom"). The second element, *li*, in all probability, is Chinese *li* 例.
221. *li*, league, mile (in the wooden documents; see above, p. 430). From Chinese *li* 里.
- le-bar* (*Hua i yi yü*: *sa le-bar*), *le-war*, mile; *le*, from Chinese


li 里. In the description of Jambudvīpa (aDeam-glin spyi bśad no mts'ar gtam sñan), written by Sum-pa mk'an-po in 1717, it is stated, "India is semi-circular in shape, and its circumference is said to amount to 90,000 *le-war* of Chinese style" (rgya-gar-gyi sa dbyibs zla gam lta-bu mt'a k'or rgya-nag lugs-kyi le-war dgu k'ri yod zer). Here, accordingly, *le-war* is characterized as a Chinese word. I cannot explain the second element, *war*. Colloquially, a Chinese *li* is called in Tibet *le-bor*.

222. *gi-lin*, listed by JÄSCHKE as "a fabulous animal" after Klaproth's *Description du Tibet* (p. 157). We further have the transcriptions *gi-liñ* ("strong-bodied, durable horse") and *gyi-liñ*, mentioned in *rGyal-rabs* as an excellent breed of horses. In the *Pol. D.* the names of the eight famous steeds of Mu Wang and other designations of horses are rendered into Tibetan by means of the word *gyi-liñ*. The *French Dict.* (p. 152) notes also a variant *ger-liñ*. Transcription of Chinese **gi-lin* (*k'i-lin*) 麒麟. In the *Hua i yi yü*, Tibetan *gi-lin* is identified with this Chinese term.
223. *gi-wañ*, *gi-bam*, *giu*, *giu-wañ*, *gi-wam* (Mahāvīyutpatti *agi-hañ* = Sanskrit *gorocanā*), *ghi-dbañ* (*Hua i yi yü*), *gi-hañ* (*Pol. D.*, 19, p. 19), bezoar. Derived from Chinese **giu-wañ* (*niu lwañ*) 牛黃 (Japanese *giū-kwō*). Mongol *giwan* (KOVÁLEVSKI, p. 2554).
224. *a-jab-tse*, nippers, tweezers. From **ʕap(k'ap)-tse* 鉗子.
225. *čog-ts'e*, *l-čog-tse*, *l-čog-rtse* (*Li-šii gur k'añ*, fol. 23: *čog-ts'o*),¹ table. From Chinese **čok-tse* 桌子. Also *rgya lčog*, Chinese table; *rgya jog* or *a-jog*, long table, bench; and *a-jon-tse*, *a-jon-ts'e*.

¹ See above, p. 444. The fact that this word means "table" becomes evident from the Mongol translation *širügün*.

226. *ha-šig* (*Tib. Pharm.*, No. 54), steatite. From Chinese **hwa šik* (*hua ši*) 滑石. JÄSCHKE defines the word as "a mineral medicine, used as a remedy for the stone."
227. *yol* (*French Dict.*, pp. 877, 918), month. From Chinese **yüet, yüt* 月; anciently **n'wiet*. The Tibetan form is curious, inasmuch as it shows the recent initial *y* in combination with the ancient final consonant, which, in like manner as in Korean (*wöl*), is transformed into a liquida.
228. *gur*, dynasty (not in our dictionaries), occurs only in connection with the names of the Chinese dynasties; for instance, *T'an-gur* (the "T'ang dynasty"), *Č'in-gur* (the "Ts'ing dynasty"); compare *T'oung Pao*, 1907, p. 394, note 2. In *Pol. D.* (Appendix, 1, p. 33) the term *Čou i* 周易 is rendered into Tibetan *Teu gur-gyi rtsis-kyi rig-byed* (literally, "the science of the calculations of the Čou dynasty"). In all probability, this word is a reproduction of Chinese **kwok, *kwor, *gwor* 國 ("kingdom, state, dynasty"), from which also Manchu *gurun* is derived.
229. *pir*, writing-brush, pencil. From Chinese **bit, bir* (*pit*) 筆 (*Mongol bir*). King Sron-btsan sgam-po asked Emperor Kao-tsun (650—683) for workmen to manufacture paper and writing-brushes (*T'an hui yao*, Ch. 97, p. 3 b). The Tibetans usually employ for writing a wooden or bamboo stylus (*smjug-gu*), in the same manner as the ancient Chinese did prior to the invention of the brush.
230. The Tibetans have adopted from the Chinese the system of *pa kua* 八卦 for purposes of divination. These are styled in Tibetan *spar k'a*.¹ The *Pol. D.* gives *p'yag rgya* as Tibetan rendering of Chinese *kua*. The transcription *spar*

¹ *T'oung Pao*, 1914, p. 79, note.

(in the Sūtra of the Eight Phenomena *par*) with final liquids, again, is notable, and suggests an Old-Chinese pronunciation *par* beside *pat*. A comparative list of the Tibetan and Mongol names has been given by O. KOVALEVSKI¹ and A. POZDN'AYEV:² a Tibetan list, by CHANDRA DAS.³ None of these authors has compared them with their Chinese equivalents. In order to establish the correct spelling of the Tibetan names, I availed myself of the *Pol. D.* and several wood-engravings executed in Peking, which give the designs of the *pu kua* with their Tibetan equivalents.⁴ The figures are sometimes wrongly identified; thus, for instance, the figure  is called *dva*, while its Chinese designation is *sun* 巽. The Tibetan equivalent of the latter character, of course, is *zon*, while *dva* is the transcription of *tui* 兌. No regard need be taken here of this confusion of the trigrams; it is merely our task to study the Tibetan terms in their relation to the Chinese.

1. 乾 *k'ien* (Japanese *ken*, Sino-Annamese *kien*) = Tibetan *kin* or *gin*,⁵ Mongol *kin*, *gin*.
2. 兌 *tui* (Japanese *de*, Sino-Annamese *dwai*) = Tibetan *dva* (the letter *d* with *va* *zur*, accordingly *dva*),⁶ Mongol

¹ *Dict. mongol-russe-français*, p. 2599. The Mongols employ for Chinese *kua* their native word *kūlil* ("knot"), also the transcription *guwa*.

² *Sketches of the Life in Buddhist Monasteries*, in Russian, pp. 414—415. There are two misprints in the Tibetan: *mi* for *li*, and *gir* for *gin*.

³ *Tibetan Zodiac* (*Proc. A. S. B.*, 1890, p. 4), where the "eight *parkha*, or factors of luck" are given as follows: *k'en*, *k'on*, *gin*, *dva*, *k'am*, *sson* (intended for *zon*), *li*, *ssin* (*zin*). In his *Dictionary* they are enumerated thus: *li*, *k'on*, *dva*, *k'en*, *k'am*, *gin*, *zin*, *zan* (for *son*).

⁴ A similar divination-chart has been published by Satis Chandra Vidyabhusana under the title *Srid-pa-ho: a Tibeto-Chinese Tortoise Chart of Divination* (*Mem. As. Soc. Bengal*, Vol. V, No. 1, pp. 1—11, 1913).

⁵ Chandra Das, Vidyabhusana (*l. c.*, p. 2), and the aforementioned Sūtra of the Eight Phenomena, transcribe *gin*; *Pol. D.*, *k'en*.

⁶ Vidyabhusana (*l. c.*, p. 2) transcribes *dvo*.

da which Pozdn'äyev transcribes *dva*. This transcription must be old, having been made at a time when the initial sonant was still preserved in 兌 **dʷi* (compare Annamese *dwai*).

3. 離 *li* = Tibetan and Mongol *li*.
4. 震 *čön, tsön, čin* = Tibetan *tsin, zin*¹ (Pozdn'äyev: *jen*, likewise in Mongol; Kovalevski: *dšen*).
5. 巽 *sun* (from **dzun, zun*) = Tibetan *zon*,¹ Mongol *šün*.
6. 坎 *k^can* (**k^cam*) = Tibetan *k^cam*, Mongol *kam*. The final *m* shows that the transcription is old and was effected at a time when 坎 was still sounded *k^cam*.
7. 艮 *ken* = Tibetan *gin* (*Pol. D.*), *k^cen*,² Mongol *ken*.
8. 坤 *k^cun* = Tibetan *k^con*, Mongol *kon*.

As the Tibetan transcriptions have partially preserved the ancient initial sonants and the ancient finals of Chinese, they are thus well attested as coming down from the T'ang period. In this connection we might remember the Tibetan tradition recorded by Vidyabhusana,³ that the Chinese method of divination by means of the tortoise, in which the system of the *pa kua* was employed, is said to have been imported into Tibet by the Chinese princess who was married to King Sron-btsan sgam-po in 641.

231. The Ten Celestial Stems of the Chinese are transcribed by the Tibetans as follows: 甲 *aya* (*g'a*), 乙 *yi*, 丙 *biñ*, 丁 *tiñ*, 戊 *wu*, 己 *kyi* (*k'i*), 庚 *gin*, 辛 *zin*, 壬 *žim, žiñ*, 癸 *gui*. The Twelve Branches are transcribed as follows: 子 *tsi, či*, 丑 *ts^ciu*, 寅 *yin*, 卯 *mau*, 辰 *šin*, 巳 *zi*, 午 *wu*, 未 *wui*, 申 *šin*, 酉 *yiü*, 戌 *zui*, 亥 *hai*.

¹ Thus likewise in the Sutra of the Eight Phenomena mentioned above.

² The Sutra of the Eight Phenomena writes *k'yen*.

³ *L. c.*, p. 1.

232. *par* (written also *s-par* and *d-par*),¹ printing-block, printed book; form, mould. Presumably derived from Chinese *pan* 板 ("printing-block"). Also the compounds *par rkyen* and *č'a rkyen* (the latter in HUTN, *B.M.*, Vol. II, p. 165) seem to be reproductions of Chinese terms.
233. *pi-waṅ*, *pi-baṅ* (*Pol. D.*: *pi-waṅ*), guitar. The word is on a par with Chinese **bi-ba* (*p'i-p'a*) 琵琶 (Japanese *biwa*, Mongol *biba*, Manchu *fifan*), which in all probability is not a Chinese word. The instrument of this name, written *p'i-pa* 批把, is first mentioned in the dictionary *Ši miñ* 釋名 of Liu Hi 劉熙, and in the *Fuñ su t'uñ* 風俗通 of Yin Šao 應劭 of the second century, who says that it was made by musicians of recent times, but that it is unknown by whom, and that it received its name from being struck with the hand (compare also M. COURANT, *Essai hist. sur la musique classique des Chinois*, p. 177). This explanation, of course, is a fantastic afterthought; and it is reasonable to regard **bi-ba* as the transcription of the foreign appellation for this instrument that seems to have reached China from Central Asia. It is doubtful whether the Tibetan form is borrowed directly from Chinese. If this were the case, we should expect an initial labial souant, for the Tibetan word is of ancient date, being listed in the *Mahāvvyutpatti* and *Amarakosha*; it could by no means be a more recent transcription of Chinese, for in that case we should have the initial labial aspirate. Further, the final guttural nasal is curious, and cannot be justified from the standpoint of the Chinese. It is therefore more likely that the Tibetan word is not based on the Chinese, but is derived from another language,

¹ Over the entrance to the library of the monastery sKu-ābum (Kumbum) I read the legend *dpar-gyi lha k'añ ūo-mte'ar rin-č'en gliñ*, "the library, the temple-hall of wonderful treasures."

probably from Khotanese.¹ I am led to this supposition by the presence of the final guttural nasal which seems to be a peculiar feature of the language of Khotan (see PÉLLIOT, *Journal asiatique*, 1914, sept.-oct., p. 400, note).

234. *šiñ-tse*, lion (SCHIEFNER, *Čákyamuni*, p. 96; the form *šiñ-tsi* must be regarded as a misprint). Transcription of *ši-tse* 獅子 (see this volume, p. 81).

B. Modern Chinese.

235. *la* (also with the Tibetan suffix *la-ba*), wax-light, wax-candle, taper. Jäschke already annotated that it is from the Chinese *la* 蠟. The Tibetan loan cannot be very old, as in the T'ang period the Chinese word was still possessed of a final labial explosive, which appears at present in Amoy *lap*, Korean *rap*, and Mongol *lab*.

la-č'a, also *la-ja*, sealing-wax. JÄSCHKE (*Z.D.M.G.*, Vol. XXX, p. 112) sought the etymology of this word in Sanskrit *lākshā*; it is not likely, however, that Sanskrit *lākshā* would yield a Tibetan form *la-č'a*, or we must presuppose without reason a Prākṛit form **lāchā*. It is more probable that Tibetan *la-č'a* is a transcription of Chinese *la-ča* 蠟渣 ("wax-sediment"). I believe that also KOVALEVSKI (p. 1960) was of this opinion when he identified Mongol *latsa* with Chinese *la-tcha* (characters not given) and Tibetan *la-č'a*, translating it by "sédiment de

¹ Any corresponding words of Central-Asiatic languages are not known to me. It is not correct, as stated by me in *T'oung Pao* (1914, p. 89), that *pišik* is the Djagatai word. The derivation of the Tibetan word *pi-wan* from Sanskrit *viṣā* must positively be rejected.—Chinese *pa-wan* 巴汪 is considered by M. COURANT (*Musique classique des Chinois*, p. 179) as a reproduction of Tibetan *pi-wan*.—The *Pol. D.* (7, p. 18) gives Tibetan *wan-še* as equivalent of Chinese *yue k'in* 月琴 ("moon guitar"). In Mongol it is *biwalik* ("an instrument like the biwa"), in Manchu *fituzan* (*fi-* from *jifan*); hence also the element *wan* of Tibetan *wan-še* may be identified with *pi-wan*.

cire." Chinese 'č'a, as indicated by the Korean reading č'a, may formerly have had, at least in certain dialects, an initial surd aspirate.

236. *huñ la*, according to *Li-šii gur k'añ* (above, p. 444), a Chinese word with the meaning "seal." From *huñ la* 紅蠟, "red wax."
237. *la-tse* (generally in eastern Tibet), Guinea pepper, red pepper (*Capsicum annuum*). From *la-tse* 辣子 (*la tsiao* 辣椒). According to G. A. STUART (*Chinese Materia Medica*; p. 92), this solanaceous plant is not mentioned in the *Pén ts'ao*. In the opinion of A. DE CANDOLLE (*Origin of Cultivated Plants*, p. 290), the original home of the plant is probably Brazil. According to WATT (*Economic Products of India*, II, p. 138), it was recently (comparatively speaking) introduced into India from South America. Chinese *la tsiao* means "acrid pepper," but the designation *la* was presumably suggested by the Hindustānī name *lāl-mirč* لال میرچ (*mirč* = Sanskrit *marica*, "pepper"); see also BRETSCHNEIDER, *Chinese Recorder*, Vol. II, 1870, p. 224. The extensive cultivation of red pepper in Yün-nan and Se-č'uan suggests an overland transplantation from Indian regions. The word is found also in Turkistan: A. VON LE COQ (*Turjan*, p. 97) notes it in the form *lā-zā* (the derivation from Chinese is certain, and need not be queried, as was done by the author). There is another Tibetan word for "red pepper," *su-ru-p'an-ts'a* or *sur-p'an*, the origin of which is unknown to me. The word *mar-rtsi*, indicated by CHANDRA DAS (p. 1270), surely is a transcription of Sanskrit *marica*.
238. *u-sū*, coriander (*Coriandrum sativum*). Apparently transcription of *hu-sui* 胡荽. The tradition reported by Li Ši-č'ên, to the effect that this plant was introduced by Čan K'ien, is unfounded; it is contained only in the *Po wa č'i*, but not in the *Hau Annuals*. The plant is first mentioned in the *Ts'i min yao šu* (fifth century),

and was introduced into the pharmacopœia under the Sung, when it appeared in the *Pên ts'ao* of the Kia-yu period (1056—64). For more information see my *Sino-Iranica*.

239. *t'au*, peach, *Prunus persica* (recorded in the *Hua i yi yü*). From *t'ao* 桃.
240. *čañ-bkwa-tsi* (*Pol. D.*, 27, p. 33), transcription of *tsiañ kwa-tse* 醫瓜子 (Manchu *čanggówa*, Mongol *jaguwasa*), melons (*Citrullus vulgaris*) seasoned in soy. The transcription *bkwa* appears to be of modern origin; the usual mode of transliteration is *kau*, *gau*, *ku*, *ku-ba*. Likewise *čañ* for *tsiañ* is a recent affair, for in the *Hua i yi yü* the Chinese word is transcribed *tsaň*.
241. *pe-tse*, *pi-tsi*, Chinese cabbage (*Brassica chinensis*, cultivated in the U. S. under the name "celery cabbage"). From *pai ts'ai* 白菜 (see *T'oung Pao*, 1916, p. 88).
242. *pi-tsi* (*Pol. D.*, 28, p. 58), *Scirpus tuberosus*. From *pi-ts'i* 葶薺.
243. *tañ-kun* (*Tib. Pharm.*), transcription of *tañ kuei* 當歸 (*Cryptotaenia canadensis*; see STUART, *Chinese Materia Medica*, p. 133). An older form of transcription is *dañ-gu*, noted in the *Hua i yi yü*. The plant is mentioned as a product of Mao čou 茂州, Wei čou 維州, and other localities of Se-č'uan (*T'añ šu*, Ch. 42, p. 3), and may have been exported as a medicine from there to Tibet.
244. *hor-len* (*Tib. Pharm.*), a species of lotus (?). Transcription of *hu lien* 胡蓮; *hor* is not part of the transcription, but the corresponding translation of *hu*. In the edition of Pozdn'äjev, the Tibetan word is written *hoñ len* (Mongol *khoñlen*), and, according to Rehmann, the plant is identified with *Scutellaria baicalensis*. A species of *Scutellaria* is termed in Chinese *huan k'in* 黃芩 (STUART, *Chinese Materia Medica*, p. 400),

while *huan lien* 黃連 refers to *Coptis teeta* (*ibid.*, pp. 125, 401). Some confusion has obviously crept in here between *huan lien* and *hu* 胡 *huan lien* (*Barkhausia repens*).

245. *mdzo-mo šin* is explained by CHANDRA DAS as "a tree the wood of which resembles the red sandal wood, and being largely imported into Tibet from China is used in dyeing the garments of the Lamas of Amdo." The word *mdzo-mo* is Tibetan, and denotes the female of that cattle breed which is a cross between a yak bull and the ordinary cow, and is known to the Chinese under the name *p'ien niu* 犏牛. "Wood of the female yak mongrel" certainly yields no sense; and the wood, we are told, is imported from China. It is therefore reasonable to regard the word *mdzo-mo* as the adaptation of a Chinese term. The *Tib. Pharm.* (No. 170) given as equivalent of the above Tibetan term, Chinese *su mu* 蘇木 ("sappan-wood," *Caesalpinia sappan*) and Tibetan *mdso-mo* (pronounced *dzu-mu*), seems to be a jocular imitation of the Chinese sounds.
246. *li-tsi* (*Pol. D.*, 28, p. 50), plum (*Prunus domestica*). From *li-tse* 李子.
247. *se-yab*, *b-se-yab*, according to JÄSCHKE, "(in medical literature), fig." This, however, rests on an erroneous identification. The *Pol. D.* (28, p. 49) has *se-yab* = Chinese *ši piñ* 柿餅, dried *Diospyros kaki* (*Mongol šikir šabtala*, "sugar-cake"); see G. A. STUART, *Chinese Materia Medica*, p. 152. Tibetan *se*, therefore, represents a transcription of Chinese *ši*. In the same manner we have Tibetan *se-pad* = Chinese *ši šuan* 柿霜, "crystallized *Diospyros*, prepared by taking off the skin of the fruits, and then exposing them to the sunlight and night-dew until they are dry, when a whitish powder gathers upon the surface" (STUART).
248. *bo-ti-tse*, rosary, given in *Pol. D.*, 22, p. 68: Chinese *p'u-*

- t'i-tse* 菩提子, Manchu *bodisu*. CHANDRA DAS (p. 877) writes the Tibetan word *bo-dhi-rtsi* and (p. 922) *qbo-dhi-tsi*. The Tibetan term is not based on Sanskrit, as shown by the transcription *ti* and the last element *tse*, but transcribes the Chinese name (not *vice versa*, as suggested by WATTERS, *Essays*, p. 377). Chinese *p'u-t'i* transcribes Sanskrit *bodhi*, and the whole term signifies "seeds or fruits of the Bodhi-tree" (*Ficus religiosa*). The Tibetan form *bo-de*, cited by Watters from Jäschke, does not represent a transcription, but is a loan-word orally received from an Indian vernacular, while Tibetan *bo-dhi* is the correct and learned reproduction of the Sanskrit word.
249. *p'an šu* (*Pol. D.*, 28, p. 59), potato (*Solanum tuberosum*). From *fan šu* 蕃薯.
250. *bin-tsi* (*Pol. D.*, 28, p. 50), a sour crabapple. From *pin-tse* 檳子 (Manchu *merseri*).
251. *po-so-i siu* (*ibid.*, Appendix 3, p. 9), date (*Phoenix dactylifera*). From *po-se tsao* 波斯棗 (Manchu *bosoro*), see BRETSCHNEIDER, *Chinese Recorder*, Vol. III, 1870, p. 265; and my *Sino-Iranica*.
252. *'u-bi-tsi* (*Mong. Pharm.*, No. 87), transcription of *wu pei tse* 五倍子, denoting the galls that are produced by an insect upon the leaves or leaf-stalks of *Rhus semialata*.
253. *p'u-guñ-yiñ* (*ibid.*, No. 139), transcription of *p'u kuñ yin* 蒲公英陰 (*sic*, for *yin* 英), *Taraxacum officinalis*.
254. *č'au-tse* (*ibid.*, No. 143), transcription of *č'ie-tse* 茄子, *Solanum melongena*.
255. *ti-gu-p'i* (*ibid.*, No. 62), transcription of *ti ku p'i* 地骨皮, *Lycium chinense*, a solanaceous plant, root and seeds of which are used medicinally. It is mentioned in the *T'an šu* (Ch. 38, p. 2 b) among the taxes sent from Kuo čou 虢州 in Ho-nan.
256. *k'ru-lan-šun* (*ibid.*, No. 61) answers to *č'uan hiuñ* 川芎,

- Conioselinum univittatum* (G. A. STUART, *Chinese Materia Medica*, p. 123), an umbelliferous plant. Tibetan *šun* is a bad transcription of Chinese *hiuñ*, *hsiuñ*.
257. *su-mi*, a cereal on which the Black Lo-lo (kLo nag) subsist. VASILYEV (*Geography of Tibet by the Minčul Chutuktu*, p. 86) tentatively proposed that it should be a transcription of Chinese *su mi* 粟米 ("millet"); but it rather seems to be a Lo-lo word.
258. *tā-ts'va*, *tā-ts'van* (CHANDRA DAS), "two kinds of Chinese tea greatly used in Tibet." Evidently *ta čuan* 大磚 ("great brick"), brick-tea.
259. *sin-i me-tog* (*Pol. D.*, 29, p. 51). Transcription of *sin i hua* 辛夷花, *Magnolia conspicua*.
260. *ts'uv*, vinegar. From *ts'u* 醋 (see this volume, p. 77).
261. *ts'ai (ts'e) yan-tse* (written *ts'al yan-ts'e*; JÄSCHKE, p. 447), vegetable garden. According to HENDERSON (*Tibetan Manual*, p. 51), from Chinese *ts'ai yüan-tse*. More probably, however, it is *ts'ai yan-tse* 菜樣子. Chinese *ts'ai*, in the form *ts'e* of the Se-č'uan dialect (written *ts'al* and *ts'as*), is much used in colloquial Tibetan (p. 122); but it is incorrect to say, as assumed by Henderson, that there is no word in Tibetan for "vegetables" (compare *šno*, *šno-ts'od*, *ts'od-ma*, *ldum*).
262. *Zi-liñ*, the Chinese city and prefecture of *Si-niñ* in Kan-su Province; especially in *Zi-liñ ja*, "tea from Si-niñ." YULE (*Marco Polo*, Vol. I, p. 276) observed that "Si-ning is called by the Tibetans Ziling or Jiling, and by the Mongols Seling Khoto." The town is frequently referred to by mediæval writers as Seling. DESIDERI, who heard the name of the city in Tibet, spelled it Sinim or Silingh (C. PUINI, *Il Tibet*, p. 25); ORAZIO DELLA PENNA, Sciling, Scilingh, and Silin. According to ROCKHILL (*Land of the Lamas*, p. 49), the Tibetans call the

place at present Seling k'ar (*mk'ar*, "walled town"); the Mongols, Seling kutun.

Zi-liñ t'a k'ug (*t'a* is the abbreviation for *t'a-ma-k'a*), an embroidered Chinese tobacco-pouch, as illustrated on plate 20, fig. 1, of Rookhill's *Notes on the Ethnology of Tibet*. This designation was given me by a Lama on being shown this illustration; the pouch in fig. 2 he styled *bod-kyi t'a k'ug* ("Tibetan pouch"), and that in fig. 3 *rgya-mii t'a k'ug* ("Chinese pouch").

Si-liñ, sliñ, name applied in Ladakh and the Panjāb to a stuff of goat's wool made at Si-niñ and used for shawls (YULE, *Hobson-Jobson*, p. 847).

"A cloth called 'Siling' is manufactured from the shawl wool in Yarkand and China; it somewhat resembles a coarse English kerseymer in texture."—G. T. VIGNE, Vol. II, p. 129.

"Siling, stoffa proveniente dalla China, tessuto di pashum; generalmente di colore cenericcio; la stoffa più soffice al mondo, molto cara e rara."—O. ROERO, Vol. III, p. 71.

263. *zi-liñ, zi-lim, zi-lañ*. JÄSCHKE states that these words are derived from the Chinese and denote a composition metal similar to German silver. There is no doubt, accordingly, as to the meaning of the word, which designates the "white copper" (*pai t'uñ* 白銅) of the Chinese, our "tootenague." The words *zi-liñ* and *zi-lim* may refer to the city of Si-niñ; *zi-lañ*, possibly, is an adaptation from *si la* 錫鐵 ("spelter, pewter, solder").
264. *yu ši*, jade. From *yü ši* 玉石. Frequently in the biography of the lČans-skya Rol-pai rdo-rje; for instance, *yu ši-i p'or-ba gčig*, a jade bowl; *yu ši-i ak'or-lo*, a jade prayer-wheel; *yu ši-i yid bžin lčags-kyu*, a jade žu-i sceptre.
265. *gruñ-ru-ši* (*Mong. Pharm.*, No. 27), transcription of *čüñ žu ši* 鐘乳石 (the text in question writes 中), carbonate of lime

- in stalactitic masses (D. HAMBURY, *Science Papers*, p. 218).
266. *k'yen-lun* (*Mong. Pharm.*, No. 25), transcription of *kien fōn* 鉛粉, carbonate of lead, white lead (D. HAMBURY, *l. c.*, p. 223).
267. *big-ban* (*Tib. Pharm.*, No. 68; *Mong. Pharm.*, No. 16) [not *big-pan*, as written by JÄSCHKE, or *big-pag*, as in the *French Dict.*] corresponds to *tan fan* 贍鐵, sulphate of copper; accordingly Tibetan *ban* = Chinese *fan*.
268. *k'am-pa*, porcelain clay, kaolin. Perhaps from *kañ* (t'u) 筒 (土), kaolin. The transcription is irregular, though the Tibetan aspirate may be explained from the tendency to preserve the high tone of the Chinese word; the change of the guttural into the labial nasal might be due to assimilation to the ending *pa*. It is difficult to realize that the Tibetans, unfamiliar with porcelain and its manufacture, should have a word of their own for the designation of kaolin. "Porcelain" is expressed by *kar* (or *dkar*) *yol* ("white pottery").¹
269. *hai* (CСOМA), shoe (compare *ho lham*, "espèce de chaussures:" *French Dict.*, p. 1065). From *hai* 鞋.

¹ In Mongol, porcelain is called *tsagūjan*, *tsūjan*, *ᠰagūdsan*, *ᠰādsan*, explained by KOVALEVSKI: as being developed from Chinese *č'a č'ü* 茶鍾 ("tea-cup"). This derivation was justly called into doubt by A. SCHIEFNER (in the preface to Castrén, *Buryät. Sprachlehre*, p. XIII), for in Buryat we have *ᠰāzan*, *ᠰāsen*. In other Mongol dialects we find *ᠰālin* (A. RUDNEV, Материалы по говорамъ восточной Монголии, p. 156, who adheres also to Kovalévski's wrong etymology). "Tea" in Mongol, however, is *čai*, in dialects *ts'ai*, *č'ü* (RAMSTEDT, Справ. фонетика монг. письменнаго языка, Russian translation by Rudnev, p. 53), in Buryat *čai*, *sai*, but never with initial *ᠰ*; and there is no reason why a Chinese *č'ü* should be transformed by the Mongols into *dsan*, *san*, or *sen*; it would simply be retained by them as *č'ü* or *dsüi*, as proved indeed by Mongol *dsūnda* ("goblet"), which is the equivalent of Chinese *č'ü-tse* 鍾子 (KOVALEVSKI, p. 2409). The variants *tsagū-*, *tsū-*, *ᠰagū-*, *ᠰā-*, plainly show that this is the Mongol word *tsagūn*, *tsūn*; in dialects *ᠰagūn*, *ᠰānūn*, Buryat *sagan*, *sagan*, which means "white." The second element, *dsan* or *jan* (the alternation of initial *ds*, *j*, and *y* in Mongol is well known), means "cup, bowl, pot, pottery," and may have been derived from Persian *jūm* ("glass, cup"). Pahlavi *jūm*, *yām*, Avestan *yūma*. The Mongol term *tsagūjan*, accordingly, presents an analogon to Tibetan *dkar yol*.

270. *yan ljin*, dulcimer, a musical instrument employed in gTsañ (Central Tibet). From *yan č'in (k'in)* 洋琴.¹ The Tibetan word apparently is a recent loan based on oral communication of a Se-č'uan dialect, in which the word is sounded *yan jin* (the confusion of final *n* and *ñ* being prevalent in Se-č'uan as in other dialects, for instance, in Nankin). The addition of the prefixed *l* is merely prompted by the modern tendency to lend foreign words a native appearance; for it cannot refer to the tone, as 琴 has the even lower tone, while *ljin* is high-toned; the correct transcription, therefore, would be *jñ* in the deep tone. As stated by M. Courant, the instrument in question was introduced into China from abroad, in all probability, not earlier than the end of the seventeenth century or the beginning of the eighteenth.
271. *čon*, bell. From Chinese *čün* 鐘.
272. *mog-mog* (JÄSCHKE, p. 419: "meat-pie, meat-balls in a cover of paste," where "paste" is meant for "dough;" HENDERSON, *Tibetan Manual*, p. 84: "pastry-puff, Chinese word"). From *mo-mo* 饜饜. The two final *g*'s in the Tibetan transcription are not articulated.
273. *ts'ai-tau* (JÄSCHKE, p. 447: "Chinese"), chopping-knife. Transcription of *ts'ai tao* 裁刀.
274. *lin-ts'e*, gratings, lattice. From *lin-tse* 櫺子, lattice of a window, sill.
275. *lan-gan*, *lan-kan*, balustrade, railing, barrier. Transcription of *lan kan* 欄杆 [Mongol *käräsgä*, Manchu *jerguwen*] (*Pol. D.*).
276. *lu-kañ*, crucible for gold and silver. JÄSCHKE is inclined to regard the word as a "misspelling for *lugs-koiñ*." It seems

¹ Figured and described by J. A. VAN AALST, *Chinese Music*, p. 67; A. C. MOULE, *Chinese Musical Instruments*, p. 118; M. COURANT, *Essai hist. sur la musique classique des Chinois*, p. 180.

more reasonable to look upon it as the transcription of a Chinese word, the element *lu* being apparently identical with *lu* 爐 ("stove;" *tan* 丹 *lu*, "crucible"), and the element *kan* presumably being *kan* 缸 ("earthen vat").

277. *hp'uñ hwa-añ*, phoenix. Transcription of *fuñ-huan* 鳳凰 (see HUTN, *B.M.*, Vol. II, p. 54). In the same work we meet *hp'u* for *fu* 府, and *hp'u-sañ* as transcription of *Fu-sañ* 扶桑, while in *Pol. D.* (29, p. 53) the *Fu-sañ* flower is styled in Tibetan *bu-ts'añ me-tog*.

278. *yā-tse*, duck. From *ya-tse* 鴨子.

279. *k'ra-rtse* is given in the *French Dict.* (p. 114) as a Chinese word with the meaning "balance, scale." CHANDRA DAS ascribes to the same word the significance "a kind of biscuit or pastry made in the shape of a grating." The Chinese scale is usually designated in Tibetan *rgya-ma* and *rgya-t'ur*; the latter name was given me by a learned Lama in explanation of plate 27 (figs. 1 and 2) of ROCKHILL'S *Notes on the Ethnology of Tibet*, while he termed the native scale on plate 28 *ñā-ga* (or *ñag*, literally "notch," from the scale of notches cut in the beam). As *k'ra-rtse* is pronounced *t'ur-tse*, it would seem that this spelling is identical with *t'ur* of *rgya-t'ur*; but I do not know what Chinese word it should transcribe. The word for the scale used by the Chinese traders in Tibet is *tōñ-tse* 戥子.

280. *man-tsi*, a kind of silk cloth; *men-tsi* (DAS), a colored silk handkerchief. It occurs in the History of Ladakh, where K. MARX (*J.A.S.B.*, Vol. LX, 1891, p. 135) explains it as "silkgauze with dots," while *g-liñ-tsi* (綾子) should be the same without dots. From *man-tse* 縵子, thin, plain silk, sarsenet. DAS gives also *s-man-rtse* as an incorrect spelling of *man-tse*, with the meaning "yellow silk scarf with red spots impressed on it."

281. *ja-hoñ* (JĀSOHKĒ, who erroneously writes *ja-hod*: "yellowish red"), the color of boiled tea, red brown; according to *Li-ñii gur k'añ*, the color of madder (*btsod mdog*, Sanskrit *mañjishṭā*, Chinese *k'ien* 茜, *Rubia cordifolia*). Transcription of Chinese *č'a huñ* 茶紅, tea-red. Regarding *hoñ* = Chinese *huñ*, see also *French Dict.*, pp. 111, 1066.
282. *dar liñ*, fine silk material. This term is given in the Ming edition of the *Hua i yi yü* as equivalent of *liñ* 綾, so that Tibetan *liñ* appears as a transcription of this word. Regarding *dar* ("silk"), see No. 161.
283. *č'añ čan*, wine-cup (*Hua i yi yü*); *čan*, from Chinese *čan* 盞.
284. *k'rau*, paper money (*Hua i yi yü*). Transcription of *č'ao* 鈔. The Tibetan transcription is only intelligible if we assume that at the time when it was made (under the Ming), *k'rau* was sounded *č'au*. In this case the Tibetans employed a cerebral in order to reproduce a Chinese palatal; *vice versa*, the Chinese reproduce Tibetan cerebrals by means of their palatals (above, p. 409).
285. *zan yañ*, transcription of *san yañ* 三樣, "three styles (of art)," used with reference to the monastery bSam-yas (compare *T'oung Pao*, 1908, pp. 20, 24). Hence the latter is styled *Zan yañ mi-ḡgyur lhuu-gyis grub gtsug-lag* (VASILYEV, *Geography of Tibet by the Minčul Hutuktu*, in Russia, p. 33; Vasilyev could not explain the term *zan yañ*, and took it for a copyist's error). In an inscription of this temple, copied by CHANDRA DAS (*Sacred and Ornamental Characters of Tibet*, J.A.S.B., Vol. LVII, 1888, plate VI and p. 43), this title is written *gzan yañ*. The transcription *gzan* is justified, inasmuch as the word, by the addition of the prefix *g*, is high-toned (while *zan* is deep-toned), thus rendering the high tone of Chinese *san*. An older Tibetan transcription of the same word

- is *zam* = Chinese **sam* (*T'oung Pao*, 1907, p. 396, note 2).
286. *ha-šan* (also *hva-* and *hā-*), a Chinese Buddhist priest. From *ho-šan* = Sanskrit *upādhyāya* (compare EITZEL, *Handbook*, p. 186; LEBOE, *Fa Hien*, p. 58; J. BLOCH, *I.F.*, Vol. XXV, 1909, p. 239; or *T'oung Pao*, 1909, p. 719; and PELLIER, *Journal asiatique*, 1914, sept.-oct., p. 400).
287. *kiñ-kañ*, *kañ dañ kiñ*, mentioned as a terrifying deity in *rGyal-rabs*. From *kin kañ* 金鋼 (see *T'oung Pao*, 1908, p. 23).
288. *jiñ*, *sūtra*. From *kiñ*, *čiñ* 經 (CHANDRA DAS [*Tib. Dict.*, p. 449] erroneously states that *jiñ* is the "Chinese term for Buddhism"). The older Tibetan form is *giñ* (see, for instance, *T'oung Pao*, 1907, p. 392; and above, p. 423).
289. *gu ši*, *gu šri*, *ko ši*, *ko šri* (in the *Hua i yi yü: gui šri*), state preceptor, royal teacher; a title conferred on the Buddhist clergy. From *kuo ši* 國師. Mongol *guši*. The writing *šri* seems to have been prompted by adaptation to Sanskrit *śrī*. In the Sino-Tibetan inscription of 1341 (*T'oung Pao*, 1908, plate 28, line 2) we find the form *gui šri*. In the *Hua i yi yü* we meet also *č'en šri* as transcription of *č'an ši* 禪師 ("master of contemplation").
290. *r-luñ rta*, *k-luñ rta*, dragon-horse. The first element is a transcription of Chinese *luñ* in the compound *luñ ma* 龍馬 ("dragon-horse"). The Tibetans possess a large variety of charms printed on paper, cotton, or hemp cloth. These contain manifold designs accompanied by invocations, stereotyped prayer formulas, *Dhāraṇī*, etc. One of the most frequent designs to be met with is the figure of a running horse, usually carrying on its back the flamed jewel, which is composed of three individual precious stones encircled by a line. This jewel trinity has a double significance: first, it is an illustration of the Sanskrit term *triratna*, "the Three Jewels" (Buddha, his doctrine,

and the clergy); and, second, it represents the *cintāmaṇi*, the fabulous jewel granting every wish (Tibetan *yid-bžin nor-bu*, Chinese *žu i pao ču* 如意寶珠). F. W. K. MÜLLER, who published a Japanese *ema* 繪馬 (*Z. f. Ethnologie*, 1899, Verh., p. 529), referred only to the latter symbolism. The Japanese votive picture described by Müller differs from the dragon-horse of the Chinese and the *luñ rta* of the Tibetans: it presents a syncretism of Shintō and Buddhist ideas, horse and jewels being separated from each other, the horse in the upper panel being tethered to two stakes, the three jewels in the lower panel being placed on a dish and enclosed in a shrine. The Tibetan term *r-luñ rta* (pronounced *luñ ta*), literally translated, means "wind-horse" (JÄSCHKE, p. 538, "the airy horse." His statement, derived from Schlagintweit, that the figure of the horse signifies the deity *rta mč'og*, is erroneous: the latter is not a deity at all, but merely means "excellent horse"). In view of the fact that strips of cloth imprinted with figures of such horses and attached to poles are made into flags merrily fluttering in the wind from the roofs of houses or from the top of an *obo*, the etymology "wind-horse," which is indeed advanced by the people, would seem to have a certain degree of plausibility. But two objections to this theory present themselves immediately. In lieu of the above spelling, we find another orthography of the word *luñ* in the form *k-luñ*, likewise articulated *luñ*; and, as this mode of writing occurs as early as 1514 in the *Za-ma-tog*, there is reason to believe that it is even the older of the two.¹ Further, from an iconographic point of view, the coincidence of the Tibetan

¹ The expression quoted in *Za-ma-tog* is *kluñ rta dar* (*dar*, "flag"); and besides *rluñ rta*, the term *rluñ dar* is still in use (the difference between the two is established in the *French Dict.*, p. 479).

designs with the Chinese is obvious. Also L. A. WADDELL (*Buddhism of Tibet*, p. 412) rightly identifies *r-luñ* with Chinese *luñ* ("dragon"). He translates *luñ-ma* by "horse-dragon;" but what is figured on p. 410 under this title is not the Chinese dragon-horse, but the *lin* 麟, as indicated also by the Chinese legend that accompanies the illustration. In the *Gazetteer of Sikkim* (p. 347), where the *luñ-rta* is styled "the pegasus-horse of luck," Mr. Waddell derived it from "the jewel horse of the universal monarch, such as Buddha was to have been had he cared for wordly grandeur." This theory had already been advanced by E. SCHLAGINTWEIT (*Annales du Musée Guimet*, Vol. III, p. 164), who likewise fell back on the horse of the Cakravartin. The seven treasures (*saptaratna*) of the Cakravartin are the wheel, the wishing-jewel (*cintamani*), wife, minister, elephant, horse, and general. In this series the jewel and the horse are two distinct affairs; their combination into a jewel-carrying horse, it seems to me, was brought about, not in India, but in China, and the Tibetans received this conception from the Chinese. All this leads to the conclusion that Tibetan *r-luñ* or *k-luñ* is merely a transcription of Chinese *luñ* ("dragon").

291. *zin-šin*, the Taoists. From Chinese *šien šōn* 先生. In the Tibetan history of Buddhism in Mougolia (*Hor č'os byuñ*, ed. of HIRTH, p. 97) it is narrated that under Kubilai the followers of the sect *Zin-šin* were very numerous, and adhered to the doctrine of T'ai šan la gyin; that is, Chinese T'ai šan lao kiün 太上老君, designation of Lao-tse.¹ The Tibetan transcription, however much it may have been disfigured in this work of recent date, corresponds to Marco Polo's *sensin*,

¹ HIRTH, in his translation (p. 153), has misunderstood the entire passage.

- Rašid-eddīn's *šinšin* (see YULE in his edition of *Marco Polo*, Vol. II, p. 322), and Mongol *senč'ing-ud* (DEVÉRIA, *Notes d'épigraphie mongole-chinoise*, p. 41). Semedo's *shien-sien*, cited by Yule, however, is a different word, answering to Chinese *šōn sien* 神仙. The above Tibetan text, in close concordance with Rašid-eddīn, irrevocably proves that Marco Polo's Sensin are nothing but Taoists, and most assuredly have no connection with the Tibetan Bou sect. See also CHAVANNES, *T'oung Pao*, 1904, p. 377.
292. *t'e-se* (*Pol. D.*, Appendix, 2, p. 3), the planet Jupiter. Transcription of *t'ai sui* 太歲.
293. *t'e-an*, *t'ian*, heaven; Allah (see, for instance, *J.A.S.B.* Vol. XLI, 1882, p. 114). Transcription of *t'ien* 天.
294. *hu-añ* (*hvañ*)-*dhi*, (also *dī* and *tī*), title of the Chinese emperor. Transcription of *hvañ ti* 皇帝.
295. *k'ā* (*Pol. D.*, 4, p. 16), guardian, adjutant, body-guard (*ši wei* 侍衛). The Manchu equivalent is *xiya* (*x'a*), the Mongol *kiya* (*k'a*), of which Kovalevski says that it represents Chinese *hia*. I do not know for which character this is intended. The Tibetan transcription appears to be based on the Mongol form.
296. *tā žin*, excellency. Transcription of *ta žōn* 大人 (see, for instance, HIRTH, *B.M.*, Vol. II, p. 191). Chinese *žōn* is even transcribed in Tibetan *bžin*, as already observed by SCHIEFFNER (*Mélanges asiatiques*, Vol. I, p. 337).
297. *Dá-lo-ye*, aide-de-camp of the Amban of Lhasa. From *ta lao ye* 大老爺.
298. *guñ*, or *kuñ* (the latter in *Pol. D.*, 4, p. 6). JÄSCHKE (p. 69) observes, "(Chinese?) title of a magistrate in Lhasa, something like Privy Counsellor." CHANDRA DAS (p. 220) gives a more complete definition of the title. Transcription of *kuñ* 公.

The *Pol. D.*, further, has Tibetan *hiu* (from *hou* 侯) and *pe* (from *po* 伯).

299. *t'ai rje* (*French Dict.*, "title of a provincial governor"). Seemingly modelled after *t'ai ši* 太師; *rje* ("lord"), of course, is a Tibetan word.
300. *tai hu*, title of certain officials. From *tai fu* 大夫 (see *T'oung Pao*, 1907, p. 397) or 大傅. The latter is transcribed in the *Pol. D.* (3, p. 13) *p'u*, while 大夫 is translated as *mi drags*.
301. *a-p'yiñ-saň* is indicated as a Chinese word with the meaning "minister" (*blon-po*) in the *Li-ši gur k'aň* (see above, p. 444), the Mongol translation offering *č'iňsaň*. Although pointed out by SCHIEFNER (*Mélanges asiatiques*, Vol. I, p. 341), it is not listed in JÄSCHKE'S Dictionary. CHANDRA DAS (p. 852) gives it with the explanation, "the designation in the older writings of a minister of state of Tibet = the modern *bka-blon*." That the term occurs in older writings may well be doubted; for the Tibetan transcription, apparently based on Chinese *č'öň* (*č'iň*) *siaň* 丞相 ("minister of state"), must be of recent date when *p* had changed into *č*; moreover, the addition of the prefix *a* is meaningless: Chinese *č'öň* has the even lower tone, while both Tibetan *p'yiň* and *ap'yiň* are high-toned. The Chinese word has passed into Mongol as *č'iňsaň*, and is written by Rašid-eddin in the same manner (KLAPROTH, *Description de la Chine sous le regne de la dynastie mongole trad. du persan de Rachid-eddin*, p. 21 of the reprint from *Nouveau Journal asiatique*, 1833; and E. BLOCHET, *Djami el-Tévarikh*, Vol. II, p. 472; YULE, *Marco Polo*, Vol. I, p. 432, Vol. II, p. 145 [Polo: Chincsaň]; YULE, *Cathay*, new ed. by CORDIER, Vol. III, p. 119). The Tibetan transcription is perhaps based on the Mongol form, not on the Chinese; compare

- p'yam-ts'a*, transcribing Mongol *tsamtsa* (KOVÁLEVSKI, p. 2104).
302. *tai se du*, president of the Board of Revenue. Transcription of *ta se t'u* 大司徒 (*T'oung Pao*, 1907, p. 397).
303. *zuñ-č'u* or *-ču*. DAS explains this as Chinese *zuñ* ("province") and *č'u* or *ču* ("local governor"). Apparently it is intended for *tsuñ tu* 總督 ("governor-general").
304. *žin sa*, province. The first element, *žin*, is a transcription of *šön* 省; the latter is given as the equivalent of *žin sa* in *Pol. D.* (19, p. 42), where we find also Tibetan *ti-li žin č'en* ("great province of Chi-li").
305. *ñp'u* (older mode of writing *hu*, see *T'oung Pao*, 1907, p. 397, note), department. Transcription of *fu* 府.
306. *čeu*, *ču*, department. Transcription of *čou* 州. Other transcriptions of the same word are *jo* (see HUTN, *B.M.*, Vol. II, p. 416) and *ju* (for instance, *T'ou ju* = *T'ao čou* 洮州). In the Sino-Tibetan inscription of 1341 (*T'oung Pao*, 1908, plate 28, line 6) it is written *jiu*.
307. *ži-an*, district. Transcription of *hien* 縣. In the aforementioned inscription it is written *hyen*.
308. *'ui*, fort, military station (defined as *mk'ar č'uñ*, see HUTN, *B.M.*, Vol. II, p. 34). Transcription of *wei* 衛.
309. *šo-gam*, customs duty. The first element presumably from *šui* (Hakka *šoi*) 稅.
310. *t'uñ-ši*, interpreter (generally used in eastern Tibet. From *t'uñ-ši* 通事, which has passed also into Mongol, likewise into Turkī (*tungči bük*: A. VON LE COQ, *Turfan*, p. 88). HENDERSON (*Tibetan Manual*, p. 63) writes the word in Tibetan letters *t'uñ-sri*, transcribing it *t'ung-si*. Manchu *tuñse*, Golde *tuñsiko*).
311. In an extensive work on Tibetan chronology printed in Peking, and entitled *rTsis-kyi man-ñag ñin-mor byed-pai snañ-ba*, is contained a synoptical table of the names of the months

according to Chinese, Tibetan, Hor, and Sanskrit fashion. The transcriptions of the Chinese names, accompanied by a translation into Tibetan, prove to be the Twelve Animals of the duodenary cycle. They are enumerated as follows:

Number of Hor or Turkish Month	Name of Hor Month	Name of Chinese Month	Identification
3	<i>gsan yol</i>	1. <i>mā yol</i>	<i>ma yüe</i> , horse month
4	<i>gsi yol</i>	2. <i>yañ yol</i>	<i>yañ yüe</i> , goat month
5	<i>u yol</i>	3. <i>huu yol</i>	<i>hou yüe</i> , monkey month
6	<i>blu yol</i>	4. <i>kyi yol</i>	<i>ki yüe</i> , rooster month
7	<i>ts'i yol</i>	5. <i>gau yol</i>	<i>kou yüe</i> , dog month
8	<i>bā yol</i>	6. <i>t'ui yol</i>	<i>čü yüe</i> , swine month
9	<i>sgyeu yol</i>	7. <i>zui yol</i>	<i>šu yüe</i> , rat month
10	<i>šin yol</i>	8. <i>neu yol</i>	<i>niu yüe</i> , ox month
11	<i>dbyi yol</i>	9. <i>lau-hu yol</i>	<i>lao hu</i> 老虎 <i>yüe</i> , tiger month
12	<i>šin-dbri yol</i>	10. <i>t'ur yol</i>	<i>tu yüe</i> , hare month
1	<i>byi yol</i>	11. <i>luñ yol</i>	<i>luñ yüe</i> , dragon month
2	<i>dbri yol</i>	12. <i>še yol</i>	<i>sö yüe</i> , serpent month

These transcriptions are of comparatively recent date, as shown above all by *neu*, while the Old-Tibetan transcription for *niu* 牛 is *gi* (No. 223). The Sino-Tibetan names are given also in the *French Dict.* (p. 877), with the exception of the fourth month, and with a few errors: the name of the

serpent is written *sgeu* instead of *že*; the name of the tiger is given as *lau*, and that of the hare as *ši-dgri*, apparently due to a confusion with the corresponding Hor month.

9. *Portuguese, Anglo-Indian, English, and Russian Loan-Words.*

312. *kor-do-pa, ko-do-ba* (Ladakh, JÄSCHKE: "boot," with query), cordwain, Spanish leather. From Portuguese *cordovão, cordão*; Spanish *cordoban*, from Cordoba in Spain. Hindustānī *kardhani*, Laskari-Hindustānī *kurdam*, Tamil *kordan*, Malayālam *koḷudam* (see S. R. DALGADO, *Influência do vocabulário português em línguas asiáticas*, p. 63, Coimbra, 1913).
313. *go-bi* (West Tibet), cabbage. Hindustānī *kobī*, from Portuguese *couve* (see this volume, p. 87).
314. *li-lam*, auction. From Portuguese *leilão*, through the medium of modern Indian languages: Gujarāṭī *lilām, nilām*, Hindī and Hindustānī *nīlām*, Nepalese *līlām*, etc. (DALGADO, *l. c.*, p. 97; YULE, *Hobson-Jobson*, p. 621). Burmese *lay-lan*, Siamese *lelān*, Malayan *lelan, lelon, leloñ*. Cantonese *yeloñ*, Amoy *lelan*, Swatow *loilan*.
315. *sa-bon* (West Tibet), soap. Hindustānī *sābūn, sábuṅ, saban*; Gujarāṭī *sabu, sābú*; Bengālī *sabán*; Singalese *saban, sabuñ*; Telegu *sabbu*; Siamese *sa-bu*; Malayan *sabon, sabun*; Chinese *sa-pun, sa-būn* (WALTERS, *Essays*, p. 346); Japanese *sabon, šabon*. The word was spread over Asia by the Portuguese (Portuguese *sabão*, Spanish *jabon*, from Latin *sapo*). The Arabic word *šabon, šabun* صابون is derived from Latin; and in view of the fact that the Arabs made little use of soap, it is not probable that they introduced the term into Malaysia (DALGADO, *l. c.*, pp. 138—139). The Latin word in all likelihood is of Celtic origin, since PLINY (xxviii, 51, § 191) ascribes the invention

of soap to the Galla (prodeat et sapo, Galliarum hoc inventum rutilaudis capillis).¹

316. *'aṅ-rgar-ajig* (pronounced *'aṅgarji*), English. In imitation of Hindī and Hindustānī *angrezī*, that is based on Portuguese *inglés, ingrês* (DALGADO, *l. c.*, p. 89).
317. *pa-tir*, padre; address to English missionaries and clergymen.
318. *kartūs* (Ladākh: RAMSAY), cartridge. Anglo-Indian *cartooze*.
319. *čurut* (Ladākh: RAMSAY), cigar. From Anglo-Indian *cheroot*, which is said to come from Malayālam *čuruttu*, Tamil *čuruttu* (YULE, *Hobson-Jobson*, p. 188). The word was probably diffused by the Portuguese (*charuto*).
320. *t'a-ma-k'a*, West-Tibetan *t'a-mag, tamak*, and *da-mag*, tobacco. In all Indian languages the word for "tobacco" terminates in *ku, khu*, or *k* (DALGADO, *l. c.*, p. 147); *-k'a* is peculiar to Tibetan, and it seems that it owes its existence to an adaptation to the Tibetan suffix *k'a*. The *Pol. D.* (29, p. 12) has the Tibetan form *t'a-ma-k'i* (Mongol *tamaga* and *tamaki*, Manchu *dumbaku*, Chinese *yü* 菸).
321. *mulmul* (RAMSAY), muslin. Anglo-Indian *mulmull*, Hindustānī *malmal* (see YULE, *Hobson-Jobson*, p. 595).
322. *ka-fī*, coffee (Ladākh: RAMSAY, p. 22). The missionaries in Lahūl have given to *k'a-ba* the signification of "coffee," which is otherwise unknown in Tibet (JÄSCHKE, p. 37). There is no reason, however, for the initial aspirate, and, according to Tibetan practice, *f* would preferably be represented by *p* or *p'* (compare in Indian languages *kaphi, kāphi, kopi, kappi, kapi*, etc.).

¹ The Tibetan word *pa-le* ("bread"), however, which DALGADO (*l. c.*, p. 120) derived from BELZ's *Manual of Colloquial Tibetan* and with an interrogation-mark placed among the derivatives from Portuguese *pão*, does not belong to the Romance languages. It is written *bag-leb*, both elements being genuine Tibetan words, *bag* meaning "flour, pap, porridge," and *leb* "flat."

323. *ti-keḍ*, *tri-keḍ* (JÄSCHKE), card, postage-stamp. From English *ticket*.
324. *ra-sid ti-keḍ*, money-stamp (*ra-sid* from Persian *rasid*, "receipt").
325. *rafal* (RAMSAY), rifle. From English *rifle*.
326. *kōt* (RAMSAY), European coat. From English *coat*.
327. *ma-ni 'or-da* (written *gra*) = money-order.
328. *mim*, mistress. From *Ma'im*, *Madam* (through Hindustānī *mēm*).
329. *samāwār* (RAMSAY, p. 157), *samavār* (ROEMO, Vol. III, p. 252), tea-boiler. From Russian *samovar* (many of these being brought to Le, Ladākh, by traders from Central Asia).

APPENDIX I. TIBETAN LOAN-WORDS IN CHINESE.

Although the number of Tibetan words, which are transliterated in books dealing with Tibet and Lamaism, is very large, only a few Tibetan loan-words have penetrated into Chinese. The word *la-ma*, which does not yet appear in the T'ang Annals, is as familiar to the average Chinese as to any of us. Most Tibetan words, however, are familiar only to those Chinese who have come in contact with Tibetans, live among them or along the frontier, or are in commercial relations with Tibet. Words like *p'ōn ša* ("carbonate of soda") from Tibetan *bul* (*T'oung Pao*, 1914, p. 88),¹ *p'u-lu* from Tibetan *p'rug* (*ibid.*, p. 91; 1915, p. 22), *ka-ta* from Tibetan *k'a-btags* (WATTERS, *Essays*, p. 377), may be regarded as genuine loan-words

¹ The term *ta p'ōn ša* 大鵬砂 occurs in the *Ta T'ai leu tien* 大唐六典 (Ch. 22, p. 8; ed. of *Kuan ya šu kü*, 1895), where it is remarked that this product comes from Persia 波斯 and Lian čou 涼州. Persia, in fact, is one of the great centres for the supply of borax, and this very word is derived from Persian *burā* بوره (Russian *burá*), Arabic *būraq* بورق. Likewise *tincal*, *tincar* (crude borax found in lake-deposits of Persia and Tibet) comes from Persian *tinkār*, *tankur* تنكار (Sanskrit *tankara*; YULE, *Hobson-Jobson*, p. 923). Besides the passage of the *Wu tai li*, formerly noted, the *Pien tse loi pien* (Ch. 209, p. 1 b) points out a text in the *Sui šī* and another in the *Moñ hua lu* 夢華錄. For more information see my *Sino-Iranica*.

naturalized in the Chinese language. Words, however, like **üan* (*yüan*) 獬 (T'oung Pao, 1914, p. 71; provided this word be a reproduction of Tibetan *gñan*), and *fu-lu* in the T'ang Annals, are mere transcriptions of isolated occurrence, which left no imprint on the Chinese language. The term *p'u-t'i-tse* noted by Watters is not Tibetan (see No. 248). His *tie-lie* (from *t'er*) is not in general use, but is merely a bookish transcription; in the Tibetan-Chinese documents of the *Hua i yi yü* (Ch. 20), Tibetan *t'er-ma* is transcribed *t'ie-li-ma* 鐵哩麻. A few more interesting examples of Tibetan words in Chinese may follow.

1. *tsan-pa* 糌粑, transcription of Tibetan *r-tsam-pa*, roasted barley-flour, the staple-food of the Tibetans. This word is well known to all Chinese living in Tibetan regions.
2. *kien'r* 蘭耳 is the designation, on the part of the people of the West (西人), of the wild yellow goat 黃羊 of Tibet (*Pên ts'ao kuñ mu*, Ch. 50 A, p. 18). The corresponding Tibetan name is *r-gya-ra*, *r-gya-ru*, or *r-gya* (*French Dict.*: *r-gya-ba*, in certain places also *r-gya-ka-ra*), identified with *Procapra gutturosa* (family Capridae), that occurs in the Kuku-nōr district and Amdo (G. SANDBERG, *Tibet and the Tibetans*, p. 298; the rendering "Saiga-antelope," given by JÄSCHKE after Schmidt, is erroneous). The Chinese transcription, answering to **gyer*, *gyar* (*g'er*, *g'ar*), may well be based on the Tibetan term. Li Ši-čên observes that the animal's ears are very small, which may have given rise to the choice of the characters ('cocoon ears'). The same animal is called also *fan* 番, an artificial formation meaning the "goat of the Fan (Tibetans)," and defined in the *Šuo wen* as a "goat with yellow abdomen" (黃腹羊); GILES explains it as "a small-sized deer found among the mountains of Kuku-nōr" (for "deer" insert "goat").

3. *kio-ma* 脚嗎, *Potentilla anserina* (compare ROCKHILL, *J.R.A.S.*, 1891, p. 284; the Chinese name is *žōn žou kuo* 仁壽菓), is derived from Tibetan *gro-ma* (*do-ma*), referring to the same plant. In the *Pol. D.* (29, p. 14) the latter is identified with Chinese *kou šé ts'ao* 狗舌草, which is said to refer to *Senecio campestris* (STUART, *Chinese Materia Medica*, p. 403).
4. *k'ü-ma ts'ai* 曲麻菜 and *k'u-ma'r* 苦麻兒 (*Pol. D.*, 27, p. 27) appear to be transcriptions of Tibetan *k'ur-ma* (also *k'ur-mañ*, *k'ur-mañs*), dandelion. The Mongol equivalent *idara* is explained by KOVALEVSKI as "chicory," a plant that does not occur in China, either.
5. Chinese *kan-pu* 甘卜 does not render Tibetan *mk'an-po*, as stated by E. BLOCHET (*Djami el-Tévarikh*, Vol. II, p. 544), but Tibetan *s-gam-po*, 甘 being formerly **kam*, **gam*, and, like *sgam*, possessing the high tone. The Tibetan aspirate would be reproduced also in Chinese by the corresponding aspirate. The Mongol writing *mkanpo* for Tibetan *mk'an-po* proves nothing, as Mongol is devoid of aspirates, at least as far as the script is concerned. As already stated by T. WATERS (*Essays*, p. 376), *mk'an-po* is transcribed in Chinese *k'an pu* 堪布.

The official organization of Tibet has been dealt with from the Chinese angle by F. W. MAYERS (*Chinese Government*, 3d ed., 1896, pp. 105—122), T. WATERS (*Essays*, pp. 375—377), W. W. ROCKHILL (*J.R.A.S.*, 1891, pp. 219—221), and BRUNNERT and HAGESTROM (*Present Day Political Organization of China*, pp. 465—477; Russian edition, pp. 389—399). None of these expositions is complete or entirely clear, and the identification of the Chinese transcriptions with their Tibetan equivalents leaves much to be desired. I have

no intention of canvassing the same ground again, but restrict myself to a few identifications or observations.

1. *dza-pe*, *ža-pe*, *ša-pe*, the colloquial designation for the *bka-blon* (*ka-lon*, "minister"), is not written *gšags dpe* ("model of justice;" this compound indeed does not exist), as suggested by ROCKHILL, but is *žabs pad* ("foot lotus;" that is, a lotus placed beneath the feet, as in the images of Buddhas and saints).
2. The Chinese transcription *ka-pu-lun* 噶布倫 (MAYERS, No. 567) of Tibetan *b-ka-blon* ("prime minister") is based on the Tibetan pronunciation *kab-lun*.
3. *ka-hia* (*zia*) 噶厦, Council Chamber. Transcription of Tibetan *bka g-šag-s* (pronounced *ka ša*), abbreviated for *bka-blon g-šag-s lhan rogyas* ("union of the court of ministers"). In the Ming edition of the *Hua i yi yü*, 厦 serves for the transcription of Tibetan *žag*, *šag*, and *ša*. In the *Pol. D.*, Tibetan *gšags* is employed for the rendering of 司.
4. *tsai puñ* 仔琿 (MAYERS, No. 569), Councillor of the Treasury, of the first class. Transcription of Tibetan *m-dzod d-pon* (pronounced *dzö puñ*).
5. *šan-čö-t'ö-pa* 商卓特巴 (MAYERS, No. 570), Councillor of the Treasury, of the second class. Transcription of Tibetan *p'yag mdzod-pa*, pronounced *č'an* or *č'an dzot-pa*. The *ts'an-* or *č'an-ču-pa*, noted by WATTERS (*Essays*, p. 376), represents the same Tibetan word; this, however, is not the title of a Lama of rank, as stated by Watters, but an appellation of the secular governor or regent (*sde-srid*) of Tibet, who is styled *sa skyön-bai p'yag mdzod* ("treasure of the government").
6. *yer-ts'an-pa* 業爾倉巴 (MAYERS, No. 571), Controller of the Revenue, fifth rank. Presumably transcription of

- Tibetan *g-ñer-ts'añ-pa* ("one in charge of storehouses"), pronounced *ñer-ts'añ-pa*.
7. *lañ-tsai-hia* 郎仔轄 (MAYERS, No. 572), Controller of Streets and Roads. Presumably transcription of Tibetan *lam-mdzad* (pronounced *dzai, dzä*) *g-šag-s* ("road-making court").
 8. *hie'r pañ* 協爾幫 (MAYERS, No. 573), Commissioner of Justice. It is not clear on what Tibetan term this transcription is based. The usual term for this office is *žal gčod-pa* or *žu len-pa*. As to *pañ*, I should be inclined to see in it *dbañ* ("power").
 9. *šo-ti-pa* 碩第巴 (MAYERS, No. 574), Superintendent of Police. The element *ti-pa* represents the transcription of Tibetan *s-de-pa* ("chief, governor"), which occurs again in No. 578. The Tibetan word represented by Chinese *šo* is not known to me.
 10. *ta-puñ* 達琿 (MAYERS, No. 575), Controller of the Stud. Transcription of Tibetan *r-ta d-pon* ("horse official").
 11. *čuñ yi* 中譯 (MAYERS, No. 576), Secretary of the Council. Transcription of Tibetan *druñ yig* (pronounced *đuñ yi*; in regard to Chinese palatals representing Tibetan cerebrals, see above, p. 409), secretary. The usual designation is *bka druñ*, abridged from *bka blon druñ*, secretary of a minister.
 12. *tui k'o'r* 東科爾 (MAYERS, No. 583), "the ancient native nobility." Transcription of Tibetan *g-duñ q-k'or* (pronounced *đuñ k'or*, "circle of families"). The men thus entitled form the nucleus of civil officers. They receive their training in a school of Lhasa (*gYu-t'og slob-grwa*), are then assigned for five years as apprentices to the Office of Accounts (*rtsi k'añ*), may be detailed on various duties with the executive

or revenue, and may finally laud the post of a *rDzoñ dpon* (*Joñ pon*), corresponding to that of district magistrate in China.

13. Titles of the military officers. These are enumerated, but not identified by Mayers and Brunnert. Watters has only identified the first title. Chinese *tai puñ* 戴 琫 = Tibetan *mda dpon*, general. Chinese *žu puñ* 如 琫 = Tibetan *ru dpon*, captain, commander of 200 men. Chinese *kia puñ* 甲 琫 = Tibetan *brgya dpon*, centurion, commander of 100 men. Chinese *tiñ puñ* 定 琫 = Tibetan *ldiñ dpon*, officer set over 45 or 50 men. Add: *bču dpon*, corporal, set over ten.
14. *čao* 召 does not mean in Tibetan "monastery or shrine," as asserted by MAYERS (No. 585), but is the transcription of Tibetan *jo-bo, jo-wo, jo-o* ("lord") with reference to the celebrated Jo-k'an temple of Lhasa (see ROCKHILL, *J.R.A.S.*, 1891, p. 74).
15. What MAYERS and BRUNNERT write *geleng* and *gylong* is in written Tibetan *dge sloñ* (pronounced *ge-loiñ*). Brunnert's *gheneng* is Tibetan *dge-bsñen* (pronounced *ge-ñen*). In regard to Chinese *pan-ti*, see above, No. 74.
16. *ko-se-kuei* 格 思 規, according to Brunnert and Hægelstrom, is Tibetan *gisk-hui*. It corresponds to Tibetan *dge-bakos*, the Chinese transcription being based on a Tibetan pronunciation *ge-s-kö*.

APPENDIX II. TIBETAN LOAN-WORDS IN ENGLISH.

Tibetan words like Lama, Dalai Lama, Teshoo Lama, Kajuur, Tanjuur, yak and other names of animals, have obtained naturalization in the English language. Books of travel in Tibet, as might be

expected, swarm with native words. Thus we read of *gelong* or *gylong* (*dge-slon*, "monk"), *kahlon* (*bka-blon*, "minister"), *gompa* (*dgon-pa*, "monastery"), *chörten*, *horten* or *chürten* (*mδ'od-rten*, "töpe"), *tsamba* (*rtsam-pa*, "roasted barley-flour"), and others.¹ The following list contains our zoölogical terms borrowed from Tibetan and a note on the word "polo."

1. **YAK**, *Bos grunniens*. From Tibetan *g-yag*.
2. **DZO**, cross between yak-bull and Indian cow. From Tibetan *m-dzo*.
3. **KYANG**, **KIANG**, the wild horse inhabiting the table-lands of Central Asia (*Equus kyang*, or *Equus hemionus kiang*). From Tibetan *r-kyan*.
4. **SEROW** (spelled also *saraw*, *sarau*, *sarao*, *surow*, *serou*), an antelope (*Nemorrhædus bubalinus*). From Tibetan *b-se-ru*.
5. **CHIRU** (R. LYDEKKEE, *Game Animals of India*, p. 184, gives also **CHUHU** as a Tibetan name), an antelope (*Pantholops hodgsoni*). Presumably based on the same Tibetan word as the preceding one.
6. **GOA**, **RAGAO**, a gazelle (*Gazella picticaudata*). From Tibetan *r-go-ba*, Central Tibetan *go-a*.
7. **TAKIN**, a horned ruminant allied to both the goats and the antelopes (*Budorcas taxicolor*), occurring in south-eastern Tibet and on the northern frontier of Assam (first described by J. RICHARDSON, *On the Takin of the Eastern Himalaya*, *J.A.S.B.*, Vol. XIX, 1850, p. 65; see also R. LYDEKKEE, *Game Animals of India*, p. 157). The word *takin* (omitted

¹ In his article "Cooly" (*Hobson-Jobson*, p. 250), YULE, after mentioning the Turkish word *kol* ("slave"), has inserted this observation: "*Khol* is in Tibetan also a word for a servant or slave (note from A. Schiefner; see also Jäschke's Tibetan Dict., 1881, p. 59). But with this the Indian term seems to have no connection." I do not share Yule's opinion (*ibid.*, p. 463) that the Tibetan verb *dpyan* ("to hang") can be sought in Anglo-Indian *jampan* ("kind of palanquin"), although we have the compound *ak'yogs-dpyan* with this meaning.

in Yule's *Hobson-Jobson*) is usually regarded (thus in the new *Oxford English Dictionary*) as Mišmi, on the authority of T. T. COOPER (*The Mishmee Hills*, p. 183, London, 1873). E. H. PARKER (*As. Qu. Rev.*, 1913, p. 429) says that it is presumably a Tibetan or Assamese word. This is justified, inasmuch as G. SANDBERG (*Tibet and the Tibetans*, p. 297) gives a Tibetan word *rta skyin* (pronounced *ta kyin*) with the identification "Budorcas taxicolor," and this item thus found its way into the *Tibetan Dictionary* of Chandra Das, of which the late G. Sandberg was one of the editors. But is *rta skyin* really a Tibetan term for the animal in question? It is given neither by Jäschke, nor by the *French Dictionary*, nor by any Tibetan or Chinese-Tibetan dictionary known to me, nor does it occur in Tibetan literature. The formation itself is highly suspicious: *rta* means "horse," and *skyin* is a wild mountain-goat (*Capra sibirica*; see M. DAUVERGNE, *Bull. Mus. d'hist. nat.*, Vol. IV, 1898, p. 217). It seems to me impossible that the Tibetans should regard Budorcas as the "horse-goat," as this animal does not bear an atom of resemblance to a horse. In the words of Cooper, it resembles somewhat a cross between the deer and the bull. G. Sandberg, interested in Tibetan and in zoölogy, resided in Darjeeling, where he made his inquiries about the fauna of Tibet. His informant, whom he interrogated in regard to the takin, may have coined for his benefit the above Tibetan mode of writing. I do not believe that this is a Tibetan term at all, but simply the fancy of an individual who attempted to make the best of writing it in Tibetan. Takin is indeed a Mišmi word, and *ta* does not mean "horse" in Mišmi.

8. The most interesting of our Tibetan loan-words is POLO,

the equestrian ball-game. Both the *Century Dictionary* and the *Encyclopædia Britannica* (Vol. XXII, p. 11) derive it from Tibetan *pulu* ("ball"), the former referring also to Balti *polo*. The form *pulu* as a Tibetan word is given by G. T. VIGNE (Vol. II, p. 289). JÄSCHKE writes the word *lo-lo* ("ball, for playing"), but we know positively that the Ladākhi form is *po-lo* (O. ROERO, Vol. III, p. 236, who has *po-lo* as Tibetan and *pu-lo* as Indian; RAMSAY, p. 123; A. H. FRANCKE, *Ladākhi Songs*, p. 12). The *Polyglot Dictionary* of K'ien-lun writes the word *p'o-loñ* (as likewise KOVALEVSKI, see *bumbuge*); in the unique Pentaglot edition of the British Museum we find the same Tibetan spelling, which, moreover, is confirmed by the pronunciation added there in Manchu characters, *p'oloñ*. An analogon to the alternating forms *po-lo* and *p'o-loñ* is presented by *šo-lo* and *šo-loñ* ("dice"), and by *č'o-lo* ("dice, chess;" see No. 76) in comparison with Lepcha *č'o-loñ*. The Chinese equivalent given is *hiñ t'ou* 行頭, apparently a colloquialism (see K. HIMLY, *T'oung Pao*, Vol. VI, 1895, p. 272), corresponding to Manchu *mumuhu*, Mongol *bumbuge* (the pronunciation is thus fixed by the Manchu transcription in the Pentaglot edition), and eastern Turki *tob* توف (transcribed *tob* in Manchu). The latter word is listed by RADLOFF (Vol. III, col. 1220) as Djagatai and Osmanli *top*, meaning "any round object, ball, globe" (hence also *topči*, "button," see No. 178). First of all, therefore, the term *po-lo* or *p'o-loñ* relates to the ball, which, according to the Manchu description given in the *Mirror of the Manchu Language*, was a large ball sewed together from pieces of leather; the balls used in Ladākhi are made from willow-wood. In a wider sense, the word *po-lo* denotes also the game itself and the polo ground, the latter, in addition,

being styled in Ladākh *ṣa-ga-ran* (ROERO: *ṣagara*). The game is by no means cultivated throughout Tibet; in the central and eastern portions of the country it is now wholly unknown. In fact, it is restricted to Baltistān and Ladākh, and there is good reason to believe that it was introduced into Ladākh from Baltistān, or from Gilgit and Chitral, where the game also is cultivated (BIDDULPH, *Tribes of the Hindu Kush*, p. 84). Some authors regard polo as the national game of Ladākh (A. CUNNINGHAM, *Ladāk*, p. 311; RAMSAY, *Western Tibet*, p. 123); see also KLAPROTH'S *Magasin asiatique*, Vol. II, p. 17.

The word *p'o-loñ* is of ancient date, for it occurs in the *Mahāvvyutpatti*. The Emperor T'ai-tsun (627—649) knew that the Tibetans made excellent polo-players. In A. D. 709 Chinese were defeated in a polo-match by a Tibetan envoy in the Pear-Garden Pavilion (see *Fuñ ši wen kien ki* 封氏聞見記 by Fuñ Yen 封演 of the T'an period, Ch. 6, p. 2 b, ed. of *Ki fu ts'un šu*; and *Kiu T'an šu*, Ch. 196 A, p. 4 b). I hope to publish some day a detailed history of the game.

Through an oversight of the compositor the following item was omitted on p. 503.

211. 'an-dur (*Hua i yi yū*), cherry (*yñ t'ao* 櫻桃, *Prunus pseudocerasus*, so-called Chinese cherry). The Chinese term is transcribed in Mongol *ingdōr*, in Manchu *ingduri*; hence it is probable that the Tibetan form (presumably written inexactly for 'an-dur) also represents a transcription of Chinese.

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ADDENDA.

The following Tibetan Sūtra printed in Peking has been translated from the Chinese. The Tibetan title runs thus: Śin-tu rgyas-pai sde snod rtogs-pa yoñs-su rdsogs-pai sñiñ-poi ñes don batan-pai tes bya-bai mdo. It is accompanied by the Chinese title in Tibetan transcription: Tā hpañ bkwañ ywan kyau seu tau (written with double *o*, presumably intended for *ō*) lo liu yi kyin. This corresponds to Chinese 大方廣圓覺修多羅了義經 *Ta fai kwan yüan kiao siu to lo liao yi kiñ* (Bunyiiu Nanjio, No. 427). According to the Tibetan colophon, this Sūtra had never previously been translated into Tibetan, but existed in the Chinese Tripiṭaka (rgyai bka-ḡgyur). The translation was made by the dka-bču [title] Subhagaṇḡreyadhvaja and the dka-bču Dhyānāriṣṭaiñvāsa; a Manchu translation was utilized for this work, and a dānapati (sbyin bdag) Hiiñ lin, apparently a Chinese, contributed toward it a sum of three hundred Taels.

67. *ne-tso*, after all, may be a Tibetan word. Cf. Lo-lo-p'ō *a-jū* ("parrot").

157. The Uigur title *baksi* appears in the transcription 帛師 'bak-š'i in the *Yu yan tsa tsu* (Ch. 17, p. 11) as the title of Fa-t'ui 法通, a Parthian 安西人, who in his youth had lived in southern India, and had there entered the clergy. This transcription shows that *baksi* conveyed to the Chinese the impression of a foreign word. Simultaneously it demonstrates that my identification of the second element, *ši*, with 師, is correct. To Manchu *faksi* add Jurči *fasi* (GRUBE, *Jučen*, No. 315) and Golde *paksi* or *pa.xsi*.

183. Mongol *bogdo* is possibly connected with Uigur *poktas*.

To the Tibetan loan-words in English, add *tangun*, *tanyan*, according to YULE (*Hobson-Jobson*, p. 898), "Hindustānī *ṭāṅghan*, *ṭāngan*; apparently from Tibetan *ṛtañāñ*, the vernacular name of this kind of horse (*ṛta*, 'horse'), the strong little pony of Bhutān and Tibet." JASCIKE has noted this term after Hooker, writing it *ṛta-ñan*; but whether it is really written this way, and whether the term actually exists in Tibetan, is not known to me.

THE SI-HIA LANGUAGE,
A STUDY IN INDO-CHINESE PHILOLOGY.

BY

BERTHOLD LAUFER.

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INTRODUCTORY.

"After you have travelled thirty days through the Desert, as I have described, you come to a city called Sachiu, lying between north-east and east; it belongs to the Great Kaan, and is in a province called Tangut. The people are for the most part Idolaters, but there are also some Nestorian Christians and some Saracens. The Idolaters have a peculiar language, and are no traders, but live by their agriculture." Thus MARCO POLO opens his chapter on the Great Province of Tangut.¹ According to YULE, the "peculiar language," as Neumann supposes, may have been Tibetan; while, on the other hand, he was inclined to think that the language intended by Polo may have been a Chinese dialect. At present we might confidently say that Polo certainly visualized the Si-hia language, and, judging from the fragments of it now at our disposal, and to be discussed on the pages to follow, that he was quite right in styling the language "peculiar." It is in fact a peculiar language, not, however, plainly Tibetan, as believed by Neumann and several successors,² but an independent and peculiar idiom within the great family of Tibeto-Burman languages, fundamentally evincing decided affinities with the Lo-lo and Mo-so group.

In designating the language as Si-hia I follow the established convention, although it is not logical to speak of a Si-hia language or people, as Si Hia 西夏 is a purely Chinese term pertaining to the dynasty of the kingdom. The people were descendants of

¹ *The Book of Ser Marco Polo*, ed. of YULE and CORDIER, Vol. I, p. 203.

² DEVÉRIA (*L'Écriture du royaume de Si-hia ou Tangut*, p. 29 of the reprint from *Mémoires présentés par divers savants à l'Académie des Inscriptions*, first series, Vol. XI, pt. 1, Paris, 1893) designated the language as possibly being a Tibetan dialect. M. G. MORISSE (*Contribution préliminaire à l'étude de l'écriture et de la langue Si-hia*, p. 37, reprint from *Mém. prés. par divers savants à l'Académie des Inscriptions*, first series, Vol. XI, pt. 2, Paris, 1904, pp. 313—379) concluded from certain analogies of syntax that "la langue tangoutaine était apparentée au tibétain."

the Tang-hiang 党項, in particular of the gens T'o-pa 拓拔, forming one of the eight *gentes* of that tribe.¹ They were accordingly members of the Tibetan family. The word *Tang* seems to have resulted in the Mongol name *Tangut* (-*ud* being the ending of the plural), employed by Marco Polo and Rashid-eddin.² The term *Tangut*, however, antedates the Mongol epoch, for, as already observed by DEYÉRIA,³ it is found as early as the year 734 in the Sino-Turkish inscription of Kosho-Tsaidam.⁴

A considerable literature must have been extant in the Si-hia language. Chinese books were eagerly sought in the kingdom, and were not only brought there from China proper, but were also printed in the country itself, sometimes even at the initiative of the rulers of the Si-hia dynasty.⁵ Confucian literature was cultivated under the reign of Li Jên-hiao (1140—93), when schools were erected after the Chinese model in all departmental and district towns, swelling the number of students to three thousand. All children of the royal family, from their seventh to their fifteenth year, were obliged to frequent a college installed in the palace. The king and the queen did not think it beneath their dignity to impart instruction there. In 1145 a learned academy was founded after the Chinese model. In 1150 Wa Tao-chung was appointed professor of Chinese and Si-hia literatures; he translated the Analects of Confucius, and provided them with a commentary in thirty books.

¹ See the interesting observations of E. CHAVANNES, *Dix inscriptions chinoises de l'Asie centrale*, p. 13 (reprint from *Mém. prés. par divers savants*, etc., first series, Vol. XI, pt. 2, 1902, pp. 193—295).

² See an interesting note on Tangut, in W. W. ROCKHILL, *Land of the Lamas*, p. 73; and *J.R.A.S.*, 1891, p. 189.

³ *L'Écriture du royaume Si-hia ou Tangut*, p. 21.

⁴ Compare W. RADLOFF, *Alltürkische Inschriften der Mongolei*, I, p. 58; and V. THOMSEN, *Inscriptions de l'Orkhon*, pp. 123, 178.

⁵ P. PELLLOT, *Les documents chinois par la mission Kozlov* (*Journal asiatique*, 1914, mai-juin, p. 504).

Besides, he wrote a treatise on divination. His works, composed in the national system of writing, were propagated in the kingdom. At the time when it was overthrown by the Mongols (1226), Chinese literature was in a flourishing condition, and numerous books were carried away with the booty of the conquerors.¹ In 1154 Li Jên-hiao requested permission from the Kin to purchase from them books relating not only to Confucius, but also to Buddha. The Buddhist Tripitaka has been entirely translated into the Si-hia language, and an edition of this translation was prepared in print in 1294.² The interest in Buddhism awoke under Li Yüan-hao (1032—48), who procured a collection of Buddhist works from the Chinese Court in exchange for fifty horses. He constructed a monastery and high Stūpas east of his capital, where the sacred canon was deposited. Uigur monks were called to this establishment to study and interpret these texts and to render them into the Si-hia language. The Uigur, a Turkish tribe bordering the Si-hia Kingdom on the west, furnished the missionaries and translators of Buddhism to the Si-hia in the same manner as at a later date to the Mongols. The *Saddharma-puṇḍarīka-sūtra* translated into Si-hia has been made the object of an ingenious study by M. G. MORISSE,³ who availed himself of a manuscript (incomplete, in three volumes), written in gold on stiff blue-black paper (a style familiar also in Tibet). The Si-hia rulers likewise had annals kept in their language and writing, but no historical works seem to have as yet come to the fore.

The Si-hia system of writing was constructed in 1037 by Li Yüan-hao. It is perhaps the most complicated system ever invented by a human mind,—ideographic, like Chinese, the single characters being

¹ G. DEVÉRIA, *L'Écriture du royaume de Si-hia*, pp. 23—26.

² PELLLOT, *l. c.*, p. 518.

³ *Contribution préliminaire à l'étude de l'écriture et de la langue Si-hia (l. c.)*.

composed of a bewildering mass of irregular lines, in which no method or principle has as yet been disclosed. Only a small fraction of characters has been read; of others, the meaning only is known, but not the phonetic value. Devéria is presumably right in tracing the origin of Si-hia writing to that of the Khitan, which, on its part, was derived from Chinese script in 920. Apart from books, manuscripts, and scrolls, we have but few monuments of Si-hia culture in the form of lapidary inscriptions, coins, and seals. In the celebrated inscription of Kū-yung-kuan (in the Nan-k'ou Pass, on the road from Peking to Kalgan), dated 1345, four sections are composed in Si-hia, two remaining undeciphered; the two others present the literal phonetic transcription in Si-hia characters of Sauskrit Dhāraṇī. The majority of the latter characters have been identified by A. WYLIE¹ and E. CHAVANNES.² It is to the merit of G. DEVÉRIA to have established the fact beyond doubt, that the inscriptions in question were really of Si-hia writing, through comparison with an inscription of 1094 erected in the Temple of the Great Cloud at Liang-chou in Kan-su Province, and studied by him in the publication above cited. S. W. BUSHELL³ examined twelve Si-hia coins, and succeeded in deciphering the sense of some forty characters, without being able, however, to assign to them their phonetic value. Reproductions of some Si-hia seals have been published in the Chinese journal *Shên chou kuo kuang tsi*, No. 10. King Li Yüan-hao received from the Chinese Court a plated silver seal on which were engraved four characters, reading, "seal of the lord of the country of Hia" 夏國主印.⁴

¹ *On an Ancient Buddhist Inscription at Kou-yung kwan* (*J.R.A.S.*, N. S., Vol. V, 1870, pp. 14-44).

² *Documents de l'époque mongole, édités par le prince Roland Bonaparte*, Plate X.

³ *The Hsi Hsia Dynasty of Tangut, their Money and Peculiar Script* (*J. China Branch R. A. S.*, Vol. XXX, 1895-96, pp. 142-160).

⁴ *Sung shi*, Ch. 485, p. 8 b.

The only available material for a study of the Si-hia language is a brief manual, unfortunately incomplete, found, together with a large number of other Si-hia books, in 1908, by Gen. Kozlov, in a Stūpa not far from Karakhoto,¹ and published by Professor A. IVANOV.² This booklet was prepared by an author of Si-hia descent, Ku-le or Ku-lo (Ku-ro, Gu-ro) 骨勒, with the intention of facilitating for his compatriots the study of the Chinese language. The work, written in 1190,³ consists of a vocabulary, arranged according to subject-matter, in Chinese fashion, — heaven, earth, man, body, costume, implements, fauna, flora, minerals, nutrition, abstract nouns, measurements, adjectives, verbs, and numerals. Each word is given in Si-hia script (third column); it is accompanied by the pronunciation of the corresponding Chinese word in Si-hia characters (first column), by the Chinese rendering (second column), and by Chinese characters indicating the reading of the Si-hia word (fourth column). Professor Ivanov, to whom we are under great obligation for having rendered this important material accessible, has added a few Chinese, Mongol, and Tibetan words for purposes of comparison, but the real analysis of the language remains to be made. Besides the vocabulary in question, I availed myself of a number of Si-hia words recorded in the Chinese Annals (Nos. 46, 138—142).

As regards the transcription of the Chinese characters reproducing the Si-hia words, Mr. Ivanov is generally correct in what he remarks on this point (p. 1225). I think, however, that Northern Mandarin should be preferred to the Peking dialect. Thus

¹ The ruined town of Karakhoto, first visited and explored by Gen. Kozlov in 1908—09, was investigated again by A. Stein on his recent expedition to Central Asia, with good results: abundant remains of Buddhist manuscripts and prints, both in Tangut script and Tibetan, and miscellaneous records on paper in Chinese, Tangut, and Uigur, were brought to light by him (see his report in *The Geographical Journal*, 1915, pp. 408, 409).

² *Zur Kenntnis der Hsi-hsia Sprache* (*Bull. de l'Acad. imp. des sciences de St.-Petersbourg*, 1909, pp. 1221—1233).

³ The correct date has been established by CHAVANNES (*T'oung Pao*, 1910, p. 151).

Si-hia 七吾 ("salt") doubtless is *ts^ci-niu*, not *ch^ci-wu*, and Si-hia 皆 ("gold") is *kie*, *kiā*, *k'ü*, not *chieh*. A point chiefly to be noted is that modern Chinese, lacking the sonants, resorts to the corresponding surds in transcribing the sonants of foreign words; while there is every reason to believe that Si-hia, like its congeners, possessed the sonants *g*, *b*, *d*. Only close comparison with cognate forms of speech can teach us whether the sonants or surds have to be adopted for Si-hia; and in many cases, this remains doubtful. For example, 芭丕 ("daddy") is not to be rendered *pa-pu*, but *pa-bu*, the element *bu* being the same as the diminutive ending *bu* of Tibetan; 則移 ("water"), as shown by linguistic comparison, is *dzei*, *jei*, not *tse-yi*. Whether *l* or *r* is to be read for Chinese *l*, can be decided solely by comparative methods; even then the decision is not always easy, as *l* and *r* are to a great extent interchanged in Tibeto-Burman. In a single case, Chinese *l* corresponds to Si-hia *n*: 羅 *lo* ("disease"), being identical with A-hi Lo-lo *no*, Nyi Lo-lo and Tibetan *na*, should be read as Si-hia *no*.

The comparative material brought together in elucidation of the Si-hia onomasticon has been arranged on as broad a basis as possible, covering, so far as this can be done at present, the Indo-Chinese languages in their entire range. It is thus hoped that this essay will be interesting, not only to students of Si-hia and Tibetan, but also to those engaged in the pursuit of other Indo-Chinese branches and to philologists in general. It will be seen from the following pages that the Si-hia language is more than an isolated phenomenon of local interest, and that it even has a fundamental value for the understanding of the speech history of the Indo-Chinese family, and in many cases largely contributes to a correct appreciation of its genetic growth. The ethnologist and historian of culture may also find here some new facts of importance, particularly with reference to the utilization of metals and cultivated

plants. It was not feasible, in each and every case, to state the source from which a word has been derived; only in specific cases acknowledgment has been rendered, author's names have been cited in parenthesis wherever it seemed that responsibility must solely rest with them. In general, only well-authenticated material has been adopted, each item being drawn and verified from first-hand sources. It is chiefly to the following works that I am under obligation. My knowledge of the Lo-lo languages is based on the fundamental studies of Fathers P. VIAL (*Les Lolos*, Shanghai, 1898; and *Dictionnaire français-lolo*, Hongkong, 1909) and A. LIÉTARD (*Notions de grammaire lo-lo*, *Bull. de l'Ecole française*, Vol. IX, 1909, pp. 285—314; *Notes sur les dialectes lo-lo*, *ibid.*, pp. 549—572, an achievement of principal value on account of the copious comparative vocabulary; *Notions de grammaire lo-lo*, *T'oung Pao*, 1911, pp. 627—662; *Essai de dictionnaire lo-lo français, dialecte A-hi*, *ibid.*, pp. 1—37, 123—156, 316—346, 544—558; *Vocabulaire français lo-lo, dialecte A-hi*, *T'oung Pao*, 1912, pp. 1—42; *Au Yun-nan, les Lo-lo-p'ò*, *Bibliothèque Anthropos*, Vol. I, No. 5, Münster, 1913; this work contains a solid grammar of the Lo-lo-p'ò dialect, also several texts with translation). Vial and Liétard are the founders of Lo-lo philology, and their phonetic reproduction of the language may be regarded as fairly exact; at any rate, it is infinitely superior to what is offered us in the lists of words haphazardly gathered by casual travellers. I feel the more grateful toward the work of the two fathers, as the present investigation could not have been made but for their efforts, one of my main results being the proof of a close affinity between Si-hia and Lo-lo. The materials of BONIFACE (*Etude sur les langues parlées par les populations de la haute Rivière Claire*, *Bull. de l'Ecole française*, Vol. V, 1905, pp. 306—327; and *Etude sur les coutumes et la langue des Lo-lo et des La-qua du Haut Tonkin*, *ibid.*, Vol. VIII, 1908, pp. 531—558) have also proved

useful. Occasional references have been made to the Lo-lo collection of E. C. BABER (*Travels and Researches in Western China, Roy. Geogr. Soc. Suppl. Papers, Vol. I, 1886, pp. 73—78*), and H. R. DAVIES (*Yün-nan, the Link between India and the Yangtze, Cambridge, 1909*), but only in cases where they offer material not listed by Vial and Liétard. Next to Lo-lo, the language of the Mo-so has proved most important for my purpose. The interesting work of J. BACOT (*Les Mo-so, ethnographie des Mo-so, leurs religions, leur langue et leur écriture, Leide, 1913*) has furnished most of the Mo-so material (with occasional quotations from the work of Davies). M. Bacot's transcription of Mo-so is not made after rigid phonetic principles, but according to the French alphabet. The comparative method, however, brings out the fact that his mode of writing is generally correct. It has, of course, been reduced to the phonetic system adopted by me. It will be noticed that the phonology and vocabulary of Mo-so are closely allied to Lo-lo, and hence to Si-hia, and that even in some cases Mo-so furnishes the sole clew to a Si-hia word. Thus new light falls on the Mo-so language itself. These results, together with other observations on the language, I hope to set forth in the near future. It hardly requires mention that ample use has been made of that admirable linguistic encyclopædia, the *Linguistic Survey of India*, edited by G. A. GRIERSON, or that B. H. HODGSON'S *Essays on the Languages, Literature, and Religion of Nepal and Tibet* (London, 1874), have been laid under contribution for the languages of Nepal, or the Gazetteer of Upper Burma and the Shan States for the Karen dialects. It is regrettable that since Hodgson's day our knowledge of Nepalese idioms has so little advanced; this immense field merits a most serious exploration. Newāri remains the only language of this group of which we possess a somewhat superficial knowledge, thanks to the pioneer labors of A. CONRADY (*Das Newari, Grammatik und Sprach-*

proben, *Z.D.M.G.*, Vol. XLV, 1891, pp. 1—35; and *Ein Sanskrit-Neuwari Wörterbuch*, *ibid.*, Vol. XLVII, 1893, pp. 539—573). My acquaintance with Lepcha is founded on G. B. MAINWARING, *A Grammar of the Rong (Lepcha) Language* (Calcutta, 1875), and *Dictionary of the Lepcha Language*, compiled by G. B. MAINWARING, revised and completed by A. GRÜNWEDEL (Berlin, 1898). The majority of Bunan words are derived from the article of H. A. JÄSCUKE (*Note on the Pronunciation of the Tibetan Language*, *J.A.S.B.*, Vol. XXXIV, pt. 1, 1865, pp. 91—100); an exhaustive study of this interesting language would be a primary desideratum and of greatest service to Indo-Chinese philology. Kanauri or Kanāwari words are taken from Pandit T. R. JOSHI, *Grammar and Dictionary of Kanāwari, the Language of Kanāwar* (Calcutta, 1909), and from T. G. BAILEY, *Kanauri Vocabulary* (*J.R.A.S.*, 1911, pp. 315—364). The sources of Tibetan do not need specification. The Tromowa and Sikkim dialects are quoted from the important paper of E. H. C. WALSH (*A Vocabulary of the Tromowa Dialect of Tibetan spoken in the Chumbi Valley*, Calcutta, 1905), partially also from G. SANDBERG (*Manual of the Sikkim Bhutia Language*, Westminster, 1895). Materials relating to the East-Tibetan dialects, Jyaruñ and Gešits'a, are derived from the writer's own collectanea made in the field. Words of the Tibetan dialect of Yūn-nan are partially due to Father TH. MONBEIG (*Bull. de l'Ecole française*, Vol. IX, 1909, pp. 550—556), partially to the book of Davies above cited. As regards the T'ai languages, I hold myself under greatest obligation to the work of H. MASPERO (*Contribution à l'étude du système phonétique des langues Thai*, *Bull. de l'Ecole française*, Vol. XI, 1911, pp. 153—169); from many another study of this eminent philologist I have derived as much instruction as pleasure (compare *J.R.A.S.*, 1915, p. 757). As to Ahoim, I am indebted to the excellent vocabulary of G. A. GRIERSON (*J.R.A.S.*, 1904, pp. 203—232; and *Z.D.M.G.*, Vol. LVI,

1902, pp. 1—59). Pa-yi words are culled from F. W. K. MÜLLER'S study of this language (*T'oung Pao*, Vol. III, 1892, pp. 1—38). Other material relative to the T'ai languages of Yün-nan is drawn from DAVIES (*l. c.*), G. W. CLARK (*Kwiechow and Yün-nan Provinces*, Shanghai, 1894), S. R. CLARKE (*Among the Tribes in South-West China*, London, 1911), and in some instances from T. DE LACOUPERIE (*Les langues de la Chine avant les Chinois*, Paris, 1898, used with reserve; this also holds good for D'OLLONE, *Langues des peuples non chinois de la Chine*, Paris, 1912). I am further indebted to B. HOUGHTON for his *Kami Vocabularies* (*J.R.A.S.*, 1895, pp. 111—138), his *Southern Chin Vocabulary* (*ibid.*, pp. 727—737), and his *Tibeto-Burman Linguistic Palæontology* (*ibid.*, 1896, pp. 23—55), a first attempt of culture-historical and philological study in the Indo-Chinese field, to which I owe a great deal of inspiration and encouragement; to T. C. HODSON (*Thādo Grammar*, Shillong, 1905; and other monographs quoted in the proper place); and to STEN KONOW (*Zur Kenntnis der Kuki-Chin Sprachen*, *Z.D.M.G.*, Vol. LVI, 1902, pp. 486—517). Kachin is drawn upon from H. F. HERTZ, *Handbook of the Kachin or Chingpaw Language* (Rangoon, 1895; 2d ed., 1902). It is a matter of course that the standard works of A. JUDSON, PALLEGOIX, MCFARLAND, etc., have been consulted for Burmese and Siamese, and that the synthetical studies of E. KUHN, A. CONRADY, H. MASPERO, and others, have been duly appreciated. To these and other contributions special acknowledgment is given in every instance.

THE NUMERALS.

In the vocabulary published by Mr. Ivanov we find only the numerals for 1, 2, 4, 5, 8, 10, 100, and 10,000. These numerals, while in general reflecting Tibeto-Burman types in the widest sense of the word, reveal far-reaching deviations from Tibetan proper,

and show that Si-hia is not a Tibetan dialect, but is an independent idiom, which takes its place beside Tibetan.

Si-hia 1, a [a], deviates from the standard Tibetan form *ci-k* (written *g'ig*) and *ti-k* (Jyarun *k-ti, k-ti-k*; Bunan *ti*; Lo-lo *t'i*; Burmese *taθ*, spoken language *tit-ta*; hence *ci-k* seems to be evolved from **t-ši-k*, which is confirmed by Lepcha *ka-t*, Chinese *yi-t*, Milčan and Chuñ-kia *i-t*; Tibetan *g-či-g*, therefore evolved from **ya-* or **ka-t-ši-k*).¹ The only western Indo-Chinese language known to me, in which the element *a* appears as the numeral 1, is Aka in Assam.² On the one hand, however, the habitat of Aka is so far removed from that of Si-hia, with no missing links discoverable between the two, that a correlation of the two forms, at least for the present, would seem a hopeless venture. On the other hand, Mr. T. C. Hodson, to whom we are indebted for a very important and ingenious study of the numeral systems of the Tibeto-Burman languages, inclines toward the belief that Aka *a* is the survival of fuller forms, like *aka, akhet, ekhā, ikū, hak*, encountered in other Assam languages; and traced by him to Indo-Aryan *eku*.³ Moreover, Mr. Hodson makes the very appropriate observation that "the freaks and fantasies of phonetic growth and decay in this area are such that seemingly identical forms may be evolved out of totally distinct original forms."⁴ Whatever the origin of Aka *a* may be, therefore, its ancestry might be entirely distinct from that of Si-hia *a*. It may be suggested that the latter is possibly related to Tibetan *ya* ("one of two things forming a pair, one of two op

¹ It has not yet been pointed out that Tibetan *ci-g* is related to Cantonese *dik, dek*, Hakka *ɬak*, North Chinese *ci* 隻 ("single").

² A numeral *a* ("one") appears in Miao and Yao of Yün-nan (H. R. DAVIES, *Yün-nan*, p. 339), classified by Davies in the Mon-Khmêr family. In Mon-Khmêr, however, the typical form of the numeral 1 is *mu*.

³ *J.R.A.S.*, 1913, p. 320. According to SÆEN KONOW (*J.R.A.S.*, 1902, p. 129), who writes *ū*, Aka *a* corresponds to Meithei *a-mū*, Kachin *ai-mū*.

⁴ *L. c.*, p. 335.

ponents"), and possibly to Chepañ *ya* ("one").¹ The reason why Si-hia rejected the common type may be explained by another suggestive opinion of Mr. Hodson, "There can be no doubt that the use of the numeral for 'one' as an affix to indicate singularity has led to the disappearance of the original numeral in several cases and the employment of some word of different origin in its place."² Unfortunately, it is not known what the suffix of singularity was in Si-hia; but some such factor, as indicated by Mr. Hodson, seems to have been at play in that language.

Si-hia 2, *nōn*, *nō̃*, *noñ* (or perhaps *loi*) 能, is different from the common Tibetan type *ñi*, *ñis* (*g-ñis*, from **ga-* or **kā-ñi-s*; Lepcha *ñat*; Lo-lo and Mo-so *ñi*). The nearest forms of relationship that I am able to trace are Chinese *lian* (Cantonese *lōi*) 兩 ("both, a pair") and Chuñ-kia *s-loñ* (the prefix *s-* presumably being the survival of *sam* of the T'ai group). Perhaps also Hai-nan and Swatow *no* belong to this series. Further relationship may exist with the base *nii* of Miju Mišmi, Lalañ, and Garo Jalpaiguri.³

Si-hia 4, *le* 勒, represents the typical base of Tibeto-Burman *le*, *li*, *ri*, *lu*: Burmese *le*, Kachin *ma-li*, Haka *pa-li*, Tauntha *p-li*; Kami *ma-li*, *m-le*; Lepcha *fa-li* (from **ba-li*), Lušai *pa-li*; Jyaruñ *k-b-li* (from **ka-ba-li*); Miao-tse *p-lu*, Mo-so *lu*, Chuñ-kia *s-le*, Lo-lo *s-le*; Tibetan *b-ži*, evolved from **ba-ži*, *ba-ši*, or **bi-ži*: Bunan *li* ("four"), the base **ʎi*, *si*, being identical with Chinese *se* 四 and T'ai *si*.

Si-hia 5 is handed down to us in the transcription *ku-γä* 骨魚. As the standard type of the numeral 5 in Tibeto-Burman is *ña*, *niu*,

¹ B. H. HODSON, *The Phoenix*, Vol. III, p. 46; or *Essays on the Languages, Literature, and Religion of Nepal and Tibet*, pt. 2, p. 52.

² *L. c.*, p. 321.

³ HODSON, *l. c.*, p. 322, who justly remarks that the closing *ñ* may, on further investigation, prove to be only a nasalization. Hence I have added above also the transcription *no* (see Phonology, § 14).

no, we have doubtless to assume the prevalence of the former initial *n* in *yü* 魚, and to restore the Chinese transcription to Si-hia *k-nü* or *k-nu*. An analogous case of transcription occurs in *ku-yü-mo* 骨魚沒 ("heaven"), which in my opinion should be restored to Si-hia *k-nüm*, and be correlated with Tibetan *d-guñ* and *g-nam* (see No. 35). As to the prefix *k-*, Si-hia coincides with Jyarun *k-mu*. The fact that this prefix is the remnant of an independent base with the meaning "five," we may glean from Lo-lo *gha*, Chun-kia and Tai languages *ha*; hence Si-hia *k-nu* appears to have arisen from **ka-nu*. The second element *nu* is identical with Chinese *nu* 五, Lepcha *fa-no*, while other languages have the vowel *a*: Burmese *na*, Tibetan *l-na*, Lušai *pa-na*, Mo-so and Gešits'a *wa*.

Si-hia 8, *ye* 𠵼 (possibly also *ya*), again agrees with the typical Tibeto-Burman series, particularly with Dbimal *ye*; Kami *ta-ya*, *te-ya*, or *ka-ya*; Lo-lo *e*; Gešits'a *r-ya*, *va-r-ya*; Jyarun *v-r-yat* or *v-r-yä-t*; written Tibetan *b-r-g-ya-d* (now sounded *gyat*; *b-* evolved from **ra*).

The Si-hia numeral 10 is mysterious. It is transcribed 奄, which Mr. Ivaou renders *yen*, *am*; probably we have to read *an*, *en*. Whatever transcription we may choose, however, this form remains isolated, and defies identification with any type of Tibeto-Burman or any other Indo-Chinese group known to us. The consonantal basis for the numeral 10 is *s*, *š*, *č*, and *t*: Tibetan *b-ču* (from **ba-t-šu*), Jyarun *š-či*, Lepcha *ka-ti*; Gešits'a *z-ra* (from **si-ra*), and *s-ka* (from **si-ka*) in multiplication; Kami *ka-su*; Siamese *si-p*; Chinese **ši-p*, *ži-p* 十.¹ Owing to the isolation of the Si-hia form, it is justifiable to regard it as a loan-word, perhaps from Turkish *on*.

Si-hia 100, *i* or *yi* 易, corresponds to the Tibeto-Burman base *ya*, with the remarkable modification of *a* into *i* (see Phonology,

¹ For further information see HODSON, *l. c.*, pp. 327-331.

§ 1): Burmese *ta-ya*, Karen *ta-ye*, other Burmese languages *a-ya*;¹ Jyaruñ *b-ri-yā*, Gešits'a *r-yo*, *r-ya*, Milčañ *ra*, Bunan *gya*, Lepcha *gyo*, Tibetan (written language) *b-r-g-ya*. Si hia *i*, *yi*, is perhaps preserved in Siamese *roi*, if the latter should have been evolved from **ro-i*, *ro-yi*.

Si-hia 10,000, *k'o* 刻, is an isolated form (Tibetan *k'ri*, *t'i*; Lo-lo *t'i-va*; Mo-so *mö*; T'ai group *mün*, *mön*). It is notable that the word is identical with Si-hia *k'o* ("foot"), which is reproduced by the same Chinese character (see No. 51). Hand and foot, as is well known, belong to the primitive means of counting; and the words for these bodily parts, as well as for fingers and toes, have left their imprint in the numerals of many peoples.

ANALYSIS OF THE SI-HIA ONOMASTICON.

GROUP I.

Words of Common Indo-Chinese Type.

In this group are treated words of general Indo-Chinese character, which bear the same or similar features, or a peculiar form in Si-hia.

1. Si-hia *no* 我, silver. There is only one metal the designation of which is common to all Indo-Chinese, and that is silver. In the eastern group we encounter Amoy *gin*, Cantonese *nön*, Hakka *nyin*, Fukien *nün*, Ningpo *nyin*, Wen-chou *nian*; Siamese *nön*, Ahom and Shan *nün*, Black Tai *nön*, White Tai *nün*, Dioi *nan*;² Chuñkia *nan*, Hei Miao *ni*, Hua Miao *nai*, Ki-lao *nün*. In the western group we have Burmese *nwe*; Tibetan (written language) *d-nul* (from **de-nul*, compare Mo-so *de-gu*), K'ams *γ-nul* (Purig and Ladākhī *š-mul*; *š* = Bunan *ši*, "white;" Ladākhī also *mul*), Jyaruñ *po-ni'*, Central Tibetan *nü-l*, Sikkim and Lhoke *nü*, Yün-nan Tibe-

¹ *Gazetteer of Upper Burma and the Shan States*, Part I, Vol. I, p. 646.

² Compare MASPERO, *Bull. de l'École française*, Vol. XI, p. 168.

tan *no-l*; Mo-so *nö*; and corresponding to the last-named we have Si-hia *no*, that accordingly stands closer to the western than to the eastern branch of Indo-Chinese.¹ The coincidence of Si-hia with Mo-so, in particular, is notable; and in all probability we have to recognize in *no* the base of the word that, with the vocalic variations *iu*, *iü*, *nö*, assumes in Sino-T'ai a suffix *-n*, and in Tibetan a suffix *-l*. In some languages the initial guttural nasal has been transformed into the surd or sonant of the guttural series: Mo-so *de-gu* corresponds to Chö-ko *a-ko* and Lepcha *ko-m*. Tibetan, Bunan, and Kanauri *mu-l*, Milčan *mi-l* and *mu-l* (parallel to Mi-ñag [*Baber*] *mwe*), Murmi *mui*, and Lepcha *ko-m*, in all probability, represent an independent type, which has not arisen from *d-iul*, but which is formed from the base **mu*, *mi*, with suffix *-l*. This is demonstrated by two facts. First, the Lepcha word *ko-m* consists of the two elements *ko* + *m*, both of which cannot well have been evolved from the same root. Second, we may examine the Mongol-Tungusian languages that have adopted the Indo-Chinese word for "silver." In these, the element *mo*, *mö*, *me*, appears coupled with *iün*, *nö*: Mongol *mönün*, Buryat *mönö*, *mönön*, *mönün*; San-čuan T'u-jen (Rockhill, *Diary*, p. 377) *miengo*; Niüci *meñguwen*, Mauchu *meñgun*, Tungusian *meiün*, Gold *muñgu*; Yakut *mainuni* (Tungusian loan-word, that occurs beside the Turkish word *kömüs*). The latter series forms a well-defined group, diverse from what is found in the Turkish and Finno-Ugrian languages: Uigur and Djagatai *kümüs*, Kirgiz *kümüs*, Yakut *kömüs*;² Suomi *hopea*, Esthonian *hõbe*, Votyak *opea*, Livonian *õbdi*, Chudian *hobet*; Magyar *ezüst*, Syryän *ezyś*, Votyak *azveś* (probably "white copper;" *-veś* = Suomi *vaski*, "copper"). The Mongol-Tungusian loan-words which must be of ancient date

¹ In other Tibeto-Burman languages, "silver" is expressed by "white:" Nyi Lo-lo *šlu* ("white" and "silver"); Li-su *p'u* ("silver"), *pu-pu*, *i-p'u*, and *yu-p'u* ("white").

² RADLOFF, *Wörterbuch der Türk-Dialekte*, Vol. II, col. 1527, 1528.

hint also at the fact that in Northern Chinese, in the same manner as in the south, the word for "silver" might formerly have been *nün* or *nön* until it was turned into the modern form *yin*.¹ They further demonstrate that besides *nün*, *nön*, an element *mo*, *mö*, with the meaning "silver," appears to have existed within the northern or north-western range of Iudo-Chinese, and the survivals of this ancient word we encounter in Tibetan and Kauri *mul*, Murmi *mui*, Lepcha *ko-m*.

2. Si-hia *k'ü*, *g'ü*² 皆, gold. B. HOUGHTON, in his very interesting and suggestive essay "Tibeto-Burman Linguistic Paleontology," justly says that there seems little doubt that gold was practically unknown to the Burmans and Tibetans before they divided.³ Indeed, Burmese *hrwe* (spoken Burmese *hwe*) and Tibetan *gser* are distinct types. Moreover, the Iudo-Chinese languages in general do not have a common word for "gold." Chinese practically has no word proper for it, but styles it "yellow metal," *huani kin* 黃金. The same meaning underlies the Tibetan term *g-ser*, which is derived from the adjective *ser* ("yellow"), and, as shown by the corresponding Mo-so word *ke-se*,⁴ is to be analyzed into **ke-ser* (*ye-ser*). The element *ke*, probably related to Chinese **gin*, *kin* 金 (Cantonese *köm*, Fukien *kin*, Japanese *kin*, *kon*),⁵ appears to have had in its origin the significance "metal." It is exactly the same word that we meet in Si-hia *k'ü*, *g'ü*, which, accordingly, mirrors

¹ As to the change of *n* to *y*, compare 雁 Fukien *nai*, Cantonese and Hakka *nai*, Tibetan *nai* ("wild goose"), Northern Chinese *yen*, Si-hia *ya*; 贗 Cantonese and Hakka *nai* ("false"), Tibetan *nai* ("bad"), Northern Chinese *yen*, Si-hia *wen*.

² The accent following a consonant is intended to express the palatalization of the latter.

³ *J.R.A.S.*, 1896, p. 34.

⁴ Thus given by J. BACOT, *Les Mo-so*, p. 46. H. R. DAVIES (*Yün-nan*, p. 360) imparts *ka* as Mo-so word for "gold;" this appears merely as a variant of *ke*, *ge*.

⁵ Siamese *gam* (*k'am*), Abom and Shan *k'am* (MASPERO, *Bull. de l'École française*, Vol. XI, p. 168); Kachin *gya*, "gold" (*Gazetteer of Upper Burma and the Shan States*, Part I, Vol. I, p. 662), in Karen dialects *ham* and *kyam* (*ibid.*, pp. 650, 651).

the same state of affairs as Chinese *kim*, *kin*, inasmuch as the original meaning "metal" passed into that of "gold." In like manner we find in Miao-tse *ko* ("gold"). Si-hia *k'ü*, therefore, is preserved in the first element of Mo-so *ke-se* and Tibetan *g-ser*. The latter word is still articulated *γser* in Balti and K'ams, but *ser* in all other dialects. Since this element *ser* has the same tone (the high tone) as the word *ser* ("yellow"), the Tibetans simply designate gold as "the yellow one." ¹ The same condition is reached in Lo-lo: Nyi Lo-lo *še*, A-li Lo-lo *ša*, Lisu *ši*, P'u-p'ä *si*, Chö-ko *a-si* ("yellow" and "gold," akin to Tibetan *ser*); further, Ngačan *se*, Lisu *šü*, A-k'a *su*.

3. Si-hia *šan* 尚, iron. There is no general Indo-Chinese word, either, for "iron." The working of this metal became known in eastern Asia at a comparatively late period. Chinese *t'ie* 鐵 (formerly **t'it*, *t'et*, *det*; Japanese *tetsu*) is apparently an ancient loan-word, somehow connected with the Old-Turkish forms: Uigur *tämür*, Orkhon inscriptions *tämür*, in other dialects *täbir* or *timür*, Mongol *tümür* (*tümür*). The Si-hia word *šan*, as suggested also by Mr. Ivanov, may be akin to Tibetan *l-čag-s* (Lepcha *ča*, Central Tibet *čak*, *ča*);

¹ It is curious that so eminent a philologist as JÄSCHKE (*Tibetan-English Dictionary*, p. 590) could connect Tibetan *gser* with Persian *zer*. Persian *zer* (Pahlavi *zar*, Kurd *zer*, *sir*, Afghan and Baluči *zar*) goes back to Avestan *zairi*, *zaranya* (Vedic *hari*, *hiraṇya*; compare P. HORN, *Neuperrische Etymologie*, No. 554); and Persian *zard* ("yellow"), to Avestan *zairi*, *zaray*. In order to make Tibetan *gser* (from **ke-ser*, *ge-ser*) dependent upon Persian *zer*, it would be required to prove also that Tibetan *ser* ("yellow") is traceable to Persian; this assumption, however, is disproved by the Lo-lo forms *ša*, *še*, *ši*, *si*, and Kachin *si-t*, which show that Tibetan *ser* is derived from a base *se*, followed by a suffix *-r*. The Lepcha words for "gold," *jer* and (in the legends of Padmasambhava) *zar*, are singular. Again, it seems to me that the coincidence of Lepcha *zar* with Pahlavi *zar* is accidental, for an influence of this language on Lepcha can hardly be assumed. In view of Kanauri *zan*, *za-n* ("gold"), it seems to me conceivable that Lepcha *ze-r* and *je-r* are variations or perhaps older forms corresponding to Tibetan **zer*. Compare (under No. 199) Tibetan *zan-s* ("copper"), developed from **jan*, where Lepcha, Mo-so, and Yun-nan Tibetan have initial *s*.—Regarding gold as the yellow metal compare Phrygian γαυρός ("gold")=Greek χλωρός ("yellowish"); Gothic *gulþ*, Slavic *slato*, Lettic *zells*, from Indo-European **ǵheltos* ("yellow"), etc.

Hor-pa *ču*. The alternation of the palatal surd *č* with the palatal sibilant *s* is not unusual in Tibeto-Burman languages, and, in the present case, is confirmed by Jyarun *šo-m*, Mo so *šu*, *šo*, Bodo *šu-r*, and Manyak *ši* ("iron"). The final guttural nasal is met also in Rankas *čjan*, Därmiyā *ni-jan*, Chaudangsī *na-jan*.¹ There is an exceedingly large variety of words for "iron" in Indo-Chinese. Suffice it to note here that Nyi Lo-lo *re* (compare Ahom and Shau *lik*; Kachin *p^cri*; Kanauri and Kanāsbī *ron*), A-hi Lo-lo *hō*, *ho*, Lasu *ho* (*huo*), are unrelated to Si-hia and Tibetan.²

4. Si-hia *wu* 牯, cow = Shan *wo*, *wuw* (Karen *pu*), Ki-lao *wu*, Ahom *lu*, Khamti *no*, Laos *noa*, *ni-woa*, *ni-wau*; Chuñ-kia *vai*, *vai*; Ya-č'io Miao *niei*; Cantonese *nau*; Burmese *nwā* (spoken *nwau*); Thado *bo-ni*; Tibetan *ba*. B. HOUGHTON (*J.R.A.S.*, 1896, p. 36) has combined Burmese *nwā* with Tibetan *nor* ("cattle"); this is partially correct, inasmuch as Tibetan *nor* possibly inheres in the prefix *n-*, the first part of the Burmese word, which has arisen from **no-wa*,—*no* answering to Tibetan *nor*, and *wa* to Tibetan *ba*. Tibetan *nor* itself is *no* + *r*, *r* being an affix; the root *no* survives in Lo-lo-p^co *no-ni* ("ox"),³ in Southern Chin *no* and *no-n* ("cattle"), in Kami *pan-no* and *ma-na* ("buffalo"), and in Lisu *a-nia* ("buffalo"). In the Jyarun dialect "cattle" is called *nui-wa*, *nu-ni* being the equivalent of *no-r*, the guttural nasal being substituted for *r*.

5. Si-hia *žu* 汝, fish = Mi-nāg *zö*; Tibetan *nā*; Lepcha *no*; Newārī *nā*; Lo-lo-p^co *no*, P^cu-p'a *nā*, A-hi Lo-lo *no-zo* and *a-no*, Nyi Lo-lo *gha*, Hua Lisu *ni-wa* (Black and White Lisu *wa*); Mo-so *ni*; Chinese *ni*, *yü* 魚; Burmese and Kachin *nā*. In its phonetic formation the Si-hia word is isolated, and seems to answer only to

¹ *Linguistic Survey of India*, Vol. III, pt. 1, p. 538.

² Khamba and Itāi *sel*, Bāhiñ *syel*, Kirānti *syel*, curiously remind one of Manchu *sel*.

³ The element *ni* is identical with Lisu *a-ni* ("ox" and "cow").—Chinese *ni*, *wu* 牯 ("wild ox") should be added to the above series.

Mi-nag zö and the element zo of Lo-lo *uo-zo*, rather than to the typical Indo-Chinese series.

6. Si-hia *šou* 手, louse = Nyi Lo-lo *ši-ma*; Kachiu *tsi*; Tibetan *ši-g*, *ši-k*, Lepcha *ša-k*; Annamese *sa-t*, Chinese *ši-t* 虱, Fukien *sai-k*; Southern Chiu *hai-t*, *hē-k*; Kami *χē-t*; Bunan *šrig*, evolved from **ši-rig*, for in Kanauri *rig*, *ri-g*, means "louse" (compare Ahom *rin*, "flea;" Shan *lin*, "sandfly;" Ahom *rau*, *rau*, Shau *haw*, "louse;" and Ahom *rai*, "kind of louse or mite," Shan *hai*, "lice of animals and fowl"). Kanauri *š-pög* (*š-püg*), "flea," appears to have originated from **ši-pög*; the association of flea and louse is evidenced by Tibetan *k'yi-šig* ("flea," literally, "dog-louse") and *ḡ-ji-ba*, *l-ji-ba* (flea),¹ the stem *ji* representing the same base as *ši* (compare also Nyi Lo-lo *ē-ši-ma*, "dog louse, flea," and Ahom *bat*, "a kind of louse found on the body of a dog," and Shau *mat*, "flea").²

7. Si-hia *lan-nöü* 浪能, camel. In order to understand the Si-hia word for "camel," it is necessary to remember the history of this domestic animal and its designations in the cognate languages. In ancient times the Indo-Chinese group of peoples was not acquainted with the camel. It was unknown to the ancient Chinese; at least there is nothing on record about the matter. The camel, together with the donkey and the mule, belonged to the "strange domesticated animals" (奇畜) which the Chinese for the first time encountered among the Hiung-nu.³ The name for the camel then

¹ The prefix *l-* originated from *li*; we find *li* ("flea") in Miabu and Sandoway (Houghton, *J.R.A.S.*, 1895, p. 734).

² Likewise in the Mon-Khmér languages the flea is known as the louse of the dog. It is also a fact of great interest that this family, unrelated to Indo-Chinese, has a common word for "louse" (see E. KUHN, *Beiträge zur Sprachenkunde Hinterindiens*, *S.B.A.W.*, 1889, p. 215). The louse belongs to the very oldest ingredients of Indo-Chinese and Mon-Khmér cultures.

³ *Šhi ki*, Ch. 110, p. 1; *Ts'ien Han shu*, Ch. 94 A, p. 1. In view of this fact,

was *t'o-t'o* 橐佗, and in this form we find it written also in the contemporaneous documents of the Han period.¹ The vacillating modes of writing the word in the Annals of the Han 𧑦,² 佗, and 駝, show well that an effort toward reproducing a foreign word was made; *t'o-t'o* appears to have been the Hsiung-nu name for the camel.³ How the latter was articulated we do not know exactly, but the restoration of *t'o-t'o* to the older phonetic stage with initial non-aspirated sonant—that is, *da-da* or *do-do*—is legitimate.⁴ An exact parallel to this word is no longer preserved, but it seems to be traceable in Mongol *adan*, Turkish *atan* (“gelded camel”), further in the general word for “camel:” Uigur *töbe*, *töbek*; Djagatai *töve*, *töye*, *tüye*; Altaic and Teleutic *tö* (from *tögö*), also *tebe*, *tebege*; Soyot *tübü*; San-č'uan T'u-jen *time*; Taranči *tŷgä*; Osmanli *dävä* (*deve*); Serbian *deva*; Albanian *deve*; Ossetian *tewa*, *täwa*; Magyar *teve*; Old Chuvash *tüwü*, Cumanian *tova*; Mongol *tämäyän*, *tümän* (Guiragos in 1241 wrote the word *thaman*); Niüči *teo*, Manchu *temen*, Gold *tyme*, Solon *temuye*. The Taranči word *tŷgü* means also “a sepulchral mound,” and Djagatai *tübü* (Altaic *töbö*, Osmanli *tebe*, Chuvash *tübe*) signifies “summit, mound,” likewise; in Mongol we meet *dobo* (“hill”) and in Manchu and Tungusic *dube* (“summit”). The word for “camel,” accordingly, seems to be based on that conspicuous property of the animal, the hump. For this organ the Chinese have preserved a special word *fusi* (from **bui*), formerly

BRETSCHNEIDER'S generalization (*Medieval Researches*, Vol. I, p. 150) that “the Chinese were acquainted from remote times with the camel of Mongolia,” is difficult to understand.

¹ CHAVANNES, *Documents chinois découverts par Aurel Stein*, p. 74, No. 319.

² Thus still in *T'ang shu*, Chs. 170, p. 3 b; 217 B, p. 1.

³ P. P. SCHMIDT (*Essay of a Mandarin Grammar*, p. 175, in Russian, Vladivostok, 1914), as far as I know, is the only one who justly states that “in all probability the Chinese word *t'o* is of Central-Asiatic origin.”

⁴ The Japanese and Annamese reading of 駝 is *da*. Regarding *t'o=da* see particularly PELLUOT, *Bull. de l'Ecole française*, Vol. VI, 1906, p. 372.

written 封,¹ and subsequently 峯 ("peak of a mountain").² We first meet it in the designation of the dromedary or single-humped camel of Ngan-si (一封橐駝). This word *fun* (**bui*) is traceable in the second element of the Tibetan expression for the camel *na-bon* (Balti and Purig *ña-boñ*, Spiti *na-boñ*, West Tibetan *na-moñ*). The Chinese-Tibetan *bui*, *boñ*, however, is again an ancient loan-word received from Turkish-Mongol languages: Mongol *bükü* or *bükün*³ and Manchu *bohoto* ("camel-hump"); Dzagatai and Kirgiz *bykyr* ("hump");⁴ Dzagatai *buiira*, Kirgiz *būra*, Osmanli *buiur*,⁵ Mongol *bughūra* ("camel-stalliou").

At a later period⁶ the Chinese word *t'o-t'o* was altered into *lo-t'o* 駱駝. At that time *lo* was still possessed of a final *k* (compare Japanese *raku*); and this word **lok*, in my opinion, is the reproduction of some Turkish word, the remnants of which have survived in Dzagatai and Kirgiz *lök* لوك ("single-humped camel").⁷

In this connection, the Lepcha word for the camel, *lum-dai*, deserves special consideration. MAINWARING and GRÜNWEDEL, in their excellent dictionary of the Lepcha language (p. 354), have added to this word the comment "Chinese" in parentheses. But *lum-dai* cannot well be a mere Chinese loan-word in Lepcha; for

¹ See *Ts'ien Han shu*, Ch. 96 A, p. 6 b.

² The so-called "wind-camel" (*fung t'o* 風駝, see BRÜTSCHNEIDER, *l. c.*), that is, a swift-footed camel for the despatch of a special courier, is probably nothing but a substitute suggested by punning upon the loan-word *fun* (**bui*).—From a semasiological point of view, compare Persian *kohān* كوهان ("hump of a camel"), derived from *koh* كوه ("hill").

³ The former is given in K'ien-lung's Polyglot Dictionary (Ch. 31, p. 62), the latter in the Mongol dictionary of I. J. Schmidt. Kovalevski and Golstunski also have recorded the former in their Mongol dictionaries.

⁴ RAULOFF, *Wörterbuch der Türk-Dialecte*, Vol. IV, col. 1878.

⁵ RAULOFF, *ibid.*, col. 1806, 1807, 1817.

⁶ Without attempting here to define its limits exactly, it may be pointed out that the word *lo-t'o* occurs in *Sung shu*, *Liang shu*, and *T'ang shu*.

⁷ RAULOFF, *l. c.*, Vol. III, col. 755. Compare also Turki *lökän*.

the initial sonant of *dai* would indicate that the word was at least borrowed at a time when the present Chinese *t'o* was still articulated *da*, which would carry us at least as far back as the T'ang period. We know nothing, however, about a possible contact of the Lepcha with the Chinese in that era, nor is the very existence of a Lepcha tribe attested at that date. Yet the fact remains that the Lepcha, in the persistent isolation of their mountain-fastnesses, have preserved the word in that original phonetic state which not only we are bound to assume for the Chinese, but which we find also in Mongol *adai* (corresponding to Turkish *atan*, "gelded camel"). Again, it cannot be denied that the first element of the Lepcha word bears a certain relation to Chinese *lok*, although the final *m* in place of the guttural surd remains singular; it was perhaps suggested by the Lepcha word *fyam* or *a-fyam* ("hump"); compare *lum-dai* or *fyam* ("camel's hump").

The Si-hia word for the camel, *lai-nöi*, is composed of the two elements *lai* and *nöi*. For the first element, the alternative between *lai* and *rai* remains, the former being preferable in view of Chinese *lo* and Lepcha *lum-dai*, the latter in view of Tibetan *ria* (-*boi*).¹ Tibetan *r-ria* should be conceived as having originated from **ro* (or *ra*)-*ria*,² and Si-hia *lai* in like manner from **lo* (or *la*)-*ria*, the word *ria* referring to the hump of the animal (compare the derivative *r-riog*, "hump;" Siamese *hnök*, "hump of zebu").³ The accent operated differently in the two languages: in Tibetan, the strong accentuation of the ultima, **ro-riá*, finally resulted in *r-ria*; in Si-hia, the accent was thrown upon the first syllable,

¹ The complement *boi* is not essential to the word. It may be dropped at least in the formation of compounds, for instance, *ria-rgod* ("wild camel;" Polyglot Dictionary of K'ien-lung, Ch. 31, p. 3), *k'al-ria* ("loaded camel;" *ibid.*, p. 47).

² A similar development is found in *ria-ma* ("tail"), from **rai-ma* or *ra-ria-ma*; Ahom *rai* ("tail"). Tibetan *ma*=Thädo *me*, Kami *a-mai*, Lo-lo *ma*, mü ("tail").

³ *Gye-gu-čan* ("provided with a hump") is a Tibetan synonyme of "camel."

**lô-ña*, *lí-ña*, and ultimately brought about the monosyllabic product *lan*, under the pressure of the dissyllabic compound *lan-nōn*. It is well known that in Tibeto-Burman the ending of a dissyllabic word may be dropped when it enters into composition and thus forms a new dissyllable.

The second part of the Si-hia word *lan-nōn* cannot be explained from Tibetan *bon* or *mon*. The element *nōn* being written 能, and the same character serving for the transcription of the numeral "two" (*nōn*), it seems probable that the same meaning attaches to the word *nōn* in the compound *lan-nōn*. It would thus have the sense "two-humped camel" (**lo-ña-nōn*, literally, "camel-hump-two"). This implies that also the single-humped camel or dromedary was known to the Si-hia. The Annals of the Tang Dynasty attribute to Tibet single-humped camels capable of running a thousand *li* a day.¹ The Si-hia country appears to have abounded in camels. Tribute gifts to the Chinese Court of three hundred camels are mentioned in the Chinese Annals; and Rashid-eddīn states that Chinggis, after subjugating part of Tangut, drove off many camels which formed their wealth.

8. Si-hia *liū-lo*, *riū-lo*, *riū-ro* 領羅, horse. To all appearances this word presents a compound formed by two synonymous terms. As to the first element, *liū*, *riū*, we may compare it with the widely diffused word *rai*, which in Kanauri is the designation for "horse."² This type, further, occurs in Bunan *ŷ-rai-s*, Chepañ *se-rai*, Burmese *m-rai* (from **mo-rai*), Wa *ma-rōn*, Rianñ *ma-rai*; Palaun *b-rai*, Rumi *r-b-rai*. The fact that the second element of

¹ 獨峯馳日馳千里 (*Tang shu*, Ch. 216, p. 1 b). This item is not given in the corresponding passage of the *Kiu Tang shu* (Ch. 196 a, p. 1 b).

² To compare Si-hia *liū* with Kanauri *gi-liū-ta* ("horse") would be a fallacy. The latter is a Tibetan loan-word and composed of *gi-liū* (Jäschke: "a strong-bodied, durable horse") and *r-ta* ("horse"). The former, in all probability, is nothing but a transcription of Chinese *k'i-lin* (**gi-lin*, in Tibetan also *gi-lin* and *gyi-liū*).

the Si-hia compound, *lo* or *ro*, is an independent base with the meaning "horse," is well evidenced by the Si-hia language itself, which offers the word *lo-i* or *ro-i* 羅依 ("saddle"), literally, something like "horse-covering" (see Morphological Traits, § 2).

The same word for "horse" is met in T^co-čü *ro*, Newārī *sa-la* (the element *sa* being identical with the above *š-* and *se-* of Bunan and Chepañ; Southern Chin *ši*), Pahrī *so-ro*; Kachin *kum-ra*; Jyarun̄ *mo-ró* and *bo-ró*, Manyak *bó-ro*, *bro*, and in the prefix *r-* of Tibetan *r-ta*, which appears to have been evolved from **ro-ta*, and Tibetan *r-kyan̄* ("wild horse"), from **ro-kyan̄*.¹

An old theory, already pointed out by Tomaschek, is to regard the Indo-Chinese word-types for "horse" in general as borrowings and to render the Mongol-Tungusic *morin* responsible for all phenomena of the kind in the Indo-Chinese languages. In view of the history of the domestication of the horse, it may indeed be possible that the word *morin* has a certain share in these formations, but certainly it is not capable of accounting for all the manifold variations that we meet in Indo-Chinese. It was W. SCHOTT² who wisely cautioned against too wide an application of Tomaschek's theory. A. CONRADY,³ nevertheless, adopted the latter in its entire range, but the proof given in support of his opinion is not wholly convincing. There is no resemblance, for instance, between Tibar-skad *šun̄*, Kanaurī *šan̄*, Southern Chin *ši*, Singp^co *gūm-ran̄*, Tan̄k^cul *sa-puk*, Karen *t^ci*, *ka-t^ci*, etc., and Mongol *morin*. According to the doctrine of the loan-theory, the word *morin* was dissected by the Indo-Chinese into *mo-rin*, and the first element *mo* (*ma*) is found in Chinese, Lo-lo (*mo*, *mu*), and in the T^cai languages.⁴ The

¹ The element **kyan̄* presumably is related to *r-god-pa* ("wild").

² *Über einige Tiernamen*, p. 12 (*A. Ak. W. B.*, 1877).

³ *Indochin. Causativ-Bildung*, p. XII.

⁴ Regarding the latter see MASPERO, *Bull. de l'Ecole française*, Vol. XI, p. 165.

second element *-rin* we should then meet in our Si-hia word *riu*. In Conrady's opinion the prefix *r-* should represent the survival of the root-word in Tibeto-Burman, and be reducible to the Mongol prototype *morin*.¹ This view conflicts with Si-hia and also other Indo-Chinese formations. If we infer (and perhaps justly so) that *morin* yielded to Si-hia the word *riu*, it is difficult to realize that this language should have drawn upon *morin* twice,—first, to adopt the syllable *rin*, and second to distil an element *lo* or *ro* from the *r* of the same word. On the contrary, *lo* or *ro*, as we have seen, represents another Indo-Chinese base conveying the notion "horse," and independent of *morin*. We recognize this also from Rumai *r-b-ran* and Jyarun *mo-ro*. The latter, certainly, is not merely a variation of *morin*, but is composed of *mo* (the Chinese-Lolo-T'ai word, possibly derived from the first syllable of *morin*) and *ro*, an entirely distinct word for "horse." Remnants of this word *lo* or *ro* in the Ural-Altai languages possibly are encountered in Magyar *ló*, Irtish-Ostyak *t-lau-χ* or *t-lo-χ* (from **ta-lo-χ*; regarding the word *ta* see below), Mongol and Kirgiz *o-lo-ü* ("girth in harness").²

In the Gešits'a language (Hodgson's Hor-pa), a peculiar Tibetan dialect spoken in the territory stretching from Dawo to Kanze in the northwestern part of Sze-ch'uan, we meet as the word for "horse" *ryi* (*r'i*). As in Buryat the word for "horse" shows the same palatalization of *r*, *moryen* (*mor'ei*) and *morye* (*mor'e*), similarly in Gold *mor'ü*, it seems likely that the Gešits'a word is traceable to the former contact with a Mongol-Tungusic dialect in which this process

¹ It is hardly possible to suppose with Conrady an older form **mor*. Such can be inferred neither from Mongol-Tungusian, nor from Chinese or any other Indo-Chinese speech. Chinese *ma* never had a final consonant.

² RAULOFF, *Wörterbuch der Türk-Dialecte*, Vol. I, col. 1086. As Altaic *kolon* corresponds to Kirgiz-Mongol *olon*, it may be permissible to refer also to Altaic, Kirgiz, etc., *kulun* ("foal;" *ibid.*, Vol. II, col. 979).

of palatalization had taken place.¹ By means of this suggestion, we may account for the peculiar Si-hia word *yii* 迎, used for the horse in the cycle. Tentatively I would propose that it may have been derived from a supposed form *moryii* (*mor'ii*), analyzed into *mor-yii*. The existence in Indo-Chinese of the type *mo* on the one hand, and the type *rii*, *rui*, *ryi*, *ri*, on the other hand, raises to a high degree of probability the supposition of a loan from *morin*.

The second element of the Tibetan word *r-ta*, in my opinion, is of Turkish origin, and should be connected with the word *at* ("horse"), common to all Turkish idioms. The phonetic combination *at* does not exist in Tibetan, for which the metathesis *ta* was required.² There is even reason to believe that in some ancient Turkish dialect a word for "horse" of the form *ta* seems to have existed. As is well known, the stem *at* appears in Mongol in *adayun* (*adayu*, *aduyu*), "herd, herd of horses" (Buryat *adūχun*, Tungusian *adugun*, Manchu *adun*, "herd;" Manchu *ad-u-la*, "to graze"), *adaγ uči* ("herdsman tending horses"), *adayusun* ("beast, domestic animals").³ W. RADLOFF⁴ has added to this group Turkish *atan* ("gelded camel") and Mongol *adai tümäγän* of the same meaning. These equations bear out the fact that in the Turkish-Mongol languages the word *at* originally did not have the significance "horse," but conveyed the general meaning "gregarious or domestic animal," and subsequently was differentiated into the specialized categories "horse" and

¹ In Hodgson's list of Sok-pa words the horse is *ma-ri*. Considering the exuberant number of Mongol loan-words in Sok-pa, this word may well have been directly borrowed from Mongol. *Mari* is likewise the Korean word for "horse."

² A similar metathesis prevails between Tibetan and Bunan: Tib. *k'a* ("mouth")—Bunan *ag*, Tib. *r-tsa* ("vein")—Bunan *sta*. Compare also Ladūkh *rgun-drum* ("grape")—Balti *urgun*.

³ This relationship was first pointed out in 1836 by W. SCHOTT (*Versuch über die turarischen Sprachen*) and repeated by him in *Über einige Tiernamen* (*A. Ak. W. B.*, 1877, p. 12). Mongol *ajirga*, Manchu *ajirχa*, Tungusian *adirga* (CASTRÉN, *Tungusische Sprachlehre*, p. 72), Yakut *atjyr* (ПЕКАВСКИ, *Dictionary of the Yakut Language*, in Russian, col. 201), "stallion," may be added to this series.

⁴ *Wörterbuch der Türk-Dialecte*, Vol. 1, col. 441, 454.

“camel.” If *atan* in Turkish and *adañ* in Mongol refer to the camel, it is obvious that also the stem *tü-*, *tö-* (see p. 21), applied to the camel, is connected with the stem *at* for the designation of the horse. Moreover, as pointed out by Schott, the horse is styled *tau*, *tav*, in the language of the Irtysh-Ostyak. And *tai* in Uigur, Osmauli, Djagatai, and many other dialects, means a “young horse;”¹ Djagatai *tatu*, according to VÁMBÉRY,² is “a strong horse of medium stature, a cart-horse,” according to Sulejman Efendi “a stallion.”³ The Mongol word *taki* relates to the wild horse.

9. Si-hia *siž* (character not given), heart, mind (occurs in the phrase *siž-le*, “to think”) = Chinese *siem*, *sim* 心; Tibetau *sem-s* (“mind, soul”), *sem-pa* (“to think”); White Tai *sam*; Kachiu *sin-tu* (“heart”).

10. Si-hia *r-ni* (*lu-ni*) 六 尾, ear. This word represents a compound formed by the two synonymes *r* + *ni*, each of which has the meaning “ear.” It corresponds to Tibetan *r-na* (from **re-na*), except the peculiar vowel change from *a* into *i* (see Phonology, § 1). The vowel *i* occurs also in Hakka *ii*, Pahari (Nepal) *ni-sab-ne*, Rai (Nepal) *ii-čö*. The element *r-* is preserved in Chinese *r* 耳, in Bunan *rē-tsi* (“ear”), Chuñ-kia *re*, *reo*, Ya-č’io Miao *b-re*. In Jyaruñ *d-r-nā* (“ear”) *r* still forms a syllable with vocalic value. In the majority of Tibeto-Burman languages we find only the base *na*, *no*, in combination with various elements: Nyi Lo-lo *na-po*, A-hi and Lo-lo-p’o *no-pa*, Lisu *na-bo*, P’u-p’ä *na-be-tla*, Chö-ko *na-ku*; Burmese *nā*, K’chin *na*; K’yeñ *ma-nho*; Southern Chiu *a-hno*; Guruñ *nha*; Sunwar *no-p’ä*; Magar *na-kep*; Balti and Purig *s-na*, etc. Gešits’ä *nä* (book-language *s-nan*) and Lepcha *a-nor* are connected

¹ RADLOFF, Vol. III, col. 765. Perhaps also Mongol and Manchu *to-žo* (“to saddle”), Mongol *to-žo-m*, Manchu *to-žo-ma*, Tungusian *to-ku-m* (“saddle-cloth”), have to be associated with this root.

² Čagataische Sprachstudien, p. 11.

³ I. KUNOS, Sulejman Efendi’s Čag-osman. Wörterbuch, p. 42.

with another stem, *ñan* ("to hear"). The element *čo* in Rai *ñit-čo* seemingly corresponds to the second part of Ladākhi *nam-č^ook* (from **r-na-ba-č^oog*); the same formation might eventually be recognized in Si-hia *r-ni č^aai-ni* 六尼長尼 ("exterior part of the ear"). *Ni* is a Si-hia suffix, and Si-hia final *i* may correspond to Tibetan final *g* (see Phonology, § 27). On the other hand, the expression *č^aai-ni*, written in the same manner, means also "to fly," and the term *r-ni č^aai-ni*, after all, may be of independent Si-hia origin, without Tibetan affinity.

11. Si-hia *ni* or *ñi* 你, nose = Mo-so *ñi-ma*; Nyi Lo-lo *na-bi*, Chö-ko *na-mo*, Lo-lo-p^o *no-bi*, A-hi Lo-lo *no-bo*, Lisu *na-pe*, *na-kō* (Kami *na-baun*; Tōtō *na-ba*); Tibetan *s-na*, Gešits^a *s-ni* and *s-na*, Jyarun *te-š-no-s*; Burmese *nhā* (Newārī *nhā-sa*), Kuki-Lušai *hnā*, Southern Chiu *h-nu-t-tō*; Lepcha *tuk-n-om*; Sunwār (Darjeeling) *ne*. Besides the *i*-forms of Mo-so and Gešits^a, we have *nhi-se* in Pahrī (Nepal) and *a-nhi-ča* in Angao-Nāgā.

12. Si-hia *li* 力, moon. This is a peculiar variation of the general type *la*, *le*, *lo*, that we meet in Tibeto-Burman. The form *li*, however, is not entirely isolated, but occurs in Ya č^{io} Miao and Hua Miao *li*, in Leñ-ki Miao *ka-li*, and in Miao-tse *ka-h-li*. The more important representative forms are: Burmese *la*, Lepcha *la-vo*, Nyi Lo-lo *š-la-ba*, Tibetan *z-la-ba* (Central Tibetan *da-va*, K^aams and Ladākhi *lda-va*); Bunan *h-la*; A-hi Lo-lo *h-lo*, *h-lo-bo*, K^{ye}n and Southern Chiu *k-h-lo*, Kuki *lha*, Haka *k-la*, Thuluñ *k-h-le*, *k-h-lye*; Kachin *ša-ta*. Tib. *z-la* is evolved from **za-la*, as shown by Lahūl *la-za*.

13. Si-hia *tsⁱ-niu* 七吾, salt = Tibetan *ts^{wa}* (*ts^{ya}*), *ts^a*, *ts^o*; Nyi Lo-lo *ts^a*, A-hi Lo-lo and Lo-lo-p^o *ts^o*; Lisu *ts^a-po*; P^u-p^a *sa-m*, Chö-ko *tso-m*; Mo-so *tse*; Hua Miao *udse*; Newārī *če-lu* ("salty taste"); Mauryak *če*; Lepcha *ča*; Kanaurī *č^a*; Burmes^e *č^a*; Karen *i-sē*, Yintale *i-sā*. The Si-hia form with the vowel *i* occurs only in Thādo *či* (T. C. HODSON, *Thado Grammar*, p. 99), Chin *dsi*

and *tsi*, and Hei Miao *sie*. The corresponding Chinese word is *ts'o* 齶 (Canton *t̃'a*, Fukien *t̃'wa*, Sino-Annamese *sa*). The second element *niu* in the Si-hia compound seems to be an independent base, likewise with the meaning "salt." It corresponds to Kuei-chou Chuñ-kia *ku* and Kuang-si Chuñ-kia *giu* ("salt:" S. R. CLARKE, *l. c.*, p. 310), Ahom *k-lu* (from **ku-lu*), Shan *küw*, Siamese *k-lua*.

14. Si-hia *nio* 邊, 1 = Chinese *nio* 我; Tibetan *ña, nio*; Lo-lo *ña*, Lisu *ñica*, Mo-so *ña, nio*; Burmese *ña*, Kachin *ñai*.

15. Si-hia *wei* 爲, to do = Chinese *wei* 爲, Tibetan *bye-d* (*v'e, j'e*), Mo-so *be, pe*.

16. Si-hia *si* 悉, to die = Chö-ko *si-pü*, P^cu-p^a *se-poa*; Kachiu *si*; Lo-lo *šö*; Mo-so *še*; Tibetan *ši*, Yün-nan Tibetan *šö*; Digaru, Daffa, and Miri (Assam) *sī*; Chinese *se* 死.

17. Si-hia *wen* (character not given), bad = Chinese *ñan* (yen) 贗 ("bad"); Tibetan *ñan*; Ahom *ñam* ("false, falsehood").

GROUP II.

*Words directly Related to Lo-lo or Mo-so, or Both Idioms,
and bearing a Further Relationship of the Second Degree
to Tibetan or Chinese, or to Both Languages.*

18. Si-hia *kou, gou* 苟, ant = Nyi Lo-lo *kau-ma*, A-hi Lo-lo *ka-vu* (*vu* is perhaps akin to Chinese *wei* 螳, "wingless insects"); Ahom *kau* ("spider"), Shan *kui-kau*; Bhūtan *kyo-ma*; Kirānti (*saču-*) *ka-va*; Kachin *ka-gyin*. The element *-ma* of *kau-ma* meets its counterpart in Tibetan *grog-ma*.¹ The latter, stem *grog*, as shown by Jyarun *go-rok* (Sog-pa *k'o-rok-wc*, Uor-pa *k'ro*), should be analyzed

¹ In all probability the element *ma* in this case is not a mere suffix, but an independent base meaning "ant;" compare Ahom *man, ma-t, ma-t* ("a kind of ant"); Shao and Siamese *mo-t, Pa-yi ma-t*; Thādo *si-mi* ("ant").

into **yo-rog* or **gi-rog* (*rog*, "black"). The base **yo, gi* is related to Si-hia *kou, gou*, on the one hand, and to Chinese *ni* (Japanese *gi*) 蟻 on the other hand. The ant is called *bo-yo* in Lo-lo-p^o, *bu-ku* in P^u-p^a, and *bu-ma* in Chö-ko. This word *bu* seems to me to be identical with Tibetan *abu* ("insect, worm;" combining the significance of Chinese *é^cui* 虫) and Burmese *pü*.

19. Si-hia *pan-bu, ban-bu* (perhaps with labial assimilation *pam-bu, bam-bu*) 板哺, butterfly. The second element *bu* occurs in Nyi Lo-lo *bu-lu-ma*, A-hi Lo-lo *bu-hlo*, Lo-lo-p^o *bo-lu* ("butterfly"), and possibly in Chinese *fu* (from **bu*) 蚨 ("water beetle;" *fu-t^cie*, "butterfly"). The first element may be in some relation with Tibetan *p^cye-ma* of *p^cye-ma-leb* ("butterfly"), Ladākhi *pe-ma-lab-tse*; Tromowa *p^ci-ma-lag, pim-lab*, Sikkim *byam-lap*; Mo-so (written language) *p^ce-le*; ¹ Magar *whā-mā*; Kachin *pa-lam-la*; Thādo *pei-pu-lep*. B. HOUGHTON (*J.R.A.S.*, 1896, p. 37) has identified Tibetan *p^cye-ma-leb* with Burmese *lip-pyā* (the members of the compound being transposed), explaining *pyā* as meaning "to fly." This is interesting, and in some measure is corroborated by the Bunan verb *pan-éum* ("to fly;" *-éum* is a verbal ending), so that Si-hia *pan-bu* would mean "flying insect." It seems doubtful, however, that, as suggested by Houghton, the element *lip, le^b* can be interpreted through Tibetan *leb*, which means "flat." This conception of the matter is contradicted by the variant *lab*. It seems more appropriate to take the element *leb* or *lab* in *p^cye-ma-leb* as **le-bu, la-bu*, and to identify **bu* with the base *bu* in the Si-hia and Lo-lo words, and **le, la*, perhaps with Lo-lo *lu, lo*.

20. Si-hia *moi-tsi* 夢積, fly. This is a compound formed by two synonymes. The first element *moi* is apparently identical with Chinese *moi* 蚋 ("gadfly"), *moi* 蠅 ("flies"); Siamese, Shan and

¹ The primeval forms presumably are **be, b'e, ba, b'a*, while *ma, -m*, may be suffixes or euphonic insertions. In this way we arrive at a satisfactory explanation of Si-hia *pam-bu, bam-bu*, by analyzing the latter into *pa-m-bu, ba-m-bu*.

Laos *mei* ("insect"); Pa-yi *myān-moi* ("fly"); Ahom. *mlin* ("white ant, firefly"), *mūk* ("mosquito"); Lepcha (Hodoson) *man-koi* ("mosquito"); Tibetan *boi* in the names of small insects (*rgyas-poi boi-bu*, "sugar-wite;" *boi-nag*, "Jung-beetle"), and Tibetan *muñ-ba*, *muñ-pa* ("moth, worm"). The second element *tai* is comparable with Nyi Lo-lo *je-mu*, A-li Lo-lo *yi-mu*, Lo-lo-p^o *ya-mu* (possibly further relationship with Tibeto-Chinese *yai*, *yii*, see No. 21).

21. Si-hia *mou-šuai*, *mou-šu* 謀率, bee. The first element *mou* is met with in Kanauri *mö-klar* ("beehive"), in Chuñ-kia *mo-vei* ("bee"), and Mo-so *mba-me*. According to J. BACOT (*Les Mo-so*, p. 29), this word literally means "honey-mother," so that *mba* would signify "honey" (*me*, "mother"). At the same time we have in Mo-so *ba-ler* and in the written language *mbar* in the sense of "fly." Mo-so *mba*, therefore, seems to be evolved from **mo-ba*. This analysis is confirmed by Chepañ (Nepal) *tu-mba* ("bee") and *tu-m* ("honey"),¹ which shows that Mo-so *mba* (**mo-ba*), in the same manner as Chuñ-kia *mo-vei* and Si-hia *mou*, has also the meaning "bee." The element *vei* (= Mo-so *ba*) appears in Nyi Lo-lo *d-la-vu-k^oia* ("wild bee"). It is noteworthy that in the Indo-Chinese languages the notions "insect, fly, bee, honey" inhere in the same roots. There is the remarkable parallel: Tibetan *bui-ba* ("bee"), Chinese *fui* (from **bui*) 蜂, Siamese *p^oün* (from **büi*: МАСПЕКО, *Bull. de l'École française*, Vol. XI, p. 158), Ahom *p^orüi*. The Si-hia word, of course, bears no direct relation to this series, or to Lo-lo-p^o *byo* ("bee"). The latter is akin to Tromowa *byo-mo*, *bya-mo*, and Sikkim *byam* ("fly"). These forms are contractions of **bu-yo*, *bu-ya*, which, as a matter of fact, we meet in West Tibetan *bu-yai* ("humble-bee"). The latter is by no means a corruption of *bui-ba*, as asserted by JÄSCHKE

¹ The element *tu* is related to another word for "fly" in the Mo-so written language, *udu*, apparently coincident with A-li Lo-lo *do* ("bee"). The same base is found in Mo-so *bu-tu* ("insect"), Lo-lo-p^o *hyo-to* ("mosquito"), and Nyi Lo-lo *dla-ma* ("bee"), from **do-la*.

(*Tibetan Dictionary*, p. 393a), but an independent formation: *yai* is a root-word with the meaning "insect," that is found in Chepañ and Burmese *yai* ("fly"), Kachin *či-yoi* ("mosquito"); Kanauri *yai* ("fly, bee"); Newāri *yai-kela* ("bee"), Tibetan *s-b-rai* ("fly, bee"), Lepcha (*sum-*)*b-r-yoi*, Ahom *jii*, *jii* ("dragon-fly"), Shan *yii*; and Chinese *yii* (Wen-chou *yai*) 蠅, "fly." Tibetan *-rai*, that as independent word occurs in West-Tibetan *rai-ñu* ("fly") and *rai-si* ("honey"), is merely a phonetic variation of *yai*, for in Sikkim we have *se-byam* and in Tromowa *se-byom* as equivalents of common Tibetan *sbrai*.¹ It is therefore obvious that the latter has been evolved from **se-bu-rai* = **se-bu-yai*. Lepcha *sum-bryoi* is developed from **su-bu-ryoi*, with a euphonic insertion of *m* between *su* and *bu*. The base **bu* seems to be associated with Tibetan *u-bu* ("worm, insect") and *s-bu-r* ("beetle"); it is widely disseminated also in the languages of Nepal, in Lo-lo, and Si-hia (see Nos. 18, 22). The second element of the Si-hia word *mou-šu* (probably from **mou-su*), in my opinion, may be correlated with the above Tibetan-Lepcha bases **se*, *su*, Sikkim *se-byam*, Tromowa *se-byom*. This *s*-base appears also in Lohoroi *b^cu-su-na* ("mosquito"), Magar *b^cu-s-na*, Kuswar *b^cu-n-si*.

22. Si-hia *mo-lu* (possibly pronounced *m-lu*, *m-ru*, *b-ru* 沒魯), worm, snake. In order to understand this formation, it may be well to proceed from an analysis of Tibetan *sbrul* ("snake"). This complex word (at present articulated *sbrul* only in Purig; Central Tibetan *ḍul*), as follows from a comparison with the facts of the cognate languages, presents a triple compound evolved from **sa(se)-bu-ru-l*, *sa(se)-bu-lu-r*. 1. The base **sa*, *se*, *si*, is widely spread in

¹ *Ya-ta* and *ra-ta* (that is, the subscribed letters *y* and *r* interchange within Tibetan: *abras* ("rice")—Tromowa *bya* (WALSEN, *Vocabulary of the Tromowa Dialect of Tibetan*, p. vi), *k'rag* ("blood")—Trom. *k'yag*, *abros-pa* ("to flee")—Trom. *byo-po*, *ak'rid-pa* ("to guide")—Trom. *k'yi-ko*, *abrog-pa* ("herdsman")—Trom. *byo-ko*, *brag* ("rock")—Trom. *byag*, *gro* ("wheat")—Trom. *gyo*, etc.

Indo-Chinese: Limbu *o-se-k*;¹ Gyami *ŷ-re*; P^cu-pⁿ *a-si-ma*, Chö-ko *sis-na*, Nyi Lo-lo *ŷe-p^cai*; Mo-so *jö*; Chinese *dzie, že, ŷe, šö, ŷa, sia* 𧈧. As to Tibetan, it is found again in Central Tibetan *sa-gu-tse* ("worm") and in the prefix *s-* of *s-bran* (see No. 21), *s-rin* ("worm, insect"), and *s-bu-r* ("beetle"). 2. The base **bu* (*mu, mo*) occurs in Tibetan *a-bu* ("worm, insect;" *a-bu-rin*, "snake"); Tibetan *abrug*, Balti *blug* ("dragon, thunder"), evolved from **abu-rug, abu-lug* (**lug* = Chinese *lu*, "dragon"); Tromowa *bu*, Sikkim *bi-u* ("serpent"), Bunan *de-bu* ("serpent"), Lepcha *bu* ("serpent"), Kirānti *pu*, Takpa *mrui* (from **mo-rui*), Manyak *bru* (from **bu-ru*); Murmi *pu-ku-ri*; Guruñ *b^cu-gu-ri*; Magar *bu-l* (Mi-ñag *bu-r*); Kachiu *lu-pu*; Bhrāmu *pai*; Lo-lo (*ŷe-*)*p^cai*, Lo-lo (БАБЕВ) *vu*, Lisu *fu*; Kami *pu-wi* (besides, *me-k^cwi, m-k^cwe, ma-k^cui*); Khambu dialects *pu*. 3. The base **lu, ru*, is encountered as independent word in Mo-so *lu* ("worm"), Pa-yi *low* ("python"), in the second element of Lo-lo-p^o *bo-lu* and Nyi Lo-lo *bu-lu-ma* (both "butterfly"); in Sokpa *t^o-le* ("snake"); in Manyak *bru* ("snake"), from **bu-ru*; Tapka *mrui*, from **mo-rui*; further in Burmese *k^crū* (also Burmese *mrve*, "serpent," from **mo-ru-ve*) and Tibetan *k-lu* ("cobra, serpent-demon"), evolved from **gu-lu, ku-lu, ku-ru* (the first element appears in Central Tibetan *sa-gu-tse*, "worm," Thādo *g^cū-l*, "snake;" Ahom *ku*, "worm;" Murmi *pu-ku-ri*, Guruñ *b^cu-gu-ri*,² T^oču *bri-gi*, "snake;" the latter from **bu-ri-gi*, instead of **ru-gu*), and finally in Tibetan **ru-g, lu-g* of *abrug, blug*, previously cited, and in *s-bu-r* ("beetle"), from **se-bu-ru*. As demonstrated by Si-lia and Mo-so *lu* on the one hand and by Tibetan *k-lu* and *s-b-rul* on the other hand, the final *g* of **rug, lug* is not inherent in the stem, but is either a terminating affix (**ru-g, lu-g*),

¹ Kanauri *sa-pös* and Milčai *sābās* appear to be loan-words from modern Indo-Aryan *sapa, sap* (from Sanskrit *sarpa*).

² Corresponding to Milčai and Bunan *gur-gu-ri*, "thunder" (A. CUNNINGHAM, *Ladák*, p. 403), which I conceive as a gemination (**gu-ri-gu-ri*), and to Kanauri *gur-gur* ("thunder").

or the survival of the above base **gu*; in this case *abrug* would represent a triple compound, contracted from **abu-lu-gu*. For this reason I conceive also Chinese *lui* ("dragon") as *lu-ni*, that is, stem *lu* + affix *i*; this opinion, from the viewpoint of Chinese, is confirmed by the form *löe* for *lu-ni* in the dialect of Wen-chou. In Ladakhi and Labül, "snake" is called *rul*; possibly *rul* has arisen from a contraction of *ru-lu*, that is, a gemination of the base **ru*, *lu*. On this assumption, *sbrul* would even be a quadruple compound (**se-bu-ru-lu*), each element having the significance "worm, snake." It is conceivable, however, that the final *-l* of *sbrul*, *rul*, is merely an affix on the same footing as *-g*, *-n* (compare *spre-l*, "monkey," derived from *spre*). There can be no doubt of the fact that Si-hia *mo-lu* is composed of the two bases dealt with under 2 and 3. What may be questioned is solely the correct articulation of the Si-hia speakers, as there is a somewhat wide range of possibilities in the allied languages. Magar *bu-l*, for instance, might tempt one to restore a Si-hia form **mu-l*; but considering the close affinity of Si-hia with Lo-lo and Mo-so, where we have the base *lu*, I believe we are justified in adhering to a Si-hia word of the type *mo-lu*, *m-lu*.

23. Si-hia *wei* (perhaps *wöi*, *wö*) 崑, dragon = Mo-so *lö*, *l-wö*, from **lö-wö* (compare Wen-chou *löe* for *lui* 龍). The Mo-so element *lö*, *l-*, has perhaps survived in Tibetan *abrug* ("dragon, thunder"), Balti *b-lug*, possibly evolved from **abu* ("worm, snake")-*lug* (**lug* = Chinese *lui*, "dragon"). It is therefore not necessary to regard A-hi Lo-lo *lo* as a mere loan-word from Chinese *lui*, as proposed by LIÉTARD,¹ but Lo-lo *lo* may very well be anciently allied to Mo-so *lö*, Tibetan **lug*, and Chinese *lui*. There is a further possibility that this root is connected with the base *lu* ("worm") men-

¹ *Bull. de l'Ecole française*, Vol. IX, p. 557.

tioned afore, if **lug* and *lun* be *lu-g* and *lu-n*; that is, if the finals *g* and *n* should not be inherent in the stem, but merely terminating suffixes. This is confirmed by Wen-chou *lœ*.

24. Si-hia *ri-n* or possibly *ri* (with nasalized *i*) 領, bear = A-hi Lo-lo *rö-mo*, Lo-lo-p^o *vö-mo* (LIÉTARD, *Au Yun-nan*, p. 214); Hua Lisu *wo*; Lo-lo (BABER) *wo*; Mi-ñag (BABER) *re*. Further relationship seems to exist with Tibetan *dred* ("yellow bear") to be analyzed into *d-re-d*, so that the initial *d-* would have to be regarded as a prefix somehow related to Tib. *dom* ("black bear," *Ursus tibetanus*, Sanskrit *bhallūka*).

25. As we note in the preceding example an alternation of *r* and *v* in the Lo-lo dialects, I am inclined to connect Si-hia *ro* 勒 ("wolf") with Nyi Lo-lo *ve* and A-hi Lo-lo *rö-mo*.

26. Si-hia *dzei*, *zei* (zōi) 則夷, panther = Lo-lo *ze*, *zō*; Mo-so *ze*; Tibetan *g-zi-g*; Lepcha *syi-čak*.

27. Si-hia *wo* 訛, hog, swine = A-hi Lo-lo *vye*, Nyi Lo-lo and Lo-lo-p^o *ve*, P^u-p^a and Chö-ko *va*; Lisu *a-ve*; Mo-so *bu*, *bo*; Miao *ba*; Newārī *p^a* ("boar"); Gešits^a *va*; Tibetan (written language) *p^a-g* (in many dialects *p^a*); Kanauri *fa-g*; Burmese *va-k* (*vet*); Thādo *vō-k*; in Khambu dialects *ba-k*, *p^a-k*, *ba*, *b^a*, *bo*, *po*, *pa*.¹ In view of Mo-so *bu*, *bo*, the series *mu* of the T'ai languages and Chuñ-kia possibly may belong to the same root.²

¹ *Linguistic Survey of India*, pt. III, Vol. 1, p. 344.

² The coincidence of the type *vak*, *bak*, etc., with Old Javanese *wök*, Kawi *wäk*, Sumban *we*, Malayan *babi* ("hog"), etc., is hardly fortuitous. One of the great centres where the domestication of the pig (*Sus indicus*, traceable to the wild form *Sus vittatus*) was brought about in a prehistoric age was located in southeastern Asia, inclusive of Java. This species gradually extended to Yün-nan, Sze-ch'uan, southwestern Kan-su, and farther into Tibetan territory. In Sze-ch'uan and Kan-su it meets with the species of northern China, which, as far as we can judge at present, is the product of an ancient Chinese domestication from indigenous wild material. These zoölogical results may account also for the fact that the Chinese nomenclature relative to swine is perfectly independent, being without parallels in T'ai and Tibeto-Burman.

28. Si-hia *k'ü*, *č'ü* 屈, dog = Mo-so *k'ō*, *k'e*, *kü*; A-hi Lo-lo *k'i*, Nyi Lo-lo *č'e*; Lo-lo-p'ō *č'ō*; Mili Si-fan (DAVIES, *Yün-nan*, p. 360) *č'ō*; Northern Lo-lo (DAVIES) *ksō* (from **ki-sō*?); Yün-nan Tibetan (DAVIES) *ts'ō*, (MONBEIG) *tsō*; Ya-č'io Miao and Hua Miao *k-le* (from **ki-le*; Hei Miao *la* ("dog")); Bunan *k'yu*; Tibetan, in general, *k'yi* (K'ams *k'ye*, Jyaruñ and Spiti *k'i*, Gešits'a *d-ga* and *k-ta*); Digaru *n-kwī*, Daffa *i-kī*, Miri *e-kī*; Burmese *k'wē*, Kachin *gwi*. The primeval form seems to be **gi*, *g'i*. I am not convinced that Chinese *kou*, *ku* 狗 belongs to this series.

29. Si-hia *tsai-šu* (*tsai-šuai*), *dzai-šu* 宰率, rat. The first element appears to be related to Mo-so *dse* ("rat"), Tibetan *tsi*, *tsi-tsi* ("mouse, shrew"), Bunan *myu-tsi* ("rat, mouse"),¹ Burmese *čwet* (written *krvak*). The word seems to be imitative of the animal's voice (compare Malayan *tikus*, "mouse," Javanese *tjit*, "piping of the mouse;" Sikkim *tiñ-rjini*, "shrew;" Turkish *syčkan*, *syčan*, Kirgiz *čičkan*, "mouse;" Magyar *cziczány*, "shrew"). Lo-lo *e* and Chō-ko *a-i* (stem *i* with prefix *a*) correspond to Tibetan *byi*. The second element of the Si-hia compound is presumably identical with Chinese *šu* 鼠 ("rat, rodent").

30. Si-hia *lo-wo* 勒訛, hare = Lo-lo *lo*: Lo-lo-p'ō *a-lo* (*lo* with prefixed *a*), *ti-h-lo*, and in the cycle *ta-lo*;² Nyi Lo-lo *a-š-la*; Mo-so *to-le*. The element *wo* of Si-hia *lo-wo* possibly is akin to the second element of Tibetan *ri-boi*, *ri-voi* (Tromowa and Sikkim

¹ In Kami, *myu* means "rat" (HOUGHTON, *J.R.A.S.*, 1895, p. 137).

² LIÉTARD, *Au Yun-nan*, p. 230; the element *ta*, as shown by the phonetic variations *ti* and *to* in the cognate idioms (perhaps also Siamese *kā-tay* belongs to the series) is indigenous. Lo-lo-p'ō *ta-lo*, accordingly, bears no relation to Mongol *taulai*, *tolai*, Kal-muk *tūlai* (from **tabulai*, Old Mongol *tablqa*), Yakut *tabišan*, Orkhon Inscriptions *tabyšyan*, Osmanli *tawšan*, Khitan *t'ao-li* 洵裏 or 陶里 (K. SHIRATORI, *Sprache des Hiung-nu Stammes*, p. 44). The case of Nyi Lo-lo *t'o š-la*, used in the duodenary cycle for the year of the hare, is different. As rightly observed by P. VIAL (*Dict. français-lolo*, p. 201), this *t'o* is of Chinese origin (*t'u* 兔), as is likewise Siamese *t'o* employed in the cycle.

ri-gon); but I do not feel certain of this. Tibetan *-boi* is comparable with Ahom *pan*, Shan *pan-lai* ("hare").¹

31. Si-hia *la* 麂, stag = Nyi Lo-lo *la* ("chevrotain;" *la-re*, "musk"); Lo-lo of T'ung River (BABER) *lō* ("musk-deer"); Mi-nag (BABER) *lie* (*id.*); Tibetan *g-la* (*id.*); Chinese *lu-k* 鹿 ("stag"). Lo-lo *re* ("musk") seems to tally with Chinese *šö*, *zö* 麝.

32. The designation for the domestic fowl in Si-hia is *wo-yao* 詭要. This is a compound formed by the two synonymes *wo* and *yao*, each of which has the general meaning "bird." As shown by the Si-hia form and by what is found in other Tibeto-Burman languages, Tibetan *bya* ("bird, fowl"), which at first sight appears as a primitive stem-word, has resulted from a contraction of **ba* (*va*) or *bo* (*vo*) + *ya*. In Balti and Purig a glide is still audible between the initial sonant and *y* (*b^eya-po*).

Si-hia *wo* and Tibetan **ba*, *va*, occur in Nyi Lo-lo *va* ("bird"), used only in the written language.² In the idioms of Nepal, *wa* is the generic of birds of the fowl kind; Chepañ (*mo*-)*wa* ("bird") and *wa* ("fowl"); T'oču *mar-wo* ("bird"); Limbu *wa-bha-le*; Magar *gwa-bha* (*bha* corresponding to Tib. *p^o*, "male," in *bya-p^o*, "rooster") and *gwa-ja* (correctly analyzed by Hodgson into *g-wa-ja*; regarding *g-* see No. 33); Murmi *hwā-bā*; Sunwār (Darjeeling district) *wo-a*; Khambu *wa-pa* ("rooster"). Kami *ka-va*, *ta-va* (*a-bwi*, "rooster," *va-ā*, *wa-ā*, "to crow");³ Lepcha *fo*; Kachin *wu*, *u* ("fowl").

Si-hia *yao* and Tibetan **ya* are found in Nyi Lo-lo *ye* ("fowl"), *ye-p^cu* ("rooster"), *ye-p^cā* ("hen"); A-hi Lo-lo *ye* (*ye-p^cu*, "rooster;"

¹ It is possible that Tibetan *ri-boi* means "wild ass" (*ri*, "mountain, wilderness;" *boi-bu* or *boi-bo*, "ass"). The long ears form the point of comparison between hare and donkey: compare Nyi Lo-lo *a-šla-la-mu* ("donkey;" literally, "hare-horse"); Persian *xergōš* ("hare;" literally, "donkey's ear").

² P. VIAL, *Dictionnaire français-lolo*, p. 79 (see *chauve-souris*). Baber gives for Lo-lo of the T'ung River *wo* ("fowl").

³ B. HOUGHTON, *J.R.A.S.*, 1895, pp. 116, 118. As to *ka* in *ka-va* compare No. 33.

$p^c u$ = Tib. $p^c o$); Lo-lo- $p^c o$ $yi-p^c o$; $P^c u-p^c a$ $ya-p^c u-ma$; Hua Lieu $ai-ya$, White Lisu $a-yö-r$; Mo-so $ā$, $a-me$ (compare $P^c u-p^c a$ $e-ma$ and Chö-ko $e-me$, beside $za-p^c o-ma$; Thādo $ā$, "bird," $ā-pī$, "heu"); Murmi $nam-ya$, Guruñ $nem-ya$; Chin $p^c a-yā$. As Tibetan bya was formerly taken for a stem-word, it was subjected to erroneous comparisons; it cannot directly be correlated, for instance, with Newāri $j^c ai-gal$, as proposed by CONRADY (*Causativ-Bildung*, p. 105), in which the element gal coincides with Sog-pa $t^c a-kol$, and $j^c ai$ with Kirānti $ēoi-wā$. On the other hand, we meet in Newāri and also in Pahari a form $j^c a-ña$, which seems to be the antecedent of the contraction $j^c ai$. As $j^c a$ corresponds to ya in other languages of Nepal, we may equalize the two forms, which answer to $*ya$, with the second element of Tibetan bya ; Central Tibetan $j^c a$, $j^c ya$, however, is a recent affair, developed from bya , — a specific Tibetan home-affair which has nothing to do with Newāri $j^c a$.¹

33. Si-hia $ku-kiä$, $gu-giä$, $gu-g'ä$ ($ku-kiäi$) 姑皆, phoenix (in Buddhist texts presumably for the designation of the Garuda). The literal meaning of this compound is "the bird gu (ku);" for the second element is identical with Nyi Lo-lo ge ("bird, fowl"), Black Lisu $a-ke$ ("chicken"), Hor-pa gyo , and Magar $g-wa-ja$ (see No. 32). This base appears also in Mi-ñag $ge-ji$ ("bird") and Mo-so $gi-ā$ ("duck;" $ā$ borrowed from Chinese ya 鴨), and further points to the T'ai languages: Shan and Ddoi kai , Siamese and Laos $k'ai$, White Tai $kéi$ ("bird, chicken"), developed from $*gai$ (Annamese ga), Chuñ-kia and Hua Miao kai ; and to Chinese $*gi$, ki 鷄 ("fowl,

¹ The Si-hia word for "egg" is unfortunately not given. It is a felicitous suggestion of B. HOUGHTON (*J.R.A.S.*, 1896, p. 36), in view of radically different words for "egg" in Tibetan ($sgo-ña$) and Burmese (u), taken with the diversity of the name for the domestic fowl in the two languages, that the fowl was not kept by the Burmans in prehistoric times prior to their separation from the Tibetans. Even in the Lo-lo dialects the words for "egg" are at variance: Nyi $ñla$, A-hi $t'o$, Lo-lo- $p'o$ fu , Black Lisu $a-le-fu$, Hua Lisu $ai-ya-k'u$. Tibetan $sgo-ña$, $sgoi-ña$, or $sgoi$, appears in the written language of the Mo-so as $gü$, to which $a-ku$, $a-kvu$, of the oral language, is perhaps related.

rooster"), Cantonese and Hakka *kai*, Kuei-chou *gi*. As to formations analogous to the Si-hia compound, compare Nyi Lo-lo *k'ü-ge* ("pheasant"). The first element *gu*, *ku*, appears to be identical with Tibetan *go-bo* ("eagle;" stem *go*), Tibetan *g-lag* ("eagle," from **go-lag*), Kanauri *g-ol-t'ōs* ("vulture"), Mo-so *ko-n*, *ko-n-do* ("eagle"), Lepcha *ko-juk ge-bo fo* ("a species of eagle"). The last named cannot be identified with Tibetan *k'yab-ajug dge-ba*, as proposed by GRÜNWEDEL (*Lepcha Dictionary*, p. 26), but Lepcha *ko-juk* is the phonetic equivalent of Tibetan *k'yuñ*, evolved from **go-jui*, *go-yuñ*, the element **go* being identical with *go* ("eagle"). Tibetan *k'yuñ* was heretofore known to us solely as a rendering of Sanskrit *garuḍa*, but, as demonstrated by Kanauri *k'yuñ pyā* ("eagle")¹ and by the very phonetic development of the word itself, it originally had the significance "eagle." The Si-hia compound, accordingly, means "eagle-bird."

34. The Si-hia word for "heaven" is *mo* 沒, and that for "sun" is *mo* 墨. As these two Chinese characters represent a sound-combination *mo* of the same tone (the entering lower one), the two words, separated in the glossary, apparently are identical, the single stem *mo* combining the two significances "heaven" and "sun." This state of affairs is confirmed by Lo-lo, where we meet the same base *mu* in the same tone and with the same duplicity of meaning, as well as by Mo-so *mu*, *mō*. It is obvious that the Si-hia word for "sun" has nothing in common with Tibetan *ñi-ma*, which Mr. Ivanov has added to it, or with Chinese **ži-t*, *ñi-t* 日, coincident with Tibetan *ñi*. The affinity of Si-hia, in this case, decidedly points to Lo-lo and Mo-so. In Mo-so, "heaven" is *mu*, *mō* (written language also *mu-n*); in A-hi Lo-lo *mu*; in Nyi Lo-lo, the vowel is but dimly sounded, so that P. VIAL writes *m(u)*, while

¹ T. G. BAILEY, *J R A.S.*, 1911, p. 335.

LIÉTARD¹ transcribes the corresponding word in P^cu-p^ca *m*³. This *m* enters into composition with *k^ce*, *k^c'ü* in Nyi Lo-lo *m^u-k^ce*, *m^u-k^c'ü* (Hua Lisu *mu-kua*), and with *ti* in Chö-ko (*m-ti-ma*). The former presents an exact analogon with Tibetan *m-k^ca* ("heaven"), which accordingly is evolved from **mu-k^ca*.² In Jyaruñ we have *te-mu* ("heaven"). The Lo-lo-p^co dialect has combined the base *mö* with *ñi-mo* (= Tib. *ñi-ma*, "sun") into *mö-ñi-mo* ("heaven"), and employs the same compound *mö-ñi* in the sense of "sun." The base *ñi* becomes *ni* in P^cu-p^ca (*ni-zō-ma*) and Chö-ko (*ni-ma*).³ A-hi Lo-lo has *mu-ño* for "sun," besides *li-ki*;⁴ Mo-so (written language) *mo* ("suu"). In Black Lisu *mu-ts^ca* and White Lisu *mö-č^ca* the meaning is perspicuous, being "heat of heaven" (*ts^ca*, "hot" = Lo-lo and Tibetan *ts^ca*). The same root covers much ground also in the Burmese languages: Karen *mā*, *ta-mā*, Yintale *ta-mü-n*, other dialects *tü-mu*, *mü*, *mü-ñ*;⁵ Kachin *la-mu*.

35. Another Si-hia word, although I cannot trace it in Lo-lo or Mo-so, may be discussed in this connection, as it belongs to the same semasiology. This is transcribed in Chinese *ku(gu)-yü-mo* 骨魚沒, and is translated by Mr. Ivanov "supreme Heaven." The character *mo*, as, for instance, also in *lo-mo* 羅沒 = *lom* = Tibetan *k^cron-pa*, *k^crom-pa* (see No. 114), serves to denote a final *-m*. The combination *ku-yü*, written in the same manner, is intended also for the numeral "five," which may be restored to

¹ *Bull. de l'École française*, Vol. IX, p. 550.

² These comparative considerations, again, refute the unwarranted opinion that Tibetan *mk^ca* should be a Sanskrit loan-word (see *T'oung Pao*, 1914, p. 101); on the contrary, it is a dissyllabic compound framed from Indo-Chinese elements. The element *k^ca* appears in Kami as *k^c'ä*, *k^c'u*, *k^c'u-sün*, and *k^c'au-rani*.

³ The Lo-lo dialects make a far-reaching use of the stem *mu* in the terminology relative to atmospheric phenomena: *mu-ho* and *a-mu-ho* ("rain"), *mu-hlö* and *a-mu-ši* ("wind"), *mu-dö* ("thunder"), *mu-llö* ("lightning"), etc. Compare also E. HUBER, *Bull. de l'École française*, Vol. V, 1905, p. 324.

⁴ The element *ki* perhaps coincides with the prefix *ke-* in Jyaruñ *ke-ñi*.

⁵ *Gazetteer of Upper Burma and the Shan States*, Part I, Vol. I, p. 650.

k-üü, k-üu (see Łöcve, p. 13). In the same manner, the transcription *ku-yü-mo* leads to the restitution *k-üum* or *g-üum*, which in my opinion may be correlated with Tibetan *d-gui* and *g-nam* ("sky, heaven") and Burmese *koü-kaü*.

36. Si-hia *mo* 沒, fire = A-hi Lo-lo *mu-tö, mö-te*, Nyi Lo-lo *mu-tu*, P^cu-p^ca *mi-to* (Lo-lo-p^co and Lisu *a-to*; that is, stem *to* with prefixed *a-*), Chö-ko *bie-tu*; ¹ Mo-so *m'ö, mi*; Tibetan *mö, me*; Lepcha *mu*; Newari *mī*; Khambu dialects *mi*.

37. Si-hia *tsei, dsei, jei* 則移, water = Nyi Lo-lo *je*, A-hi Lo-lo *yi-j'e*, Lo-lo-p^co *vi-dye* (*dye* from **je*); ² Mo-so *jie* (beside *gi*); Lisu *a-čia, i-čia*; Dhimal *či*; Limbu *čia*; Mišmi *m-č'i-n*; Jyarüü *ti-či* (a dissyllabic split of the primitive form; also in Chinese 水 *we* we have the *i*-vowel); Li-fan Tibetan *tse*. The last two forms are nearer to the Si-hia and the Lo-lo series than *č'u* of the Tibetan written language, which represents a later stage of development; but also in Tibetan we have the base *či* (*tši*) in *g-či-n* ("urine"); ³ compare Kachin *n-sin* ("water"). Lepcha *ji-t* ("urine"), derived from the same root; is certainly identical with the Si-hia and Lo-lo type for "water," *jei, je*. There can be no doubt also that the aspirate of Tibetan *č'u* is secondary, and that *č'u* has been evolved from **ču, ju* (*t-šu, d-žu*), still preserved in the derivation *b-ču-d* ("juice, sap"); ⁴ Newari *čo* ("urine"). Tibetan *č'ab*, the word for "water" in the respectful and elegant language, seems to be a

¹ As indicated by Miao-tse *tö* ("fire"), the element *tu, to, te*, in Lo-lo, is an independent word meaning "fire," so that the above compounds consist of two synonymes.

² Considering Karen *tö*, in cognate languages *ti* and *tai* (*Gazetteer of Upper Burma and the Shan States*, Part I, Vol. I, p. 652), Kami *twi, tü*, and *tui*, Thädo *tui*, Jyarüü *ti-či*, Miao-tse *t-le*, Kanauri *ti* (*Linguistic Survey of India*, Vol. III, pt. 1, p. 428), we probably have to assume a primeval form **d-že, t-še*, from which the type *je, či*, etc., was evolved.

³ In view of the Chö-ko form *zi* ("urine"), it seems admissible to associate the Lo-lo series of the same meaning (A-hi *zo*, P^cu-p^ca *a-zo*, Lo-lo-p^co *še-vi*) with Tibetan *g-ti-n*.

⁴ Also in *b-ču, b-ču-s* ("to scoop water").

compound, presumably formed by contraction of $\check{c}^u + bab$ ("to flow;" compare $\check{a}bab-\check{c}^u$, "river, rain"), as we have *snabs* ("mucus, snivel"), from $*sna-bab-s$ (literally, "nose-flowing").¹ Also Tibetan *ʃwa* ("flood"), $\check{c}^ar(-pa)$, "rain," and $m-\check{c}^i-l-ma$ ("saliva") seem to belong to the same root.

38. Si-hia *wet*, *wö*, *bö* 雪, snow = Mo-so (written language) *be*, (coll.) *m-be* (from $*mu-be$); Nyi Lo-lo *va*, A-hi *uo*, *wo*; Shan and Laos *nam m-we* (from $*mu-we$); Lisu *wa*; Bunan *mu*; Chepañ *é-pu* ("ice"); Newāri *čvā-pom* (from $*če-va-pom$); Tibetan k^a-ba , k^a-wa . This case bears out the interesting fact that *-ba*, the second element of the Tibetan word, is not the affixed particle *ba*, but is an independent base meaning "snow;" as in West-Tibetan "snow" is called k^a , the combination k^a-ba (k^a-wa) presents a compound consisting of two synonymes. Moreover, Tibetan k^a is evolved from $*ga$: the latter base occurs in *gañs* ("snow, ice, glacier"); *gañs* is to be analyzed into *gañ-s* (*-s* being a suffix), and *gañ* is a compound contracted from $*ga-añ$, for in Bunan we have the base *añ* as independent word for "ice." The latter notion is expressed in Milčañ by *pam*, *pañ*, which accordingly presents a contraction of $*ba-añ$, $*ba$ being identical with the above base *be*, *wa*, *wo* for "snow." The Milčañ word sheds light also on Newāri *čvā-pom* (from $*če-va-pom$), which is a triple, and eventually even a quadruple compound. Finally the question may be raised whether Chinese *piñ* (from $*biñ$, Annamese *bañ*) 冰 ("ice") does not belong to the same group.

39. Si-hia *lō*, *lo*, or *ro* 勒, wind = Nyi Lo-lo *mu ʃ-le*, A-hi Lo-lo *mu h-lo* (or *h-lö*);² Burmese *le*, Kachin *la-ru* ("storm"),³ Ahom *rau*, *raw* ("air, atmosphere"). The Si-hia stem-word has survived in the prefix *r-* of Tibetan *rluñ* ("wind") and *rdzi* ("wind"), which

¹ CONRADY, *Indochin. Causativ-Bildung*, p. 107.

² The form *h-lo* is evidently a contraction of $*he-lo$, as shown by Lisu *we-hei*, *mi-hi* ("wind").

³ Kachin *m-boñ* ("wind"), evolved from $*mu-boñ$ (*mu* = lo-lo *mu*).

accordingly are developed from **ro-luñ* and **ro-dzi*. Comparison with Bunan *lan*, Burmese *luñ*, Ahom and Shan *lum*, *löm*, Siamese *lom*, Chuñ-kia *rum*, *röm* ("wind"), bears out the fact that Tibetan **ro-luñ* is a compound formed by two synonyms, each conveying the notion "wind." Mo-so *ör*¹ is obviously identical with Tibetan *ur* ("roar of a tempest"), to which possibly also the element *ru* of Kachin *la-ru* belongs; presumably Tibetan *ur* is only a metathesis of *ru* = **ro* ("wind").

40. Si-hia *le, lo* 勒, earth, field = Mo-so *le* ("field"), Hua Miao *liai*, Hei Miao *li*, Ya-č'io Miao *lie* (S. R. CLARKE, *Among the Tribes in South-West China*, p. 312); Lušai and Lai *lo*, Rank'ol *loi*, Kami *la, le*, Meitei and Thado *lau*, Shö *lai*, Burmese *lay-yā (le)*; Red Karen *lyā, kē-lā*; Leñ-ki Miao *le* ("earth"); Khamti *la-nuin* ("earth"); [possibly Shau and Ahom *na* ("field"); Siamese and Chuñ-kia *na*;] Chepañ *b-lu* ("cultivated field": HODGSON, *The Phoenix*, Vol. III, p. 46); Tibetan *k-lu-ñ-s* ("cultivated land, field, a complex of fields").

41. Si-hia *lu* 盧, stone. This word occurs in the compound *lu-yi* ("mineral coal;" *yi* 乙 means "charcoal"), corresponding in sense to Tibetan *rdo-so*.² The word *lu* answers to Mo-so *lu, lö, lu-n, lu-pa*; Nyi Lo-lo *lu-ma*, A-hi Lo-lo *lo-mo* or *lo-po*, Lo-lo-p'ö *lo-di*, P'u-p'a *lo-ka*, Chö-ko *lo-ma*; Black Lisu *lu-ti*, White Lisu *lo-ti*; Karen *lā*, Yintale *lo-n*, Mauö *lü*, in other dialects of this group *lo, lo-m, lo-m-tu*;³ Kachin *n-loñ*; Khambu dialects *luñ*; ⁴ Lepcha *lan, luñ*; Mišmi *m-p-la*; Newari *lo-ho*; T'öču *yo-lo-pi*, Sok-pa *č'i-lo*;

¹ Transcribed *N'eur* by M. BACOT (*Les Mo-so*, p. 52).

² Coal is nowhere found in Tibet. It is known there, however, as a produce of China, as noticed at Si-ning and other parts and border-places.

³ *Gazetteer of Upper Burma and the Shan States*, Part I, Vol. I, pp. 650, 651. Possibly also Siamese *p'loi* ("jewel") belongs to this group. The element *tu* is related to *do* in Tibetan *r-do*.

⁴ *Linguistic Survey of India*, Vol. III, pt. 1, p. 346.

Jyaruñ *ru-gu*; Tibetan *r-do*, from **lu-to*, *lu-do*, *ru-do*, or *ra-do* (Bunan *ra*, Milčan *ra-g*, *ra-k*; Ya-č'io and Hua Miao *re*, "stone").

42. Si-hia *si*, *zi* 西, grass = Mo-so *zi*; Bunan, Milčan and Kanauri *či*; A-hi Lo-lo *hi*; Nyi Lo-lo *še*, Lo-lo-p^{co} *sö-ba*; Lo-lo of T'ung River (BABER) *jih-pa*; Meng-hua Lo-lo *šo*; Yün-nan Tibetan (DAVIES) *su*, (MONBEIG) *tsa*; Central Tibetan *tsa*; Ladākhī and Labul *sa*; Balti and Purig *r-tswa* (*tsua*), *s-tswa*; Tibetan written language *rtswa*; Chinese *ts'ao* 草, Hai-nan *šau*.

43. Si-hia *fu* 縛 (probably to be restored to *bo*, *vo*; *fo*?), flower = Mo-so *bo-bo*, *ba-ba*; A-hi Lo-lo *vi-lo*, Nyi Lo-lo *vi-lu*, Lo-lo-p^{co} *ve-lu*; White Lisu *su-wei*, Hua Lisu *su-wye* (Newāri *s-woñ*); Kirānti (*bui-*)*wai*; Gyami *k'wā*; Milčan *u*; Karen *p'ō*; possibly also Chinese *hua*, *hwa*, *fa* 花, as proposed by Mr. Ivanov.

44. Si-hia *č'i-ma* 吃麻, orange. This word corresponds to Nyi Lo-lo *č'u-se-ma* and Tibetan *ts'a-lum-pa*. According to a phonetic law (see Phonology, § 1), Si-hia *č'i* is the equivalent of Tibetan *č'a*, *ts'a*. It is reasonable to suppose that the term in the three languages is a loan-word, but its history is still obscure. In A-hi Lo-lo, the name for the orange is *hua-ko*, explained by LIÉTARD¹ from Chinese *huan kuo* 黄菓 ("yellow fruit").

45. Si-hia *tsu-ni* 卒尼, man, homo (*ni* being a suffix) = Nyi Lo-lo *ts'o*, A-hi Lo-lo *ts'u*, Lo-lo-p^{co} *ts'a*, Black Lisu *ts'ou-tsa*, White Lisu *ts'o-tsa*, Hua Lisu *la-ts'u-n*; P^{cu}-p^{ca} *čö*, Chö-ko *u-čö*; Mo-so *zu-ču* (*zu* = A-hi *zo-p'co*, Lo-lo-p^{co} *u-čö'-me*, P^{cu}-p^{ca} *za*, Burmese *sú*, *Ṣo*, "vir"); Leñ-ki Miao *tsi-ne*. Further relationship may exist with Manyak (HODGSON) *č'o* ("man"), Tibetan *ts'o* ("number, host"), plural suffix of living beings and pronouns, and possibly with Chinese *tsu-t*, *tswo-t* 卒 ("servant, retainer, soldier," etc.). In Lepcha,

¹ *Bull. de l'École française*, Vol. IX, p. 557.

the males of some animals are expressed by *a-tsu*, as, *luk* ("sheep"), *luk-tsu* ("ram"); *món* ("pig"), *món-tsu* ("boar").¹

46. Si-hia *gu-tsu* (*ñu-tsu*, *wu-tsu*) 吾祖 or 兀卒, king. This is the Si-hia term for "king," handed down in the Annals of the Sung Dynasty (*Sung shi*, Ch. 485, p. 8). This title was officially adopted in 1032 by King Li Yüan-hao 李元昊,² and is said to have the meaning of *khagan* 可汗. The reasons why I prefer the reading *gu* are prompted by the results of linguistic comparison, as stated below, and by the fact that Rashid-eddin calls the King of Taugut ٲنكفوت Lung-šādir-ghū ٲونك شادرغو.³ Lung-šādir appears to be intended for his name, while *ghū* is his title ("king"). Parallels to the Si-hia title we meet in Nyi Lo-lo *ts'ie ko-ts'ö* ("chef de village")⁴ and *o-ko-ts'ö* ("homme de la tête" = chef).⁵ The Lo-lo word *ts'ö* means "man," and as the corresponding Si-hia word is *tsu* (No. 45), we are perfectly justified in identifying with it the second element of *gu-tsu*. The attribute "the man, the male" in the royal title is very similar to the *p'ö* in ancient Tibetan *rgyal-p'ö*.⁶ Si-hia *gu* belongs to the base **go* ("head, chief") that we find in Tibetan *m-go* ("head"), *a-(m-)go-pa* ("head man, chief, alderman"), *go-ñi-ma* ("a superior, emperor"); Nyi Lo-lo *ge-mu* ("king, emperor"), A-hi Lo-lo *ñü-ma*, *rö-mu*, *wo-mö* (these variants illustrate very well that Si-hia *gu* could have been sounded also *ñu*, *wu*; *gu*, at any rate, represents the older form, and *ñu*, *wu*, a subsequent development; at the same time, these phonetic variants of A-hi

¹ G. B. MAINWARING, *A Grammar of the Rong (Lepcha) Language*, p. 25.

² G. DEVÉRIA, *L'Écriture du royaume de Si-hia*, p. 17.

³ F. v. ERDMANN, *Uebersicht der ältesten türkischen Völkerstämme nach Raschid-ud-din*, p. 62 (Kasan, 1841); E. BLOCHET, *Inscriptions turques de l'Orkhon*, p. 51.

⁴ P. VIAL, *Dict. français-lolo*, p. 344 (see *village*). Regarding *ts'ie* ("village") see No. 47.

⁵ *Ibid.*, p. 79.

⁶ *T'oung Pao*, 1914, p. 102, note 2.

testify to the correctness of the equation here proposed); and Mo-so *gi-bu* ("king").

47. Si-hia *tsö-ni*, town. This word is known to me only from the note given by M. PELLLOT in *Journal asiatique* (1914, mai-juin, p. 506). Mr. Ivanov has equalized the Si-hia word with a Tibetan term transcribed by him in Russian *dzon*; this is intended for *dzoñ*, written language *r-dzoñ*. Mr. Ivanov certainly does not visualize the Tibetan word *gron*, as supposed by M. Pelliot; and Mr. Ivanov, as will be seen presently, is quite right in his conception of the matter. First of all, the Si-hia word *tsö-ni* (stem *tsö*, *ni* being a suffix) corresponds to Nyi Lo-lo *ts'ie* ("village") and to the first element in Mo-so *je-nua* ("village"); Ahom *če* ("town"), Shan *če* ("province"); Tibetan *ts'o* in *yul-ts'o*, *gron-ts'o* ("village"). A-hi Lo-lo *k'ye* ("village"), in all probability, is derived from a different base; and, as shown by the compound *k'ye-ra-mo* (LIÉTARD: "*bourg*"), is connected with Tibetan *k'yer* in *gron-k'yer* ("town"). Tibetan *k'yer*, *k'ye-r*, is a contraction of **k'ye-ra*, exactly corresponding to A-hi *k'ye-ra-mo*, and consists of the bases *k'ye* ("house," from which also the word *k'yi-m*, "house," is derived; primeval form **gi*, *g'i*)¹

¹ Tibetan *k'yim* ("house") has been brought together with Burmese *im* by B. HOUGHTON (*J.R.A.S.*, 1896, p. 44). In the Kuki-Chin languages, with the exception of Meitei, it is *im* or *in*. The Mo-so word for "house" is given by M. BACOR in the form *gi*. In Bunan, "house" is *gyum* (Lepcha *k'yum*, Abor *e-kum*, and Meitei *yum*, show likewise the *u*-vowel). Mo-so and Bunan have preserved the original initial sonant; and in view of Moso *gi* and Burmese *im*, we are bound to presume that Tibetan *k'yim* is evolved from **gi-im* or *gi-yim* (Bunan from **gi-yum*, compare Meitei *yum*), the aspirate surd being a subsequent development. Newāri *č'em* and Thādo *čen* ("house") have arrived at the same stage as Tibetan *k'yim*. Tibetan **gi*, further, corresponds to Chinese **gia*, *kia* 家 and Hei Miao *gie* ("house"). In regard to the change of initial guttural sonant into surd compare Chinese **gū* (*kū*) 懼 ("to fear"), Bunan *gyar-čum* with Ahom *kū*, *kūw* (Shan *kuw*) and Tibetan *s-krag-pa*. In the same manner as *k'yim*, also Tibetan *lam* ("road") is a compound formed from **la-am*; for in Newāri we find *la* ("road") beside *lam*, and in Bunan *am*, *am-tsi*, *om*, Milčan *om* ("road"); Tibetan **la* is presumably identical with *la* ("mountain-pass"), so that *lam* would mean "road leading over a pass," practically the only kind of road in Tibet.

and *ra* (*ra-ba*), "enclosure, wall, pen, fold." The word *k^cyer*, accordingly, signifies an "assemblage or block of houses." ¹ Si-hia *tsö* (probably to be restored to *dzö*, *jö*) is finally found also in Tibetan *rdzoñ*, which doubtless is divisible into *r-dzo-ñ* and evolved from **ra-dzo-ñ* (**ra* = *ra*, "enclosure"). The usual pronunciation in Central and Eastern Tibet is *joñ*. ² There is, in all probability, further relationship with Chinese **dzoñ, joñ* (*dzian, zian*) 牆 ("wall"). Rashid-eddin narrates that the people of Tangut have dwelt in towns and steppes since oldest times.

Two other Tibetan words merit consideration in this connection, — *groñ* ("town") and *k^crom* ("market, bazar"). Both apparently represent parallels developed from the same base, **gi-roñ* (*rom*), *roñ* and *rom* being identical. Both the primeval form **gi* and the later development **k^ci* are encountered in the cognate languages: No-su Lo-lo *gi kao*, Kuei-chou Chuñ-kia *gei*, Kuang-si Chuñ-kia *heo* ("market;" S. R. CLARKE, *Tribes in South-West China*, p. 310); Ya-č'io Miao *ki*; Nyi Lo-lo *k^ce*, A-hi Lo-lo *č'ö*; Ki-lao *k^cö*, Hua Miao *k^cü* ("market"); Kuki-Chin: Lai-kwa, Rañk^col *kū*, Thādo and Lušai *k^cua*, Meitei *k^cü-l* ("village"). Tibetan **roñ, rom*, may be compared with Kachin *ma-reñ*, *ma-re* ("village;" *ma* being a prefix), Burmese *rwā*.

48. Si-hia *č'i* 直, flesh = Mo-so *š'i, š'e, š'ö* (written language *š'ü, š'e, š'i*); Mi-nāg (BABER) *š'i*; Tibetan *ša*; Kachin *ša-n*; Burmese *a-sā'*; Chinese *šou*, **yu-k, ŋu-k* (Japanese *šiku*) 肉; Lo-lo (Nyi *ra*; A-hi *ho, po-ho*) is different, but Lo-lo of T'ung River (BABER) *š'i-ni*. Note

¹ From what has been said about the development of *k^cyim* it follows that the primeval type of *k^cye-r* must have been **g^ce-r, ge-r* (*ge-ra*). This **ge-r* I believe I recognize in the name of the border-fortress *Liger* ليكر, which, according to Rashid-eddin, was situated in the realm of Tangut, and was destroyed by Chinggis.

² Mr. WALSH (*J.R.A.S.*, 1915, p. 466) is quite right in saying that "a *dzong* in Tibet is not merely a fort, but a district, of which the fort is the headquarters of the administration under the Jong-pön." As shown by the etymology of the word, it originally designated a fortified ("walled," *ra*) place.

that both Si-hia *či* and Chinese *žou* have the deep tone, while Tibetan *ša*, owing to the change of the initial, is high-toned. Chinese *ki*, *či* 肌 ("flesh"), on account of being high-toned, cannot come into question for comparison.

49. Si-hia *la* 朧, tongue = A-hi Lo-lo *lo*; Black Lisu *la-č^cue*; Ahom *lā*, Shan *li-n*; Gुरु, Murmi, and Sunwār *le*; Magar *le-t*, Tōtō *le-be*, Vāyu *li*, Lepcha *a-li* (with prefixed *a*), Lušai *lei*; Gešits^c *a v-le*; Bunan *l-he*; Burmese *lhyā*, Karen *p-li*.¹ Tibetan *lče*, as demonstrated by the facts of the cognate languages, is a compound evolved from **le* + *če* (*je*), each of these components signifying "tongue." The second element, *če*, is encountered in Mo-so *či*, Sharpa (Darjeeling) *če lak*, Thāmi (Darjeeling) *či-le*, Yün-nan Tibetan *j^ce-le*,² Jyarūn *de-š-mi*, Chinese **džiet*, *žiet*, 舌 (Hakka *še-t*, Canton *šu-t*, Fukien *sie-k*), Lo-lo-p^co *še-ve*; Lo-lo of T^cung River (BABER) *šie*.

Another Tibetan word for "tongue" is *ljags*, now assigned to the respectful style of speech (*že-sai skad*). Its origin is now clearly indicated by the phonetic writing *l-ja-g-s*, evolved from **le-ja* (**ja* = *če*, *je*), to which the consonants *-g-s*, terminating nouns, are affixed. The prefix *l-* in the verb *l-dag-pa* ("to lick") has doubtless sprung from the base *le* ("tongue").

50. Si-hia *la* 朧, hand = Mo-so *la*; Nyi Lo-lo *le-p^ce*, A-hi Lo-lo *lye-pö*, Lisu *le-pe* (Hua Lisu *la-kua*); Kachin *la-ta*, *la-pan*; Pahrī *lā*; Newārī *lā-hā*; Tromowa and Sikkim *la-ko*; Tibetan *la-g*; Taungyo (Karen language) *la-k*.

51. Si-hia *k^co* 刻, foot = Mo-so *k^cö*, *k^cu* [A-hi Lo-lo *k^ci-bye?*]; Hor-pa (HODGSON) *ko*, Sok-pa (HODGSON) *k^co-il*; Li of Hai-nan *k^co-k*; Kami and Shö *k^co* (also *a-k^co* and *a-k^cu-t*); Meitei *k^co-ü*; Thādo *k^cu-t* ("finger"), *ke-ü* ("foot"); Lušai *ke*; Burmese *k^cre*; Kachin *la-go-ü*.

¹ Newārī *me* is isolated.

² The two forms *či-le* and *j^ce-le* are merely inversions of Tibetan **le-če*.

The primary base is *go, preserved in Kachin, further in Kanauri *gu-d* ("hand, arm"), and in Old Chinese **gu-k* 脚 ("foot"); it further appears in Tibetan *a-gro* ("to go, walk"), *gro* from **go-ro* (**ro* also in *a-grul*, from **go-ru-l*), and in Mišmi *mgro* ("foot"), from **me-go-ro*.

52. Si-hia *k'o-i* 刻移, boot. Probably a derivation from *k'o* ("foot").

53. Si-hia *mei*³ 每, eye = Lo-lo-p'o *me-du* (Bhütan *mi-do*, Sokpa *nū-tu*); Mo-so *mö*, *m'ö*; Lisu *mie-su*; Jyaruñ *d-mye*; Newāri *mi-kā*; Chinese *mu-k* 目; Tibetan *mi-g*; Kirānti *ma-k*; Burmese *mya-k*, *mye-t*; Thādo *mi-t* (*mū*, *mū-k*, "to see"). The base is **me*, *mi*, etc. (compare also Tibetan *me-loñ*, "mirror," Takpa *me-loñ*, according to Hodgson, "eye;" Hor-pa *mo*, Manyak *mini*, from **mo-* or *me-ni*; Kachin *myi*; Chinese *mou* 眸, "pupil of the eye," and *mou* 瞽, "near-sighted," derived from the same base). In the Si-hia word for "lungau," *wöi-mei*, which means "dragon's-eye," being a literal translation of the Chinese term *luñ-yen*, the word *mei* ("eye") is written *mei*² 梅. It is not, however, a difference in tone which is here intended, but it seems that the classifier 木 was added to the phonetic element merely for the purpose of indicating to the eye the botanical character of the term.

54. Si-hia *mo*⁴ 墨 eyebrows = Chinese *mei*², *mi*² 眉; Tibetan *s-mi-n-ma*; Newāri *mi-sa*. The Lo-lo and Mo-so terms are not on record. On p. 1232, Mr. Ivanov states that "eyebrows" is *mo-ma*, so that we should have the same affix as in Tibetan.

55. Si-hia *si* 息, liver = Nyi Lo-lo *se*; Mo-so *se-r*; Jyaruñ Tibetan *te-šie*; Tibetan written language *m-č'i-n*, from base **či*; Kanauri *či-pur* and *ši-ñ*; Newāri *sya-lā*.

56. Si-hia *č'i* 吃, gall = Nyi Lo-lo *če*, A-hi Lo-lo *i-ki*; Tibetan *m-k'ri-s*; Lepcha *k'i-bo*; Kachin *ša gri*.

57. Si-hia *mo* 沒, lip = Lo-lo-p^o *mē-čō*; Tibetan *m-č^ou*, evolved from **mē-* or *mō-č^ou*. Nyi Lo-lo *ñi-p^ou* and A-hi Lo-lo *ni-p^oye* are independent words.

58. Si-hia *č^oui-ko* 垂箇, tooth. This word represents the combination of two synonymes, each with the meaning "tooth." Si-hia *č^oui* is not related to Tibetan *so*, as stated by Mr. Ivanov, but is akin to Nyi Lo-lo *č^oe-ma*, Hua Lisu *ts^oe-č^ou-r*, Lo-lo of T^oung River (BABER) *ji-ma*; Shan *k^oiw*, Ahom *k^oriw*; Tibetan *ts^oe-m-s*, Burmese *Swà*, Chinese *č^oi* 齒. The element *č^ou* of Hua Lisu answers to A-hi Lo-lo *č^oa-rō* or *č^oa-ho*, and to the second element in Lo-lo-p^o *so-čō*. The latter compound plainly shows that the series with initial sibilant is distinct from that with initial palatal surd. The element *so* in Lo-lo-p^o *so-čō* certainly is identical with Tibetan *so*, Gešits^o *šo*; it further occurs in P^ou-p^oa *su*, Chō-ko *su-ma*, Mo-so (written language) *še*, and in the languages of Nepal: Guruñ *sa*, Murmi *s-wā*, from **sa-wa* (Newari, Takpa, and Pahari *wā*), Magar *šyāk*, Tōtō *si*. The word *ko*, forming the second part of the Si-hia compound, is met in Mi-nag (BABER) *fu-k^owa* ("molars"), Karen *ku-kō*, Manō *ku-ki*, Yintale *ta-kai*;¹ Siamese *k^oiau*, Shan *k^oio*, Laos *kiu*.²

59. Si-hia *wo-wei* 訛味, stomach, abdomen. This is a compound formed by two synonymes, that are found in the same manner in La-hu Lo-lo (DAVIES) *wop-pe* (for *wo-pe*). The first element, *wo*, occurs in Tibetan *p^oo-ba* (*p^oo-wa*), Tromowa *p^oo*, Yün-nan Tibetan *a-po*; Lepcha *pu-p*, *ta-fu-k* ("abdomen"); Red Karen *p^oū*, Burmese *wam-pū-k*, *po-k*; Kuki-Chin group: Meitei *pu-k*, Lušai *pu-m*, Lai *pā*. The second element, *wei*, is found in Chinese *wei⁴* 胃, "stomach" (note the identity of tone with *wei⁴* 味), Nyi Lo-lo *e-pi* ("abdomen"), in other Lo-lo dialects *vi-mu*, Thādo (Kuki-Chin) *wai*, *oi*.

¹ *Gazetteer of Upper Burma and the Shan States*, Part I, Vol. I, p. 648.

² *Ibid.*, p. 630; and MASPERO, *Bull. de l'École française*, Vol. XI, p. 167. Perhaps further relationship exists with Amoy *ge*, Ningpo *no*, and Cantonese-Hakka-Fukien *na*, **a* 牙.

60. Si-hia *no* 孽, back. This formation is isolated, as far as the initial guttural nasal is concerned, which in the cognate languages answers to *g*: Mo-so *gu-dse*, *gö-se*; Lepcha *ta-gu-m*; Tibetan dialects *g'a-p*, *g'e-p*, written language *r-gya-b*; Gurun *g'o*.

61. Si-hia *wu-yi*, *u-yi*, *u-i* 勿移, backbone. The first element is presumably related to No. 60; in this case *-i* is a suffix (see Morphological Traits).

62. Si-hia *no* (lo) 羅, disease = A-hi Lo-lo *no*, Nyi Lo-lo and Tibetan *na* (Tibetan also *na-d*), Burmese *ná*.

63. Si-hia *tsö-wei* (wö) 則胃, hatchet. The nearest approach is BABER'S Mi-nag *wo-tsu* ("axe") with inverted members; for the Lo-lo of Tung River he gives *wu-ma*; compare Chö-ko *sa-va*, Kachin *niñ-wa*. In Nyi Lo-lo *ra-tsu* ("hache"), *ra* corresponds to Si-hia *wei*; and *tsu*, to *tsö* (regarding the interchange of *w* and *r* compare Nos. 24 and 25); A-hi Lo-lo *ö-ts'ö*, Lo-lo-p'ö *a-tso*, P'u-p'a *sa-ču*. Compare further Tibetan *tog-rtse*, *tog-tse*, *tog-tsö* ("hoe"), Yün-nan Tibetan *tar-rö* (common Tibetan *sta-re*); Thädo *tü-tsā* ("hoe"). Chinese *pu*, *fu* 鈇, 斧 ("axe") may be grouped with Si-hia *wei*, Mi-nag *wo*, Lo-lo *wu*.

64. Si-hia *le*, *lo* 勒, heavv = Lo-lo-p'ö *li*;¹ Kachin *li*; Mo-so *li*, *lia*; Black and White Lisu *a-ke-li*, Hua Lisu *li*; A-hi Lo-lo *h-lö*; Nyi Lo-lo *l-je*; Tibetan *l-či*, evolved from **le-* or *li-či*; Bunan *li-ko*; Kanauri *ki-k*, *li-g*; Milčan *li-hig*.

65. Si-hia *mi* 迷, high = Mo-so *me-ša-ša*, Lo-lo of Tung River (BABER) *a-mo-so*; Nyi Lo-lo *mu*, A-hi Lo-lo *mo*; La-hu Lo-lo (DAVIES) *mwa*; Tibetan *m t'ö*, from **me-t'ö* (the vowels of these restored elements naturally remain uncertain); Burmese *mrañ*, *myen*, *t'wā*; Yün-nan Tibetan *t'qa*. The Mo-so and Lo-lo elements *ša*, *so*, are comparable with Ahom *yu-ñ*, Shan *hsu-ñ* ("high"); Thädo *a-sāñ*

¹ A. LIÉTARD, *Am Yün-nan*, p. 222.

("high"). E. H. PARKER (*Up the Yang-tse*, p. 273) notes a Miao-tse word *ša* ("high").

66. Si-hia *na-kü*, *na-gü* 那局, at night. The second element seems to correspond to Mo-so *mu-ku*, *mè-k^cu* ("night"), *mö-kö* ("evening"), *u-ko* ("midnight"); and Black Li-su *mu-k^ce* ("night"); Ahom *k^cü-n*. The Mo-so element *me*, *mu*, answers to Lo-lo-p^co *a-mo-č^o* ("night"); otherwise the Lo-lo languages have different words: A-hi *so-vu*, P^cu-p^ca *na-si-lyä* (*na* possibly related to the first element of the Si-hia word), Chö-ko *si-pa-i*. The equation of Si-hia *na-kü* with Tibetan *nam-guñ*, proposed by Mr. Ivanov, is untenable; for *nam-guñ* means "midnight" (*nam*, "night;" *guñ*, "middle"), while in the Si-hia term *kü*, *gü*, refers to "night," and *na* might well be a pronominal or adverbial element. We meet the latter again in Si-hia *na-lo* ("to-morrow"); compare further Milčan *na-sam*, "to-morrow" (*sam* = Tibetan *sañ*, "to-morrow;" Bunan *zañ-ma*, "day," *bar-sañ*, "year").

GROUP III.

Words Related to Lo-lo and Mo-so, without Equivalents in Tibetan and Chinese.

67. Si-hia *lo* 勒, tiger = A-hi Lo-lo *lo*, Nyi Lo-lo *la*, Lo-lo-p^co *lo-mo*, Lisu *la-ma*; Mo-so *la*; Manyak (HODGSON) *lêphê*. This series is independent of Tibetan *stag*, Chinese *fu*, *hu* 虎, and the type *su*, *sü*, encountered in all T'ai languages (Siamese and Black Tai *süa*, Shan *sü* [*süw*], Ahom *su*, *shü*, Khamti *sü*).¹ A base with initial *s* occurs likewise in Kačāri *mo-sa*, *ma-sa*, and Lepcha *sa-t^cañ* or *sa-t^coñ* ("tiger").² This word simultaneously shows us that Tibetan *stag* is a compound, which has arisen from **sa-tag*, *sa-d^cag*. The

¹ MASPERO, *Bull. de l'Ecole française*, Vol. XI, p. 161.

² Perhaps also in Lušai *sa-kei*, and Kachin *si-roñ*; *-kei* answers to Meitei *kei* and Burmese *kyū* ("tiger").

element *sa* survives in Tibetan *g-sa* ("Felis irbis"), the prefix *g-* being identical with that in *g-zig* ("Felis leopardus"). The second element, **tug*, *d'ag*, corresponds to Lepcha *t'an*, *t'on*; Newari *d'u*, *d'um* (at present *tuñ*);¹ Waliñ *d'in(a)-ra*; Kami *ta-ka-i* (or *ta-ke-i*);² and language of Ch'u *wu-t'u* 烏菟 or *t'u* (from **du*, *d'u*) 兔.³

Also in Tibetan we find a form with initial aspirate surd: *t'wi-ña* ("a three-years-old tiger" 三歲虎),⁴ which seems to have arisen from *t'u-ña* (**d'u-ña*). While the ancient language of Ch'u is thus connected with Tibetan and still more closely with Nepal, the *l*-base of Lo-lo, Mo-so, and Si-hia is wedged in between them. This state of affairs is curious, and may raise the question as to whether it may be due to an outside influence upon these languages. In the Mon-Khmér family we have also an *l*-base for the designation of the tiger: Kuy *k'o-la*, Khasi *la* and *k'la*, Mon and Bahnar *k-la*, Khmér *k'la*, Stien *klah*; Kolh *ku-la*; ⁵ Palaun *la-wai*, Wa *ra-woi*. A derivation of Lo-lo *lo* from this quarter, of very ancient date, seems to me quite possible.

68. Si-hia *ye* 野, sheep, mutton, wether = Mo-so *yo*, *yu*, *yü*; Nyi Lo-lo *jo*, A-hi Lo-lo *ju*; Hua Lisu *a-ju*, Black and White Lisu *a-č'ö*; Min-kia, Mi-ñag and Lo-lo of T'ung River *yo*; Jyarun *ke-yó*; Thado *yao*, *yā-m*. [Possibly related to Hok-lo *yo*, Amoy *ye* 羊 (*yan*).]⁶

69. Si-hia *tan*, *dan* 担, mule. This word certainly is not related to Tibetan *ra* ("horse," see No. 7), as suggested by Mr. Ivanov,

¹ A. CONRADY, *Z.D.M.G.*, Vol. 47, 1893, p. 565; and *Caustio-Bildung*, p. 106.

² The *k*-base denoting "tiger" occurs in T'öu *k'ok*, Gyami *k'u*, Jyarun *kon* (HODGSON).

³ LEGER, *Chinese Classics*, Vol. V, pp. 117, 297; T. DE LACOUPERIE, *Les Langues de la Chine avant les Chinois*, pp. 18, 19; CHAVANNES, *Quatre inscriptions du Yün-nan* (*Journal asiatique*, 1909, juillet-août, p. 31).

⁴ Thus explained in K'ien-lung's Polyglot Dictionary (Ch. 31, p. 5). JÄSCHKE, following I. J. Schmidt, says that it means "three years old, of animals."

⁵ Compare R. KUHN, *Beiträge zur Sprachkunde Hinterindiens* (*S.B.A.W.*, 1889, p. 213).

⁶ An interesting equation is presented by Tibetan *t'on-ya* ("a young ram in the first and second year") and Chinese *t'wi* 撞 ("a young ram").

nor to Tibetan *dre* ("mule"), Jyarun *dar-ke*. The latter word apparently is associated with the verb *a-dre-ba* ("to be mixed"), and accordingly means "mongrel." The Chinese word *lo-tse* 騾子 has been widely disseminated over the Indo-Chinese area (for instance, A-hi Lo-lo *lo-dse*, Nyi Lo-lo *a-la-sa*; White Lisu *a-mu* ["horse"]-*lo-tzu*; Shau *li*, Siamese *la*, Laos *luwa*, etc.), and has transgressed the Great Wall (Mongol *lo-sa*, Niūci *lao-sa*, Manchu *lo-sa*). Mo-so (written language) *ku* appears to be an independent word; but the first element of Mo-so *ten-ja* ("donkey") seems to be in some relation with our Si-hia word; Mo-so *ja* means "horse."

70—71. The Si-hia language possesses two words for "year,"—*kou* 苟 and *wei* 韋. Si-hia *kou* = Mo-so *k^cu*, *kvu*; A-hi Lo-lo *k^cu*, Lo-lo-p^o *k^co*; Black and White Lisu *k^co*, Hua Lisu *ci-k^co*; Lo-lo of Tung River (BABER) *koa*; P^cu-p^{ca} *kwe-so-mo*, Chō-ko *ta-ko*; Burmese *ku*. Si-hia *wei* (perhaps *bei*) = Chuñ-kia of Kuei-chou *bi*, of Kuang-si *bei*; Ahom *pī*, Siamese and Shan *pi*; Li of Hai-nan *po*, Tai of Phu-qui *suay*;¹ Old Chinese *s-wai*; Fu-kien *s-wui* 歲 (as phonetic *wei*); Ya-č'io Miao *sō*, Hua Miao *su-ni*.

72. Si-hia *tsu* 祖, winter = Mo-so *tse-lu* (*lu* = Si-hia *lu*, "season"); Nyi Lo-lo *ts^ce*, A-hi Lo-lo *jye*; Hua Lisu *mu-ts^cu*.

73. Si-hia *nōn*, *nō* 能, spring = Nyi Lo-lo *nā*; A-hi Lo-lo *ni*; Mo-so *ni*.

74. Si-hia *č'in-ni*, *č'i-ni* 頃尼, summer = Mo-so *je*; Nyi Lo-lo *xi*; Hua Lisu *mō-ši*.

75. Si-hia *nie*, *ne* 烈, mouth = Nyi Lo-lo *ni-nā*, A-hi Lo-lo *ni-p^cye*, Hua Lisu *me-ne*, Mo-so *nō-ta* (compare also Magar *ner*, Tōtō *nui-gañ*); perhaps also Ahom *na*, Shan *na* ("mouth, face").² This element has shrunk into a prefixed consonant in P^cu-p^{ca} *n-to* and Chō-ko *n-ku*. The element *to* in P^cu-p^{ca} *n-to* is apparently identical

¹ MASPERO, *Études sur la phonétique hist. de la langue annamite*, p. 45.

² E. H. PARKER (*Up the Yang-tse*, p. 272) notes a Miao-tse word *ngha-mion* ("mouth").

with the second element in *Mo-so nō-ta*, with *Pahri to*, and *Newari mhu-tu*. The *Lo-lo-p'ō* word *me-ku* is different from that in the other dialects, the element *ku* being identical with the first element in *Black and White Lisu k'ua-p'ei* (perhaps also *Chinese k'ou* 口 and *Tibetan k'a*).

76. *Si-hia wu-ki* 勿即 (probably *wu-gi* or *bu-gi*), kidney = *Nyi Lo-lo ju-ghe*. The element *wu, bu*, is possibly related to *Jyaruñ po-tu* ("kidney").

77. *Si-hia k'ā-i, č'ā-i* 皆移, genuine, true = *A-hi Lo-lo če*, *Nyi Lo-lo če, je*, *Mo-so čo-n*; *Ahom te* ("truth"). *Mr. Ivanov* has added to this word the observation, "Tibetan *kie*." Such a Tibetan word is not known to me.

78. *Si-hia na* 那, dog (used only in the duodenary cycle, as far as we know at present) = *Lo-lo a-na, a-no* (see No. 175).

79. *Si-hia tsō, dsō, jō* 則, mountain = *Ki-lao dse*; *Lo-lo-p'ō u-tsyē-bo*, *Hua Lisu wa-č'i-la-ku*, *Mo-so ji-na-me*. The element *bo* of the *Lo-lo-p'ō* word occurs as independent word for "mountain" in *Nyi Lo-lo pō*, *A-hi Lo-lo po*, *Black Lisu wa-p'ō*; further, in *P'ū p'ū bo-mi*, *Chō-ko ha-pu-ma*, *Chuñ-kia bo*, *Hei Miao hao, biei*, *Ya-č'io Miao bie*, and seems to be allied to *Siamese b'u (p'u)*, etc.;¹ *Thado mo-l*. It is fossilized in *Li-fan Tibetan b-se* (from **bu-se*).

80. *Si-hia dsei, jei* 則移, south = *Nyi Lo-lo šle-čē*, *A-hi Lo-lo hli-ki* (the words *šle* and *hli* mean "wind"); *Mo-so i-č'i-me* (*Black Lisu yi-mō*).

81. *Si-hia la* 釐, north; possibly = *Mo-so lo* in *huš-gu lo*. The *Lo-lo* base is *ma* (*A-hi hli-ma*, *Nyi šle-ma*).

82. *Si-hia wu* 勿, east; possibly = *Lo-lo* of *T'ung River (BABER)* *bu-du*. The element *du* refers to the sunrise, as shown by *Nyi Lo-lo*

¹ MASPERO, *Bull. de l'École française*, Vol. XI, p. 159.

ē-du ("sun rising" = east). Whether Newārī *wam(-tū)* may be utilized for comparison seems doubtful. ¹

GROUP IV.

T'ai Affinities.

83. Si-hia *liao* 料, blood. As far as I know, this word meets its counterpart only in Siamese *lūet* ("blood"). ²

84. Si-hia *k^o* 客, rice = Siamese *k^ouo*, Shan and Ahom *k^oau*, White Tai *k^oou*; ³ Leñ-ki Miao *kia*; ⁴ Mo-so *k^oia*; Meng-hua Lo-lo *sa-k^oao*; La-hu *sa-k^oa*. ⁵

85. Si-hia *mo*, possibly *ma* 魔 ("forest"), meets no parallel in Tibetan or Chinese, or in Lo-lo (Nyi *se-Mlai*, A-hi *le-bö*, Lo-lo-p^o *sü-dzö-li*) or Mo-so (*bi-na*, *nau* = Tibetan *nags*); but it is comparable

¹ The designations for the four quarters in Si-hia—*la* ("north"), *jei*, *dasi* ("south"), *wu* ("east"), *lin*, *rin* ("west")—do not agree with the corresponding names in Tibetan (*byan*, *lho*, *jar*, *nuḅ*). This is not surprising, in view of the fact that there is no coincidence along this line between Tibetan and Chinese and among the Indo-Chinese languages in general. This group of words was evidently formed after the separation of the Indo-Chinese tribes. Tibetan and Burmese have only the word for one quarter of the compass in common; namely, that for the west, Tibetan *nuḅ*, Burmese *nok*, proposed by B. HOUGHTON (*J.R.A.S.*, 1896, p. 34), provided this combination be correct. For Si-hia *li^o* 嶺 ("west") I have only one parallel to offer, Milcān *ni^o* (A. CUNNINGHAM, *Ladāk*, p. 408).

² Mr. Ivanov transcribes the character in question *hsieh*, and accordingly connects the word with Chinese *hsie* 血.

³ MASPERO, *Bull. de l'École française*, Vol. XI, p. 167.

⁴ T. DE LACOUPERIE, *Les langues de la Chine avant les Chinois*, p. 45.

⁵ The last two words are contributed by H. R. DAVIES (*Yün-nan*, p. 361). Davies proposes also to connect this type with the Mon-Khmêr languages: P^o-u-man *n-k^oa* (compare Kachin *n-gu*), Wa *n-gou*, Palaun *la-kou*, Khmêr *añ-ka*, K^o-a-mu *am-k^oo*, Annamese *gao*, La *kao*. While I do not share the view of Davies that Mon-Khmêr and Indo-Chinese are mutually related, his proposition notwithstanding is highly suggestive, inasmuch as the word may be a very ancient Mon-Khmêr loan-word in the T'ai languages (or *vice versa*?).—Note that the T'ai word is employed only in some Lo-lo dialects: A-hi *ta-mi* and Lo-lo-p^o *te-mi* have the Chinese word *mi* 米; Nyi Lo-lo has an apparently independent word, *te'i-se* ("riz non decortiqué") and *tsa* ("riz cuit"), where the vowel-change for the expression of differentiation in meaning is interesting.

with Leñ-ki Miao *ma-le*, and possibly with the series *pa* of the T'ai languages.²

86. Si-hia *ma* 麻 ("tree"), which seems to root in the same base as the preceding word, likewise points to connection with the T'ai family: Ahom and Shan *mai* ("wood, tree"), Siamese *mai* ("wood, tree"). Father TH. MONBEIG³ imparts a Yüu-nan Tibetan word *ma-den* ("trunk of a tree"); the second element, *den*, is obviously identical with Tibetan (written language) *s-don*, "stem" (coll. Tibetan *šin-don*, "tree;" Murui *d'on*, "tree"), so that *ma* would have the meaning "tree." In other Tibetan dialects such a word *ma* is not known to me, and if it should occur only in the Tibetan of Yüu-nan, it might well be a loan-word due to Shan influence. In Lo-lo and Mo-so we have a root *se, sō, so, sü*: Nyi *se*, A-hi *se-ts'e*, Lo-lo-p'ō *so-dso*, P'u-p'a *su-ma*; Mo-so *se, sō, so, sa* ("wood"), *ndsō, se-n-dsen* ("tree"). In view of Chō-ko *si-ma* (in which the Shan element *ma* may be visible), a relationship of the Lo-lo and Mo-so series with Tibetan *šin* ("wood, tree") is possible; also in Tibetan dialects, the final guttural nasal is eliminated, for instance, in Jyaruñ *še*. The coincidence of Chō-ko *si-ma* with Newāri *si-ma* ("tree") is very striking.

87. The Si-hia word for "fruit," *ma* 麻, is evidently the same as that denoting "tree," and likewise meets its counterpart in Siamese *ma* ("fruit") and Chuñ-kia *lek-ma* (*lek* is numerative).⁴ In this case, however, we have a missing link in Nyi Lo-lo *ma* ("fruit").

88. An interesting T'ai element in Si-hia is presented by the word *kun* ("man;" IVANOV, p. 1233, Chinese transcription not being

¹ T. DE LACOUPERIE, *l. c.* The element *le* is related to *le-bō* of A-hi and *li-dū-ma* of Chō-ko (the *ma* of the latter perhaps is identical with Miao *ma*).

² MASPERO, *l. c.*, p. 159.

³ *Bull. de l'École française*, Vol. IX, p. 551.

⁴ P. VIAL, *Les Lolos*, p. 34.

given). In the T'ai languages we have Siamese *k'on*, Shan *kon*, Laos *k'on*, Ahom *kūn*, *kun* ("man"). Perhaps also Tibetan *kun* ("all") belongs to this series.

89. Si-hia *kia*, *k'a* 假, duck, wild duck = Hei Miao *ka* (S. R. CLARKE, *Tribes in South-West China*, p. 309). The relationship with Chinese *ya*, *ap* 鴨 ("domestic duck"), proposed by Mr. Ivanov, is difficult to admit.

90. Si-hia *wei-ma* 韋麻, pear (*ma*, fruit). The word *wei* may be connected with Ya-č'io and Hua Miao *ra*, Hei Miao *za* ("pear;" S. R. CLARKE, *l. c.*, p. 312; the *z*, according to Clarke, is "a rough initial sound, indescribable, and must be heard to be appreciated;" these difficult sounds, of which we have as yet no exact phonetic description, are recorded in a state of embarrassment as *z* or *r*; we found several examples where these correspond to Si-hia *w*, see Nos. 24, 25). Lo-lo has independent words: Nyi *se-č'e-ma*, A-hi *sa-li* (*li* Chinese loan-word); *se-ndu* (CLARKE).

GROUP V.

Chinese Affinities.

91. Si-hia *wu* 勿, father = Chinese *fu* 父.

92. Si-hia *ma* 麻, hair = Chinese *mao* 毛. Further parallels are in Guruñ (Nepal) *mui*, in Limbu (Nepal) *mū-rī* ("hair of body"), in Sañpañ (a Khambu dialect) *mwa* (in other dialects of the same group *mi*, *muñ*, *muwa*, *mua*, *mui*, *māa*).

93. Si-hia *pa* 巴, palm of the hand = Chinese *pa* 把, to grasp with the hands; *pa-č'añ* 巴掌, palm.

94. Si-hia *kwañ-niñ* 光寧, neck. The first element of this compound seems to be related to Chinese *kōñ*, Hakka *kiañ* (Korean *kion*) 頸 ("neck, throat"); but it is very striking that the Si-hia form closely agrees with Bunan *koañ-gul*, *kwañ-gul* ("neck"), where

gul answers to Tibetan *m-gul*. The second element is perhaps comparable with Chinese *liñ* 領 ("throat") and Lepcha *tuk-liñ, tuñ-liñ* ("neck").

95. Si-hia *wu-ni* 勿你, wild animals; possibly = Chinese *tou(t)* 物 ("creature, animal"); Chepan *sva* ("quadruped"). Perhaps also Mo-so *go-ge* ("animal") belongs here.

96. Si-hia *tu⁴* 瀆, bean = Chinese *tou⁴* 荳 (*tu* is possibly a Chinese loan-word in Si-hia).

97. Si-hia *ya* 牙, goose = Northern Chinese *yen* 雁 (Fukien *ñan*, Cantonese and Hakka *ñan*; Tibetan *ñan*).

98. Si-hia *man*, serpent (sixth year of the cycle, but presumably the general word for "snake")¹ = Chinese *man* 蟒, python.

99. Si-hia *čai-ni* 雀尼, fox; possibly = Chinese *č'ai* 豺. In Lo-lo and Mo-so we have a base with initial *d*: Nyi *o-du-ma*, A-hi *a-dō*, Mo-so *ndra*, and Mo-so written language *da*; *pa*, another word for "fox" used in the latter, apparently is identical with Tibetan *wa* (also *wa-tse*), Bunan *goa-nu*, *g-wa-nu* (Tromowa *am*, *a-mu*; Sikkim *am*); perhaps also Ahom *ma*, Shan *mā-lin*.

100. Si-hia *šan-wei* 尙崑 (translated by Mr. Ivanov "shirt");² the first element *šan* = Chinese *šan* 裳 ("clothes on the lower half of the body").³ The second element *wei* refers likewise to an article

¹ This may be inferred from the fact that Si-hia offers a word of its own for "dragon," which is used also in the Si-hia cycle for the designation of the dragon-year, while *man* strictly refers to the year of the serpent. If *man* in Si-hia would denote the dragon, I should not hesitate to regard it as a loan-word. As such we find *man*, for instance, in Niuči *man-lu-won*, being the equivalent of Chinese *man-lun* 蟒龍, in opposition to the native word *mudur* (Manchu *muduri*).

² Probably it is "undergarment." The Tibetan tribes and their congeners have no shirts. "Le Lolo ne porte pas de chemise" (P. VIAL, *Dict. français-lolo*, p. 79). The coincidence of Chinese *šam* 衫 ("shirt") with Tibetan *šam*, *g-šam* ("lower part of a thing"), *šam-got*, *šam-t'abs* ("lower garment, skirt"), is interesting.

³ The character transcribing the Si-hia word is the phonetic element employed in the character 裳.

of clothing, for in the chapter on the Si-hia, embodied in the Annals of the Sung, this word *wei*, reproduced by the same character, is explained as "a red, knotted ribbon hanging down from behind the button of the official cap." ¹ This certainly is a rather specialized significance, which does not fit the case of *šan-wei*, but we are perhaps allowed to infer from this example that *wei* had also a more general meaning with reference to attire. Further, Si-hia *wei* may be compared with Lo-lo *bā, bi* ("coat"): Nyi Lo-lo *šlo-bā* ("habit"), *šla-bü* ("pantalon, c'est-à-dire habit enveloppant la cuisse"); A-hi Lo-lo *a-bi, ka-bi* ("habit"), *lo-bi, lu-bi* ("pantalon") [Mo-so *bā-la*, "habit"; Bu-nan *p^cos*, "garment, dress"?]; Chuñ-kia *bu*, Hei Miao *u* ("clothes"); Meitei *p^ci*, Kachin *m-ba*, Burmese *a wat*. The combination of *šan* and *wei* leads me to conclude that *šan*, in the same manner as *wei*, is a genuine old Si-hia word, not merely a Chinese loan-word. Chepan *sum-ba* ("lower vest") ² is an analogous formation, though I am not convinced that the element *sum* is the phonetic equivalent of Si-hia *šan*.

101. Si-hia *no*, 餓, lake (Ivanov: "sea;" compare Tibetan *mts^co*, "lake," *rgya-mts^co*, "sea"). Possibly related to Chinese *lu* 湖, Cantonese *u, wu*.

GROUP VI.

Tibetan Affinities.

102. Si-hia *lu* 六, body = Tibetan *lu, lu-s*.

103. Si-hia *wu* 吳, head = Tibetan *wu, u* (written *dbu*); Miñag (BABER) *we-li*. The same word occurs in the first element of A-hi Lo-lo *o-ko*, Lo-lo-p^co *u-di*, and Mo-so *wu-k^cua*. The element *ko* in A-hi *o-ko* and Chö-ko *i-ko* (further Mo-so *ku-lü, ku-lō*) is apparently identical with Tibetan *m-go* ("head").

¹ 冠頂後垂紅結綬自號崑名 (*Sung shi*, Ch. 485, p. 5 b).

² HODGSON, *The Phoenix*, Vol. III, p. 45; or *Essays*, pt. 2, p. 51.

104. Si-hia *wu* 悟, centre, central = Tibetan *wu*, *wu-s* (written *dbus*).

105. Si-hia *niñ* 寧, heart = Tibetan *s-niñ*.

106. Si-hia *o* (*wo*, *no*)-*diñ* 訛丁, neck (Ivanov), but more probably throat, windpipe = Tibetan *'o-don* (written also *'o-lon*). The first element of the latter word, *'o*, appears also as *'og* (*'og-ma*, "throat, neck;" *'og-ajol*, "gullet") and *'ol* (*'ol-mdud*, "larynx"). It is further equivalent to *l-kog*, *r-kog* (*l-kog-ma*, "gullet, windpipe, throat, neck"), which is related to *m-gu-r*, *m-gu-l*, *m-g-rin* ("throat, neck"); that is to say, all these variations are derived from a common base **gu*, *go*, further developed into **ko* and *'o*. There is possible relationship with Chinese *hou* (in dialects *u*, *wu*, *ho*, *hau*) 喉 ("throat, gullet"), Siamese *k'o*, P^cu-p^ca *ko-bya*, and Mo-so *ki-pa*; Black Lo-lo *ko*; Burmese *kup-jak* (*gok-zet*);¹ compare further Kanauri *gol-ōñ* and Bunan *sta-gor-wa*.

107. Si-hia *miñ*, *mī* 名, man = Tibetan *mi*.

108. Si-hia *miñ*, *mī* 名, not = Tibetan *mi*; Si-hia *mo* 沒 ("not") = Tibetan *ma*. Compare Canton, Hakka, and Shaughai *m* 唔 ("not").

109. Si-hia *ma yüo* 麻說, river, that is, the River = Tibetan *r-ma č'u*, the Yellow River (Huang ho).

110. Si-hia *p^cu* 普, a place of higher altitude = Tibetan *p^cu*, upper part of an ascending valley (Si-hia *p^cu* is perhaps Tibetan loan-word).

111. Si-hia *k^cia* 恰, magpie = Tibetan *skya-ka*, *skya-ga*.

112. Si-hia *lo-tsei* (*tsü*) 羅賊, species of antelope; *lo* = Tibetan *lug* ("sheep"); *tsō* = Tibetan *gtsod* (*tsü*), *gtso*, *btso* ("Pantholops hodgsoni Abel").

113. Si-hia *po* 孛, species of antelope = Jyaruñ *po*, *ba*; Kanauri

¹ E. HUBER, *Bull. de l'École française*, Vol. V, 1905, p. 325.

p'ō and *fō* ("deer"); Ahom *pū* ("a fallow deer"); Tibetan written language *r-go-ba*, *d-go-ba* (Central Tibetan *go-a*), "*Procopra* or *Gazella pucticaudata*." ¹

114. Si-hia *lom*, *rom* (*lo-mo*) 羅沒, spring, well = Tibetan *k'-ron-pa* (*k'-rom-pa*), Yün-nan Tibetan *lom-ba* (*Bull. de l'École française*, Vol. IX, p. 550), Lepcha *ram* (compare No. 35).

115. Si-hia *lu* 路, season = Tibetan *lo*, year.

116. Si-hia *na* 那, cereals, barley = Tibetan *na-s*, Tromowa and Sikkim *na*.

117. Si-hia *na* 納, deed, action; possibly = Tibetan *la-s*, Bunnan *len*.

118. Si-hia *go*, *ko* 各, form; possibly = Tibetan *go-po* (written *sgo po*), "the body with respect to its physical nature and appearance." (Ahi Lo-lo *gō-mo*, Lo-lo-p'ō *gō-čō*, P'u-p'a and Chō-ko *gu-mo*, "corps".)

119. Si-hia *liñ*, *riñ* 令, great; perhaps = Tibetan *riñ*, "long, high, tall" (or rather = Ahom and Shan *luñ*, "great, large"?). This word *liñ* doubtless occurs in the two titles of Si-hia officials, *niñ-liñ* and *mo-niñ-liñ* (G. DEVÉRIA, *L'Écriture du royaume Si-hia*, p. 18).

120. Si-hia *sie-niñ* 薛寧, the day after to-morrow. The first element, *sie*, signifies "following, coming," as shown by the phrase *sie wei* 斜韋 ("next year;" *wei*, "year"). *Niñ*, therefore, is a noun, and identical with Tibetan *nañ(-mo)*, "morning," especially "the following morning;" *nañ-par*, *nañ-la*, written language *g-nañ*, "the day after to-morrow." In like manner Si-hia *yiñ* 盈 ("light, in weight") corresponds to Tibetan *yañ-po*, Lepcha *kyañ-bo*. Regarding Si-hia *i* = Tibetan *a*, see Phonology, § 1.

¹ See M. DAUVERGNE, *Bull. du Muséum d'histoire naturelle*, Vol. IV, 1898, p. 219. Mr. Ivanov translates the Si-hia word by "yellow sheep" as the literal rendering of Chinese 黃羊; but the latter term corresponds to Tibetan *rgo-ba*, Manchu *jeren*, Mongol *daegere*, *dsere* (K'ien-lung's Polyglot Dictionary, Ch. 31, p. 14).

121. Si-hia *tu* 漬, fruit; possibly = Tibetan *t'o-g* ("produce, fruit"), *lo-tog* ("annual produce, harvest"). Or the same as *tu* ("bean")? See No. 96.

122. Si-hia *ma-mo* 麻沒, mother = Tibetan *ma* ("mother"), *ma-mo* ("grandmother"). No equivalents in cognate languages are known to me for Si-hia *č'ōñ* 成 ("mother"). Si-hia *nir* (*ni-lo*) 你羅 ("relatives") possibly is identical with Tibetan *ñer* (*ñe, ñen, g-ñen*). Si-hia *p'ū-bu* (characters not given; certainly it is not *p'ū-pu*, as transcribed by Mr. Ivanov), "the ancients," may be akin to Tibetan *p'ū-bo, p'ō-bo* ("elder brother").

GROUP VII.

Dubious Cases.

123. Si-hia *tsu-ni* 足尼, rain (*-ni* being suffix), has no correspondent equivalent in Lo-lo and Tibetan (Tibetan *č'ar* belongs to the base *či, ju, ču*, see No. 37). Whether *tsu* can be correlated with Mo-so *šō*, Lepcha *so*, seems doubtful. It is striking, however, that we find an element *tsu* ("rain") in the Karen languages: Yintale *kan-tsu*, Manö *ka-ču*, Karen *ke-tsi* (in other dialects *kan, kam, kyan, kã, ka-le*).¹

124. Si-hia *yiñ-na* 迎那, agate. The first element *yiñ* may be identical with the Si-hia word *yiñ* 迎 ("star"). Whether the element *na* may be identified with Chinese *nao* 瑙, is questionable. The Tibetans transcribe Chinese *ma-nao* as *ma-nahu*; the Mongols have it as *manu, mānu*; the Niüči as *ma-nao*.

125. Si-hia *yi, i* 移, woman = Kachin *yi* ("female"), Ahom and Shan *ī* ("the youngest of several, young girl"), perhaps also Shan *yiñ*, Ahom *ñiñ* ("female"). The character 移 has the same tone (even lower) as *i* 姨 ("a wife's sister, mother's sister"); but owing

¹ *Gazetteer of Upper Burma and the Shan States, Part I, Vol. 1, pp. 652, 653.*

to the difference in meaning, relationship of the two words seems to me doubtful. The types of words expressing the notion "woman" are widely varying in Indo-Chinese, and even Tibeto-Burman has no word in common for it. A-hi Lo-lo *i-mo* ("female") presents merely a seeming coincidence with Si-hia, for, as shown by *i-po* ("male"), the base *i* means "man" (*-mo* = Tibetan *mo*, "woman, female;" Mo-so *a-mu*), and answers to *ya* in Lo-lo-p^o.¹ Lepcha *yu*, again, is a different word from Si-hia.

126. Si-hia *tsan* 搨, lungs (no relation to Chinese or Tibetan), possibly = Newārī *som*; Nyi Lo-lo *ts^e-p^u-ma*. Other comparative material is not available.

127. Si-hia *tsan* 搨, Chinese. Mr. Ivanov, who transcribes *tza*, suggests relation to Tibetan *rgya*, *rgya-mi*. This is difficult to prove. It is true that *rgya* is sounded at present *gya*, *g'a*, *jya*, and that the character in question was sounded in the T^{ang} period *ja* and *ǎa*;² but we cannot base our Si-hia readings on the T^{ang} phonology, still less is there any evidence that the Tibetans of the T^{ang} period articulated the word *rgya* as *ja* or *j'a*. The most probable assumption is that they pronounced it *gya*. The same Chinese character, that above and No. 126, is employed also for writing the Si-hia word *tsan* ("autumn"), which I am unable to explain through comparative analysis.

128. Si-hia *kwan* 幹, shoulder. This word, possibly, might be connected with Mo-so *kwa-pi* and Chinese *kien* 肩 ("top of shoulder"). On the other hand, Mo-so *koa-pi* may point to Chinese **kiap* 胛 ("part under and between the shoulder-blades"); the case, therefore, is still dubious. There are no corresponding forms in Tibetan or Lo-lo. The element *bu*, *bo*, *po* in Lo-lo (Nyi *bu-k'ü*, P^u-p^a *na-po*,

¹ Compare Huo Lisu *mu-ts'u* ("woman"), from *mu* ("female") and *ts'u* ("homo").

² F. W. K. MÜLLER, *Uigurica*, II, p. 101. It renders *sa* in Sanskrit words (A. VON STAEL-HOLSTEIN, *Kien-ch'ü-san-tsan*, p. 185).

Chō-ko *na-bo-ma*) may be related to Siamese *ba*, Shau *ma*.¹ A-hi Lo-lo *p'a-ni* may point to Tibetan *p'ra-g*; and Chinese *pañ* 膀 may be associated with Tibetan *d-puñ*, Lepcha *tuk-puñ*.

129. Si-hia *pu*, *bu* 不, spleen. Related to Newari *al-pe*? The word is not recorded for Lo-lo and Mo-so; it is independent of Tibetan *m-č'er(-pa)*, and Chinese *p'i* 脾, which has the lower tone, while *pu* 不 is in the high tone.

130. Si-hia *no-čui-ni* 萼追尼, chair. *Ni* is a suffix. The element *no* seems to be the same as the word *no* ("back"), transcribed by the same character (No. 60).

131. In the Indo-Chinese languages we meet a common word for "elephant" only in the eastern branch, T'ai and Chinese: Siamese *čañ*, Shan *sañ* or *tsan*, Khamti *čañ tsañ*, Laos *tsañ* (Mo-so *tso*, *tso-n*), Palaui *san*, Ahom *tyañ* (Lepcha *tyañ-mo*); Cantonese *tsōñ*, Hakka *sioñ*, Fukien *č'ioñ* (Japanese *šō*, *dso*), Northern Chinese *siañ*.² In the western branch of Indo-Chinese there is no common word for "elephant." The Tibetans evidently made the elephant's acquaintance only when they came in contact with India, as shown by their term *glañ-č'en* or *glañ-po-č'e* ("big bull").³ In Nyi Lo-lo we have *a*, in A-hi Lo-lo *ro* (distant relationship with Lepcha *ruñ-mo*?); Mo-so *tso*, *tso-n*, as indicated above, points to the T'ai group. In view of this diversity of words in the western branch of Indo-Chinese, it is not surprising to find a seemingly independent name for "elephant" in Si-hia *mu* 暮. Perhaps this word is related to some such form as Lisu *a-mu*, Chin *mwie*, Kachin *magwi*; but this is doubtful.

¹ MASPERO, *Bull. de l'École française*, Vol. IX, p. 553.

² Mongol *deñ* (Buryat *san*), written *degen* (*aga* being a graphic expedient to indicate the length of the vowel: compare *Begē-dsin* = *Pei čin* 北京 [Peking]; *šogor* ["peach"] = *t'ao'r* 桃兒; *lagūsa* or *lagūse* ["mule"] = *lo-tse* 騾子) is apparently a Chinese loan-word.

³ Also *ba-laiñ* (from *bañ glaiñ*), that is, ox of Nepal.

192. Si-hia *č'ui* 垂, nit. The Chinese word corresponding in meaning is *ki*, *či* 蟻; the Tibetan, *s-ro-ma*; the Kachin, *tsi-ti*. Unfortunately the word is not known to me in other languages, and I therefore hesitate to establish a relationship between the words named, although this seems not to be impossible. As to Tibetan *s-ro*, the element *s-* appears to be related to Lepcha *sa-* in *sa-fyat* ("flea"); and the element *-ro*, to Ahom *rau*, *raw*, "louse" (see No. 6).

193. Si-hia *liñ* 令, tortoise. The word has no equivalent in Chinese or Tibetan (*rus-sbal*, "bone frog"). The following are merely tentative suggestions: Kami *tu-lī*, Newari *kāp-li*, Kanaurī *ri-hōnts*, Kachin *tau-b-ren* (Ahom, Shan, Pa-yi, and Siamese *tau*, "tortoise").

194. Si-hia *ku-ni*, *gu-ni* 穀尼, flour. Possibly connected with Bunan *k'u-g* ("meal of roasted barley").

195. Si-hia *mañ* 旄, white. This word has no counterpart in Lo-lo, Mo-so, Tibetan, Chinese, or T'ai. Perhaps Burmese *māñ*, Thado *boñ*, and Chepan *p'am(-to)*, may be enlisted for comparison.

196. Si-hia *fu* (*bu*, *bo*)-*sai* 縛腮, lotus. The first element appears to be identical with the Si-hia word *fu* ("flower"), see No. 43; but it should be pointed out that Ahom *bū* (Shan *wuw*, *muw*) means "lotus, water-lily." See also p. 95.

197. Si-hia *miñ* 名, lower as to position or altitude. Mr. Ivanov gives another word *miñ* ("low, small"), but accompanied by a character reading *liñ* 令. He further compares the latter with a Tibetan word, printed in Tibetan letters as *smeñ*, and transcribed *me*. I presume that this is intended for Tibetan *smad*, which may indeed be pronounced *me*; this being the case, a relationship of Si-hia *miñ* with the Tibetan word is hardly apparent. As some confusion has here arisen, judgment should be held in abeyance till we hear again from Mr. Ivanov himself. An application of the word *miñ* doubtless occurs in the official title *ki-miñ*, the lowest grade in the Si-hia official hierarchy (G. DEVÉRIA, *L'Écriture du royaume Si-hia*, p. 18).

GROUP VIII.

Words Peculiar to Si-hia.

There are naturally a number of words in Si-hia, which cannot be traced in cognate forms of speech, and which, at least for the present, must be characterized as peculiar features of this language. Those preserved in the Chinese Annals may first be passed under review.

138. Si-hia *se* 厮, sorcerer, shaman, priest (西夏語以巫爲厮也。 *Liao shi*, Ch. 115, p. 3). As far as the Indo-Chinese languages are concerned, this word may stand isolated.¹ The Lo-lo and Mo-so use different words for their native medicine-men (Mo-so *to-pa*, *tuñ-pa*; Lo-lo *pi-mo*). Chinese **bu*, 巫 ("shaman;" probably connected with **bu-k*, *pu-k* 卜, "to divine") belongs with Tibetan *aba* ("sorcerer;" *aba-g*, "mask;" *abo-g*, "to sink down in a fainting-fit;" *smyo-abo-g*, "madness"), Ahom *mo* ("a learned man, a Dēodhai or Ahom priest"), and possibly Burmese *rua* ("witchcraft").

139. Si-hia *wei li* 崑理. This was the name borne by the Si-hia King Nang Siao or Li Yüan-hao (1032—48) during his childhood, as stated in *Sung shi* (Ch. 485, p. 5 b). According to the interpretation there given, the word *wei* means "to regret, to pity" 惜; and the word *li*, "rich and of high rank" 富貴. These words are not given in our Si-hia glossary.

140. Si-hia *wei* 崑 or 威 (compare No. 100), a red, knotted ribbon hanging down from behind the button of the official cap (*Sung shi*, *l. c.*; and *Liao shi*, Ch. 115, p. 2 b). The first of the characters given is employed in the *Sung shi*, the second in the *Liao shi*.

¹ EITEL, in his *Cantonese Dictionary* (p. 419), gives a term " 厮也 *ss-ma*, a witch" (GILES, No. 7871, "necromancers"). The history of this term is not known to me; perhaps this Chinese *se* is somehow connected with the Si-hia word.

This duplicity is striking, as the one has the even lower, the other the even upper tone. The reading presented by the Sung Annals, which is the older work, merits preference.

141. Si-hia *nii lii ko* 甯令哥. This was the juvenile name of King Li Liang-tso (1049–67), oldest son and successor to Li Yüan-hao (*Sung shi*, Ch. 485, p. 9). The word *nii* is explained in the Annals as meaning "to rejoice in what is good" (歡嘉). The word *lii* is said to be the name of the river Liang-ch'a 兩岔河. This may well be the case, but it is not plausible that the designation of a river should enter the personal name of a royal child. As *ko* means "elder brother" (our Si-hia glossary gives this word in the form *a-ko*), it would seem more probable that *lii* is identical with the adjective *lii* (No. 119), "great," *lii-ko* being the "great brother."

142. Si-hia *to-pa* 拓跋, title of the Si-hia sovereigns, said to signify "king of the earth" (G. DEVÉRIA, *L'Écriture du royaume Si-hia*, p. 15). It is doubtful, however, whether this etymology is correct; the word in question, in all probability, is not of Si-hia origin.

143. Si-hia *lo* or *ro* 勒, fir-tree. In Tibetan we have *som* or *gsom*, that has been compared with Chinese *sui* 松 by SCHIEFNER;¹ but *sui* is evolved from **zui*, *dzui*, *dui* (Sino-Annamese *tui*, Cantonese *ts'ui*), and is rather related to Tibetan *t'ai*, Burmese *t'ai-rū*, Lepcha *dui-šii* or *tui-šii* (*šii*, "tree"); Newāri *t'a-sim* (*sim*, *si-mā*, "tree"); Mo-so (written language) *ton*, *t'o*; Nyi Lo-lo *t'o-se*, Lo-lo-p'o *ta dsō*.² See also p. 95.

144. Si-hia *yii* 迎, star. The relation with Chinese *si* 星, proposed by Mr. Ivanov, is not convincing: the Si-hia word, as indicated by the Chinese transcription, is in the lower tone, while

¹ *Mélanges asiatiques*, Vol. I, p. 340.

² LIÉTARD, *Au Yun-nan*, p. 216. The word *dsō* means "tree." The Polyglot Dictionary (Ch. 29, p. 17) justly identifies Tibetan *t'ai-šii* with *sui* 松.

siñ has the upper tone, which makes for a net differentiation of the two words; the assonance *iñ* is not conclusive, the initial sounds are the decisive factors in Indo-Chinese, and a correspondence of Si-hia *y* to Chinese *s*, for the present at least, cannot be established. In my opinion, therefore, Si-hia *yin* is to be regarded as an independent Si-hia word.

145. Si-hia *yao* 要, day. In opposition to Tibetan and Lo-lo *ni*, Chinese **zi-t*, *ni-t* 日.

146. For Si-hia *la-nu* 肆怒 ("the four stars of the Dipper"), no equivalent in another language is known to me.

147. Si-hia *ko-ni* 葛¹ 尼, owl. The stem *ko* looks like an inversion of Tibetan *ug*; but this means nothing along the line of mutual relationship, as the two words may be conceived as independent formations mimetic of the bird's cry (compare Sanskrit *ulūka*, Latin *ulucus*, *ulula*; Mongol *ugūli*, *ūli*; Persian *kokan*; Kachin *u-k'u*; Ahom *kaw*).

148. As to other names of birds, *tsō-ni*, *jō-ni* 則尼 ("wild goose"), *mo-ni* 莫你 ("cuckoo"), *k'iñ* 慶 ("pigeon"), *ta-yaiñ*, *da-yaiñ* 打樣 ("swallow"), *yaiñ-hei* 樣黑 ("raven;" *hei*, "black"), *tan-lañ* 党俚 ("quail"), seem to be word-formations peculiar to Si-hia.

149–150. Si-hia *san* 桑 ("male") and ¹*tu*, *du* 瀆 ("female") appear to be words peculiar to Si-hia. For the latter I find a slight comparative indication in Miao-tse *ts'u-to* ("female").² As *ts'u* means "man" in general, Miao-tse *to* must have the meaning "female." There is, further, *na-lâ* ("women") in Chin.³ The word *san* is

¹ Mr. Ivanov (p. 1229) prints the character *ko* 各; but in the plate attached to his paper, where a facsimile of two pages of the glossary is given, the character appears as above.

² D'OLLONE, *Langues des peuples non chinois*, p. 66.

³ KANAUFI has a feminine suffix *-de* joined to verbal forms ending in *ci* or *ji*: *ci'ug-ji-de* ("a lady visitor"), *lan ci-de* ("she who wears"); but I do not feel sure that this *-de* is connected with Si-hia *tu*, *du*.

utilized in *wei-sai* 嵬桑 ("sparrow"), literally, "male bird;" *wei* ("bird") is inferred from the phrase *č'auñ-ni wei* ("flying birds").

151. Si-hia *yi* 乙 ("charcoal") is isolated. In Tibeto-Burman we find chiefly two stems, one with initial *s* and another with initial *ts*, for expressing the notion "coal:" Tibetan *so-l(-ba)*, *so'*, *so* (Yün-nan Tibetan *se-a*); Burmese *mi:-swe*; Nyi Lo-lo *tse-se*, Lo-lo-p'ö *se-ni*, A-hi Lo-lo *tša-sa*; Mo-so *še*.¹

Other Si-hia words not traceable to allied languages are:

152. *lan-to* or *-do* 浪多, younger brother.

153. *č'ön* 成, mother.

154. *ki* 卽, brain.

155. *t'ien-čö* 天捉, loam-house.

156. *yi* 移, ladle, spoon (hardly related to Tibetan *k'yem-bu*, *skyog*).

157. *k'u* 枯, saw.

158.

<i>tsu</i>	}	足
<i>mo</i>	}	末

 drum.

159. *čio*, *tsio*, *kio* 爵, spider (related to Chinese *č'i* 蜘蛛?).

160. *yü* 玉, silk.

161. *č'ou-na* 抽那, coin.

162. *yin* 盈, mark, characteristic.

163. *tsin*, *dsin* 精, law.

164. *mei* 每, virtuous.

165. *sie* 寫, wise.

166. *to*, *do* 多, true.

167. *nian* (Chinese character not given), word.

168. *liu* (Chinese character not given), world.

¹ The word *millö*, added by J. BACOT (*Les Mo-so*, p. 34), is composed of *mi* ("fire") and *lo* ("stone"). Likewise Nyi Lo-lo *lu-ma* and A-hi Lo-lo *lo-mo* ("mineral coal") are formed with *lu*, *lo* ("stone"), in the same manner as Si-hia *lu-yi* (see No. 41).

GROUP IX.

Technical Terms.

The Si-hia names for the animals of the duodenary cycle merit a special discussion. In this list we meet only two names identical with those for the real animals given in the vocabulary, — *lo* ("tiger") and *wō* ("dragon"), both genuine Si-hia words. In eight cases the names of the cyclical animals vary from the ordinary names for these animals; ¹ in two other examples ("serpent" and "monkey"), we cannot decide the status, as the words for the animals are not contained in the vocabulary. Also in the Tibetan cycle, two animals appear with specific terms reserved for the cycle only, — *yos* ("hare;" common word *ri-boñ*) and *ts'a* (or *mts'a*)-*lu* ² ("fowl;" common word *bya*).

169—170. In the same cases Si-hia offers likewise unusual names, — *tsō*, *dsō*, *jō* 則 ("hare;" common word *lo-wo*, No. 30) and *č'an-ni* 長尼 ("fowl;" common word *wo-yao*). If we were positive that at the end of the twelfth century Tibetan *yos* already had the modern pronunciation *yō*, it might be permissible to correlate Si-hia *jō* with this Tibetan form. The expression *č'an-ni* is a Si-hia formation: we find in the vocabulary *č'an-ni wei* (*wōi*) in the sense of "flying birds;" *č'an*, accordingly, means "to fly," and with the suffix *-ni*, "the flying one."

171. The year of the rat is called *hi'* 携, while the rat ordinarily is styled *tsai-šū* (see No. 29). The former word seems to be identical with Chinese *hi'* 鼯, which in a poem of Hu Yen 胡儼 of the Ming period appears as name for the year of the rat. ³

¹ This is likewise the case in Siamese (see CHAVANNES, *T'oung Pao*, 1906, pp. 52 and 53, note 2).

² This word survives in Jyarui *pu-ts'a* ("chicken").

³ CHAVANNES, *Toung Pao*, 1906, pp. 56, 57.

172. The year of the ox is *mo* 沒, while "cow, cattle," is *wu*. There is indeed in Indo-Chinese a stem *ma*, *mo*, with the meaning "cattle" or "ox." In discussing the Si-hia word *wu* (No. 4), reference was made to Kami *ma-na* ("buffalo"). There is, further, in Chuñ-kia, a word *mo-tlañ* ("ox"),¹ the element *tlañ* being composed of *t-lañ*, *lañ* being identical with the base *lañ* in Tibetan *g-lañ* (Central Tibetan *lañ*, Lepcha *loñ*, Yün-nan Tibetan *lon*, Lo-lo *lo*, Balti *χ-lañ*; as loan-word in Pašai *gō-lāñ*²), and the element *t-* surviving in Ladākhi *χ-lañ-to*, and Tibetan *po-to* ("bullock"), *be-to*, *be-do* ("calf"); so that the Chuñ-kia word seems to be evolved from **mo-to-lañ*. The prefix *g-*, *χ-*, of Tibetan *g-lañ*, likewise was once a full word, which is preserved in Mo-so *gō*, *na-gō*,³ and in Siamese *k^co* (from **go*); hence Tibetan *g-lañ* from **go-lañ*.⁴ Moreover, the *m-* type for "ox" appears in Lo-lo *ñi-mu* (*ñi* = Chinese *ni*, *niu* 牛; P^cu-p^ca *ñü*, Chō-ko *ñö*), Miao-tse *ñi-ma*, *s-ñi-ma*. Hence it is legitimate to regard Si-hia *mo* as an indigenous word with the meaning "ox, cow, cattle."

As to *yiñ* ("horse") see above, p. 27.

173. As regards *mo* 沒, the year of the sheep or goat, it is curious that this word is identical with *mo* ("ox"); the vocalic timbre of the two words perhaps was different. The corresponding Siamese year is *māmā* or *mome* (the latter likewise in Cambodjan), year of the goat. I am inclined to assume a connection (that is, linguistic, not historical) between this and Si-hia *mo*, which would accordingly mean "goat," not "sheep," like the corresponding Tibetan and Mongol years. Compare also A-hi Lo-lo *k^ci-mo*, Lo-lo-p^co *a-čō-mo*, P^cu-p^ca *tsō-ma-la* ("goat").

¹ P. VIAL, *Les Lolo*, p. 36

² GRIERSON, *Pitāca Languages*, p. 65.

³ J. BACOT, *Les Mo-so*, p. 32.

⁴ For this reason the above Pašai form is not a corruption of Tibetan *g-lañ*, as assumed by GRIERSON (*l. c.*), but is a conservation of the original form of the Tibetan word.

174. The year of the monkey is termed *wei* 章. Such a word for "monkey" is not found within Tibeto-Burman.¹ It therefore seems permissible to read the word *bei*, *lä*, and to derive it from Turkish *bäcün*, which in the Orkhon inscriptions is used for the year of the monkey² (Uigur *bičün*;³ Mongol *bečün*, *mečün*; Niüci *mo-nen*; Mauchu *mo-nio*, *bo-nio*). In HODGSON'S Sokpa vocabulary we find as word for "monkey" *meči*, which is assuredly a Mongol loan-word. There are many of these in the same idiom: *tavoso* ("salt") from Mongol *dabusun*, *usu* ("water") from Mongol *usun*, *t'umar* ("iron") from Mongol *tämür*, *č'agan* ("white") from Mongol *tsagān*, etc. BABER'S Mi-nag word for monkey, *mi*, might be derived from the same source, unless it be related to White and Black Lo-lo *miu*, Müng *miau*, Burmese *myok* (*myauk*).

175. The year of the dog is *na* 那, while the general word for "dog" is *k'ü*. *Na* is a Si-hia word for "dog," for we encounter the same stem-word in Lo-lo with prefixed *a-*: Li-p'a and Li-su *a-na*; Lo-lo-p'ö, Kö-sö-p'ö, Ke-sö-p'ö and Li-p'ö *a-no*.⁴ It further occurs in Murmi (HODGSON) *na-ni* and Gurun *na-gyu*.

¹ My first impression was to connect Si-hia *wei* with Siamese *wok*, year of the monkey (the common word for "monkey" in Siamese is *liü*); but on account of the final *k*, which is absent in Si-hia, I have abandoned this theory.

² RADLOFF, *Wörterbuch der Türk-Dialecte*, Vol. IV, col. 1625.

³ Aside from its Turkish ending *-cün*, this word certainly is not of Turkish origin; *bü-*, *di-*, may have been derived from Greek *πῆθων*, *πίθηκος* (from which also Old Slavic *pitikü* comes) at the time of the dissemination of the Hellenistic cycle over Central Asia. J. HALÉVY (*T'oung Pao*, 1906, p. 294) derives the Turkish word from Persian *pūzineh* or *būzneh*, which does not sound very probable.

⁴ A. LIÉTARD, *Bull. de l'Ecole française*, Vol. IX, pp. 563—567. The form *a-no* is indicated also by D'OLLONE, *Langues des peuples non chinois*, p. 60. Side by side with *a-no*, the word *č'ö* (corresponding to *k'i* of A-hi, *k'yi* of Tibetan, and *k'ü* of Si-hia) is employed in Lo-lo-p'ö (LIÉTARD, *l. c.*, p. 551); in the Lo-lo-p'ö cycle, however, the word *č'ö* is utilized (LIÉTARD, *Am Yun-nan*, p. 230). The Lo-lo-p'ö cycle, as given by A. LIÉTARD (*l. c.*), contains ten genuine Lo-lo words for the animals, and two borrowed from Chinese,—No. 6 *ya* from Chinese *ya* 羊 ("sheep" in Lo-lo is *ju*, *ju*, and this word is used in the Nyi Lo-lo cycle; "goat," *k'i*, *ts'i*; final Chinese *n* and *n* are dropped in Lo-lo [*Bull. de l'Ecole française*, Vol. IX, p. 557; and *Am Yun-nan*, pp. 201—204]); and No. 7 *myo*, year of the

176. The year of the hog in Si-hia is *yū* 玉 ("hog" in general being *wo*; the corresponding Lo-lo word *ve* is applied to the cycle). The word *yū* shows no relation to any equivalent in the cycle of outside languages, nor can I trace its existence in other Indo-Chinese idioms. It may be, therefore, an autochthonous Si-hia formation.

177. As to the Si-hia designations of the Ten Cyclical Symbols (*ši kan* 十干), we are confronted with a puzzle. The Tibetans have rationally transcribed the Chinese names as follows: *gya* (*g'a*), *yi*, *biñ*, *tiñ*, *wu*, *kyi* (*k'i*), *giñ*, *zin*, *zim* or *ziñ*, *gui*. Si-hia, however, offers the following series: *nai*, *liñ* (*riñ*, *ri*), *mi*, *wei*, *wei*, *ts'i*, *lai*, *k'o*, *nai*, *nu*. There are two homonymes in this series, 1 and 9 both being *nai* 乃, and 4 and 5 both being *wei* (*wō*) 嵬, certainly to the disadvantage of the system. All that can be said for the present is that the Si-hia people seem to have exerted their own ingenuity in framing this series, that shows no resemblance to the Chinese prototypes on which it is based.

GROUP X.

Loan-Words.

A. Chinese Loan-Words.

178—179. There are a certain number of Chinese loan-words in articles of clothing, in names of fruits and other objects imported from China. These, and others also, have been indicated by Mr. IVANOV:¹

monkey, where Nyi Lo-lo has the regular word *nu*. I am inclined to regard *myo* as being derived from Chinese *mao*, *myao*, *myo* 猫 ("cat"). Lo-lo-p'o and A-hi apparently possess no word for "monkey;" Nyi has *a-nu*, P'u-p'a *a-no*, Chō-ko *a-si* (*Bull.*, l. c., p. 552),—evidently mere descriptive epithets of the animal. *Myo*, at any rate, is not a Lo-lo word.

¹ In a few cases, Mr. Ivanov has drawn also upon Mongol for the explanation of Si-hia words denoting bodily parts. At the outset, an influence of Mongol upon Si-hia could not be disavowed, though we are ignorant of the state of the Mongol language in that time when our Si-hia vocabulary was edited (1190). Si-hia *k'o* ("foot") is connected by Mr. Ivanov with Mongol *kūl*; in fact, however, we have a stem *k'o* meaning "foot" within Indo-Chinese: Mo-so *k'ō*, *k'u*, etc. (see No. 51). It is therefore not necessary to

for instance, *tiñ* or *diñ* 丁 ("lamp") from *töñ* 燈;¹ *kiai-i* (presumably *χ'ai-i*) 皆夷 ("shoe, slipper") from *χai* 鞋 (also in *Chun-kiä hai*, *Hei Miao ha*, Tibetan *χai* and Mongol *χei*). It seems unnecessary to me, however, to derive *Si-hia k'o-i* ("boot") from Chinese *hūe* 靴, as proposed by Mr. Ivanov. Aside from the phonetic difficulties of the case, *Si-hia k'o-i* appears as a legitimate derivation from *Si-hia k'o* ("foot"), No. 51, the suffix *i* being endowed with the same function as in *ro-i* ("saddle"), from *ro* ("horse"). Also in the Lo-lo idioms, the word for "boot" is based on that for "foot:" *Nyi Lo-lo č'e-nō* (literally, "*ped-exhaussement*"), *A-hi Lo-lo ki-no*, *Lo-lo-p'o k'ye-no*. The combination of *Si-hia k'u* 枯 ("saw") with Chinese *kū* 鋸 seems to me doubtful, and a derivation of *Si-hia tsu* 足 ("drum") from Chinese *ku* 鼓 appears to be out of the question.²

180. *Si-hia yao* 藥 ("furnace") is hardly connected with Chinese *tsao* 竈, as conceived by Mr. Ivanov, but rather with Chinese *yao* 窑 ("kiln, furnace"),—a word adopted also by Mongol in the form *yō*.

181. The fact that the Chinese loan-words in *Si-hia* are not written in every case with the proper Chinese characters for these words, but that different symbols are chosen for them, does not militate against the conclusion that they are nothing but loan-words; for it is not necessary to assume that their status as loan-words rose into the consciousness of the author of our vocabulary or of

assume that *Si-hia k'o* is a Mongol loan-word. *Si-hia wu-i* ("backbone") is compared by Mr. Ivanov with a Mongol word written by him *wi*; KOVALEVSKI, in his *Mongol Dictionary* (Vol. I, p. 551) has a word *ūye* ("joint, articulation"). This combination is not very convincing either; and as *-i* is a suffix that occurs in *Si-hia*, I prefer to think that *wu-i* is an original word-formation of this language (No. 61). *Si-hia wu* ("cow") certainly bears no relation to Mongol *ūtür* and Turkish *ut*, as proposed by Mr. Ivanov, but is a genuine Indo-Chinese word and the legitimate equivalent of Tibetan *ba* (see No. 4).

¹ This word was adopted by several other languages. In P'u-p'a we find it in the form *a-teñ* with prefixed *a* (*Bull. de l'École française*, Vol. IX, p. 554). In Buryat it occurs as *diñ* with the meaning "candle" (SCHIEFNER in Castrén, *Burjat. Sprachlehre*, p. XIII). In Malayan we have *tiñ* ("lamp").

² If a loan-word at all, *Si-hia tsu* would rather seem to come from Chinese *č'u* 祝.

the Si-hia speaking population in general. This is well evidenced by the transcription *mao^r* 貌兒 ("cat"), which, as justly recognized also by Mr. Ivanov, certainly is a Chinese loan-word and the equivalent of 貓兒.¹

182. Of color-designations, *hei* (*ha*, *ho*) 黑 ("black") has been received from Chinese.

183-184. Among fruits, we find *hūn* 杏 ("apricot"), *Prunus armeniaca*, a native of China;² and *šwi-ma* 水麻 (*Diospyros kaki*), from Chinese *ši* 柿,³ transcribed in Tibetan *se*; possibly also *tu* ("bean") from *tu* (see No. 96).

185. Si-hia *č'u-liñ*, *č'u-li* 出令, plum. As *č'u* has the upper tone, it may be permissible to correlate it with *č'o'* in Lo-lo-p'ó *se-č'o'-dsō* ("prunier").⁴ The element *se* of the latter word occurs in Nyi Lo-lo *se-ka-ma* ("prune") and Hua Lisu *se-li*. The second element of the latter word is indeed identical with Chinese *li* 李 ("plum"), and for this reason I am inclined to regard also Si-hia *liñ*, *li*, as a Chinese loan-word. We find the latter also in Mongol (*lise*).

186. Si-hia *č'u-li* or *č'u-ri* 出梨 ("vinegar"), as justly observed by Mr. Ivanov, is borrowed from Chinese *ts'u* 醋, in the same

¹ The example is interesting for another reason: we note that *érh* was used as a diminutive suffix in Chinese at the end of the twelfth century.

² A. DE CANDOLLE, *Origin of Cultivated Plants*, p. 217; BRETSCHNEIDER, *Bot. Sin*, pt. 2, No. 471.

³ Mr. Ivanov gives as translation "*hakki*," a word which does not exist, and which I believe is a misprint for *kaki*. In regard to another plant I cannot make any statement, as Mr. Ivanov does not specify the meaning exactly. This is *ts'üan-ni-na* 全尼那, a plant for which only the botanical term *Solanum esculentum* is given as equivalent. This term is now obsolete, and was formerly applied to the potato, the tomato, and the egg-plant. Since the first two are strictly American plants, they cannot come into question here; thus the supposition remains that the egg-plant (in Chinese *k'ie* 茄) may be intended. I hope that Mr. Ivanov will clear up this point in his further studies of Si-hia.

⁴ A. LIÉTAUD, *Au Yun-nan*, p. 216. The word *dsō* means "tree."

manner as Tibetan *ts'uu*. The determinative element *li* or *ri* seems to be a Si-hia addition. If *č'u* is a Chinese loan-word, the supposition advanced by Mr. Ivanov (p. 1225) is not justified, that *č'u-li* should have terminated in *-l* or *-r*, "especially as in Tibetan 'acidity' is styled *skyur*." Si-hia *č'u-li*, however, has no connection with this Tibetan word which means "sour" (note what Jäschke remarks on the unfamiliarity of Tibetans with vinegar), and which presents a contraction from *skyu-ru*, *skyu-r* (compare Tromowa *kyu-pu*, *kyum*; Sikkim *kyum*; Bunau *žu-ri*).¹ If the Si-hia word were to be read *č'ur*, an element *lo* or *lu* would have been chosen for the transcription of *r* (compare *nir*, written *ni-lo*, No. 122), not, however, *li*; and this hypothetical *č'ur* could certainly not be correlated with Chinese *ts'uu*. It seems quite reasonable to read *č'u-vi* or *č'u-ri*, and to look upon *č'u* as a Chinese loan-word.

187—188. Si-hia *ts'un* 寸 ("inch") and *šön* 聖 ("holy") are likewise derived from Chinese.

B. Sinicisms.

Besides Chinese loan-words, we meet in Si-hia with certain terms presenting literal translations into Si-hia of the corresponding Chinese terms. Such are found in the field of astronomy.

189. Si-hia *mo-jei* 沒則移 ("galaxy") is composed of *mo* ("heaven") and *jei* ("water, river"), being a rendering of Chinese *t'ien ho* 天河, while Tibetans have a seemingly native term in *dgu-tš'igs* or *dgu-tš'igs skya-mo*; Nyi Lo-lo has *č'e-k'a* ("road of dew"), and Lepcha *lóm teñ* ("highroad") or *lum toñ lum-ba*.

190—193. The Si-hia names of the planets *k'ü yin* 皆迎 ("gold star," Venus), *jei yin* ("water star," Mercury), and *mo* 沒

¹ The Polyglot Dictionary (Ch. 27, p. 12) has coined an artificial Tibetan word, *skyur-'u* ("sour water, vinegar"). Manchu *jušan* is likewise borrowed from Chinese, and so is Ordos Mongol *oču*.

yiñ ("fire star," Mars), are modelled in imitation of Chinese *kin siñ* 金星, *šui 水 siñ*, and *huo 火 siñ*.¹ The name for "Jupiter," *si yiñ* 西迎, forms an exception, *si* being a transcription of Chinese *sü 戌* or *sui 歲* with following *siñ* 星.

194. Si-hia *mo-wo* 沒訛 (*Anas galericulata*, the mandarin duck) is composed of *mo* ("heaven") and *wo* ("bird"), and looks like an imitation of Chinese *t'ien ngo* 天鵝 ("wild swau").

195. Si-hia *wei(wö)-mei* 嵬梅 (*Nephelium longan*) means "dragon's eye," being a literal rendering of Chinese *luñ-yen* 龍眼.² In the same manner the Tibetans have translated the Chinese term as *ąbrug-mig*; the Mongols as *lū-yin nidu*.³

C. Tibetan Loan-Words.

196. Si-hia *šu(šuai)-k^uuai* 率塊, coral. The character *šuai* is used in the transcription of Si-hia words on two other occasions,— in *mou-šu* (No. 21) and *tsai-šu* (No. 29). As the second element, *k^uuai*, is written 塊, it may be nothing but this Chinese word meaning "a piece." The Mongol word *širu* (written also *bširu*), Kalmuk *šuru* and *šür*, and Manchu *šuru* ("coral"), are justly regarded as loan-words based on what is written in Tibetan *byi-ru*⁴ or *byu-ru*, but articulated *j'u-ru*, *šu-ru*; there is, further, *šo-lo* ("coral") in Mo-so, and *šu-li*, *šu-lig*, in Kanauri. There is thus good reason to assume that also the Si-hia word for coral was sounded *šu*, not *šuai*, and is derived from Tibetan.

Si-hia *p^u* ("place of higher altitude") might be regarded as a loan from Tibetan *p^u* (see No. 110).

¹ In the same manner, the Manchu have translated from Chinese *aisin usiha* (Venus), *muke usiha* (Mercury), *tuwa usiha* (Mars).

² BRETSCHNEIDER, *Bot. Sin.*, pt. 3, No. 285.

³ *Poivyglot Dictionary*, Ch. 28, p. 52.

⁴ Derived from Sanskrit *vidruma* through the medium of some Indian vernacular.

D. Indian Loan-Words.

197. The peacock is termed in Si-hia *wo* (*vo*)-*lo*, or *wo-ro* 訛勒. The first element, *wo*, as already stated (No. 32), is the Si-hia word *wo* ("bird, fowl"). The second element, *lo* or *ro*, in my opinion is derived from the last syllable of Sanskrit *mayūra* ("peacock"), transcribed in Chinese *mo-yu*(*yü*)-*lo* 摩由(裕)邏, from which Manchu has distilled the form *molo-jin* (*-jin* being a Manchu ending).¹

Sanskrit *mayūra* has affected also other Indo-Chinese languages. In Tibetan *rma-bya* (*bya*, "fowl"), the element *rma* (*r-* being silent in all dialects), in my opinion, is nothing but a reproduction of the first syllable in the Sanskrit name; also *yūn* in Lepcha *muñ-yūn* and Ahom *yūn*, Siamese *ma-yūn* or *nok-yūn*, Pa-yi *wuk-yūn*, might be traceable to the same type.²

¹ K'ien-lung's Polyglot Dictionary (Appendix, Ch. 4, p. 6) has the series Manchu *molo-jin*, Tib. *ma-yu-ra*, Mongol *mayara*, Chinese *mo-yu-lo*. Manchu, moreover, has the following designations for "peacock:" *kundu-jin*, from Chinese *k'ui tu hu* 孔都護 (*ibid.*, where Tibetan *yo-bya* and Mongol *kündügüri* are added); *to-jin*, from Mongol *tūs* (written *taqus*, *logos*, to express the length of the vowel), doubtless conveyed through an Iranian language, Persian *taurus* طاوروس (Turki *ta'us*), that, together with Greek *ταρῦς*, Hebrew *tuki*, *tūki*, has been traced to Tamil-Malayalam *tokei*, *topei*, by R. CALDWELL (*Comp. Grammar of the Dravidian Languages*, 3d ed., pp. 88—89); *yo-jin*, from Chinese *Yü niao* 越鳥 ("bird from Yü"), Tibetan *yo rma-bya*, Mongol *yogon* (*ibid.*, Ch. 4, p. 6); and *ju-jin*, given as equivalent of Chinese *nan k'o* ("guest from the south"), Tibetan *lhoi rma-bya* ("peacock of the south"), Mongol *emürdi*. All these are artificially coined book-words without legitimate life.

² Tibetan *rma-byu* is hardly intended to convey the meaning "*oiseau aux plumes*," as stated by J. HALÉVY (*Journal asiatique*, 1913, nov.-déc, p. 713); the Tibetan word *rma* certainly means "wound," but we cannot etymologize on this basis in Indo-Chinese languages. Nor can it be positively asserted, "le nom indien n'a jamais quitté la péninsule gangétique;" it has indeed wended its way to China, and has resulted in Manchu *molo-jin*. The dependence of Tibetan *rma* on Sanskrit *mayūra* is attested also by the fact that in cognate forms of speech we have a variation *mo*, *mu*, corresponding to modern Indo-Aryan *mōr*, *mūr*. In Kanari we have a duplicity of words,—first, *mōrūs*, *mōres* (feminine *mōrī*), directly derived from Indian; and, second, *mom-za*, leaning toward Tibetan *moḍza* ("peacock's feather"); Newari *hmu-sa-kha*.

E. Iranian Loan-Words.

198. The Si-hia word for the lion is *ko-čēn* 葛正. In all probability this is to be transcribed phonetically *go-čē* or *ko-čē* (that is, initial *č*, followed by a nasalized *e*; compare Phonology, § 14). The element *go* or *ko* seems to have the function of a prefix, and the element *čē* appears as the stem. The word *čē* appears to have arisen from *šč;¹ Si-hia *č* sometimes is developed from original š, as shown by Si-hia *či*, "flesh" = Tibetan *ša* (No. 48). The form *šč, without doubt, is identical with the same Iranian word as resulted in Chinese *ši* 獅. The latter has been derived from Persian *šēr* شیر.² This, however, is not quite satisfactory, since at the time when the first lions were sent to China by the Yüe-či (Indo-Scythians), in A.D. 88, the language, styled properly Persian, was not yet in existence. It seems that toward the end of the first century the word was transmitted to China through the medium of the Yüe-či, and that it originally hailed from some East-Iranian language, where it appears to have been known in the form *šē* or *šī*,³ as Chinese *ši* (*š'i) 師 has no final consonant.

On the other hand, if we adhere to the reading *čēn*, a connection may be sought with Sanskrit *siṃha*, *siṅga* (Tibetan *señ-ge*, Newāri *sim*, Lepcha *suñ-gi*).⁴ The change of *s* to *č*, however, is difficult

¹ Compare Tibetan *šin-tse*, "lion" (SCHIEPNER, *Čakjamuni*, p. 96), apparently a transcription of Chinese *ši-tse*.

² WATTERS, *Essays on the Chinese Language*, p. 350. The Persian word is traced to Avestan *xšābr-ya* (= Sanskrit *kshatriya*), "imperiosus, lord, ruler" (C. BARTHOLOMAE, *Altiranisches Wörterbuch*, col. 548; SALEMANN, *Grundr. iran. Phil.*, Vol. I, pt. 1, p. 273; HORN, *ibid.*, pt. 2, p. 34, and *Neupersische Etymologie*, No. 803). It is perhaps under the influence of this signification that the Chinese chose the word *ši* 師 ("master") for the transcription of the Iranian word. This character was formerly employed for the designation of the lion without the classifier (see HIRTH, *J.A.O.S.*, Vol. XXX, 1910, p. 27).

³ Tokharian A *šisäk*.

⁴ The Lepcha form *suñ-gi* is surprising. Still more curious is it that this variation meets an analogy in the languages of Madagascar: Madagasy *soñ-ombi*, *šun-ūmbi*; Merina *suñy-ūmbi* (written *songombi*). This compound means literally "lion-ox" (a fabulous animal

to explain, and for this reason I prefer the explanation as outlined above. As to the meaning of the first element in the Si-hia term, I have no definite opinion. From a Si-hia point of view the syllable *ko* might be an epithet characterizing the lion, as, for instance, we have in Shina *guma ĩēr* ("a fiery liou").¹ In view of the affinities of Si-hia with Lo-lo, it may be pointed out that *ko* is a Nyi Lo-lo word meaning "wild, savage" (A-hi Lo-lo *ku*), used especially with reference to non-domesticated animals.²

199. Si-hia *lo*, *ro* 羅, copper. This word is not Indo-Chinese, but it is doubtless derived from an Iranian language; for it is identical with Persian *rō*, *rōi* روى, "brass, copper" (رویین *royīn*, "brazen, bell-metal"); Yidghal and Khowar, two Hindukush dialects, *lo*; Pahlavi *rōd*, Sogdian *rōd* (from **rōd*),³ Baluči *rōd*, which belongs to the well-known series: Sanskrit *loha*, Latin *raudus*, *rōdus*, *rūdus* ("piece of ore"), Old Slavic *ruda* ("ore, metal"), Old Icelandic *raude* ("red iron-ore"),—a group of words possibly connected with or derived from Sumerian *urudu* ("copper"). The Si-hia form *ro* shows that it is derived from Persian, not from Pahlavi.⁴

with the trunk of an ox or horse; also a strong, brave man). G. FERRAND (*Essai de phonétique comparée du malais et des dialectes malgaches*, p. 298), who enumerates these words among the Sanskrit elements in Madagasy, explains the vowel *u* or *o* from the effect of vocalic attraction prompted by the *u* of *ūmbi* (*siŋa-ūmbi*, *siŋ-ūmbi* becoming *suŋ-ūmbi*). In Javanese *siŋd*, Malayan *siŋa*, the Sanskrit word is preserved in its pure state. In view of Lepcha *suŋ-gi*, it is conceivable that in some language of India such a variant with *u* vowel was already developed, especially as also in Cambodjan the lion is called *suŋ*.

¹ G. W. LEITNER, *Languages and Races of Dardistan*, p. 26.

² See P. VIAL, *Dict. français-lolo*, pp. 256, 298.

³ R. GAUTHIOT, *Essai sur le vocalisme du sogdien*, p. 101. See also P. HORN, *New-persische Etymologie*, No. 635.

⁴ Iranian loan-words exist in Tibetan also, and merit a special investigation. The following may be called to mind: Tibetan *p'o-lad* ("steel"), from Persian *pūlād* پولاد (Pahlavi *pūlāfat*, Armenian *połuvat*, from **pavīlavat*), a word widely diffused (Ossetian *bolat*, Turkish *pūlād*, Grusinian *p'oladi*, Russian *bulat*, Mongol *bolot*, etc.); Tibetan *sag-lad* ("a textile"), from Persian *saglāt* سقلات (see *J.A.S.B.*, 1910, p. 266); West Tibetan *ču-li*, *ču-li*, Kanauri *čul* ("apricot"), from the Pamir languages: Minjan and Galcha *čeri* (Dardu and Shina *jurū*). Ladakhi *a-lu-ča* ("plum"), from Persian *ālucā* الوجه; Tibetan *deb-t'er*, *deb-*

In other Tibeto-Burman languages this Iranian word seems not to exist; at least, it has not yet been traced. There is a uniform Indo-Chinese word for "copper" pervading the chief members of the group, besides others covering limited areas. We have:

(1) Tibetan *zan-s* (from **džan*),¹ Lepcha *son*, Yüu-nan Tibetan *son*, Mo-so *soŋo*; Chinese *t'un* 銅 (from **duñ*, *džuñ*, *dsuñ*), and Ahom *t'än* ("brass"), Shan *tän* ("copper"), Siamese *t'oñ* ("metal, gold;" *t'oñ deñ*, "copper"), from **don*; Hei Miao *deo*, Ya-čio Miao *de*, Hua Miao *duñ*.

(2) A-hi Lo-lo *ji*, Nyi Lo-lo *je*, Lo-lo-p'ö *jö*, Chö-ko *dai*, Mo-so *šö-tu* ("bronze").

(3) Tibetan *k'ro* and *a'kar* ("brass, bronze"), Burmese *k'ë*.²

F. West-Asiatic Loan-Words.

200. Si-hia *po-lo* 字羅, radish (*Raphanus sativus*). Mr. Ivanov identifies this word with Chinese *lo-po* 蘿蔔. The case, however, is not such that the Si-hia would have inverted the Chinese term, but Chinese *lo-po* (**la-buk*) and Si-hia *po-lo* (from **buk-lo*) go back to two West-Asiatic names. The prototype of the Si-hia term is furnished exactly by Aramaic *fuglo* 𐤕𐤓𐤁𐤏 ("radish");³ and we meet the same word in Grusinian *bolo-ki*, Ossetian *bälk*, Kabardian *belige*, all of which refer to the radish.⁴ Whether this word occurs

gter, *deb-ster* ("book, document, record"), from Persian *däbtär* دفتر (derived from Greek *διδάσκαλος*). Tibetan *sur-na* (Chinese *so-na* 鎖呐), "hautboy, flageolet," from Persian *surnä* سرنه.

¹ The ancient initial *j* is preserved in the languages of Almora, Raikās, Dārmiyā, Chaudānsī, and Byānsī (see *Linguistic Survey*, Vol. III, pt. 1, pp. 538, 539), where *jāñ* means "gold," answering to Kanāurī *zan* ("gold"). In Bunan, *mal*, a typical word for silver (No. 1), means "gold." Confusion between the words for "gold" and "copper" obtains in several languages; for instance, Yakut *altun* ("copper"), Turkish *altun* ("gold"). Tibetan *zan* is transcribed in Mongol *tsan*, *čan*.

² Proposed by B. HOUGHTON, *J.R.A.S.*, 1896, p. 51.

³ I. Löw, *Aramäische Pflanzennamen*, p. 309.

⁴ W. MILLER, *Sprache der Osseten*, p. 10.

also in Iranian is not known to me.¹ It is perfectly conceivable that the Nestorians who were settled in the Si-hia kingdom² brought with them the plant and the word. It is notable that the next item introduced by our Si-hia vocabulary is the term *tsan po-lo*; that is, "Chinese radish." Consequently the plain term *po-lo* must have designated another species or variety which apparently was non-Chinese.

Further, we find in Aramaic and Syriac *lajto* ܠܝܬܘܢ³ (Arabic *laji* لفت), derived from Greek *ῥάπυς*; or *ῥαῖπυς* (Latin *rāpa* or *rāpum*).⁴ This type, in coalition with *juglo*, seems to have conspired in forming Chinese *la-buk*. T. WATERS⁵ insisted on "a suspicious resemblance of the Chinese word to *rapa* and the kindred terms in Latin and Greek." On the one hand, however, we cannot fall back on Greek directly; and, on the other hand, the word *lajto* cannot fully explain the Chinese term, but at best solely the first element *la*; while Chinese *po* must be traced to *buk*, and the latter to *juglo*. According

¹ A Persian word for the radish has been transmitted to Turks, Mongols, and Tibetans: Persian *turma* *ترمه* and *turub*, *turb*, *turf* *ترب*; Balkar (PÉRIEUX, *Keleti szemle*, Vol. XV, p. 263) and Mongol *turma*; West Tibetan *se-rak turman*, written also *dur-sman* ("carrot"), *se-rak* from Persian *zardak* *زرده*. The Polyglot Dictionary (Ch. 27, p. 18) writes the Mongol word *tūrma*, and gives it as synonyme of *tōbang* (Chinese *lo-po*; Manchu *mursa*). G. A. STUART (*Chinese Materia Medica*, p. 371) holds the opinion that our English word "turnip" is probably derived from Persian *turub*. This would not be so bad, if our turnip had really come from Persia. There is, however, no trace of evidence to that effect; on the contrary, our turnip is a very ancient European cultivation, being indigenous everywhere in temperate Europe (A. DE CANDOLLE, *Origin of Cultivated Plants*, pp. 36—38; J. HOORS, *Waldbäume und Kulturpflanzen*, pp. 351, 467). The *-nip* of "turnip" doubtless goes back to Anglo-Saxon *nāp* (Middle English *nepe*, *neep*; Old Norwegian *nāpa*), from Latin *nāpus* (French *navet*, *navette*); the usual explanation of the first part (from *turn* or French *tour*, in the sense of turned, round) is hardly satisfactory, and, for myself, I do not believe it.

² As related by Marco Polo (see YULE's note in his edition, Vol. I, p. 207).

³ I. Löw, *l. c.*, p. 241. This name in particular refers to the species *Brassica rapa*.

⁴ Regarding the names of the European languages, see J. Hoors, *Waldbäume und Kulturpflanzen*, p. 350.

⁵ *Essays on the Chinese Language*, p. 332.

to BRETSCHNEIDER,¹ the word *lo-po* or *lo-p^o* first appears in Chinese books of the ninth century, and was originally used in the state of Ts'in (Shen-si and eastern Kan-su). The name accordingly makes its début in the T^cang period when numerous new species of cultivated plants were introduced into China from the West, and its first appearance in the border-land of Turkistan is likewise suggestive of a foreign origin. The various earlier designations of the plant, *lai-ju* 萊服 (in the T^cang p^{en} t^sao) and *lu fei* 蘆菔 or *lu fu* 菔 in Kuo P^o, are independent of *lo-po*, referring to an apparently indigenous cultivation; Bretschneider assumes that the radish, as it is mentioned in the *Erh ya*, has been cultivated in China from remote antiquity. Since numerous varieties of this genus are under cultivation, not only in China, but also in Europe and India as well (and there also of uncontested antiquity), it is conceivable that a new variety might have been introduced into China from Western Asia through Turkistan under the T^cang to receive the foreign name *lu-buk*. Bretschneider's observation, that "from China the cultivation of the radish spread over the neighboring countries, where the people generally adopted also the Chinese name of the plant," is somewhat too generalized. A. DE CANDOLLE² has remarked that "for Cochin-China, China, and Japan, authors give various names which differ very much one from the other." A specific instance may be cited to the effect that an Indo-Chinese nation received the name of the radish from India. The Sanskrit word for the radish is *mūlaka* (from *mūla*, "root"), also *mūlābha*. It is commonly cultivated in Western India and in the Panjab. In the latter territory it is styled *muñ-ra*, in Bombay *mogri*, in Hindustān *muḡra*.³ An Indian form of the type *muñ-ra* appears to have resulted in Burmese *mun-lā*.

¹ *Bot. Sin.*, pt. 2, p. 39.

² *Origin of Cultivated Plants*, p. 31.

³ WATT, *Dictionary of the Economic Products of India*, Vol. VI, p. 394.

This shows that not all Indo-Chinese words for the radish are traceable to Chinese, and that Burmese *mun-lā* has no relationship with Tibetan *la-p'ug* (Ladakhī *lu-bug*), as assumed by B. Houshron.¹

201. Si-hia *si-na* 悉那, mustard. This word is neither related to Chinese *kai*, *kiai* 芥, nor to Tibetan *yunis*; nor can any relationship with Nyi Lo-lo *o-na-se* be asserted. According to the explanation of P. VIAT,² *o* means "vegetable," *na* "nose," and *se* "congestive." As "nose" is *ni* in Si-hia, we should expect at least *si-ni*, if the Lo-lo and Si-hia words were identical. Si-hia *si-na* reminds one of Greek *sinapi* (σίναπι or σινάπυ), which found its way into Latin *sinapis* (in Plautus), Gothic *sinap*, Anglo-Saxon *sēnep*, Italian *senape*, French *sanve*, etc. However startling this derivation may seem at first, it is nevertheless possible. Si-hia *si-na* denotes a species different from Chinese *kiai*: the former relates to *Sinapis* or *Brassica alba*, the latter to *Sinapis juncea*. The home of the white mustard (*Sinapis alba*) is in southern Europe and western Asia.³

It first appeared on the horizon of the Chinese in the T'ang period, being described under the name *pai kai* 白芥 ("white mustard") by Su Kung, the reviser of the *T'ang pên ts'ao*, and said by him to come from the Western Jung (*Si Jung* 西戎). Under the term *Hu kai* 胡芥 it is noted in the *Pên ts'ao* of Shu 蜀 of the middle of the tenth century. It then was abundant in Shu (Sze-ch'uan), and for this reason received also the name *Shu kai* ("mustard of Shu").⁴ It is therefore logical to identify Si-hia *si-na* with the

¹ *J.R.A.S.*, 1896, p. 42. Moreover, the first part of the Burmese word is not traceable to the tribal name Mon, as supposed by the same author.

² *Dictionnaire français-lolo*, p. 227.

³ A. ENGLER in Hehn, *Kulturpflanzen*, p. 212 (8th ed.); WATT, *Dictionary of the Economic Products of India*, Vol. I, p. 521.

⁴ *Pên ts'ao kang mu*, Ch. 26, p. 12. G. A. STUART (*Chinese Materia Medica*, p. 408) states that the white mustard was introduced into Sze-ch'uan from Mongolia; it is safer to say "Central Asia." Also in Tibetan a distinction is made between *sko-ts'o* = Sanskrit *rājika* ("black mustard") and *yunis-kar* or *yunis-dkar* = Sanskrit *sarshapa* ("white mustard"),

white mustard of the Chinese, introduced under the T'ang from a region of Central Asia; and it is not surprising, that, with this new cultivated species, also its Hellenistic name (*sinap*) was diffused over the Asiatic Continent. It remains to determine through which language the transmission took place. Iranian may come into question, but Persian *sipand* سبب (also *sapandān*, *sipandān*, *sipandīn*, *saped-dān*) surely is not related to *sinapi*.

202. Si-hia *liu-na* 流那, cabbage. In attempting to account for this word, it is necessary to survey to some extent the field relating to the cultivation of the genus *Brassica*. The Tibetan language shows us best the various historical probabilities with which we are confronted. The Tibetans, not much given to the growing of vegetables, have three words for designating cabbage, that are borrowed, and curiously enough, each from one of those three great centres of culture with which Tibet was in contact on its western, southern, and eastern frontiers. In West Tibetan we meet the word *kram*,¹ which is traceable to Persian *karanb* کرب² or *kalam* کلم, Arabic *kiranb*, *kurumb*, *kromb*, Hindustāni *kāramkālā* کرم کلا; Siamese *ka-lan*; Greek *κράμβη*, Latin *crambē*, Aramaic *keruba* כרובה.³ We further meet in West Tibetan *gobi*, Sikkim and Bhūtan *kobi*, an Indian word derived from Hindustāni *kōbī* کوبی, Bengālī *kōpī*, Gujerati *kōbiā*.⁴ The last, in consequence of the

both terms being listed in the *Mahāvvyutpatti*. The latter term is artificial, and plainly shows that the white mustard was foreign to the Tibetans likewise; for *yūns*, *yūn*, or *ānū* relates to the turnip. Tibetan *sko-ts'e* is a transcription of Chinese *kai ts'ai* 芥菜; the two terms are equalized in the *Polyglot Dictionary* (Ch. 27, p. 19).

¹ H. RAMSAY (*Western Tibet*, p. 15) remarks that the Tibetan word is used for cabbage, but really means "a kind of spinach." According to Jäschke it only means "cabbage."

² The word appears as early as the latter part of the tenth century in the pharmacological work of Abū Mansūr (HORN, *Grundr. iran. Phil.*, Vol. I, pt. 2, p. 6).

³ I. Lōw, *Aramäische Pflanzennamen*, p. 213.

⁴ The word is found in Singalese (*kōvī*), in the Dravidā languages (*kōb*, *kōbī*, etc.), in Malayan and Javanese (*kōbis*, *kūbis*). See S. R. DALGADO, *Influencia do vocabulário português em linguas asiáticas*, p. 65 (Coimbra, 1913).

introduction of cabbage into India by Europeans,¹ is a European word connected with our series: Latin *caputium*, Italian *capuccio*, Portuguese *couve*, French *cabus*, *caboché*, English *cabbage*.

In central and eastern Tibet the name *pe-tse* or *pi-tsi* is used. This, as already observed by Jäschke, is Chinese *pai ts'ai* 白菜 (*Brassica chinensis*), a colloquial term for the species *suü* 菘. The Tibetan word, likewise in oral use only, was apparently conveyed through the medium of a Sze-ch'uan dialect, as shown by the vocalization *pe*; and the tenuis instead of the aspirate proves that we have not a rigorous transcription of the written language before us. The term *pai ts'ai* itself is not old, but makes its first appearance in the *P'i ya* 埤雅 of Lu Tien 陸佃 (1042–1102).² The conditions of the Tibetan language, accordingly, bear out the fact that Central Asia, on the one hand, participated in the European variety or varieties of cabbage (and A. DE CANDOLLE³ has well demonstrated the European origin of this species, *Brassica oleracea*), and, on the other hand, received (probably as imported product only) another species anciently cultivated in China.⁴ The Si-hia word *liu-na* bears no relation either to Chinese or to any other Indo-Chinese language (compare, for instance, Lo-lo *o-za*, *o-lai-ma*; Lepcha *bi-bum*), and it is therefore justifiable, as in the case of Tibetan *kram*, to seek its origin in a western language. The Turkish word *lahana* لَحْنَان suggests itself.⁵ This is derived from Greek *λάχανον*, which passed into Arabic as *lahana* لَحْنَان. The Turkish, Arabic, and Si-hia ending *-na* is due to the Greek plural *λάχανα*; the word (from *λαχάινω*, "to dig") was chiefly used in the plural form in the sense of

¹ WATT, *Dictionary of the Economic Products of India*, Vol. I, p. 533.

² *P'ei ts'ao kang mu*, Ch. 26, p. 10 b.

³ *Origin of Cultivated Plants*, pp. 83–86.

⁴ BRETSCHNEIDER, *Bot. Sin.*, pt 3, No. 245. G. A. STUART, *Chinese Materia Medica*, p. 73.

⁵ RADLOFF, *Wörterbuch der Türk-Dialecte*, Vol. IV, col. 731.

"gardeu-herbs." Again, it seems to me that also in this case the Nestorians may be responsible for the transplanting of both the name and the object.

NOTE ON SI-HIA PLANTS.

The preceding observations show that the Si-hia names of cultivated plants are of particular interest, and augur a peculiar position of Si-hia culture in Central Asia. It is therefore appropriate to elucidate this subject to some extent from an historical point of view; and an attempt in this direction is supported by a list of plants growing in the Si-hia country, and recorded in the Chinese Annals.¹

The only cultivated plant the name of which is common to Si-hia and Tibetau, as far as we can judge at present from our fragmentary material, is barley: Si-hia *na*, Tibetau *na-s* (No. 116). The translation of this word given by Mr. Ivanov is "cereal," but the standard cereal of Tibetau tribes has at all times been barley. Barley is expressly mentioned in the Annals, and occupies the first place among the plants cultivated in the Si-hia country. The food-plants raised by the ancient Tibetans are enumerated in the *Kiu T'ang shu* (Ch. 196 A, p. 1 b) as barley, a certain species of beans,² wheat, and buckwheat.³ The *Sin T'ang shu* gives the same in the

¹ *Liao shi*, Ch. 115, p. 3.

² *Lao tou* 豇豆, according to BRETSCHNEIDER (*Bot. Sin.*, pt. 2, No. 96), "a climbing leguminous plant, wild-growing, used as a vegetable; the small black seeds, which resemble pepper, are edible" (see also G. A. STUART, *Chinese Materia Medica*, p. 378), identified with *Rhynchosia volubilis*. The proper mode of writing is 勞 *lao* ("to weed"), the plant being a weed growing in wheat-fields. There can be no doubt that this is not the plant intended in the above passage of the T'ang Annals, where a cultivated plant is in question. In the Polyglot Dictionary (Ch. 29, p. 11) we find the term *lao tou*, written 勞豆, with the following equivalents: Tibetan *sran-d'ui*, Manchu *laifa*, Mongol *khosingur*. Tibetan *sran-d'ui* means "small bean or pea," and appears in the Mahavyutpatti as rendering of Sanskrit *masūra* ("lentil," see A. DE CANDOLLE, *Origin of Cultivated Plants*, p. 323); but it is not known to me that lentils are grown in Tibet.

³ Tibetan *bra-bo*, Purig *bro*, Jyarui *dru*.

order wheat, barley, buckwheat, and *lao* beans. The Chinese term for "barley" employed in this passage is *ts'in k'o* 青稞, which in meaning answers to Tibetan *na-s*.¹ The word *na*, *na-s*, does not seem to cover much ground in Tibeto-Burman.

Barley is among the most ancient cultivated plants, and many varieties have been brought into existence through the process of cultivation. The word *nas* refers at the present time to the beardless variety of barley (*Hordeum gymnodistichum*), which has only two rows of spikelets, and further presents the curious feature of having the flower-scales non-adherent to the grains. These scales drop in threshing, leaving the grains naked like those of the wheat. Three sub-varieties are said to be largely cultivated in Tibet, — a dull green, a white, and a dark or chocolate brown. It was recently (1886) introduced into India by seed obtained in Tibet.² It is known in the Indian vernaculars as *paiyambari*, *rasuli*. In China it is called *kuñ mai* 穰麥,³ and *ts'in k'o* 青稞.

The term *nas*, however, has a wider application in literature; for in the *Mahāvvyutpatti*, translated into Tibetan in the ninth century, it is identified with Sanskrit *yava*. The latter term, as conclusively shown in particular by J. Hoops,⁴ referred to the barley in the earliest period of Indian history. Moreover, as *Hordeum hexastichon* (the six-rowed barley) is almost the only cultivated form, the barley par excellence, of India,⁵ we are justified in identifying with it both the terms *yava* and *nas*.

¹ Polyglot Dictionary, Ch. 26, p. 45. BRETSCHNEIDER (*Chinese Recorder*, Vol. IV, 1871, p. 225) is inclined to think that *ts'in k'o* in the above text refers to oats. This, however, is not correct; *ts'in k'o* denotes the so-called naked barley (*Hordeum gymnodistichum*).

² WATT, *Dictionary of the Economic Products of India*, Vol. IV, p. 274.

³ BRETSCHNEIDER, *Bot. Sin.*, pt. 2, No. 32; pt. 3, No. 220.

⁴ *Waldbäume und Kulturpflanzen*, pp. 344, 358—359.

⁵ WATT, *l. c.*, p. 275.

Another variety of barley is styled in Tibetan *so-ba*, *so-wa*; Ladākhī *sōa* or *swa*. This word is widely diffused in Tibeto-Burman: Jyarūn *sui*, Nyi Lo-lo *ze-ma* (*ša-za*, "oats"), A-hi Lo-lo *e-sa*, Lo-lo of T'ung River (БАВКУ) *zo*, Mi-ñag *mu-dza* (the element *mu* is apparently identical with Burmese *mu-yau*, "barley," and Chinese *mou* 牟 or 麩, "barley"), Nepal *to-sa*; Bunuau *za-d*. The primeval form appears to be **za*, *zo*; we may derive from it also the Tibetan word *ka-rtsum*, *ka-sam*, *rtsum-pa*, *tsam-pa*, *tsam-ba* ("roasted flour from barley or oats"). The barley here in question is the common, four-rowed variety (*Hordeum vulgare*). An interesting identification of Tibetan *so-ba* is made in K'ien-lung's Polyglot Dictionary (Ch. 38, p. 45), where it corresponds to Manchu *arfa* and Mongol *arbai*. Both these words are identical with, and presumably derived from, Turkish *arpa* (in some dialects *arba*, Salar *arfa*), whence the Hungarians received their *árpa*.¹

Another Tibetan word that belongs to this group is *yu-gu*, *yu-k'u*, or *yug-po* (Ladākhī *ug-pa*), which relates principally to oats (*Avena sativa*), but is locally employed also for barley (compare Burmese *mu-yau*, "barley"). Tibetan *yo-s* ("roasted corn") and Bunan *yu-ši* ("flour") are derived from the same base, that we have also in Chinese *yu* 莩 ("oats"). The wild oat (*Avena fatua*), from which the cultivated species is now generally believed to have been obtained, occurs spontaneously in the Himalaya up to 9500 and 11500 feet,² everywhere in Eastern Tibet,³ and in several parts

¹ Z. Gombocz, *Die bulgarisch-türkischen Lehnwörter*, p. 30. Other Manchu words for "barley" are *muji* (corresponding to *ta mai* 大麥) and *murfu* (corresponding to Tibetan *nas*). The Chinese equivalent for Tibetan *so-ba* in the Polyglot Dictionary is *lin-tan mai* 鈴鐺麥 ("bell wheat"), a Peking colloquial term explained by BRETSCHNEIDER (*Chinese Recorder*, Vol. IV, 1871, p. 225) as "oats;" the meaning "barley" seems more appropriate. In Mongol dialects we meet the following variations: *arpa*, *irpei*, *arpai*, and *zarba* (POTANIN, *Tibeto Tangutan Border-Land of China*, in Russian, Vol. II, p. 398).

² WATT, *l. c.*, Vol. I, p. 355.

³ According to the observations of the writer who secured specimens in the field.

of China.¹ Though no investigations as to the relation of the wild to the cultivated species in Tibet have as yet been made, it is very likely that the latter has sprung from the former. As to the oat of Europe, the same relation has been assumed, but the origin of European oat-cultivation is a problem as yet unsolved. It has been carried somewhat vaguely into Central Asia or Turkistan by some investigators;² but I have no doubt that Tibet, where we find the wild and the cultivated species side by side, must be regarded as the home of oat culture. The *Liao Annals* mention for the Si-hia country no other cereal than barley (*ta mai*), which probably includes also oats. The Si-hia people, accordingly, like the Tibetans, must chiefly have been barley and oat eaters.

The designation for "beans", *tu* (No. 96), separates the Si-hia from the Tibetans,³ and draws them near the Chinese; for *tu* is apparently akin to Chinese *tou* 荳 ("beans, pulse").⁴ A special kind of black beans (*tu hei*) is recorded in our Si-hia glossary. In the language of the Chuñ-kia we meet *lok-tu*, in Miao-tse *ka-tu*, *lan-tao*, and *tu*.⁵ The Lepcha terms for different kinds of beans (*tuk-byit*, *tuñ-ki*, *tuñ-kuñ*, etc.) do not belong to this series; Lepcha *tuk* is a distinct word, that is independent of Chinese *tou*. Lo-lo-p'ono, A-hi Lo-lo *a-nu*, Nyi Lo-lo *a-nu-ma*, present likewise a separate group. Mo-so *beber* is a mysterious word. Considering the numerous varieties of beans, the diversity of words is not surprising. The

¹ FORBES and HEMSLEY, *Journal Linnean Soc.*, Botany, Vol. XXXVI, p. 401. In Turkistan we have *Avena sterilis* and *A. desertorum* (S. KOBZINSKI, *Sketches on the Vegetation of Turkistan*, in Russian, pp. 20, 66, 76).

² See HOOPS, *l. c.*, p. 405. The information of this author as to China and Central Asia is certainly insufficient.

³ Tibetan *sran-ma*, *srad-ma*; Yün-nan Tibetan *se-mer*; East Tibetan (so-called Si-fan) dialects *se-mer*, *se-ma*.

⁴ The case of Manchu *turi* ("bean"), derived from Chinese *tou*, might favor the assumption that Si-hia *tu* is likewise a Chinese loan-word.

⁵ D'OLLONE, *Langues des peuples non chinois de la Chine*, p. 61.

cultivation and consumption of beans (*pi tou* 華豆) in the Si-hia country is testified to by the Annals.

As imports from China we meet fruits like apricots, *kaki*, plums, *lungan*, and oranges. Pears (No. 90) were possibly cultivated.

The relationship of the Si-hia designation for rice (*k'o*) to the T'ai languages (No. 84) is curious. It is independent of the Tibetan (*ubras*) and Chinese terms, and probably points to the fact that the inhabitants of the Si-hia kingdom received the T'ai word from Miao-tse and Mo-so tribes, which likewise possess it, and also that they may have traded this staple from their southern and south-eastern neighbors. It is likewise interesting that the nomenclature for "field, forest, tree, wood, fruit" (Nos. 85-87) exhibits decidedly T'ai affinities; and this may hint at a certain degree of influence exerted by the T'ai on Si-hia agriculture.

Among the plants enumerated in the *Liao shi*, we find the fruits of the *p'ui* of the salty soil 鹹地蓬實, which may be the equivalent of *kien p'ui*, identified with *Salsola asparagoides* (family *Chenopodiaceae*).¹ FORBES and HEMSLEY² enumerate three Chinese species, — *Salsola collina*, *S. kali*, and *S. soda*, — and state that several others are in the Kew Herbarium. These desert shrubs grow everywhere in Persia, Tibet, Mongolia, and Turkistan.³

The *Liao shi*, further, mentions sprouts of *ts'ui yui* 苳蓉苗. T'ao Hung-king indicated that the best ones came from Lung-si (Kan-su).⁴ The plant is common in southern Siberia, Dsungaria, and Mongolia, and belongs to the family *Orobanchaceae*. The species

¹ BRETSCHNEIDER, *Bot. Sin.*, pt. 2, p. 254.

² *Journal Linnæan Soc.*, Botany, Vol. XXVI, p. 330.

³ WATT, *l. c.*, Vol. VI, pt. 2, p. 392. The Mongol names will be found in POTANIN, *Sketches of North-Western Mongolia*, Vol. IV, p. 152; and *Tanguto-Tibetan Border-Land of China*, Vol. II, p. 404 (both in Russian); the Turkish names in GRUM-GEZIMAILO, *Description of a Journey in Western China* (in Russian), Vol. III, p. 498.

⁴ BRETSCHNEIDER, *Bot. Sin.*, pt. 3, p. 38.

in question is probably *Cistanche salsa*, which occurs in Kan-su and Siberia.¹

The Si-hia people turned out mats from the bark-fibre of the small *wu-i* tree 小蕪莢席. Two kinds of *wu-i* are distinguished, a larger and a smaller one. The former has been identified with *Ulmus macrocarpa* (family *Urticaceae*).² The latter presumably is *Ulmus parvifolia* or some other kind of elm.³ The bark of *Ulmus* contains a strong fibre suitable for the manufacture of cordage, sandals, and mats.

Finally we meet the following wild-growing plants in the Annals of the Liao:

Leaves from *ti huan* 地黃葉, *Rehmannia glutinosa*.⁴ The dried leaves of this plant furnish digitalis.

Kū hui t'iao 拒灰條, presumably identical with *hui t'iao* 灰滌, *Limnanthemum peltatum* (family *Gentianaceae*);⁵ applied to the Kan-su region, it may refer as well to one of the ten species of *Gentiana* occurring there.⁶

Pai hao 白蒿, *Artemisia stelleriana vesiculosa*.⁷ Root and

¹ FORBES and HEMSLEY, *J. Linnean Soc., Botany*, Vol. 26, p. 222. The above designation of the species is the same as *Phelipaea salsa* given by G. A. STUART (*Chinese Materia Medica*, p. 61). Compare the interesting descriptions of this and the preceding plants by S. KORŽINSKI, *Sketches on the Vegetation of Turkistan* (in Russian), pp. 5-6.

² BRETSCHNEIDER, *Bot. Sin.*, pt. 3, No. 330. G. A. STUART, *Chinese Materia Medica*, p. 448. The discrimination of the two kinds is attributed to Li Shi-chên by Bretschneider and Stuart; it is first made, however, in the *Pên ts'ao yen i* of the year 1116 by K'ou Tsung-shi. There the smaller species is said to be identical with elm-seeds 榆莢. In fact, as follows from our above text, it must have designated a particular species.

³ Eight species of *Ulmus* are known from China (FORBES and HEMSLEY, *l. c.*, p. 448); the genus comprises about sixteen species. The elm of Mongolia is *Ulmus campestris*.

⁴ BRETSCHNEIDER, *l. c.*, No. 100. G. A. STUART, *l. c.*, p. 150. FORBES and HEMSLEY, *l. c.*, p. 193.

⁵ G. A. STUART, p. 241. FORBES and HEMSLEY (*l. c.*, p. 142) enumerate the two species *L. cristatum* and *L. nymphoides*, both of which occur likewise in India (WATT, *l. c.*, Vol. IV, p. 641), where stems, fruit, and leaves of *L. cristatum* are eaten in certain localities, *L. nymphoides* being largely employed as fodder in Kashmir.

⁶ GRUM-GRZIMAILO, *l. c.*, Vol. III, pp. 493-494.

⁷ G. A. STUART, *l. c.*, p. 52

leaves are used as food; a decoction is employed as a wash in ulcerous skin affections.

Fruits of *kien ti sui* 鹹地松實, pine-nuts of a particular species growing in salty soil. The tree in question is perhaps identical with the *lo* or *ro* of the Si-hia glossary (No. 143). At least eleven species of *Pinus* are known from China.¹

The following plants recorded for the Si-hia country in the *Liao shi*, as far as I know, have not yet been identified: *ts'ih lo mi-tse* 青裸床子, *ku-tse man* 古子蔓, *ki ts'ao-tse* 雞草子, and *tōn sian ts'ao* 登廂草. The plants previously mentioned, may have been employed partially by the Si-hia as food-stuffs, and partially by the Chinese as medicines. The Si-hia, if we may depend on the Chinese annalist, in case of sickness, did not resort to physicians and drugs, but summoned their shamans for the exorcism of the devils causing the complaint.

In our Si-hia glossary, the name of a flower is given as *t'o-lū* 托綠, and through the Chinese translation *mu-tan* is identified by Mr. Ivanov with *Paeonia chinensis*. It is more probable, however, that this is not the Chinese, but an indigenous Si-hia species. Presumably it is *Paeonia anomala*, found in Kan-su and Mongolia. According to POTANIN,² it is styled by the Tangut *tombu-tuglan*; and the Si-hia name may bear some relation to this word *tuglan*.

Likewise the Si-hia term *fu-sai* (No. 136), alleged to mean "lotus," in all likelihood refers to an autochthonous plant of the Kan-su and Amdo regions, where we know of four species of *Iris* (*bungei*, *dichotoma*, *ensata*, and *gracilis*).³

It is regrettable that the Si-hia vocabulary does not impart the words for "onion" and "garlic." It is related in the Annals of the

¹ FORBES and HEMSLEY, *l. c.*, pp. 549—553.

² *Tanguto-Tibetan Border-Land of China*, Vol. II, p. 401.

³ GRUM-GUŽIMAILO, *Description of a Journey in Western China*, Vol. III, p. 500.

Liao that the Si-hia country produced two wild species, called *ša ts'uñ* 沙葱 ("sand-onion") and *ye kiu* 野韭 ("wild-growing leek"). The former species is not mentioned in the *Pén ts'ao kang mu*; but it is explained in the continuation of this work, the *Pén ts'ao kang mu shi i*,¹ according to which *ša ts'uñ* is a Kan-su name, and relates to a wild-growing onion occurring everywhere in Mongolia, the leaves being the same as those of the cultivated variety. It is styled "sand-onion," because it thrives in sandy places; and the Mohammedans of Kan-su especially relish it. The term is listed in the Polyglot Dictionary (Ch. 27, p. 27) with the literal Tibetan translation *bye-tsoñ*, Manchu *engule*, Mongol *günggel*. Eight wild species of *Allium* have become known from Kan-su.²

The alliaceous plants belong to the oldest cultivated within the dominion of the Indo-Chinese family. We have the following interesting coincidences of names:

1. Chinese *ts'uñ* (even upper tone) 葱 (general term for alliaceous plants, as onions, garlic, leek), Korean *č'oñ*, Japanese *sō*. Tibetan *b-tsoñ* (high tone), Tromowa, Sikkim, and Lepcha *o-tsoñ*, eastern Tibetan (so-called Si-fau) *a-č'uñ*, Chō-ko *a-suñ*, Nyi Lo-lo *a-ts'e*. Primary form presumably **dzuñ, juñ*.

2. Chinese *suan* (sinking upper tone) 蒜, "garlic" (*Allium sativum*), Cantonese *sūn*, Hakka *son*, Fukien *sauñ*, Korean and Japanese *san*, in north-western Chinese dialects *suai*.³ Lepcha *suñ-gu*, A-hi Lo-lo *šo*, Lo-lo-p'ō *šu*, Nyi Lo-lo *še-ma*; Burmese *krak-swan*, So. Chin *kwet-šon*.

3. Chinese *kiu* (rising upper tone) 韭 or 菲 ("leeks, scallions," *Allium odorum*), Cantonese *kau*. Tibetan *s-goy(-pa)* (high tone), Yün-nan Tibetan *gau-pa*, Suñ-pan Tibetan *čon-grog*;⁴ Burmese

¹ Ch. 8, p. 16 b (see *T'oung Pao*, 1913, p. 326).

² Enumerated by GRUM-GRZIMAŁO, *l. c.*, Vol. III, pp. 500—501.

³ POTANIN, *Sketches of North-Western Mongolia* (in Russian), Vol. IV, p. 146.

⁴ POTANIN, *Tanguto-Tibetan Border-Land of China* (in Russian), Vol. II, p. 395.

Li-šii gur k'an (fol. 15) has also *kew* in the sense of wild garlic (*ri egog*).

krak-swan, Southern Chin *kwet-šon*. The primary form seems to be **gau*, *gou*. The suffix *-g*, *-k*, is peculiar to Tibeto-Burman. Presumably also Tibetan *ske-tse* ("wild onion") belongs to the same base; perhaps even Tibetan *kwon-don* or *kon-ton*¹ and *kiu-ljan* ("wild onion," = Mongol-Manchu *suduli*).

4. The element *don*, *ton*, in the Tibetan compounds *kwon-don*, *kon-ton*, and the element *čon* in Suñ-pan Tibetan *čon-grog*, may be anciently related to Chinese **diem*, *tiem* 截, now *ts'ien* and *t'ien* ("wild garlic or onion").

Chinese *ts'un* and *suan* (*sun*, *sui*), with their corresponding equations in the other languages, apparently are allied words; and, what is still more interesting, appear to be historically connected in some manner with Turkish (Cumanian, Chuvaš, and Osmanli) *soyan* ("onion"),² Uigur *soyun*, Baskir *šugan*, Djagatai *soiyan*, Mongol *soiyina* (in dialects also *soiyinok*), Shirongol *saignyk*, Teleutic *soyono*, Altaic *sōno*, Manchu *suigina*, Mongol and Manchu *suduli* ("wild garlic"). From a purely philological standpoint it is difficult to decide which side is the borrower, and which is the recipient. A further interrelation seems to prevail as to the Indo-Chinese base **gau*, *gou*, *gok*, *ko*, and Shirongol *gogo*, Ordos Mongol *kogut*, *kogyt* (*y* = Russian *ы*); also as to Tibetan *kwon*, *kon*, previously mentioned, and Mongol *günggel*. The Turkish-Mongol-Tungusian series bears the genuine imprint of Altaic words, both as to their phonetic structure and particularly as to their endings. On the other hand, the Chinese words, as shown by documentary evidence, point to a great antiquity, and this conclusion is corroborated by their wide diffusion in the cognate languages. The philologist,

¹ Polyglot Dictionary, Ch. 29, p. 24. The former is equalized with Chinese *ye suan miao* 野蒜苗 ("sprouts of wild garlic"), Manchu *sejulen*, Mongol *khaliyar*; the latter, with *aiso ye kiu* 小野韭 ("small wild leek"). *Li-šii* writes *kun-don*.

² SCHRAUER (in Hehn, *Kulturpflanzen*, 8th ed., p. 208) compares with this Lithuanian *svogūnas*, a word that stands alone in Indo-European languages.

however, cannot decide two important botanical questions without which the solution of the problem is hopeless: and these are whether the Indo-Chinese and Turkish-Mongol names in their origin refer to a wild or to a cultivated species, and where the home of the wild and cultivated species is to be sought. BRETSCHNEIDER¹ informs us that the *ts'ui* of North China is *Allium fistulosum*, a native of Siberia, Dauria, and northern Mongolia, and that the ancient dictionary *Erh ya* does not mention the cultivated *ts'ui*, but notices only the mountain or wild onion. Since the researches of E. ROBERT,² who found *Allium sativum* growing wild in the Kirgiz steppe, botanists are agreed that this region should be regarded as the original habitat of garlic. In Egypt, the cultivation of garlic and onion is very ancient, and traceable at least to about 1200 B.C.³ Yet their spontaneous origin in Egypt cannot be proved.⁴ The ancient Semitic name (Assyrian *šūmu*, Hebrew *šūm*, Punic *σοῦμ*, Arabic *ṭūm*) is probably not correlated with the Turkish term. Relying on the botanical evidence, the assumption would be possible that a certain species of garlic or onion was first cultivated by Turkish tribes and handed on by them to the Chinese and their neighbors in Central Asia; this transmission, as borne out by the linguistic evidence, must have taken place in a very remote, prehistoric period.⁵ It is of great interest also that Mongol and Turkish

¹ *Bot. Sin.*, pt. 2, p. 169.

² *Alliorum adhuc cognitorum monographia*, p. 44 (St. Petersburg, 1875).

³ V. LORET, *L'ail chez les anciens Egyptiens* (*Sphinx*, Vol. VIII, 1904, pp. 135-147).

⁴ F. WOENIG, *Pflanzen im alten Aegypten*, pp. 198, 199.

⁵ This prehistoric transmission must not be confounded with the late historical introduction in the Han period of another species of *Allium* (*Allium scorodoprasum*), *ts'uan* 大蒜, *ku* 胡 *ts'uan*, or *ku* 葫. HIRTH (*T'oung Pao*, Vol. VI, 1895, p. 439) has represented the matter as though garlic had been introduced into China for the first time under the Han from Fergana by General Chang K'ien. The attribution of the introduction to Chang K'ien, however, is not an historical fact; this event is not reported in his authentic biography inserted in the Han Annals, but it is on record only in that spurious and untrustworthy Taoist production, the *Po sui chi* (see BRETSCHNEIDER, *Bot. Sin.*, pt. 2,

possess a common word for a wild species of leek or garlic thriving in the steppes (*Allium senescens*): Mongol *maŋgin*, *maŋgir*, Kalmuk *maŋgirsun*, Buryat *maiehuñ*, *maiehañ*;¹ Teleutic *mañyr*.² The popularity of this plant is borne out by the fact that the Buryat designate June the "month of leek" (*maiehañ hara*). In view of the situation on which the problem rests, and in view of two wild species of garlic and leek utilized by the Si-hia, we readily see that it would be important to know the Si-hia terms for the latter, which would possibly shed light on the subject.

PHONOLOGY OF SI-HIA.

A complete and positively assured phonology of Si-hia can naturally not be based on the limited material available for the present. Some characteristic phonetic traits, however, may be pointed out.

1. The most striking phenomenon in the vocalic system of Si-hia is that in a number of cases the vowel *i* corresponds to Tibetan *a*:

li, moon = Tib. *z-la* (No. 12).

rni, ear (corresponding to Chinese *ni*, *ni*) =
Tib. *rna* (No. 10).

ni, nose = Tib. *s-na* (No. 11).

či, flesh = Tib. *ša* (No. 48).

p. 171). F. P. SMITH (*Contributions toward the Materia Medica*, etc., p. 8; and repeated in the new edition of G. A. STUART, p. 28) says that according to the *Pên ts'ao* Chang K'ien introduced the plant; but Li Shi-chên, the editor of that work (Ch. 26, p. 6 b) gives as his own opinion only that "people of the Han dynasty obtained the *ku suan* from the Western Regions," while he cites the dictionary *T'ang yün* of Sun Mien (published in 750) to the effect that Chang K'ien was the first to bring it back from his expedition to Central Asia. It therefore was in the T'ang period that this opinion prevailed, but, as far as I know, there is no evidence thereof accruing from a contemporaneous source of the Han. The connection of the plant with the name of the great general is purely traditional, as he was famed for having introduced a number of other useful plants; and all we may assert safely is that it is possible that a new alliaceous species was received by the Chinese during the Han era from inner Asia.

¹ CASTRÉN, *Buryätische Sprachlehre*, p. 172.

² RADLOFF, *Wörterbuch*, Vol. IV, col. 2007.

č'i-ma, orange = Tib. *ts'a-lum-pa* (No. 44).

ts'i-nu, salt = Tib. *ts'a* (No. 13).

si, zi, grass (Mo-so *zi*) = Tib. *tsa* (No. 42).

nin, morning = Tib. *nan* (No. 120).

yi, hundred = Tib. *b-r-g-ya*, Burmese *ta-ya* (p. 14).

yin, light (in weight) = Tib. *yan* (No. 120).

2. If, however, the Tibetan word containing the vowel *a* is closed by final *s* or *g*, which are eliminated in Si-hia,¹ the vowel *a* is preserved in the latter language:

na, barley = Tib. *nas* (pronounced *na*).

la, hand = Tib. *lag*.

Interchange of *a* and *i* occurs within the pale of the Tibetan written language: *r-man-lam* ("dream;" *lam*, "road") and *r-mi-lam* (*man* = Chinese *moñ* 夢, "dream"). In this case we may safely assert that the form *r-man* is older than *r-mi*. Ladakhi *lča* corresponds to common Tibetan *lči* ("dung"). The word *rmon* ("ground, foundation") has a provincial form *rmön*; both *t'ag* and *t'ig* mean "cord." The same alternation is met between Tibetan and other Indo-Chinese languages: Tib. *šig* ("louse") — Lepcha *šak*; Tib. *byan* ("pure") — Newari *b'in* ("good, fine"), but Chepan *b'an-to*; Tib. *za-ba* ("to eat") — Chepan *ŋ'i-sa*; Tib. *ña* ("fish") — Mo-so *ni*. In the word for "eye" (No. 59) we noted the forms *mik* and *mak*.

3. In other cases, Tibetan *a* in an open syllable changes in Si-hia into *o* or *u*:

Tib. *na*, sick, disease = Si-hia *no* (corresponding to Ahi Lo-lo *no*).

Tib. *ba*, cow = Si-hia *wu*.

¹ In this, as well as in the following paragraphs, where the elimination of finals is mentioned, it should be understood that elimination merely refers to an existing fact, but is not intended to convey any notion of genetic development. It is more than doubtful whether Si-hia (like other Indo-Chinese languages) has ever possessed such finals (see Conclusions).

² This base occurs also in the Karen languages: *ner-man*, *mye-man*, *šin-man*, *mi-man* (*Gazetteer*, etc., p. 654).

4. Tibetan *a* followed by a final labial or guttural consonant is transformed into *o* in Si-hia, the labial or guttural being eliminated:

Tib. *r-gyab*, back = Si-hia *no*.

Tib. *p'ag*, hog = Si-hia *vo* (Ahi Lo-lo *vye*).

5. Si-hia *u* corresponds to Tibetan *u*:

lu, body = Tib. *lus*.

wu, head = Tib. *wu* (*dbu*).

wu, centre = Tib. *dbus* (*wu*).

6. Si-hia *u* corresponds to Tibetan *o*:

lu, season = Tib. *lo*, year.

7. Si-hia *u* corresponds to Tibetan *a*:

wu, cow = Tib. *ba*.

wu, father = Tib. *p'a*.

k-iu, five = Tib. *l-na*.

k-num, heaven = Tib. *g-num* (*d-guñ*).

zu, fish = Tib. *ña*.

8. Si-hia *u* corresponds to Chinese *ou*:

tu, bean = Chin. *tou*.

9. Si-hia *o* corresponds to Tibetan *u*:

lo, sheep = Tib. *lug*.

mo, worm = Tib. *abu*.

10. Si-hia *o* corresponds to Tibetan *ö* (*e*):

mo, fire = Tib. *mö* (*me*).

11. Si-hia *ö* corresponds to Tibetan *ö* developed from *o*:

tsö, *Pantholops hodgsoni* = Tib. *tsö* (*gtsod*, *gtsö*).

12. Si-hia *i*, usually in a closed syllable, corresponds to Tibetan *i*:

niñ, heart = Tib. *s-ñiñ*.

miñ, man = Tib. *mi*.

liñ or *riñ*, great = Tib. *riñ*, long.

č'i (*k'i*), gall = Tib. *m-k'ri-s* (*-pa*).

13. Si-hia *i* in an open syllable corresponds to Tibetan *i* and Chinese *ɛ*:

si, to die = Tib. *sī*, Chin. *sɛ*, Mo-so *se*.

14. Nasalized vowels seem to occur in the following examples:

mĩ, man = Tib. *mī*.

mĩ, not = Tib. *mī*.

rĩ, bear = A-hi Lo-lo *rō-mo*, Lo-lo-p'o *ro-mo*,
Tib. *d-re-d*.

č'u-lĩ, plum = Chin. *li* (No. 184).

ko (go)-čẽ, lion (No. 198).

nũ, two (see p. 13). beside *noĩ*.

nũ, spring (No. 73).

č'ĩ-ni, summer (No. 74).

15. Diphthongs occur with comparative frequency. The one most characteristic of the language is *ou*. The words in which it is found have only a simple vowel in the allied languages: *šou* (No. 6), *kou* or *gou* (No. 18), *mou* (No. 21), *kou* (No. 70), *č'ou-na* ("coiu"), and *lou* ("to stew"). The same diphthong is characteristic also of Jyaruĩ, a Tibetan dialect with which Si-hia shares other features: *smou* ("medicine") = Tibetan *aman*; *šou* ("paper") = Tib. *šog*.

16. Likewise the diphthong *ei* thrives in Si-hia where the allied languages have a plain vowel: *mei* ("eye"), *zei* ("panther"), *jei* ("water"), *šaĩ-wei* ("under-garment"), *wei* ("snow"), *wei* ("year"), *dzei* ("south"), *wei* ("monkey"), *pei* ("present, current"). In *wei* ("to do") the diphthong agrees with Chinese *wei*.

17. The diphthong *ai* is met with in *tsai-šiu* ("rat") and *nai* (two of the cyclical signs, see No. 176). It will be noticed that, with the single exception of *t'ien-čõ*, all diphthongs close the syllable, and are never followed by a consonant.

18. The diphthong *ao* is found in the Chinese loan-words *yao* ("furnace") and *mao'r* ("cat"); and in the indigenous words *yao* ("day"), and *yao* ("bird") in the compound *wo-yao* ("domestic fowl").

19. The diphthong *ui* appears after palatals in *č'ui* ("tooth"), where no diphthong is encountered in related idioms, *no-čui-ni* ("chair"), and *č'ui* ("nit"). The diphthong *iu* occurs only in the loan-word *liu-na* ("cabbage"); *ie*, in *t'ien-čö* ("loam-house") and *sie* ("following, next").

20. The triphthong *iao* occurs in *liao* ("blood") and *siao* ("to be born"). The existence of the triphthong *uai* seems to me doubtful (see No. 196).

21. The consonantal system of Si-hia is as follows:

<i>k</i>	<i>k^c</i>	<i>g</i>	<i>ñ</i>
<i>č</i>	<i>č^c</i>	<i>j</i>	<i>ñ̃</i>
<i>t</i>	<i>t^c</i>	<i>d</i>	<i>n</i>
<i>p</i>	<i>p^c</i>	<i>f</i>	<i>b</i> <i>w</i> <i>m</i>
<i>ts</i>	<i>ts^c</i>	<i>dz</i>	
<i>z</i>	<i>z</i>	<i>š</i>	<i>s</i>
<i>y</i>	<i>r</i>	<i>l</i>	<i>h</i>

This system coincides with Tibetan save the fricative *f*, which does not exist in Tibetan. All consonants occur as initials. No double consonants are found in our material. Only *ñ*, *n*, *m*, and *r* are utilized as finals. A Si-hia syllable or word is therefore composed of initial consonant + vowel + *ñ*, *n*, *m*, or *r*. Phonetic groups consisting solely of a vowel or diphthong or initial vowel + final consonant seem to be scarce.

22. Initial gutturals and palatals are capable of palatalization: *k'ä* or *g'ä* ("gold"), *k'ä-i* or *č'ä-i* ("true"), *gu-g'ä* ("phoenix").

23. Consonantal prefixes can be pointed out only in four cases: *k-ñü* or *k-ñu* ("five"), *k-ñum* ("heaven"), *r-ni* ("ear"), and possibly in *m-ru*, *m-lu* ("worm," No. 22).

24. Si-hia is destitute of final *g*, *l*, and *s*, as compared with Tibetan and other languages:

la, hand = Tib. *lag*.

lo, sheep = Tib. *lug*.

dzei, *zei*, panther = Tib. *g-zig*.

- wo*, swine = Tib. *p'ag*.
ho, silver = Tib. *d-ñul*, Mo-so *ho*.
na, barley = Tib. *nas*.
wu, centre = Tib. *abus* (*wu*).
lu, body = Tib. *lus*.

25. Final *ñ* is frequent in Si-hia: *č'ōñ* ("mother"), *liñ*, *riñ* ("west"), *šaiñ-wei* ("shirt"), *yiñ* ("star"), *tañ-lañ* ("quail"), *moñ-tsi* ("fly"), *tañ* ("to set," of the sun).

26. Si-hia final *ñ* corresponds to Tibetan final *i*:

- yiñ*, light (in weight) = Tib. *yai*.
liñ or *riñ*, great = Tib. *riñ*, long
niñ, heart = Tib. *s-ñiñ*.

27. Si-hia final *ñ* corresponds to Tib. final *g*:

- šaiñ*, iron = Tib. *l-čag-s*.

28. Si-hia final *ñ* corresponds to Chinese and Tibetan final *m*:

- siñ*, heart, mind = Chin. *sim*, Tib. *sem(s)*.

29. Final *n* appears in Si-hia *tsan* ("lungs"), *tsan* ("autumn"), *tan* ("to be").

30. Final *m* occurs in *rom* ("spring of water") = Tib. *k'ron-pa*, *k'rom-pa*; *kium* ("heaven") = Tib. *gnam*.

31. There is only one instance of final *r* in Si-hia: *nir*, *n'ir* ("relatives") = Tib. *g-ñer*, *g-ñen*, *ñen*, *ñe*.

32. Si-hia *k'* corresponds to Tibetan *sk* in:

- k'ia*, magpie = Tib. *skya*.

33. *č* and *š* alternate in Si-hia and Tibetan:

- či*, flesh = Tib. *ša*.
šuo, water = Tib. *č'u*.
šaiñ, iron = Tib. *l-čag-s*, Lepcha *ča*.

34. Si-hia *m* answers to Tibetan *m*:

- mĩ*, man = Tib. *mi*.
mo, fire = Tib. *mö*, *me*.

35. Si-hia *m* corresponds to Chinese *m*:

moñ-tsi, fly = Chin. *moñ* 蠅, gadfly.

36. Si-hia *ts* answers to Tibetan *ts*:

tsö, *Pantholops hodgsoni* = Tib. *tsö*, *g-tso(-d)*.

37. Si-hia *z* corresponds to Tibetan *ts*:

zi, grass = Tib. *tsa* (*r-tsa*).

38. Si-hia *y* answers to Chinese *y* (from *ñ*) and Tibetan *ñ*:

ya, goose = Chin. *yen*, Cantonese and Hakka *ñau*,
Fukien *ñan*; Tib. *ñan*, Burmese *ñan*.

39. Si-hia *w* corresponds to Tibetan *b*, *p'*:

wu, cow = Tib. *ba*.

wo, stomach = Tib. *p'ö*.

40. Si-hia *w* corresponds to Tibetan and Chinese *ñ*:

wen, bad = Tib. *ñan* (in Central Tibet *ñem-pa*,
Tromowa *ñen-po*, Chin. *ñan* ("false, fraudulent")).

wu, cow = Cantonese *ñau*, Siamese *ñoa* (*ñ-woa*),
but Tib. *ba*.

41. Si-hia *w* is the equivalent of Chinese *f'*:

wu, father = Chin. *fu*.

MORPHOLOGICAL TRAITS.

1. The syllable *ni* appears at the end of several stems, so that it may be regarded as a suffix, used similarly to Tibetan *-pa*: *tsu-ni* ("rain"), *k'ñ-ni* ("summer"), *tsu-ni* ("man"), *ño-čui-ni* ("chair"), *ku-ni* ("flour"), *tsö-ni*, *jö-ni* ("town"). It occurs with a certain preference in the names of animals: *čxi-ni* ("fox"), *tsö-ni* or *jö-ni* ("wild goose"), *ko-ni* ("owl"), *mo-ni* ("cuckoo"), *wu-ni* ("wild animals"), *č'an-ni* ("birds"). In the phrase *tsiñ-ni* ("in time") it seems to have an adverbial function.

2. A suffix *-i* appears in *k'o-i* ("boot"), derived from *k'o* ("foot"); and in *ro-i* ("saddle"), from *ro* ("horse"). Thus it seems to imply the meaning of a covering.¹ Perhaps also *wu-i* ("backbone") may belong here, if the element *wu* bear any relation to *üw, o* ("back").

3. The diminutive suffix *bu*, in the same manner as in Tibetan (from *bu*, "son"), seems to be employed in *pa-bu* ("daddy"). In *pan-bu*, *ban-bu* ("butterfly"), however, the element *bu* (= Tibetan *abu*) means "insect."

SYNTACTICAL TRAITS.

I have nothing new to add to the observations of my predecessors along this line. Our vocabulary imparts only a few brief sentences which allow of no far-reaching inferences as to syntax. The main point in the construction of the Si-hia sentence, as already remarked by M. MORISSE, is that the verb concludes the phrase, while it is preceded by both the direct and the indirect object. This feature is in striking agreement with Tibetan, and presents additional proof for the fact that Si-hia belongs to the Tibeto-Burman group. The position of the attribute, which may precede or follow the noun, is also in harmony with Tibetan. M. Morisse is presumably right in observing that the place of the adjective may be regulated according to certain rules of euphony analogous to those of French. The glossary offers certain fixed terms, as *pei wei* ("current year"), *sie wei* ("next year"), *yi wei* ("past year"), *sie nüü* ("after to-morrow"), but *wei sañ* ("sparrow," No. 149), *yañ hei* ("raven"), *tu hei* ("black bean"). In regard to the last, Mr. Ivanov remarks that the attribute is placed after the noun if terms of Tibetan origin are involved. I do not see why *tu hei* should be of Tibetan origin; both *tu* and *hei* are probably Chinese words (Nos. 96 and 182).

A suffix with analogous significance occurs in Mongol *-bēi*: *ebēigün* ("chest") — *ebēigü-bēi* ("thorax"); *dala* ("shoulder-blade") — *dala-bēi* ("collar"); *būlgägüsü-bēi* ("girdle").

CONCLUSIONS.

The preceding analysis leaves no doubt that the Si-hia language belongs to the Tibeto-Burman group of the Indo-Chinese family. It is more difficult for the present to assign to it an exact position within that group. It appears as a certainty that Si-hia is not a mere dialect of Tibetan, Tibetan being taken in the strict ethnographical sense. It is as distinct from Tibetan as is Lo-lo or Mo-so, and has peculiar characteristics by which it is clearly set off from Tibetan proper. To these belong the prevalence of the vowel *i* corresponding to Tibetan *a*, the predominance of diphthongs, particularly of *ou*, and the lack of final explosive consonants. In the latter trait, Si-hia agrees with Lo-lo and Mo-so. Further, it has a common basis with these two languages, as shown by the large number of coincident words. While the Si-hia vocabulary displays certain affinities with Chinese, on the one hand, and with Tibetan, on the other, there are numerous words that are not related to Chinese or Tibetan, but that closely agree with Lo-lo and Mo-so. A goodly proportion of these (sixteen, Nos. 67—82) meet with no counterpart in Chinese and Tibetan, and must be designated as formations peculiar to the Si-hia, Lo-lo, and Mo-so stock; while those words of the same stock, which are traceable to Chinese and Tibetan, exhibit a closer degree of relationship with one another than with Chinese and Tibetan. It must therefore be conceded that we are entitled to the uniting of Si-hia with Lo-lo and Mo-so into a well-defined group of Indo-Chinese languages, which for brevity's sake might be termed the Si-lo-mo group (by choosing the first syllable of each name). How this curious fact is to be explained from the standpoint of history is a question that is not yet capable of a satisfactory solution. Si-hia is a dead language, and the remains discussed on these pages come down from the end of the twelfth century; Lo-lo and Mo-so,

however, are known to us only in their present state. The missing links between Lo-lo and Mo-so on the one hand, and Si-hia on the other, must have existed in the territory of Sze-ch'uan (or may still survive there), but little of the aboriginal languages spoken in that region has come to our knowledge. One trail leads from the Si-lo-mo group to the Burmese, Assam, and Nepal languages; and another trail takes us to the T'ai group. Unsuspected relations between the various groups of languages are revealed; these may partially be of ancient date, partially may point also to a lively interchange of ideas in historical times. Among the characteristic traits of the Si-lo-mo branch, two are prominent: in distinction from Tibetan, a very limited number of consonantal prefixes; and in distinction from Chinese and Tibetan, the lack of final explosives. These two features may be illustrated somewhat more in detail.

The significance of the preceding investigation for a study of the historical grammar of Tibetan (and a language can be properly comprehended only if we grasp its genetic growth) is self-evident. In former days it was permissible, for instance, to compare such words as Tibetan *č'u* and Chinese *š'ui* ("water"); but now we recognize that the two words, though certainly interrelated, are not directly comparable, each representing a different phase of development from a common root (see No. 37). The most signal result of our study is that many monosyllabic phenomena of the Tibetan language, which at first sight appear as indivisible stem-words and have indeed been taken as such by previous scholars, now turn out to be compounds contracted from two, three, and even four bases: compare *bya* (No. 32), *k'yim* and *lam* (No. 47), *sbrul* (No. 22), *rna-boñ* (No. 7), *rta* (No. 8), *gañs* (No. 38), *rluñ* (No. 39), *rdzoñ* (No. 47), *groñ* and *k'rom* (No. 47), *lče* and *ljags* (No. 49), *qyro* (No. 51), *mt'o* (No. 65), *stag* (No. 67). These examples demonstrate that it is our primary task to ascertain the history of Tibetan

words through careful analysis of their components, based upon comparative methods, before venturing direct comparisons of the word in question with the corresponding notions of cognate forms of speech. It is not good method, for example, to correlate Tibetan *spreu* ("monkey") with Burmese *myok* (*myauk*).¹ The Tibetan word is a secondary formation contracted from *spra-bu* (*bu* being a diminutive ending which affects the stem-vowel after the elision of *b*; *hya-bu* becomes *byeu*, *bye*; *lo*, "leaf" — *löu*, *lō*, "section of a book;" *mda*, "arrow" — *mdōu*, *mdö*, "arrowhead").² Judging from experience, the word *spra* certainly is not a plain stem-word, but, on the contrary, is a double or even a triple composition. Theoretically it should be analyzed into **sa-pa-ra* or *sa-pa-la*, and in fact we meet these single components in the Lepcha designation of the monkey, *sa-hu-pa-lá-p*. It is therefore improbable that Tibetan *spra* bears any relation to Burmese *myok*, which, on the contrary, is an independent word. In the same manner, Tibetan *skra* ("hair") has been evolved from **sa-ka-ra*, for in Aka we have *sa-ká* ("hair") and in Kachin *ka-ra* ("hair"); the element *sa* further appears in Kuki-Chin *sa-m* and Burmese *sa-n*. Tibetan *gru* ("boat") is developed from **ge-ru*, *ge-lu*: the two elements are transposed in Mi-ñag *lo-ge*; and the base **lu* occurs in Mo-so *lu*, *lō* ("boat"), Lo-lo of T'ung River *lo*, Lo-lo-p'ó *li*, A-hi Lo-lo *li* and *li-zo*, Nyi Lo-lo *š-li*; Aka *lä*, Burmese *hle*, Kachin *hli*. In the languages of the illiterate tribes we naturally find older forms preserved; this is the case also in many Tibetan and Chinese dialects, as contrasted with the written languages and the standard colloquial forms now in use. When we compare Tibetan *hya-wa-ni* or *p'a-wa-ni* ("bat") with Chinese *pien-fu* 蝙蝠, a word that refers to the same animal, no relationship between the two words is apparent; but if we fall back on the dialectic forms,

¹ E. HUDER, *Bull. de l'Ecole française*, Vol. V, 1905, p. 326.

² See also A. SCHIEFNER, *Mélanges asiatiques*, Vol. I, pp. 357, 358.

Tromowa *p'o-loi-da*, Sikkim *p'yo-loi-da*, and Hakka *p'o-fuk*, we begin to realize the identity of the first element in the Tibetan and Chinese compounds (compare also Sino-Annamese *bien* with Lepcha *bryan*).

Tibetan *r-mi-ba* ("to dream"), past tense *r-mi-s*, at first sight, seems to be a widely different formation from Chinese *moü* 夢 ("dream, to dream"); but the Tibetan noun *r-moi-lam* ("dream;" *lam*, "road;" of rare occurrence for *r-mi-lam*) at once prepares the connection. We further have Lepcha *moü* (*moü myon*, "to dream a dream") and Burmese *mak*. The final guttural surd in Burmese in lieu of the guttural nasal shows us the variability of the finals, and the Tibetan stem *r-mi* may raise the question whether the finals *i* or *k* in their origin formed really part of the stem, or rather present subsequent formative additions. He who has carefully gone over the analysis of Si-hia words must have noticed that this problem presents itself in more than one instance. It has been said that Lo-lo has dropped all final consonants with the exception of all nasals;¹ it has been asserted also, and is generally assumed, that the final explosives *k*, *p*, *t*, in Chinese are inherent in the stem, and have been eliminated in the northern dialects. These suppositions, however, are by no means borne out by careful observation of the facts. In a number of cases, it is true, Chinese and Tibetan, as well as other cognate languages, agree as to their finals; for instance:

Chin. *ciuk* 竹, bamboo; Tib. *s-ñug*; Magar *luk*.

Chin. *dzak* 賊, brigand; Tib. *jag*.

Chin. *tuk* 毒, poison; Tib. *dug*.

Chin. *muk* 目, eye; Tib. *mig*.

Chin. *luk* 六, six; Tib. *drug*.

¹ E. HUUBER, *Bull. de l'École française*, Vol. V, 1905, p. 325.

- Chin. *čik* 織, to weave; Tib. *t'ag*.
 Chin. *swiet* 說, to speak; Tib. *b-sad*.
 Chin. *šat* 殺, to kill; Tib. *b-sad*.
 Chin. *kiap* 甲, armor; Tib. *k^srab*.

In other instances, however, Tibetan is destitute of a final, whereas Chinese is provided with it:

- Tib. *agro*, Si-hia *k'o*, Chin. *gu-k* (No. 51).
 Tib. *ñi*, sun; Chin. *šit* 日.
 Tib. *ko*, hide, leather; Chin. *kok* 革.
 Tib. *za-ba* (*zo*, *b-zo-s*), to eat; Shanghai *zok* 食.
 Tib. *l-če*, tongue; Chin. *džiet* 舌 (see No. 49).
 Tib. *g-la*, Si-hia *la*, stag; Chin. *luk* (No. 31).¹

Again, in other cases, Tibetan has a final, while Chinese is devoid of it:

- Tib. *s-gog*, leek; Chin. *kiu* (see p. 96).
 Tib. *zug-pa*, pain, *adzug-pa*, to sting, prick;
 Chin. *dž'u* 愁, to grieve.

Or, the finals differ in Chinese and Tibetan:

- Chin. *šik* (Hakka *šit*) 識, to know; Tib. *šes*.
 Chin. *dat* 達, to penetrate; Tib. *dar*.
 Chin. *šit* 虱, louse; Tib. *šig*.
 Chin. *džak*, *džak* 作, to make; Tib. *m-dzad*.²

¹ Compare also Tib. *ro*, taste; Siamese *rot*, taste.

² Final *m*, *n*, and *ñ* are inherent in the stem:

Tib. *sem-s*; Chin. *šim* 心 (No. 9).

Tib. *šam*; Chin. *šam* 衫 (No. 100).

Tib. *ram-s*; Chin. *lam* 藍, indigo (Korean *ram*, Manchu *lam-un*).

Tib. *žon-ps*, to mount, ride; Chin. *džien* 乘.

Tib. *mai*, many, *dmai-s*, people, multitude; Chin. *moi* 氓, people, subjects.

Tib. *r-moi-ba*, to be obscured, stultified, *mun-pa*, obscurity; Chin. *mu* 蒙 and 悞, dull, stupid. Compare, however, *lu-ñ*, dragon (No. 22).

The final consonants of Tibetan are by no means stable. SCHIEFNER¹ has already called attention to two phenomena,—parallel words with and without final consonants, and confusion of final consonants. This, however, is not an explanation of the phenomenon. Certain final consonants, as I endeavored to show on a former occasion,² were added as formative elements with a specific significance, or with a grammatical function which became lost in course of time. From *ko-ba* ("hide, leather") is formed *ko-g-pa*, with the meaning "shell, peel, rind." The word *kug* ("crooked"), identical with Chinese *k'uk* 曲 and Burmese *kok*, appears also as *kum* and *koñ*, while in Ahom it is *kut*, in Siamese *koñ*.³ In Ahom we have *lat* ("to speak"), in Tibetan *lab*. More examples will be found in the Appendix.

Within the Chinese language we find variations of the finals in Cantonese, Hakka, and Fukien:

Cantonese *yét* 一, one; Fukien *cik*.

Cant. *pat* 八, eight; Fukien *paik*.

Cant. *yét* 日, sun; Fukien *nik*.

Cant. *lip* 立, to stand; Fukien *lik*.

Cant. *lik* 力, strength; Hakka *lit*; Swatow *lat*.

Cant. *šik* 食, to eat; Hakka *šit*; Amoy *sit*;
Shanghai *zok*.

Cant. *fat* 法, law; Hakka *fap*; Swatow *hwap*.

Cant. *tsat* 疾, disease; Swatow *čit*; Amoy *ček*;
Fukien *čik*.

Cant. *šat* 室, room; Fukien *sek*; Shanghai *sak*.

Comparison shows us that Fukien has in some cases preserved

¹ *Mélanges asiatiques*, Vol. I, pp. 346—348.

² *T'oung Pao*, 1915, p. 424.

³ The primary root is **gug*, which is preserved in the Tibetan verb *a-gug-s* ("to make crooked, to bend"), corresponding to Chinese **guk*, *kuk* 局, and in Bunan *gur-gur* ("crooked;" analogous to Tibetan *kug-kug*). The final *t* appears also in Mil'c'ai *kut* ("crooked"), beside *k'un-jim*.

the ancient final *k*, whereas Hakka and Cantonese have exchanged it for *t*: Fukien *sai k* ("louse") agrees with Tibetan *šig* in the final, where Cantonese has *šét* and Hakka *sit* (No. 6).

If we now take Indo-Chinese philology in its widest range, we observe that vast tracts of its domain are occupied by languages which are destitute of any finals, and that the lack of finals even covers a larger geographical area than the area where they occur. The word for "tongue" (No. 49), for instance, possesses a final only in the South-Chinese dialects (*še-t*, *šu-t*, *sie-k*), while such is absent in all other languages of the family, notably in Tibetan (*l-čé*). Examining the word *la* (No. 50), we note that Si-hia, Mo-so, Lo-lo, Kachiu, and Nepalese are equally devoid of a final, while Tibetan has one in *la-g*; but Tromowa and Sikkiu *la-ko* demonstrates that the Tibetan final *g* is not inherent in the stem, but the survival of a syllable *ko*, which was contracted with the base *la*. Hence it is reasonable to conclude that *la* presents the primary root-base, and that *la-g* denotes a secondary development. It is likewise obvious from the facts cited under No. 53 that the base of the word for "eye" is **me*, *mi*, not *mik* or *mit*. Not only is the number of languages without a final in this case very large, but also derivatives like Tibetan *s-mi-n-ma* and Chinese *mou*, *mei*, *mi* (No. 54) uphold this point of view.

The secondary character of final Tibetan *l* has been demonstrated in the case of *diul* (No. 1), where *-l* corresponds to Chinese *-n* or *-ü*, and where the base is *iu*, *iü*, *io*; likewise in the case of *sbrul* (No. 22). The same holds good for *sbal* ("frog"), for we meet in Mo-so *pa*, in Burmese *p'ä*, in Nyi Lo-lo *a-pa-ma*, in Chinese *wa* 蛙. In *spre-l* ("monkey," from *spre*), *-l* is secondary.

There is accordingly no valid reason to regard the final consonants as the prior event and to construe a theory of their gradual elision in the light of a posterior move. It is not only conceivable, but it

is borne out by the data of many languages, particularly by the branch which interests us here, Si-hia, Lo-lo, and Mo-so, that there are Indo-Chinese idioms without final explosives. To my mind, these did not originally belong to the stem, but were subsequent formative elements. In this respect, the relationship between Chinese and Tibetan is closer than between these languages and the Si-hia, Lo-lo and Mo-so branch, which is essentially characterized by the lack of final explosives. As to Mo-so, compare, for instance, *bo* ("pig") -- Tib. *p'ag*, *da* ("to weave") -- Tib. *t'ag*, *nau* ("forest") -- Tib. *nags*, *še-še* ("paper") -- Tib. *šog*, *miō* ("eye") -- Tib. *mig*, *du* ("poison") -- Tib. *dng*, *be* ("to do") -- Tib. *byed*, *p'e-le* ("butterfly") -- Tib. *p'ye-ma-leb*, *ma* ("oil") -- Tib. *mar*. As to Si-hia, see Phonology, § 24 (p. 103).

A similar observation holds good for the prefixes. There is no basis for the precouceived assumption that prefixes should once have been general in Indo-Chinese, that in view of an abundance of prefixes in some languages those with scanty or no prefixes should have lost them, and that the type of prefix-language is older than that devoid of prefixes. It seems certain that Chinese roots have never had any consonantal prefixes (the only instance of a Chinese prefix is the vocalic *a*).¹ In general we might say that those idioms which are destitute of prefixes at the present time were likewise so in the past. Si-hia sides with Lo-lo and Mo-so in the very limited number of prefixes;² and the mere fact that the prefixes of the

¹ See the writer's *The prefix A- in the Indo-Chinese Languages* (*J.R.A.S.*, 1915, pp. 757-780).

² The following examples of Mo-so words show lack of prefix, as compared with Tibetan: *k'o* ("door") -- Tib. *sgo*, *pa* ("wolf") -- Tib. *spyan*, *kō* ("star") -- Tib. *skar*, *pa* ("frog") -- Tib. *shal*, *ts'ō* ("lake") -- Tib. *mts'o*, *dsō* ("to do") -- Tib. *mdsad*, *ba* ("goitre") -- Tib. *lba*, *ci* ("tongue") -- Tib. *lce*, *nō* ("silver") -- Tib. *dñul*.

same words are variable within the Tibetan dialects, and again are at variance with the prefixes in the corresponding words of cognate languages, is apt to show that the prefixes represent a secondary stage of development.¹

Prefixes as well as final consonants, therefore, are of minor importance in the comparative study of Indo-Chinese languages. The same may be said about the stem-vowels, which are likewise vacillating, although we may arrive at certain laws in course of time. The staff of comparison remains the initial consonant and the tone conditioned by it: these form the backbone of the word and the basis of all investigation. The tendency of the sonants to change into surds and aspirates has gradually modified the face of many root-words and obscured the mutual relationship of Chinese and Tibetan (compare, for instance, No. 143). The manner and degree of relationship in the Indo-Chinese camp, therefore, do not lie so clearly at the surface as in the Indo-European field. Strictly speaking, we first ought to elaborate the historical grammar of Chinese and Tibetan, taken individually, before attempting the comparative study of the two languages. Nevertheless, the one cannot well be accomplished without the other, and both efforts undertaken simultaneously and leading in the same direction will yield results to benefit and to advance both historical and comparative research of these languages.

¹ Compare the prefix *d* in Jyuruñ in cases where common Tibetan is without a prefix (*T'oung Pao*, 1914, p. 108).

APPENDIX.

In connection with the preceding observations, the following Chinese and Tibetan concordances may be of interest; these demonstrate at the same time that the relationship between the two languages is much closer than assumed heretofore. The first group here selected shows Tibetan words, most of them being provided with prefixes. The fact that these are of secondary character becomes evident from their absence in Chinese.

1. *kan* 乾, dry. Tib. *s-kam*, *s-ken*, dry. (Compare also **go*, *ko*, *k'o* 頰, chin; Tib. *ko-ko*, *ko-sko*, *kos-ko*, chin.)
2. **gañ* 岡, ridge of a hill, mound. Tib. *s-gañ*, a projecting hill.
3. *kañ* 槓, trunk, box. Tib. *s-gam*, chest, trunk, box.
4. **dzañ* 藏, granary. Tib. *r-dzañ*, storage-chest (West Tib. *zem*, box, chest).
5. **džam*, *dzam*, *dam* 參, to counsel, advise. Tib. *g-dam*, *a-dam*, to advise, exhort.
6. **džam*, *dzam* 慚, to feel shame. Tib. *a-dzem*, to feel ashamed.
7. **džiet*, *diet* 節, knots or joints of plants. Tib. *m-dud*, knot; *m-dze-r*, knot in wood; wart.
8. **džiet*, *diet* (Japanese *šitsu*) 櫛, a comb, to comb the hair; **šwat* 刷, brush, to brush. Tib. *šad*, *g-šad*, *g-šod*, to comb, curry, brush, stroke; *zed*, brush.
9. **džañ*, *dzañ*, *zañ* 曾, past, done, finished. Tib. *a-dzañ-s*, *za-d*, spent, consumed, exhausted.
10. **džañ*, *dzañ*, *zañ* 層 (Shanghai *dzuñ*, *zuñ*), story of a building, layer. Tib. *b-zañ-s* (also *k'añ b-zañ*), a two-storied building; *a-dzeñ*, to project, to jut out.
11. **džan*, *dzan*, *zan* 餐, viands; 餐, to eat, a meal. Tib. *zan*, *b-zan*, food, porridge; *zu*, to eat.

12. *zan 姸, beautiful. Tib. *b-zan*, good, beautiful.
13. *džai, dzai 材, stuff, materials; 財, property, wealth. Tib. *r-dza-s*, objects, materials, goods, property, treasures, jewels.
14. *džuñ, duñ 同, together, the same as, alike; 雙, a match for, a peer. Tib. *m-ts'uñ-s*, similar, like, equal; a match for.
15. *džuñ 聰, quick of apprehension, clever; 慳, intelligent. Tib. *m-dzan-s*, wise. Regarding the change of vowel compare *džuñ, duñ 銅, copper, and Tib. *zan-s*.
16. *dzin 盡, exhausted. Tib. *zin*, exhausted.
17. *dže, dze, de 砥, whetstone. Tib. *a-dze-ñ*, whetstone.
18. *džuñ, duñ 鎗, javelin, to stab with a spear. Tib. *m-duñ*, spear.
19. *džuñ 中, middle. Tib. *g-žuñ*, middle.
20. *džu, du 聚, to collect, to assemble. Tib. *a-du*, to come together, to assemble, to unite, to join one another.
21. *džwi, dzwi, zwi 醉, intoxicated. Tib. *zi, b-zi, g-zi*, intoxication.
22. *džie (Wen-chou *zi*, Ningpo *zie*) 射, to shoot, to aim at, archery. Tib. *g-žu*, bow.
23. *džie (Hakka *sa*) 麝, musk-deer. Tib. *ša, šwa*, stag; *šwi*, newborn fawn.
24. šö (Hakka *ša*, Fukien *sia*) 社, personification of Earth. Tib. *sa*, earth.
25. *bun 糞, ordure, dung. Tib. *brun*, dung, excrements.
26. *boñ 胖 or 腩, fat. Tib. *boñ*, size, bulk; *s-bom*, thick, stout, coarse.
27. *bun 氛, vapor, miasma, poisonous exhalations. Tib. *bem*, dead matter, a pestilential disease.
28. *bu 舞, dance. Tib. *bro*, dance.
29. *bat, pat 拔, lofty, eminent. Tib. *d-pal*, glory, splendor.
30. *bun 墳, grave, mound. Tib. *a-bum*, tomb, sepulchre.
31. pa 疤, scar, birth-mark. Tib. *r-ma*, wound; *r-me, d-me, s-me*, natural mark, spot, mole, birth-mark.

32. **pa* 波, wave; Tib. *d-ba*, wave.
33. *pa* 霸, to rule by force; might, leadership. Tib. *d-ba-ñ*, might, power, rule.
34. *pa* 筩, a kind of bamboo. Tib. *s-pa*, *s-ba*, cane; Lepcha *po*; Burmese *wā*; Kačari *oá*; Ahom *bai*, cane, rattan; Shan *wai*; Thādo *wo*, *go*.
35. **wat* 日, to say. Tib. *a-bar*, to talk.
36. **dam* 毯, rug, carpet. Tib. *g-dan*, bolster, seat of several quilts; *s-tan*, mat, carpet, cushion.
37. **dam* 潭, pool, lake. Tib. *l-ten*, pool, pond.
38. **duñ* 洞, hole, cave, grotto, ravine. Tib. *doñ*, deep hole, pit, pitch.
39. **duñ* 筒, tube, pipe, duct. Tib. *doñ*, *l-doñ*, tube; a hollow, cylindrical vessel.
40. **duñ* 疼, pain, soreness, ache. 病 or 恫, to moan with pain. Tib. *g-duñ*, to desire, long for; to feel pain, to be tormented, afflicted.
41. **diñ* 稭, stalk or grain; 棍, stalk, staff, cudgel; 莖, stalk of grasses and plants. Tib. *s-doñ*, stalk of a plant, trunk of a tree, tree (Mūrmi *d'oñ*, tree).
42. **diñ* 靛, indigo. Tib. *m-t'iñ*, indigo.
43. **do* 砢, heavy stone, stone roller, weight. Tib. *r-do*, stone, weight.
44. **duk* 督, to superintend, to direct, to rule. Tib. *b-dog*, to possess, to own; *b-dag*, master, lord, self; *b-dag byed-pa*, to reign, to possess.
45. **džek*, *zek*, *šek*, *sek* 石, stone. Tib. *g-seg*, small stones; *šag*, pebbles, gravel.
46. *t'o*, *t'u* 唾, to spit, saliva. Tib. *t'u*, *t'o-le*, to spit.
47. *leu* 籬, basket. Tib. *s-le*, *le*, basket. (Compare also *lei* 儻, lazy, and Tib. *le-lo*, lazy.)
48. *luñ* 悞, stupid. Tib. *b-lun*, dull, stupid.
49. **dzi*, *dzi*, *dza* 瓷. 磁, pottery. Tib. *r-dza* (West-Tib. *za*), clay.

50. *tsi* 漆, lacquer. Tib. *r-tsi*, varnish, paints.
 51. **hap* 啣, to swallow. Tib. *hab*, a mouthful; *hab-hab za-ba*, to devour greedily.

Chinese final explosives correspond to a Tibetan liquida:

52. **g'ap* 俠, heroic, bold; **dž'ap*, *dz'ap* 捷, to gain a victory in battle. Tib. *r-gyal*, to be victorious, victory, king.
 53. **g'ap* 夾, to squeeze, to press. Tib. *b-čer*, *b-čir*, to squeeze, to press.
 54. **get* 訐, to accuse. Tib. *a-gel*, *r-gol*, to accuse.
 55. **džo*, *dzo*, *džak*, *dzok* 錯, to err, to make a mistake. Tib. *a-dzol*, fault, error, mistake; *r-dzu*, delusion; *r-dzu-n*, falsehood.
 56. **džik*, *džek* (Cantou *ts'ek*) 刺, thorn, to prick. Tib. *ts'er*, thorn, prick, brier.
 57. **wat* 曰, to say. Tib. *a-bar*, to talk.

**džiet*, *diet* 節, knot. Tib. *m-dzer*, knot in wood (see No. 7).

58. **dat* 達, to pass through, to penetrate. Tib. *dar*, to be diffused, to spread. See also No. 29.

Final explosives in Chinese where Tibetan has none:

59. **dži-p*, *dzi-p* (Ningpo *dzi*) 睫, eye-lashes. Tib. *r-dzi*, eye-lashes.
 60. **džu-k*, *dzu-k*, *zu-k* 畜, to feed, nourish, rear. Tib. *a-ts'o*, *g-so*, to feed, nourish, rear, cure.
 61. **ku-t* 掘, to dig out, excavate. Tib. *r-ko*, to dig, dig out, hoe, engrave.

Final explosives or liquidæ in Tibetan where Chinese has none:

62. **giao* 膠, glue. Tib. *r-gya-g*, glue.
 63. **giao* 交, to unite, friendship. Tib. *gro-g-s*, friend; *a-gro-g-s*, to be associated.
 64. **giao* 絞, to bind, to twist. Tib. *s-gro-g*, cord, rope, feathers.
 65. **giao* 叫, to call out. Tib. *s-gro-g*, to call out, to proclaim.
 66. *ki* 皎, the bright white moon; effulgent. Tib. *b-kra-g*, brightness, lustre.

67. *džo, dzo, zo (Shaughai zu) 坐, to sit. Tib. s-do-d, b-žu-g-s, to sit.
68. *džai, dzai, zai 纔, just now, then. Tib. g-zo-d, now, this moment.
69. *zai, ts'ai 猜, to guess (猜謎, to guess a riddle). Tib. ts'o-d, estimation, guess; ts'od šes, ts'od bya, riddle.
70. *tš'ai, ts'ai 菜, vegetables. Tib. ts'o-d, vegetables.
71. *džai, dzai, dzoi, čai 裁, to cut off (but čöt 截). Tib. g-čö-d, to cut.
72. *giai 解, to loosen; to explain; to get free from. Tib. a-gro-l, to be released from; to loose, untie, release; to explain; s-gro-l, to rescue, deliver. As to the initial guttural with following r or l, compare Tib. sgro, large feather for ornamenting arrows, as a charm, etc., with Chinese *gio 翹, long-tail feathers used as ornaments; Tib. sgro, to elevate, exalt, sgrob, haughtiness, pride, with Chinese *gio 堯, high, elevated, 喬, high, stately, proud; and Tib. glen, to talk, to preach, with Chinese *gian 講, to talk, to preach.
73. *giai, kai 偕, to accompany. Tib. s-kye-l, to accompany.
74. *gia, ga, ge 跏, to sit cross-legged. Tib. s-kyi-l, to sit cross-legged.
Chinese final nasals correspond to Tibetan liquidæ:
75. *zan 燦, bright, glittering. Tib. g-zer, ray, beam; zil, brightness; a-ts'er, to shine, glitter.
76. *džam, dzam 慘, grieved, sad; 憐, to be sorrowful. Tib. g-zer, pain, ache, illness; to feel pain; a-ts'er, to grieve, grief, sorrow.
77. *džam, dzam, dziem, zam 鑿, to pierce, cut, chisel out, engrave; 鑽, to bore a hole, to pierce; Tib. g-zer, to bore into; zer, to drive in nails; g-zer, nail; g-zoñ, chisel, graving-tool.
78. *kwon 勸, to admonish. Tib. s-kul, to admonish.
79. *kwon 圈, circle. Tib. s-kor, a-k'or, s-gor, circle.

The following comparisons are instructive both as to the finals and initials of the words:

80. *džien, dzien 剪, to cut with scissors or shears. Tib. čem-tse,

scissors; *ts'em-pa*, tailor; *ts'em-po*, seam; *a-ts'em*, *b-tsem-s*, etc.,
to sew.

81. **k'em*, *k'im* 衾, coverlet, quilt. Tib. *k'eb-s*, *k'yeb-s*, cover.
82. **zuñ*, *suñ* 雙, a pair, couple. Tib. *zuñ*, a pair, couple.
83. **dza-k* 作, to make. Tib. *m-dza-d*, to make.
84. **džuk*, *dzuk*, *dzok* 足, to be sufficient. Tib. *č'og*, to be sufficient.
85. **bik*, *p'ak* 甃, tile. Tib. *pag*, brick.
86. **džok*, *zok* 鑿, to chisel out, to bore into. Tib. *a-dzug-s*, *zug*,
to prick, sting, pierce, bore.
87. **džiek* 食, to eat. Tib. *b-žes*, *b-za*, food.
88. **džan* 殘, to injure, to destroy. Tib. *a-jom-s*, to conquer, to
destroy.
89. **giao* 狡, crafty, clever. Tib. *s-gam*, *s-grin*, clever.
90. **giao* 較, to compare. Tib. *s-grun*, to compare.
91. **l'äp* (Canton *lip*) 獵, to hunt. Tib. *liñ-s* (probably from **lim-s*),
hunting, chase. Lepcha *lyüm mat*, to hunt (*lyüm*, the god
of hunting).
92. **džai*, *dzai*, *dzoj* 彩, color, gay-colored, ornamented. Tib. *b-tso*,
a-ts'o-d, to dye; *ts'o-s*, *ts'o-n*, paint, dye; *b-tsa-g*, red ochre,
earths of different color.
93. **džok*, *džak*, *dzak* 昨, yesterday. Tib. (*k'a*)-*r-tsañ*, *m-dañ*, yesterday.
94. *yañ* 颺, to be tossed about, as by wind or waves. Tib. *g-yeñ*,
to be moved by the water to and fro.
95. *yañ* 揚, to raise, to hold up, to praise. Tib. *g-yañ*, happiness,
blessing. Shan *yǎñ*, to praise; Ahom *jǎñ*, fame, glory.
96. **lok* 烙, to burn, roast. Tib. *s-reg* (West-Tib. *š-rag*), to burn,
to roast. The Tibetan stem is **ra*, *re*, *ro*: compare *s-ro*,
heat, to make warm; *d-ro*, hot time of the day; *d-ro-ba*,
d-ro-n-ma, warm, *d-ro-d*, warmth; Bunan *ko-s-ra*, hot;
Ahom *rau*, *raw*, *rǎ-n*, heat.

INDICES.

(The figures refer to the numbers of the words.)

1. Si-hia	ño, I 14	tu, female 160	ban-bu 19
kwan-mü 94	ño, lake 101	tu, fruit 121	bu 129
kwan 128	ño, silver 1	to 166	bo 43
ki 154	ño-čui-ni 130	to-pa 142	bü 38
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Addenda. — Two valuable studies of Chinese scholars have meanwhile reached me, — a Dissertation on the national writing of the Si-hia 西夏國書略說 by Lo Fu-ch'ang 羅福萇 (accompanied by good reproductions of Si-hia Antiquities) and an Investigation on the Si-hia translation of the Saddharma-pundarika-sūtra (p. 4) 西夏譯蓮華經考釋 by Lo Fu-ch'eng 羅福成.

P. 12. In the language of the Min-kia, *a* is the numeral 1 (LÉTAUD, *Anthropos*, Vol. VII, 1912, pp. 678, 692).

P. 112. The following may be added to the base **gug* ("crooked, bent"): **giok* 角 ("horn"), **g'uk* 毬 ("leather ball"), **you* 句 ("crooked"), **you* 疍, "hunchback" (corresponding to Tibetan *gye gu*, "hunch, hump"). Compare also CONRADY, *Causatiobildung*, p. 168.


NÉCROLOGIE.

FRANK H. CHALFANT †.

On the 14th January of this year, the Rev. Frank H. Chalfant, D. D., passed away at Pittsburgh, Pa., after a long and lingering illness of most distressing character which for two years he had borne with heroic patience and fortitude. Born on May 29, 1862, in Mechanicsburgh, Pennsylvania, the son of an eminent clergyman, he graduated from Lafayette College at Easton, Pa., in 1881 and studied for the ministry in Western Theological Seminary where he was graduated in 1886. He was ordained to the ministry in the same year by the Presbytery of Pittsburgh and appointed by the Board of Foreign Missions of the Presbyterian Church in the U. S. A. to the West Shantung Mission at Wei-hien, Shantung, China, March 21, 1887, sailing for his field October 20, 1888. His evangelistic career was one of devotion and efficiency, and for a quarter of a century, during indefatigable itinerations, brought him into close contact with the rural population of Shantung. He acquired the language both oral and written, and amid his mission labors found time for intelligent study and research. Mr. Chalfant kept aloof from the popularizing tendencies to which so many missionaries in China too easily succumb, and remained an earnest student of scientific problems. His interest was particularly aroused in the early development of Chinese writing. The first fruit of his studies was published in 1906 by the Carnegie Museum of Pittsburgh under the title "Early Chinese Writing" ¹⁾. He became deeply interested in Chinese archaeology ²⁾ and was a coin collector and connoisseur of distinction. A well illustrated treatise from his pen on "Ancient Chinese Coinage" is embodied in the work "Shantung, the Sacred Province of China" edited by R. C. FORSYTH

1) Reviewed by E. S. MOUSE, *Science*. 1906, pp. 758—60, and H. MASPERO, *B.E.F.E.O.*, Vol. VIII, 1908, pp. 264—7.

2) He wrote *Standard Weights and Measures of the Ch'in Dynasty* (*J.Ch.Br.R.A.S.*, Vol. XXXV, 1903—4, pp. 21—24). He excavated several graves of the Sung period near Wei-hien and donated the ceramic finds yielded by them to the American Museum of New York; they are figured and described in the writer's *Chinese Pottery*, pp. 312—320.

(Shanghai, 1912) ¹⁾. Owing to its intrinsic value his numismatic collection including 690 coins, among these many rare and unique specimens, has recently been acquired by the Field Museum of Chicago. Mr. Chalfant's name will forever be connected with the discovery and original decipherment of the inscriptions carved in bone and tortoise-shell first exhumed in Honan Province in 1899 ²⁾. The greater part of these finds was bought by Mr. Chalfant and S. Couling, who acted very wisely in the distribution of these little treasures. They are now deposited in the Museum of the Royal Asiatic Society of Shanghai, Royal Scottish Museum of Edinburgh, British Museum of London, private collection of Mr. L. C. Hopkins ³⁾, Carnegie Museum of Pittsburgh, and Field Museum of Chicago. These collections comprise not only inscribed fragmentary bone and tortoise-shell pieces but also wonderful carvings of inscribed bone. According to his statement, the 150 specimens in the Field Museum secured from Mr. Chalfant, include many of the finest specimens which passed through his hands, as, for example, the largest perforated disk pi  ever found, and a masterly carving of a charm showing twin phenixes connected by two serpent-heads, of bone stained turquoise-blue and inscribed on three faces. For the last seven years Mr. Chalfant was zealously engaged in the study of these inscriptions on which he leaves a voluminous work in manuscript, which he planned to have issued in two volumes. The first is to consist of over 400 plates containing facsimiles of all the bone documents which came under his notice, amounting to 4812, of which 929 are carved amulets, together with an introduction upon the methods of divination by the tortoise and copious notes upon decipherment; the second was to embrace a syllabary of all the characters found, — some 3000 in all including variants, but this is left incomplete. In April of last year I spent a day with Mr. Chalfant in Pittsburg, going with him over the pages of his manuscript. It is hoped that no effort will be spared toward its publication. It is very deplorable that he was not allowed to live to himself give his important work to the world. As an autodidact and self-made sinologue in America, Mr. Chalfant will always command respect and leave pleasant memories among his friends for the seriousness and unselfishness of his aspirations, for the tenacity of his purpose, for his modesty and the sterling qualities of his character. I wish there were more men of his type in this country.

B. LAUFER.

1) He contributed to the same work a gazetteer of the prefecture of I-chou (pp. 337—50).

2) Compare CHAVANNE, *Journal asiatique*, 1911, Janv.-Févr., pp. 127—137.

3) Compare HOPKINS, *J. R. A. S.*, 1911, p. 1026.

NECROLOGIE.

William Woodville ROCKHILL.

In memory of Mr. Rockhill, whose useful and noble career was so suddenly and lamentably ended at Honolulu on December 8, 1914, and with whom it was my privilege to have been acquainted and to have corresponded for a period extending over eighteen years, I take the liberty to add the following data to the bibliography of his works given by M. Cordier on pp. 162—164 of this volume:

Le traité de l'émancipation ou Pratimoksha-sûtra, traduit du tibétain. (*Revue de l'histoire des religions*, Vol. IX, 1884, pp. 3—26, 167—201).

The Tibetan "Hundred Thousand Songs" of Milarsapa, a Buddhist Missionary of the Eleventh Century. (*Proc. Am. Or. Soc.*, 1884, pp. v—ix).

Notes on some of the Laws, Customs, and Superstitions of Korea. (*American Anthropologist*, 1891, pp. 177—187).

A Pilgrimage to the Great Buddhist Sanctuary of North China. (*Atlantic Monthly*, 1895, pp. 768—769). [Interesting record of a visit to the Wu-t'ai shan.]

China's Intercourse with Korea from the XVth Century to 1895. London (Luzac & Co.), 1905 (60 p.).

Diplomatic Audiences at the Court of China. London (Luzac & Co.), 1905 (64 p.).

The last of Mr. Rockhill's literary products is the edition of the *Chu fan chi* 諸蕃志 elegantly printed at Tōkyo with movable copper types in one volume, with English postscript, dated April 1, 1914. On September 8, when I conveyed to him my thanks for the copy which he had kindly addressed to me, and expressed my satisfaction at this fine example of Japanese book-making, he wrote me: "The book was published by the Kokumin shimbun Press at Tōkyo I had 250 copies struck off; some of these I had sent to Kelly & Walsh at Shanghai, others to Luzac & Co., London. I hope they reached them safely, but I have not yet heard. I am much pleased that you like the way the book was printed, I rather like it myself." Mr. Rockhill was a rare type of scholar, singularly broad-minded, and equipped with common sense and an unusually wide knowledge of all peoples of the Far East. His *Life of the Buddha* will remain a household book with all of us; and his four great works devoted to Tibet, the goal of his lifelong ambition, will continue to serve as an inexhaustible mine of valuable information, with their solid fund of geographical

and ethnological data. Besides his writings he left two lasting monuments,—a remarkable collection of Tibetan objects housed in the U. S. National Museum; and the nucleus of a Tibetan, Mongol, and Chinese Library, belonging to the treasures of the Library of Congress in Washington,—the interests of which he always furthered with a liberal spirit. Mr. Rockhill was a man of extreme modesty, and seldom talked about himself and his achievements. He received no honors from this country, but indeed he craved none; and it is decidedly to his credit that he was never chosen by a university for an honorary degree. It is painful to think that at the end of his life his diplomatic services were valued more highly by China than by his own Government.

B. LAUFER.