THE use of books consisting of a long strip of writing material, folded up like a harmonica and written in lines parallel to the folds, is not uncommon in Eastern Asia, but the use of prepared tree-bark for this purpose is, as far as I know, restricted to the Indonesian island of Sumatra. There it survives to the present day among the Batak people in the northern part of the island; in the South also books of tree-bark are still to be found, though probably no longer made nowadays. Such books from southern Sumatra are rare in ethnographical collections, but Batak bark books are to be seen in nearly every ethnographical museum and in many libraries possessing oriental manuscripts.

A table of the Batak alphabet (of Indian origin) was published by William Marsden in his *History of Sumatra* as early as 1783. Nevertheless, scholars asked by curio-hunters for an explanation of their exotic treasures during the first decennia of the nineteenth century still made all kinds of fantastic guesses, comparing the letters with hieroglyphs, mixtures of Greek and Arabic astronomical symbols, Phœnician alphabets, etc. It was only after Dr. H. N. van der Tuuk had made a thorough study of the Batak language and published an anthology printed in the Batak character, a dictionary and a grammar (1860-1867) that the meaning of the books became generally known. In 1925 Dr. Joh. Winkler, a German missionary doctor working in the Batak country, gave a nearly complete survey of the literature contained in the bark books as a part of his work on Batak folk-medicine (*Die Toba-Batak auf Sumatra in gesunden und kranken Tagen*).

The Batak people numbered about 1,200,000 when the last census was held in 1930. Their social organisation, based on
genealogical principles, is the same everywhere. Every individual belongs to a patrilinear exogamic group (*marga*), and this fact for the most part determines his rights and obligations. But in other respects there are great local differences, and the language is split up into a number of dialects, which may be roughly divided into a northern (Karo and Dairi) and a southern group (Toba, Angkola and Mandailing), whilst Simalungun holds an intermediate position. Batak is an Indonesian language, but especially in the books a number of Indian loanwords are found. One of these is the word *pustaha* (southern dialects; northern, like Sanskrit, *pustaka*). This is the most usual name for the books written on tree-bark.

In South-Sumatran bark books several kinds of literature are represented: codes of law, legends and magical texts. Batak literature as found in the pustahas is much more monotonous. All the texts deal with magic and divination. In the few cases where legends are found written down in a pustaha there is nearly always a European investigator in the background. Unquestionable instances of the contrary are extremely scarce. The pustaha is, as Dr. Winkler remarks, the note-book of a Batak medicine-man, dictated to his pupils or copied by them as a supplement to oral instruction. This explains the abrupt and fragmentary character of many texts, the large part taken by lists and tables and by magical drawings. Dr. Winkler has studied a number of pustahas with the help of a competent medicine-man (*datu*), and in this way has succeeded in giving a much more vivid and coherent picture of ceremonies, practices and methods than the study of the manuscripts alone can ever yield.

The only really adequate commentator of a pustaha is the *datu* who wrote it himself. Even in the Batak country it is now seldom possible to get this kind of help, as large sections of the Batak people have embraced Islam or Christianity, and the old sciences of magic and divination are much in decline, even among those who still cling to the religion of their ancestors. But by a careful comparison of different copies, much that is obscure in the older texts may be elucidated; many details and some main points may be added to Dr. Winkler’s survey;
small but sometimes interesting linguistic data may be gathered. This would, however, involve a lot of very tedious work: transcribing of texts, indexing of doubtful and obscure words, etc. A start in this direction was made by C. M. Pleyte. He published lists of some of Van der Tuuk’s Batak manuscripts in Amsterdam (1894), and of the Batavia collection (1909). Unpublished notes in his handwriting were found in many of Van der Tuuk’s manuscripts in Leiden, and he also made an unpublished catalogue of the Batak MSS. of the Bibliotheca Lindesiana, now in the John Rylands Library. All these lists are superficial and inaccurate. But it was also at his initiative that full romanised transcriptions, accompanied by copies of the illustrations, were made of the pustahas in Batavia. This was done with much patience by a Christian Batak teacher, Pandita Simon. I have not collated them, but they seemed to me fairly accurate when I used them in Holland in 1926.

Another line of approach would be to compare Batak magical and divinatory literature with its sources. The use of Sanskrit words leaves no doubt that these must be looked for in India. But Van der Tuuk has remarked that some of these words show by their form that they have not passed immediately from Sanskrit into Batak, but through the intermediary of some other Indonesian language. So comparison with similar literature found elsewhere in Indonesia might also prove useful. To give an example: the Batak word raksa meaning “property”, “peculiarity”, “attribute”, baffled me until I found Malay laksana (Skr. laksana) used in the same way as the Batak word. The last syllable has been dropped in Batak, because -na is there the possessive suffix of the 3rd pers. sing. But here two difficulties arise. In the first place, many subjects treated in the pustahas have no parallels in other Indonesian languages. Secondly, no sufficiently detailed descriptions of the magical literature in Bugis, Makasar, Javanese, etc., exist; even Skeat’s “Malay Magic” is not detailed enough for this purpose. The magical and divinatory literature of India is also not easily accessible. The Indian origin of some parts of Batak lore has been proved in a general way, but a detailed comparison cannot be given in the present state of our knowledge.
I shall now give a short summary of Dr. Winkler's survey of the art and science of the datu, the Batak medicine-man. Dr. Winkler has divided the subject into three parts: the art of preserving life, the art of destroying life, and divination. Under the first heading he treats of diagnosis, domestic remedies, magic medicine, amulets, charms and other protective devices, and the cult of the human soul, of the ancestors, of gods and spirits. The second part comprises what is usually called black magic. Divination is subdivided into: oracles to find out the wishes of the soul; oracles for detecting the decrees of the gods and ancestors; and astrological oracles.

Diagnosis (I. 1) implies several forms of divination, as illness is often ascribed to unfulfilled wishes of the human soul (tondi), the gods or the spirits. In pustahas treating of divination one finds formulæ like: if this omen occurs, such and such a spirit is causing illness. As a source for the knowledge of folk medicine (I. 2) the bark books are disappointing; recipes for domestic remedies against all kinds of ailments, so frequent in Malay manuscripts, are seldom found in them. Dr. Winkler's exposition of this subject is not based on written sources but on oral information and personal observation of practice. Magic medicine (I. 3), however, is fully treated in some pustahas; it consists chiefly of antidotes against poison and hostile magic. Protective magic (I. 4), generally denoted by the word pagar (which in Malay means "fence"), fills a considerable part of the datu's books; often a whole book treats of one kind of pagar. Every pagar has its own specific name, and the method of preparation and the incantations used are mostly given in some detail. Acts of cult (I. 5) are often prescribed in the pustahas to ward off some evil, but the exact way in which they are performed cannot be learned from this literature. An exception is the porsili, the giving of an image to the spirits as a substitute for the patient; the preparation of this kind of magic is sometimes described rather elaborately.

As a subdivision of the art of destroying life, Dr. Winkler mentions in the first place (II. 1) the preparation of poisons. Recipes of this kind are still scarcer in the pustahas than those for remedies. One of the most important subjects treated
amply is pangulubalang (II. 2). This word is derived from ulubalang, a champion in war, and means a spirit made subservient to the magician and acting as his champion against his enemies. Most of the illustrations found in the pustahas are magical drawings serving as seats for a special manifestation of such an aggressive spirit. These manifestations are called debatá, from Skr. devatá, deity, and the proper names of some of these manifestations also show an Indian origin. In the third place Dr. Winkler treats of dorma (II. 3), which is the Skr. dharma, but in Batak generally means "alluring magic", e.g. a love-philtre. Some forms of it may be used to allure the enemy’s soul to its destruction. Lastly, under this heading come all kinds of magical devices for leading the enemy into perdition which are summed up under the name of adji (II. 4).

The third chapter of the datu's science, divination, is the most promising subject for comparative studies. Winkler enumerates many oracles to find out the wishes of the patient's soul (tondi) (II. 1). Among these we find such widespread practices as chiromancy and fortune-telling from names and from the egg. This last subject is sometimes treated in pustahas. To this same group belongs sooth-saying from involuntary motions of the muscles (gorak-gorahan). But much more room is taken in Batak magical books by some of the oracles mentioned by Winkler under the next heading: oracles for detecting the decrees of the gods and ancestral spirits (III. 2). Long tables of cases occurring in divination by the double string (rambu siporhas) and the hanging cock (manuk gantung) fill many pages in the bark books, easily recognisable by the drawings representing the different positions of the strings and the critical points in the inside of the chicken which has been cut open. Shamanistic practices belong to this group, and also ordeals and war, which, according to Batak ideas, is a kind of ordeal.

Most clearly of Indian origin are the oracles which form Winkler's last group. It comprises all kinds of astrological fortune-telling (III. 3). In the first place there is the dragon in the sky, which changes its position every three months. In Malay it is called naga (Skr. nāgo), in Batak pane na bolon, the great pane (probably also a Skr. word). Then Winkler mentions
in this connexion two oracles that take a large place in the pustahas: *panampuhi*, soothsaying with slices of lemon, and *manuk di am pang*, for which a fowl is killed and put under a basket until it does not move any more. These belong to the astrological oracles because the position of the slices of lemon or the fowl with relation to the points of the compass (called by their Sanskrit names) determines the omen. According to Winkler's ingenious explanation of the *manuk di am pang*, the apparatus used for this method of divination represents the cosmos, and one of the gods of heaven, Batara Guru, descends into the fowl and so gives his decision. In a Mandailing pustaha containing invocations of spirits (*lobajak*) I found a curious passage in which the fairy of incense is asked to ascend to heaven and to bring down a daughter of the gods (*boru ni dibata*), apparently to give oracles through a cock.

A special study was made by Dr. Winkler of the Batak calendar (*porhalaan*). It was first published in *Zeitschrift für Ethnologie*, Jahrg. 45 (1913), and afterwards incorporated in his book, *Die Toba-Batak*. Independently of C. Snouck Hurgronje, who in 1893 had given a clear exposition of the similar system followed in Acheh, Dr. Winkler found that the Batak seasons are regulated by the conjunctions of the Scorpion with the moon and that the *porhalaan* (from *hala*, Skr. *kāla*, "scorpion") is a schematic representation of these conjunctions. It consists of a rectangle divided into 12 or 13 × 30 squares for the days of the months, with the figures of the scorpion in the appropriate places. The thirteenth month is mostly only used as a safety margin; when the datu is uncertain about the number of the month, he chooses a day that is lucky in the next month as well. Originally it certainly represented the intercalary month which must be added after some years to make up for the difference between the solar and the lunar year. The necessity of such a correction is determined by the Batak, as well as by the Achehnese, in a purely empirical manner by observation of the stars. Some time ago Dr. Winkler sent me an addition to his book from which it appears that this whole ingenious system of combining the solar and lunar reckonings is of Hindu origin. He found it mentioned in the seventeenth century work *Afgoderye*.

Other astrological tables found in the pustahas are the pormesa, the twelve signs of the zodiac, that have retained their Sanskrit names; the eight panggorda, animals arranged according to the points of the compass, also of Indian origin (see Indian Antiquary, V, p. 296); and the five pormamis, the Malay kētika lima. These have still the Skr. names of gods in Malay. In Batak the names are mamis, bisnu, sori, hala and borma, with mamis for the Malay mahēswara. The Malay word sēri in the sense of "drawn (of a game)" is taken from this series, as Sēri occupies the middle position among the five.

After Pleyte's lists of Batak manuscripts, already mentioned above, two more collections have been catalogued: that in the Ethnographical Museum at Leiden by H. W. Fischer (in Catalogus, Vol. VIII, pp. 129 sqq., 1914), and that of the Indisch Instituut at Amsterdam by the author of this paper (in Aanwisten v.d. Afdeeling Volkenkunde, 1933). Fischer's catalogue is much fuller than Pleyte's lists, but it also teems with errors in the transcription of Batak passages. My own notes about the manuscripts at Amsterdam were not originally meant as a catalogue; for the most part they only give the titles and no detailed survey of the contents of the books. But, as they were carefully revised by Dr. Winkler, they contain almost no errors in transcription, and some words not found in the dictionaries could be explained by his help. As neither Dr. Winkler nor I knew the Simalungun dialect then, some titles of Simalungun books have been mistranscribed, e.g. by spelling -eh for the Simalungun diphthong -ou!

The place of origin of a pustaha is not always easy to ascertain. In the old times of intertribal warfare the datus were the only class of people who could move about more or less freely, owing to their dreaded magical powers. As young men they often sought wisdom in far-off parts of the country. In transcribing the pustahas of their masters they only slightly adapted the language to their own dialect. The standard dialect of Batak magical literature may be said to be what Van der Tuuk calls sub-Toba, with an admixture of words and forms peculiar to
the jargon of the datu. Passages conforming to this standard may be found in any pustaha, whatever its place of origin. Therefore, as a source of linguistic information, the pustahas should be handled very carefully. Sometimes the place of origin is indicated in the introduction, where one finds passages such as: “this is an instruction from N.N.” (a famous datu in a remote past); “then it came to you, N.N. in the land X”, and so on, until the scribe of the copy in hand is reached.

Palaeographical evidence is also a weak base for determining the place of origin or the date of a pustaha. I once thought that a special form of the letter “n” was only found in old pustahas from Mandailing, but afterwards I found the same form in a book from Siantar in Simalungun and in another copy which has peculiarities pointing to a Dairi origin and is probably not very old. Generally the only terminus ante quem in the dating of a pustaha is the date of its acquisition by a museum or a private collection. By this criterion the oldest specimen should be British Museum Add. 4726, presented by Alexander Hall, Esq., 18th May, 1764. It is in the ordinary Toba script. Next would come the pustaha of the Royal Netherlands Academy of Sciences, which was bought in an auction in Holland, 3rd October, 1781. This MS. has the old form of the “n”, but those that come next in chronological order, William Marsden’s pustahas in the School of Oriental and African Studies, as well as the specimen in the British Museum just mentioned, could have been written a hundred years later.

The largest and most complete collection is that of Van der Tuuk, now partly in Amsterdam (Indisch Instituut), partly in the University Library, Leiden. It was collected during the years 1852-1857 in Barus on the western coast of Sumatra, and shows a great variety of subject-matter, but little dialectical and palaeographical diversity. In compiling his dictionary Van der Tuuk did not exhaust the lexicographical data found in his pustahas. Nevertheless with the help of his publications and some pieces on the science of the datu found in the twenty-five volumes of Batak texts collected by him, his manuscripts are more easily accessible than those written in other dialects. joustra, Warneck and Eggink took little notice of pustaha-
literature in composing their dictionaries of Karo-, Toba- and Angkola-Batak. Some valuable information about this subject was gathered among the Batak of Eastern Sumatra by H. H. Bartlett; besides his publications (The labors of the Datoe; Sacred edifices of the Batak) little has been written in English about this subject.

The John Rylands Library has a collection of 26 Batak manuscripts; 14 are written on tree-bark, 9 on bamboo and 3 on paper. There are some notes about ten of these MSS. by G. K. Niemann, dated 1878, and the complete catalogue, mentioned above, by C. M. Pleyte, made at a somewhat later date, but before 1898. In that year some of the MSS. were shown in an exhibition and the printed catalogue published for the Bibliotheca Lindesiana on that occasion obviously uses Pleyte's description. In 1901 the oriental manuscripts of the Bibliotheca Lindesiana were acquired for the John Rylands Library. The numbers 1, 5, 8, 9, 10, and perhaps some others, were bought by the Earl of Crawford in the auction of Professor H. C. Millies' books at Utrecht in 1870. Four of the manuscripts about which Niemann made notes are from the "Bragge collection", and according to Niemann were "apparently very old" when he saw them. One of these is now no. 6.

The following list has been drawn up from Niemann's and Pleyte's notes. As the regulations of the John Rylands Library do not permit the loan of manuscripts outside the library, I have not seen the MSS. themselves, but I have had a microfilm reproduction of some pages from no. 12. Pleyte's numbers are used in the list.

No. 1. (This, or no. 7, must be no. 1284 of Millies' catalogue. Professor Millies got it in 1859 from Mr. A. P. Godon, who had been assistant-resident of Mandailing and Angkola.) Tree-bark, 69 leaves, 270 × 170 mm. Badly written, full of mistakes and errors. The main subject seems to be a pagar (I. 4) called Balik Kunda na bolon, "the great Balik Kunda". Parts are devoted to dorma (II. 3), pangulubalang (II. 2) and daon (medicine, I. 2).

No. 2. Tree-bark, 54 leaves, 160 × 110 mm. Well written; large distinct characters. Subject: pagar (I. 4), called Sipiuan
"na bolon, "the great Sipiuan" (a kind of kite). In connexion with this pagar, tables of the pormesa, panggorda and pormamis (III. 3) are given. There is also a piece about parombunan, the reading of omens from the form of clouds in the sky. A peculiarity of the pagar sipiuan is that its formulæ should be written on a long bamboo (30 internodes). In an illustration in a pustaha written for Van der Tuuk, this bamboo is pictured in an upright position (see plate 4). A passage from the incantation of this pagar has been published by Pleyte (Bijdr. Taal-, Land- en Volkenk. 1903).

No. 3. Tree-bark, 38 leaves, 180 × 140 mm. Badly written. This pustaha also is about pagar (I. 4). According to Pleyte the title is Poda ni pagar Adjí Debata na bolon, "Instruction about the pagar called Adjí Debata the great ", but from his description it seems likely that the main subject is the pagar called Si Adjí Sang Baima. Some particulars about a similar pustaha in the Djakarta collection are given in my Overzicht van de Volksverhalen der Bataks, page 128. This pagar owes its name (though probably little more) to Bhima, one of the heroes of the Mahābhārata.

No. 4. Tree-bark, 45 leaves, 125 × 80 mm. Wooden, sculptured cover. Well written except at the end. Pagar (I. 4) again, this time called Dua Radja Handang Bosi, "Two Kings Iron-Fence ". The last part treats of pangulubalang (II. 2).

No. 5. (Millies' catalogue, no. 1282. Received from Mr. C. v. S. Matthiessen in Padang.) Tree-bark, 34 leaves, 210 × 160 mm. Wooden cover. Legible throughout. Contains two instructions: (a) concerning Pagar si unte rudang (I. 4), a kind of pagar of which unte (lemon) is the chief component; (b) concerning pamuhu (or pamunu) tanduk, a kind of magical preparation kept in a buffalo's horn. This belongs to aggressive magic (Winkler's second group).

No. 6. Tree-bark, 63 leaves, 175 × 120 mm. Very fine handwriting and good drawings. First and last pages damaged. The main subject seems to be a pagar (I. 4) called Panunsang Harahar na bolon.

No. 7. Tree-bark, 67 leaves, 240 × 125 mm. Wooden cover. Badly written. The same text as no. 1; one of these
books must be a copy of the other, or both are copied from the same original.

No. 8 (Millies' catalogue, no. 1274). Paper, 18 pages, 4°. A tale in the South Mandailing dialect, relating how the dragon Ompu Pungu made the charm *Bohom-bohom ni si Adji Guru Sang Baima* (cf. no. 3).

No. 9 (Millies' catalogue, no. 1275). Paper, 48 pages, 4°. A fragment of the legend about *Mangaradja Enda Panjabungan*. A complete text has been published by Van der Tuuk in his *Bataksch Leesboek*, II. 61-105; cf. my *Overzicht*, page 190, no. 234. Van der Tuuk's version is in the North Mandailing (Angkola) dialect, whereas this one is in the dialect of South Mandailing.

No. 10 (Millies' catalogue, no. 1276). Paper, 44 leaves, 4°. Written at Panjabungan (Mandailing) in 1857 by Patuan Soang-kupon. The legend about the origin of the *marga* (genealogical group) Nasution, said to descend from Mangaradja Sokondar Mudo of Pagarruyung (Minangkabau). South Mandailing dialect. The Leiden library possesses a shorter, unfinished version in the same dialect. Extracts have been published in Batak by Willem Iskander (*Siboeloes-boeloes*, 1872) and in Dutch by Willer (*Tijdschr. v. Neerl. Indië*, 1848, I. 405 sqq.).

No. 11. Tree-bark, 29 leaves, ca. 245 × 180 mm. Well written. *Poda ni pagar pangorom*, i.e. instruction about a *pagar* (I. 4) to make ineffective the charms used against us.

No. 12. Tree-bark, 50 leaves, 175 × 110 mm. Well written, but not free from errors. In the catalogue of the exhibition held in 1898, “ca. 1750” is given as the date of this manuscript. The principal reason for ascribing such a date to this pustaha seems to be Pleyte's observation that “its handwriting closely corresponds with a manuscript of the Leyden library which was brought back from Sumatra before A.D. 17—” (the last two numbers not filled up). Pleyte further remarks that the letters “n”, “b”, “m”, “t” and “s” have an ancient form. The old manuscript meant by Pleyte can only be that of the Royal Academy mentioned above. In my opinion the resemblance is not very close (see plates 2 and 3); the only letter that really has an ancient form (i.e. a form nearer to that of the alphabets of old
Javanese and Malay inscriptions) is the "n", and, as remarked above, the use of this kind of "n" probably survived in some regions until recent times. Another reason why Pleyte considers the MS. as old is found in a note saying that "it belonged to Opput Sarimatua from Patsur-na-pitu in whose family it has been for ages". In my opinion this only proves that it cannot be much later than the beginning of the nineteenth century. Of course it may be much older, but this can be said of most pustahas. From Pleyte's notes and the pages I saw in reproduction I gather that on one side the chief subject is pamunu tanduk (see above, no. 5). Much room is also taken by lists of the twelve months, with the purposes for which they are auspicious or inauspicious, the offerings to be given to the spirits of the months if they are well disposed, the porsili (I. 5) to be given them to avert their evil influence. A pagar (I. 4) against ferocious ghosts is also mentioned. On the back are two chapters, the first entitled: Poda ni songonta di sitangko bodan, instruction about our songo or songon against thieves of bodan. Neither for songo or songon nor for bodan can I find a meaning that makes sense. The second chapter is about dorma (II. 3).

No. 13. Tree-bark, 14 leaves, 90 x 70 mm. Well written. Poda ni pamusatan ni manuk gantung, succinct instruction about divination by means of the hanging cock (III. 2).

No. 14. Tree-bark, 39 leaves, 140 x 140 mm. About a pagar (I. 4) called Subutan Mula Djadi.


No. 16. Bamboo, 770 mm. long. Small distinct writing. From Djandji Angkola. About offerings to the spirits of the days of the calendar (porhalaan, III. 3).

No. 17. Bamboo, 630 mm. long. From Djandji Angkola. Calendar (porhalaan, III. 3).

No. 18. Bamboo, 700 mm. long. From Djandji Angkola. Poda ni tua ni dijuhut na djadi panganon dohot na so djadi panganon, instruction about the parts of a buffalo which may be eaten and which may not be eaten (by the guest and by the host, according to the month of the year).
No. 19. Bamboo, 680 mm. long. Large clear writing. From Djandji Angkola. Contains two mintora, invocations to be recited in applying antidotes.

No. 20. Tree-bark, 48 leaves, ca. 490 × 150 mm. Well written but partly illegible by use. This is a pustaha of the same kind as the largest specimen in Van der Tuuk’s collection (cf. plate 1) and several other copies, all distinguished by their large measurements. They contain rules for divination and magic in war. The contents of this MS. are:

(a) Rambu siporhas, divination by the twin string (III. 2).
(b) Pane na bolon, divination from the position of the dragon in the sky (III. 3).
(c) Pangulubalang, aggressive magic (II. 2).
(d) Pommesa, the signs of the zodiac (III. 3).
(e) Poda ni porsili ni surat na sampulu sia, about the nineteen letters of the alphabet used as charms.
(f) Panggorda (III. 3).
(g) Pormamis (III. 3).

No. 21. Tree-bark, 21 leaves, 230 × 170 mm. Very well written. Bought in Baringin, district Rambe, in the upper lands of Barus; said in the catalogue of 1898 to be the very first that came from this independent region. About pamuhu tanduk (see above no. 5).

No. 22. Tree-bark, 18 leaves, 160 × 85 mm. Much damaged. About divination by means of a chicken, probably the manuk gantung (III. 2). At the end we find some notes about how to shoot with a gun, illustrated by rough drawings. This kind of magic, called pamodilon (from bodil, gun) has not been treated in Dr. Winkler’s book.

No. 23. Bamboo, ca. 280 mm. long. From “Djandji Mariah in the independent hinterland of Baros”. Spelling manual, containing the alphabet, each consonant accompanied by all the different vowels.

No. 24. Bamboo, 1540 mm. long. Five internodes, of which four are engraved with instructions for panampuhi, divination by means of a lemon (III. 3).

No. 25. Bamboo, 1700 mm. long. Four internodes, all
engraved with an instruction about the consultation of pane na bolon (III. 3). From Djandji Mariah.

No. 26. Bamboo, 1070 mm. long. Three internodes. From Djandji Mariah. Contains a fragment of an invocation of the gods; two of them are Mangala Bulan (one of the three heavenly gods) and Debata Hasi-hasi, a god "to whom the priest never brings offerings, to whom the female shaman never presents a gift".

According to Pleyte's catalogue the texts of nos. 2, 12, 13, 20 and 22 are written in the Toba dialect; of no. 6 in South Toba; of no. 11 in sub-Toba; of nos. 1, 4, 5, 7 in Mandailing; and of nos. 3, 8, 9, 10 in South Mandailing. Some of these determinations seem rather uncertain. Apparently the collection contains no specimens in the Northern Batak dialects or in those of the East Coast, but various dialects from the Western Toba and Mandailing area are represented in it. As to contents, protective magic (pagar) is in the majority, whereas texts on pangulubalang, so numerous in other collections and usually containing the most elaborate illustrations, are scarce. Important methods of divination, such as porbuhitan (omens taken from the falling of the buffalo slaughtered at a sacrificial ceremony) and manuk di ampang (III. 3) are not treated at all, but several other divinatory texts are found in the collection. I do not know a parallel of the legend found in no. 8. Otherwise, although the collection contains nothing that is unique, it supplies valuable materials for comparison for any scholar wishing to explore the devious byways of Batak magical thought of olden times.

APPENDIX

TRANSLITERATION OF BATAK TEXTS

Plate I. From MS. Amsterdam, Indisch Instituut A 1389, catalogued in Mededeelingen van de Afdeeling Volkenkunde, no. 6 (1937), p. 52 sqq. It is the largest pustaha in Van der Tuuk's collection; its wooden covers are in the shape of a four-legged animal. It has often been portrayed, e.g. in Van der Tuuk's dictionary, Plate XXI and in A. J. de Lorm en G. L. Tichelman, Verdwijnend culturebezit: Beeldende kunst der Bataks (1941), Plate XXXI. Another illustration from this book has been reproduced in J. C. Lamster, Indië, p. 97 (with
PLATE 1.—Illustration from a bark book in Van der Tuuk's collection.

The subject of this part of the book is the pangulubalang (aggressive magic) called Dua radja odjim na bolon, "The two great jinnee rulers". The picture illustrates one of its many applications. The magician takes a toad and a lizard, feeds them on his magic medicine, makes them wear sashes of earth-worms and yokes them to a small plough (right side of the picture). Out of the rib of a palm-leaf he makes a whip with a hibiscus flower bound at its top by means of three-coloured thread (middle). Stark naked he goes (left side) to the battlefield and makes them plough seven furrows. Then he throws away his whip and goes home. This practice will cause storm and darkness that drive the approaching enemy back.
PLATE 2.—Specimen of writing from Rylands Batak MS. 12.

PLATE 3.—Specimen of writing from MS. Leiden, Royal Academy no. 247.
This picture represents the bamboo pole on which the formulae of the *pagar sipiuau* (cf. Rylands Batak MS. 2) should be written. It must be slanting towards the East. The person standing next to the bamboo is the datu, uttering incantations. From the top of the bamboo a rectangular rack for offerings is suspended, apparently by means of a pulley-rope. This manuscript was specially written for Van der Tuuk.
Dutch translation of Batak text). The text belonging to the picture of the ploughing ceremony is:

"Ahu pangulubalang pangkaba-haba di bisara na godang asa dapahani ma djolo saringgupan sadangkibul dohot sosak sadangkibul di sibiangsa ni adjinta inon di hudon asa dahoba-hobai ma di goa (l.: goja) duwa be nasida asa dagana ma gaol siransar sadangkibul rupa djolma asa damare-)marei ma asa dadoding-d(oding ma laho tu tapian asa dapatibal ma nitak rondang napuran pinungpuk) dohot surat a(sa dabunga-bungai ma sosak dohot saringgupan asa dagunggung ma saringgupan dohot) sosak asa dadoding-doding ma ro di tapian (gaol asa muli ma hita tu ruma asa dapadudu ma sosak dohot saringgupan) di palangka na tarulang asa dataruhon ma tu por(parangan ija ro do di porparangan asa dating-galahon ma sosak dohot sa)ringgupan pitungkalebat ija batahinta li(li tunggal dabunga-bungai di punsu ni diihoti di bonang manalu ija hita da)tu sae lambak do hita ija hu do pitungkale (bat asa dadanggurhon ma batahinta inon asa muli ma hita ro ma haba-haba) sipulang di dalan sipulang galito ale amang da(tu).

It is not clear whether the human figure represents the datu (as supposed above) or an image made from a banana-stem that must be brought to the river before the ploughing ceremony.

Plate 2.

ku pangulubalang ni dormanngku aman sangke ma
ngahu inan sangke mangahu botara si sangke ma
ngahu hahuhon do baba ni si anu s
o marusap so mormuni so malo a
hu n[i] hona debata ni dormanngku si l
omo dorma si podjam na mugsos s
i lom(o) dorma ma ho ate si anu so
malu ahu dorma ma ho pusu-pusu ni si
anu ija suwa dongan padang togu dongan ha
pal-hapal pitu dongan hisik dongan.

This is the last part of an incantation inciting the spirit of the dorma (see above) to close the adversary's mouth. At the end some plants to be used with the incantation are named.

Plate 3. Two complete incantations and the beginning of a third one. The first formula belongs to the illustration representing three puppets; the other two illustrations do not appear in the reproduction.

Suru(ng) ma ho batara pangulubalang n
i si laowar-lawar di p
ortibi radjaonkon di simbo(ra)
beya di langge sihuk dohot goar ni do
li-doli di musunta ale datu na mangadji.
Suruung ma ho batara pangulubalang ni era
m di banuwa radjaonkon di
[i] bulung ni sapu ame ija ma inon
na mor(g)o(ar pangulubalang si
bindoran di portibi.
Suruung ma ho batara pangulubalang s
(i rungga bisa).
Translation of the first part: Up! you, divine pangulubalang of the wanderer on the earth (?), (whose image, shown in the picture) should be drawn on lead or on (the leaf of a kind of arum called) langge sihuk together with the name of a young man among our enemies, O magician who studies (this text).

Plate 4.

do(m)pak habinsaran djombana
binahen ale datu na mordjaga-djaga o
i ma tahe gurunami i ma podana

i ma bulu
air-(a)
ir ale
songon
i ma djol
ma tindang
manabasi
di lambung
bulu inon

I.e.: to the East its slanting
be made O magician who reads (this).
Indeed, our master. Thus is the instruction.

This is the long bamboo, thus a man stands reciting incantations over it next to the bamboo.