Among orientalists I think there has never been any doubt that the Devanāgarī writing of India was the remoter source from which in 1284 A.D. Prince Rām Khamhāng of Sukhothai derived the letters which he used in giving to Siamese speech for the first time a written form. The relationship between the two is abundantly seen in the number of letters, their general equivalence, their remarkable phonetic grouping in the list, and their peculiar syllabic positions as regards the vowels—to say nothing of traces still seen here and there of the ancient shapes of the letters. But as regards the more immediate source of Siamese writing, there has been so far no agreement. Three theories are in the field: 1) that the source was the Pali of the Buddhist scriptures brought by missionaries from Ceylon; 2) that it was the older Burmese writing; and 3) that it was the older Cambodian. All these forms of writing are known to be derivatives nearer or more remote of the Sanskrit of India, and so are alike eligible for the place. And one of these three apparently must have been the source, for in all that peninsula we have no trace of any other possible source; and invention is entirely out of the question. The Devanāgarī could not have been a second time invented.


2. To the north, filling the upper Mēnam basin and the valleys of the Salwin and the Méhkōng, and stretching far up into China, lay the great mass of the Thai tribes—then doubtless illiterate, as many of them still are. On the east, the scepter and the culture of ancient Champā had before this period passed to Cambodia, her neighbor on the south. As for the distant little province of Si Thammarāchā on the Malay Peninsula, the learned Buddhist monk it contributed to the Prince’s court (cf. the inscription cited above 11. 62-660) seems to have been almost its only cultural achievement. And any alphabet which he might have brought in would almost inevitably have been the Pali, which is already included in the list.
So far all treatment of the question seems to have been largely \textit{ex parte}, determined by individual prepossession, and without attempt to examine and bring to bear all the evidence available. Such an examination the writer has recently essayed to make. While he does not claim that his search has been exhaustive, it seems to him to be practically conclusive of the question. He therefore ventures the following summary of the investigation and of its results.

I.

The theory of a Pali and a Singhalese origin of the Sukhōthai letters has had by far the greatest vogue. Up to a very recent date there was practically no competing theory in the field. It is therefore the theory still almost universally held by those whose attention has not been directly called to the claims advanced for other origins.\(^3\) The antecedent probability in its favor is very great. Missionary zeal has ever been a most efficient agent in spreading the art of writing among unlettered races. Thus it was in ancient times that most of the peoples of Europe received the gift of letters. So too have numberless savage tribes in modern times. And quite apart from missionary effort to that end, the very presence and use of written books in a foreign tongue would be a powerful incentive to every native student of them among an illiterate race, to adapt their method to the recording of his own vernacular speech—as was done long ago in Japan. As regards the case in hand, there can be no doubt either of the religious zeal, or of the knowledge and use of the Pali scriptures in the monasteries of Siam. The inscription itself bears witness to both.\(^4\)

But the internal evidence of the alphabet itself seems conclusive against the theory of of a Pali source. For if the source were indeed Pali, we should expect: \(a\) that the alphabet would be essentially Pali in its make-up, rather than of some other Indian type; \(b\) that its letters would show their origin in their shape—would be visibly like the letters of Pali texts then written in Ceylon; and \(c\) that being such, they would of course be used by Siamese scribes in copying the

\(^3\) Such was the writer's own case when he made his study of the Sukhōthai inscription, Cf. \textit{op. cit.} p. 10.

\(^4\) Cf. \textit{op. cit.} pp. 27-29.
Pali scriptures, as well as in writing the vernacular speech. But the facts are directly negative of these three presuppositions.

a) A number of the characters of the older Sanskrit writing are entirely lacking in Pali; that is, were lost in consequence of the loss of the sounds which those characters represented. All Sanskrit words which involved these sounds, if continued in Pali, were therefore altered both in pronunciation and in spelling, so that all trace of these characters was lost. Knowledge and use of them, therefore, could not have come to anyone through study of the Buddhist writings. But in Siamese all of these characters are found. The consonants among them stand in their original places in the alphabetic list. All this seems to point unmistakably to their origin in some form of Sanskrit writing.

b) The Sukhöthai letters do not in general clearly resemble any of the Singhalese forms with which the writer has been able to compare them. The divergence indeed is so great as seemingly to preclude the idea of any immediate derivation. The occasional resemblances are no more than should be expected as a result of relationship through a rather distant common ancestor.

c) So far no Pali text in a Siamese copy made so long ago as the 13th century of our era has ever been discovered. It is not probable that any such exists. It is therefore not at all likely that we can ever be absolutely sure what form of writing was at that time actually used for that purpose. It is, however, significant—as will appear more fully later—that in modern times copies of Pali texts,

5 These are the symbols for the palatal sibilant, ꝱ; the dental sibilant, Ꝺ; the visarga, which, at least in Siamese, is the glottal stop abruptly cutting off a vowel sound; the l-vowel; and the r-vowel.

6 As is the case in all, or nearly all, oriental alphabets, the Devanagari in its alphabetic list includes consonants only. Vowels are accessories akin to our diacritical marks, having no certain place in the line along with the consonants, and often no listed order or sequence.

7 Material accessible in this portion of the study was not very abundant, but what was found gave very little promise of reward for further search.

8 Because lapidary inscriptions are regularly in the vernacular, while Pali texts for the monastery libraries are as regularly inscribed on the traditional—and very perishable—palm-leaf.
and quotations from them in vernacular writings, are not generally in Siamese letters, but in Cambodian. 9

It seems, then, that the internal evidence from the Sukhothai alphabet alone is very nearly conclusive against the theory of its Pali origin; that the lack of any obvious resemblance between the Sinhala and the Sukhothai letters strongly reinforces that negative; while under all three heads the evidence points positively in the direction of quite another—namely a Sanskrit—origin of the Siamese alphabet.

II.

The theory of a Burmese origin has had fewer supporters. It seems to rest a) upon the basis of a general resemblance claimed between the four-square writing of the Sukhothai stone and that of ancient Burmese inscriptions; b) upon the fact that the present form of writing among the Thai peoples throughout northern Siam, and far beyond, through the British Shan States and French Indo-China, into China itself, is obviously of Burmese origin; and c) upon the further fact that for many centuries the two races have been in contact with each other along a common frontier of some hundreds of miles in length.

a) Upon examination, however, the resemblance claimed turns out to be very largely that of the general impression which the two forms of writing make when viewed in the mass. If corresponding letters are compared in detail, the resemblance for the most part vanishes, as will be seen upon reference to the accompanying chart where the Sukhothai and the ancient Burmese letters stand side by side. The technique, moreover, or method of construction of the letters, is fundamentally different in the two cases. For while the shape is in a general way quadrate in both, in the Burmese it is exactly such—made up of separate straight strokes meeting in square corners; whereas the Sukhothai letters are made with one continuous

9. The growing use of the printing press together with the lack of Cambodian type, will doubtless account for the very recent exceptions to this rule. The most striking example of this newer usage is the monumental edition in Siamese letters of the Tripitaka complete in thirty-three volumes published by the late King Chulalongkorn. But already before His Majesty’s death a special font of Cambodian type had been cast for the purpose of printing the Buddhist Scriptures in accordance with the old usage.
stroke throughout, resulting in lines which are rarely straight, and in corners which are nearly always somewhat rounded.10

v) The present form of writing used in the Lào provinces of Siam is undoubtedly a rather close copy of the Burmese circular writing described in foot-note No. 10, or perhaps an earlier form of that. Its use in those provinces is historically recent, having been introduced there during the period of Burmese domination in that region. But all older monuments of vernacular writing found there are of an entirely different script, known as the Fak Khăm (tamarind-pod) letters, the origin of which may be traced back directly to Sukhôthai. The introduction of the Burmese writing among the Lào of Siam was doubtless the more easy because it was already in use among their kinsmen and neighbors of similar speech, the Western Shans of Burma.

c) Siam and Burma during all these ages have been hereditary enemies. Intercourse along their common border consisted largely of raids and reprisals, resulting in the formation of a no-man's-land—a zone of lawlessness and disorder almost impervious to cultural influences. While the distance between Maulmein and Sukhôthai seems trifling as viewed on our maps, a journey from the one to the other would have been a matter of weeks. The only routes were lonely and dangerous trails leading through labyrinths of mountains and across deep rivers, through uninhabited wastes and jungles tenanted by savage beasts and

10. There is another form of ancient Burmese writing, the so-called square Pali. It is a freakish calligraphic variant of the lapidary form shown in the chart. All vertical strokes are enormously exaggerated in width, almost obliterating the central spaces of the letters; while all horizontal elements are correspondingly reduced to slender appendages or hyphen-like connectives between the broad masses of vertical elements. The letters are painted with a broad flat brush, generally in dark brown lacquer, on a plate of gilded metal. The effect is very striking as a work of art: but it is not easily read because the distinguishing features of the letters are to a great extent obscured by the startling scheme. A thing so artificial could never have been the model for standard writing anywhere.

Another striking variant of the lapidary form has furnished the well-known Burmese script and print of the present day. In it the letters are made up almost wholly of strictly circular arcs in various combination. Its survival is almost certainly due to its special adaptation for tracing with a stylus-point on the surface of palm-leaves. It resembles the Sukhôthai writing even less than does its original. It has therefore not been thought necessary to reproduce either of these in the chart.
equally savage men. It was considered a remarkable feat when, so late as 1884, a fortnightly mail service by courier was established between Maulmein and Chiengmai.

Thus all the arguments in favor of a Burmese origin of Siamese writing seem alike to fail. But it is strange indeed that the conclusive argument against such an origin has so far apparently escaped notice altogether—the argument already urged against the theory of a Pali origin. The Burmese alphabet is conceded to have been derived from the Pali, and it contains only the Pali letters. It could not, any more than the Pali itself, have furnished to the Siamese an alphabet with the full complement of Sanskrit letters.

III.

Having gone so far, the writer was unwilling that the award should go to the third claimant merely through failure of the other two to make good their cases. A strict examination was therefore made into the positive evidence in favor of the theory of a Cambodian origin of Siamese writing. It is entirely natural that this theory should have been advanced by French explorers and scholars, since to their lot has fallen the task of gathering and mastering the material records of ancient Cambodia, in which alone was to be sought evidence bearing upon our problem. Their problem, however, is by no means the same as this of ours, but the immensely greater one of reconstructing from those fragmentary records the origin and history of the ancient empire to which in these days France has fallen heir. The few references to the Sukhôthai letters noted in the works of these men, are therefore wholly incidental—statements of the author's conviction, without attempt to enforce it by presentation and discussion of the evidence. Thanks, however, to the vivid interest of France in her new Asiatic possessions, and to the learning and skill of her orientalists, the gathered material has been in large part successfully mastered and admirably published.11 The needed evidence was therefore within reach and to it the writer addressed himself.

Most of the published epigraphy of southern Indo-China was carefully scrutinized for whatever light it might shed upon the source and development of Cambodian writing, leading down to the forms it actually assumed in the 13th century of our era, and to a comparison of these with the Sukhōthai writing.

The labors of Aymonier, Bergaigne, and Barth have rescued from the realm of mere folk-lore and fairy-tale the shadowy kingdom of Champa. They have shown that from the earlier centuries of the Christian era, on the shores of the China Sea and along the middle reaches of the Mêkông River, there really existed a kingdom of that name, founded by princely adventurers from India, who brought with them their Sanskrit speech and literature and the worship of Cīva. From the sixth to the ninth centuries we have somewhat of authentic documentary information concerning this kingdom. We know, for example, the names and lineage of a number of its kings, together with the dates of some of them, and references to various affairs of the realm.

The inscriptions which record these matters are often bilingual—that is, partly in Sanskrit prose or verse, and partly in the vernacular speech; but written throughout in the Devanāgarī characters which are said to be of the form anciently used in the Dekhan of India. This kingdom of Champa at last yielded to the rising power of Cambodia, which had already taken over the culture and art of its neighbor, and which afterwards carried these on to a culmination in the tenth and eleventh centuries of our era, attested by the wonderful monuments of Angkor Wat and Nakhawn Thôm.

The Cambodian inscriptions consist generally of an opening section in stately Sanskrit verse in honor of Cīva and the reigning monarch, followed a section in prose dealing with the more mundane affairs of the realm which are to be commemorated. The published series referred to deals solely with the Sanskrit portions, the ancient native speech of both realms being thought as yet too imperfectly understood to permit of satisfactory treatment. Chronologically the series ends with an inscription from Angkor Wat, apparently the very last record of that Golden Age of Cambodia. It is in classic Sanskrit verse, bearing no discoverable date, but on internal evidence judged by M. Barth to be of the early part of the thirteenth century. A long gap of silence follows it, indicative, as is surmised of the downfall of
the old régime. When at last inscriptions appear again, they are of
the modern world both in speech and writing. The splendor of
that elder time was already become a myth, kept alive only by the sight
of those mighty ruins of unknown origin and date. Thus far my sum-
mary from the French archeologists.

Of the long series of inscriptions already mentioned, some forty-
five were passed in review by the writer, and upon a selected group
of them chosen mainly for their legibility, extent, and definite dating,
he paused for special study of the writing. The results in each case
were embodied in the form of a careful facsimile of the alphabet
of each, as complete as the verbal content and the state of
preservation of the inscription would permit.\textsuperscript{12} Three of these alphabets
chosen as best illustrating the gradual change of form during the six
centuries preceding the Sukhōthai date, have been reproduced side by
side on the chart—the last being the one from Angkor Wat referred to
above. In the column next this, for ready comparison, are placed the
Sukhōthai letters.\textsuperscript{13} The two are probably less than a century apart;
and the divergence in form is, as will be readily seen, no more than
should be abundantly accounted for by the time-and-space interval, by
the individual differences between the style of different scribes, or by
the purposeful changes which we know the Siamese Prince made in
the interest of simplicity and the avoidance of confusion between
letters too nearly alike in shape.

\textsuperscript{12} In no case was it possible to secure an alphabet quite com-
plete. Weather, time, and imperfect skill on the part of engravers
have rendered useless for this exact study of form, some portions of
every inscription. Some letters, moreover, are of very rare use. Many
more are rare in independent and unmodified form, being encountered
for the most part in ligated, subscript, superscript, or even circumscript
forms, often with little or no resemblance to the standard forms as
shown in the alphabetic list. None of these would at all serve us here,
for Prince Rām Khamhêng abolished at a stroke all this senseless
complexity, and confined each character to its one standard form and to
its one place on the line.

\textsuperscript{13} The columns of the Chart contain the following:—

I. Roman equivalents of the Sanskrit letters according to
the scheme given in Whitney’s Sanskrit Grammar.

II. Cambodian Alphabet from Wat Phou (Phū), 664-670
A. D. *Bulletin de l’Ecole Française d’Extrême Orient*, II,
pp, 235-240 with Plate.

III. Alphabet from an Inscription of King Satyavarman
of Champâ, 965 A. D. *Notices et Manuscrits*, Tome
XXVII, Pt. 1, 2d Fascicule, Plate xxvii-A.
Here then at last for the Sukhotai letters is found an original which the transcript actually resembles, and which at the same time affords complete explanation of the presence in the transcript of the Sanskrit letters not found in the Pali, nor known anywhere else in all the peninsula of Farther India. Were there nothing more to be said the evidence on these two points alone, it seems, should suffice to decide the case in favor of the Cambodian origin. But the case is greatly strengthened when we consider the evidence of contact between the two peoples along other lines, and of other borrowings by the Siamese.

Thus, for example, the Siamese has incorporated into its vocabulary a large body of loan-words of Indian origin. Of these many, or perhaps most, appear in what are essentially their Sanskrit forms, and with their Indian meanings; while others appear in their derivative Pali forms—where these are different from the other—and with Buddhist meaning and use. Some actually appear in both forms, with some distinction of meaning or use. The presence of both these groups of words in Siamese speech is proof of contact some time with both civilizations. And the Cambodian civilization is the only one that could have afforded the double contact. For in Cambodia, at the period of which we speak, Buddhism was already displacing—or

IV. Cambodian Alphabet from Angkor Wat, 13th century A. D. Notices et Manuscrites etc. Plate LXV.
V. Burmese Alphabet from Po U Daung; taken from a photograph of an inscription of King Sinbyuyin, published in Rangoon, 1891. The inscription is modern (1774), but it has very faithfully reproduced the ancient Burmese writing, as reference to any of the published alphabets of Taylor, Paulman and Bühler will show. It was the best specimen of its kind I was able at the time to secure in unimpeachable reproduction.

14. A very few examples must suffice. The transliteration here given renders according to Whitney’s scheme the actual spelling of the words in Siamese, and not at all their pronunciation. Sanskrit forms are:—aśava (Pali avadana), letter, character; satev (Pali satte) a creature; suvarna or subarna (Pali suvarna), gold; Indra (Pali Indra), Indra; crī (Pali cīri) glorious. Pali forms are:—nibbāna (Sanskrit nirvāna), extinction; sāsana (Sanskrit āsana), religion; bhikkhu (Sanskrit bhiksu), mendicant. Doublets from the same root are:—siṅha, lion, and siha (in rajasiha), a fabulous monster; Kusātrya (for kṣātrya), king, and khatiyu (jāti), of warrior caste.
perhaps had largely displaced—Brahmanism and the cult of Śiva. Of the presence, however, of Hindu religious cults in various portions of the Siamese area at a period even later than our date, we have not only the evidence of place-names, such as Mùang Brahmpù (Brahmapura) and Bîgmulôka (Vishnulôka); but direct as well, in various ancient images of the Hindu deities, still regarded with reverence at the present day.

Then again, the early Siamese religious architecture, as seen in the Sukhôthai region, at Lopburi (the ancient Lawô), and elsewhere, distinctly reproduces Cambodian and Hindu forms. Moreover the terms of court speech in Siam concerning the person, actions, and belongings of royalty, are to this day for the most part either Cambodian outright, or Cambodian-Sanskrit. Not only are the great seasonal festivals of the Siamese court—excepting, of course, those directly concerned with monastery life—but very many also of its special rites and ceremonies—the festivals of hair-cutting, coronation, swinging, and ploughing—distinctly reveal either an Indian or a Cambodian origin. There is still maintained at the present day a corps of Brahman astrologers to determine the auspicious day and hour for all courtly movements and events. In fact, behind these, and behind the newer and nearer Buddhism, there stretches on every side, in the imagination and in the thought of the Siamese, the mighty background of Hindu cosmogony, mythology, and legend, as fresh as when these were brought from India to the shores of Annam two thousand years ago. What further evidence is needed?

To summarize:—The theory of a Sinhalese origin of Siamese writing postulates, as its necessary foundation, a previous contact and intercommunication between Ceylon and Sukhôthai—at the very core of the peninsula of Farther India—of the existence of which not the slightest evidence has ever been adduced, and which inherently is very

---

15. Buddhist religion and culture, of course, may have been separately brought into Siam by missionaries from Ceylon; for we have authentic record in later times of visits of monks from that island. Just how it was at our earlier date, I think we have as yet no positive evidence. For all that we now know, Buddhism might well have come to Siam from Cambodia along with letters and other elements of culture.

16. For example, on a famous image of Śiva, now in the Royal Museum at Bangkok, there is an inscription calling upon the people to re-establish his worship, and renounce that of Buddha.
unlikely. The theory is not supported by any clear resemblance between the Siamese letters and their supposed Singhalese originals; nor by the use either of those originals or of their Siamese derivatives by native scribes in copying the Pali scriptures. And it is distinctly negatived by the presence in Siamese writing from the very first, of elements entirely unknown in the Pali, but unmistakably Sanskrit.

The theory of a Burmese origin fails on these same lines. Contact between the two peoples there has been; but it has never been intimate and friendly; and it has left almost no trace upon the culture of central Siam. Neither of the three forms of Burmese writing visibly resembles the Siamese. And, being derived from the Pali, Burmese writing has not, and could not have furnished the Siamese, its striking Sanskrit features.

Cambodian culture was Brahmanical and Indian throughout. Cambodian writing retains its distinctive Sanskrit features to the present day. Historically, the shape of the Cambodian letters—originally Indian—underwent gradual change, until in the thirteenth century A.D., they are found to approximate very nearly the Sukhōthai letters in, scribed a little later. The close cultural contact between the two peoples suggested by the epigraphy, is strongly corroborated and extended by consideration of the very large borrowings from Cambodia found in Siamese speech, ceremonial, art, and government.

Berkeley, California, January 14th, 1918.
BIBLIOGRAPHY.

AYMONIER, ÉTIENNE: Le Cambogé, Tomes I, II, III; Paris, 1900, 1901, 1904.


Inscription de Bien Hoa; Bulletin de l’École Française d’Extrême Orient, Tome IV, pp. 687-697; Hanoi 1904.

BERGAIGNE, ABEL (followed by A. BARTH): Notices et Extraits des Manuscrites etc., Tome XXVII, Pt. I, 2d Fascicule with accompanying Portfolio of Inscriptions from Champã and Cambodia; Paris, 1893.


BÜHLER, G.: Indische Paläographie; Grundriss der Indo-Arischen Philologie; 17 Tafeln; Strassburg, 1896.

FAULMAN, CARL: Das Buch der Schrift; Zweite Auflage; Wien 1880.


Les Ruines d’Angkor; Paris, 1890.


SINBYUYIN, KING: The Po U Daung Inscriptions; with photograph; Rangoon, 1891.