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37, GREAT RUSSELL STREET, LONDON, W.C.

JOURNAL

OF THE

AMERICAN ORIENTAL SOCIETY.

EDITED BY

E. WASHBURN HOPKINS, AND CHARLES C. TORREY
Professor in Yale University.
New Haven.
Professor in Yale University.
New Haven.

TWENTY-EIGHTH VOLUME.
SECOND HALF.

THE AMERICAN ORIENTAL SOCIETY.
NEW HAVEN, CONNECTICUT, U. S. A.
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Contributions to Comparative Philippine Grammar, II.—
By Frank R. Blake, Ph.D., Johns Hopkins University, Baltimore, Md.

THE NUMERALS.

The numerals of the Philippine languages, with the exception of the first, fourth, and sixth of the cardinal series, are derived from dissyllabic roots, and are thus, from a morphological standpoint, more closely allied to nouns than to pronouns. They may be divided into the following classes, viz.:

---

1 Part I. Introduction, General Features, Phonology, and Pronouns appeared in the preceding volume of the Journal, pp. 317-396. For addenda and corrigenda to Part I, see page 232, at the end of this article.
2 For the principal grammars and dictionaries of the Philippine Languages cf. I, p. 323, ft. nt. 2. For the Kalamian numerals cf. pp. 211–224 of Retana’s Archivo del Bibliofilo Filipino, II. Add Encina, Gramatica bisaya-cebuana, Manila, 1885; Williams, Grammatische Skizze der Ilocano-Sprache, München, 1904: Montano (see below, p. 258).
3 In addition to the languages treated in Part I, viz., Tagalog, Bisayan (Cebuan, Hiligayna, Samaro-Leytean), Bikol, Pampangan, Pangasinan, Ilok-an, Igorot (Nabaloï, Bontok), Ibanag, Bâtan, Magindanao, Sulu, and Bagobo, the following are also included in this part, viz., Kalamian, Samal, Manobo, Tagakaolo, Bilan, and Atas (cf. Montano, op. cit.). The numerals of the Harayan dialect of Bisayan, which was included in Part I, are not given in Mentrida-Aparicio, hence it does not appear in the above enumeration. As the numerals in Montano, op. cit., seem to be very incorrectly reported, they will be given separately in an appendix to the Cardinals, pp. 236-228.
4 Besides the classes of numerals given here, there are a number of other derivatives, made with verbal particles and used as verbs, but the treatment of these belongs rather to the discussion of the verb.

VOL. XXVIII. 14
a) cardinals, answering the question 'how much?'
b) ordinals, answering the question 'in what order in a series?'
c) fractions, answering the question 'what part of?'
d) distributives, answering the questions 'how many at a time?' 'how many apiece?'
e) adverbs, answering the questions 'how often?' 'which time?'
f) restrictives, in which the idea of 'only' is added to the other numerals.

Cardinals.

For purposes of discussion the cardinals may be conveniently divided into the following classes, viz.:

Primary.
a) units from 'one' to 'ten.'
b) even tens from 'twenty' to 'ninety.'
c) even hundreds, thousands, etc.

Intermediate.
a) teens from 'eleven' to 'nineteen.'
b) numbers between even tens.
c) numbers between even hundreds, thousands, etc.

Primary Cardinals.

The units have the following forms in the various languages, viz.:

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<tbody>
<tr>
<td></td>
<td>isa</td>
<td>dalawa</td>
<td>tatlo</td>
<td>apat</td>
<td>lima</td>
</tr>
</tbody>
</table>

1 Noceda in his Tagalog dictionary, article *isa*, p. 159, mentions another series of the first ten numerals, viz., *isa*, *duwain*, *mampat*, *agyo*, *tondong*, *kala*, *manapit*, *saga*, *bulaid*, *tora*, which, he states, were used in ancient times. The first series, however, is the common property of all the languages of the Malayo-Polynesian family, so it is hardly possible that the second series should be the more ancient. Brandstetter, *Tagalen and Madagassen*, Luzern, 1902, p. 10, thinks that Noceda's statement rests on a misunderstanding, and that they represent a series of secret numbers or the numerals of another language; the former supposition is probably correct. It may be that some of them belong to one of the idioms of the Negritos, about which very little is known. The first two numerals of this series, *isa*, *duwain*, seem to be derivatives with the suffix *in* from *isa* of the other series, and *duwain* an older form of 'two' (cf. below, p. 204); the third, *mampat*, is based on *pat*, the root of *apat*, the fourth of the first series.

The form *tipat* occurs in the adverbs, cf. below, p. 246.
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<tr>
<td>Bis. (Ceb.)</td>
<td>usa</td>
<td>duha</td>
<td>tolo</td>
<td>upat</td>
<td>lima</td>
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<td>Bis. (Hil.)</td>
<td>usa</td>
<td>isa</td>
<td>duha</td>
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<td>Bis. (S.L.)</td>
<td>usa</td>
<td>duha</td>
<td>tolo</td>
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<td>Bik.</td>
<td>saro</td>
<td>dua</td>
<td>tolo</td>
<td>apat</td>
<td>lima</td>
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<tr>
<td>Pamp.</td>
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<td>atlo</td>
<td>apat</td>
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<td>isa</td>
<td>dua</td>
<td>talo</td>
<td>apat</td>
<td>lima</td>
</tr>
<tr>
<td>Ilok.</td>
<td>isa</td>
<td>dua</td>
<td>tallo</td>
<td>uppat</td>
<td>lima</td>
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<tr>
<td>Iban.</td>
<td>itte</td>
<td>due</td>
<td>dua</td>
<td>tallu</td>
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<tr>
<td>Igor. (Nab.)</td>
<td>saxe</td>
<td>chua</td>
<td>taddo</td>
<td>apat</td>
<td>dima</td>
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<tr>
<td>Igor. (Bon.)</td>
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<td>tatdo</td>
<td>apat</td>
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<td>Kal.</td>
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<td>eta</td>
<td>doroa</td>
<td>tolo</td>
<td>epat</td>
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<tr>
<td>Mag.</td>
<td>isa</td>
<td>dua</td>
<td>telu</td>
<td>apat</td>
<td>lima</td>
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</table>

1 In Cebuan these reduplicated forms are made from the units with initial consonant; in Samaro-Leytean the same rule probably applies, although it is not stated and only ‘two’ and ‘three’ are given. In Samaro-Leytean these forms are used when the numerals form the predicate of a sentence, and are equivalent to verbal forms with prefixed ma, e. g., maduha. Zueco gives the following ambiguous distinction between reduplicated and unrepeated forms: “Las unidades cuya inicial es consonante, duplican la primera sílaba cuando especifican una cantidad. No la duplican, cuando la cuenta es abstracta.” He also states, however, that the two forms may be used without distinction (cf. Zueco, p. 14).

2 The numerals from ‘two’ to ‘ten’ are followed by ra, iva ‘they’ when they stand as predicate of a sentence, ra after a vowel, e. g., dua ra, iva after a consonant. e. g., apat iva.

3 In the distributive satto also occurs (cf. below, p. 239).

4 The form epat occurs in the distributive (cf. below, p. 239).

5 With Batan forms the subscript Arabic numerals refer to the pages of the Batan Catechism, and the Roman numerals to the pages of the “Prolongo” in Retana’s Archivo, vol. II, on which the forms occur.

6 Given by Porter, A Primer and Vocabulary of the Moro Dialect (Magindanao), Washington, 1903, p. 71.
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<th>Sulu</th>
<th>1</th>
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<tbody>
<tr>
<td></td>
<td>isa,</td>
<td>dua</td>
<td>to</td>
<td>opat</td>
<td>lima</td>
</tr>
<tr>
<td></td>
<td>hambuk</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Bag.</td>
<td>sabbad</td>
<td>dua</td>
<td>tatlo</td>
<td>appat</td>
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<th>7</th>
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<td></td>
<td>anim</td>
<td>pito</td>
<td>walo</td>
<td>siyam</td>
<td>sangpowo, polo¹</td>
</tr>
<tr>
<td>Bis. (Ceb.)</td>
<td>unum</td>
<td>pito, pipito</td>
<td>walo</td>
<td>siam,</td>
<td>(na)polo</td>
</tr>
<tr>
<td>Bis. (Hil.)</td>
<td>unum, anum</td>
<td>pito</td>
<td>walo</td>
<td>siam</td>
<td>(na)polo, iska-polo²</td>
</tr>
<tr>
<td>Bis. (S. L.)</td>
<td>unom</td>
<td>pito</td>
<td>walo</td>
<td>siam</td>
<td>napolol</td>
</tr>
<tr>
<td>Bik.</td>
<td>anom</td>
<td>pito</td>
<td>walo</td>
<td>siam</td>
<td>sangpolo³</td>
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<td>walo</td>
<td>siam</td>
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<td>siam</td>
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<td>Ilok.</td>
<td>innem, enem</td>
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<td>walo</td>
<td>siam</td>
<td>polo, sanga-polo, polo-pololo</td>
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<td>walu</td>
<td>siam</td>
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<td>pito,⁴</td>
<td>wago⁴</td>
<td>siam⁴</td>
<td>pogo₂, asapogo, asapogo, asapogo, asapogo, asapogo</td>
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<td>Kal.</td>
<td>eñem⁵</td>
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<td>siam</td>
<td>tampolok</td>
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<td>Mag.</td>
<td>anem, nem⁶</td>
<td>pitu</td>
<td>walu</td>
<td>siau</td>
<td>sapulu</td>
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<td>Sulu</td>
<td>ûnom</td>
<td>peto</td>
<td>walu</td>
<td>siam</td>
<td>hangpoh</td>
</tr>
<tr>
<td>Bag.</td>
<td>annam</td>
<td>pitto</td>
<td>walo</td>
<td>sio</td>
<td>sapolo</td>
</tr>
</tbody>
</table>

¹ Polo is said to be used without sang when counting consecutively, cf. Totanes, *Arte de la lengua tagala*. Binondo, 1865, p. 103. This form is either dialectic or is borrowed from one of the adjacent languages.
² Sampolo is found also in the distributives (cf. below, p. 240).
³ Following sangpolo in San Augustin is de rarong polo. Whether this indicates that polo is rarely used alone, or that there is another form saro-ng polo, as in the case of laksa, ‘million,’ is uncertain.
⁴ Assumed on the basis of the ordinals on pp. 3 and 6 of the Catechism.
⁵ So given in the Kalamian vocabulary (cf. above, p. 199, ft. nt. 2) p. 234; doubtless simply a mistake for enem.
⁶ Given by Porter *op. cit.*, loc. cit., as nâm, â being probably used to represent the indistinct vowel which is given as e by Juanmarti.
The forms of ‘one’ differ from those of the other numerals in being derived from pronominal particles. They have for the most part been explained in Part I, pp. 344, 345. Add the following. Batan asa is probably the root particle sa which is found in the majority of the forms of ‘one,’ with a prefixed a probably identical with the a of Tagalog ang, just as the i of isa is identical with the i of Pampangan ing. Kalamian tata, eta are based on a root particle ta identical with the sa (cf. kutawa ‘husband, wife’ = ka+utawa [Tag. asawa] and cf. also the change from s to t in Ibanag [I, p. 333]). Tata is a reduplicated form, eta is probably identical with i-sa. Pampangan metong is probably to be analyzed as me (= Ilok. mai in maisa [I, p. 331]) + to (= dem. root part. to [I, p. 352]) + ligature ng, which has become an integral part of the word as in Tagalog ang (I, p. 341 f.). If metong contains the demonstrative root particle to, it is not unlikely that the root particle sa, which is found in the majority of the forms of ‘one,’ is identical with the demonstrative particle sa of the Pangasinan definite article sa (I, p. 342).

Sulu hambuk is probably hang-buk with assimilation; for hang cf. below, p. 207; buk is probably numeral coefficient (cf. I, p. 345).

The remaining nine numerals are apparently derived from roots, disyllabic except in the case of ‘four’ and ‘six.’ The fifth numeral is also the word for ‘hand’ in many of the languages. Here it is evident that the word for ‘hand’ with its five fingers has been taken to indicate ‘five.’ The original meaning of the other numeral roots does not appear.

The original Philippine form of ‘two’ seems to have been dua (doua) as in Bicol, Pangasinan, Ilokan, Ibanag, Magindanao, Sulu, and Bagobo. Ibanag dua, like itte, contains the ligature i, viz. dua + i (cf. I, p. 345). Igorot ch is the regular phonetic representation of d (I, p. 333). In Bontok chwea, a semi-vowel w has been developed out of u. In Bisayan duha a secondary h has been developed between the two vowels. In Pampangan the initial a of adua is, like that of atlo, ‘three,’ probably derived from the a of aput ‘four;’ ‘two’ and ‘three’ had probably become monosyllabic as *dwa and *tlo, and the a was prefixed in order to conform them to the prevailing disyllabic type. The fact that ‘six’ is anam and ‘ten’ apulo may also have had some influence in bringing about this ana-
logical change. 1 Kalamian doroa and Cebuan and Samaro-
Leytean duduha have reduplication 2 of the first syllable. In
Hiliguayna doroa and Batan dadua the vowel of the redupli-
cation is written a instead of u, o, and probably represents an
unaccented indistinct vowel. Tagalog dalawa is difficult; it
may represent a reduplicated form of *dawa, intervocalic d
being irregularly changed to l instead of r, or it may be *dawa
with infixed particle la. 3 *Dawá is probably a modification of
dawá, derived by insertion of r from *dwa, 4 unaccented u
being changed to a as in the reduplicated forms above.

The original form of 'three' seems to have been a form lo-
lo with an indistinct vowel between the two consonants. This
indistinct vowel appears as o in Bisayan, Bikol, Bontok, and
Kalamian tolo, and Cebuan and Samaro-Leytean reduplicated
totoo, as a in Pangasinan taho, Ilokan, Ibanag, tallo, tallu, Nabaloi
tadda, and as e in Magindanao telu. In Nabaloi l appears as l

1 For analogical changes produced by the influence of consecutive
numerals upon each other. cf. Osthoff u. Brugmann, Morphologische
Untersuchungen, Leipzig, 1878, Th. 1, pp. 92-102: also my article, Hebrew

2 In the Philippine Languages reduplication at the beginning of a
word, which is the only kind we are concerned with in this article,
consists in the repetition of either one or two syllables. Ordinarily the
final consonant of the syllable or combination of syllables which is to
be reduplicated, does not appear in the reduplication, except when it is
the final consonant of a word or root. Reduplication of one syllable
may be called partial, reduplication of two syllables, full reduplication.
The two are sometimes combined in the same word. Examples in
Tagalog are, e.g.,

susulat from sulat
magiginbalan from maginbalan
araaw-araw " arow
babalibaligtad " baligtad
kakakakatawu " katawu

Sometimes, however, in partial reduplication the consonant after the
vowel of the syllable to be reduplicated is repeated, even though it
stands in the following syllable. This mode of reduplication is found
chiefly in the languages of the Northern Group like Ilokan. Examples
in Ilokan are, e.g.,

balbalay from balay
silasilid " silid.

xxvii, 1906, pp. 142-146.

4 Cf. the ordinal form ikalua, p. 230, below.
(I, p. 334). The doubling in Ilokan, Ibanag, and Nabaloí is phonetic (I, p. 336). Sulu to represents a contraction of too derived from tolo by loss of intervocalic l (I, p. 333 f.). In Pampangan atlo the initial a is to be explained like the a of adua; the indistinct vowel is syncopated. Tagalog, Hiliguayna, Bagobo tatlo, Batan tatlo (d for l, cf. I, p. 334) consist of the syncopated form tlo with a reduplicative syllable ta, a representing an indistinct, unaccented vowel.

The original form of ‘four’ seems to have been pat. This has been made dissyllabic by prefixing an articular particle a in Tagalog, Hiliguayna, Bikol, Pangasinan, Batan, and Magindanao; u, o in Bisayan, Ilokan, and Sulu; i, e in Bontok and Kalamian. The doubling in Ibanag, Nabaloí, and Bagobo appat, Ilokan uppat, is phonetic. Magindanao pat may be the original root, or it may be a shortened form due perhaps to the analogy of forms like supulpat ‘fourteen,’ if the a is lost here phonetically (cf. below, p. 217).

The original form of ‘five’ was lima, as in all the languages except Nabaloí and Batan where l has been changed to d. Cebuan has the reduplicated form tilima, and Batan the form dadima, in which the vowel of the reduplication is a.

The original form of ‘six’ was probably n-m with an indistinct vowel between the two consonants. This form, like pat ‘four,’ was made dissyllabic by prefixing an articular particle, a in Tagalog, Hiliguayna, Bikol, Pampangan, Pangasinan, Ibanag, Nabaloí, Batan, Magindanao, and Bagobo; u, o in Bisayan, and Sulu (for a cf. I, p. 332); i, e in Ilokan, Bontok, and Kalamian. In every case except in Ilokan the articular particle is the same as that used in ‘four.’ The indistinct vowel appears as i in Tagalog aním, Nabaloí anním, Bontok iním, as e in Ilokan ínem, Pangasinan, Batan, Magindanao anem, Kalamian énem, as u, o in Bisayan umom, umum, Hiliguayna and Bikol umom, umum, Sulu ínem, as a in Pampangan anum, Ibanag and Bagobo anum. The doubling in Ilokan, Ibanag, Nabaloí, and Bagobo is phonetic. Magindanao nem (umum) is to be explained like pat ‘four.’

The original form of ‘seven’ was pito, pitu, as in most of the languages. Phonetic doubling occurs in Nabaloí and Bagobo pitto. In Sulu peto, i is represented by ē (cf. I, p. 377). Reduplicated forms are Cebuan pipito and Batan papitu, in the latter of which the vowel of reduplication is a.
The original form of 'eight' was walo, walu, as in most of the languages. In Nabaloi gualo, initial w has become gu (I, p. 332), and in Batan wago, intervocalic l has become g (I, p. 334).

The original form of 'nine' was siam, as in most of the languages. Cebuan has the reduplicated form sisiam. In Tagalog siyam a semi-vowel y has been developed out of the i. In Nabaloi dsiam the initial s has suffered some phonetic modification; ds probably represents the affricative dz. In Magindanao siau and Bagobo sio the end of the word has been modified after the analogy of the adjacent numerals, in Magindanao valu, sapulu, in Bagobo valo, sapolo; sio may be a contraction of *siau.

'Ten' consists sometimes of the simple root, but usually of a combination of root and prefix. The original root of 'ten' was polo, pulu, pulo. This is found unchanged in Bisayan, Bikol, Pampangan, Pangasinan, Ilokan, Nabaloi, Magindanao, and Bagobo. Kalamian polok has added a final k of uncertain origin. Ilokan may have doubling of the l, viz. pollo. In Ibanag fulu, p before u has become f (I, p. 332). In Batan pogo intervocalic l has become g. In Tagalog po wo, Bontok poo, and Sulu poh intervocalic l has been elided (cf. I, p. 333 f.). In Tagalog a secondary w has been developed out of the o vowels; the h in Sulu may be simply graphic. Root forms seem to be used only in Tagalog, Bisayan, Ilokan, Batan, and perhaps in Bikol (cf. p. 202, ft. nt. 3), and then probably only when counting consecutively.1 Usually the root has a prefix meaning 'one, a.' This prefix is sa, the root particle of 'one,' without ligature in Magindanao and Bagobo sapulu, sapolo; sa followed by ligature in Tagalog and Bikol sa-ng-polo, Pangasinan and Nabaloi sa-m-polo,1 sa-m-polo, Ilokan sa-nya-polo, Kalamian ta-m-polo-k. Bontok simpoo may possibly be modified from sa-m-poo after the analogy of siam 'nine,' but as siu

---

1 This is true at least of Tagalog (cf. above, p. 202, ft. nt. 1). It is possible that the root form is also used in this way in Pampangan, cf. the statement "nota que esa 1. y apolo 10 solo se dicen numerando simple-ment, mas para individuarase usa de metong, uno, y Apolo, diez." Here the first apolo is probably a mistake for polo, otherwise this statement is without meaning with regard to 'ten.'

1 The ligature n or ng is often assimilated to m before a labial.
occurs as prefix also in the other powers of ten it is more likely that it is based on the pronominal particle si. In Hiliguayna isa-ka-polo and Batan asa pogo, asa a pogo, and perhaps in Bicol (cf. p. 202, ft. nt. 3), the full numeral ‘one’ is prefixed to the root; in Hiliguayna the root takes the prefix ka according to rule; in Batan the ligature a may be used or not. Hang in Sulu hangpoɔ is probably to be analyzed as a-ŋ morphologically identical with Tagalog article ang, but having an indefinite meaning ‘one, a,’ with a secondary initial h (I, p. 336). Pampangan apulo probably contains the same particle a without ligature. Bisayan has the prefix na, Ibanag the prefix ma, viz., na-ŋ-polo, ma-fulu, which are probably connected in some way with the identical verbal prefixes.

The even tens have the following forms in the various languages, viz.:

<table>
<thead>
<tr>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tag.</td>
<td>dalawa-ng powo</td>
<td>tatio-ng powo</td>
<td>apat na powo</td>
</tr>
<tr>
<td>Bis. (Ceb.)</td>
<td>kuluaan</td>
<td>katloan</td>
<td>kaupatan</td>
</tr>
<tr>
<td>Bis. (Hil.)</td>
<td>kaluaan,</td>
<td>katloan,</td>
<td>kap-atan,</td>
</tr>
<tr>
<td></td>
<td>duha ka-polo</td>
<td>tolo ka-polo,</td>
<td>apat ka-polo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bis. (S. L.)</td>
<td>karuaan</td>
<td>katloan</td>
<td>kapat</td>
</tr>
<tr>
<td>Bik.</td>
<td>dua-ng polo</td>
<td>tatio-ng polo</td>
<td>apat na polo</td>
</tr>
<tr>
<td>Pamp.</td>
<td>adua-ng polo</td>
<td>atlo-ng polo³</td>
<td>apat a polo</td>
</tr>
<tr>
<td>Pang.</td>
<td>dua-n polo</td>
<td>tatio-n polo</td>
<td>apat a polo</td>
</tr>
<tr>
<td>Ilok.¹</td>
<td>dua pol(l)o</td>
<td>tallo pol(l)o</td>
<td>uppat a pol(l)o</td>
</tr>
<tr>
<td>Iban.</td>
<td>dua fulu</td>
<td>tallu fulu</td>
<td>appat a fulu</td>
</tr>
<tr>
<td>Igor.</td>
<td>chua pulo</td>
<td>taddo pulo</td>
<td>appat pulo</td>
</tr>
<tr>
<td>(Nab.)</td>
<td>chuwa-n poo</td>
<td>tolo-n poo</td>
<td>ipat poo</td>
</tr>
<tr>
<td>(Bon.)</td>
<td>chuwa-n poo</td>
<td>tolo-n poo</td>
<td>ipat poo</td>
</tr>
</tbody>
</table>

² So in Arabic and Mineo-Sabean, the nunation and mimnation respectively, though originally emphatic and definite, have acquired an indefinite meaning, e. g., Arabic بيتٍ, Mineo-Sabean بيت - bit-m ‘a house’; cf. Wright-De Goeje, A Grammar of the Arabic Language, Cambridge, 1896, vol. I, §§ 8, 308: Hommel, Süd-arabische Chrestomathie, München, 1898, p. 36, § 57.
³ Not given, but practically certain.
⁴ For another series of ‘tens’ cf. the intermediate numbers, p. 222 below.
<table>
<thead>
<tr>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bat.</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Kal.</td>
<td>doroa-ng polok</td>
<td>tolo-ng polok</td>
<td>?</td>
</tr>
<tr>
<td>Mag.</td>
<td>dua pulu</td>
<td>telu pulu</td>
<td>apat pulu</td>
</tr>
<tr>
<td>Sulu</td>
<td>kauhan</td>
<td>katluan</td>
<td>kaopatan</td>
</tr>
<tr>
<td>Bag.</td>
<td>dua polo</td>
<td>tatlo polo</td>
<td>appat polo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tag.</td>
<td>anim na powo</td>
<td>pito-ng powo</td>
<td>walo-ng powo</td>
</tr>
<tr>
<td>Bis. (Ceb.)</td>
<td>kanuman</td>
<td>kapitoan</td>
<td>kawaloan</td>
</tr>
<tr>
<td>Bis. (Hil.)</td>
<td>kan-uman,</td>
<td>kapitoan,</td>
<td>kawaloan,</td>
</tr>
<tr>
<td></td>
<td>anum ka-polo</td>
<td>pito ka-polo</td>
<td>walo ka-polo</td>
</tr>
<tr>
<td>Bis. (S.L.)</td>
<td>kaun-man</td>
<td>kapitoan</td>
<td>kawaloan</td>
</tr>
<tr>
<td>Bik.</td>
<td>anom na polo&lt;sup&gt;1&lt;/sup&gt;</td>
<td>pito-ng polo&lt;sup&gt;1&lt;/sup&gt;</td>
<td>walo-ng polo&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Pamp.</td>
<td>anam a polo&lt;sup&gt;2&lt;/sup&gt;</td>
<td>pito-ng polo&lt;sup&gt;2&lt;/sup&gt;</td>
<td>walo-ng polo&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Pang.</td>
<td>anem a poio</td>
<td>pito-n poio</td>
<td>walo-n poio</td>
</tr>
<tr>
<td>Ilok.</td>
<td>innem l a pol(l)o</td>
<td>pito pol(l)o</td>
<td>walo pol(l)o</td>
</tr>
<tr>
<td>Iban.</td>
<td>annamma fulu</td>
<td>pitu fulu</td>
<td>walu fulu</td>
</tr>
<tr>
<td>Igor.</td>
<td>annim pulo</td>
<td>pitto pulo</td>
<td>gualo pulo</td>
</tr>
<tr>
<td>Igor.</td>
<td>inim poo</td>
<td>pito-n poo</td>
<td>walo-n poo</td>
</tr>
<tr>
<td>Sulu</td>
<td>kaññoman</td>
<td>kapetoan</td>
<td>kawaluán</td>
</tr>
<tr>
<td>Bag.</td>
<td>annam polo</td>
<td>pitto polo</td>
<td>walo polo</td>
</tr>
</tbody>
</table>

These tens are made in one of two ways, viz., <i>a</i>) by multiplication, that is by placing the unit before the root of ‘ten,’ the ligature being sometimes used to join the two, sometimes not; <i>b</i>) by deriving abstracts from the units by prefixing <i>ka</i> and suffixing <i>an</i>.

The first formation is found in all the languages except Cebuan, Samaro-Leytean, and Sulu, the second in Bisayan in general and Sulu. Both formations occur in Hiliguayna. In the first formation the ligature is regularly used in Tagalog, Bikol, Pampangan, Pangasinan, and Kalamian (?). It is regularly omitted in Nabaloí, Magindanao, and Bagobo. In Ilokan

<sup>1</sup> A question mark indicates that the form is not given in the work or works referred to. If a language is omitted entirely it indicates the same thing.

<sup>2</sup> Not given, but practically certain.
and Ibanag the ligature is used only after units ending in a consonant; in Ibanag the final \textit{m} of \textit{anam} and \textit{siam} is doubled before the ligature \textit{a}. In Bontok it is found after all units ending in a vowel,\textsuperscript{1} but is apparently optional after one ending in a consonant. In Batan, to judge from the forms of \textquote{ten} \textit{asa pogo} and \textit{asa a pogo}, the ligature seems to be optional, at least after a vowel. In Hiliguayna no ligature is used, but \textquote{ten} takes the prefix \textit{ka} according to rule.

In the second formation, the following are made regularly from the units, \textquote{seventy}, \textquote{eighty}, and \textquote{ninetyn} in all the languages; \textquote{forty} in Cebuan and Sulu; and \textquote{sixty} in Sulu. In \textquote{twenty}, Samaro-Leytean \textit{ka-ruha-an} is derived from \textit{*ka-duha-an} by change of intervocalic \textit{d} to \textit{r} (I, p. 334). In Cebuan and Hiliguayna a similar form \textit{*ka-ruha-an} has been still further modified to \textit{ka-luha-an} by change of \textit{r} to \textit{l} (I, pp. 333, 382 f.). In Sulu the development is probably as follows: an original \textit{*ka-dua-an}>\textit{*ka-duan} with contraction, >\textit{*ka-duhan} with development of secondary \textit{h} as in Bisayan \textit{duha}, >\textit{*ka-ruhan} with change of intervocalic \textit{d} to \textit{r}, >\textit{ka-luhan} with change of \textit{r} to \textit{l}, >\textit{ka-uhan} with loss of intervocalic \textit{l} (I, p. 333 f.).

\textquote{Thirty} is regularly made on the syncopated basis \textit{tlo}, \textit{tlu}. \textquote{Forty} in Hiliguayna and Samaro-Leytean is made either from the root \textit{pat} or from a base \textit{apat}, which however does not occur in Samaro-Leytean, the initial vowel \textit{a} coalescing with the \textit{a} of the prefix. Hiliguayna has developed a glottal catch after the \textit{p}, viz., \textit{kap-atan}. \textquote{Fifty} in Bisayan syncopates the final \textit{a} of the unit and develops a glottal catch before the suffix, viz., \textit{kulim-an}. In Sulu final \textit{a} of the unit is contracted with the \textit{a} of the suffix and the intervocalic \textit{l} is elided. \textquote{Sixty} in Cebuan and Hiliguayna is made either from the root \textit{num} or from a base \textit{umum}, which however does not occur in Cebuan, the initial \textit{a} coalescing with the prefix as in \textquote{forty}, developing a glottal catch in Hiliguayna \textit{kan-uman}. Samaro-Leytean \textit{kanuman} may represent a metathesis of \textit{kanuman} or it may be made from \textit{umum}, with syncope of the second \textit{u}.

The powers of \textquote{ten} have the following forms in the various languages, viz.:

\textsuperscript{1}Forms like \textit{chuwea lifo} \textquote{two thousand} and \textit{tolo lifo} \textquote{three thousand} in the compound numerals indicate the possibility of the omission of the ligature after a vowel.
<table>
<thead>
<tr>
<th>Tag.</th>
<th>100</th>
<th>1,000</th>
<th>10,000</th>
<th>100,000</th>
<th>1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>sangdaan,</td>
<td>sanglibo,</td>
<td>sanglaksa,</td>
<td>sangyota,</td>
<td>sangpowo-ng yota</td>
</tr>
<tr>
<td></td>
<td>isa-ng daan</td>
<td>isa-ng libo</td>
<td>isa-ng laksa</td>
<td>isa-ng yota</td>
<td>sanggatos</td>
</tr>
<tr>
<td>Bis. (Ceb.)</td>
<td>usa ka-gatos</td>
<td>usa ka-libo</td>
<td>napolo ka-libo</td>
<td>usa ka-gatos ka-libo</td>
<td>napolo ka-gatus ka-libo</td>
</tr>
<tr>
<td>Bis. (Hil.)</td>
<td>usa ka-gatos</td>
<td>isa ka-libo</td>
<td>usa ka-laksa,</td>
<td>usa ka-gatos ka-laksa</td>
<td>usa ka-lamak</td>
</tr>
<tr>
<td>Bis. (S. L.)</td>
<td>usa ka-gatos</td>
<td>usa ka-yokot</td>
<td>?</td>
<td>?</td>
<td>usa ka-ribo</td>
</tr>
<tr>
<td>Bik.</td>
<td>sanggatos</td>
<td>sangribo</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Pamp.</td>
<td>dinalan</td>
<td>libo</td>
<td>laksa</td>
<td>gatus</td>
<td>sangyota</td>
</tr>
<tr>
<td>Pang.</td>
<td>sanlasus</td>
<td>sanlibo¹</td>
<td>sanlaksa</td>
<td>sampolo-n laksa</td>
<td>sanlasus laksa,</td>
</tr>
<tr>
<td>Ilok.</td>
<td>sanggasut</td>
<td>sanigaribu</td>
<td>sangalaksa</td>
<td>sangapollo a laksa</td>
<td>sangariuriu</td>
</tr>
<tr>
<td>Iban.</td>
<td>magatut</td>
<td>maribu</td>
<td>?</td>
<td>magatut jibu</td>
<td>mafulu gatut jibu,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>mariburibu</td>
</tr>
<tr>
<td>Igor. (Nab.)</td>
<td>sandasus</td>
<td>sandibo</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Igor. (Bon.)</td>
<td>sinlasot, lasot</td>
<td>sinlifo</td>
<td>simpoo-y lifo</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Kal.</td>
<td>agket²</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Mag.</td>
<td>magatus</td>
<td>sangibu</td>
<td>salaksa</td>
<td>sajuta</td>
<td>sakati</td>
</tr>
<tr>
<td>Sulu</td>
<td>anggatus,</td>
<td>angibu</td>
<td>salaksa</td>
<td>hangpoh laksa</td>
<td>angratus laksa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 The most common spelling of this word is *livo*. This may represent a phonetic change of *bu* or *bo* to *vu* or *vo* as in Ibanag (I, p. 332), or it may be simply due to the confusion of *b* and *v* in Spanish.

² Probably *mafulu ribu*.

³ *Archivo*, vol. ii, p. 229.
Still higher numerals are given in some of the languages, viz.:  

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>sangkati</td>
<td>sanlibo-n laksa</td>
<td>nilaksalaksa</td>
</tr>
<tr>
<td></td>
<td>sakedi</td>
<td>sapandang</td>
</tr>
</tbody>
</table>

These numerals have regularly, except in the case of Pampangan and Kalamian (?), a prefix similar to that used with 'ten.'

The forms of 'one hundred,' omitting Kalamian agket, which stands alone, are based on two roots. One is dalan, which occurs in Tagalog as daan with loss of intervocalic l, in Pampangan as d-in-dalan with infix in, probably connected with the nominal infix in which means 'like, similar'; dalan also means road in many of the languages, and there may be some connection between the two. The other appears in various forms, viz.: as gatus, gatos in Bisayan, Bikol, Magindanao, Sulu, and Bagobo, as ratus in Sulu, as gasut in Ilokan, gatut in Ibanag, as lasus in Pangasinan, lasot in Bontok, and dasus in Nabaloí. The original form seems to have been ratus, as in Malay and Javanese.¹ This would explain the initial l of the Pangasinan and Bontok forms, and the d of the Nabaloí form (cf. I, pp. 333, 334). The initial g of the other forms may represent an irregular change of r similar to that in Ibanag, Pangasinan, and Nabaloí piya (Sam.-Ley. piru), cf. I, pp. 334, 335. Sulu ratus may be simply borrowed from Malay. In Ibanag final s has become l and then glottal catch (I, pp. 333, 336). In Ilokan and Bontok there is a metathesis of the s and t. The Pangasinan and Nabaloí forms lasus, dasus are probably a blend of two forms, one *latus, *datus, the regular phonetic representative of original *ratus, the other *lasut, *dasut, with metathesis of s and t, as in Ilokan and Bontok.

The forms of 'thousand' are for the most part based on a root ribu identical with Malay ribu. This root occurs as ribu, ribo in Bikol, Ilokan, and Ibanag; with change of r to l as libo in Tagalog, Bisayan (except Samaro-Leytean), Pampangan,²

¹ In Pampangan katakata means a number beyond count. The root kata is probably the same as koti in Magindanao and Tagalog.
² Cf. Marre, Des Noms de Nombres en usage dans Madagascar, aux Philippines, dans la Malaisie et dans la Polynésie, Torino, 1890, p. 18.
Pangasinan, as *lifo* with change of *b* to *j* in Bontok (I, p. 332); with change of *r* to *d* as *dibo* in Nabaloit. Magindanao *sanĝibu*, Sulu *angibu* are probably derived by assimilation respectively from *sangribu* and *anglibu*. In Magindanao, however, *njibu* is treated as root, e. g., *dua njibu* 'two thousand.' In Bagobo the root is *-raran*, doubtless identical with *dalan* 'hundred,' both intervocalic *d* and *l* being changed to *r*. In Samaro-Leytean the root is *yokot*, which has no analogon.

The forms of 'ten thousand' are made for the most part from *laksa*, a loan work from Sanskrit (= *lakṣā* 'hundred thousand') though Bagobo employs *ribo*, and Cebuan and Bontok expresses it by multiplication of 'thousand' as in English.

'Hundred thousand' is expressed variously; in Tagalog and Magindanao by a root *yuta*, *yota*, a loan word from Sanskrit (= *ayūta* 'ten thousand'); in Pampangan by *gatus*, ordinarily employed for 'one hundred.' It is expressed by multiplication as 'ten ten-thousands,' in Cebuan, Hiliguayna, Pangasinan, Ilokan, and Sulu, and as 'a hundred thousands' in Hiliguayna, Ibanag, and Bagobo. In Ibanag, *ribu* has become *jibu* (pronounced *žibu*) after *magatut* (pronounced *magatu* with glottal catch); as *d* regularly becomes *j* before *i*, *jibu* probably represents a form *dibu* which may have been derived from *ribu* by partial assimilation of the *r* to the preceding *t* of *magatut*, before that *t* was changed to the glottal catch.

'One million' is expressed by the following roots, viz.: in Tagalog by *gatos* (usually employed for 'one hundred') or *anĝawawanjaw*; in Hiliguayna by *lanak*; in Samaro-Leytean by *ribu* (usually employed for 'thousand'); in Ibanag by *riburibu* with reduplication; in Bicol by *laksa* (usually employed for 'ten thousand'); in Pampangan by *yota* (also employed for 'hundred thousand'), in Ilokan by *riirin*, in Magindanao by *kati*, probably a loan word from Sanskrit (= *koti* 'ten million'). It is expressed by multiplication, as 'ten hundred-thousands' in Tagalog, Cebuan, and Ibanag; as 'a hundred ten-thousands' in Hiliguayna, Pangasinan, Sulu, and Bagobo; and as 'a thousand thousands' in Pangasinan, and perhaps in Ibanog. In Tagalog *anĝawawanjaw*, Ilokan *riirin*, and perhaps in Ibanag *riburibu*, the reduplication emphasizes the greatness of the number.

1 Cf. also Pampangan *katakata* 'a number beyond count.'
‘Ten million’ is expressed in Pangasinan as ‘a thousand ten-thousands,’ in Tagalog by kati (= Mag. kati), and in Magindanao by the root kedi, perhaps a modification of kati (cf. Malay and Javanese sa-keti ‘hundred thousand’).

‘One hundred million’ is expressed in Pangasinan by ‘ten-thousand ten-thousands,’ the compound taking a prefix ni, in Magindanao by the root pandang. This prefix ni may be the Pangasinan prefix ni, which is used instead of the infix-prefix in of similarity before l and y, and is thus the same as the in of Pampangan dinalan, or it may be the Sanskrit prefix ni which is used in that language with certain higher numerals, viz.:

niyuta ‘100,000.’
nyarbuda ‘100,000,000.’
nikharya ‘100,000,000,000.’

The prefixes employed with these roots are in general the same as those employed with ‘ten’; so throughout in Ilokano, Ibanag, and Igorot. Tagalog has in addition to the sang which is used with ‘ten’ a fuller form isa-ng, i.e., numeral ‘one’ + ligature. Bisayan has the numeral ‘one’ followed by the root with prefixed ku (a formation found also in ‘ten’ in Hiliguayna) except in ‘ten thousand’ in Hiliguayna, which may be expressed as ‘ten ten-thousands’ as well as by ‘one hundred thousand.’ Bikol has in ‘million’ in addition to sang, saro-ng, i.e., ‘one’ + ligature. Pangasinan has san or sam identical with the prefix of ‘ten’ except in ‘ten million,’ where a prefix ni is used. In Magindanao all numerals take sa like ‘ten’ except ‘one hundred,’ which has ma like Ibanag. Sulu has ang, probably a more original form of the hang of ‘ten,’ except in ‘ten thousand,’ which has sa like Magindanao, and ‘one hundred thousand,’ which is expressed by ‘ten ten-thousands.’ Bagobo has sabbad ‘one’ before the root of ‘hundred,’ and before the root with additional prefix ma in the higher numerals. Pampangan has the infix in in ‘one hundred,’ and the prefix sang, identical with Tagalog and Bikol sung, in ‘one million.’ In Tagalog, Bisayan, Bikol and Bagobo, as has been seen, the full form of the numeral ‘one’ may be used as prefix. Forms without prefix (or infix) are Pampangan tibo,

laksa, gatus, Pangasinan libo'y libo, Bontok lasot, and Kalaman agket(?).

Generally speaking, even multiples of these numerals are formed by multiplication, the units being placed before the numeral, which regularly loses its prefix; the ligature is used as in the formation of the tens. The prefix is retained in Pam- pangan sangyota 'million,' and in Sulu in the forms with ang. In Pampangan the infix in of dinalan is dropped, e. g.:

<table>
<thead>
<tr>
<th>State</th>
<th>Tag.</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dalawa-ng daan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dua ka-gatos</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dua-ng gatos</td>
<td></td>
</tr>
<tr>
<td></td>
<td>adua-ng dalan</td>
<td>apata sangyota '4,000,000'</td>
</tr>
<tr>
<td></td>
<td>dua-n lasus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dua gasut</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dua gatut</td>
<td></td>
</tr>
<tr>
<td></td>
<td>chua dasus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>chuwa-n lasot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dua gatus</td>
<td>dua ngibu '2,000'</td>
</tr>
<tr>
<td></td>
<td>dua ang-ratus</td>
<td>dua laksa '20,000'</td>
</tr>
<tr>
<td></td>
<td>dua gatos</td>
<td></td>
</tr>
</tbody>
</table>

Ilokan also has forms made on the basis of the hundred, thousand, etc., toward which the count is proceeding, by means of the prefix kanika, e. g., kanikatlo gatus 'two hundred,' cf. below, p. 222.

In those numerals which consist of a compound numeral with a prefix the same rules in general apply, e. g.:

Iban. dua gatut jibu '200,000.'

---

1 walo-ng gatos '800' is the only 'hundred' given, but the others are practically certain.

1 The derivatives of the higher numerals, which are not given, are probably e. g.,

dua mararan '2,000.'

dua maribo '20,000.'

with retention of the prefix ma, cf. '100,000' and '1,000,000.'

So in all probability, though the forms are not given,

Tag. dalawa-ng powo-ng yota '2,000,000.'

Hil. dua ka-gatos ka-libo '200,000.'

dua ka-gatos ka-laksa '2,000,000.'
The Cebuan compound numerals beginning with *napolo* 'ten' substitute the other tens for *napolo,* e. g.,
kaluhaan ka-libo '20,000.'
katloan ka-libo '30,000.'

The forms without prefixes take the units before them just as in the case of 'ten.'

A number of these higher numerals are derived from Sanskrit, so *lakṣa,* *yuta,* and probably *kati* (*kata,* *keti*?). The prefix *ni* of Pangasinan *nilakṣalakṣa* is perhaps also borrowed from Sanskrit.¹ The idea that *ribu* 'thousand' is of Semitic origin, cf. Hebrew יָבוּם 'ten thousand,' is clearly untenable. It does not occur in Arabic, which is the only Semitic language with which these languages have come in contact.

As is often the case with the higher numerals in many languages, these numerals are frequently confused in the Philippine languages. The root *dalun* is used for 'one hundred' in Tagalog and Pampangan, but for 'one thousand' in Bagobo. *Ratos* is used for 'one hundred' in most of the languages, but in Pampangan it is used for 'one hundred thousand,' in Tagalog as one of the words for 'million.' *Ribo, libo* is the regular root of 'one thousand' in most of the languages, but in Samar-Leytean it is used for 'million,' in Bagobo for 'ten thousand.'

---

Pang.  
dua-n polo-n lakṣa '200,000.'  
dua-n lasus lakṣa '2,000,000.'  
dua-n libo-n lakṣa '20,000,000.'

Ilok.  
dua pollo a lakṣa '300,000.'  
dua riuriu '2,000,000.'

Iban.  
dua fulu gatut jibu '2,000,000.'

Igor. (Bon.)  
chuw-a-n po-y līfo '20,000.'

Sulu  
dua ang-ratus lakṣa '2,000,000.'

What the derivatives of Ibanag *mariburibu* 'one million' and Pangasinan *nilakṣalakṣa* 'one hundred million' are, if any are formed, is uncertain.

¹ The derivatives of Hiliguayna *napolo ka-lakṣa,* Sulu *hangpoh lakṣa,* are probably made in a similar fashion.

² No examples happen to occur, but the following are without doubt correct, at least in the case of Pampangan, e. g.,

Pamp.  
adua-ng libo '2,000.'  
adua-ng lakṣa '20,000.'  
adua-ng gatus '200,000.'

Pang.  
dua-n libo-y libo '2,000,000.'

³ In Pampangan *katakata* 'a number beyond count.'

⁴ Cf. Whitney, op. cit., p. 177.
Laksa, although meaning ‘hundred thousand’ in Sanskrit, is the regular root of ‘ten thousand,’ but in Bicol it is used for ‘million.’ Yota, although meaning ‘ten thousand’ in Sanskrit, is the root of ‘one hundred thousand’ in Tagalog and Magindanao, and of ‘million’ in Pampangan.

_Intermediate Cardinals._

The first intermediate number between ‘ten’ and ‘twenty,’ viz., ‘eleven,’ is expressed as follows in the various languages, viz.:

<table>
<thead>
<tr>
<th>Language</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tag.</td>
<td>labi-ng isa</td>
</tr>
<tr>
<td>Bis. (Ceb.)</td>
<td>napolo ug usa</td>
</tr>
<tr>
<td>Bis. (Hil.)</td>
<td>napolo kag usa</td>
</tr>
<tr>
<td>Bis. (S. L.)</td>
<td>napolo kag usa</td>
</tr>
<tr>
<td>Bik.</td>
<td>kagsaro, sangpolo meysaro</td>
</tr>
<tr>
<td>Pamp.</td>
<td>labi-n metong</td>
</tr>
<tr>
<td>Pang.</td>
<td>labi-n sakey</td>
</tr>
<tr>
<td>Ilok.</td>
<td>san-gap(l)o ket mai-sa kanikadua pol(l)o {ket} mai-sa</td>
</tr>
<tr>
<td>Iban.</td>
<td>karattadday*</td>
</tr>
<tr>
<td>Igor. (Nab.)</td>
<td>sawal ne saxe-i</td>
</tr>
<tr>
<td>Igor. (Bon.)</td>
<td>simpoo ya isa</td>
</tr>
<tr>
<td>Bat.</td>
<td>asa sicharuana a pogo1vii</td>
</tr>
<tr>
<td>Kal.</td>
<td>tampolok mai tata</td>
</tr>
<tr>
<td>Mag.</td>
<td>sapulu isa, sapulu ngu isa</td>
</tr>
<tr>
<td>Sulu</td>
<td>hangpoh tug isa</td>
</tr>
<tr>
<td>Bag.</td>
<td>sapolo sabbad</td>
</tr>
</tbody>
</table>

The other teens may be formed from these by substituting the other units for ‘one,’ e. g., Tag. _labi-ng dalawa_, etc.1

---


2 The statement in De Cuevas that _minikuraufulu_ means ‘ten and something more but less than twenty’ seems to indicate the possibility of teens like _minikuraufulu tu tadday_, etc., cf. below, p. 222.

3 In Nabalo, however, the teens are expressed in several other ways, viz.: a) by addition in compound numerals and in the distributive numerals, e. g., _sampulo tan saxe-i_; b) without the genitive sign in adverbs and multiplicatives, e. g., _sawal saxe-i_. The multiplicatives from ‘three’ upward are made by placing the cardinal before _tope_ ‘double.’ The _ni_ which is found in the ordinals, e. g., _sawal ni saxe-i_, is probably simply a graphic variant of _ne_.

In Ibanag the element that is prefixed to the unit is kura, after which an initial consonant, except w, is doubled as above, while an initial a coalesces with the final a of the prefix. The remaining teens are, therefore, karaddu, karattallu, karappat, karallima, karamam, karappitu, karavalu, karassiam.

In Magindanao the initial a of the units apat and anem is elided after sapulu, or these forms are based on the original monosyllabic roots pat and nem, viz., sapulu-pat, sapulu-nem.

These forms fall into three classes, viz.: a) those made by simple addition of ten and unit, with or without conjunctive word; b) those in which ten is not expressed, but the unit is accompanied by a word or words meaning 'over,' 'above,' or the like; c) those in which the unit is accompanied by a derivative of the next higher ten, viz., 'twenty.'

To the first class belong the forms in the following languages, the connective being indicated by the words in parenthesis, viz.: connected by conjunction 'and,' Bisayan (ug, kag), Ilokano (ket), Bontok (yu), Magindanao (ngu); connected by a particle meaning 'having,' Bikol (may), Kalamian (mai), and Sulu (tug); without connective, Magindanao and Bagobo. Magindanao has forms both with and without connective.

To the second class belong the forms in Tagalog, Pampangan, Pangasinan, Ibanag and Nabaloji, and Bikol forms with prefixed kag. In all these forms 'ten' is understood. In Tagalog, Pampangan and Pangasinan the unit is modified by a preceding element labi 'overplus,' the two being joined by the ligature; the meaning of the 'teens' being thus 'a one overplus,' 'a two-overplus,' etc. In Nabaloji, sucal has probably a meaning similar to labi, but it governs the unit in the genitive, the teens meaning thus 'an overplus of one,' 'an overplus of two,' etc. In certain derivatives (cf. p. 216, ft. nt. 3) the genitive sign is omitted, probably after the analogy of the numbers intermediate between the other tens, e.g., chua pulo surei 'twenty-one,' etc. In Ibanag the prefix kara is perhaps to be analyzed as preposition ka 'to' + da pronoun of the third person plural; the teens meaning thus 'one, two, etc., to (in addition to) them (i.e., to the ten numbers that have preceded). In Bikol the prefix kag seems to be the conjunction 'and,' the teens thus meaning 'and one,' 'and two,' 'ten' being understood before them.
To the third class belong the forms like Ilokan kanikaduapollo ket (or -t) maisa, and Batan asa sicharuana a pogo; for Ibanag, cf. above, p. 216, ft. nt. 2. kanikaduapollo and sicharuana a pogo are both based on ordinal forms. Batan sicha is probably identical with the Pampangan fractional prefix sika (cf. below, p. 235); Ilokan kanika is the same as the prefix of the numbers intermediate between the higher numerals (cf. below, p. 219). These combinations mean ‘the twenty or second-ten one, two, etc.’ In Ilokan the t is without doubt the original connective, being probably derived from ti, the genitive of the article. The connective ket means ‘and’ and is probably due to confusion with the other series of ‘teens’ like sanña polo ket maisa, etc.

The first intermediate number above ‘twenty,’ viz., ‘twenty-one’ is expressed as follows in the various languages, viz.:

<table>
<thead>
<tr>
<th>Tag.</th>
<th>dalawa-ng { powo at isa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bis. (Ceb.)</td>
<td>kaluhaan ug usa</td>
</tr>
<tr>
<td>Bis. (Hil.)</td>
<td>kaluhaan ( ) kag usa</td>
</tr>
<tr>
<td>duha ka-polo ( ) kag isa</td>
<td></td>
</tr>
<tr>
<td>kaluhaan kag may (usa</td>
<td></td>
</tr>
<tr>
<td>( ) isa</td>
<td></td>
</tr>
<tr>
<td>Bis. (S. L.)</td>
<td>karuhaan kag usa</td>
</tr>
<tr>
<td>Bik.</td>
<td>dua-ng polo mey saro</td>
</tr>
<tr>
<td>Pamp.</td>
<td>adua-ng polo ampon metong</td>
</tr>
<tr>
<td>Pang.</td>
<td>dua-n polo tan sakey¹</td>
</tr>
<tr>
<td>Ilok.</td>
<td>dua pol(l)o ket maisa</td>
</tr>
<tr>
<td>Iban.</td>
<td>duafulu tadday</td>
</tr>
<tr>
<td>Igor. (Nab.)</td>
<td>chua pulo saxeí</td>
</tr>
<tr>
<td>Igor. (Bon.)</td>
<td>chua-n poo ya isa</td>
</tr>
<tr>
<td>Mag.³</td>
<td>duapulu ngu isa</td>
</tr>
<tr>
<td>Sulu</td>
<td>kauhan tug isa</td>
</tr>
</tbody>
</table>

The first intermediate numbers above the other tens may be obtained by substituting the other tens for ‘twenty,’ e. g., Tag. tatlo-ng powo at (t) isa ‘thirty-one,’ etc. The other intermediate numbers between the various tens may be obtained by

¹ Not given but practically certain.
³ These forms are given only by Porter, who employs the conjunction also in the teens, e. g., sapulu ngu isa ‘eleven.’ Judging from the forms of the teens given by Juanmarti, it is possible that the earlier forms heard by him were without conjunction, viz., duapulu isa, etc.
substituting the other units for 'one' in these first intermediate numbers, e. g., Tag. dalawa-ng puso at ('t) dalawa 'twenty-two,' tattlo-ng puso at ('t) tattlo 'thirty-three,' etc.

These intermediate numbers are regularly made by addition of tens and units, the tens preceding. The two are juxtaposed without connective in Ibanag and Nabaloi, and perhaps also in Magindanao (cf. p. 218, ft. nt. 2). In the other languages one or more connectives meaning either 'and' or 'having' are employed as follows, the word in parenthesis indicating the connective, viz.: 'and' in Tagalog (at, 't), Bisayan (ug, kag), Pampangan (ampon), Pangasinan (tan), Ilokan (ket), Bontok (yu), Magindanao (ngu); 'having' in Bikol (may) and Sulu (tyug). In Hiligaynna forms like kalunaan kag may usa both kinds of connectives are used together.

Besides the forms of the numbers intermediate between the tens given above, which are the forms in common use, accounts of another and more original system of forming these numerals have been preserved in a number of the grammars, and in fact this system seems to be still in use in some sections alongside of the common one. These intermediate numerals consist of three parts, viz., the units, which stands last; a preceding modifier based on the ten toward which the count is proceeding; and a joining element between them. The modifier is formed in Pangasinan, Ilokan, and Ibanag by prefixing certain elements to the ten toward which the count is proceeding: in Pangasinan mika, in Ilokan kanika, in Ibanag minika.

The following examples of these forms occur for the intermediate numerals between 'twenty' and 'ninety,' viz.:

<table>
<thead>
<tr>
<th>Pang.</th>
<th>Ilokan</th>
<th>Iban.</th>
</tr>
</thead>
<tbody>
<tr>
<td>mika-tlo-n polo</td>
<td>kanika-tlo polo</td>
<td>minika-tallufulu</td>
</tr>
<tr>
<td>mikapat a polo</td>
<td>kanikapat polo</td>
<td>minika-limafulu</td>
</tr>
<tr>
<td></td>
<td>kanika-lima polo</td>
<td>kanikanem a polo</td>
</tr>
</tbody>
</table>

1 The l of polo is apparently not doubled in these forms.
2 These forms are assumed on the basis of general analogy and the following forms containing a modifier made from the same unit, viz.,
mikapat na poted—'three and a fraction.'
mikapito-y binting—'six salapis (4 reals), and a binting (2 reals)._'
mikawalo-y binting—'seven salapis and a binting.'
munikatalu gatut—'over two hundred.'
minikalima ribu—'over four thousand.'
mika-pito-n polo  kanika-pito polo
mika-walo-n polo  kanika-walo pclo
                     kanika-siam a polo

In Tagalog, Pampangan, and Nabaloi the modifier is formed by prefixing respectively meyka, meka, and ka to the unit indicating the number of the ten towards which the count is proceeding, the word for ‘ten’ being omitted. The following examples occur for the intermediate numerals as above, viz.:

<table>
<thead>
<tr>
<th>Tag</th>
<th>Pamp.</th>
<th>Igor. (Nab.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>meyka-tlo</td>
<td>me-katlo</td>
<td>ka-ddo</td>
</tr>
<tr>
<td>meykapat</td>
<td>me-kapat</td>
<td>ka-appat</td>
</tr>
<tr>
<td>meyka-lima</td>
<td>me-kalima</td>
<td></td>
</tr>
<tr>
<td>meykanim</td>
<td></td>
<td></td>
</tr>
<tr>
<td>meyka-pito</td>
<td></td>
<td></td>
</tr>
<tr>
<td>meyka-walo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>meyka-siyam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Hiliguayna the modifier is apparently made by prefixing hin to the ten towards which the count is proceeding. The following examples occur for the intermediate numbers, as above, viz.:

hingatloan < hin + katloan
hingap-atan < hin + kap-atan
hingalim-an < hin + kalim-an

In the numbers intermediate between ‘ninety’ and ‘one hundred,’ the modifier is made by prefixing the proper particle to the word for ‘hundred,’ the ten towards which the count is proceeding. ‘Hundred’ occurs in the root form except in Pampangan, viz.:

<table>
<thead>
<tr>
<th>Tag</th>
<th>meyka-raan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pamp.</td>
<td>meka-dinalan</td>
</tr>
<tr>
<td>Pang.</td>
<td>mika-lasus</td>
</tr>
<tr>
<td>Ilok.</td>
<td>kanika-gasut</td>
</tr>
<tr>
<td>Iban.</td>
<td>minika-gatut</td>
</tr>
</tbody>
</table>

1 See preceding page, note 2.
2 In most of the Philippine languages the combination of n + a guttural becomes by reciprocal assimilation ngng and then ng by simplification of the doubling, as here.
3 The Hiliguayna form is not given.
4 Not certain but probably the proper form.
While the exact force of the prefixes of these modifiers is not clear, they all (except Hiliguyna *hin*) seem to be modifications of the ordinal prefixes. This is indicated by the following facts, viz., a) that all of them except *hin* contain *ka*, which is the basis of the ordinal prefixes; b) that *maika*, identical with Tagalog *meyka* and Pampangan *meka*, is used as ordinal prefix in Ilokano and Nabaloi; c) that the numeral after the prefix regularly appears in the form it has in the ordinals, e. g.,

<table>
<thead>
<tr>
<th>Modifier</th>
<th>Ordinal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tag.</td>
<td>meykatlo ikatlo</td>
</tr>
<tr>
<td></td>
<td>meykapat ikapat</td>
</tr>
<tr>
<td>Pamp.</td>
<td>mekatlo katlo</td>
</tr>
<tr>
<td></td>
<td>mekadinalan kadinalan</td>
</tr>
<tr>
<td>Pang.</td>
<td>mikapat kapat</td>
</tr>
<tr>
<td>Nab.</td>
<td>kaddo maikaddo</td>
</tr>
</tbody>
</table>

These formations are joined to the following units in several ways, viz., in Tagalog and Pampangan, by the ligature (used only after a vowel; after a consonant it is omitted, the two elements being simply juxtaposed); in Ilokano by its which is probably a contraction of *ti* the genitive of the definite article, or by the conjunction *ket* ‘and’ (cf. above, p. 218); in Pangasinan and Nabaloi by the genitive of the definite article; in Hiliguyna and Ibanag by the sign of the indefinite accusative (I, p. 345).

As an example of these intermediate numerals the forms of ‘twenty-one’ may be given. They are as follows, viz:

| Tag.     | meykatlo-ng isa |
| Bis. (Hil.) | hingatloan sing usa |
| Pamp.    | mekatlo-n metong |
| Pang.    | mikatlo-n polo na sakey |
| Ilok.    | kanikatlo polo \{ket\} \{t\} maisa |

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1 The explanation of these intermediate forms given in Dr. Seiple’s article *The Tagalog Numerals* (JHU. Circs. No. 183, June, 1903, p. 80), while possible from the standpoint of Tagalog and Bisayan alone, is untenable when the other languages are taken into consideration.

2 *Hin*, however, is followed by the *ka* of the ten.

3 In Nabaloi, however, *kaappat* and *maikapat* do not correspond.

4 The ligature in these forms seems to be indiscriminately *ng* or *n*.

5 Not given, but cf. *mikatlo-n polo na talo* ‘23.’
F. R. Blake,

Iban. minika tallufulu tu tadday'
Igor. (Nab.) kaddo ne saxe

In Ilok, Ibanag, and Batan similar forms are found in the teens (cf. above, p. 218).

The meaning of the connectives seems to be 'with respect to,' 'as far as — is concerned,' though it is possible that the relation between unit and modifier in Tagalog and Pampangan is that of noun and adjective; the forms of 'twenty-one' for example, therefore, mean 'thirty as far as one concerned,' the first or 'one' step towards 'thirty' having been taken; for kêt in the Ilok forms, cf. above, p. 218. The word for 'ten' is understood in Tagalog, Pampangan, and Nabalo, just as it is in the case of the teens.

The modifiers of these numerals may be used alone to indicate an indefinite number, more than the ten below and not so much as the ten on which the modifier is based; in this case in Tagalog and Pampangan 'ten,' which is understood in the definite numbers, reappears. In Ilok these forms seem to be used also to indicate the even ten below the one on which the modifier is based, e.g.:

Tag. meykatlo-n polo 'some twenty.'
Pamp. mekalima-ng polo 'some forty.'
Pang. mikatlo-n polo 'some twenty.'
Ilok. kanikapat a polo 'some thirty' or 'even thirty.'
Iban. minikatallufulu' 'some twenty.'

In Ilok and Ibanag this formation may be used to indicate an indefinite teen, e.g.,

Ilok. kanikaduapolo } 'some ten.'
Iban. minikaruafulu } 'some ten.'

The intermediate numbers above 'one hundred' in so far as they are given by the grammars, are made in general by addition, the larger numeral preceding the smaller, and the conjunction 'and' standing between the last two, e.g.,

Tag. sangdaan at } isa '101.'

sangdaa't } sangdaan at dalawa-ng powo '120.'
Tag. sangdaan dalawa-ng powo \{at\} isa ‘121.’ sanglibo \{at\} isa ‘1001.’
\{t\} isa ‘1200.’ sanglibo dalawa-ng daan dalawa-ng powo’t isa ‘1221.’ etc., etc.

Similarly in the following languages, the word in parenthesis being the word for ‘and,’viz., Cebuan (ug), Hiliguayna (kag), Pangasinan (tan), Ilokan (ket), Nabaloi (tan), Bontok Igorot (ya), Magindanao (engu, ngy).

In Cebuan the form *usa ki-libo ug may usa* ‘1001’ with double connective *ug* and *may* is given by Encina.¹

In Hiliguayna it is possible that forms with the double connective *kag may* like *katulahaan kag may usa* ‘twenty-one’ are also formed.²

In Nabaloi, *tan* seems to be used wherever an addition is to be indicated; in these compound numbers the teens are expressed by ‘ten and one’ etc., instead of by *sawal ne* as above; e.g.,

'sandasus tan sampulo tan saxei '111.'

In Bontok in some of the higher numerals a particle *nan*, probably identical with the *nan* used in forming distributives (cf. below, p. 242), is employed in addition to *yu* ‘and,’ e. g.:
sinpo ya nan chuwa lifo ‘12,000.’
sinpo ya nan tolo lifo ‘13,000.’

In Bagobo the conjunction is omitted in the forms that are given, viz.,

'sabbad gatos sapolo '110.'
sabbad mararan sabbad gatos '1100.'

Ibanag, to judge from the form of the numbers intermediate between the tens, e. g., *duwfulu tadday* ‘twenty-one,’ probably also dispenses with the conjunction.

In Samaro-Leytean, when the compound number consists of a power of ‘ten’ + any number less than ‘one hundred,’ the power of ‘ten’ is followed by the word for ‘having’ *mey,* after

¹ Grammatica bisaya-cebuana, Manila, 1883.
³ This assumption is based on the form of the numerals for one hundred + the teens, as no other compound numerals involving the same principle are given.
which the remaining part of the numeral has the same form it would have if standing alone. If the number contains two or more powers of ‘ten,’ the lowest is connected with the numbers below ‘one hundred’ as above, and the higher power or powers are placed before the lowest power without connective, e. g.:

usa ka-gatos mey usa ‘101.’
usa ka-gatos mey karuhaan ‘120.’
usa ka-yokot mey usa ‘1001.’
usa ka-gatos mey katloan kag usa ‘131.’
unum ka-yokot, duha ka-gatos mey napolo ‘6210.’
tolo ka-ribu, duha kayokot, lima kagatos mey kapanan kag walo ‘3,002,548.’

In Bikol the word for ‘having’ mey, mei, seems to be used between the two lowest elements of a compound number, e. g.,
sanggatos mei saro ‘101.’
sanggatos, apat na pali mei tolo ‘143.’
sangribo, walo-ng gatos, pito-ng polo mei sian ‘1879.’

In Sulu when the compound number consists of two parts, they are connected by tug ‘having,’ e. g.,
angratus tug isa ‘101.’
angratus tug kauhan ‘120.’
angibu tug angratus ‘1100.’

In Pampangan these intermediate numbers are regularly indicated in a way similar to the teens by lalo or lawit ‘overplus’ followed by the hundred, thousand, etc., from which the count is proceeding (lalo taking the ligature), and this in turn followed by the number above the even hundred, thousand, etc., which may be connected with the preceding by ampon or at ‘and’.” ‘Hundred’ is used in the root form, e. g.:

lalo-n] dalan (ampon) metong ‘101.’
lawit]
lalo-n dalan (ampon) labi-n metong ‘111.’
lawit dalan (ampon) lima-ng polo ‘150.’
lawit libo lima-ng dalan ‘1500.’
lalo-n libot walo-ng dalan mekanum metong ‘1851.’

1 No examples of numbers consisting of more than two parts are available.
2 At least according to Bergaño’s grammar published in 1729. In all probability, however, forms made after the Spanish fashion, e. g., *dinalan ampon metong, etc., are in use here as in the other languages (cf. the adverbial forms, p. 247, below).
lawit libo anam a dalan ampon mekadinalan siam '1699.'
lawit adua-ng laksa mekasiam atlo '20,083.'
lalo-ng laksa walo-ng libo pitu-ng dalan mekalima-n lima '18745.'
lawit adua-ng sangyota atlo-ng gatus mekalima-n anom a libo ampon anom a dalan at mekatlo-n anam '2,346,626.'

As appears from these examples lalo or laseit is used only once, the remainder of the number being expressed in general as in English with the exception of the intermediates with prefixed meka.

The ancient system of numeration discussed above (p. 219 ff.). was also employed for these intermediate numbers, the modifier of the unit being made according to rule on the basis of the next higher hundred, thousand, etc., e.g.,

Tag. meykmatlo-n daan isa '201.'
Pamp. mekadua-n dalan a metong '201.'
Pang. mikadua-n lasus na sampolo '110.'
Ilok. kanikadua ribu ket dua gasut '1200.'

In general in Pampangan not more than one mika form, and in Pangasinan not more than two mika forms are used in succession in the same compound number, forms made by addition being employed after the first, e.g.,
Pamp. mekatlo-n dalan apat a polo ampon anam '246.'
Pang. mikadua-n libo na mikadua-n lasus na dua-n polo tan lima '1125.'

not, *mekatlo-n dalan mekalima-n anam
and *mikadua-n libo na mikadua-n lasus na mikatlo-n
polo na lima.

The modifying element of these intermediate forms may be used alone as in the case of the tens, e.g.,
Pamp. mekatlo-n dalan 'between two and three hundred.'
mekapat libo 'between three and four thousand.'
Pang. mikadua-n lasus 'between one and two hundred.'

In Ilokan they may also be used for the even hundreds, etc., as in the case of the tens, e.g.,
kanikatlo gasut 'between two and three hundred'
or 'even two hundred,'
kanikapat a gasut 'between three and four hundred'
or 'even three hundred.'
In Tagalog, however, in the numbers between the first and second hundred, first and second thousand, etc., a formation similar to that of the teens was employed, viz., *labi* 'overplus' followed by the oblique of the number (hundred, thousand, etc.) from which the count was proceeding, and this followed by the number above the even hundred, thousand, etc. The number above the even hundred, etc., is modified by the preceding complex like an adjective, the ligature sometimes standing between them, and the literal meaning of these numerals being 'a more-than-a-hundred one,' etc., e. g.:

- labi sa raan isa '101.'
- labi sa raan sang powo '110.'
- labi sa raan labi-ng isa '111.'
- labi sa raan dalawa-ng powo '120.'
- labi sa raan meykatlo-ng isa '121.'
- labi sa libo-n isa '1001.'
- labi sa laksa dalawa-ng powo '10,020.'
- labi sa yota-n tatlo '100,003.'

**Appendix (Cardinals given by Montano*).**

<table>
<thead>
<tr>
<th>Samal</th>
<th>Manobo</th>
<th>Tagakaolo</th>
<th>Bilan</th>
<th>Atas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>isa</td>
<td>sabad</td>
<td>isa</td>
<td>anisa</td>
</tr>
<tr>
<td>2</td>
<td>dua</td>
<td>kadua</td>
<td>dua</td>
<td>aluu</td>
</tr>
<tr>
<td>3</td>
<td>too</td>
<td>ikatlo</td>
<td>katlo</td>
<td>atlo</td>
</tr>
<tr>
<td>4</td>
<td>upat</td>
<td>upat</td>
<td>ufat</td>
<td>faat</td>
</tr>
<tr>
<td>5</td>
<td>lima</td>
<td>lima</td>
<td>lima</td>
<td>lima</td>
</tr>
<tr>
<td>6</td>
<td>ikaunum</td>
<td>ikaunum*</td>
<td>kanuon*</td>
<td>aguaman*</td>
</tr>
<tr>
<td>7</td>
<td>ikapito</td>
<td>ikapito</td>
<td>fito</td>
<td>nagfito</td>
</tr>
<tr>
<td>8</td>
<td>uao</td>
<td>ualo</td>
<td>kaulian*</td>
<td>gualo</td>
</tr>
<tr>
<td>9</td>
<td>siam</td>
<td>siam</td>
<td>siam</td>
<td>gasium</td>
</tr>
<tr>
<td>10</td>
<td>sampo</td>
<td>polo</td>
<td>samfolo</td>
<td>gasfaolan*</td>
</tr>
<tr>
<td>11</td>
<td>sampo isa</td>
<td>polo isa</td>
<td>samfolo tag isa</td>
<td>sanfolo satu</td>
</tr>
<tr>
<td>20</td>
<td>kauaan</td>
<td>dua polo</td>
<td>karuan</td>
<td>aluu folo</td>
</tr>
<tr>
<td>30</td>
<td>atloan*</td>
<td>lolo polo*</td>
<td>katloan</td>
<td>atlo folo</td>
</tr>
<tr>
<td>100</td>
<td>sanggatus</td>
<td>sabad dagatus</td>
<td>sanggatus</td>
<td>?</td>
</tr>
<tr>
<td>1000</td>
<td>sangman</td>
<td>sabad mararan</td>
<td>sangmaala</td>
<td>amlibo</td>
</tr>
</tbody>
</table>

1 Cf. above, p. 199, ft. nt. 3.
2 Probably miswritten.
3 Probably mistakes for *katloan*, *tolo polo*. 
In a number of cases the author seems to have confused ordinals with cardinals, so in 'two' in Manobo, in 'three' in Manobo and Tagakaolo, in 'six' in Samal, Manobo, and Tagakaolo, in 'seven' in Samal and Manobo, perhaps in 'eight' in Tagakaolo, and in 'nine' and 'ten' in Bilan, where ka has become ga (cf. agu 'I' for aku). Bilan 'six' and 'eight' may also be ordinal forms. Bilan 'seven' is apparently a verbal form.

Intervocalic l is lost in Samal (cf. I, p. 333 f.); p becomes f in Tagakaolo and Bilan; an intervocalic consonant is often doubled in Atas. 'Ten' and its powers are regularly preceded by a prefix meaning 'one' except 'ten' in Manobo.

The forms that call for remark are the following, viz.:

1—sabad is the same as Bagobo sabad without doubling; anisa is probably a (articular particle) + n (ligature)+isa; sakkad is probably sa+kud (numeral coefficient?) with phonetic doubling.

2—in alun the a is probably articular, luu, a modification of *lau for *dua; arua has the same articular (?) a.

3—too is for tolo with loss of intervocalic l as in uao 'eight,' po 'ten'; atto has an articular (?) a.

4—faut has been made disyllabic by splitting the a of *fat< *pat.

6—kannon is perhaps a mistake for *ku-unom; aguanan, for *aga-unam, the initial a being still difficult to explain.

8—uao is for ualo with loss of intervocalic l; kaullian seems to contain the suffix an, the form may possibly be a mistake for *kaualan 'eighty,' instead of an ordinal formation; gualo is probably for *ga-utlo.

9—siau, siau are to be explained like Magindanao siau; gaisum is a modification of *ga-siam.

10—giasuolan is probably for *ga-sa-falo-an, with prefix sa 'one,' and suffix an.

Teens—The teens seem to be formed by addition without connective except in Tagakaolo, where tag (=Sulu tag) is employed; in isagkad, miswritten for isakkad, i is probably ligature.

Tens—The tens in Samal and Tagakaolo are formed as in Bisayan and Sulu; in the other languages by multiplication, the ligature being used in Atas. Samal kauan is for *kahuau<
*ka-dua-an; Atas atadlum polo is phonetic spelling for *atatlon polo.

100—The root word is gatus; Atas na is probably ligature; sabad da gatus probably represents sabad a gatus with ligature a.

1000—Besides the familiar root words libo and dalan (in mararan), two new ones appear, viz., man and maala; amlibo is probably articular a-+ligature m-+libo; Atas na is to be explained as in ‘100.’

Ordinals.

The ordinals, with the exception of the first, are made from the cardinals with the following prefixes, viz.:

- Tag., Bis., Bik., Iban., Mag. ika
- Bat. icha (= ika)
- Pamp., Sulu, Bag. ka
- Pang. ka,‘ onkoma, koma
- Ifok. maika, ka
- Igor. (Nab.) maika, mai

In Batan and Ibanag the ordinals, except the first in Ibanag, are regularly followed by the genitive of the third personal pronoun, singular, viz., na, in Batan; singular or plural, viz., na or da, in Ibanag. As the Ibanag forms, however, are usually given in DeCuevas’ grammar without these suffixes, they will be omitted in giving the ordinals here.

In Bontok Igorot the numeral adverbs are used as ordinals (cf. below, p. 245 ff.).

‘First’ is expressed as follows in the various languages, viz.:

- Tag. naona
- Bis. (Ceb.) nahaona
- Bis (Hil.) nahaona
- Bis. (S. L.) siapa, ona, uahaona, siahap pa
- Bik. enot
- Pamp. mona
- Pang. inmona (pret.), onona (pres., fut.)
- Ilok. omona
- Iban. olu

¹Those made with ka signify anyone of a certain number, e. g., kalima is anyone of a group of five; anyone of this group is kalima ‘fifth’ with regard to the other four.
Bat.  ichasana
Igor. (Nab.)  mapangdu
Mag.  muna
Sulu  kaisa
Bag.  ona, tagna

In Batan and Sulu the forms are made with the regular ordinal prefix, in Sulu on the basis of *isa ‘one,’ and in Batan probably on the basis of the particle *su, though *ichasana may represent a contraction of *icha-asu-na. The majority of the other forms are made from a root *una, ona meaning ‘first, beginning.’ This occurs unchanged in Samaro-Leytean and Bagobo, but usually it is combined with verbal particles or modified like a verbal root, the meaning being ‘acting as first,’ or ‘being first,’ viz.,

    Tag.  na-ona
    Bis.  naha-ona
    Pamp.  m-ona
    Pang.  inm-ona, on-ona (redup.).
    Ilok.  om-ona
    Mag.  m-una

Bagobo tagna perhaps contains ona. Ibanag olu is the common Philippine word for ‘head.’ Samaro-Leytean siapu and siahan pa are perhaps sia, the pronoun of the third person singular, and siahan, a derivative with passive suffix *an, followed by the adverb pa, which ordinarily means ‘still, yet,’ but which here no doubt simply emphasizes the preceding word. The original meaning was probably something like ‘it, the one par excellence.’

Naboloi mapangdu probably contains the adjectival prefix ma. The meaning of the roots of Bikol enot, Naboloi mapangdu, and Bagobo tagna is not certain.

The remaining ordinals from ‘two’ to ‘nine’ are made regularly by prefixing the proper particle to the cardinal with the following exceptions, either particle being used in those languages which have two, except in Naboloi, where maika alone is employed.

   a) The a of the prefix regularly coalesces with the a of units with initial a, e. g.,

      Tag.  ikapat ‘fourth.’
      Pamp.  kanam ‘sixth.’
Iban. ikappat 'fourth.'
Igor. (Nab.) maikapat 'fourth.'
Bag. kannam 'sixth.'

Bikol is an exception to this rule, e.g.,
ikaapat 'fourth.'
ikaanom 'sixth.'

In Ilokan, 'four' and 'six' are irregular, being made as if the cardinals began with a. They are, viz.,
maikapat, kapat 'fourth.'
maikanem, kanem, 'sixth.'

In 'four' and 'six' the bases may be pat and n-m instead of apat and an-m; forms like Bisayan ika-upat, ika-unom, Bikol ika-apat, iku-anom argue for the dissyllabic bases; forms like Ilokan maikapat, maikanem, for the monosyllabic. In Pampangan 'two' and 'three' the ordinals are probably based on dua and tlo, not on adua and atlo.

b) The second ordinal is irregular in Tagalog and Nabaloi, viz.,

Tag. ika-lawa, ika-lua
Igor. (Nab.) maikadgwa

and in Bagobo a special word sosog occurs alongside of the regular formation. In Tagalog in ikalawa the ordinal particle has either been prefixed to a shortened form of the cardinal, or lawa represents a modification of a more original *dava for *duwa (cf. above, p. 204); ikalwa may be a shortened form of ikalawa, or it may represent *ika-dua. In Nabaloi the form is derived from *maikad-wa<*maika-dua, the u becoming u, due to the change in the arrangement of syllables, and then changing to gu according to rule (I, p. 332), and the d in this combination escaping the regular change to ch (I, p. 333).

c) The third ordinal is made from a base tlo in several of the languages, viz.,

---

1 The doubling of the cardinal appat seems to be omitted here.
2 Written ikaapot, doubtless simply a mistake for ikaapat.
3 Not given, but practically certain.
Tag., Bik. ika-tlo
Pamp., Bag. ka-tlo
Pang. ka-tlo, koma-tlo
Ilok. maika-tlo, ka-tlo
Bat. icha-tdo-na

Cebuan and Hiliguyna have the two forms ika-tlo and ika-
toto; Nabaloí has the form maikaddo (by assimilation from *maikatlo <*maikatlo).

d) The sixth ordinal in Hiliguyna has developed a
secondary glottal catch, viz., ikan-um; Samaro-Leytean
has besides the regular form ikaunom, a form ikanum,
based on anum or num (cf. a, above); in Nabaloí an ana-
logical d borrowed from maikadima ‘fifth’ appears before
the cardinal; e.g., maiku-dannim:

In the case of the tenth ordinal the particles are prefixed,
as in the ordinals from ‘two’ to ‘nine,’ sometimes to the root,
sometimes to the full form of the cardinal; in Batan the suffix
na follows the prefix, viz.,

Tag. ika-powo, ika-sangpowo, ikapolo
Bis. (Ceb.) ika-polo
Bis. (Hil.) ika-polo, ika-napolo
Bik. ika-polo, ika-sangpolo
Pamp. ka-polo
Pang. ka-polo, koma-polo
Ilok. maika-pollo, ka-pollo
Iban. ika-fulu, ika-mafulu
Igor. (Nab.) maika-sampulo
Bat. ichasana a pogo
Sulu ka-hangpoh
Bag. ka-sapolo

The remaining ordinals, with the exception of certain in-
termediate numerals, are made by prefixing the proper prefixes
to the cardinals. In Pangasinan from ‘twenty’ upward the
two series of ordinals have the same form, koma being used as
prefix, or the ka series may take the prefix onkoma; in Nabaloí
from ‘eleven’ upward, the prefix mai alone is used, e.g.,

1 Not given, but probably correct.
Pang. koma-dua-n polo ‘twentieth’
onkoma-dua-n polo ‘any one of twenty, twentieth.’
Igor. (Nab.) mai-sawal ne saxe ‘eleventh’
mai-chuwa polo ‘twentieth.’

In the powers of ten the ordinal particles are sometimes prefixed to the root form of the cardinal, sometimes to the fuller form. In Pampangan except in *dinalan*, and in Pangasinan they are prefixed to the root form, e. g.,

<table>
<thead>
<tr>
<th>100th</th>
<th>1000th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pamp.</td>
<td>ka-dinalan</td>
</tr>
<tr>
<td>Pang.</td>
<td>koma-lasus</td>
</tr>
</tbody>
</table>

Pamp. | ka-libu        |
Pang. | koma-libo      |

In Tagalog they are usually prefixed to the fuller form, though forms derived from the simple root also occur, e. g.,

ika-sangdaan | ‘one hundredth.’
ika-raan       |

In Hiliguayna, Sulu, and Nabalo, they are prefixed to the fuller form. In Cebuan they may be prefixed to either the root or the fuller form, e. g.:

Bis. (Hil.) ika-isa-ka-libo ‘thousandth.’
Bis. (Ceb.)
ika-usa-ka-gatos | ‘hundredth.’
ika-gatos       |
Sulu | ka-ang-ratus   |
Igor. (Nab.) mai-san-dasus |

In the other languages the forms are not given.

The intermediate numerals with prefixed *meyka* in Tagalog and *meku* in Pampangan may take the ordinal prefix regularly, or be used unchanged as ordinals, e. g.,

| Tag. | ika-meykatlo-ng apat | ‘twenty-fourth.’
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>meykatlo-ng apat</td>
</tr>
</tbody>
</table>
| Pamp. | ka-mekatlo-n lima | ‘twenty-fifth.’
|      | mekatlo-n lima         |

In Tagalog moreover there was a third series of forms made by dropping *mey* after the prefix *ika.*

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1 The ordinal of *sangyota* ‘million,’ which does not occur, is probably *ka-sangyota.* *Sangyota* being treated as a root.

2 The only example of this formation (given by Totanes, p. 106) is *ang icaatatlong apat* ‘the twenty-fourth,’ which seems to be a mistake for *ika-katlo-ng apat.*
The only example given in Pampangan of an ordinal made from forms with lalo or lawit is without ordinal prefix, viz.,
ing lawit dalan apat ‘the hundred and fourth.’

In Ibanag the numbers intermediate between the tens may be expressed regularly by prefixing ika to the cardinals made by addition, or by placing the units before the ten towards which the count is proceeding with prefixed pinaka, e. g.,

ika-ruafulu tadday \{twenty-first\}
tadday pinakallufu

This particle pinaka may be the same as Tagalog pinaka, which indicates ‘that which takes the place of, passes as, etc.,’ e. g., pinaka-tinapay ‘that which is used instead of bread’ from tinapay ‘bread.’ The idea of the complex is perhaps that instead of ‘thirty,’ etc., we have ‘one,’ i. e. the one in the decade that ends in ‘thirty,’ etc.

The particle ka which forms the basis of most of the ordinal prefixes seems to be identical with the nominal prefix ka, which indicates one of a number of units that are associated in some way or belong to the same class, e. g., Tagalog ka-tavo ‘one of a number of men, a single man’ from tavo ‘koma, people,’ ka-tolong ‘one of those that help one another, a single helper’ from tolong ‘to help.’ Ka prefixed to a cardinal would thus mean ‘one of two, three, etc.,’ i. e., the second, third, etc., with regard to the others of the same company. From this associative meaning, which is still the only one these forms have in Pangasinan, their use was extended, so that they were employed as ordinals in any connection. In some of the languages additional particles were prefixed or infixed; i in i-ka, i-cha, ma and i in ma-i-ka, om in k-om-a, on in on-koma. The prefix i may possibly be identical with the articular particle i, but it is more likely, as seems to be indicated by the fact that om and on in koma and onkoma are also verbal particles, that it is identical with the passive particle i; the forms with ika thus meaning ‘that which is made one of two, three,’ etc.

The particles on and om indicate ‘becoming, a passage from one state to another,’ e. g., Tagalog g-um-aling ‘to become good’ from galing ‘good,’ Pangasinan on-bato ‘to become

\footnote{The only example given; \i{tlu in pinakalltu, probably represents \i{tlu, cf. below, p. 286.}
stone’ from bato ‘stone’; hence forms with koma and onkoma indicate ‘becoming or having become one of two, three, etc.’

The prefix ma is probably identical with the adjective prefix ma. Nabalois mai is probably simply a shortened form of maika.

Fractions.

The statements in the various grammars with regard to the fractions are very meager indeed, and in many of them no mention of fractions is made.

Generally speaking, with the exception of the word for ‘half’ they are identical with or based on the ordinals.

The words for ‘half’ in the various languages are, viz.:

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<td>karag_s¹vi</td>
<td>ang sipak</td>
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</tbody>
</table>

In Pampangan, Pangasinan, Ibanag, and Nabalois ‘half’ is a derivative of ‘two,’ the prefixes all containing the ordinal particle ka in connection with some other element. In Pampangan and Ibanag the prefixes are the same as those used in the formation of the other fractions (cf. below). In Pangasinan an additional element pat or perhaps apat, in Nabalois an additional element gu is inserted between the ordinal prefix and ‘two.’ Tagalog kalahati consists of a root hati with prefixed ka and infixed lu,⁠¹ the formation being thus similar to that of Pangasinan and Nabalois. In Cebuan, Hiliguayna, and Bagobo the ordinal particles ika or ku are prefixed directly to a root tun⁠ã, ton⁠ã; the doubling in Bagobo is probably phonetic. In Batan karag, ku is perhaps ordinal prefix. In Sulu the root sipak is without ordinal particle, simply taking the prefix ang ‘one, a’ (cf. below, p. 236).

¹ Cf. dalawa ‘two,’ p. 204 above.
The remaining fractions are formed as follows:

In Tagalog they are identical with the ordinals; though in an older period of the language they were formed by prefixing sa to the ordinals, e.g.,

- sa-ikatlo ‘third.’
- sa-ikapat ‘fourth.’

Fractions derived from intermediate numerals in meyka had one of three forms, viz.,

- sa-meykatlo-ng isa
- ika-meykatlo-ng isa
- sa-ika-meykatlo-ng isa

The forms identical with the ordinals may stand alone or may modify the noun bahagi ‘part,’ e.g.,

- ikatlo
- ikatlo-ng bahagi

‘a third.’

In Cebuan and Hiliguyna they consist of bahin ‘part’ modified by the preceding ordinal, e.g.,

- Ceb. ikatolo ka-bahin ‘one third.’
- Hil. ikagatos ka-bahin ‘a hundredth.’

In Pampangan they are formed by prefixing si to the ordinal even in the case of the first of the series (cf. above), e.g.,

- si-katlo ‘third.’
- si-ikapat ‘fourth.’

This si is probably a contraction of sa-i, the formation being thus the same as the Tagalog. The same contraction is found in Tagalog in sikapat (< saikapat) ‘real’ sikolo (< saikavalo) ‘half real.’

In Pangasinan they are formed up to ‘tenth’ by prefixing an additional syllable ka to the ordinals with prefixed ka, e.g.,

- ka-katlo ‘third.’
- ka-ikapat ‘fourth.’

From ‘eleventh’ upward they consist of the noun poted ‘part’ modified by a preceding ordinal with prefixed koma, e.g.,

komalabi-n sakey a poted ‘an eleventh.’

---

1 Cf. Totanes, Arte de la lengua tagala, p. 107, José, Arte y reglas de la lengua tagala, p. 729. This formation is still preserved in saikapat, saikavalo (usually contracted to sikapat, sikolo), one-half and one-fourth respectively of a salapi, a piece of money worth four reals.
In Ibanag they are formed by prefixing *pakka to the cardinal; the forms given are, viz.,

pakkallu 'a third.'
pakkappat 'a fourth.'

These forms probably represent *pakka-tlu and *pakka-appat or *pakka-pat. This prefix pakka is, perhaps, the same as the basis of p-in-aka (cf. above, p. 233), which contains the infix in. If this is so, the meaning is something like 'that which stands for three, four, etc., has a three, four, etc., quality.'

In Sulu they seem to consist of special words, as in the case of 'half,' e. g.,

ang utud 'a fourth.'

When the numerator of the fraction is more than one, the fraction is expressed in Tagalog by cardinals as 'so many of so many parts,' e. g.,

tatlo nang apat na bahagi 'three-fourths.'
pito nang walo-ng bahagi 'seven-eighths.'

In Ibanag and Sulu the word indicating the fraction is preceded by the cardinal indicating the amount of the numerator, e. g.,

Iban. rua pakkallu 'two-thirds.'
Sulu to ang-utud 'three-fourths.'

The combination of an integer and a fraction seems to be indicated in Sulu by the fraction preceded by the ordinal of the next higher unit,¹ e. g.,

ka-to ang-sipak 'two and a half (the third half).'

In Ibanag it is expressed by connecting the integer and the fraction by the conjunction tapenu, which ordinarily means 'in order that,' but which here probably means simply 'tending towards,' 'in addition to,' e. g.,

lima tapenu rua pakkallu 'five and two thirds.'

In Pangasinan it is expressed by the next higher unit with prefixed miku followed by the fraction, the two being connected by y or na, e. g.,

¹ Cf. German 

\[ \text{dritthalb} \] 'two and a half.' \[ \text{vierthalb} \] 'three and a half, etc.
mika-dua-y kapaldua 'one and a half.'
mika-tlo-y kakatlo 'two and a third.'
mikapat na poted 'three and a fraction.'

**Distributives.**

Distributives may be either cardinal or ordinal. The cardinal distributives have sometimes the meaning 'so many at a time,' sometimes that of 'so many to each.' Some languages have a separate set of numerals for each meaning. The ordinal distributives have the meaning 'every first, second, third,' etc.

The cardinal distributives are made from the cardinals by reduplication, by prefixed particles, or by both together. The chief prefixes used are, viz.:

- Tag., Bik. tig, man
- Bis. tag, tinag (Ceb.)
- Pamp. ti, tia
- Pang. san, tag, tungal
- Ilok. sag, tungal
- Iban. taggi, ta
- Igor. (Nab.) san-sis-kei
- Mag. nγaga, kaga

The prefix of 'ten' and its powers is usually different from that of the other numbers.

In Bikol and Pampangan the particles on and an respectively, in Bontok the complex -s nan isa or is nan isa are used as suffixes. Reduplicated forms are found in Tagalog, Hiliguayna, Samaro-Leytean, Bikol, Pampangan, Pangasinan, Ilokan, and Ibanag.

The forms of the first five numerals are, viz.:
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| 1 These reduplicated forms are given only by Lozano.  
2 The form *tigasararo*, which is also given, seems to be a mistake for *tigasarosaro*.  
3 In most of the Philippine languages the combination of *n* + *a* dental becomes by assimilation *nn* and then by simplification of the doubling *nn*, as here.  
4 For the *h* cf. I, p. 387.  
5 Cf. Juanmarti, op. cit., p. 64.
In Tagalog the series with *tig* has the meaning of ‘so many apiece,’ and the reduplicated series, the meaning of ‘so many at a time;’ and the same difference in meaning is found between the forms with prefix *tag*, and those with prefix *tinag* in Cebuan; between the Bikol forms with prefixes *tig* and *man*, and those with suffixed *on*; and between the unreduplicated and reduplicated series in Pampangan. In the other languages the distributives have probably both meanings, certainly so in Hiligayna and Pangasinan.

Some of the cardinals have a modified form after the various prefixes. Tagalog *tigalawen* and *tigallo* are made on the basis of *lawa* (cf. above, p. 204) and *tlo*; the *a* of *tiga* is probably due to the analogy of *tigapat*. Bisayan *tagsa* is probably syncopated from *tagusa* or *tagisa*; it is unlikely that it is formed directly by prefixing *tag* to the root particle *sa*. Cebuan *tagudha*, *tagotlo* and *tagilma* are due to a metathesis of *tagduha*, *tagtolo*, and *taglima*. In Pampangan ‘one’ is represented by *tungal* or *tioran*; *tungal* is found also as prefix (cf. below, p. 241); *tioran* is perhaps derived from *ona*, the root of most of the ordinals for ‘first,’ being analyzed as *ti-ona-an*, *ti* being distributive prefix and *an* passive suffix. ‘Three’ is made on the base *tlo* as in Tagalog. In Pangasinan, ‘two,’ ‘three,’ and ‘four’ are made on the bases *dedua*, *tatto*, *epat*; *dedua* is a reduplicated form, *e* representing an indistinct unaccented vowel; *tatto* is the regular form of ‘three’ in many of the languages (cf. above, p. 205); *epat* is *pat* with *e*, probably equal to articular *i* (cf. above, p. 205). In Ilokano, *sagatlo* is probably derived from *sag-tatlo* by assimilation; *sagapat* is probably for *sag-apat* with reduplication like that of the numeral adverbs of ‘four’ and ‘six’ in Pampangan (cf. below, p. 246). In Magindanao the final *a* of the prefix *nipaga* and the initial *a* of *apat* coalesce, or the form is made on the basis *pat*.

All the forms of these distributives not here mentioned, together with those from ‘six’ upward, are made according to the following rules. Some additional examples of the numbers from ‘six’ upward will be given.

In Tagalog in the first series *tig* is prefixed to the cardinal, from ‘five’ upward, usually with reduplication of the first syllable of the cardinal, though sometimes without reduplication, except in the case of the powers of ‘ten,’ which take the prefix *man*. ‘Ten’ itself may take either *tig* or *man*, *tig* being
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Some of the cardinals have a modified form after the various prefixes. Tagalog *tigalawa* and *tigatlo* are made on the basis of *lawa* (cf. above, p. 204) and *ilo*; the *a* of *tiga* is probably due to the analogy of *tigapat*. Bisayan *tage* is probably syncopated from *tagusa* or *tagisa*; it is unlikely that it is formed directly by prefixing *tag* to the root particle *sa*. Cebuan *tagulha*, *tagolto* and *tagimta* are due to a metathesis of *tag-duha*, *tagtolo*, and *taglima*. In Pampangan ‘one’ is represented by *tungal* or *tionan*; *tungal* is found also as prefix (cf. below, p. 241); *tionan* is perhaps derived from *ona*, the root of most of the ordinals for ‘first,’ being analyzed as *ti-on-a-an*, *ti* being distributive prefix and *an* passive suffix. ‘Three’ is made on the base *ilo* as in Tagalog. In Pangasinan, ‘two,’ ‘three,’ and ‘four’ are made on the bases *dedua*, *tatto*, *epat*; *dedua* is a reduplicated form, *e* representing an indistinct unaccented vowel; *tatto* is the regular form of ‘three’ in many of the languages (cf. above, p. 205); *epat* is *pat* with *e*, probably equal to articulär *i* (cf. above, p. 205). In Ilokan, *saggatlo* is probably derived from *sag-tatto* by assimilation; *sappapat* is probably for *sag-upapat* with reduplication like that of the numeral adverbs of ‘four’ and ‘six’ in Pampangan (cf. below, p. 246). In Magindanao the final *a* of the prefix *unjaga* and the initial *a* of *apat* coalesce, or the form is made on the basis *pat*.

All the forms of these distributives not here mentioned, together with those from ‘six’ upward, are made according to the following rules. Some additional examples of the numbers from ‘six’ upward will be given.

In Tagalog in the first series *tig* is prefixed to the cardinal, from ‘five’ upward, usually with reduplication of the first syllable of the cardinal, though sometimes without reduplication, except in the case of the powers of ‘ten,’ which take the prefix *man*. ‘Ten’ itself may take either *tig* or *man*, *tig* being
prefixed to the longer, *man* to the shorter form; numerals with prefixed *netyka* do not take this formation, e. g.:

- tig-aanim 'six apiece.'
- tig-sasangpowo 'ten apiece.'
- mamolo (*man*+*polo*) 'eleven apiece.'
- tig-lababi-ng isa 'a hundred apiece.'
- man-daan 'a thousand apiece.'

In the second series, if the cardinal is disyllabic it is repeated entire; if it contains more than two syllables only the first two are repeated, e. g.,

- animanim 'six at a time.'
- sangposangpowo 'ten at a time.'
- labilabi-ng isa 'eleven at a time.'

In Bisayan, at least in Cebuan, the distributive particle is simply prefixed to the cardinals, e. g.,

- tag-unum 'six apiece.'
- tag-pito 'seven apiece.'
- tinag-unum 'six at a time.'
- tinag-pito 'seven at a time.'

In Hiliguayna apparently the cardinal may be reduplicated as in 'one' and 'two.' In 'ten' the distributive particle may be prefixed to the root, e. g., Hil. *tagpelo*, or to the form with prefixed *na*, e. g., Sam.-Ley. *tagnapolo*. Hiliguayna also presents the forms *tag-usa-ka-polo* and *tag-sampolo*. In the powers of 'ten' the particle is prefixed to the root in Samaro-Leytean; in the other dialects forms are not available, e. g.:

- tag-gatos 'one hundred at a time.'
- tag-yokot 'one thousand at a time.'

In Bikol apparently *tig* or *man* are prefixed and *on* suffixed to the cardinal with the first two syllables reduplicated.

In Pampangan in the first series *tia* is prefixed to cardinals with initial consonant, *ti* to those with initial vowel, e. g.,

- ti-anam 'six apiece.'
- tia-pitu 'seven apiece.'

1 In most of the Philippine languages the combination of *m+a labial* becomes by assimilation *mm*, and then *m* with simplification of the doubling, as here. *Mamowo* is apparently not formed.
In the second series up to 'ten' ti and tia are prefixed as above to the fully reduplicated cardinal; the teens may have reduplication or not; 'one hundred' is without reduplication; the powers of ten seem to have reduplication, e. g.:

- ti-anamanam 'six at a time.'
- tia-labilabi-n metong 'eleven at a time.'
- tia-labi-n metong
- tia-dinalan 'one hundred at a time.'
- tia-libolibo 'one thousand at a time.'

The even tens seem to be formed by prefixing the distributive unit as a modifier to polo, e. g.,

- tiduatidua-ng polo 'twenty at a time.'
- tiwalowalo'-ng polo 'eighty at a time.'

The numerals with prefixed meka intermediate between the tens seem to be formed by reduplicating the syllable ka, and adding the suffix an, e. g.,

- mekakatloan adua 'twenty-two at a time.'

In Pangasinan up to 'eight' inclusive, and from 'twenty' upward with the exception of the powers of 'ten' the distributives are formed by prefixing san to the cardinal, simple or with first syllable reduplicated; 'five,' 'seven,' and 'eight' have apparently only reduplicated forms, e. g.:

- san-anem 'six apiece, at a time.'
- san-aaem
- san-pipito 'seven apiece, at a time.'
- san-wawalo 'eight apiece, at a time.'
- san-derua-n polo 'twenty apiece, at a time.'
- san-derua-n polo

'Nine' and the teens take the prefix tag with reduplication of the first syllable of the cardinal, e. g.,

- tag-sisiam 'nine apiece, at a time.'
- tag-lalabi-n sakay 'eleven apiece, at a time.'

In 'ten' and its powers tongal is prefixed to the root form, e. g.,

- tongal-polo 'ten apiece, at a time.'
- tongal-lasus 'one hundred apiece, at a time.'
- tongal-libo 'one thousand apiece, at a time.'

1 Written ticalovalo, probably a mistake.
2 Written sanooaolo, evidently a mistake.
In Ilokan *sag* is apparently prefixed to the cardinal with first syllable reduplicated, except in the case of ‘ten’ and its powers, in which *sag-tungal* is prefixed to the root form, e. g.:

*sag-sisiam* ‘nine apiece.’
*sag-tungal-polo* ‘ten apiece.’
*sag-tungal-gasut* ‘one hundred apiece.’

In Ibanag in the first series *taggi* is apparently added to the simple cardinal. The second series is formed only from those cardinals with initial consonant, this initial consonant being doubled after *ta* and the first syllable of the cardinal repeated, e. g.,

*tappipitu* ‘seven at a time.’

In Nabaloi the complex *san-sis-keit* is prefixed to the cardinal, and in Bontok the cardinal is followed by the complex -*s nan isa* as in the case of the first five numerals. In Bontok instead of *s* the particle *is* seems to be used in some of the numerals, e. g.,

*simpoo ya chuwa is nan isa* ‘twelve to each.’

In Nabaloi ‘ten’ has the fuller form, in Bontok sometimes the root, sometimes the fuller form, e. g.:

Nab. *san-sis-kei-sam-pulo* ‘ten to each.’
Bon. *poo-s nan isa* ‘ten to each.’

*simpoo ya iss-s nan isa* ‘eleven to each.’

In Magindanao, *nijau* or *kaqa* (to judge from the form *kaqadua*) are prefixed to the cardinal; the forms above ‘five’ are not given.

With regard to the formative elements of the distributives, *man* and *tungal* are clear, the explanation of the others is more uncertain. *Man* is the same prefix which is used with nouns in many of the languages to indicate ‘so many apiece,’ e. g., Tagalog *maniso* (*man*+*piso*) ‘a peso to each.’ *Tungal* is certainly connected with Tagalog *tungali*, which means to do something, one after another, e. g., *magtungali kayo-ng uminum* ‘drink one after the other.’

The remaining elements are apparently made up of a number of smaller elements, the principal of which seem to be *ti, ag, sa*

---

1 The sixth numeral, which is not given, is probably *sagnarame*, cf. *sagapate*.

1 The distributives of ‘ten’ and its powers are not given.
(Iban. ta, cf. I, p. 333), all of which may appear in a shorter form without vowel, viz., t, g, s.

Ti is found uncombined in Pampangan; the a of tia is probably derived from forms like tiapat, tianam, in which the root has initial a. Ti, t is probably also an element of Tagalog and Bikol tig, Bisayan and Pangasinan tag, Cebuan tinag, which are to be analyzed as ti-g, t-ag, and t-in-ag, combinations of ti with the formative element ag, and infix in.

The particle sa, s is found in Pangasinan san, Ilokan sag, Ibanag taggi, ta, Nabaloı san-sis-kei, Bontok s or is nan isa. Pangasinan and Nabaloı san is sa + ligature n; Ilokan sag and Ibanag taggi contain ag, and are to be analyzed thus: sa-ag or s-ag or sa-g; what the final i or gi of the Ibanag prefix is, is uncertain. Ibanag ta is either sa uncombined, or sa+ag, the doubling after the prefix representing the assimilation of g;

Bontok s and is are perhaps reduced forms of sa; Nabaloı sis is perhaps a combination of these reduced forms. The kei of Nabaloı is the same as the xeı of saxei ‘one’ (cf. I, p. 345); Bontok nan isa is probably a genitive of isa ‘one.’

The particle ag, g occurs in tig, tag, taggi (Iban.), sag and perhaps ta (Iban.), which have already been discussed, and probably also in Magindanao nýga, kuyu. These seem to be composed of ag or g preceded by a particle nýa or ka, and followed by an a which is perhaps borrowed from cardinals with initial a as in the case of tiu.

The particle sa is without doubt the root particle of the numeral ‘one,’ the particle ti is perhaps identical with the root particle ti of the Ilokan article and Pampangan demonstrative iti (I, p. 353), used here with the meaning of ‘one’ like sa. The particle nýa of Magindanao is perhaps equivalent to the common ligature nýu, being likewise a demonstrative particle used in a numeral sense; ka is uncertain. The particle ag is perhaps to be connected with the particle ag of Harayan demonstrative ag-to and with the indefinite accusative signs ąg and ak in Cebuan (I, pp. 345, 355); its function seems to be mainly connective. The suffix on in Bikol and the infix in in Cebuan are doubtless the same as the identical verbal particles.

These particles sa, ti and nýa, if this analysis is correct, give the idea of ‘for each one,’ ‘apiece,’ ‘at once’ to the cardinal numeral to which they are prefixed.
A special series of ordinal distributives is usually not formed. Tagalog, however, has such a series formed from the ordinals by full reduplication, e. g.,

ikaikalawa 'every two, every second.'
ikaikatlo 'every three, every third.'

Adverbs.

The numeral adverbs are of two kinds, viz., cardinal and ordinal. Cardinal adverbs answer the question 'how many times?' Ordinal adverbs answer the question 'which time in a series?' A special series of ordinal adverbs has been developed in only a few cases.

The cardinal adverbs are formed from the cardinals by prefixes sometimes accompanied by reduplication. The chief prefixes are, viz.:

Tag., Bis., Bik., Pamp., Mag., Sulu, maka
Pang., Ilok. mamin, mami
Iban. mi, min
Igor. (Nab.) pin
Igor. (Bon.) mami(n), manga

These particles are in many cases varied like verbal particles to express tense. In Tagalog maka is the usual particle, but naka may be used to indicate past time. In Bisayan and Bikol, naka is the usual particle, but maka is used of the future. In Pampangan, meka, in Pangasinan, amin, ami, and in Ilokan, namin, nami are the forms for past time. Tagalog minsan has also the form minsan for the preterite.

Reduplication is found in older Tagalog and in Pampangan. The forms of the first five numerals are, viz.:
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tag.</td>
<td>minsan</td>
<td>makalawa</td>
<td>makaitlo,</td>
<td>makaipat,</td>
<td>makalima,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>makatatlo</td>
<td>makaapat</td>
<td>makalilima</td>
</tr>
<tr>
<td>Bis. (Ceb.)</td>
<td>nakausa</td>
<td>nakaduha</td>
<td>nakatolo</td>
<td>nakaapat</td>
<td>nakalima</td>
</tr>
<tr>
<td>Bik.</td>
<td>nakasaro</td>
<td>nakadua</td>
<td>nakatolo</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Pamp.</td>
<td>misan</td>
<td>makaladua</td>
<td>makatatlo</td>
<td>makapapat</td>
<td>makalilima</td>
</tr>
<tr>
<td>Pang.</td>
<td>tolo-misan</td>
<td>tolo-kaladua</td>
<td>tolo-katatlo</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Ilok.</td>
<td>maminsan</td>
<td>mamidua</td>
<td>mamitlo</td>
<td>mamipat</td>
<td>maminlima</td>
</tr>
<tr>
<td>Iban.</td>
<td>mittan</td>
<td>mirua,</td>
<td>millu</td>
<td>mippat</td>
<td>milima</td>
</tr>
<tr>
<td>Igor. (Nab.)</td>
<td>pinsak</td>
<td>pinchua</td>
<td>pintaddo</td>
<td>pinappat</td>
<td>pindima</td>
</tr>
<tr>
<td>Igor. (Bon.)</td>
<td>mamingsan</td>
<td>mamiddua</td>
<td>mamitlo</td>
<td>mangipat</td>
<td>mangalima</td>
</tr>
<tr>
<td>Mag.</td>
<td>makaisa</td>
<td>makadua</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Sulu</td>
<td>makamisan</td>
<td>makarua</td>
<td>makato</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>
The first of the series is made regularly by prefixing the adverbial particle to the cardinal in Cebuan, Bicol, and Magindanao; Nabalo si sak in pinsak seems also to be a shortened form of the cardinal saxei (<sakei). The other forms are based on the root particle sa, which takes everywhere the verbal suffix an, the a of which coalesces with the a of the particle, and a verbal prefix in the forms mi, min, ming. In addition Pampangan, Pangasinan, and Bontok have the prefix ma, probably the adjectival prefix, and Sulu has the regular adverbial prefix maka; Pampangan may take the additional prefix tolo. Ibanag mittan stands either for *mi-ta-an <*mi-sa-an with phonetic doubling, or for *min-ta-an <*min-sa-an with assimilation of n to t.

The other numerals are made with the adverbial prefixes. In Pangasinan 'two,' 'three,' and 'four,' and in Ilokan 'three' are made with mami, the others with mamin. In Bontok mami occurs in 'three'; mamidua represents *mamin-dua with assimilation; the prefix of 'four' and 'five' is manga, the final a being elided before the initial vowel of 'four.' In Ibanag, mi is apparently the prefix in all the forms except middua <*min-dua; min is perhaps also to be assumed in mippat (cf. below). In Pampangan, tolo may be substituted for the ma of the prefix maka.

In some cases the form of the cardinal has been changed. In Tagalog 'two' is made on the basis luva like the ordinal, and 'three' and 'four,' besides the regular forms, have forms made on the bases tilo, ipat; ipat is pat with articular i as in the Bontok cardinal; the i of tilo is probably borrowed from ipat. In Pampangan the bases are all reduplicated, the vowel of the reduplication in 'two' and 'three' being a; ladua is probably for *dadua; makapapat probably stands for *maka-apapat. In Pangasinan and Ilokan, 'three' is made on the base tlo, and 'four' apparently on the base pat. Ibanag miltu and mippat are probably made on the same bases, miltu being derived by assimilation from *mi-tlo, and mippat standing either for *mi-pat with phonetic doubling, or for *min-pat with assimilation. Bontok 'three' is made on the base tlo, 'four' apparently on a base ipat.

All the forms of these adverbs not here mentioned, together with those from six upward, are made according to the follow-
ing rules. Some additional examples of the numerals from ‘six’ upward will be given.

In Tagalog from ‘five’ upward maka is prefixed to the cardinal, simple or reduplicated, the prefix sang of ‘ten’ and its powers being regularly omitted in the reduplicated forms, and sometimes in the forms without reduplication, e. g.,

\[
\begin{align*}
\text{maka-sangpowo} & \quad \text{‘ten times.’} \\
\text{maka-popowo} & \quad \text{‘ten times.’} \\
\text{maka-labi-ng isa} & \quad \text{‘eleven times.’} \\
\text{maka-lalabi-ng isa} & \quad \text{‘eleven times.’} \\
\text{maka-sang libo} & \quad \text{‘a thousand times.’} \\
\text{maka-libo} & \quad \text{‘a thousand times.’}
\end{align*}
\]

In Bisayan and Bikol maka is prefixed to the cardinal. In Samaro-Leytean ‘ten’ stands either with or without the prefix na, to judge from the forms, maka-polo ‘ten times,’ maka-napolo kag usa ‘eleven times.’ In Bikol the higher cardinals seem to be reduplicated, to judge from maka-riribo ‘thousand times.’ In Bikol the ordinals may also be used as adverbs.

In Pampangan, maka is prefixed to the cardinal, which has its first syllable reduplicated when it begins with a consonant, as in ‘five;’ but when the cardinal begins with a vowel, as in ‘four’ and ‘six,’ the consonant following that vowel is prefixed to the cardinal; this is likewise due to reduplication, the vowel and following consonant of the cardinal being repeated, and the initial a of this reduplicated form coalescing with the a of maka; ‘ten’ has the root form; ‘hundred’ preserves the infix in, e. g.:

\[
\begin{align*}
\text{makananam} & \quad \text{‘six times.’} \\
\text{maka-pipito} & \quad \text{‘seven times.’} \\
\text{maka-popolo} & \quad \text{‘ten times.’} \\
\text{maka-dirinalan} & \quad \text{‘a hundred times.’}
\end{align*}
\]

In numbers intermediate between the even tens, etc., the adverbial particle is prefixed to forms made by addition, e. g.,

\[
\begin{align*}
\text{maka-tatlo-ng polo ampon adua} & \quad \text{‘32 times.’} \\
\text{maka-dirinalan ampon mekapat pito} & \quad \text{‘137 times.’} \\
\text{maka-lilima-ng dalan ampon mekatlo-n siam} & \quad \text{‘529 times.’}
\end{align*}
\]

\[1\] In Tagalog an additional series of adverbs meaning ‘so many days ago’ is formed by prefixing ka to the maka forms, e. g.,

\[
\begin{align*}
\text{kamakalawa} & \quad \text{‘day before yesterday.’} \\
\text{kamakatlo (irregular)} & \quad \text{‘three days ago.’}
\end{align*}
\]
In Pangasinan, *mamin* is prefixed to the cardinal except in ‘six,’ which is irregular; ‘ten’ and its powers having the root form, e. g.,

mamin-pito ‘seven times.’
mamin-polo ‘ten times.’
mamin-lasus ‘one hundred times.’

‘Six’ is *maminem*, and is probably derived from *maminanem* or *mamininem* (cf. the bases *ipat, epat*, in Tagalog, Bontok and Pangasinan) by haplogogy as in the Ilokan form.

In Ilokan, *mamin* is prefixed to the cardinal as in ‘five,’ ‘ten’ having the root form, e. g.,

mamin-ennem ‘six times.’
mamin-polo ‘ten times.’

‘Six’ is also *maminem* for *mamininnem*, one of the syllables in having been dropped, or lost by haplogogy.

In Ibanag, *mi* is said to be prefixed to the cardinal, but no examples above ‘five’ are given.

In Nabalo, *pin* is prefixed to the cardinals, ‘ten’ and its powers having the root form, and the teens being expressed by *sawal* + the unit without connective, e. g.,

pin-pulo ‘ten times.’

pin-sawal saxei ‘eleven times.’

pin-dasus ‘one hundred times.’

In Bontok up to ‘ten’ inclusive *manga* is prefixed to the cardinal, the final *a* coalescing with the initial *a* of ‘six’; and ‘ten’ having the root form, e. g.,

manganim ‘six times.’
manga-pito ‘seven times.’
manga-poo ‘ten times.’

Above ‘ten’ in general the unit that stands at the beginning of the compound cardinal takes the form given above, the rest of the numeral remaining unchanged, e. g.,

mangapoo ya chuwa ‘twelve times.’
mamiddua poo ‘twenty times.’

---

1. ‘Nine’ times is given as *mang-nin-siam*, but this is probably simply a mistake, cf. *manga-siam ay poo* ‘ninety times.’

2. There seems to be a great deal of freedom in the use of the ligature; it may be omitted, or *ay* may be used after a vowel.
mangalima ay poo 'fifty times,'
mangipat ay lasot ya isa 'four hundred and one times.'

The hundredth of the series is made by prefixing manga to poo ay poo¹ 'ten tens' instead of to lasot. The thousandth is kulasokasot or kalifolifo, the reduplication emphasizing the largeness of the number.

The meaning of the various formative elements of these numerical adverbs is not clear, but they all seem to be verbal particles, pin and an being passive, the others active. This is indicated by the fact that they are varied to express tense. The forms containing a prefix ka may be derived from the ordinals. The close relation between the ordinals and these adverbs is shown by the fact that the two classes are identical in Bontok, and that the Bikol ordinals may be used as adverbs. The prefix maka, however, may be the active causative prefix, the adverbs formed with it signifying 'causing, making two, three,' etc.

In Pangasinan and Ibanag special series of ordinal adverbs have been developed, viz.:

<table>
<thead>
<tr>
<th>Pang.</th>
<th>Iban.</th>
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<tbody>
<tr>
<td>1 kasia</td>
<td>pamittan</td>
</tr>
<tr>
<td>2 pidua</td>
<td>pamirua</td>
</tr>
<tr>
<td>3 pitlo</td>
<td>pamillu</td>
</tr>
<tr>
<td>4 pipat</td>
<td>pamippat²</td>
</tr>
<tr>
<td>5 pinlima</td>
<td>pamilima²</td>
</tr>
<tr>
<td>6 pinen (sic)</td>
<td>etc</td>
</tr>
<tr>
<td>7 pinpito</td>
<td>etc</td>
</tr>
</tbody>
</table>

In Pangasinan from 'eleven' to 'nineteen' instead of the forms with prefixed pin, the ka ordinals or miku forms made on the basis of dua-n polo, may be used, e.g.,

kalabi-n lima 'the fifteenth time,'
mikadua-m¹ polo-y¹ sakey 'the eleventh time.'

¹ Written mangapat, probably a mistake, cf. mangipat ay lasot 'four hundred times.'
² Written poo ya poo, 'ten and ten,' evidently a mistake.
³ Not given, but formed according to the rule given by De Cuevas, p. 203.
⁴ Assimilated from n.
⁵ Ligature used instead of a form of the article, as frequently elsewhere.
In Ilokano the ordinals themselves are used as adverbs.\textsuperscript{1}

The analysis of *kasia* is not entirely clear; it may be ordinal prefix *ka + sia*, identical with the *sia* of Samaro-Leytean *siapa*, *siahan pa* 'first,' and ultimately with the pronoun of the third person singular in many of the languages.

The other forms are simply modifications of the cardinal adverbs. The Pangasinan forms are made by dropping the prefix *ma* of the cardinal adverb and changing the *m* of *mi* to *p*. In *pinen*, if it is correct, the final *m* of *pinem* has been assimilated to the preceding *n*. The Ibanag forms are made by prefixing *pa* to the cardinal adverb, or by changing the *m* of its prefix *mi* to *p*. These forms have, at least formally, passive prefixes with initial *p* like the Nabaloi cardinal adverbs, while the other cardinal adverbs have active prefixes.

**Restrictives.**

Restrictive numerals are those in which the meaning of the original numeral is restricted by the added idea of 'only.' They are usually derived from other numerals by reduplication. They occur in Tagalog, Pampangan, Pangasinan, Ibanag, and probably in other languages.

In Tagalog this restrictive meaning is given by reduplicating the first syllable of a numeral, cardinal, distributive, or adverb, e. g.,

\begin{align*}
iisá & \text{ 'one only.'} \\
ttígisa & \text{ 'only one apiece.'} \\
míminsan & \text{ 'only once.'} \\
dádálawá & \text{ 'only two.'} \\
ssásangdaán & \text{ 'only a hundred.'}
\end{align*}

The restrictive meaning is still further enhanced by combining full with partial reduplication, e. g.,

\begin{align*}
iisáisá & \text{ 'only one.'} \\
dádáladálawá & \text{ 'only two.'} \\
míminsánmínsan & \text{ 'only once.'}
\end{align*}

In Pangasinan this restrictive meaning is given to cardinals by repeating the first syllable of the numeral including the consonant after the first vowel, e. g.,

\textsuperscript{1} Cf. Williams, *op. cit.*, p. 71.
saksakey 'one only.'
taltalo 'three only.'
samsampolo 'ten only.'

This formation is made also from the ordinals in this language, e. g.,
kadkadua 'the one that alone makes the second of a series.'

The reduplicated distributives seem to have, at least occasionally, a restrictive meaning, e. g.,
sandererua 'no more than two by two, no more than two apiece.'

In Ibanag restrictive forms are made from the cardinals from 'two' to 'nine' by reduplicating the first syllable.

In Pampangan besides the forms consisting of numeral + adverb 'only,' which are found in general in all the languages, the numeral or part of it may be repeated, the two forms being joined by the ligature, and a modifying adverb usually accompanying the complex, e. g.,

metong mo-ng metong 'only one.'
apat mo-ng apat 'only four.'
mekatlo la-nmekatlo-nlima 'only twenty-five.'

Restrictives may also be formed from the cardinals by prefixing ka and suffixing an to the reduplicated cardinal, e. g.,

kamemetungan { } 'one only.'
kamemetungmetungan { } 'one only.'
kalimaliman 'five only.'

In Ilokan a series of restrictives are made from the adverbs by changing the specifies of the prefix min to p and inserting an additional min between this prefix and mu. This is really a species of the reduplication, the prefix min appearing first in the active and then in the passive form, e. g.:
maminpinsan ‘only once.’
maminpindua ‘only twice,’
maminpitol ‘only three times.’
maminpinpat ‘only four times.’
maminpinnem ‘only six times.’
maminpinpolo ‘only ten times.’

Addenda and corrigenda to Part I:
p. 340—Samaro-Leytean genitive nan is used only in such expressions as nga nan Padre ‘says the priest.’
p. 350—In Samaro-Leytean the oblique of the demonstratives may also apparently be preceded by the genitive of the definite article, e. g., san sadlo; sa sadlo and sa sito, though not given, are practically certain.
p. 358—Samaro-Leytean genitive of the personal interrogative is written nino, without glottal catch; Pampangan kanino is given as ‘suppletive’ i. e., oblique, but has been placed in the genitive following the analogy of the other languages.
p. 359—Samaro-Leytean individualizing interrogative is haen.
p. 365—Samaro-Leytean si ako is not given by Figueroa, but is practically certain.
p. 366—Pampangan kekatam is evidently a mistake for kekatamo: there being room for another letter between it and the following word in the badly printed copy of Bergaño that was used.
p. 374—Samaro-Leytean si iako, though not given, is practically certain; the Bikol plural forms, which are not given by San Agustín, are taken from Herrejon, Lecciones de gramática bicol-hispana, Binondo, 1882.
p. 379—Samaro-Leytean has kanira 3. pl. corresponding to kaniya; both forms are given by Figueroa as genitive, but have been placed in the oblique following the analogy of the other languages. In Nabaoi the form niai ‘of this’ is given by Sheerer in the text, p. 128.
The personal pronouns of Bontok Igorot, which were not given in Part I, may be added here, in so far as they are known.

<table>
<thead>
<tr>
<th></th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
</tr>
</thead>
<tbody>
<tr>
<td>sing.</td>
<td>sakín, ak</td>
<td>siká; ka</td>
<td>sia, sitódi</td>
</tr>
<tr>
<td>pl.</td>
<td>chátako, takó</td>
<td>chakayyo, kayó</td>
<td>chaicha, cha</td>
</tr>
<tr>
<td>chakami, kamí</td>
<td>chatódi</td>
<td></td>
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</tr>
</tbody>
</table>

Genitive forms of the first person singular and plural are -k and ta respectively.

Ak, siká, ka, sia, kamí, kayó. -k and ta are to be explained as the identical forms in the other languages. Sakín is perhaps akin (= Tag. akin) with articular s (<sí). Sitódi is si (= Tag. si) + to (Tag. dem. root

\[1\] Made on the basis of maminnem.
part. to) + di (?). In the plural cha is a phonetic modification of da as in Nabaloí (cf. p. 388). Tako is doubtless inclusive, kami exclusive. Tako is a combination of ta (root part. 1 pers.) + ko (perhaps a modified form of ka, root part. of 2 pers.), cf. Tag. tayo, Pamp. tamo, p. 370. Chatako, chakami, and chakayo are like the Ilok. datayo, dakami, dakayo (pp. 373, 378). Chaicha and chatodi are similar forms made on the basis of icha (= Ilok. ida), and todi of singular.

The following pronouns of Samal, Manobo, Tagakaolo, Bilan, and Atas, languages spoken by pagan tribes in Mindanao, are given in the vocabularies in Montano, Rapport à M. le ministre de l'instruction publique sur une Mission aux Iles Philippines et en Malaisie (Archives des Missions scientifiques, série 18, tome xi, Paris, 1885).

<table>
<thead>
<tr>
<th></th>
<th>Sam.</th>
<th>Man.</th>
<th>Taguk.</th>
<th>Bil.</th>
<th>Atas</th>
</tr>
</thead>
<tbody>
<tr>
<td>def. art.</td>
<td>yan</td>
<td>yan</td>
<td>ang</td>
<td>ni</td>
<td>ang</td>
</tr>
<tr>
<td>dem. sg.</td>
<td>ini</td>
<td>iani</td>
<td>ini</td>
<td>ani</td>
<td>ini</td>
</tr>
<tr>
<td>dem. pl.</td>
<td>inian</td>
<td>ninian</td>
<td>inian</td>
<td>anian</td>
<td>inian</td>
</tr>
<tr>
<td>1 sg.</td>
<td>aco</td>
<td>siacon</td>
<td>aco</td>
<td>agu</td>
<td>siccao</td>
</tr>
<tr>
<td>2 sg.</td>
<td>icao</td>
<td>icuna</td>
<td>icao</td>
<td>gufa</td>
<td>siap</td>
</tr>
<tr>
<td>3 sg.</td>
<td>iaan</td>
<td>ian</td>
<td>iaan</td>
<td>sanito</td>
<td>sia</td>
</tr>
<tr>
<td>1 pl.</td>
<td>kita</td>
<td>si kami</td>
<td>karaygan</td>
<td>guictodoon</td>
<td>sikami</td>
</tr>
<tr>
<td>2 pl.</td>
<td>kamu</td>
<td>si kamu</td>
<td>kamuyan</td>
<td>?</td>
<td>sikiu</td>
</tr>
<tr>
<td>3 pl.</td>
<td>silan</td>
<td>si kandan</td>
<td>guaya</td>
<td>sikandan</td>
<td></td>
</tr>
</tbody>
</table>

In the demonstratives, ani and iani are probably to be analyzed as a-ni and i-a-ni, ni being root particle, and a and i articular particles. The plural seems to be indicated by a suffix an; ninian is perhaps a mistake. In the first person singular k has apparently become g in Bilan, Manobo acon is probably the same as Bisayan akon; Atas siccao and siap (probably a mistake for siak) seem to have been interchanged by the author. In the third singular iaan, ian are probably combinations of the root particle ya and suffix an. The forms Manobo icuna, sikandan and Atas sikiu, sikandan are to be compared with the Bagobo forms; Samal silan, with Magindanao silan. The forms Tagakaolo karaygan, kamuyan, and Bilan gufa, sanito, guictodoon, and guaya are not clear; sanito and guictodoon probably contain the root particle to; kamuyan and guaya, the root particle ya. The remaining forms require no comment.
Al-Hasan ibn Ibrāhīm ibn Zālāk.—By RICHARD GOTTHEIL,
Professor in Columbia University, New York City.

Al-Hasan ibn Ibrāhīm ibn Zālāk—or, with his full name, Abū Muḥammad al-Hasan ibn Ibrāhīm ibn al-Ḥasan ibn 'Alī ibn Khuld ibn Rashīd ibn 'Abd Allāh ibn Sulaimān ibn Zālāk—is considered to be one of the best authorities for the early history of the Fatimids. Of his personal history we seem to know nothing other than that he was descended from an enfranchised slave, affiliated to the tribe al-Laith.¹ His immediate relatives, however, were scholars. His great-grandfather, al-Ḥasan ibn 'Alī, was already known as a learned man. Abū Muḥammad’s son, Abū al-Ḥusain (died 415 A.H.), continued the historical work of his father; and this work was further continued by Abū al-Ḥusain’s son, Ibn Abī Ḥusain.² Al-Siyūṭī mentions a Muḥammad ibn Zālāk who was the teacher of Abū Bakr Muḥammad ibn Ḥamad al-Kinānī³ (born 264 A.H., died 345 A.H.). Whether he was any relative of al-Ḥasan ibn Ibrāhīm, I do not know. The dates preclude the possibility of his having been a son. Our Ibn Zālāk was born in 306 A.H., according to a combination of Ibn Khallikān, based upon a statement of Ibn Zālāk himself.⁴ He died at an advanced age in 387 A.H.⁵

Of the various historical treatises written by Ibn Zālāk, only one seems to have come down to us, his life of Muḥammad ibn Mūsā ibn ‘Abd al-‘Azīz al-Kindī al-Sairafti (died 358 A.H.).⁶ His Sirāt Muḥammad ibn Tughj the Ikshīd is mentioned by

¹ That he was a pupil of al-Kindī would seem to follow from the expression shaikhuna, on fol. 2a of Paris Ms. Arabe 1818, quoted below.
² Becker, Beitrag zu Geschichte Ägyptens unter dem Islam, i, p. 14 gives the details.
³ Ḥusn al-Muḥādara (Cairo 1830) i, p. 141, 2.
⁴ Tr. de Slane, i, p. 388.
⁶ Ms. in the Khedivial library. See the Catalogue of that library vol. v, p. 6. Part of his name is given there as ibn Khalf ibn Rashīd.
Ibn Sa'id and by al-Makrizi; his Sirat Mu'izz li-Din Allah by al-Makrizi alone; his Sirat al-Madhariyyin also by al-Makrizi. His continuation of al-Kindi's Umar al-Misr went down to the year 302 A.D., that of al-Kindi's Kudat Misr to the year 386 A.H. It is probable that a great part of the material which the historian collected in these works has passed over into those of later writers, and his own name been suppressed. His additions to the Kudat Misr seem, however, to have had a longer separate existence. They were used by Ibn Hajar al-'Askalani (773-852 A.H.) for his Raf' al-Islr or biographical lexicon of Egyptian Cadis. In his preface to this work (Ms. Bibl. Nat. Paris, Arabe No. 2149) he gives his sources as follows:

In his account of Ibn Zulak, Ibn Khallikân says that the additions to al-Kindi's Kudat Misr commenced with the life of Bakkar ibn Kutaiba (ca. 246 A.H.); and in the Raf' al-Islr of

1 Seemingly mentioned only in Ibn Sa'id, al-Makrizi and Ms. Brit. Mus. No. 1212.
2 Unfortunately, the Ms. of al-Kindi's Kudat Misr in the Brit. Mus. (No. 1212) contains the continuation by Abû al-Hasan Ahmad ibn 'Abd al-Rahman ibn Burd, and not that of Ibn Zulak.

Huen, i, p. 218; Haji Khalifa, i, p. 188; ii, pp. 102, 141; iv, p. 561.
Ibn Ḥajar, Ibn Zūlak is mentioned several times by name in the life of Bakkar. The same is the case in the life of Muhammad ibn al-Nu‘mān, with whom Ibn Khallikān says the additions ended.

The greatest uncertainty, however, seems to exist in regard to Ibn Zūlak’s supposed historical and topographical works. Of such an historical work as Becker ascribes to him we know little. Ibn Khallikān says simply, “he composed an excellent work” on history; and does not mention any of the minor works cited above. Ḥājī Khalifā seems to think that this was a continuation of the two histories of Ibn Yūnus ‘Abd al-Rahmān ibn Ahmad al-Sādafi. If this is so, and if al-Sādafi carried down his work approximately to a time near his death (347 A.H.), it is possible that the Sirat Muḥammad ibn Tughj and the Sirat Mu‘izz were part and parcel of this Dhaīl. In this case, it would be wrong to count them as individual productions of Ibn Zūlak. In the introduction to his Ḥum al-Muhādara, al-Siyūṭī speaks of Ibn Zūlak’s Ta‘rīkh Miṣr as one of his authorities; but in his chapter on the historians who lived in Egypt, he seems to know only of his Fāḍa‘īl Miṣr and of his additions to the Kūdāt Miṣr of al-Kindī. One of the

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1 Ms. Paris, Arabe 2149, fols. 27b, 29a, etc. Al-Kindī is also mentioned. The passage, however, is not in the London Ms. of the Kūdāt Miṣr. Ibn Ḥajar refers to al-Taḥāwī (Ṭabakāt al-Huffāz xii, 25), as Ibn Khallikān states—probably on the authority of Ibn Zūlak.

2 The only distinct reference to it that I can find is in Ibn Ḥajar’s Raf‘ al-Isr (Ms. Paris 2149), fol. 93b, where he says: وذكر ابن زللك في تاريخه الذي على سنين في حوادث سنة عشرين فتكب مصر في أول المحرّم منها وروى عمر بن العاص جربته وخرجها الخ. According to this testimony, the work was arranged in chronological sequence; yet, in view of the paucity of further testimony we must suppose that it was not in frequent use or that it formed a part of his Khiṭṭa.


5 i, p. 265.
titles of the *Khiṭṭa* is *Tu'rîkh Miṣr wa-Fadâ'îliha*; and al-Siyûti is evidently speaking of one and the same work in both places.¹

The view suggested here is in a small measure supported also by Ibn Sa'îd; though he adds an additional difficulty to the problem. Ibn Sa'îd has taken most of his material dealing with Muḥammad ibn Tughj from Ibn Zulâk’s *Sîra*.² But he expressly states that the *Sîra* was nothing but an addition to the *Umbârâ* *Miṣr* of al-Kindî. Accordingly, the *Sîra* was no independant work, but a *Dhâil*, though not to the history of al-Ṣadaﬁ. There is no evidence I know of which will solve this second question as between al-Kindî and al-Ṣadaﬁ; but there seems little doubt that the *Sîra* was nothing more than an addition to some previous work. Parts of larger works were often designated with the title *Kitâb*. In Ms. Bibl. Nat. Paris, Arabe 1818, Ibn Zulâk himself states that he had written a separate *Kitâb* on the river Nile;³ but in all probability, this is nothing more than the various chapters dealing with that subject that are or were to be found in his *Khiṭṭa*.

This name “Khiṭṭa” is given to his topographical work on Egypt by Ibn Khalîlikân; and, following him, by Abû al-Fidâ'.⁴

Among the Arabic manuscripts in the Bibliothèque Nationale and in the library of Gotha, there are certain works purporting to be by Ibn Zulâk, and entitled either *Kitâb Fadâ'îl Miṣr wa-Akhbârîhu wa-Khawlîniha* or *Tu'rîkh Miṣr wa-Fadâ'îliha*. Ibn Khalîlikân says of the *Khiṭṭa* that Ibn Zulâk treated his subject in this work “fully.” It will be seen from the examination of these manuscripts, that they can in no way represent the *Khiṭṭa*, as the material they contain is practically worthless; and of the subjects treated only a cursory view is given. At most, they give us an extract of the larger work; probably only of a part of it—a panegyric of the country.

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¹ What Ibn Khalîlikân (i, p. 201) means by the “Lesser History” of Ibn Zulâk I do not know.
³ See below. According to Voller (ZDMG., vol. xliii, p. 104) at the end of the Cairo Ms. of Ibn Zulâk’s life of al-Sairaff there are some extracts from the *Fadâ’îl Miṣr*.
⁴ *Annales Moslemici* ii, p. 399. Ḥâji Khalîfa from Ibn Khalîlikân, ii p. 148; he adds that al-Maţrîzi does not mention the work.
It was the habit of Muhammadan historians to open their history of the country with which they were dealing with a description of its Fudā'il or excellencies. Very often, special treatises upon such “excellencies” were composed, which later historians incorporated with their opening chapters. To mention only a few: Fudā'il Bayra by Omar ibn Shabba Abu Zaid al-Numairi (died 262 A.H.); Fudā'il Baghdad by Abu al-'Abbas Ahmad ibn Muhammad al-Sarakhsi (died 286 A.H.); Fudā'il Bait al-Mukaddas by Hamza ibn Ahmad al-Hasan al-Dimishki (died 874 A.H.); Fudā'il al-Ḥaram by Ibn 'Asākir (died 600 A.H.); Fudā'il al-Sha'm by Abu al-Iṣāsan 'Ali ibn Muhammad Rab'a (ca. 435 A.H.); Fudā'il Gharnāta by Muhammad ibn Ibrāhīm al-Gharnāṭi.

The first to write such a treatise on the Fudā'il of Egypt seems to have been Omar ibn Muhammad ibn Yusuf ibn Ya'kūb al-Kindi; though Ibn 'Abd al-Ḥakam prefaced his history of the Conquest of Egypt by the Mohammedans with material of the same kind. Following al-Kindi, and very evidently on similar lines, Ibn Zulak wrote his own account, which he included in his Khatṭa, and later edited in an abridged form. It may be useful to give a short account of the subjects treated by al-Kindi, in order to compare his work with that of Ibn Zulak. After citing verses from the Koran dealing with Egypt, the derivation of the name Miṣr from a supposed son of Noah, and the part played by a Copt in building the Ka'ba at Mecca, he cites the prominent men of pre-Islamic times who were born in Egypt: Alexander the Great, Hermes, Hippocrates, Plato, Aristotle, Ptolemaeus, Theon, Philo, Archimedes. Then came the “Companions,” the legal lights, the holy men, the poets and the caliphs born there. The “excellencies” of Egypt are mentioned, especially in comparison with those of other Islamic lands. Of the eighty cities in Egypt, he mentions the principal ones, e.g., Sa'id, Alexandria and its lighthouse, Fayyum Memphis, 'Ain Shams and Farama; describes the poll-tax (kharāj) in pre-Islamic and Islamic times; the story of the

1 Hājī Khalifa iv, pp. 447 et seq.
2 Information kindly given by Professor Torrey. Al-Kindi’s text has been published, with a Danish translation, by J. Oestrup in Oversigt over det Kongelige Danske Vindenskabernes Selskabs forhandlinger, Copenhagen 1896, No. 4.
Mukaukis, the wonderful things (‘ajā‘ib) to be found there; the Nile; the Mukattam hills; the burial places; the pyramids; the peculiar fish eaten there; the various stuffs manufactured; the Egyptian horse; the mines, field products, animals, trees and the commerce of the country.

In the Catalogue of the Arabic Manuscripts belonging to the Bibliothèque Nationale in Paris, Nos. 1816, 1817 and 1818 are attributed to Ibn Zulak; though the editors seem to have some doubt in regard to Nos. 1816 and 1818. But it is in regard to 1817 that such an ascription is manifestly impossible. On fol. 3a Abū Salt ibn Umayya al-Andalusi is cited, who died in the year 529; and on fol. 2b al-Makrizi. The name of Ibn Zulak is mentioned neither in the body of the book nor in the preface; though the title gives it as the complete work of the author—and in this Brockelmann has naturally followed the copyist’s lead. The first seven folios give us a general account of Egypt, its peculiarities and its wonders:

a. The greatness of Egypt and the many blessings showered upon it by God; traditions of Ka‘b al-Ahbar. fol. 1a.
b. The boundaries of Egypt. fol. 3a.
c. Account of the excellencies of Egypt; the prophets born there; the prominent men that came to Egypt; the “companions” and “followers” buried there; the advantages

1 p. 380.

هكذا ذكر المقرئي في كتابة المسيحي بالخط مقال أبو الحسن المسعودي.

هذا تاريخ مصر وفضلتها لأبي زولاف على العالم.

3 Gesch. der arab. Lit. i, p. 149.

وقال صلب عمّ قسمة الامامة إجزاء جعل الله منها تسعة أجزاء في مصر وجزء واحدا في سائر الأراضي—a quotation that occurs in all Muhammadan histories of Egypt (e. g., Ḥusn, i, p. 10; ii, p. 199), and which reminds one of the Talmudic saying “Ten measures of beauty descended upon the world: Jerusalem took nine, and the rest of the world one” (Kiddushim 49b: Esther Rabbah, i).
(maḥāsin) of Egypt; the wonderful things (‘ajā‘ib) to be found there; the good things to eat, e. g., water-melons, lemons. fol. 4a.

d. Further account of the excellencies of the country—especially of the green stone used in building the Ka‘ba and which came from Egypt. fol. 5a.¹

e. Each month has its own food and perfume.² fol. 6b.
f. The first rulers in Egypt. fol. 7a.

It seems probable that these opening pages have caused the imputation, by some ignorant scribe or some willful deceiver, of this work to Ibn Zūlūk; for exactly the same sort of introduction is to be found in the Paris Mss. 1819 and 1820. These two are ascribed to Ibrāhim ibn Wāṣif Shāh, who lived towards the end of the seventh century A.H. According to Ḥāji Khalīfa,¹ Ibn Wāṣif Shāh wrote a history of Egypt, which he himself shortened into a compendium with the long title: Kitāb Jawāhir al-Buḥr wa-Waḳā‘i‘ al-ʿUmrār wa-‘Ajā‘ib al-Duḥār wa-Akhbār al-Diyār al-Miṣriyya; and not two separate works as Wüstenfeld believed.⁴ The description given by Ḥāji Khalīfa suffices to prove this. The value placed upon this work of Ibn Wāṣif Shāh may be seen from the fact that a number of Mss. of the history have come down to us, and from the use made of it by later writers, e. g., al-Maqrīzī, Abū al-Maḥāsin,¹ al-Ḳalkashandī,⁶ Ibn Iyās,⁷ Sambari.⁸ But the Paris

¹ Cf. al-Khīṭāt, i, p. 28, below.
² Cf. al-Khīṭāt, ibid.
³ ii, pp. 150, 641.
⁴ Geschichtsschreiber, p. 151.
⁵ i, p. 40.
⁶ Subḥ al-ʿAṣḥā, Cairo 1903, i, p. 222; Wüstenfeld, Calçaschandī’s Geographie und Verwaltung von Ägypten, pp. 20, 47.
⁷ Taʾrīkh Miṣr, i, pp. 17, 23, 24.
⁸ In the Ms. of his Chronicle dealing with the history of the Jews in Egypt, Library of the Alliance Israelite Universelle. Wüstenfeld in Orient und Occident, i, p. 326, calls attention to the fact that some passages cited in other works as coming from Ibn Wāṣif Shāh can not be found in the Mss. See, also, the opening chapters of such late works as Muḥammad ibn ‘Abd al-Muṭṭaṣif’s Kitāb akhbār al-nuṣai fi man taṣarrufa fi Miṣr, Cairo 1311 A.H. and ʿAbdallāh ibn Ḥijāzī al-Shaḵwī’s Tūḥfat al-Nāṣirīn, etc., on the margin of the preceding (cf. Brockelmann, Gesch. ii, p. 296, 480).
Mss. 1819 and 1820 can hardly contain this work; not simply because Ibn Wāṣīf Shāh is mentioned in the third person—a point made by the compilers of the Catalogue. This was no uncommon procedure with Arabic authors. There are more cogent reasons. The Mss. themselves carry the history of Egypt down to the time of the Turkish Conquest in 923 A.H.; the same is true of the Gotha Ms., and authorities cited lead us well beyond the middle of the eighth century A.H. In addition to 'Abd al-Hakam, al-Kindī, al-Kudā'ī, al-Musabbiḥī and al-Masʿūdī, there appear al-Dhahabī (died 748 A.H.) and Ibn al-Kathīr (died 774). In fact, al-Dhahabī seems to be the principal authority upon whom the author relies. As Ibn Wāṣīf Shāh is often cited by al-Makrīzī (845 A.H.), he must have lived before his time; in fact, al-Makrīzī uses him largely in connection with the fabulous period of Egyptian history.

But, whether or no Mss. 1819 and 1820 are the work of Ibrāhīm ibn Wāṣīf Shāh, Ms. 1817 agrees with them to a remarkable degree. In fact, Mss. 1817 and 1819 go back to one and the same original manuscript; while 1820 is a copy of an original that had a slightly longer text than the original of 1817 and 1819, particularly in the quotations. It is, therefore, certain that Ms. 1817 can not contain the Fudā'il of Ibn Zūlāk.

If we now turn to a consideration of Mss. 1816 and 1818, we shall see that the first work mentioned by Brockelmann in his list of Ibn Zūlāk's works, Kurze Geschichte Ägyptens bis zum Jahre 49/669 in Ms. 1617, 1 of the Gotha collection, is in all probability the same as our Ms. Paris 1818. Becker has already pointed out that the two commence in the same manner; I

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1 Ms. 1819, fol. 41: Ms. 1820, fol. 55a.
2 Ms. 1820, fol. 30b.
3 Ibid. fols. 28a, 31b, 33a, 53a.
4 Ibid. fols. 30b, 57b (=Ms. 1819, fol. 42b).
5 See A. Guest, in JRAS. 1902, p. 120. More than half of the Abrégé des Merveilles translated by Baron Carra de Vaux (Paris 1898) deals with the legendary history of Egypt. Passages cited from it by Makrīzī are attributed to Ibn Wāṣīf Shāh (p. xxxi), though Carra de Vaux does not believe that he is the author. Of Ibn Wāṣīf Shāh as an historian we know next to nothing (Lit. Central-Blatt, 1898, col. 1188); it has been suggested even that there are two writers of that name (Orient. Lit. Zeit. i. p. 147).
imagine that Gotha 1617, 1 and 1617, 2 are both comprised in
Paris 1818—a fact which of course is not apparent from the scanty
description given in the French catalogue.

It will be useful to give a short description of the contents
of Ms. 1818. Prefixed to the whole work is an introduction
that reads as follows:

كتاب حندرسة فضائل مصر تصفيف الشيخ
الأجل الإمام الحسن ابن ابراهيم بن زوالق رحمه الله تعالى
ورضى عنه. وفيه ذكر الاسكندرية وصفتها غذائها رذكر وقعة
الاسكندر مع القبيرو وغير ذلك. وفيه أيضا المسائل التي
ستل عنها الإمام الشافعي رضي الله عنه واجبتهما. وفيه
الإخوان حديثا الموسومة بالطيب الطيبات اختمت بها الكتاب.
و صلى الله على سيدينا حبيب وعلي آل حبيبته وسلم.

This introduction itself raises some questions. I can not
find in the manuscript any account of al-Shâfi‘î. Nor does it
end with the forty traditions called طيبي الطببات. One is
forced to the conclusion that the introduction is misplaced and
does not belong here. It would be a long introduction for
ten pages; for that which follows is no single work. The first ten
pages form a separate treatise and open with the words:

قال الحسن ابن ابراهيم كانت مصر دار كفر والإسكندرية ومنف
والصعيد وأسفل الأرض إلى الموضع المعروف بالخيرتين والمودين
المعروف بقرص الشع. وكان جميع ذلك في يد هرقل عظيم
الروم يطول المقاطع القبطية وأسامه مينا بن تربت المهدي
وخلقه [؟] صاحب قصر الشع المذكر المعروف بالشيرم. ثم
بعد الله عز وجل رسوله صلما الله عليه وسلم فاقام
بمقا ثلاثية عشر سنة هاجر إلى المدينة فاقام بها عشرا.

1 Evidently a variant for the usual الآغرير (Yaḳūṭ, iii, 894, 14; al-
Makrizī, i, 289, 14; 290, 22) or the الأغرير (Abū al-Mahāsin, i, 8, 3). Kar-
bacek in Mittheil. Papyrus Rainer i, 2: Butler, Arab. Conquest of
Egypt, p. 518.
The sections of this second treatise are as follows:

a. Verses from the Koran dealing with Egypt. fol. 10b.
b. ذكر دعاء الأنبياء لمصر. Benedictions of the prophets on Egypt. fol. 13a.
c. وصف العلماء بـ مصر ودعائتهم لها. What the learned men have to say about the excellencies and blessings of Egypt. fol. 13a.
d. ذكر من ولد بـ مصر من الأنبياء. The prophets born in Egypt. fol. 14b.
e. The wise men in Egypt, e. g., Aristotle, Galen, Ptolemaeus. fol. 15a.
f. ذكر من ملك مصر منذ الطوفان إلى الإسلام. Account of thirty-five rulers that reigned in Egypt from the Flood to the time of Islam. fol. 17b.

g. ذكر ما في مصر من شغور الرباط والمساجد الشريفة وما فيها من شركة الخمسين وسائر الدنيا. Account of the frontier garrisons, mosques and connections with Mecca, Medina, etc. (mere lists). fol. 19b.

h. ذكر صفة مصر وخيرها وذكر الامور لها. Description of Egypt, the good things to be found there and that of which the country is free. Contains, also, a list of the khalijs in Egypt. fol. 21b.

i. ذكر كور مصر وما في كل كورة من أصابع الح. The various cities of Egypt; the cloths, fruit, food and drink peculiar to each one. fol. 22b.

j. A short account of the City of Alexandria and its light-house; letter of 'Amr ibn al-Āṣī in regard to it. fol. 24a (cf., also, fol. 30a).

k. وصف مصر من الاعجاب. On the wonderful things to be seen in Egypt. fol. 27b.

l. ذكر البنيل وأمورها باختصار. A short account of the Nile, in which the author mentions the fact that he had written a special treatise on this subject. fol. 31a, commencing: فاما النيل وعظم شأنه ومنافعه فقد عملت في ذلك كتابا وقد انتشر والذي اذكر هنا في هذا الكتاب المع.

m. On the Nilometer (mentioning the year 247 A.H.). fol. 30b.

n. ذكر صفة مصر وتمييزها. A further general account of Egypt. fol. 33b.


p. ذكر مصر وفضائلها. Another chapter on the excellencies of Egypt. fol. 41a.

q. ذكر ما تختص به مصر دون غيرها من البلدين والمركب والمأكول والمشرب. On the clothes, shoes, food and drink peculiar to Egypt. fol. 42a.
On the flora of Egypt, e.g.,

The register of the Byblos florist. fol. 43a.

s. Egypt is more desirable than Basra and Kufa. fol. 44b.

As far as I can see, there is nothing in these folios, 10b–44b, that would militate against ascribing them to Ibn Zulak. If we can trust the heading, they represent a compendium of his larger history of Egypt; or, at least, of a part of it.

In considering Paris Ms. Arabe 1816, it must be noticed in the first place that though it contains less actual matter than Ms. 1818, it treats of more subjects. Ms. 1818 has 45 folios of 21 lines to the page; i.e., about 3780 lines in all. Ms. 1816 has 49 folios of 15 lines to the page; i.e., about 1470 lines in all—less than half the number of words in Ms. 1818. The differences in the subject matter may be seen from the following table of its contents:

a. Verses on Egypt in the Koran. fol. 1b.

b. ذكر دعاء النبياء لبصر. Benedictions of the prophets on Egypt. fol. 3b.

c. واما دعاء نوح. Benedictions of Noah on Egypt. fol. 4b.

d. ذكر وصف العلماء لبصر ودعاتهم لها. What the learned men have to say about the excellencies and the blessings of Egypt. fol. 5a.

e. ذكر من ولد بصر من النبياء. The prophets born in Egypt. fol. 7a.

f. ذكر من كان بها من المكاء. The wise men who were in Egypt. fol. 7a.

g. وبصر الطلسمات العشرة وبدوى الإسكندرسب صاحب الرزق. And in the sciences cultivated in Egypt. fol. 8b.

h. ذكر من ملك مصر منذ الطوفان. On the rulers of Egypt from the Flood. fol. 9b.

i. ومن فضائلها إن الدلى بني الكعبة رجل من قبط مصر. The builder of the Ka’ba in Mecca was a Copt. fol. 15b.
Account of the frontier garrisons. fol. 15b.

On the good things in Egypt; on the Khalij. fol. 15b.

On the good arrangement of things in Egypt. fol. 18a.

On the plants of Egypt. fol. 20b.

On certain ameliorations introduced by ‘Amr ibn al-‘Asi. fol. 21a.

On the poll-tax of Egypt. fol. 25a.

Further account of the excellencies of Egypt. fol. 30a.

A comparison of Egypt and Bagdad—especially in regard to climate, dress, fruits, etc. fol. 32b.

On the pre-Islamic rulers of Egypt. fol. 37a.

On the praise accorded to Egypt, and especially to the Nile. fol. 39b.

How Noah divided the earth between his sons. fol. 41b.

On the excellencies and the blessings of Egypt, the plenteousness of its provisions, the cheapness of living, etc. (contains also a short poem). fol. 43b.

Egypt the granary of Mecca and Medina. fol. 44b.

On the eighty cities of Egypt. fol. 45a.
x. A poem in Rejaz verse on the governors of Egypt entitled
al-‘Ukād al-durrīyya fi-l-‘umārā al-Miṣrīyya by Jamāl

This last piece shows quite conclusively that the whole of
Ms. 1816 can not be by the hand of Ibn Zulāk. Jamāl al-Dīn
ābū al-Ḥasan ibn ‘Abd al-‘Azīm ibn al-Jazzār lived from 601
A.H. to 669 A.H.; and his versified treatise counted up the
rulers of Egypt from ‘Amr ibn al-‘Āṣī down to al-Malik al-Zāhir
Baibars (died 676 A.H.). A comparison of the table of con-
tents of Ms. 1816 with that of 1818 seems to prove that some
later compiler has taken about one-half of the material found
in the Fāṭa’il of Ibn Zulāk, and has combined this with some
other notices in order to form a new work. Who this compiler
was we do not know.

These descriptions of the early history of Egypt and of the
wonderful things to be seen there continued to be recited by all
those who treated of Egypt. Who was their original compiler
we do not know. As mentioned above, they are in large part
already put down in Ibn ‘Abd al-Ḥakam’s work, and in al-
Mas‘ūdī’s Murūj al-Dhahab. But, later writers are wont to
mention as one of their special authorities our Ibn Zulāk; evi-
dently all the quotations coming from the Fāṭa’il. Yākūt has
the following references:1 Mu‘jam al-Buldān i, 168, 21 on
Udīf; 260, 6 on Alexandria (قَالَ الْحَسَنُ بْنِ ابْرَاهِيمَ) (269,
19 on Usāwan; 272, 17 on Asyūt; 264, 8 on the lighthouse of
Alexandria; 760, 4 on Busīr; ii, 603, 8 on Dimyāt; iii, 74, 23
on the Khalīj Sardūs; 660 on al-Arish (Fāṭa’il mentioned);
762, 23 on ‘Ain Shams; 935, 14 (ٍرَفْطَفَ) on the Fāyūm; iv,
517, 3 on Mariūt; 668, 8 on Memphis; 965, 3 on the Pyramids
(twice). Al-Kazwīnī, Ḫathār al-Bilād, ed. Wüstenfeld ii, 149
(ما ذَكَرَ الْحَسَنُ بْنِ ابْرَاهِيمِ) cites him in connection
with ‘Ain Shams; p. 177 (وَقَالَ أَبِي رَفْطَفَ) on the Pyramids;
182 on Memphis=Yākūt iv, 668, 8; the passage following in

1 Brockelmann, Geschicchte, i, p. 335. The whole poem is given by al-
Siyūṭī, Husn, ii, pp. 41 et seq.
2 Les Prairies d’Or, ii, pp. 338 et seq.
3 Nearly all cited in Heer, Die historischen und geographischen Quellen
in Jägūf’s Geographischem Wörterbuch, Strassburg 1898, p. 42.
Yākūt is given by al-Ḳazwīnī as also coming from Ibn Zūlāk. Abū Sālih, the historian of the churches in Egypt, ed. Evetts, tr. p. 283, mentions him in connection with a wonderful palm-tree in Barhūwa—though the form of the name, al-Naṣr ibn Zūlāk, is evidently a mistake. From some Fudā'il Miṣr, however, Abū Sālih has gleaned a goodly amount of material which has been scattered throughout his work, e.g. on the revenues of Egypt, pp. 15, 80; on certain wonders in Egypt, p. 43; "Certain matters concerning Egypt," p. 57; distinguished men of Egypt, p. 58; fish, trees, stuffs, horses, mules, gold-mines, clay, paper, also on the Nile, pp. 67, 93; on the Sojourners in Egypt, p. 68; on Nebuchadnezzar and Belshazzar, p. 83; sayings of Muhammad in regard to the Copts, p. 97; on Hermes, p. 153; on the old kings at Memphis, p. 199; description of the Fayyūm, p. 202.

Al-Maḳrīzī has, naturally, gathered together a great many traditions regarding the early history of Egypt, its excellencies and its advantages; not only in the opening chapters, but scattered throughout his voluminous work. As is usual, he has drawn very extensively upon all the authors accessible to him, copying many passages word for word, and not always citing the author from whom he had drawn his material. For the Fudā'il, ʿAjāʾib and Maḥāsīn, he seems to have relied largely upon Ibn Wāṣif Shāh; but he mentions a number of other authorities, e.g., Ibn ʿAbd al-Ḥakam, al-Kindī, Masʿūdī, al-Kudāʾi, al-Jāḥiz, etc. Ibn Zūlāk's name does not occur once in this connection, though he mentions other works of our author. Many passages, it is true, read as if they came from Ibn Zūlāk's Fudā'il; but as the other works upon this subject are not accessible, it is difficult to accuse al-Maḳrīzī of citing him anonymously.

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1 See Introduction, p. xvii.
2 Abū al-Faḍl Jaʿfar ibn Thaʿlab al-Adfuwī (883-943 A. H.) in his al-Ṭālīʿ al-Saʿīd, dealing chiefly with the city of Kūs in the Ṣaʿīd and the learned men of that place, mentions Ibn Zūlāk—the quotation coming evidently from his Fudā'il: ʿوَذَكَرَ ابْنُ زُولَکَ أَنَّهُ لِيْسُ ذِوْعُ مِنْ انواع الثمرة بالعرائس الآلَّ وَقَصَبِ عِصِيد قُروض مثله. (Ms. Bibl. Nat. Arabe 2148, fol. 7a.) He is one of the chief authorities of al-Maḳrīzī for Upper Egypt (al-Khilaf 1, 189).
A further question arises in connection with later writers upon Egypt who mention Ibn Zulak. Have they the citations at first or at second hand? In the present state of our knowledge, it is impossible to answer the question.\footnote{Abū al-Maḥāsin cites Ibn Zulak in three places, i, pp. 47, 48, 50; all three evidently from the \textit{Fudā'i}. From al-Kindī and others he has the following dealing with the same subject: passages from the Koran on Egypt, i, p. 28; traditions of Muhammad concerning Egypt, p. 30; the Nile, p. 35; the extent of Egypt, p. 38; its excellencies, p. 39; the ancient history of the country, p. 44; wonderful things and buildings, p. 45; advantages of Egypt, p. 47; comparison between Baghdād and Egypt, p. 48; ancient revenues, p. 49; the "Companions" and the Biblical personages who were there, p. 55; poems laudatory of Egypt, p. 55; the khalifs, p. 59; Kings of Egypt (from Masūdi), p. 51.\footnote{The few citations of Ibn Zulak in al-Siyāṭi's \textit{Iḥsan al-Muḥādara} give me the impression that they are at first hand. He mentions him in his preface as one of his sources, and cites him as an historian of the country (i, 265). He quotes him, i, p. 29 (twice), on the pre-Islamic wise men of Egypt; ii, p. 196, on the Maidān (حکی ایب زولق در کتابم); i, p. 2, on the passages in the Koran which refer to Egypt; p. 4, on the same subject; p. 9, on the traditions in regard to Egypt; p. 13, on the names of certain cities and again upon the poll-tax; p. 26, on Daniel in Egypt (evidently at first hand). Al-Siyāṭi, of course, collected much other material dealing with the subject. It is to be found in Fazil Mās, راهبها ونیلها وندرها وما ورد فيها من الآيات الشرفیة والاحادیث النفیسة, and of the second: \textit{Gotha Ms. Nos. 56, 1539}. A similar Ms. seems to be in Leipzig. See Pertsch, \textit{Arab. Hss. der Herz. Bibl. zu Gotha}, i, p. 108; iii, 159. Brockelmann, \textit{Gesch. der arab. Lit.}, ii, 131, mentions a copy in the Khedivial Library, but omits the others.}}

Ibn Iyās, in his Ta‘rīkh Miṣr, mentions the death of Ibn Zulāk in the year 387 A.H. (i, p. 55); but he does not cite him as an authority, though he opens his history with an account of the Mahāsin and ‘Ajā‘ib of the country (pp. 5–8); adds verses laudatory of it (p. 8) and closes with the pre-Islamic history (pp. 9–19). His chief authorities seem to be Ibn ‘Abd al-Ḥakam, Ibn Wāṣif Shāh, Mas‘ūdī, al-Ḵudā‘i and Sa‘īd al-Ghauthī, though probably all at second or third hand. The knowledge of these ancient authors had died out; their works had either perished or had been carried off by the conqueror; and in truth one of the most modern authorities on the later history of Egypt, ‘Abd al-Rahmān ibn Ḥasan al-Jabarī, complains that al-Makrīzī mentions works which (the author) has never seen. Among such he cites the histories of al-Musabbiḥi, Ibn Zulāk and al-Ḵudā‘i.

1 By Muḥammad ibn Ibrāhīm al-Waṭwāt, Brockelmann, Gesch. ii, p. 55.

2 A similar work treating of the "excellencies" of Egypt must be the al-Fadā‘īl al-bāḥira fī maḥāsin mistr wa-al-Ḳāhirah—of which Ms. are found in Gotha, in the India Office, the British Museum, and in the collection of the Asiatic Society of Bengal (see their Catalogue, Calcutta 1899, p. 56, Ms. No. 48). The description given by Rieu in his Supplement to the Catalogue of the British Museum, p. 354, shows that it covers exactly the ground of the works preceding it. The Ms. give the author’s name as Ibn Zahir; but Wüstenfeld (p. 229) and Brockelmann (Gesch. ii, 193) give Muḥammad Abū Ḥāmid al-Ḵudā‘i al-Shāfī (820–888 A.H.). He was a pupil both of Ibn Ḥajar and of al-Makrīzī.
The English-Rommany Jargon of the American Roads—By J. Dyneley Prince, Professor in Columbia University, New York.

The work of preparing the following paper, which is the result of twenty years of more or less intermittent personal study of the English gypseys on the American roads, chiefly in New Jersey, has been very largely a labor of piety. The late Charles Godfrey Leland, who was the most trustworthy authority on the English gypsy jargon and with whom in his declining years the present writer was most pleasantly associated, expressed the desire that a systematic etymological English-Rommany vocabulary should be prepared, to facilitate the further study of this highly interesting linguistic survival. In Mr. Leland’s own works on this subject¹ there is little attempt to classify according to probable derivation. In the Romano Lavo-til² of the late George Borrow, furthermore, the material given is of small philological value, unless the student has already some knowledge of Rommany. Borrow, for example, did not scruple, in many instances, to change his Rommany to fit his own theories and was in no sense a safe scientific guide. It should be added that his specimens of Rommany (pp. 96ff.) seem frequently to be rather his own composition than the real utterances of gypseys. I need only call attention to the absurd catch-word (p. 108): wehenjuggalsionomengreskeytenskeytud-logueri, which can hardly be said to have emanated from a gypsy brain. Borrow seems to have meant by this monstrosity, although he does not translate it: “a milkmaid (tullogueri) of the fox-hunters’ country.” Furthermore, Borrow’s ignorance of the old gypsy gen. pl. ending -engro should be noted, which he regarded (p. 31) as a separate word meaning


² Romano Lavo-til by George Borrow (reprint), Putnam, New York, 1905.
"fellow." He also showed his unacquaintance with the inflections of the older dialect, all of which are excellently well preserved in the Continental Rommany, by supposing that the gen. sing. ending -eskro was a suffix of Wallachian origin (p. 31).

The English Rommany, as it is spoken to-day by the vast majority of the English gypsies on the American roads, is, from the grammatical point of view, little more than a broken jargon based grammatically on English. Thus, only the following remnants of the older inflection are still in general use: the gen. sing. -eskro, now only in adjectives, as fükëskro ‘vulgar’ from füki ‘people’; the gen pl. -engro, used to-day only in derivatives, as yagëngro ‘a gun,’ from yag ‘fire.’ In C., derivative nouns of this character are formed by means of the gen. sing., as maćeškro ‘fisherman,’ from maço ‘fish.’

The plural is formed usually by Eng. -s, as ribabens ‘clothes,’ but occasionally by -yor as bål-yor ‘hairs.’ This -yor is probably a relic of the C. nom. pl. fem. -a, and -a also applied to abstract derivatives, as C. tatyapa, pl. of tatypen ‘heat, fever.’

The abstract -ben is still in very common use in the Eng. Rom., as tättohen ‘heat,’ from tätto ‘hot.’

The numerals are ordinarily only used up to ten, although there are old people who can count to one hundred in Rommany.

The adjectival and nominal endings -o and -i for masc. and fem. respectively are still used, although the fem. -i is beginning to give way to the masc. -o. The comparative degree is still expressed by the ending -deer, as kushto-deer ‘better’ and the superlative by -dëro, as tättoedere ‘hottest,’ although these endings are frequently replaced by the Eng. -er, -est.


2 I have followed generally the system of pronunciation given by Leland, as this is in use to-day among such few Rommany as write their idiom: viz., as o in spot; à as a in father; ài, au and ay as in English; è as e in met; ee as in English; ï as i in pin; i as i in machine; o as au in taught; ò as o in more; ô as o in spot; u as oo in foot; ù as oo in foot; y as the vowel y in English. The consonants are to be pronounced as in English. In the Slavic and Continental words herein cited the Bohemian system of orthography is followed.
With the exceptions of a very few old people who occasionally use the 1 p. -āva, 2 p. -es, 3 p. -ēla, pl. -ān, -ēn, all verb-forms are lost and the verbal roots are inflected like English. Thus, instead of ānādva 'I know,' we find always māndi ānus, i.e., the accus. pronoun with the Eng. 3 p. The writer has heard a very old woman say yov ānālā 'he knows,' but these older forms are incomprehensible to the average Rom.

The pronouns are māndi 'I, me'; tūte 'thou, you'; yov 'he' (only nom.); yoi 'she' (only nom.); liest 'he' and 'him'; lāki, latti 'she, her'; mēndē 'we' and 'us'; mēndūce (dual) 'we two'; lēndē 'they' and 'them.' I have never heard tāmēndē 'you' (pl.), but have no doubt that it still may be remembered.

On the other hand, in spite of this grammatical poverty, the vocabulary is surprisingly rich and well preserves the Hindu original, as may be seen from a study of the following glossary of 672 root-words. Of these, 148 are pure Rommany derivatives, compounds and synonyms, 56 are of uncertain derivation and 468 seem to show a reasonably sure origin. Out of these 468, 310 seem to be of pure Hindu origin, 33 are Persian, 32 Mod. Greek, 34 are Slavonic, 3 are Magyar, 11 are English, 6 are apparently German, 8 are Osmanli-Turkish, 4 Italian, one seems to be French, 21 are hybrids (Eng. and Romm.), 4 are Yiddish, and one is probably Wallachian. The marvellous tenacity of the original Hindu and Persian elements is thus admirably exemplified. Although the Indian origin of Rommany has of course been well known since the days of Pott, it is still a source of surprise to the student to find in this perhaps most broken of all the Rommany idioms save one so extensive a survival of the basic material. The presence of Greek and Slavonic elements is, of course, most natural, if we remember


2 The sole exception is the Skandinavian Rommany jargon. See Ellert Sundt, Beretning om Fante-eller Landstrygerfolket, Christiania, 1842.

3 In the following glossary my comparison of Rommany words with modern Hindu forms simply indicates a connection in root, and does not in any case imply my belief that Rommany is derived from any modern Hindu idiom.
the wanderings of these people across Europe. It should be noted that the Slavonic equivalents herein cited have been taken chiefly from the Slovák dialect, with which the writer is somewhat acquainted. The few Magyar, German, Italian and other non-English loanwords were, of course, brought into England from the Continent, but the very slight Yiddish admixture was most probably picked up in and about London. It is also strange and a striking testimony to the conservative character of the English gypseys that they have resolutely rejected slang of every character (thieves' cant, tramps' jargon, etc.). These people have often expressed to me the feeling that their speech is a language and their one common heritage. In fact, nothing can irritate a gypsy more than to accuse him of using cant, which indeed has borrowed from Rommany, as stir, from stari-ben 'prison,' but never conversely.

The following table of phonetic changes which have occurred in this Eng.-Romm. dialect will be of interest to the philologist:

**Rommany**

\[ ch= \text{Hin. } z; \text{ chong 'knee' } = \text{zānū.} \]
\[ ch= \text{Hin. } j; \text{ chōvihānee 'witch' } = \text{jādūgārnū.} \]
\[ ch= \text{Hin. } th; \text{ chunger 'spit' } = \text{thūk 'spittle.'} \]
\[ ch= \text{Mag. } d; \text{ chāmba 'hill' } = \text{domb.} \]
\[ k= \text{Hin. } gh; \text{ kair 'house' } = \text{ghar.} \]
\[ r= \text{Hin. } z (\text{rhotasic}); \text{ rūt 'blood' } = \text{zūt.} \]
\[ sh= \text{Hin. } ch; \text{ shālee 'rice' } = \text{chāwul.} \]
\[ sh= \text{Hin. } s; \text{ shūn 'hear' } = \text{sun-na.} \]
\[ sh= \text{Hin. } j; \text{ shānaloo 'angry' } = \text{julānā 'kindle, make jealous.'} \]
\[ s= \text{Hin. } d; \text{ sūv 'swim' } = \text{dūbānū 'be immersed.'} \]

Finally, the Hindu j in rūjā 'king' has been palatalized in the Rom. ry, rya 'gentleman, lord.'

The American Rommanys speak very rapidly in a pleasant monotone, slurring over the English words and accentuating their own material as much as possible. They preserve, in fact, a sort of philological freemasonry, always testing the stranger with a few fixed shibboleths, such as kan 'sun,' chūree 'knife' and, most especially with that puzzling compound, höchevechee = the Eng. hedgehog. Only last autumn an aged Rommany man said to me after a long conversation, and this must suffice as a specimen of the dialect:
Rya, muk māndī pācher tāte chūmanis. If you can pēn māndī sosse a hōchevīchee, I'll pen tāte's a tācho Rōm=Sir, let me ask you something. If you can tell me what a hōchevīchee is, I'll say that you are a genuine Rommany.'

The language is still very much alive, as the small children may be heard prattling in it constantly, and it will probably continue to live in its present form as long as the law permits these wanderers to camp on the highways.

The following glossary, containing, it is hoped, practically all the words in common use, is given in order to facilitate the labors of some better qualified scholar than myself in rescuing from the memories of the older gypseys more valuable material for the comparative study of this Aryan Oriental dialect, which has refused to die even among the American fields and hedges.

**Rommany Glossary.**

*Adōsta* ‘enough’; see *dosta*=Sl. *dost* ‘enough.’

*Adōi* ‘there’; prob. same element as Zend *avadha* ‘here.’

Note that C. *adaj=* here.’

*Adōvo* ‘that’; same element as in *adōi*. See *dovo*.

*Adrēe* ‘in, within, into.’ See *dree=C. andro* ‘in’=H. *andar* ‘in, within.’

*Aglāl* ‘before’=C. *anglal*. Contains same element as H. *āge*; *agat* ‘before.’

*Ajāw* ‘again, already’=Eng. *a-jaw* ‘go’; lit. ‘agoing’=‘again’; probably paronomasia (?).

*Akōnəyo* ‘alone’=H. *akellā* (?)=‘solitary.’

*Akōvo* ‘this.’ See *kovo*. *This=C. *gaba* and *akkova* ‘here’;

*akkova* ‘there, that one.’ These words are prob. II. Cf. Pott, 257.

*Aky* ‘here’= *akovo* (akovo); *akoi*; *akāti* (?).

*Alδy* ‘down, below’=H. *tale*. Cf. *talley*.

*Angūstro* ‘finger-ring’=P. *angushtari*. See *gushto* ‘finger’ and *wongashee* ‘ring.’

*Ānkāir* ‘begin’; prob. Germ. analogy *ān+kaier=anfangen* ‘begin.’

*Ānpāuli* ‘back’ (adv.). Same element as *ān+pauli*, q. v.

*Āpōpli* ‘back’ (adv.). Seems to contain a reduplication of Gk. *pōle=pauli*, q. v.

*Aprēe* ‘upon, on’=C. *upré, pro=H. *upar*.
Archich ‘lead’ (metal). Uncertain derivation.
Atrush ‘afraid.’ See trash. This = Eng. a→trash.
Atit ‘across, against.’ Der. uncertain.
Avo ‘come’ (only imperative). See hav. This = C. avav ‘I come’ = H. ā-nā.
Avali ‘yes.’ Longer form of ávo. The ending -ali appears also in bābali, q. v.
Ávo ‘yes’ = C. wu = H. hān, huñ ‘yes.’
Arrée ‘out, out of’ = C. arrī. Prob. H. See JAOS. vii. 207 = Skr. bahir by metathesis (?)
Bābali ‘grandmother.’ Fem. of bābās, q. v.
Bābās ‘grandfather’ from Gk. πάππος ‘grandfather.’
Bāl ‘hair’; pl. bālyor = H. bāl.
Bālloras ‘bacon, lard, pork’; baulo ‘pig’ + mas ‘meat.’
Bānder ‘divide, share’; conn. with H. band ‘contrive, appor-
tion’ (?)
Bar ‘garden, hedge.’ See bor. Perhaps = P. bagh ‘garden’ (?)
   Note also H. bāṛā ‘enclosure, arena’; more probable.
Bar ‘stone’ = P. bar ‘burden’ (?)
Barrin ‘except’ = Eng. ‘barring.’
Bārvelo ‘rich’; JAOS. vii. 211 = Skr. prabala ‘powerful’ (?)
   Note also H. bāl ‘powerful.’
Bārya ‘sea.’ I think that this is from H. (Ar.) bahīra ‘lake.’
   But see dārya, of which this bārya may be an accidental perversion.
   also Pott, 420 ff.
Bavol ‘air, wind’; must = H. pauḍān.
Bavris ‘snail.’ Der. uncertain,
Beebe ‘aunt; any elderly female relative’ = P. bībī ‘lady.’
Beeno ‘born’ (adj.) = H. biānā ‘be delivered of a child.’ Contains same root as Germ. and Celtic be, bī ‘to be.’
Beero ‘ship, boat’ = H. bĕrā ‘raft.’
Bender ‘across’; prob. Eng. slang from ‘bend.’
Bing ‘devil’; must be conn. with same root as Sl. boh, Russ. boy ‘deity.’
Bëngliskero ‘devilish.’ Adj. from beng.
Bingo-tem ‘Hell’ = ‘devil country’; see tem.
Béringero ‘sailor’; lit. ‘ship-man’; see beero.
Bish ‘sit, lie’ = H. baith-nā ‘to sit.’
Bëšh 'year' = H. baras. Old form hersh.
Bicher 'send' = H. bhej-nä.
Bikkus 'bullet.' Uncertain der. See Pott, 397. Gk. βόξια (?)
Bikkin 'sell' = H. bech-nä.
Bish 'twenty' (rare) = H. bis.
Bisser 'forget, lose' = C. pobistérvav with Sl. particle po- = H.
    bisá-r-nä 'forget.'
Bitti 'little, a little' = Eng. 'bit.' Also as adj. bitto.
Bobbi 'breast-nipple, pea, bean' = Sl. bab (Bulg. bop 'bean').
    The Eng. slang bobby 'breast' comes from this word.
Bok 'luck'; cf. kushto bok 'good luck' = T. (Ar.) bakh 'luck.'
Bókkalo 'hungry' = H. bhúkh 'hunger.' Note Old Rommany
    bok 'hunger'; also C. bok 'hunger.'
Bókr 'goat, sheep' = H. bakrú 'goat.'
Bolléngro 'Christian.' I believe this means 'one who has hair,'
    as distinct from the shaven Mohammedan = Yebollengro,
    q. v. See bił 'hair.'
Bómbaros 'monkey' = H. banhar 'monkey' + R. ending -os (us).
Bonger 'bend, bow,' from bongo.
Bongo 'crooked, left hand' = C. bungo = H. bünkà 'crooked, foppish.'
Bongo sin 'hook, crooked needle.' See siv.
Bonnek 'handful'; also Eng. cant = P. burung, barang 'gain,
    hoard' (JAOS. vii. 190).
Bor 'hedge.' See bur.
Boro 'big, large' = H. barä.
Bësh 'violin' = P. bëzî-dan 'play' (thus Borrow).
Bëshno 'cock.' JAOS. vii. 173 = Skr. pukshin 'fowl, bird.'
Bóshoméngro 'violin player.' See bosh.
Bështo 'saddle'; clearly conn. with bosh 'sit.' Syn. of pisali,
    q. v.
Bov 'oven.' I feel compelled to connect this with Arm. bov 'stove.'
Bugnee 'small-pox,' conn. with H. bëghî 'bubo' (Pott, 397).
Buk 'belly'; conn. with bok 'hunger' (?).
Bull 'arse' = H. bił 'hole, burrow.'
Buller 'boil'; through French bonilir and Eng. 'boil,' probably
    influencing also a more primitive word based on H.
    uðal-nä 'boil.'
Bàng 'cork,' from Eng. hung, itself of uncertain derivation.
Bāngarōr ‘cork-maker,’ from bung.
Buino ‘proud, haughty.’ Uncertain derivation.
Burk ‘breast’=C. beč. Der. uncertain.
Būt, būti ‘much, very; work’=H. bahut ‘much.’
Būti ‘to work,’ from būt.
Būtiéngro ‘a servant’=‘worker.’
By ‘sleeve’=C. baj. Perhaps=Mahratta bahi ‘sleeve’ (see Pott, 425).
Chācho ‘true, faithful’=H. sach ‘true, real.’ See the more usual form tācho.
Chakker ‘cover’=C. čakkervava, conn. with P. char ‘umbrella, parasol.’
Chal ‘fellow,’ as in Rommanchāl ‘Gypsy fellow, gypsy.’
   Same word as chāvo with formative l. See chy.
Cham ‘check,’ conn. with chāmer ‘to kiss.’
Cham ‘leather’ must=H. chamt ‘hide, skin.’
Chamyor ‘cherries,’ from idea of the fat cheek (?).
Char ‘ashes.’ Pott (212) says=H. chhar ‘ashes.’
Char ‘grass’ must=H. root char in charā-nā ‘graze, pasture’;
   H. chāra ‘fodder.’
Chāno ‘boy.’ Der. uncertain. See Pott, 183. Eng. slang ‘shaver.’
Cherus ‘time,’ I derive from Sl. čas ‘time.’ Probably not Gk. καιρὸς, although this may have influenced it.
Chib ‘tongue, language.’ See jib.
Chichi ‘nothing’=C. ĺī. Prob. conn. with H. nā-chiz ‘no thing.’ I believe it is the same element seen in P. chī ‘what.’
Chik ‘dirt, filth, sand.’ JAOS. vii. 200; Skr. chikila ‘mud, mire.’
Chiklo ‘dirty’; from chik.
Chikno ‘little, young’; prob. same root as H. chhotā ‘little.’
   See the more usual form tikno.
Chin ‘cut’; sometimes used for ‘write.’ JAOS. vii. 176; Skr.
   chhiḍ ‘cut.’
Chīnamēskro ‘chisel’=‘a cutter.’
Chingarē ‘fuss, row’=Eng. slang shindy; from chinger ‘tear.’
   Or it may be conn. with H. chingārī ‘spark’ (see just below).
Chingar 'spark' = H. chìngārī.
Chiner 'to tear, rip.' Cf. JAOS. vii. 208: Skr. chinker 'pierce.'
Chiriklo 'bird' = H. chiriyā.
Chiv 'put, set, place'; use. In C. chiwāv 'throw.' Der. uncertain.
Chō 'barley.' = H. jau 'barley.' See jōb 'oats.'
Chok 'cabbage.' See shok. This = H. sāg 'vegetables.'
Chokkas 'shoes; horseshoes,' prob. from T. chariq 'sandal.'
Chollo-tem 'universe.' Der. uncertain.
Chōn 'moon' = H. chānd 'moon.' See shūl.
Chong 'knee' = Skr. gāṅghā 'leg'; H. zānā 'knee.'
Chonger 'kneel.'
Chōr 'steal' = H. chori 'theft.'
Chōramēngro 'thief, from chōr.'
Chōro 'poor.' The mod. H. (P.) is be-chara; lit. 'without help' = chara. There may be a connection. Uncertain.
Chovihānēe 'witch.' I seem to see in this a variant of H. jādāgārni 'witch'; one who makes jādā 'magic.'
Chukko 'coat'; Eng. 'jacket.'
Chuknee 'whip'; according to Leland, the original of the Eng. 'jockey' (?). Note C. čūnī 'whip.' = H. čābuk.
Chūmanīs 'anything, something'; must be conn. with H. and P. chand 'some, any.'
Chūnando 'anyone, some one.' From chūmanis.
Chūmba 'hill' can only be a variant of Mag. domb 'hill.'
Chūmer 'kiss'; a kiss = H. chumma 'a kiss'; vb. chum-nā.
See cham 'cheek.'
Chunger 'spit' (noun and verb) = H. thūk 'spittle' (?).
Churee 'knife' = H. chhūrī 'knife.'
Churro 'round' (in form) for C. chullo = tullo, q. v.
Chuvenna 'poor,' conn. with chōro, q. v.
Chy 'young girl'; chavi, fem. of chavo. See s. v. chal and chavo.
Dādās 'father'; also dud = C. dad. In many Indo-Eur. languages; cf. Welsh tad, Eng. dadddy, etc.
Dant 'tooth' = C. dand = H. dant. Also = 'to bite.'
Dantimēngro 'pepper' = that which bites, from dant.
Dārya 'sea, river' = P. dārya. See bārya and doeyav.
Dēl 'give'; 3 p. sing. from dava 'I give' = H. de-na 'to give.'

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Dđleleméskro ‘a kicking horse’; lit. ‘a giver,’ from del.
Děšh ‘ten’=H. das.
Dik ‘look, see’=H. dekh-nä.
Dikkaben ‘sight, vision, view,’ from dik.
Dikkaméngro ‘mirror’; lit. ‘the secr.’
Diklo ‘flag, rag, dishclout.’ Same element as in pong-dishler.
From Germ. Tüchel (thus Pott, 305).
Dımmelo ‘fool, foolish’=C. dyilino, from T. deli ‘fool.’
Divius ‘mad, crazy.’ Contains the root div ‘crazy’=P. divana
‘mad’; seen also in Sl. divňy ‘wonderful.’ It may have
come through the Slavic.
Divrus ‘dey.’ Cf. H. din ‘day.’
Dokayv ‘sea, river’; variant of důrya.
Dordi (excl.) ‘O my!’ Der. uncertain.
Dori ‘rope’=H. dőri ‘cord, rope.’
Dosta ‘enough’=Sl. dost.
Dovo (pron.) ‘that’; same element as in adói.
Drab ‘poison, drug.’ Der. uncertain.
Drabéngro ‘physician, chemist.’
Drabéngro-kair ‘drug-store,’ with kair ‘house.’
Dree tůb ‘surprised’; lit. ‘in amazement’ (see tüb).
Drom ‘way, road’=Gk. δρόμος.
Droméngro ‘wayfarer.’
Drován ‘loud, violent.’ Der. uncertain.
Drow ‘poison, drug’; variant of drab.
Důbeno ‘doubtful’=Eng. ‘dubious’ with ending -no
Důd ‘light, moon, lamp, month’; Pott, 310=Skrl. dyuti.
Důdikaben ‘lightning’; used also slangily for ‘deceive.’
From důd.
Důdum ‘gourd, womb’; must be from Armen. tůtám ‘gourd.’
Note JAOS. vii. 186=Skr. duđruma ‘green onion’ (?)
Dīnee ‘two’=P. du; H. do.
Duk ‘pain; spirit.’ Apparently two originals H. dükh ‘pain’
and Sl. důch ‘breath; spirit.’ See dușh.
Dukker ‘hurt,’ from duk ‘pain’ and ‘tell fortunes’ from duk
‘spirit.’
Dukkerben ‘a fortune,’ as told by the Rommany in pěn a dúk-
kkerben ‘tell a fortune.’
Důmo ‘back’ (noun) H. and P. dum ‘tail.’
Důro ‘far, distant’=H. důr.
Dush 'trouble, pain.' Confused with duk 'pain.' Sl. duša = 'spirit, soul.'

Düvel 'God' = H. dev 'god, demon.'

Dy 'mother' = H. dāi 'wet-nurse.'

Ennea 'nine' = Gk. ἕννεα.

Fāshono 'false' = Eng. 'false' and 'fashionable' derogatorily.

Feledeer 'better'; same element as in H. bih-tur 'better' (tur = -deer).

Flick 'clever' = Germ. flink.

Fōki 'people' = Eng. folk.

Fordel 'forgive' = Eng. 'for' + del 'give,' q. v.

Foro 'city' = H. pūr 'city,' seen in many H. city-names, such as Singapore, etc. See Jour. Gypsy Lore Soc. i, 165 = Greek φῶς.

Foros 'city' = foro with s-ending.

Fūl 'dung, shit,' conn. with H. phūl 'menses,' probably from phaλūnā 'swell.'

Gad 'shirt, chemise' = C. gad. Perhaps = II. yudar 'rag.'

Gāv 'town, village' = II. gaṇa.

Gāv-mush 'policeman, constable.' Gav 'town' + mush 'man.'

Gauver 'hide, conceal'; prob. from same stem as II. gupt 'secretly.'

Geero 'person, fellow.' Can this be from Heb.-Yiddish יושב 'stranger'?

Gillee 'sing; a song.' Same root as in H. gā-nū 'sing.' In C. gilavav.

Giv 'wheat, grain, corn.' JAOS. vii. 187, connects this with Skr. śitā 'grain.' Note Sl. žito 'grain.' I do not believe it has to do with yīv 'snow' (against Pott, 67).

Godlee 'thunder, noise'; prob. = II. gālā (throat), as in gālā pharnā 'scream.' See guuldo 'story.'

Gorjo 'Gentile, one not a Rommany.' I believe this = gavjo 'a villager,' as distinct from those in the tents, (?).

Görjiko 'Gentile' (adj.).

Grānya 'barn' = Eng. 'granary.'

Grasnee 'mare'; fem. of gry 'horse,' which also appears as grast in C.

Grāvnee 'cow'; fem. of gūrū 'bull.' Cf. II. gač 'cow'; Skr. go, gū.

Gry 'horse' = II. ghorrū. In C. the form is also gras, grast, of which grasnee 'mare' is fem. The Eng. jargon has pre-
served the H. form better in gry. Cf., however, Arm.
graat ‘beast of burden.’
Gudlo ‘story, noise’ = godlee.
Gudlo ‘sweet; honey.’ A different root from gudlo ‘noise,’
but uncertain as to derivation.
Gulno pesham ‘bee; honey-comb.’ See pesham.
Güger ‘growl’ = H. gurrâ-nä. Same stem as guar ‘bellow.’
Gullo ‘throat’ = H. galû and Eng. gullet.
Gunno ‘bag; gunny’ = H. gon ‘sack.’ Is Eng. ‘gunny’ from
the Rommany?
Gûr ‘bellow, roar’; see güger.
Gûrû ‘bull.’ See grûnsee. The original Rommany word was
grûw (see Pott, 141).
Gushtu ‘finger’ = P. angusht ‘finger.’ See angusto.
Gûzvero ‘wise, prudent’ = C. godäver. This must come from
C. godi ‘brain.’ Cf. H. gûdâ ‘marrow, brain.’
Habben ‘food, meal, dinner,’ from hane ‘to eat,’ q. v.
Hâch ‘wait, stop; pitch a tent’ in hach a tan. In C. ac.
JAOS. vii. 211 connects Skr. ach ‘go towards, worship’ (?)
Hadder ‘lift’ = C. hadâv ‘ruffle, stand on end’ (see Pott, 173).
Hangar ‘coal’ = Skr. angâra; II. angârâ ‘embers, firebrand.’
See wungur.
Harko ‘copper’ = Gk. χάλκωμα.
Harkoben ‘copper.’
Hane ‘eat’ = H. khâ-nä.
Heb ‘heaven’; prob. a combination of Eng. ‘heaven’ + Sl. nebe
(Boh.) ‘heaven.’
Heezis ‘clothes,’ from Sl. (Boh.) hazuka ‘cowl’ (?)
Héfta ‘seven’ = Gk. ἕπτα.
Hêrree ‘leg, wheel of a wagon’ = C. cheroj ‘leg.’ Doubtful
derivation.
Hêr ‘hole, window’ = H. chhed ‘hole’; also H. chhek. The
C. form is chev.
Hîcher ‘drag, draw’ = Eng. hitch.
Höcher ‘burn.’ Der. uncertain.
Höcherwichee = the Eng. hedgehog. Is there any connection
with Eng. ‘hedge?’
Hökker ‘jump’ = C. chuk’av = H. kûd-nä.
Hora ‘hour, watch, clock’ = Ital. ora.
Hôrkiben ‘copper’; variant of harko.
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Hocealo 'stocking'; prob. from Eng. 'hose,' with Rommany ending.
Hufier 'cap'; prob. from Low Germ. Hube = Haube 'cap.'
Huker 'lie, boast, deceive.' Paspati (JAOS. vii. 196) cfs. Skr. kuhana 'hypocrisy.'
Hükereben 'a lie.'
Hannalo 'angry'; a variant of shănalo, q. v.
Hannaloven 'anger.'
Hushtee 'scamper'; cf. the excl. spsht, common in the East to drive away animals.
Husker 'help' (?).
Jänwear 'animal' = H. jänwear.
Jæc 'go, walk' = H. jā-nā.
Jällico 'apron'; clearly = Skr. jālikā 'net, chain-armor, veil, woollen cloth.' Note H. jāli 'net-work, lattice, bag.'
Jëb 'tongue, language' (see chëb) = H. jëb 'tongue.'
Jën 'know, understand' = H. jën-nä.
Jënnabën 'knowledge.'
Jùv 'live, dwell, exist' = H. jëv-nä.
Jëvabën 'life.'
Jöb 'oats.' See chō and jöv.
Jonger 'wake, awake' = H. jagä-nä.
Jöv 'oats' = H. jau 'oats, barley.'
Jù 'louse' = H. jàn.
Jükkal 'dog' = T. çukál 'jackal.'
Jëvà 'woman' = H. jorá 'wife.' No conn. with jà 'louse,' though often jokingly compared.
Jëvalo 'lousy'; see jë.
Kàir 'house' = H. ghar 'house.'
Kàir 'make, do' = kar-nà; P. kardon.
Kukkaráchee 'raven, magpie' = Gr. κόρακας.
Kuliko 'yesterday' = H. kàl 'yesterday' or 'to-morrow,' according to the verb tense.
Kämlo 'dear, beloved,' from kàum 'love,' q. v.
Kàmmobën 'love' (abstract) and used as an adjective 'accustomed to.'
Kan 'sun'; often used as a test-word for strangers = C. kam (JAOS. vii. 219, cfs. Skr. kàn 'shine' = Lat. candeo).
Kan 'ear' = H. kàn.
Kanéngrò 'rabbit.' Is it Germ. Kuninchen 'rabbit,' or from kan 'ear,' referring to the long ears of the rabbit?
Kāni 'hen; chicken' = kachni in Pott, 91–2 = Skr. kāhala 'cock-
bird.' I am not inclined to connect it with H. hans 'goose';
Skr. hansa, as the k seems to be inherent.
Kāto 'thorn' = H. khar.
Kas 'hay' = H. ghas 'straw, hay.'
Kus-stoggus 'hay-stack'; kas + stoggus = Eng. 'stack' + us.
Kāishi 'scissors' = H. gaiūchi.
Kātömēngro 'scissor-grinder.'
Kaulo 'black; lazy' = H. kālā.
Kaulo pani 'the ocean; the black water.' Also a mod. H.
expression.
Kaum 'love, like' = P. kam 'desire.'
Kaun 'stink'; H. gandh 'perfume, scent, odor.'
Kaulo 'stinking.'
Kāvi 'kettle.' See kekāvi.
Kēk 'no, none.' JAOS. vii. 203; kayek + jeno. This is ka+
yek, ka being negative; cf. H. koi 'anybody, anyone.'
Kekāvi 'kettle' = Gk. καβάς 'kettle.' See kavi.
Kēkker 'no, never.' See kek.
Kēkkūme 'no more' = kek + kūme 'more.'
Kīl 'play any instrument' and 'sport' = H. kel 'coition; amor-
ous sport.'
Kēn 'count' = H. gin-nā.
Kēnnd 'now.' This is Old Rommany 'when' = C. kana.
Seems to contain the same pronominal element as in H.
kañā 'where.'
Kēnnd-sig 'immediately' = 'now quick.' See sig.
Kērrī 'home' (adv.) from kair 'house.' Perhaps corruption
of old. Dat. kēresske 'to the house.'
Kerro 'made, ready'; for kairdo 'made' from kair 'make.'
Kessur (vb.) 'care.' Der. uncertain.
Kēsur 'smoke' (noun). Der. uncertain.
Kētovos 'brush'; perhaps from Polish kutas 'broom.' Or is it
Mag. kēfe 'brush'?
Kēttenus 'together' = C. jeketane. Contains yek 'one' + another
dubious element (JAOS. vii. 2, 21).
Kēchema 'saloon; tavern' = Sl. kremna (in Mag. korcma, loan-
word from Sl.).
Kil 'butter, cheese' = C.'ksil, also til. Der. doubtful.
Kil-mälliko 'cheese-cake.' See mälliko.
Kil-tūd 'butter-milk.' See tūd 'milk.'
K'tin 'buy;' conn. with ken 'count.'
K'indo 'tired.' Is it conn. with H. kīna 'malice; vexation'
Pott gives the form kingervava 'I am tired.'
K'psi 'willow'; usually kipsi-ruk. Is this 'Gypsy tree'
(=ruk) (?). They make baskets from the willow.
K'ssi 'purse' = T. keyse 'sack, bag'; P. kīsa.
K'stor 'ride' = C. gisav. Prob. conn. with Boh. klusati 'trot.'
K'stin 'key; lock' = Gk. κλειδὶ(ov); P. kulid; T. kilij 'key, lock.' Probably T.
K'okalos 'bone' = Gk. κόκαλος.
K'oko 'uncle' = P. kākā 'elder brother.' Cf. H. kākā 'paternal uncle'; fem. kākī.
Kommer 'care for'; prob. = Germ. Kummer. C. Scotch kim-
mer.
Kongii 'comb' = H. kalgi.
K'ongree 'church' a mixture of Gk. κυρία and Eng. 'congre-
gation.'
K'or 'eyebrow.' Is this conn. with kor 'nut,' or from H. kor
'blind?'
K'or 'nut' = C. akor = H. akhrot 'walnut.' Kor also means
membrum virile.
K'oränna 'crown;' as in pāsh-koränna 'half a crown.' Germ.
Krone, and also Eng. 'crown.'
K'ordo 'blind' = H. (P.) kor 'blind.'
K'sher 'to lick;' really 'cleanse.' Prob. from Yiddish kōsher
'ritually pure' (food) = ṭsḥ.
K'sht 'stick;' JAOS. vīi. 228 = Skr. kāṣṭa 'wood.'
Kováskaruk 'willow, laurel' = Kovása + ruk 'tree.' Der.
uncertain.
K'ovelo 'this.' See akóvo.
K'ovo 'this.' See akóvo.
K'ova 'thing.' Der. uncertain.
K'rāfne 'button, nail' = Gk. καρφίον 'nail.'
K'rāliss 'king' = Sl. král 'king.'
K'rālissa 'queen;' fem. of krāliss. Sl. královna 'queen.'
K'ris 'mustard.' Can this be P. kuriš 'cheese' misapplied?
K'uder 'open;' H. khol-nā 'open.'
Kâkalo ‘goblin’; same word as kókalos ‘bone,’ from idea ‘skeleton, death’s head.’
Kâme ‘moré’ = Gk. ἀκόμη ‘yet, more.’
Kun ‘who’ = H. ko ‘who.’ Not as common as savo.
Kunzus ‘corner, end’ = H. koná ‘corner.’
Kûr ‘beat, strike, fight’ = H. kurh-nâ ‘grieve, be afflicted.’
But see Pott, 113 f.
Kûri ‘pot’ = kurro ‘cup.’
Kûromûngro ‘prize-fighter; soldier’ from kûr.
Kûrrikû ‘week; Sunday’ = Gk. νεφελή ‘Sunday.’
Kûrro ‘cup’ glass,’ prob. same stem as churro.
Kushno ‘silk’ = C. keš = P. kač ‘coarse silk of little value.’
Kushto ‘good, happy’ = P. khoš, possibly through Turkish.
Kushto-dîkkin ‘good-looking.’ See dik.
Kûtter ‘piece’; doubtful derivation. Probably from T. (Ar.) qut'a ‘piece.’ On the other hand, there is an Armen. word godôr ‘piece.’ Which is it?
Ky ‘where’ = H. kahañ ‘where.’
Lach ‘find, meet’; prob. same root as in let=li=H. le.
Lâcho ‘good, sweet.’ Der. unknown; now rare.
Laj ‘shame, shamed’; H. lâj ‘bashfulness.’
Lâki ‘she, her.’ See Introduction.
Lango ‘lame’ (rare); H. and P. lang ‘lame.’
Laster ‘find’; variant of lach.
Lâtti ‘she, her’; var. of lâki.
Lâv ‘word’; P. (Ar.) lâfz ‘word.’
Lënde ‘they, them.’ See Introduction.
Lëster ‘he, him.’ See Introduction.
Lëvinor ‘ale, beer.’ The -r is not inherent; cf. C. lovina.
According to Pott, 335, from Wallachian ol'avina ‘beer,’ same element as in Eng., ‘ale.’
Lîlli ‘summer’ = C. linnaj. JAOS. vii. 218: nilai. Is it P. lin ‘smoothness’?
Lollo ‘red’; H. lûl.
Lom ‘chalk, lime, clay’ = Eng. ‘loam.’
Låbeni ‘whore, harlot,’ from same stem as H. lăbhā-nā ‘excite desire, lure.’ This is also Sl. lubit ‘to love’; Eng. ‘love,’ etc. The form låbeni is closer to the original than the metathesis seen in the C. nubli ‘harlot.’
Ludder ‘kick’; H. lät ‘a kick.’
Lullero ‘dumb’=P. lâl ‘dumb.’
Lun ‘salt’=H. loni ‘salt that effervesces from mildew.’
Lungo ‘long’=Eng. ‘long’; also H. lumbā.
Lunter ‘boast, brag’; H. lantarānī ‘boasting.’
Lūvro ‘money.’ Der. uncertain. See Pott, 335.
Machka ‘cat’; Sl. mačka. The original Skr. word was mārjāra =‘cat’=‘one who cleans herself.’
Macho ‘fish’; H. machhi ‘fish.’
Mādăvelēste ‘God bless you.’ Maha, same element as in H.
Maha-raja=Dūvel ‘God’+leske, Dat. ‘to him,’ lit. ‘may the great God be upon him.’
Mālliko ‘cake’; see māriklo and kil-mālliko.
Malāna ‘lightning.’ Uncertain. Pott, 456, gives Rom. mol-
nija=Mag. mennykō ‘lightning’ (?)
Mān ‘do not’; prohibitive only. Same as mōr=H. particle ma in nabādā ‘by no means.’
Mândi ‘I, me’; H. mainī.
Māng ‘beg’; H. mānga-nā ‘ask for.’
Māngaméngro ‘beggar.’
Mānro ‘bread’=H. mānri ‘starch.’
Mānshā (excl.) ‘be of good cheer; cheer up.’ Der. uncertain. Can it be T. (Ar.) Māshallah?
Manzin ‘curse’; chie the manzin ‘put the curse.’ The word in C. is macein, prob.=Ital. mancia ‘treasure’ and refers in Rommany to the deception of the victim by the false treasure trick. Hence=‘a curse.’
Māriklo ‘cake’; same element as in kil-mālliko. See mānro.
Māro ‘our, ours’=H. hamāra.
Māro ‘bread.’ See mānro.
Māroméngro ‘baker.’
Mās ‘meat, flesh’=H. mas ‘meat’; perhaps more directly from Sl. māso ‘meat.’ Seen in Germ. Slavic loanword Metzger ‘butcher’ from Sl. māsiar.
Māséngro ‘butcher,’ from mās.
Masker 'middle, midst.' Perhaps Gr. μοῖρα 'in the middle of' (adv.).
Mātīo 'drunk'=H. mast ‘drunk; lustful.’ Also Gk. μεθώ.
Mēe ‘mile’; prob. from French mille.
Mēro ‘my, mine’=H. merā.
Mendē ‘we, us’=H. hamen.
Mer ‘die, kill’=H. mar ‘a blow’; as in mar lena ‘to kill.’
Michis ‘mice’; most probably from Sl. mys ‘mouse.’
Minch ‘pudendum feminae.’ From a H. root the same as that seen in Lat. mingo ‘I mix.’ Cf. H. amekhta ‘mixed.’
Mīsali ‘table’=Gk. μεσάλην ‘table-cloth.’
Mīshko ‘glad, good.’ Not so common as kushto. Uncertain.
Mōkto ‘box.’ Der. uncertain (see Pott, 437).
Mol ‘wine’=P. mul.
Molēngree ‘grape’ from mol.
Mollāwvis ‘pewter’ from Gk. μολυσμον.
Mōm ‘wax’=H. mom=T. mūm. Probably through the T.
Mōmeti dūd ‘candle’; lit. ‘wax light.’ See dūd.
Mōr; prohibitive ‘do not’=mān, q. v.
Mōr ‘kill; die’; var. of mer, q. v.
Morch ‘leather.’ Certainly suggests Armen. mort ‘skin, hide.’
But also P. maš ‘leathern water bag.’
Morchimēngro ‘tanner,’ from morchi.
Morro ‘bread.’ See mānro.
Māe ‘face; mouth’=H. mūnā ‘mouth.’
Muk ‘let, leave.’ As muk māndi be ‘let me be’; Māndi’l
muk tētē aki ‘I’ll leave you here.’ This must be the same root seen in H. mukt ‘released, absolved, free’ (see Pott, 434).
Muller ‘die, kill’=3 p. sing. of mer=merēla.
Mullo ‘corpse, dead man, ghost,’ from muller.
Mūn ‘forehead’=C. meñ ‘neck.’ Seems to be equivalent to H. mūnā ‘mouth.’ See māe.
Mush ‘man’=Sl. muž. The older Rommany word even in England was manush of H. origin. Manush is still understood by old Rommanys. The question arises whether mush is not rather a contraction of manush than a direct derivative from Sl. muž.
Mushi ‘arm’=H. mutṭhi ‘fist.’
**Mutter** 'urinate' = H. mutil.
**Muttermindri** 'urinal'; also 'tea,' so called from its resemblance in its color to urine (?).

**Myla** 'ass'; same root as in Eng. 'mule.' Perhaps through Sl. mutica or Germ. Maultier?

**Nâflo** 'sick' = C. naswâlo. Can this be from Gk. nôsēma pron. nôsevma? See wafro.

**Nâg** 'worm'; see H. nag 'snake.'

**Nâk** 'nose' = H. nâk.

**Nângo** 'naked' = H. nangâ.

**Nâsher** 'lose, forget, hang' = H. nāsh 'annihilation, ruin.'

Also nāšht 'lost.'

**Nav** 'name' = H. naivē.

**Nâbollengro** 'unbaptized; one not a Christian.' See bollengro.

**Nêvo** 'new' = Sl. nový.

**Nîcher** 'fidget, fuss.' Note that obsol. Eng. nicher = 'squeal.'

Probably the same word.

**Nîko** 'own' (adj.). Der. doubtful. Can it be conn. with P. neko 'good'; hence 'proper, own'?

**Nücker** 'neigh' = Eng. neigher 'neigh, squeal.'

**Ny** 'nail'; also 'finger-nail' = H. nûl 'talon.'

**Oko** 'eight' = Gk. οκτώ.

**Pâbengro** 'cider'; = 'of apples.'

**Pâbo** 'apple' = C. pchabo. Seems to contain the same root as Fr. pomme. Very uncertain (see Pott, 378).

**Padras** 'stairs; stairway.' Probably conn. with H. pad 'foot.'

But see Pott, 78, who doubts this.

**Pul** 'comrade, friend, brother'; same root as in Skr. bhrâtri 'brother.' Cf. C. pchrao = in form Lith. brolis 'brother.'

Mod. H. bhai 'brother.'

**Pâller** 'follow'; probably from Eng. 'follow' suggested by pal.

**Panch** 'five' = H. panj.

**Pândaben** 'pound for confining animals,' from pander.

**Pânder** 'shut' = H. bandh-nâ 'bind, shut.' Cf. H. dârwaça bandh 'shut the door' = Rom. pânder the wüder.

**Pânee** 'water' = H. pâni.

**Panjer** 'fist'; probably a hybrid of panch 'five' = five fingers + Slang 'puncher.'

**Pappin** 'duck, goose' = G. náva.
Párdel ‘across’; same as parl=H. par ‘opposite bank or shore; across.’
Parl ‘across’; see pardu.
Párrako ‘thanks, thank’; cf. pārrako tāte ‘thank you’=C. parikēran=Gk. παρεκάλεσω ‘I beg you, please’; viz., ‘I beg you don’t do it,’ in a protesting thankful manner=an expression of gratitude.
Partan ‘cloth’=H. paṭṭu ‘woollen cloth.’
Pāsh ‘half’=H. pāṣh-pāṣh ‘shivered in pieces.’
Pāṣh (prep.) ‘along with’=H. pāṣ ‘near, beside.’
Pāṣh-rāti ‘midnight’=H. pāṣh the night’=rāti.
Pāṭteran ‘Gypsy trail of leaves and sticks’; also said to mean ‘leaf’=H. pattā, pattar ‘leaf.’
Pauli ‘back, behind, after’=Gk. παπλώ. See apoli.
Pauno ‘white.’ Pānī in H. means both ‘water’ and ‘lustre.’
Pauno is prob. the same root.
Pee ‘drink’=H. pī-nā.
Pēkker ‘bake, cook’=H. pakā-nā.
Pēle ‘testicles’=Skr. pela (JAOS. vii. 219).
Pēll ‘fall’=3 p. sing. of per=perēla. Cf. H. par-nā ‘fall.’
Pēlēngro ‘stallion’=‘testiced (horse)?’
Pēn ‘say, tell, think’=C. pcēnāv. Paspati (JAOS. vii. 213)
derives it from Skr. bhan ‘say, speak.’
Pēn ‘sister’; prob.=H. bahin ‘sister.’
Pēnnis ‘thing,’ from pen ‘to say’=‘a saying’ (?).
Pēshām ‘bee’; see pēshom.
Pēt ‘put’; Eng. put. See chiv.
Pētul ‘horse-shoe’=Gk. πέραλος.
Pētulēngro ‘blacksmith,’ from pētul.
Pilfro ‘heavy,’ conn. with H. pilpilā ‘soft, flabby, flaccid.’
Piller ‘attack’; H. pil-nā ‘attack, assault.’
Pireno ‘lover’=H. piyār ‘love, affection.’
Pireni ‘sweetheart’=H. piyārā ‘sweetheart,’ masc.; piyārī, fem.
Pirri ‘foot’=H. pair.
Pirri ‘walk,’ from pirri ‘foot.’
Pisāli ‘saddle’; not so common as boshto. Pisāli seems to contain root besh ‘sit.’
Posthoma `bee' = P. peshkoa `gnat.'
Posthota `bellows.' Der. uncertain.
Pithi `widow' = H. (P.) bhoda.
Pivlo `widower'; masc. of pivli.
Plaistra `pincers, plyers'; a rare synonym of tulaméngrí prob. = Sl. kliešte `tongs.'
Plashka `cloak, towel, dishcloth' = Sl. plašt `cloak.'
Plochto `glad.' Der. uncertain.
Pochi `pocket' = C. positi. The form pōchi was influenced by Eng. `pouch.'
Pogodo jib `broken language' = the broken language of the roads. See pogger.
Pogger `break, smash,' prob. from Skr. bhag-nā torn, broken; cf. H. bhūg `share, portion' (`broken bit').
Poggodováskro `broken-winded' (horse), from pogger + bavol `wind.'
Poknes `magistrate'; cf. Sl. Sudca pokoja `justice of the peace'; pokoj `peace.'
Pong-disuler `handkerchief' = pong, Eng. `pouch, pocket' + dishler, a mixture of `dishclout' and diklo, q. v.
Porder `fill up' = pūrā `full.'
Pordo `full.'
Pori `feather, pen' = H. par `feather'; cf. Sl. perie `feather'; pero `pen.'
Porji `bridge.' Perhaps = P. pul `bridge, embankment.'
Portus `stair'; portuses `stairs.' See padras.
Poshom `wool' = P. pashm `wool.'
Präster `run'; probably conn. with piri `foot, walk.'
Präterméngró `policeman, runner,' from the old Eng. expression Bow-Street runner.'
Pre `on, upon'; see aprée.
Pächer `ask' = H. puchh-nā `ask.'
Päder `blow, shoot with a gun' = H. phul-nā `blow. Same root as in ful.
Päderméngró `bellows' = `blower.'
Päker `tell' = H. pukar `cry, call'; vb. pukārnā `shout.'
Pákkeno `quiet, peaceful' = Sl. pokojný `peaceful.'
Pansi-rān `fishing rod.' The first element is H. bansi `fish-hook'; i.e., pansi-rān = `a hook rod.' See rān. Pansi = bansi alone seems lost in Eng. Rommany.
Pūr ‘change.’ Uncertain derivation.
Pūr ‘feather, pen.’ See pori.
Pūrjis ‘road.’ Same word as porji ‘bridge.’
Pūro ‘old’ = H. purāṇā ‘old.’
Pūrurn ‘onion, leek’ = Ital. porro ‘leek.’
Pūs ‘straw’ = H. phus ‘old dry grass’ or ‘straw.’
Pūsker ‘bury’; probably conn. with pūv ‘earth’ (?).
Pūtei ‘pocket’; Variant of pūchī. The word is really Rom-
many and not English. Cf. C. positi, of which pūtei, the
older form, is a metathesis. These forms come from the
same original as Eng. ‘pouch.’
Pūti ‘hub’; from same root as II. pāṭti ‘felly of a wheel; girdle.’
Pūv ‘earth, dirt, ground, floor’ = H. bhūyin ‘earth, ground.’
Pūvengri ‘potatoes’; ‘of the earth.’
Pūv-sūver ‘spider’; lit. ‘an earth swimmer’ (see sūv) from the
motions of the insect.
Pūjas ‘fun, amusement.’ See C. pechāras. Der. uncertain.
Rāker ‘talk, speak, converse’; can you rāker Rōmmanes ‘can
you talk R.? ’ The original form was clearly vrakerāva
(JAOS. vii. 216). This is not, as Paspati thought, from
vra+-kerāva ‘I make talk,’ but = H. bhākhā ‘speech,
dialect.’ The initial v = prim. bh has been entirely lost in
the Eng. Rommany. Note in Sl. vravēt ‘speak.’
Rāklo ‘young lad, boy’ = H. laṅka ‘boy.’
Rākli ‘girl, marriageable girl’ = H. laṅki ‘girl.’
Rān ‘cane, rod, reed’; Pott, 266 gives the der. from Germ.
Rāhu ‘a thick piece of wood.’
Rāne i ‘lady’ = H. rānī ‘queen.’
Rashy ‘priest, minister’ plainly = Skr. rishi ‘saint, holy man’; 
also H.
Rāt ‘blood,’ probably = H. zāt, by rhotacism.
Rāteno ‘dark,’ from rāti ‘night.’
Rātenus ‘darkness,’ from rāti ‘night,’ the nus- ending being 
the Eng. -ness.
Rātsokro ‘bloody,’ from rāt ‘blood.’
Rāti ‘night’ = H. rāt ‘night.’
Rēpper ‘remember’; Pott, 334, gives lepperāv. Der. doubtful.
The r in repper is plainly due to the Eng. remember.
Rīk ‘side, direction.’ I believe that this is the same root as in
rikker ‘bring.’
Rikker 'bring, fetch, carry'; probably = H. rok-nä, rak-h-nä 'hold, keep.'
Rikkorus 'side'; longer form of rik.
Rin 'file' and 'to file' = Gk. ῥινι.
Rinkeno; fem. rinkeni 'pretty, handsome.' I cannot place this.
Riv 'wear' (as clothes). Does this contain the Gk. root of πᾶτος 'tailor'?
Rivvabens 'clothes,' from riv.
Roi 'spoon' = H. ḍoī 'wooden spoon.'
Rokýmyas 'trousers.' Very difficult. Is this a perversion of Sl. rukavčíký 'gloves'?
Röm 'husband; Gypsy' = the gentilic name. See Jour. Gypsy Lore Soc. i, pp. 16 ff.
Römmanes 'the Gypsy language,' from röm.
Römni, fem. of Röm 'a wife'; 'a Rommany woman.' See rummer.
Rönnichál 'a Gypsy fellow'; the usual word for 'Gypsy' in general.
Rönnichy 'Gypsy girl'; fem. of Rönnichál.
Røv, rov 'weep' = H. ro-ná 'weep.'
Ruk 'tree' = H. rūkh 'tree.'
Rukestaméngro 'squirrel; tree creature,' from ruk.
Rummer 'to marry,' from röm.
Rümmerben 'marriage, wedding.'
Rup 'silver' = H. rūpā; cf. rupā 'silver coin.'
Rappeno 'silver' (adj.), from rup.
Rúsha 'flower' = Sl. růža 'rose.'
Rúshno 'bright, shining,' probably from rūzhu 'flower.'
Rúzlo 'bold' = C. impersonal vb. růzav man 'I irritate myself, I get angry.' Der. uncertain.
Ry 'gentleman' = H. ražu 'king.'
Ryéskro 'genteel' from ry.
Shālee 'rice' = H. chāneul 'rice' (?).
Sham, shan 'evening' = H. sham.
Shell 'cry, shout' = 3 p. sing. of shōr = shōrēla. See shōr.
Shělno 'green' = Sl. zelený.
Sherro 'head, chief' = H. sir; also sur in sardar; P. sar,
Zend. šara. The š also appears in Skr.
Sherroméngro 'leader, head-man,' from sherro.
Shill 'ice'; cf. H. sital 'cool'; Skr. Caità 'cold, frozen.'
Shingerballo 'horn' (of a cow or bull)=H. sing; Skr. grinda 'horn+ballo, prob.=bali 'hair.'
Shok 'cabbage'; see chok.
Shok 'bough, branch'=H. ság 'greens, vegetables.'
Shokker 'cry out, call'=H. jaikar karna 'raise a hubbub.'
Shór 'praise, boast'=H. shor 'cry, noise.'
Shohoi 'hare'; may=Skr. čapa 'hare' (JAOS. vii. 190).
Shov 'six'=H. chha.
Shtor 'four'=Skr. chatur, but probably influenced more immediately by Sl. štyri 'four.'
Shubo 'dress, gown'=Russ. šuba 'fur-coat.'
Shul 'whistle'; corr. of shell=shōrēla.
Shul 'moon'; corr. of chon.
Shōlam 'greeting,' from Yiddish shōlem=$\text{ישלום}$.
Shummi 'awning'=H. shamiyānā.
Shun 'hear'=H. sun-nā.
Shānalo 'angry.' Probably contains same root as H. jala-nā 'get angry,' seen also in H. jala-balā 'fretful.' See hun-nalo.
Shūt 'vinegar'=Gk. ξίδα.
Shūto 'sour,' from shūt.
Shavay 'enceinte.' Probably H. See Pott, 220.
Shyan 'perhaps'=H. shayād.
Sajā 'always'; combination of saw 'all'+cherus 'time.'
Sāp 'snake'=H. saip, also sarp.
sar 'all, how'; var. of saw 'all, how.'
Shārishān 'how do you do'? The regular Rommany greeting.
Sar 'how'+shan=2 p. of 'to be'='you are.'
Sāshea 'iron kettle support'; see saster.
Saster 'iron'; JAOS. vii. 194=Skr. gastra 'weapon of iron.'
Sasterno 'iron' (abj.). From saster.
Sasto 'strong'; cf. H. sakht 'strong, hard.'
Saula 'morning'; Pott, 289 gives Skr. sāya 'evening' (?).
Savo 'who'; contains element saw, so 'what.' More common than kun.
Sawvi 'laugh'=C. asāva=H. hās-nā.
Saw 'all'=H. sab; P. har as in har-kus 'everyone.'
Saw 'how.' Not common. Prob.=so 'what.'
Saw-sig 'immediately'; 'all quick.' See sig.
See 'heart, mind, soul' = C. yilo and dschi. See s. v. Zee.
Sc 'it is' (rare now) = C. hi = H. hai.
Srebr 'capture,' perhaps same root as in sörrelo.
Stig 'quick, fast'; JAOS. vii. 210 = Skr. stighra.
Stig o me see 'anxious.' Not 'quick of heart,' but probably
Eng. 'sick of heart,' possibly influenced from an early zik
from H. (A.r.) zig 'depression.'
Siggyr 'hurry,' from sig 'quick.'
Sikker 'show' = H. dikhlut, or is it Skr. siksh 'learning'
(JAOS. vii. 196)?
Sim 'like unto' = Eng. 'same,' and simensi. Sims also = 'like
(prep.). Cf. Skr. sam 'same.'
Simensi 'relatives' = H. samän 'equal, similar.'
Simmun 'soup, broth' = Gk. σοτάν 'broth.'
Sí 'needle,' = H. sā.
Siv 'sew' = H. sī-nā 'to sew'; sīwān 'a seam.'
Skammin 'chair' = Gk. σκάμμι 'bench, chair.'
Skūnya 'boot' = Boh. skorne 'big peasant boots.'
So 'what' = H. jō 'what.'
Solivdris 'bridle, harness' = Gk. σωλήδρα.
Sonanak 'gold' = H. sonā.
Sorse 'what is' = so + se.
Sōrahau 'curse, swear.' Also sollahau. Doubtful. See
Pott, 228.
Sōv 'sleep' = H. so-nā 'sleep'; ptc. sotā.
Spinya 'pin' = Eng. pin (?)
Streddi 'hat' = Gk. σκάδα 'hat, sunshade,' from σκάδα 'shadow.'
Stānya 'barn, stable,' prob. = H. sthān 'place, station.'
Sturdo 'imprisoned;' not from Ar. asir 'prisoner' (thus Bor.).
Can it be H. asthir 'at rest, quiet?' See stārien.
Sturben 'prison;' see sturdo. This has been shortened in
American thieves' and tramps' slang into stir 'prison.'
Stūd-edy 'mother-in-law;' 'stepmother.'
Sūder aprée 'hang up.' Can this = H. sudhar-nā 'adjust'?
Sākaro 'sorry, grieved.' Can this be H. sukār 'feebly'
Sām 'smell' = H. sāngh-nā.
Sārrelo 'strong' = P. zor in zor-der 'powerful.'
Sūn 'was' (rare now) = C. his.
Sūtto 'a dream, to dream.' Comm. with H. so-nā 'sleep;' sotā
'asleep.' Cf. Pāli sutto, suttam 'asleep,' 'a dream.'
Sūr 'swim' = H. dāb-nā 'drown, be immersed.'
Selgler 'tobacco-pipe'; a common word, but uncertain derivation. Can it be conn. with Gk. σφαίρα 'ball,' referring to the bowl of a pipe?

Sečiti 'world' = Sl. svet.

Tacho 'true, faithful.' See s. v. chacho for derivation.

Tāchoben 'truth'; from tācho.

Tāder 'draw, drag, attract' = C. trdav, zerdav, crdav. Perhaps from Sl. root trh?

Talley 'below, under' = H. tale 'under, below.'

Tam 'shade' = H. tana 'darkness.'

Tamto 'dark, shady,' from tam.

Tan 'tent, place.' Vb. 'live in tents, camp'; we're tannin'

aký 'we're camping here.' I believe this is the Mag. tanya 'camp,' rather than the H. thān 'stall'; thāna 'police-station.'

Tāno 'young, little' = Skr. taruna 'young' (?).

Turdo 'straight' = tāderdo 'drawn out,' from tāder.

Turro 'drag, draw, pull'; var. of tāder.

Tisser 'choke, smother, suffocate' = C. tast'arav 'I dip in.'

Der. uncertain. Prob. connected with Ital. tossire.

Tāto 'hot, warm' = Skr. tap 'heat' (JAOS. vii. 166). Cf. H. tap 'fever.'

Tātto pāni 'brandy, whiskey'; lit. 'hot water.'

Tav 'string, cord' = P. tav(ri) 'twist, coil.'

Teero 'th'ye, thine' (rare now) = H. terā 'thy.'

Tem 'country, land'; Gk. βία 'province.'

Tēmesko 'landed, as a proprietor' from tem.

Tikno 'young, small'; see chikno.

To-divuva 'to-day'; Eng. to-divus 'day.'

To-rāti 'to-night'; Eng. to-rāti 'night.'

To-sanlu 'to-morrow' = Eng. to-sanlu 'morning.'

Tōv 'wash'; H. dhō-nā; cf. dhōbi a 'wahsman.'

Tōver 'axe' = P. tabar 'axe.'

Trāsh 'fear' (noun) = H. tars 'fear, terror.'

Trāsher 'frighten, from trāsh.'

Trin 'three' = H. tri, tin.

Truppo 'body' = Sl. trup 'rump'; Russ. trup 'corpse.'

Trāshilo 'thirsty' = H. tishna 'thirsty'; tishnigi 'thirst.'

Trāshnēe 'basket'; a corruption of Gk. Rommany koshnika
(JAOS. vii. 166) = Sl. koš 'basket'; cf. Boh. košatka:
Bulg. koš, košnita.
Tāb 'amazement' = H. (P.) shōbā 'doubt' (?).
Tād 'milk' = H. dūdh.
Tāfēr 'mend, cure.' Der. uncertain.
Tagvus 'grief, sorrow': conn. with dak.
Tukli 'trouble' grief'; conn. with dak.
Tūl 'hold, manage'; seen also in racing slang; tool a horse =
'manage a horse'; tool a couch, etc. Prob. = H. tul-nū
'be weighed, balance' (?).
Tūlumēngri 'pincers, pliers' from tūl. See syn. plaistra.
Tullo 'fat' = C. tehlu 'fat' = H. sthūla 'thick.' Also chullo;
see Pott, 296.
Tūlōbo 'grease, fat,' from tullu.
Tūnero 'hold, brave.' Der. uncertain.
Tūtē 'thou, you' = H. tū.
Tūru 'smoke' (v. b. and nomn) = H. dhūnū.
Tōvalō 'tobacco,' from tōr.
Vāg 'flame'; conn. with yāg 'fire.' Is this the same root
seen in Ital. campa 'flame'?
Vāniso 'anything, something' (rare). This = C. variso. Indef.
particle vērē+so 'what.' This particle vērē occurs in C.
vērē-hār 'anyhow'; vēreko 'anyone,' etc. Vērē 'a part'
= H. mēr in composition 'having, endowed with.'
Vēndēi 'guts, entrails' = H. antrē 'entrails.' Vēndēi is also
pronounced vendēi and vendoor.
Vērīga 'chain.' Doubtful. See Pott, 80.
Vōngree 'waistcoat.' Der. uncertain. Also pronounced won-
gree.
Vonku 'when' (rare). Looks like Eng. when; Germ. wenn,
wann?
Voro 'flour, meal' = C. varō 'meal.' I believe this is conn.
with manuo, māro 'bread.'
Wadrasar 'bed, couch' = Eng. mattress?
Wāfēdo 'bad.' See wāfro.
Wāfro 'bad'; conn. with nāfro 'sick'?
Wallīn 'glass' = Gk. γυαλί.
Wārdo 'wagon, carriage' = C. erda; prob. = P. gardān 'wheel,
chariot.' The r and v in Eng. Rom. and C. respectively
were probably caused by wagon and Germ. wagon; Sl. vóz
'wagon.'
Wast 'hand' must = P. dest, but how explain the s?
Wasténegri 'gloves, handcuffs,' from wast.

Wāsser 'other, another'; prob. = H. awr 'more, other.'

Will 'come' = 3 p. sing. of av=vilā = avila = well.

Wilgayra 'fair, exposition.' Note here that according to Har-
ris, vailgyoro 'fair in color.' If this is correct—I have
never heard it so used—then the last element must = H.
görā 'fair, handsome.'

Wēn winter.' Pott, 66, gives juvend = Skr. hémanta 'winter,'
Gk. χειμών.

Wēsh 'wood, forest, wild land' = P. bēka, bīna 'forest' (see
JAOS. vii. 173).

Wēshno 'wild,' from wesh.

Wēshno jukkal 'fox' = 'wild dog.'

Wēngasheer 'finger-ring,' a var. of angyastro.

Wongur 'coal, money' = H. angyara 'embers, fire-brand.' The
use of wongur for 'money' is slangy metaphor from the
shining coals. See hangar.

Wūder 'door' = H. dēvar, dūvar 'door, gate-way,' a case of
metathesis. The common H. word is dārēzā, containing
the same element; dar = Eng. 'door.'

Wüsser 'throw, pitch' = H. pachhar-nā 'throw down' (?)

Yāg 'fire' = H. āg.

Yāgonyeri 'gun,' from yāg.

Yāg-sardō 'automobile'; a new word = yāg and sardō.

Yāhūd 'Jew,' from Yiddish יידיש.

Yāk 'eye' = H. अङ्क.

Yākonyeri 'spectacles,' from yāk.

Yēk 'one' = P. yek; H. ek.

Yēkkorus 'once'; contraction from yek + cherus 'time.'

Yīv 'snow' (noun and vb.). See īv 'grain.' But is not īv
rather conn. with Skr. hīmar 'snow' (JAOS. vii. 216)?

Yoi 'she' = H. sūh 'he, she, it.' Fem. of yoe 'he.'

Yora 'egg' = C. yāro, cunrō. I believe this is merely a cor-
ruption of T. yumurē influenced also by Gk. αὐτῆς. H.
ayda means 'an egg'; but is probably not connected with
yora.

Yoe 'he' = H. sehk 'he, she, it.' Masc. of yoi 'she,' q. v.

Yozho 'clean, pure'; corr. of C. shuzō (shuchō) = Skr. śuchi
'make pure' (JAOS. vii. 173).

Zēc 'heart, soul, mind.' Cf. see. Conn. with H. jī-nā 'live'
(see jīr).
Accustomed to kūmmoben; see used. Baby tikno, chikno.
Across atūt, bender, pardel, parl. Back (n.) dūmo.
Afraid atrish. Back (adv.) āpōpli, pauli, anpauli.
After pauli. Bacon bāllonas.
Again ajāw. Bad wāfro, wāfeto.
Against atūt. Bad tōnpered kūnala, shānalos.
Air barol. Bag gūnno.
Ale lūvinor. Bake pēkker.
Alive jiuviu'. Ball churro.
All saw. Bar sūhta.
All at once saw-sig; kēnui-sig. Barley chō.
Alone akōnyo. Barn grānya.
Along with pāsh: 'long o'. Basket truskhnee.
Aloud drovīn. Bean bobbi.
Already ajāw. Beat kūr.
Always sāja. Bed wadras.
Amazed dree tūb. Bee pīshom, pēsham.
Amusement tūb. Beer lūvinor.
Amusement pījas. Before aglāi.
Anger kūnalo ben. Beg māng.
Angry kūnala; shānala. Beggar māngamęngro.
Answer pāker. Bellow gūr.
Anxious sig o' zee. Bellows pishota, pūdermęngro.
Anyone chāmiano. Belly bak.
Anything chūmanis, vāniso. Beloved kūmlo.
Apple pībo. Below talley, alāy.
Apron jēlīliko. Bend bongo.
Arm mushi. Beneath talley, alāy.
Arse bull. Benevolent kūmmobēskro. See kainu.
Ashamed laj. Bent bongo.
Ashes char. Better fēdeter.
Ask pūcher. Big boro.
Asleep sufto. Bird chīriklo.
Ass myla. Bishop boro rashy.
Astonish chū dree tūb. Bit kutter, bitti.
At aprée. Bite dant.
Attack pīller. Black kando.
Attract lāder. Blacksmith pētulęngro.
Aunt beebee. Blind kordo.
Awake jonger. Bloody rātēskro.
Away adrom. Biow pūder.
Awning shummi. Boast luntur, puker.
Boat beero.
Body truppo.
Boil buller.
Bold rūzlo, tânero.
Bone kōkalo.
Book ill.
Boat skānya.
Born beeno.
Bough shok.
Bow (vb.) bonger.
Box kūr.
Box (n.) mōketo.
Boy chāvo, rāklo.
Brag lunter huker.
Branch shok.
Brandy tátttopânee.
Brave rūzlo, tânero.
Bread manro, morro, maro.
Break pōgger.
Breast burk, bobbi=nipple.
Breath puderben, bavōl.
Breathe püder
Bridge porji.
Bridle solivāris.
Bright rūzhno.
Bring rīkker
Brokenwinded pogobavēskro.
Broth sīnmun.
Brush kēlovos.
Bull gūrū.
Bullet bikkus.
Burn hocher.
Bury pūsher.
Butcher masēngro.
Butter kil.
Buttermilk kil-tūd.
Button krāfnee.
Buy kin.
By=near pāsh.
By and by kēnna-sig.
Cabbage shok.
Cake márliklo, mālliko.
Candle mómelī dūd.
Cane rān.
Cap hūfer.
Captin šērromēngro.
Capture serber.
Care kommer; (n.) kessur.

Careful sig.
Carriage wardo.
Carry rikker
Cat maclka.
Chiin vērija.
Chair skammmin.
Chalk lom,
Change pūr
Cheek châm.
Cheer up! mānishā!
Cheese kīl.
Cheese-cake kil-mālliko.
Chemist drabēngro.
Chew hav.
Chickens kānis.
Chief shērromēngro.
Child fīkno, chīkno, chāvo; fem.
chy.
Chisel chūree; chānamēskro.
Choke tasser.
Christian boltėngro.
Church kongree.
Cider pābēngro.
City foro, foros, gāv.
Clay lom.
Clean yozho.
Cleanse yozher, kōsher.
Clever flīck.
Cloak plāšta.
Clock hora.
Close=shut kūder.
Cloth partan.
Clothes heezās, rīvabens.
Coal hangur, wongur.
Coat chukko.
Cock-bird bōshno.
Cold shīlo.
Comb kongli.
Come well; imper. av, hav.
Commence ānkdrī.
Comrade pal
Constable gār-mush.
Cook pekker; see bake.
Copper harko, hārkoben, hörkben.
Cord lāv.
Cork būng.
Cork-maker būngaror.
Corn=grain gīv.
Corner kunzus; see end.
Corpse mullo.
Couch wadras.
Count kénn.
Country térn.
Cousin kôko; also uncle; beebee 
(fem.).
Cover chakker.
Cow gráumer.
Crazy dívius.
Cream fino-túd.
Crooked bongo.
Crow-bar sáshtha.
Crown koráuna.
Cry rów, row. See weep.
Cry out shéll, shokker.
Cup kurro.
Cure tüfer; see mend.
Curse sóvhahul.
Custom drom.
Cut chin.
Dance kél.
Dark réteno; tamlo.
Daughter chy.
Day dívus.
Dead mullo.
Dear kämilo.
Death müllerben.
Deceit hückerben.
Deceive huker. See lie.
Devil Béng.
Devilish bëngliskero.
Die, mer, mór, mulleen.
Dinner habben.
Direction rik, rikkorus.
Dirt pát; chik.
Dirty chiklo.
Disease nálfoben. See sick.
Dishcloat diklo, pongdishler.
Distance dårben.
Distant dårro.
Divide bänder.
Divine Dâvelsko, Dâveléskro.
Do kair.
Do not mánn, mór.
Doctor drübenbro.
Dog jükkal.
Donkey myla.
Door wüder.
Doubtful dûbeno.
Down talley, alay.
Drag tâder, târri, hêcher.
Dream suho (n. and vb.).
Dress shâbo (woman’s dress); heezis; see clothes.
Drink pee.
Drug drab.
Drug-store drabengro-kair.
Drunk matlo.
Duck poppin. See goose.
Dumb lullero.
Dung fál.
Ear kîn.
Early sîg; see quick, fast.
Earth pát.
Eat hau.
Egg yora.
Eight okdo.
End kunzus. See corner.
England píro tém; Anglatéra.
English Language Görtjines.
Enough adôsta, dosta.
Entrails vœndri.
Evening sham, shan.
Evil vôflroben.
Eye yák.
Eyebrow kor.
Eyeglasses yâkéngri.
Except bærinn.
Exclaim shéll, shokker.
Exhibition wellfêra.
Face mâne. See mouth.
Fair wellfêra (exhibition).
Faithful chácho, tâcho. See true.
False fáshono.
Family siménsi.
Fancy kaum.
Far dâro.
Farmer gírêskro.
Fast (rapid) sîg.
Fat tullo.
Father dàddau.
Fear (n.) trâsh; vb. trâsher.
Feather pori.
Fellow chal, geero.
Fiddle bôsh.
Fiddler kôshomôngo.
Fidget nicher.
Field paw.
Fiery yâgsko.
Fight kir. See beat.
File rin (n. and vb.).
Fill porder.
Fifth chik.
Find lach. laster.
Finger gushto.
Finished kerro.
Fire yâg.
Fish macho.
Fishing-rod punsi-rân.
Fist panjer.
Fist panch.
Flag diklo.
Flame våg.
Flour voro.
Flool rûsha.
Folk foki See people.
Follow paller.
Food habben.
Foot dûnælo.
Foot pâri.
Forehead mun.
Forest vësh.
Forget nûsher. See lose.
Forgive fordél.
Fortune dûkkerben.
Four shtor.
Fox wëshko, jukkal.
Friend pal.
Frighten trûsher.
Full pordo.
Fun pjas.
Further dûroder.
Furtherst dûrodero.
Fuss chîngarre: vb. nicher.
Gallant buoino.
Garden bar.
Genteel ryôskro.
Gentleman ry.
Get lit.
Ghost mullo.
Girl rûktl, chy.

Give dél.
Glad plochto, mishto, kushto.
Glass wallin; kurro.
Glove wustamengro. See handcuff.
Go jaw.
Goat bôkro.
Goblin kûkato.
God Dûvel.
God bless you Madûveléstoe.
Gold sonnakry.
Good kushto, mishto, lacho.
Good-looking kushto-dikkin.
Goose pappin, See duck.
Gourd dâdum. See womb.
Gown shîbo.
Grain gîn.
Grandfather bâbus.
Grandmother Bâbâli.
Grape moléngri.
Grass char.
Grease tulloben. See fat.
Green shêño.
Greeting shatam; sârishân.
Grief dush. tukil, tugnu.
Grieved akaro. See sorry.
Ground pûv.
Growl gûger.
Gun yûgëngri.
Guts rëndri.
Gypsy Language Rûmmenes.
Hair bûl; pl. bûlgor.
Half pash.
Hand wast.
Handcuff wustamengro. See glove.
Handfull bonneck.
Handkerchief diklo: pong-dishler.
Handsome kushto-dikkin: rûnkeno.
Handy flick.
Hang up sûder aprée.
Hare shôshoi.
Harlot tûben, Harness solivâris. See bridle.
Hat studî.
Hay kas.
Hay-stack kas-stoggnus.
He yov, lestér.
Head sherro.
Hear shôn.
Heart see, zee.
Heathen neboîlenêro.
Heaven hêb.
Heavy piléro.
Hebrew Yahâd.
Hedge bor.
Hedge-hog höcêwêchee.
Hell Bêngô-têm.
Help husker
Hen kânî.
Her lêkî, lâtî.
Here aky.
Hide gaver.
Hill chûmaba.
Him lester.
Hold tûl.
Hole hêv. See window.
Home kerrî (at home or homeward).
Honey gudlo: gudlo-pêsham.
Honeycomb gudlo-pêsham.
Hook bongo stû.
Hope kêmoben (n.); vb. kaum.
Horn shîngerballo.
Horse gry.
Horseshoe pêtol, chokka.
Hot tûtô.
Hour hora.
House kair.
How sau.
How do you do? Sârishôn?
Hub putî.
Hungry bôkkalo.
Hurry stêger
Hurt dukker
Husband rôm.
I mândî.
Ice shill.
Ill nôfô.
Immediately kêmâ-sig: sau-sig.
Imprisoned stardo.
In adrêe, dêre.
Injure dukker.
Iron saster; adî. sasterno.
Is se.
Jail stürîben.
Jew Yahâd.
Jolly plochto, mishto.
Jump hûkker.
Justice of the Peace pôknees.
Keep tûl.
Kettle kävi, kekîri.
Key kîlân.
Kick ludder.
Kicker delleméskro.
Kill mer môr, muler.
King krâlis.
Kiss chûmer.
Knee chong.
Kneel chonger.
Knife chûrree.
Know jîn.
Knowledge jinnaben.
Lady râklo, chal.
Lady rânee.
Lame bongo.
Lamp dûd.
Land têm; pûv.
Language jîb.
Lard bällovas. See bacon.
Large boro.
Laugh savî.
Laurel kovîka-rûk. See willow.
Lazy kaulo.
Lead (metal) archich.
Leaf pätteran, pâtîrin.
Leather cham, morchi.
Leave mûk. See let.
Leek pûrum. See onion.
Left bongo (left hand).
Leg herree.
Let mûk.
Letter lît.
Lick kösher.
Lie (tell falsehoods) hûker.
Lie (n.) hûkerben.
Lie (lie down) bësh. See sit.
Life jîrvaben.
Lift baddrer.
Light dûd; adj. dûdenô (brilliant).
Lightning dûdikaben, malûna.
Like (vb.) kaum.
Like (prep.) sim, simê.
Lime lom.
Little tôno, tikno, bitto.
Live jëiu.
Living jëivaben.
Lock klôs in (n.).
Lonely kôkkero, akônyo.
Long lungo.
Look dik.
Loosen nûshên.
Lose nâsher.
Loud drodân.
Louse jà.
Lousy jëvalo.
Love (vb.) kauim.
Love (n.) kâmmodên.
Lover piñreno ; fem. piñeni.
Low talley, alày.
Luck bok.
Mad dîvius. See crazy.
Mad (angry) hûnnalo ; shûnnalo.
Made kerro. See ready.
Magistrate poknees
Magpie kakkarâcî.
Man mush ; old form månush.
Manage tül,
Mare gâsmee.
Marry rummer.
Master ry.
Me mândi.
Meal habben.
Meat habben ; mas.
Membrum virile kor.
Mend tûfer See cure.
Middle masker.
Midnight pâsh-râtì.
Mile mee.
Milk tâd.
Mind see, zee.
Minister rashy
Mirror dikkeaméngro.
Money lûvno, wongur.
Monkey bômbaros.
Month dûd.
Moon chôn, shûl, dûd.
More ëttìme.
Morning saula.
Mother dy.
Mother-in-law stîf-dy.
Mountain chàmber.
Mouth mûce. See face.
 Much bût, bûti.
Mustard krîs.
My meero.
Nail ny : krôfner. See button.
Naked nango.
Name nax.
Needle sît.
Neigh nucker.
Never këkker.
New nêve.
Night râti.
Nine ënnea.
Nipple (breast) bobbi.
No këk, këkker.
Noble buino.
Nobody këkno.
No more këkkûme.
None këkno, këk.
Nose nîk.
Not këk.
Nothing chichì.
Now kêmnd.
Nut kor.
Oath sóvahaul.
Oats job, jôv.
Oh dear Dordi!
Old pûro.
On aprée, pre.
Once yëkkoruss.
One yëk
Onion pûrum, See leek.
Open kûder
Opposite pardel, parl.
Other wàder.
Our mûro (rare).
Out, out of avrée, vree.
Oven bov.
Own (adj.) nûko.
Pain duk, dushe.
Pay pësûr.
Pea bobbi.
Peaceful pûkkêno.
Pen pûr.
People fôki.
Pepper dantîmêngro.
Perhaps shûan.
Person geero, chal.
Pewter mollàuvìs.
The English-Rommany Jargon, etc.

Physiciani drabéngro.  Relatives stúensi.
Piece kuter.  Remember reppeer.
Pig baulo.  Residence béshaben, tan.
Pin spinya.  Rice shalee.
Pincers plaistra ; túlaméngri.  Rich bárvelo.
Pipe swélglar.  Rick stoggus.
Piss mutter.  Ride kafur.
Piss-pot muttermengri.  See tea.
Pitch wussér.  See throw.
Pitch a tent kach a tan.  Rip chinger.  See tear.
Place tan.  River darya, barya, doeyav.
Play kel.  Road drom.
Pleased plochto, mishto, kushto.  Roar gür.
Plough půwwardo.  Rod ran.
Pocket póchí, pätsi.  Rope dori.
Poison drab, drow.  Round churro.
Policeman gau-mush ; prastermen-gro.  Row (fuse) chingaree.
Poor choró, chúveno.  Run praster.
Pork bállova.  Runner prastermengro.
Pot kári.  Sack gunno.
Potatoes púvecnérí.  Saddle béshto, pisillí.
 Pound (for animals) pándaben.  Sailor béréngro.
Praise shór.  Saloon kichera.
Pregnant shávali.  Salt lún.
Priest rashy.  Scamper hushée.
Prison stáriben.  School iléskro kair.
Prizefighter kúroménegró.  Scissor-grinder kátísimengro.
Prophecy dúkkerin, dúkkerben.  Scissors kátí.
Prophecy dukker.  Scornful buino.
Proud buino.  Sea barya, darya, doeyav.
Proud gazero.  See dik.
Pudendum feminae minch.  Self kókkeró.
Pull tâder, târrí, kicher.  Sell bikin.
Pure yosho.  Send bicher.
Purse kléi.  Sermon shánaben.
Put chir ; pél.  Serpent sáp.
Queen krállisa.  Servant bútíengro.
Quick sig.  Set chir, pél.
Quiet pükkeno.  Seven hefta.
Rabbit kánengro.  Sew súv.
Rag diklo.  Shade tam.
Raven kakkardchi.  Shady tamlo.
Ready kërrro.  Shame laj.
Receive lél.  Share bänder.
Red lollo.  She yoi, láki, látti.
Reed rán.  Sheep bökro.  See goat.
Shindy chingaree.
Shining râzheno.
Ship beero.
Shirt god.
Shit fôl (n.) Vb. kair fôl.
Shoe chokka.
Shoot pûder.
Shout shell, shokker.
Show sîkker.
Shut pûnder.
Sick nâfôa.
Side rîk, rîkkoura.
Sight dikkaben.
Sign pâtteran.
Silk kusno.
Silver rup.
Silveren rûppeno.
Sin wôfroben.
Sing gîlli.
Sister pên.
Sit bêsh.
Six shov.
Sleep sôv.
Sleeve by, bydskro.
Slow pukkeno.
Small tânô, tîkno, bitto.
Smallpox bugnee.
Smash pôgger.
Smell sum (vb.).
Smell (n.) stîmaben.
Smile savri. See laugh.
Smith pêtudengro.
Smoke (vb.)图为.
Smoke (n.) kessur.
Smother tasser.
Snail bauris.
Snake sip.
Snow yûv.
Soldier kùromêngro.
Someone ehtâhmano.
Something chûmanis. wûniso.
Son châbo.
Song gîlli.
Soon sig.
Sorrow dussh.
Sorry sîkaro.
Soul see, zeer.
Soup sîmmun.
Sour shûto.
Spark chingar.
Speak rûker.
Spectacles yâkénégrí.
Spider pûv-sûcër.
Spirit duk.
Spit chunger (vb.).
Spittle chungerben.
Spoon roi.
Sport pjas.
Spur bûsâha.
Squirrel rukestâmêngro.
Stable stânya.
Stair padras portus.
Stallion pêlêngro gry.
Stay hâch.
Steal chor.
Step-mother stif-dy.
Stick kôshl.
Stil pukkeno.
Stink kaun (vb).
Stinking kaunlo.
Stocking hûvelo.
Stomach buk.
Stone bar.
Stop hâch.
Story gudlo.
Stove bov.
Straight tardo.
Straw pus.
Street drom.
Strike kûr.
Strong surrelo, sasto.
Suffocate tasser.
Sugar gûllo.
Suitor plêreno.
Summer bîli.
Sun kan, kam.
Sunday Kùrrrikus. See week.
Surprise (n.) túb.
Surprised dree túb.
Swear sôvahaul.
Sweet gûllo.
Swim sîv.
Swine bûlo.
Table mënsali.
Tail poris.
Take lêl.
Tale gudlo.
Tavern këchëna.
Tea muttermëngri.
Tear chinger.
Tell pen, pükër.
Ten dësh.
Ten tan.
Testicles pëlé.
Thank you pérrako tâte.
That (pron.) adövo, dovo.
Thee tâte.
Their lendes.
Them lende.
There adöi.
They lende.
Thief chòromëngro.
Thing köva; pennis.
Think pen.
Thirsty trùshilo.
This akóro, kovo.
Thorn kâro.
Thou fâté.
Three trîn.
Throat gullo.
Throw wussèr.
Thunder godlee; malânä. See ightning.
Thy teero
Time cherus.
Tired kînlo.
Tobacco tâvalo.
To-day to-divnus.
Together këttënu.
To-morrow to-sûlùa.
Tongue jib, chib. See language.
To-night to-râti.
Tooth dant.
Towel plëshita.
Town gâr. See village.
Track pättèran.
Trail pättèran.
Travel pirri: jaw dâro 'go far.'
Tree ruk.
Trick hukerben.
Trouble tuki, tugnus, dush.
Trousers rokimyas.
True châcho, lâcho.
Truth tâcho, châcho.

Turn rikker. See bring, carry.
Twenty bish (rare).
Two dhee.
Uncle kôko. See cousin.
Under talley, aûy.
Understand jîn.
Understanding jînnabên.
Universe chollò-tem.
Upon aprâe pre.
Urinal muttermëngri. See tea.
Urinate mutter.
Urine mutterben.
Use chîv. See put.
Used kâmmoben; wrongly employed as adj.
Very büt, bütiti.
Village gâv.
Vinegar shût.
Violent drovàn.
Violin bòsh.
Violinist bôshomëngro.
Vulgar fôkëskro.
Wagon wardo.
Waistcoat vongree.
Wait hûch.
Wake jönger.
Walk pirri, jaw.
Warm tâlto.
Was sus.
Wash tôv.
Watch (vb.) dik.
Watch hora (noun).
Water pànne.
Watercloset pànce-kair.
Wax môm.
Wax-light mîmelti dûd.
Way drom.
Wear rîv (as clothes).
Wedding rûmmerben.
Week kûrûkus. See Sunday.
Weep ror, ror.
What so.
What is sosse.
Wheat gîr. See grain.
Wheel hêrrer.
When ronka (rare).
Where ky.
Whinney nücker.
Whip chuknee. Woman jūva.
Whiskey tātto-pānee. See brandy. Womb dūdum. See gourd.
Whistle shell. Wood kōshi; wesh (see forest).
White panono. Wool poshom.
Who satro, kun. Word lāv.
Whore lābeni. Work būtī.
Widow pīvi jūva. World svētī.
Widower pīci marsh. Worm nāg.
Wife rōmni. Worry nicher.
Wild wēshno; dīvius (see crazy). Write chīn. See cut.
Willow kovīska-ruk; kīpsi-ruk. Writing ılı.
   See laurel.
Wing bavol. Yes āvai, āvo.
Wine mol. Yesterday kāliko.
Winter wehn. You tātē.
Wise ġūvvero. Young tāno, tīkno, chikno.
Wish kaum. Young girl rākhī, chy.
Witch chōvihānee. Young man rāklo, chal.
With pāsh; 'long o' Your teero (rare); tūtes.
Wizard chōvihāno.
Visiting Sins upon the Innocent.—By DR. THEODORE C. Foote, of the Johns Hopkins University, Baltimore, Md.

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Saalschütz Das Mosaische Recht, 1853.
Swoboda Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, 26ter Band, 1905.

Every one is aware that the devout belief of Christendom until recent times has been that the innocent are punished by God for the sins of their ancestors. It is true that a way has been found of ameliorating the injustice by confining the visitation to hereditary ills, but this is modern. The great prominence that has been given to this belief is no doubt due to its expression in the second commandment of the Decalogue, which, strangely enough and quite significantly, has produced a much more marked impression on Christianity than it ever did upon Judaism.

It is my intention to treat this subject from a comparative and not a theological standpoint, and to call attention to a remarkable instance of a more advanced ethical concept yielding to an inferior one which thereupon dominates the subject for nearly twenty-five centuries.

The first mention of the innocent suffering for the guilty in Hebrew literature is found in Deut. 24, 16: “The fathers shall not be put to death for the children, neither shall the children be put to death for the fathers: every man shall be put to death for his own sin.”
Such a statute as this in an ancient code can hardly be without a history, which we have, unfortunately, little means of learning. It seems evident, however, that the Hebrews had encountered some custom of punishing the innocent with or for the guilty, and this clean-cut statement that "every man shall be put to death for his own sin," is the protest of a legislator whose ethical standard was far more just.

It may be taken for granted that the responsibility¹ (rechtsverantwortlichkeit) of the family or clan, of which Post cites so many instances among primitive peoples, obtained among the Canaanites of Palestine. Post says:² "Die Haftung des Geschlechts für Rechtsbrüche seiner Genossen ist eine ganz universelle Erscheinung." He then cites authorities on the peoples of the Malay Archipelago, Polynesia, Mariana Islands, of the Caucasus, the Semites, Negroes, and various Aryan peoples.

We may then infer that among the Canaanites the primitive bloodfeud, which amounted to a state of war between different clans, passed, as among other peoples, into the blood-revenge,¹ which limited not only the causes that justified such revenge but also the persons who were allowed to participate in it. Müller points out⁴ that the Hammurabi code and the Sepher Hammishpatim, the so-called Book of the Covenant, both of which in his opinion depend on an older parent code, recognize the principle that the children are penally responsible (strafrechtlieh verantwortlich) for the crime of their parents. In the Babylonian code this is a right, which in the Hebrew code is abrogated.⁵ It may be noted here that all the books I have seen dealing with Hebrew penal laws and ethnological jurisprudence know nothing of Biblical criticism and cannot treat the facts chronologically.

The passing of the blood revenge into the lex talionis⁶ was no doubt the removal of a terrible menace to life and liberty to many persons related to the guilty party, but at the same time it was probably not remarked that this movement towards mitigation of the harsher custom, worked a shocking cruelty in the case of innocent persons dying for the guilty. In most cases, it

may be hoped, the penalty was reduced to a fine. ¹ There is probably little doubt that § 210 of the Hammurabi code,² which directs that in case a man has caused the death of a gentleman's daughter, his own daughter shall be put to death, was subject to composition; and the same may be said of § 230, where a builder's son is to be killed in case a house of the said builder falls and kills the owner's son. But nevertheless the principle of the substitution of the innocent for the guilty is plainly recognized.

This principle may also be traced in Ex. 21, 31.³ If a man's ox, known to be vicious, has killed a man or a woman, the owner's life is forfeited; but composition in the form of a ransom is allowed. Then vs. 31 reads: "Whether it have gored a son or have gored a daughter, according to this judgment shall it be done unto him"; which seems to imply that by some well known custom the owner's son or daughter would be forfeited; but this was not permitted among the Hebrews because a child cannot be put to death for a father. In the Hammurabi code⁴ the substitution of an undeveloped child or a useless old father, in case a man had killed a child or a father, was a softening of the harsher law requiring the death of the guilty person.

So far as I am aware, this is all that can be discovered of the penal laws of the Semites before the time of Deuteronomy.

The question now is, where are we to find the historical background for the statute in Deut. 24, 16: "The fathers shall not be put to death for the children, neither shall the children be put to death for the fathers; every man shall be put to death for his own sin."

On first thought it might seem to connect itself with the provision just referred to in the Hammurabi code allowing the substitution of a father or child for the guilty party, which would thus associate it with the lex talionis. But fortunately we have an interesting application of this law in 2 Ki. 14, 6, which seems to point to the period when blood revenge was the ruling penal principle and against which the Deuteronomic statute was directed.⁵ Amaziah, son of Joash, king of Judah, when well

¹ Wellhausen in Mommsen, p. 91 ff. ² Müller, p. 152.
³ Müller, p. 168. ⁴ Müller, p. 226.
⁵ Post II, p. 396 f.
established on the throne, put to death those of his subjects who had been guilty of the murder of his father, king Joash; but it especially noted that he did not kill the children of the murderers, because it was forbidden in the Book of the law of Moses, and the statute is then quoted. This is, of course, due to the Deuteronomic editor of the Books of Kings, and shows us that the idea of the statute was not to oppose a custom of substitution of children for fathers or fathers for children, but the right which was sanctioned by blood revenge, of exterminating the whole family of the guilty party. Saalschütz says:¹ "It was something quite common among ancient peoples, to punish not only the children but also the other relatives of the guilty party." He goes on to quote Potter on Grecian laws to the effect that this was done in case of political offenders in order to secure the state against traitors.² Instances of this motive as seen in Israelitish history will doubtless be called to mind. This explanation, however, does not apply in the case of the Deuteronomic statute, for the provision plainly rests on the ethical ground that it is intolerable to cause the innocent to suffer with the guilty. Nor is it to be explained by the idea of the scapegoat, nor is it a reaction against the excesses of personal revenge (cf. 2 Sa. 3, 28 f.).³ I find no other reason for the blood revenge being visited on the family of the transgressor than that of the solidarity of the related parties. There seems to have been an idea of infection which rendered it necessary to exterminate all those who were regarded as infected. However it may be explained, it is against this idea that any one else than the guilty one can be held guilty because of blood relationship, that the Deuteronomic statute was framed.

This principle, then, that the innocent shall not suffer for the guilty, which Duschak⁴ considers to be the foundation of Hebrew law, we find unequivocally stated as early as 621 B.C.

² Post, II, p. 323.
³ Förster, p. 30.
⁴ Duschak, p. 5.
It would be a great mistake, however, if we concluded that the promulgation of such a highly ethical statute was equivalent to the disappearance of the opposite view. The influence of the surrounding nations, on the contrary, continued to make itself felt on the Hebrew people. Instances, such as the murder of Naboth’s children by the Tyrian Jezebel, were probably not of infrequent occurrence, and the tendency was to bring into existence a proverbial expression of the principle that the innocent were answerable for the guilty: “The fathers have eaten sour grapes and the children’s teeth are set on edge.” An expression well adapted to convey the idea of sin infection among blood relatives.

But Jeremiah (about 606 B.C.) takes his stand firmly on the Deuteronomic statute and looks forward to the day when the abhorrent doctrine should no more be heard. “In those days, they shall say no more, The fathers have eaten sour grapes and the children’s teeth are set on edge. But every one shall die for his own iniquity; every man that eateth sour grapes, his teeth shall be set on edge.”

The prophet Ezekiel, a dozen or more years later, utters a vigorous protest against the same doctrine, which had apparently gained strength through foreign influence. It is from him we learn that the doctrine is a foreign one and has no right to a place in Israel. “What do you mean,” he indignantly exclaims, “by using this sour grape proverb on Israelitic soil (הָרִים לְךָ לְיָשָׁב)?” And Lord JHVH declares with an oath that this proverb should no more be used in Israel. The prophet then proceeds to teach the Deuteronomic statute, “The soul that sinneth it shall die; the son shall not bear the iniquity of the father, neither shall the father bear the iniquity of the son.”

Before we pass to the consideration of the postexilic teaching on this subject, we must examine two passages which belong to the older history of J and E, both of which seem to include the punishment of the innocent with the guilty. There are other references which are usually given on this subject.

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1 2 Ki. 9, 26; see Naaschütz, p. 446.
2 Jer. 31, 29 f.
3 Cf. Ps. 137, 4, Is. 32, 13, Jer. 23, 8, Ezek. 12, 22.
4 Ezek. 18, 2, 3, 20.
that are not really pertinent, and will be treated in a note.\footnote{Several other passages, usually thought to refer to this subject, but really not pertinent, are as follows: In Lev. 20, 5, “against his family” is a gloss. Some passages refer to the guilt of the person punished, e.g. Lev. 26, 39 f., Ps. 79, 8 (read “former sins”). Ps. 109, 14. In Num. 14, 33, the reference is not to punishment. Job 5, 4, is not God’s visiting. 1 Ki. 21, 29, seems to be an alteration due to the actual facts of the history. Jer. 11, 22, taken in connection with 31, 29 f., shows a coloring due to the late date of editing. See Cheyne. Black, E. B. col. 2877.}

The two passages are the account of the vengeance on Korah, Dathan and Abiram in Num. 16, and on Achan in Josh. 7. In the latter case many explanations have been given to eliminate the injustice of Achan’s family perishing with him.\footnote{Saalschütz, p. 445 f. Duschak, p. 5.} Michaelis believes the children had sinned with the father; others, that they were only brought out to witness but not to share the execution. Maimonides (zu Sanhedrin, vi. 2), points out that Joshua’s action against Achan was exceptional, since none should be condemned to death in consequence of his own confession or the declaration of a prophet. But it is not necessary to explain away difficulties which exist only as the result of later scribal expansion. It has been pointed out by Holzinger \textit{in loco} that these additions in vv. 15 and 24 which include Achan’s family, are inconsistent with the narrative in vs. 26, and are to be rejected. It may be noted that just such an expansion is to be found in Lev. 20, 5, which reads: “I will set my face against that man, and against his family, and will cut him off,” \textit{etc.}; where, as Bertholet has pointed out, “against his family” is a later addition. In the case of Korah, all the documents appear to narrate the destruction of the families, but here again the impression is due to just such expansions as are noted above. But if it were not due to later expansions, it is not strange that there should be, in the earliest traditions, some traces of the belief against which the Deuteronomic statute is evidently a protest.\footnote{Förster, p. 30.}

From the passages thus far considered it is clear that the only teaching that had any right in Israel was the Deuteronomic statute, and the contrary teaching is recognized as foreign and repudiated in the most unequivocal manner in the name of God himself.
It remains to consider the passages bearing on this subject which show the trend of postexilic thought. We find that instead of the fulfillment of the prophecies of Jeremiah and Ezekiel, that the high ethical standard of the Deuteronomic statute would prevail over the lower standard of the surrounding nations, the very opposite happened; and we have an instance, which, as far as I know, is unique,1 of a people who had adopted an advanced ethical principle and had been taught by two great prophets, speaking in the divine name, that the eternal Justice could not abide that the innocent should be punished for the guilty, yet who nullified their own legislation and adopted a foreign standard setting forth in the most solemn manner that the sins of the fathers would be visited on the children unto the third and fourth generation.2 And what seems the more strange is that writers of the same Deuteronomic school, whose thought and literary expression are so familiar, should have become thorough converts to this doctrine and have interpolated into the earlier Scriptures, in at least four places, statements diametrically opposed to the Deuteronomic statute. I refer to the interpolations in the second commandment, Ex. 20, 5, Deut. 5, 9, and virtually the same words in Ex. 34, 7, and Num. 14, 18. The date of this revision we do not know, but it probably belongs to the period of the postexilic or second Deuteronomic editing of the Book of Kings.3

The growth of this sentiment in prophetic literature seems to have begun at the close of the Exile. In Is. 14, 21, a passage that belongs to this period, in the triumph over Babylon, occur the words, “Prepare ye slaughter for the children for the iniquity of their fathers,” a wording which recalls the Deuteronomic statute at the same time that it reverses its sentiment. This can hardly be anything but the conscious adoption of a

1 Westermarck in The History of Human Marriage, p. 68, gives instances of barbarous tribes retrograding in morals on contact with higher civilization. This is not parallel, but it suggests a possible reason for the back step of the Jews.

2 Saalschütz, p. 446 f. The Rabbis apply the clause “that hate me” to the children. The fathers set a bad example which the children followed. But this clause is wanting in Ex. 34, 7, and Num. 14, 18, also in Is. 14, 21, and Lam. 5, 7.

3 See Burney, Hebrew Text of Kings. Introduction.
different ethical principle. A passage in Is. 65, 6 f., though not very clear, seems to breathe the same spirit. In Lam. 5, 7, which is not earlier than 470 B.C., we find the couplet, “Our fathers sinned and are not, and we have borne their iniquities.” The sentiment is that of the second commandment.

Finally in Jeremiah 32, 18, about the time of Hyrcanus, we find JHVH appealed to as one who “recompenseth the iniquity of the fathers into the bosom of their children after them.” A passage amply significant of the remarkable ethical change when compared with the true Jeremiah: “In those days they shall no more say, The fathers have eaten sour grapes and the children’s teeth are set on edge.”

The facts then are these. In the earlier times the influence of primitive modes of thought in the Hebrew people themselves, or the effect of contact with surrounding nations, may have led to instances of blood revenge of which the Song of Lamech may be an echo, and the rather uncertain account of the vengeance on Korah, Dathan and Abiram. But a healthier sentiment made itself felt in the time of Deuteronomy in a vigorous protest against the visiting of fathers’ sins upon children or children’s sins upon fathers; and the just statute that every one should die for his own sins became the basis of Hebrew penal law. The contrary opinion, however, refused to die and is sternly repudiated by Jeremiah and Ezekiel and stamped as un-Israelitish. By the close of the captivity, nevertheless, the lower standard prevailed, it may be through Babylonian influence, and only a trace is afterwards to be found of the early Deuteronomic legislation.

The later Jews seem to have developed still further the idea of sin infection, which may have been originally associated with blood revenge, and in the latest Books the belief in inherited sin as a result of Adam’s disobedience paved the way for the Christian doctrine of original sin.

1 We may infer from this that the Deuteronomic legislation failed to influence or represent the popular thought.

2 Perhaps such may be seen in the quoting of Deut. 24, 16, in 2 Chron. 25, 4, and Job 21, 19 (in the Persian period?) shows a similar survival.

3 1 Esdras, 8, 21.
Metrical Analysis of the Pāli Iti-vuttaka, a Collection of Discourses of Buddha.—By Justin Hartley Moore, A.M., Columbia University, New York.

In working upon a translation of the Ita-vuttaka, sometimes called the Logia-book of Buddha, it occurred to me that a study of the meters of the metrical portions might perhaps yield something of value as regards both the age of the work and the authenticity of some of its doubtful passages. In this hope I was largely disappointed. But although no satisfactory clue as to the date of the work has been given by this metrical analysis, yet it is possible that further similar examination of other books of the Buddhist canon may permit us to assign to each its proper relative date.

More definite and satisfactory results, however, were obtained, when it came to making a threefold comparison of the Pāli meters with those of the Veda, the epics, and the later classical forms. For comparison with the Vedic meters, I have made use of Arnold, Vedic Metre, Cambridge, 1905, and have employed such of his terminology as was needed; for the Sanskrit meters I have relied on Hopkins' Great Epic of India, N. Y., 1901, pp. 191–362; and for Pāli upon the articles of Oldenberg and Simon mentioned below.

The text of the Ita-vuttaka which I have used is that of Windisch, published by the Pāli Text Society of London in 1890, and in comparison with this I have collated the King of Siam's edition of the work in Siamese characters. The Iti-vuttaka is composed of one hundred and twelve sections, each of which consists of a poetical discourse or saying by Buddha (these poetical passages contain from four to thirty verses) and of a prose introduction.

Three meters are used, sloka, tristubh, and jagati. Of these I shall examine more particularly the first, the sloka, which is the most frequent and most important. The large Arabic numbers used in citing various lines of the work refer to the various sections, and the small letters, a, b, c, etc., to the verses of these sections.

Sloka.—There are in Pāli, as in Sanskrit, two kinds of sloka-stanza: first, the sloka proper or distich, of four pādās (the
pāda being octosyllabic), and second, the much less common mahāpāṅkti or tristich of six pādas. As the same laws of caesura and rhythm apply to each, I include the two varieties in the metrical tables below.

_Feet._—Every distich stanza has a well-marked division or caesura at the end of the second pāda, so that the stanza falls naturally into two halves. Each pāda may be divided into two feet of four syllables each. As no metrical difference between the two halves of the stanza exists, there are really not eight different feet, but four. With regard to the six-line śloka, or mahāpāṅkti, the stanza is divided into three equal parts, mutually independent as to rhythm. The opening feet of the first, third and fifth pādas may be called first feet.

_Syntactical union._—Although there be this metrical isolation of successive verse-couplets, there is very frequently a syntactical union of each pāda with the one following. In fact, we occasionally find two stanzas forming a single sentence.

_Caesura._—The cadence of the śloka naturally depends largely on the sense. It is invariable in the Iti-vuttaka that there be a strong caesura at the end of the second pāda, and also caesuras, somewhat weaker, at the close of the first and third pādas, but still strong enough to prevent the lines being run together. It is found, also, that when the second foot is of the form = = = there is usually a caesura within the pāda itself, after the fifth syllable. Out of twenty-four instances there are but two exceptions (51 i, 77 a). Hopkins notes the same rule in epic Sanskrit (op. cit., p. 221).

_Run-on verses._—In Sanskrit one pāda is sometimes merged with the following in such a manner that the two are inseparable at the end of a line. This is usually the case when a long list of objects is cited, as noted by Hopkins, page 196, but in the Iti-vuttaka such a running together of lines never occurs.

_Hiatus and Rhyme._—Hiatus is found everywhere. This is partly due to the absence of the application of such rules of sandhi as are carried through in Sanskrit; it is partly owing to the structure of the Pāli language, which is characterized by an avoidance of final consonants. Rhyme, which according to Hopkins (p. 200) is not uncommon in epic Sanskrit, is non-existent in the Iti-vuttaka. Alliteration is rare and is probably largely unconscious and accidental. A marked alliterative
effect is found in § 90, an interesting jingle, where in the course of sixteen lines the word *ugga* is used eleven times, with more than one meaning.

At this particular point in our investigation of the śloka, before going into the varieties of feet, I wish to acknowledge in a more especial way my indebtedness to two articles in ZDMG., the first by Oldenberg, vol. 35, pp. 181–188, entitled *Bemerkungen zur Theorie des Śloka*, and the other by Simon, vol. 44, pp. 83–97, entitled *Der Śloka in Pāli*. While both papers are very suggestive, the latter was especially valuable for my purpose, based as it is upon a quantitative analysis of the 725 verses of the Dhammapāda, 2622 from the Thera-Therīgathā, and 2430 chosen from the Jātakas. In analyzing the meters of the Iti-vuttaka I have followed Simon's method in all respects, except that I have treated the eighth syllable of each line as anecps, since Simon's tables themselves show an equal frequency of long and short syllables, and since this eighth has no effect on the character of the rhythm.

**Odd Pādas.** I append herewith an analytical table of the first and second feet of the odd pādas; in this table hypermetric feet are not included, but will be treated separately. The even pādas will be tabulated and described later.

**Forms of First and Second Feet, or varieties of Odd Pādas.**

<table>
<thead>
<tr>
<th>1st foot</th>
<th>2nd foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>43 24 12 2 1 2 1</td>
<td>85</td>
</tr>
<tr>
<td>59 2 4 3 4 1 4 92</td>
<td>245</td>
</tr>
<tr>
<td>14 6 7 3 30</td>
<td></td>
</tr>
<tr>
<td>17 17 89</td>
<td></td>
</tr>
<tr>
<td>37 1 2 2 42</td>
<td></td>
</tr>
<tr>
<td>83 2 1 3 39</td>
<td></td>
</tr>
<tr>
<td>25 1 2 1 29</td>
<td></td>
</tr>
<tr>
<td>32 1 1 34</td>
<td></td>
</tr>
<tr>
<td>13 1 1 14 74</td>
<td></td>
</tr>
<tr>
<td>22 1 1 2 26</td>
<td></td>
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<tr>
<td>3 1 3 6</td>
<td></td>
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<td>1 1</td>
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<td>2 2</td>
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</table>

| Total | 365 | 41 | 7 | 15 | 13 | 7 | 4 | 309 |
Some little explanation is necessary before making comment on this table. Two consonants, as well as a \textit{nigghita} (Skt. anusvāra) followed by a consonant, make a syllable heavy (Henry, \textit{Grammaire Pali}, p. 3) or long by position. Wherever, in lines which at first glance appear hypermetric, a word containing an anaptyctic or svarabhaktic vowel occurs, this vowel is naturally disregarded in the analysis, and the line is treated as regular, e. g. \textit{ariya} is analysed as a trochee. No catalectic lines occur, and hypercatalectic lines will be found treated in another section of this paper.

An examination of the foregoing table of different combinations of syllables in the odd pādas reveals many things of interest. There are sixteen possible combinations of the four syllables of the first foot, and eight of the second foot. Although there be this large number of possible combinations, it will, nevertheless, be seen that there is a marked preference for certain particular combinations of long and short syllables. Among the more marked of these peculiarities may be cited the following:—

(a) If the fourth syllable is short, the fifth must usually be short also. In the \textit{Iti-v.} and \textit{Jātaka} a short fifth is 16 times as common as a long, in the \textit{Thera-theri-gathā}, 23 times, and in the \textit{Dhammapada}, 40 times as common.

(b) A succession of four iambics is very rare, there being no instances in \textit{Dhp.}, 3 in \textit{Iti-v.}, 4 in \textit{Thera-Th.}, and 6 in \textit{Jāt}.

(c) Even three iambics are uncommon in proportion to the number of lines, since there is only about 3\% of such succession in the \textit{Iti-v.}, and only 4\% in the other works.

(d) A succession of four trochees is very rare, there being none in \textit{Dhp.} or \textit{Thera-Th.}, one in \textit{Iti-v.}, and two in \textit{Jāt}. A succession of three trochees is almost equally uncommon; the \textit{Iti-v.} and \textit{Thera-Th.} have each one instance; the \textit{Dhp.} has none; the \textit{Jāt}. eight.

(e) It appears from the table, furthermore, that if the sixth and seventh syllables of a verse are either both long or both short, the fifth syllable is then usually of a different quantity. In this respect the four works stand in a regular sequence as regards the proportionate frequency of a different quantity in the fifth foot. In the \textit{Iti-v.} the fifth syllable as a different quantity from the sixth and seventh, whether both of those syllables be long or whether they be short, is nine times as frequent; in
the other works the proportions are respectively Dhp. 8–1, Thera-Th. 7–1, Jāt. 6–1. The Iti-v., therefore, has the strongest proneness thus to differentiate the fifth syllable, the Jātaka the weakest.

Rare Vipulās.—As to the vipulās, or second feet, we may first dismiss briefly the least common ones of the odd pādas, viz., the third paeon or ionic a minore, o o o o, the second paeon or diambus, o o o o, and the ionic a maiore or third epitrite, o o o. In Sanskrit, for example, the first of these occurs sporadically in all parts of the Mahābhārata, but is not found in the Rāmāyaṇa. The same foot forms about 2% of the second feet in the Iti-vuttaka. The next close o o o o does not often occur in the epic śloka, and in Pāli it is very rare. The use of this vipulā more than anything else separates and distinguishes Pāli meter from the anuṣṭubh of the Veda, and the meter of the later Rig-Veda, which Arnold calls the epic anuṣṭubh. In anuṣṭubh it is the most common foot, forming the ending of the first and second pādas indifferently. Its use as a close to the first (or third) pāda sinks in epic anuṣṭubh to one-half the frequency, and in Pāli and epic Sanskrit its employment is sporadic. With reference to the next vipulā, o o o o, we find that in the Pāli śloka it has an average occurrence of one-half of a per cent., about the same frequency in anuṣṭubh, is sporadic in the epic śloka, but in epic anuṣṭubh it forms 8% of the second feet.

The most common vipulā. The most frequently used second foot in Pāli is o o o o. It forms in the Iti-v., Dhp. and Thera-Th. about 80%, in the Jāt. about 70% of the endings of the first pāda. In the epic Sanskrit, it is also the prevalent ending, but in anuṣṭubh has but a frequency of one per cent. In all four Pāli works this vipulā is used ofteneast with the first group of openings, or first feet, as shown in the table. The percentages of the use of this particular vipulā with the first group are Iti-v. 40%, Dhp. 41%, Thera-Th. 40%, Jāt. 36%.

Other vipulās.—The next popular vipulā is the form o o o o, which most commonly follows a third epitrite o o, in the first foot. It is slightly more than half as common as o o o o after this opening, in the Iti-v., and slightly less than half as common in Thera-Th. and Jāt., but in the Dhp. only one-fifth as common. This vipulā forms less than one per cent. of the
second feet in anusṭubh, about five per cent. in epic anusṭubh, but in epic śloka is fairly frequent. As to the vipulā - o o y, it is usually preceded by a diiambic or third epitritic opening y - o -. The third epitrite is the more common.

Opening feet.—With regard next to the first feet of the odd pādas, there exists much greater freedom than in the second feet. As said before, there are sixteen variations, and it is noteworthy that at least one example of each is found in the comparatively small compass of the Iti-v. The foot o o o does not occur at all in the other works, and the varieties - o o and o o o are not in the Dhp.

The most common group of first feet in all four works is the first group, - - o -, - o -, - - - - . Insignificant are differences in the four works as to which one of these is the favorite. Thus in Iti-v. and Thera-Th. the second epitrite, - o -, is of slightly greater frequency, while in Dhp. and Jāt. the third epitrite, - - o -, is a little in excess.

The second group of opening feet, o - o -, o o - - , o - - -, differs from the former group in having the initial syllable short, and we notice that this difference has a marked effect on the frequency of the opening, as is shown by the figures in the table. This preference for a long first syllable is much stronger in Iti-v. than in the other three works. An interesting contrast may be made here between the Pāli śloka and the Vedic anusṭubh. In the latter the first syllable is anæps, whereas in Pāli, on examining all the sixteen varieties of openings, we find that a long first syllable is about twice as common as a short.

The next two groups of opening feet agree in having a short fourth syllable, and it has already been said that when such is the case, the fifth is usually short also.

Lanman, Sanskrit Reader, p. 300, states that in the Sanskrit epic śloka, the syllables 2, 3 and 4 in odd pādas may not have the form of an anapaest, o o -, or a tribrach, o o o. In general this is true also in Pāli, but it is not invariable, since there are 11 examples of o o y for the second, third and fourth syllables in the Iti-v., 13 in Dhp, 73 in Thera-Th., and 47 in Jāt.

Even Pādas.—Turning now from the odd to the even pādas, we at once notice a remarkable difference in the character of the second foot, since it is here almost invariably of the form o - o y. In the Iti-v. among 519 feet, only eight have not this
diatonic close; these eight verses are 15b, 18d, 20d, 20f, 73b, 75r, 85d, 105b.

The number of hypermetric even pādas is smaller than in odd pādas, since there are 12 hypermetric verses in even pādas in Iti-v, as compared with 24 in odd pādas. These hypermetric lines will be treated later.

The opening foot of the even pādas is variable, although not so greatly as the opening foot of the odd pādas. I subjoin an analysis of the varieties of third foot in the Iti-v.

**Table of third feet, or openings of even pādas.**

<table>
<thead>
<tr>
<th>Group I</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>- - - -</td>
<td>- - - -</td>
</tr>
<tr>
<td>- - - -</td>
<td>110 { 210</td>
</tr>
<tr>
<td>u - - -</td>
<td>94 { 84</td>
</tr>
<tr>
<td>u - u -</td>
<td>23 }</td>
</tr>
<tr>
<td>- - - -</td>
<td>- - - -</td>
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<tr>
<td>- - - -</td>
<td>40 { 50</td>
</tr>
<tr>
<td>u - - -</td>
<td>9 { 0</td>
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<tr>
<td>u - u -</td>
<td>0 }</td>
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<thead>
<tr>
<th>Group II</th>
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<tr>
<td>- - - -</td>
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<tr>
<td>- - - -</td>
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<tr>
<td>u - - -</td>
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<tr>
<td>u - u -</td>
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</tbody>
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<table>
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<tr>
<th>Group IV</th>
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<td>- - - -</td>
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<td>- - - -</td>
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<td>- - - -</td>
</tr>
</tbody>
</table>

A comparison of this table with the similar one in Simon's analysis of the other three Pāli works (p. 93), shows that the first group, in which all four feet agree in having a long third and fourth syllable, contains more than one-half the number of third feet in the Pāli śloka. The first syllable is more than twice as often long as short. The second syllable is anceps, with a slight predominance of longs, the longs being proportionately more common in the Iti-v. than in the other three works.

The second group differs from the first in having the last syllable short. There is a preference again here for a long first syllable; the second is anceps, the long quantity being more numerous.

When the third and fourth syllables are short, as in group three, the second syllable is then long; there are but thirty-three exceptions to this rule in all of the four Pāli works combined, a total of 6422 lines.

Certain special rules as regards even pādas may be discovered from the above table, as for example the absence of a succession
of four iambs in the Iti-v. There are, however, three instances of this succession of syllables in the Dhp.; twelve in the Thera-Th.; and twenty-one in the Jāt. Three iambs in succession are also rather uncommon; of this there are nine instances in the Iti-v., twelve in the Dhp., forty-three in the Thera-Th., and seventy-one in the Jāt.

In the epic śloka (Lanman, Sanskrit Reader, page 300) syllables 2, 3 and 4 of even pādas cannot form a tribrach, o o o, an anapaest, o o, or amphimacer, o o. Such is not the case in Pāli, since the Iti-v. has nine examples of the tribrach, the Dhp. four, Thera-Th. eleven, and Jāt. nine; of the anapaest there are five examples in Iti-v., five in Dhp., fourteen in Thera-Th., and seventeen in Jāt.; of the amphimacer there are four in Iti-v., ten in Dhp., forty-one in Thera-Th., and seventy-five in Jāt.

Hypermetric Lines.—A number of the śloka lines in the Iti-v. are hypermetric. In itself this fact is not surprising, and the same phenomenon is found in Sanskrit. A good treatment of hypermetric verses in Sanskrit is found in Hopkins, o. c., pp. 252–261. None of the pādas of the Iti-v. are catalectic, all of the hypermetric verses being, therefore, hypercatalectic. While there is usually one extra syllable in lines of this kind, we find four śloka lines of ten and one of eleven syllables. As stated before, even pādas are less often hypermetric than odd pādas; of the former there are thirteen (18f, 28f, 29j, 29l, 32f, 42h, 64h, 70h, 75h, 77f, 81f, 99d, 112l) and out of these thirteen, one line is found three times (32f, 64h, 70h); of the latter, the odd pādas, there are twenty-four hypermetric lines (16c, 20i, 21i, 29l, 37a, 37g, 61i, 70c, 75c, 75m, 75o, 76y, 76a, 81a, 85a, 91a, 91c, 93k, 95i, 99k, 103i, 103s, 106i, 111g; of these 20i and 21i are the same). There is one instance (27k) in a passage, probably an interpolation, of a hypermetric pāda within a triśūbha-jagati stanza.

As stated above, a line is not treated as hypermetric where the extra syllable is due to an epenthetic vowel. For example, such a line as

\[ \text{nircaṁ āraddhaviriyehi} \] (78k)

is scanned \( o - o - o o - o \) I have not counted line 81a

\[ \text{yassa sakkariyamānassa} \]

as hypermetric, since the second word is most likely a passive
ppl. of sakkaroti, Sanskrit sat kr, where the vowel a in Pali is epenthetic. Similar vowels occur in the Avesta. Another derivative of kr is found in 103s, where the extra syllable is an epenthetic vowel.

A few lines are hypermetric, as Windisch has indicated in his introduction, p. viii, because the designation for some particular virtue, perhaps, a word of two or more syllables, is contrasted with the term for the corresponding vice, of three or more syllables. Seven lines (29i, 18f, 29j, 32f, 64b, 70b, 103i) are hypermetric from this cause. Thus the line

\[ \text{adayhamanena cetasa} \] (29j)

"with uninflamed mind," refers back to the line

\[ \text{dayhamanena cetasa} \] (28j)

"with inflamed mind," in the preceding section.

The fact that a line is hypermetric does not necessarily impugn the genuineness of the line. We may take as examples of this the following padas—

\[ \text{dukkham viharati tudos} \] (28 l)
\[ \text{sukkham viharati tudos} \] (29 l)
\[ \text{sukhumadithivipassakam} \] (81f).

In each of these the regular cadence 0 – 0 – 0 is present, the first foot having an extra syllable; the sense of the passage in each case is clear, and the various MSS. are practically identical in the readings of each.

A case where a variant reading gives a normal meter is found in 106i

\[ \text{ucchadanena nhapanena}. \]

This line would have the same sense ("by anointing and by bathing") were we to follow the reading of the MS. M, namely

\[ \text{ucchadanena nhahan}. \]

Elision.—Two hypermetric lines have hiatus, and consequently the extra syllable may be avoided by supposing elision to have taken place; these lines are

\[ \text{appassuto apunakaro} \] (70c)
\[ \text{vimutto upadhisaikhaye} \] (112 l)

Leaving aside now the above lines in which the extra syllable may be accounted for by anacrusis, elision, incorrect reading, or especially through contrast of one word in the hypermetric
line with a word one syllable shorter in another stanza, we have
to face the fact that there exist some hypermetric lines for
which no explanation can be given. Such for example are the
odd pādas 20i, 27k, 37a, 37g, 61i, 75e, m, o, 76a', 81a, 85a,
91a, 93k, 95i, 99k, 111g, and the even pādas 42h, 77f, 99d.

Lines of ten syllables are 16c, 91c, both of which are odd
pādas; one curious line of eleven syllables, an even pāda,
occurs at 75b, namely:

\[ na \ kapaniddhike \ na \ vanibbake. \]

Triṣṭubh and Jagati.—Of the 112 sections of the Iti-
vuttaka mentioned in the opening of this paper, 98 were in
śloka verse. The remaining fourteen are with three exceptions
either in triṣṭubh or jagati. The three exceptions are probably
later interpolations or corruptions of the text, and are written
in a mixture of śloka, triṣṭubh and jagati. These are touched
upon below. A pleasing variety is sometimes produced in
triṣṭubh stanzas by the occasional introduction of a jagati verse.
This occurs in 38f, 46d, 69e, 69c and 84l, while a sporadic
triṣṭubh appears occasionally within a jagati stanza, as in 87c
and 98c. Alternation of the two meters is found in one pas-
sage, 47i-b, the first and third lines being in triṣṭubh and the
second and fourth in jagati. In the poetical portion of § 100
we find the first and fourth verses in jagati and the two inter-
vening verses in triṣṭubh.

A metrical examination of 27i-p shows that there is a rhyth-
mical irregularity in the passage, as well as textual corruption,
as indicated by faulty grammar. The stanza in question has
seven lines, composed respectively in triṣṭubh, jagati, hyper-
metric śloka, jagati, triṣṭubh, jagati, triṣṭubh. As will be
seen from the notes on this passage in my forthcoming transla-
tion of the Iti-vuttaka, several lines are of very questionable
genuineness, and for that reason none is included in the following
statistics.

Triṣṭubh.—The commonest triṣṭubh line in epic Sanskrit, as
pointed out by Hopkins, p. 275, has the form \( u - v - v \ o \ y -
\ o - v \). There are twenty-nine lines of this kind in the Iti-v.
The first and last syllables are anceps. No example of a long
third syllable is found; only two lines have a short fifth
and only three a long seventh. The characteristic scheme of
the triṣṭubh verse in the Iti-v. is, therefore, \( v - v - o - o - o - v \). The caesura is after the fourth or fifth syllables, slightly oftener after the former. Certain deviations from this norm occur, such as

38g of the form \(-v-\ o-\ o-\ o-\ v-\)

42a "" "" \(-v-\ o-\ o-\ o-\ v-\)

84h "" "" \(-v-\ o-\ o-\ o-\ v-\)

38o "" "" \(-v-\ o-\ o-\ o-\ v-\)

34h "" "" \(-v-\ o-\ o-\ o-\ v-\)

The last of these lines is remarkable for its succession of six long syllables. In this particular case it is to be noted, however, that only the best Ms., M, reads \( i \) in the third and sixth syllables; all the other Mss. have \( t \). Grammatically the long vowel is required.

The two lines, 38h and 109b—

\( tam \ re \ munim \ antima\dhada\hini\m \)

\( yogak\hren\m \ ayati \ patthay\m\)no,

are irregular only in having the fourth syllable short. It is possible in Pāli, when the caesura comes after a short syllable as in these two lines, for the syllable in question to receive metrical lengthening.

Only one triṣṭubh is hypercatalectic

\( parip\hnumsekha\m \ apah\anadhamman\m \) (46a)

in which instance the first syllable may be taken as anacrusis, as the line is normal in other regards, although it may be noted that the second part has the rare form \(-o-\ o-\).

The line \( yo \ ca \ satin\m \ nipako \ jh\dyi \) (34g) may perhaps be treated best as a catalectic triṣṭubh, with the irregular opening of a first peon, \(-v-\ o-\ o-\)

\( Jagati. \)—Turning next to the jagatī, or line of twelve syllables, we find that here, too, the Iti-v. follows a definite metrical scheme, which is represented

\( v-\ o-\ o-\ o-\ o-\ o-\ o-\ o-\ v-\ o-\ v-\).

Of this type there are twenty-nine. The third and fifth syllables might be represented as common, but there is found a very strong preference for a short third and a long fifth. Twelve lines are different from this norm, or are hypermetric.

\( Caesura. \)—The caesura in the jagatī as in the triṣṭubh falls either after the fourth or fifth syllable, but the jagatī differs

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from the triṣṭubh in having a preference rather for the caesura to fall after the fifth syllable.

It is possible also that in jagatī verse, as mentioned before in treating of the triṣṭubh, a short syllable may receive metrical lengthening if followed by the caesura, as for example in the line

\textit{tayo pana akusale nirākare} (87b).

Other instances of a short syllable before a caesura, where the norm requires a long one, are found in lines 44c, 47e and 100a.

Two hypercatalectic jagatīs occur, of which the first,

\textit{anupādīsesā pana samparāyikā} (44c),

may be treated as a normal jagatī with anacrusis. The other line, however,

\textit{nībbānadhātā aniseitena tādinā} (44b),

even though it has the regular opening and close of a jagatī contains in the middle portion a superfluous long syllable. There is no hint of a Ms. corruption, and we have no help from variant readings. Cf. Hopkins, p. 287 and p. 468.

Irregular jagatīs.—Certain lines in jagatī passages are neither normal nor hypercatalectic, as for example,

\textit{tesamu so attho paramo visujhathi} (98g)
\textit{ātāpi bhikkhu nipako jhānalabhī} (47j).

In both of these cases also we have no assistance from variant readings, and cannot, therefore, allege Ms. corruption as an explanation of the metrical difficulty.

Textual corruption.—There do exist, however, two or three stanzas in the Iti-v. in which Ms. corruption is apparent. In these few cases, not only is one line irregular, but a longer succession of bizarre metrical effects is found. In 47f and g, for example, we find

\textit{samāhito mudito vippasanne ca}
\textit{kālena so samma dhammaṃ parivinapaṣamaṇo},

or substituting the quantities for the words, we have

\begin{align*}
  \text{v} & = \text{u} = \text{u} = \text{u} = \text{u} \\
  \text{u} & = \text{u} = \text{u} = \text{u} = \text{u} = \text{u}.
\end{align*}

These lines are metrically hopeless, and there is no help to be obtained from variant readings. Still other passages offering
metrical difficulty are 38j-0, and 69. The fifth line of the first of these passages, viz.

 sokāratiṇṇam janataṁ apetasoko

or giving its quantities

--v- [v v] v v 0--

might be emended so as to read taṁ instead of janataṁ, by which emendation the line would become a regular tristubh. The justification of this emendation is strengthened, perhaps, by the occurrence of the same word janataṁ three lines previous. If the emendation be allowed, then, the first two lines are in jagati, the last four in tristubh.

In the second of these two passages, viz. 69, a-h, a corruption of the text is certain.

yasaḥ rāgo ca doso ca
avijjā ca virājita
swaṁ samuddaṁ sagahaṁ sarokkhasaṁ
āmibhayaṁ dattaraṁ -accatāri
saṅgātiyo maevihaṁ nirūpadhi
pahāsi dakkhaṁ apunabhavarya
atthāṅgato su na samānaṁ -eti
anahayi macurājan- ti brāmīti.

The first two lines are in śloka, the third is a regular jagati, the fourth is a tristubh with the rare opening --v v , the fifth line is a regular jagati, the sixth is a tristubh with the uncommon middle foot v v v , the seventh again a tristubh, and the last one a tristubh of the very strange form

v v v v v v.

Conclusion.—Pending a comparative study of the meters of the different Pāli works much more far reaching than has yet been made, nothing can be said regarding the relative age of stanzas of the Iti-v. written in śloka, tristubh, or jagati.

All three of these meters are much more free than the corresponding rhythms in classical Sanskrit, as is to be expected. The śloka has changed in a marked degree from the Vedic type, yet it has at the same time distinct differences from the epic śloka. It is impossible to say whether the Pāli śloka is a direct outcome of Vedic imitation, and it is likewise impossible to postulate any connection or rapport with the later stages of
Sanskrit metrical development, as it might well be true that certain metrical preferences, for example, a long first syllable, are due to the idiosyncrasies of the language.

A more positive result of our analysis is the discovery that the eleven and twelve-syllable meters show less variety than the sloka. Each has in Pāli a well-fixed form, with fully as much regularity of syllabic quantities as has epic Sanskrit (cf. Hopkins, p. 273-320), if indeed there is not even more. But this statement must not be applied to Pāli in general until many other works have been analysed. The fact that the Iti-v. employs jagatī as often as triṣṭubh might seem to point to a late date, but whether this equal occurrence of triṣṭubh and jagatī is the result of chance or intention, no one can say.
On Certain Persian and Armenian Month-Names as Influenced by the Avesta Calendar.—By Dr. Louis II. Gray, Newark, N. J.

The influence of the Zoroastrian calendar, as of Zoroastrianism itself, was far-reaching, extending not only to the Transoxian regions of Chorasmia and Sogdiana, but to Armenia and Cappadocia, even as the Iranian faith had spread. This is, indeed, no new discovery—it has been known at least since 1836, when Benfey and Stern, in their *Über die Monatsnamen einiger alter Völker, insbesondere der Perser, Cappadocier, Juden und Syrer*, 76–120, themselves following Reland’s suggestion of exactly two centuries ago (*Dissertationes miscelaneae*, ii. 129): “examinanda Tibi haec Cappadocica mensium nomina, lector, exhibeo . . . . in iis umbrae mensium Persicorum mihi video detexisse,” demonstrated that the Cappadocian month-names were borrowed, one and all, from the Zoroastrian calendar. Furthermore, Lagarde, in his *Gesammelte Abhandlungen*, 9, 163, and Hübschmann, in various rubrics of his *Armenische Grammatik*, i., have shown the dependence of certain Armenian month-names on the Avesta-Pahlavi system; while Sachau’s translation of al-Biruni’s *Chronology of Ancient Nations*, 52–53, 56–57, 82–83, 220–225, 384, 425–426, gives the names of the months and other calendrical data of the inhabitants of Chorasmia, Sogdiana, Seistan, Bukhārik (?), and Qūbā. An additional list of Sogdian month-names is given in three fragments of the Turfan manuscripts published by F. W. K. Müller in his *Die „persischen“ Kalendärwiedrucke im chinesischen Tripitaka* (Sitzungsberichte der königlich preussischen Akademie der Wissenschaften, 1907, 458–465). The Armenian month-names¹ are given in order by Dulaurier, in his *Recherches sur la chronologie arménienne*, 10–14, and the same scholar records not only the Armenian calendar based on the Julian system and dating probably from the period of Constantine the Great (pp. 37–38), as well as

¹ The study of Haqopian on the Armenian months in the Armenian periodical *Banaver* for 1900 has unfortunately been inaccessible to me.
the month-names of Azaria of Julfa, who flourished early in
the seventeenth century (pp. 115–117), but also an Albanian
menology of uncertain date (p. 167). There seems to be, how-
ever, no discussion in which these scattered data are brought
together and summarized, even Marquart, in his Untersuch-
ungen zur Geschichte von Iran, ii. 198–201, 213–215, and
Ginzel, in his section on the Persian calendar (Handbuch der
mathematischen und technischen Chronologie, i. 275–309), omit-
ting any detailed comparison. In like manner, neither Sachau,
in his Zur Geschichte und Chronologie von Khorârizm (Sitzungs-
berichte der Wiener Akademie der Wissenschaften, phil.-hist.
Klasse, lxxiii. 471–506), nor Tomaschek, in his Centralasiatische
Studien, i. Sogdiana (ib. lxxxvii. 67–184), discusses the calendar
of these peoples. Indeed, so vague is our knowledge of the
Transoxian language, and so meagre the remains, that any
attempt to study the month-names must be largely a matter of
conjecture and hypothesis. This difficulty is increased in the
case of the Seistanian calendar, which may be Scythic (cf. Justi,
in Grundrisse der iranischen Philologie, ii. 489), and of the
Bukhârî (?) and Qubân systems, both of which, like the
Chorasmian and Sogdian, are Transoxian. It is at least clear,
however, that the Chorasmian calendar was borrowed from the
Avesta system before the invasion of Alexander the Great, and
the Sogdian before the revolt of Diodotus in the third century
B. C. (Marquart, ii. 201).

Contrariwise, the Zoroastrian calendar, or possibly some sys-
tem akin to the Old Persian, may perhaps have been current in
lands where Mohammedan chronology now rules. I allude par-
ticularly to the Baluchi and Afghan calendars. In Baluchistan
the mode of reckoning time is entirely Islamitic (Mockler, Gram-
matical of the Balouchee Language, 120), while in Afghanistan
we find two systems of month-names. One of these, in frequent
use along the eastern frontier between Afghanistan and India,
is of Indian origin (Trumpp, Grammar of the Pashtû, 364–365),
while the other is borrowed from the Mohammedan menology
and is as follows (ib. 363–364):

<table>
<thead>
<tr>
<th>Afghan</th>
<th>Mohammedan</th>
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<tbody>
<tr>
<td>Hasan ỉ Husain</td>
<td>&quot;(the month of) Hasan and</td>
</tr>
<tr>
<td>Husain</td>
<td>MdharraM</td>
</tr>
<tr>
<td>Safarah</td>
<td>Safar</td>
</tr>
</tbody>
</table>
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Vrunbāt Xūr, "First Sister" .................. Rabīʿ-al-awwal
Dvayamah Xūr, "Second Sister" .................. Rabīʿ-ath-thānī
Dreyamah Xūr, "Third Sister" .................. Jamād-al-awwal
Calūramah Xūr, "Fourth Sister" .................. Jamād-ath-thānī
Da Xudāe Miyāšt, "Month of God" ............ Rajab
Da Sō Qadr Miyāšt \ "Month of the Night of
Da Barāt Miyāšt \ ) Power" .................. Ṣaʿbān
Rōzah, 1 "Fast" .................. Ramadān
Da Vrūkai Axtar Miyāšt, 2 "Month of the
Da Vārah Axtar Miyāšt, 3 Lesser Fast" .... Sawwāl
Miyānī Xālī Miyāšt, 4 "Intermediate Month" . Dhu-l-Qaʿdah
Da Lōe Axtar Miyāšt, "Month of the Greater
Fast" .................. Dhu-l-Hijjah

In the preparation of the article on the Persian calendar for Dr. James Hastings’s forthcoming Dictionary of Religion and Ethics, my attention was directed to this problem the more since I had failed to evaluate it in my section on the same subject in the Grundriss der iranischen Philologie, ii. 675–678. While, in a sense, this present study is rather a summary and collation of results previously attained by others than a presentation of independent researches, yet it has seemed to me that a collection of scattered data might, when combined, throw an increased light on the Avesta calendar itself; and in one or two points, minor though they be, I have perhaps succeeded in making some advance. It is also my pleasant duty to acknowledge with gratitude the generous assistance of M. A. Meillet, of the Collège de France, Paris, in his reply of March 3, 1907, to my queries concerning the Armenian month-names; to the Rev. Dr. Thomas P. Hughes, of Brooklyn, who on February 20, 1907, responded with equal kindness to my request for information concerning the names of the Afghan months; and to Messrs. N. Nazarian and S. Surenian, of New York, who most unselfishly and courteously aided an entire stranger in determining the meaning of the Armenian day-names.

1 The translation of this and the four names following were kindly supplied me by the Rev. Dr. Thomas P. Hughes, the well-known Afghan scholar.
2 These forms are also due to Dr. Hughes.
3 Between "the lesser fast" of Ṭūl-al-fitr and the "greater fast" of Ṭūl-al-ʿaṣq.
I. Fravartin (March-April). None of the calendars affiliated with the Avesta-Pahlavi system show a month-name similar to this, which is transcribed Фарвардн, Фарвардн, and Фарвардн by Byzantine writers on the Iranian calendar, although the nineteenth day of each month, which bears the same name in the Zoroastrian calendar, is termed روزن in Sogdian and in Chorasmian. The month is called, instead, simply "New Year," the appellation being borrowed from an Avesta nava sarabu, "new year" (Chorasmian نارسارچی, Sogdian نورساد، Bukhārīk (?), Armenian Nacarsard, Albanian Nacasardus). The form of the name is of the more interest in that it represents an older form even than the Pahlavi (sāl, "year," cf. Persian سال), and may thus be compared with the Ossetic sārd, sārdā, sārd, sārd, "summer" (Avesta sare, "year"; cf. Hufschmann, Eymology und Lautlehre der ossetischen Sprache, 55; idem, Armenische Grammatik, i. 202; Horn, Grundriss der neupersischen Etymologie, 153; Salemann, in Grundriss der iranischen Philologie, i. a. 267). To the same stage of borrowing doubtless belongs the Talmudic של לארן (WZKM. viii. 366), the term applied by the 'Abodah Zarah to a Persian festival (Levy, Neuhebräisches und chaldäisches Wörterbuch, iii. 389), as well as the νέον σάρδων τὸ νέον ἔτος of Johannes Lydus xxxix. 13. The Avesta-Pahlavi form, however, is represented in the Cappadocian calendar by Араэян and its variants (Benfey and Stern, Uber die Monatssnamen einiger alter Völker, 85–89; otherwise, Marquart, i. 63). The Seistanian calendar calls the first month کرمان, which may possibly be in honor of the Kayāta of the Avesta (Yashth xiii. 132; xix. 71), the legendary founder of the Kayanian Dynasty (Justi, Iranisches Namenbuch, 159), whose home was in Seistan (Yashth xix. 65 sqq.; cf. Geiger, Oströmische Kultur, 99–100, 108, 411). The calendar of Azaria of Julfa calls the first

1 On these references see Gray, Byzantinische Zeitschrift, xi. 468–472, and the same writer's article in Avesta, Pahlavi, and Ancient Persian Studies in Honour of . . . Sanjana, 187–175, together with the citations there given.

2 "...Perhaps the word bears some relation to Памак, i. e. Bukhārā." Sachau, 393; otherwise, but less plausibly, Marquart. ii. 199.
month Šams, a loan-word from the Arabic شمس, "sun," but the Qubân1 is unclear to me.

II. Arťaβaĥiš (April-May). This is represented as a month-name only by the Chorasmian ʿAraβaša and the Cappadocian ʿAraβaša and its variants (Benfey and Stern, 89–92), although as the name of the third day of each month it finds equivalents in the Chorasmian ʿAraβaša (variant اردوست) and in the Sogdian اردوست. The Greek writers transcribe the name by ʿArapaβaša, ʿArapaβaša, ʿArapaβaša, and ʿArapaβaša. The Bukhārik (?) name فدلی نوسرد apparently represents an Avesta *paita-nava-sardi, "after the new year," but the Sogdian (variants خرزرین, خرزرین, خرزرین, خرزرین), like the Seistanian درهو, is unclear. The Armenian calendar likewise diverges from the Avesta, the corresponding month of its system being named Hori, "second month," a derivative of the Georgian ori, "two," while Azaria of Julfa calls this month Adam in honor of the father of the human race. In Albanian the second month was termed Tulën, which, if the Armenian տ was pronounced d at the time of the formation of the Albanian calendar, bears a strong, though perhaps fortuitous, resemblance to the Albanian delec, "juniper" (Meyer, Etymologisches Wörterbuch der albanischen Sprache, 65). The Qubân اودین is unclear to me.

III. Horvadaṭ (May-June). This month, which is transcribed Χορτατ in Greek, is very accurately represented by the Chorasmian ʰeruada, while the sixth day of each month, which bears the same name in the Avesta-Pahlavi system, is given in Chorasmian, in like manner, by ʰeruada and in Sogdian by ردد. The Cappadocian equivalent is ʿAraβaša and its variants (Benfey and Stern, 92–94). The Sogdian نیسین (variants نیسین, نیسین, نیسین) is clearly the Assyrian Nisāmūn,

1 "Kubā was the second largest town of Farghāna, not far from Shāsh," Sachau, 893.

2 My thanks for this identification are due to M. Meillet. On the general problem of Caucasian loan-words in Armenian, cf. Hübschmann, Armenische Grammatik, i. 396–398.
Hebrew לוי (April-May), the divergency of time being doubtless due to retrogression of the calendar at the time when the Sogdians adopted this month-name. The Bukhārīk (?) of Qubān حکش (doubtfully compared by Marquart, ii. 200, with the twelfth Old Turkish month جخش، Seistanian اورسال, and Allanian نوره, are unclear to me. The Armenian سه, however, denotes simply "third month," being derived from the Georgian somi, "three," while Azaria of Julfa's شت is simply the Hebrew שט.

IV. Tir (June-July). The month Tir, transcribed Τόρμα, Τούρμα in Greek, is represented in the Chorasmian calendar by جبزي, while for the day of the same name, the thirteenth of each month, the Chorasmian and Sogdian systems have جبزي (read, with the variant, جبزي) and نواش respectively. The Sogdian month-name corresponding to Tir is بسال، نسکم (نا... پسال، بسال، بسکم). This word may possibly be identical with the Persian بسال "garland of flowers." The Seistanian تیرکیانیارا, like the Armenian تیر (Lagarde, Gesammelte Abhandlungen, 9) and the Cappadocian تیرα and its variants (Benfey and Stern, 94–95), is clearly derived from the Pahlavi Tir. The Albanian name of the fourth month, يیل, may possibly be a translation of the old Iranian term, if it may be connected with the Albanian ال, "star" (Meyer, 460). The Bukhārīk (?) of Lolya سافت, Qubān حکش, and Azaria of Julfa’s نورسی are unclear to me. The name Tir has been borrowed as a planet-name, it is interesting to note, in the Chinese (Cantonese pronunciation) تیر.

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1 Here again my thanks are due to M. Meillet.

2 On the confusion of Tiśṭra, the dog-star, with his original opponent Tir, Mercury, cf. Spiegel's translation of the Avesta, iii. introd. 21–22; Darmesteter, Le Zend Avesta, ii. 411–413; Nöldeke, Persische Studien, i. 33–38; Justi, Iranisches Namenbuch, 235; and Bartholomae, Altiranisches Wörterbuch, 632, and the references there given. On Chorasmian j for an original Iranian t, cf. Nöldeke, loc. cit. As Indian parallels may be cited such forms as Prakrit cīfhaṭi. Uriya cिद = Sanskrit tiṣṭhaṭi, "stands" (Pischel, Grammatik der Prākrit-Sprachen, § 218; Gray, Indo-Iranian Phonology, § 228).

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V. Amerōdat (July-August). The Zoroastrian month Amerōdat, transcribed Mēsper in Greek, is represented by the Chorasmian (variant հեդան), while for the seventh day of each month, which bears the same name, the Chorasmian and Sogdian calendars have مَرْدَد and Հեդան respectively. The Cappadocian equivalent is 'Amagat and its variants (Benfey and Stern, 95-97), while the corresponding Armenian month is Kino, "(the month) of crops," a derivative of k'adel, "to gather" (Dulaurier, Recherches sur la chronologie arménienne, 12). As M. Meillet kindly informs me, "it is true that, at the period of the origin of the Armenian era, it corresponded to the month of November, but the name existed previously and was in use in an earlier system." Azaria of Julfa's name for the fifth month, Gumar, is merely a loan-word from the Arabic قمر, "moon." The Sogdian اشناخندادا (variants اشناخندادا, اشناخندادا, سرینا by Marquart, ii. 199), Bukhārik (?), and Albanian Bukteh, the corresponding names of the fifth month, are unclear to me. The Qubān is merely the East Turkish name of the same month.

VI. Šatvātō (August-September). To the name of this month, which is transcribed Ξαυρας and Ξαρηθας in Greek, corresponds the Chorasmian اخشورروى, the homonymous day, the fourth of each month, being termed اخشورروى in Chorasmian and خستشور in Sogdian. The Cappadocian derivative from the Zoroastrian month-name is Ξαὐρας and its variants (Benfey and Stern, 97-101). The Sogdian name of the month, given by al-Biruni as مَرْخَنْدَان (مرخندان), is shown by the Turfan Χαράνταμ (variant خراناننام) to have been "autumn month"; and to have been equivalent to خران (October), the eighth month in the short-lived calendar introduced by Yazdagird III. (Hyde, Historia Religionis Veterum Persarum, 197). The other names of the sixth month, Seistanian مَرْدَد (مرد), (read مَرْدَا by Marquart, ii. 199), Bukhārik (?), يسی, Qubān, Armenian Արա, Azaria of Julfa's Նադար, and Albanian Mârê, are unclear to me.
VII. Mitrō (September-October). This month-name, transcribed in Greek Μῆθρα and Μῆρος, is represented in the Persian calendars, curiously enough, only by the Qubān مهر, the Chorasmian and Sogdian equivalents being مهر and (variants مهرا, مهران, مهران, مهراج) respectively. The former is of unknown signification to me. But the latter, reflected by the Chorasmian مهر, the name of the sixteenth day of each month, is shown by the Turfan form مهراج to signify "god-month" (on مهر as a dialectic Persian development of مهر, see below, under IX.; and on مهر, مهر = Mithra, see Marquart, i. 64; ii. 129, 132-134). The name Mitrō is represented in Cappadocian by مهر and its variants (Benfey and Stern, 101-102) and in the Armenian calendar by مهر (Hübschmann, 194; Lagarde, 9), while Azaria of Julfa represents it by مهر, i.e., Tir (see above, under IV.), the discrepancy being due, perhaps, to the retrogression of the calendar. The remaining names of the seventh month, Seistanian مهر, Bukhārīk مهر, and Albanian Belkūr, are unclear to me. The Iranian Mihr appears as a borrowed planet-name in the Chinese (Cantonese pronunciation) مهر. It is likewise the name of the eighth day of each month in the Armenian calendar.

VIII. Ávān (October-November). This month, transcribed 'Arar and 'Arāna in Greek, is exactly represented by the Sogdian ادنا (variants ادنا, ادنا, بالبه), although its name for the corresponding day of each month, the tenth, is ادنا. The Chorasmian month-name is ادنا, which was also applied to Ávān as the tenth day of each month, but I am not certain of its meaning. It is probable, however, that it is synonymous with the corresponding Old Persian month Ádūkani, "(month of) canal-digging" (cf. Marquart, ii. 198). In Cappadocian the form of Ávān is 'Aroama and its variants (Benfey and Stern, 102-108), while in Armenian the eighth month is the "sum-month," Արգ (Hübschmann, 424). The other month-names, Seistanian وار، Bukhārīk وار (which can scarcely be the Arabic وار, "battle," "altercation"), Qubān اليا, Albanian Gërku (unless possibly connected with Albanian जुक, "blood," "vendetta," "death" [cf. Meyer, 136]), and Azaria
of Julfa’s *Dam*, are unclear to me. It might indeed be suggested that the latter name is the Persian دم “breath,” “wind,” and that it was adopted in allusion of the change of the monsoon from the northeast to the southwest at this season of the year; but the uncertainty of the entire problem, and Julfa’s inland situation, near Isfahan, render such an explanation very hazardous.

IX. Ātarō (November-December). The Chorasmian name of this month, transcribed ’Aðēp, ’Aðĕp, ’Aðēpma in Greek, is اذرب (read, variants اذرب, اذرب, اذرب), and the ninth day of each month, which bears the same name in the Zoroastrian calendar, is called اذرب (read اذرب) in Chorasmian and اذرب in Sogdian. The Sogdian name of the ninth month is فوغ (Turfan form بوزیچ فوغ), a dialectic form corresponding to Avesta bāya, Old Persian bāya, “god,” represented in New Persian by the Ferghânish فغ, “idol” (Horn, in *Grundriss der iranischen Philologie*, i. b, 78).

The Cappadocian equivalent is ’Āθāra and its variants (Benfey and Stern, 108–109), while the Armenian name of the ninth month, Ahekan, is likewise derived from the Avesta-Pahlavi appellation (Hübschmann, 95; Lagarde, 9). Azaria of Julfa’s name, Hāmir, is the Arabic امیر, but the Seistanian اکیارا (unless read, with Marquart, i. 64; ii. 199, اکیارا, “month of fire-times”), the Bukhārīk (?), the Qubān درا, هیيات, and the Albanian Bondokë, are unclear to me.

X. Din (December-January). This month-name, transcribed Δημa and Νημ (σ = δ, as in Modern Greek) in Greek, represents the Avesta dašna, “(month) of the Creator” (Gray, in *Grundriss der iranischen Philologie*, ii. 677, and the references there given), and is, therefore, equivalent to Pahlavi Aaharmazd and Avesta Ahūra Mazda. It is, accordingly, accurately represented by the Chorasmian ریمز (variant ریمز), while the first day of each month, Aaharmazd in the Zoroastrian calendar (corresponding to Aramazd, the fifteenth day of each Armenian month), is called ریمز in Chorasmian and خرمون in Sogdian, and is borrowed in the Chinese planet-name Wun-mut-sii (Cantonese pronunciation). The eighth, fifteenth, and twenty-third days of each month, termed Din pa Ātarō, Din pa Mitrō, and
Din ut Din in Pahlavi, are called دست in Chorasmian and Sogdian respectively; and the Iranian name is also closely followed by the Cappadocian Δαβοσα and its variants (Benfey and Stern, 109–110). The Sogdian name for the tenth month is میش دوغچ, مرسافوغ, مسافوغ (variants فوغ), "great god," the fitting appellative of Ormazd, especially as his month comes after that of Ātarō, of whom he is, in Avesta mythology, the father (cf. Yasna xxxvi. 3; lxv. 12; Siroza i. 9; ii. 9; Yasht xix. 46, 49; Gah i. 9). The word فوغ has already been discussed. The term مسافوغ is to be equated with Avesta, Pahlavi, Gabrī <mas, "great," Nāyini <mes, Samnānī mesin (Horn, in Grundriss der irischen Philologie, i. b. 17; for another interpretation, see Marquart, ii. 198–199). The Bukhārī (؟) سیر, apparently the Hebrew صلی، the ninth month, calendrical retrogression again playing a part. The Arum of Azaria of Julfa is merely the name of the eponymous hero of Armenia. The Seistanian *Qubān, Kebiš, and Albanian *Qubān, معاه, and Albanian *Qebli are unclear to me; while the Armenian *Mareēr (for *Marear) has been equated with the Avesta Maēyārya, "midyear" (Marquart, ii. 205).

XI. Vohūman (January-February). This month-name, transcribed Πεχμαν and Μαχμαν (μ = β, as in Modern Greek) in Greek, seems to find its equivalent only in the Chorasmian اسمن (variants اسمن, اسمن) and in the Cappadocian دیوμαν and its variants (Benfey and Stern, 110–113; Marquart, ii. 215); while the Sogdian has زمدا (variants زمدا, زمدا, زبند, زبند, زبند, زبند), whose meaning is unknown to me. Moreover, the corresponding day of each month, the second, is represented in Chorasmian and Sogdian by جهنر and respectively. Equally uncertain are the Bukhārī (؟) جسن, Qubān سن, Albanian Ema and Azaria of Julfa's Ordan. The Seistanian کرسن, on the other hand, seems to represent the Karsna.

1 Cf. the Old Persian sequence of the months Āsiyādiya, "worship of fire," and Anāmaka, "nameless," (i.e. sacred to the ineffable Aūrmazda).
of Yasht xiii. 106, 108, who may possibly have been the eponymous hero of the Qārēn dynasty, which played a prominent part in the Arsacid and Sassanid periods (Darmesteter, Le Zend-Avesta, ii. 536, note 212); while the Armenian name of the eleventh month, marga, seems to mean "(month) of meadows," although Marquart, i. 64, dissents from this etymology, considering it a loan-word from the Old Persian month-name (preserved only in the New Susian text, Bh. iii. 43, under the form Mār-

kazana) Margazana, "brood of birds." The Sogdian form of Vohūman was Viñxān, preserved also in the Chinese loan-name of the planet Mars, Wen-Hou (Cantonese pronunciation).

XII. Spendarmat (February-March). The name of the twelfth month, transcribed Άσφανταρματ, Άσφανταρματ, Άσφαν-

ταρ, and Aδφανταρ in Greek, is represented by اسپندارمی in Chorasmian, while the fifth day of each month, which bears the same name in the Zoroastrian calendar, appears in Chorasmian as اسپندارمی (variants اسپندارمی, خشور, خشور, خشور) is very uncertain in meaning, although it is plainly traceable in the full Chorasmian name for this month اسپندارمی فورخشور. We know that "on the last day of this month the Sughdians cry over those who died in past times, they lament over them and cut their faces. They lay out for them dishes and food, as the Persians do in Farwardajān. For the five days, which are the Πορσά αποκαλόματα to the Sughdians, they fix at the end of this month" (al-Biruni, Chronology of Ancient Nations, tr. Suchau, 222; cf. 57). Hazardous though it be to operate with such scanty material, it may be suggested that in خشور, if it be an abbreviation of فورخشور, we may possibly have a derivative of the Sogdian and Chorasmian verb corresponding to the Modern Persian بخشور, "forgive" (for Sogdian f=Modern Persian b, see above, under IX.) and to the Judeo-Persian בקשות (cf. Horn, Grundriss der neupersischen Etymologie, 43). The Cappadociam equivalent of Spendarmat is سویداپا and its variants (Benfey and Stern, 113-115), while the Armenian name of the corresponding month is Hrutiq, a loan-word from the Pahlavi *fravartakān, "the (five epagomenal days) dedi-
cated to the Fravašis" (Hübschmann, 184–185; Lagarde, 163). The Seistanian "starling"), Bukhārīk (?), Qubān, Azaria of Julfa’s Nīchun, and Albanian Buxuva are unclear to me.*

The names of the days in the Chorasmian and Sogdian calendars show many instances of borrowing from the corresponding day-names of the Zoroastrian system. Though the list of the Chorasmian and Sogdian names of the days may conveniently be found both in Sachau’s translation of al-Biruni’s Chronology of Ancient Nations, 56–57, and in Ginzel’s Handbuch der mathematischen und technischen Chronologie, i. 307–308, the following list of day-names, restricted to appellations borrowed directly from the Zoroastrian calendar, may be found of use:

1. Pahlavi Aûharmazd=Chorasmian Hīzām, Sogdian رهم;
2. Pahlavi Arťavāhišt = Chorasmian اردوشت, Sogdian اردوشت;
3. Pahlavi Šatvāîrō = Chorasmian(see above), Sogdian اخشوری، Sogdian خشوری;
4. 5. Pahlavi Spendarmlat = Chorasmian سپندارخرسی, Sogdian سندارمژ;
6. Pahlavi Hovvadat = Chorasmian حریزان, Sogdian رد (؟);
7. Pahlavi Amerōdat = Chorasmian امردا, Sogdian مردا;
8. Pahlavi Din (pa Ātarō; pa Mitrō; pa Din)=Chorasmian دن, Sogdian دست (see above, under X.);
9. Pahlavi Ātarō = Chorasmian اتر , Sogdian اتر;
10. Pahlavi Xūrēt = Chorasmian خور، Sogdian خور;
11. Pahlavi Māh = Chorasmian ماه, Sogdian ماه;
12. Pahlavi Tir = Chorasmian جی, Sogdian تیش;
13. Pahlavi Gōs = Chorasmian غوشت, Sogdian خوشت;
14. Pahlavi Srōš =

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1 This suggests a still more daring tentative explanation of the Sogdian خشوم than the one very timidly ventured above, namely, that it represents a derivative of Avesta xšaēš, "six," xšēmēn, "for the sixth time," as the five epagomenal days plus the last day of the twelfth month for the connecting link. Marquart, ii. 198, however, connects the name with the Avesta xšnaoma "contentment."

2 Allusion may be made in this connection to the names of months and days substituted by Yazdagird III. for the old religious appellations. The list may conveniently be found in Hyde, 195–200, with full elucida

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Chorasmian اسروئ (see Azrov), Sogdian اسروئ; 18.
24. Pahlavi Dīn = Chorasmian دین,
Sogdian دین; 25. Pahlavi Art = Chorasmian آروخت (Noldeke 34), Sogdian آرخ;
26. Pahlavi Āstāt = Chorasmian استاز,
Sogdian استاز; 27. Pahlavi Āsmān = Chorasmian اسمان,
Sogdian اسم; 28. Pahlavi Zamyāt = Sogdian رازیهد (read مرسبند); and 29. Pahlavi Māraspān = Chorasmian مرسبند.

The names of the remaining Chorasmian and Sogdian days are too uncertain in meaning for discussion here; and in like manner, the Sogdian names of the five epagomenal days (al-
Biruni, 57) and the Chorasmian names of the six gāhanbārs, or festivals in the course of the year (al-
Biruni, 225, cf. 425–426; and Roth, ZDMG. xxxiv. 716–717, even when compared with their Zoroastrian equivalents, require a deeper investigation, and probably a far greater knowledge of the living dialects of these regions than we at present possess.

Like the Avesta, Chorasmian, and Sogdian calendars, the Armenians also named the days of their months, instead of numbering them, as among the ancient Persians (cf., on the possible adoption of the Avesta system of day-names by the Achae-
menians, West, Sacred Books of the East, xlvii. introd., pp. 44, and Academy, xlix. 348; Marquart, ii. 210–211). Although Christian and geographical appellations are found among them, Zoroastrian influence is evident in at least five names: Mihr, the eighth day (corresponding to Mitro, the seventh month and sixteenth day of each month in the Zoroastrian calendar); Aramazd, the fifteenth day (corresponding to Aūharmazd, the first day of each month, and to Dīn, the tenth month and twenty-fourth day of each month in the Zoroastrian calendar); Anahit, the nineteenth day (corresponding to the well-known goddess Anahita of the Avesta); đμαt, the twenty-sixth day (corresponding to the Indo-Iranian water-deity Apām Nāpāt, but confused with the name of a mountain in Armenia, cf. Spiegel, Eranische Alterthumskunde, i. 173, ii. 54); and
Vahagn, the twenty-seventh day (corresponding to Vahrām, the twentieth day of each month in the Zoroastrian calendar).

The list of the Armenian day-names, which seems to be little known, is given as follows in Alishan's Armenian "Ancient Faith of the Armenians," 143-144, together with the supplementary translation of some of the terms furnished me by the courtesy of Messrs. Nazarian and Surenian: 1. Āreğ ("sun," corresponding in name to the eighth Armenian month and the eleventh Avesta day); 2. Ḥraud ("earth mixed with fire"); 3. Āram (identical with the name of the tenth month of Azariā of Julfa); 4. Margar ("prophet," i.e., St. Sylvanus; cf. Acts, xv. 32); 5. Ahrank ("half-burned"); 6. Mazdeī or Məzdeī; 7. Astlik ("Venus"); 8. Mihr ("Mithra"); 9. Jopa-ber or Xrōvab ("tumultuous"); 10. Murğ ("triumph"); 11. Erzhan or Erzkon ("hermit"); 12. Anī (name of an ancient fortified city of Armenia); 13. Parzax; 14. Vanat ("host, refectory of a monastery"); 15. Aparazd ("Ahura Mazda"); 16. Manī ("beginning"); 17. Aṣak ("beginningless"); 18. Musis (the Armenian name of Mount Ararat); 19. Anahit ("Anāhita"); 20. Aragur (name of a mountain in Armenia); 21. Gorgor or Gūgar (name of a mountain in Armenia); 22. Korli or Korduk (a district in ancient Armenia regarded as the original home of the Kurds); 23. Çmāk ("east wind" or "cool places in forests"); 24. Lusnak ("half-moon"); 25. Çrōn or Śpiuār ("dispersion"); 26. Nāp ("Apām ʿNāpāt"); 27. Vahagn ("Vahrām"); 28. 𐭠𐭫𐭠𐭯 ("mountain"); 29. Varrag (name of a mountain in Armenia); 30. Giserever ("the planet Venus after sunset"). Both in this calendar and in Azaria of Julfa's system the five epagomenal days are termed simply Avelor, "redundant, superfluous."
On a Pahlavi Bowl-Inscription deciphered by the late E. W. West.—Presented by Professor A. V. Williams Jackson, Columbia University, New York City.

Among the papers of the late distinguished Iranian scholar, Dr. E. W. West, Honorary member of the American Oriental Society, is one in the form of a correspondence relating to a short Pahlavi inscription carved on a silver bowl in the possession of M. Th. Teplonchhoff of Ilinsk in the Government of Perm, Russia. So far as I know, the inscription has never been published or its decipherment made known. For that reason scholars may be glad to have it made accessible to them, together with Dr. West's correspondence on the contents of the inscription. I present, therefore, first the letter which Dr. West received from Mr. Abercromby on the subject and then I reproduce the late scholar's reply, which is characteristic of the modesty, conservatism, and sound judgment for which he was known.

(COPY OF LETTER TO DR. WEST.)

62 PALMERSTON PLACE,
EDINBURGH
Nov. 16 [1897]

"Dear Sir:"

I enclose a Pahlavi inscription in the hope that you may be able to read it if only in part. It was copied by my friend Mr. Teplonchhoff of Ilinsk in the Gov't of Perm and is scratched on a silver bowl in his possession. He has other silver vessels in the Persian art of the Sassanide dynasty on which inscriptions are cut and a good many are known in the Gov't. of Perm. But no one at St. Petersburg has been able to read any of them for him.

Yours truly

JOHN ABERCROMBY."

(COPY OF REPLY BY DR. WEST.)

MAPLE LODGE, WATFORD
Nov. 25th, 1897.

"Dear Sir:

I think I have deciphered an intelligible sentence, constituting the Pahlavi bowl-inscription which you sent me on
the 16th instant; but without experience of other inscriptions, on similar vessels, I cannot be very certain of the exactness of my interpretation in all its details.

The inscription may be read as follows:—

[Pahl.] Shamāl zi ger denā inā tafshālak mutagad-rish, rula zad, zag govbag (govag?) ș.

[Trans.] 'Samuel the stranger, pouring out the breakfast of stew of this vessel, consumed it; the witness of it is ș.'

Shamāl is either a contraction of Shamūl, or the ą may actually exist among the confused scratches about this name.

The words ger=غبر (compare ١٩١٠ ١٨١٠), inā=ينا, and mutagad (compare متغدي متغدي) are Arabic; the first being used by the Jews for 'one dwelling in a foreign land.'

Tafshālak is a slight modification of the Persian فشر تفشله=تفشله=تفشله=تفشله, 'a stew of lentils or vegetables, or of meat, eggs, carrots, and honey.' The Jews seem to have adopted it, in the form ١٩١٠.

The remaining seven words are commonly used in Ms. Pahlavi.

It is not to be supposed that the words are easily read. The letters d, g, t, or y, z are all written much alike in this alphabet, so are ą, h, kh, also l and r, u and n. And, without a large quantity of text, it is difficult to discover the peculiarities of the particular writer. Thus, decipherment of each letter becomes a long process, based upon the gradual elimination of all impossibilities, and governed by the necessity of recognizing not only each word by itself, but also as to its capability of making sense with its neighbours. The letter șh occurs in two forms, ١٩٠٠ , an older form in Shamāl, and a later form ١٩٠٠ in tafshālak and rish; and this may afford a means of guessing the age of the inscription, for the dated coins of the rulers of Taparistān pass from one form to the other, in their dates, about A. D. 710, so far as my memoranda inform me.

In transliteration I use ą (not ā) for Pahlavi ę when it is a descendant of Sassanian ęt; also d for ėt when pronounced and written ą d in Persian. The final monogram ą I suppose to be a signature of the owner șr; but it may be merely ornamental.

Of course, I have borne in mind the possibility of modern forgery: but I do not think there is any probability of this.
The usual result of such attempts is to produce a text easy to read, so far as the letters are concerned, but very difficult and indeterminate as to its meaning. Here the reading is difficult, but the meaning is determinate, so far as I can see. Whether it would be possible to read the inscription differently, so as to give another meaning, I cannot say. One could read *dar*, ‘into,’ instead of *ger*, but this would not alter the general meaning, and would leave the name rather incomplete.

The first letters that were obvious were ְו *sh*, ֲו *l*, ֲו *b*, ֲו *ā*, and ֲו *denā*, then ְו or ְו *d*, and ְו *sh*; later ְו *vālā*. The rest had to be worked out by degrees.

I suppose *tschudischer* is equivalent to German *judischer*, ‘Jewish’; and I think I have read that there were Jews in, or near, the Crimea in former times, who might very well have had a knowledge of Pahlavi writing; as Jews were often employed as scribes by the Sassanians.

If M. Teplonoff has other inscriptions of a similar character, it would be well worth while to have them deciphered, as their contents might confirm, or modify, the conclusions I have arrived at from this single specimen. If they are as perfect as this one, I shall be glad to try if they are equally legible, provided I can be allowed to take my own length of time to study them. In case of any of the scratches being so worn as to be hardly legible, the copy should be shaded over with pencil in the worn places, as a warning, thus [*denā* is here indicated in shading].

I enclose the copy of the bowl inscription, and have taken the liberty of keeping a tracing of it for my own use and reference.

Yours truly

E. W. West.

It is possible that Dr. West might later have modified in minor details his decipherment and transliteration, but I have presented his reading of the inscription in the form in which I have found it among his notes and will leave it to the small band of Pahlavi workers to see if they can add anything further to the interpretation.

Dr. West adds a note to the effect that the inscription is “apparently about 16 inches in diameter.” See the next page.

A. V. W. J.
Schriftzeichen am Rande einer orientalischen (Sassanidischen?) silbernen Schale aus der Sammlung tschudischer Alterthümer von Th. Teplonchoff in Iljinskoye Gouvern.'u. Kreis Perm (Russland).

23 Juli 1897.

Th. Teplonchoff

[Traced 19th November 1897]

E. W. West
Epigraphic Notes.—By Charles C. Torrey, Professor in Yale University, New Haven, Conn.

1. An Inscription from the "High-Place" of the Goddess Al-Uzzá, in Petra.

In the summer of 1906, Mr. George Sverdrup, who had just completed a year of study in the American School of Archaeology in Jerusalem, made a journey to Petra. During his stay there he and his companions discovered several new inscriptions; some of them Greek, the others Nabatean. One of the latter class, a copy of which he sent me, seems to be of more than usual interest. Mr. Sverdrup says of it: "It was found on the great staircase leading up to the altar mentioned in the article by Dr. Hoskins in the Biblical World for May, 1906. The letters are all quite distinct. The inscription is complete at the left; at the right some letters are probably missing, judging from the weathering of the rock. The letters are on the average about ten inches high." His copy of the inscription is here reproduced:

\[ \text{ caracteres } \]

Mr. Sverdrup was unable to find any satisfactory interpretation of the beginning and the end of the first line; the first word of the second line, which he read נני, also gave him trouble. He recognized the name of the goddess Al-Uzzá. If I am not mistaken, the main source of the difficulty lies in a misreading of the letters which follow the name נני, in the first line. Instead of נני must not the true reading be נני, or else possibly נני? Judging from what follows, a demonstrative pronoun is necessary at this point. The inscription would then read as follows:
The meeting-place of Al-Uzza; and this is the gateway [which] Wahbullahi, the caravan-master, constructed.

According to Mr. Sverdrup's copy, the seventh letter in the first line is ␫. But as the relative pronoun ␫ is quite unlikely in a Nabatean inscription, I have conjectured ␫. As for the beginning of the first line, it may be that a demonstrative originally stood there; but of course it is possible that more is missing on the right than I have supposed. In all probability, the ␫ is to be connected with the following, as I have indicated; we then have a genuine Arabic word, with the Arabic article, الْمَلِقُ "the meeting-place," as the native name of this now famous sanctuary.

At the beginning of the second line, only the very slightest change from Mr. Sverdrup's copy is necessary in order to gain the reading ␲ ␱ ␲ ␱ in place of ␳ ␳. The last word in the line I suppose to be ␱ ␱ ␱, and this was also Mr. Sverdrup's interpretation. The proper name Wahbullahi, ␲ ␱ ␱ ␱ ␲, is already well known.

Below the right end of these two lines, at about the place where a third line would have begun, Mr. Sverdrup thought that he could see traces of the letters of a single word, which, he said, might be ␫ ␴ ␴ ␴, though none of the characters could be made out with certainty. Of course this word, so common in Nabatean and Sinaiite inscriptions, may have been appended here either by the original hand or somewhat later. If it really belonged to this inscription, and was written with the plural ending, this would increase the probability that more is missing at the right hand, namely, the mention of some other person or persons. But in view of Mr. Sverdrup's uncertainty as to this word, it can hardly be taken into account.

1 I have little doubt that the letter which Mr. Sverdrup read as ␫ really had originally the small additional stroke at the top which would have made it a ␫. Future visitors to Petra may be able to settle this point. Of course the reading here carries with it the reading of the relative pronoun which I have conjectured at the beginning of the second line.
The "great staircase" on which the inscription was found is described as one of those which lead up to the "third high-place," discovered by Dr. Hoskins in November, 1905. That these stairways contained doors, or gates, appears from Dr. Hoskins' description of the first one which he found (Biblical World, May, 1906, p. 385): "At the point where we struck it the pathway enters a cyclopean cutting... the entrance to which was once guarded and defended by colossal doors, as shown by the side walls, the sockets, and the cuttings for the lintel and the bars." Mr. Sverdrup says of the inscription that it was found "near the head of this same staircase, not more than a hundred feet from the top of the cliff." The word מַגְן, "gateway," might refer (1) to a door which stood at the place where the inscription was found; or (2) to the door at the foot of the stairs, described by Dr. Hoskins; or (3) to the staircase itself. It is a piece of good fortune, at all events, that we now have an inscription telling us the name of the deity who was worshipped at this great high-place, and the local designation of the place itself, as well as the name of one of those who were foremost in the work of constructing it.

2. A Votive Statuette with a Phoenician Inscription.

Photographs of this statuette and a squeeze of the inscription were sent me by Professor Harvey Porter, of the Syrian Protestant College in Beirut, some time ago. His description of it is as follows (see the accompanying Plate): "The statuette has lost its head and shoulders. The figure is naked to the waist, but the drapery covering the lower part and the style of the whole clearly indicate a Baal or Zeus. It closely resembles the forms of this god found on the Phoenician and Greek coins, such as those of Alexander the Great or the coins of Tarsus under the Satraps. The eagle, usually borne in the right hand, here stands at the foot of the statuette, on the right. The fragment is 9 inches in height and 7 inches broad. It is of marble, and came from Sidon. The inscription is engraved in an incuse square on the back. The marble is somewhat weathered; there is also a defect in the stone which greatly obscures the first two letters in the first line, the second letter in the second line, and the third in the following lines."

This is evidently a genuine Phoenician antique. The inscription also is ancient; on this point, as in regard to the interpre-
tation of the statue, we may take Professor Porter's judgment as final, since he speaks as an expert of long experience. The statuette was undoubtedly a votive offering at the shrine of some god.

The most of the letters of the inscription (see the Plate) are perfectly clear, and no one of them is entirely obliterated; yet the interpretation of the whole is difficult. The following transcript is from a tracing made from the squeeze, the letters being just one half the size of the original.

The first two letters of the first line are almost entirely obliterated. The few remaining traces of the first letter seem to me to suggest кро. If the long, but very indistinct, slanting line at the right could be regarded as part of this letter, then τ would be most probable. But it seems to me pretty certain that this line lies outside the inscription. The second letter was read as ][/ by Professor Porter, and this is possible. This part of the stone has been so badly damaged that the engraved lines can no longer be distinguished from the accidental ones. Judging from the marks which now appear, τ is also a possibility. The remaining letters of the line are all perfectly distinct.

In the second line, the first letter is pretty certainly ἔ, though it may be ꆞ, and even ꙇ must be admitted as a possibility. The second letter, which is badly damaged by the defect in the stone (see Professor Porter's description, above), might be ἔ—though in that case the top of the letter is not closed—or perhaps ꆞ. It could hardly be ꆞ. The third letter is either ꆟ or ꆞ, according as the line across the top is taken as original or secondary. To me it appears to be secondary. In case it were original, the letter might possibly be ꆞ, though this would be improbable. The fourth letter is either ꆞ or ꆞ, probably the
former. The fifth letter is י; and it is followed by a numeral. Professor Porter read the latter as ג, but the marks at the left look to me more like an accidental abrasion of the stone. In the squeeze they hardly appear at all. Still, Professor Porter may be right.

In the third line, the second and last letters seem to me to be י, though the small horizontal prong which I have indicated at the bottom on the right is not clear in either case. Its presence is not absolutely necessary, to be sure. The third letter in the line is destroyed. It might be ש, י, ב (?) or possibly נ. The remaining four characters are certain.

In the fourth line, the second letter is probably י, but might be ל; the third letter is probably ב, but might perhaps be ש.

I have fancied that I could see, both in the photograph and in the squeeze, traces of punctuation marks, namely periods used to separate the words. Such periods appear after the י in the third line, and at the end of that line; also after the third letter in the last line. I have not been able to make them out elsewhere in the inscription, and it may be that their seeming distinctness in the places named is only accidental.

I offer the following transliteration and translation, as a first attempt at interpreting the inscription:

ר”נ ירחוב 3
d. ל”שיט. רבן

R Y M presented these vessels, amounting to three drachmas, (in return) for the preservation of his eyesight.

The translation supposes that the statuette was not itself the principal offering, but that it merely accompanied the gift to the god, as often happened. The word מ”לכ, like the Hebrew מ”לכ, might have any one of several meanings; compare its use in the Tabnit inscription. I suppose the second line to give the sum at which these votive objects were purchased.

The combination ר”שנ as a proper name, is quite possible, and capable of explanation in several ways; the first element of the compound, for example, might be ר”שנ (ג shri), to live
in abundance), or a shortened form of ובו or בז. The grammatical forms and constructions here supposed, moreover, all have their support in actual usage, Hebrew or Phoenician. The * at the end of the third line I suppose to be the suffix of the third person singular.

This reading is the least objectionable of the half-dozen which have suggested themselves to me. If any one of my colleagues can find a better one, I shall be glad.

3. A Phoenician Seal.

The seal whose inscription is here reproduced is owned by a collector in Jerusalem. The accompanying facsimile is that of a cast made from a wax impression which was sent to me (see the preceding Plate). The characters are of a late type, and fairly well cut.

(Seal) of AB¹L, son of Hanna.

The name ובו, presumably ובו เป้ or ובו, is already familiar as a Phoenician proper name. See Lidzbarski's Glossary, and also his Ephemeris, I, p. 35. The form of the * used both as a final and as a medial letter, is unusual and interesting. It is like the final * which is common in the later Palmyrene script and appears occasionally elsewhere. The inversion of the * which ends the first line is also to be remarked; such inversion occurs not infrequently both on seals and on coins. In general, the type of the characters employed is late Palestinian.
Some Hebrew and Phoenician Inscriptions.—By Hans H. Spörer, Ph.D., American School of Archaeology, Jerusalem.

I. New Ossuaries from Jerusalem.

A. Ossuaries in the German Benedictine Convent.

Through the kindness of the Rev. P. Cornelius, the Prior, and the Rev. P. Mauritius of the German Benedictine Convent at Jerusalem, I am enabled to publish the following inscriptions found upon ossuaries now in their possession. I wish to express my thanks to them for the interest they have taken in this matter.

The ossuaries were found southeast of Jerusalem, not far from the site of "Schick's amphitheatre." Most of the inscriptions are, as is commonly the case on ossuaries, bilingual. Father Mauritius proposes soon to publish an account of the specially interesting tomb in which most of these ossuaries were found, including another now in the possession of the Convent of St. Anne at Jerusalem; see the Revue Biblique 1904, p. 263. This tomb has the rare distinction of being closed by a rolling stone.

1.

יִבֵּית

This is apparently יִבֵּית, יִבֵּית. יִבֵּית, cf. יִבֵּית.

2.
The name *Judah* is found on several ossuaries.

3. This inscription (see the Plate) is on the upper edge of the ossuary.

\[ \text{Mariam} \]
\[ \text{Miriam wife of Yahqiah} \]

4. Inscription (see the Plate) placed as in No. 3.

\[ \text{Elisabth} \]
\[ \text{elisabeth wife of Tarpôn} \]

5. These inscriptions are written in the right and left upper corners of the ossuary:

\[ \text{Eliezer the son of Eleazar} \]
\[ \text{Eliezer the son of Levi} \]

It would seem that this ossuary has been the depository for two bodies.

For the curious cf. Lidzbarski, *Ephem.* II. p. 196, the N of נב. The name נב appears without \[ \text{on the ossuary published in the Rev. Bibl. 1904, p. 263.} \]

\[ \text{Levi} \]
7. Crosswise upon the lid is found the name TPY TWN and lengthwise סלד מרד.

The same names occur, one on each side of the ossuary.

It may be that this Tarpōn was the husband of the woman mentioned in No. 4.

8. On a broken lid of an ossuary is found the inscription

9. This monogram

is on one side of a roof-shaped lid. It may possibly stand for ΕΔΙΣ[ABH]; the first four letters can easily be made out. On the other side of the lid are the letters
10. On a stone slab which formerly closed one of the loculi is written in black the name

IPA
KOY

11. On another slab, which served the same purpose as No. 10, being, however, covered with a thick layer of mortar, were made with the finger in the mortar, while it was still soft, the following letters:

B. An Ossuary from the Mount of Olives.

On an ossuary recently discovered on the Mount of Olives, and now in the possession of an English gentleman, is found the following inscription:

מרחה
The words are found on the opposite extremities of the ossuary. The letters are from one to two inches in height and very crude, although more deeply cut into the stone than is usual. The name מַרְחָה occurs elsewhere on an ossuary described by M. Clermont-Ganneau.

2. A Phoenician Seal.

This seal, found at Sidon, and now in my possession, is so much worn that the first letter of each line is almost obliterated; see the Plate, p. 355. It reads:

עֲבָרִי יִתְקָּה

That portion of the stone which presumably contained the letter ל is now completely worn away.

[In the second line, the first letter can hardly be ב; and is not the last letter י rather than י. The fourth letter cannot be י and is probably ל; see the similar forms in Euting’s Tabula scripturar aramaicar. A second impression of the seal, just received from Dr. Spoer, shows plainly a closed loop at the top of the last letter in the first line. That is, it is either ב or י.

I believe the reading to be:

[עֲבָרִי יִתְקָה

like עֲבָרִי יִתְקָה; for יִתְקָה we might compare the Arabic Zuhal (Saturn), and the problematic תֶּהָל of the Old Testament. En.]
Aspects of the Vedic Dative.—By E. Washburn Hopkins, Professor in Yale University, New Haven, Conn.

1. Dative and Genitive after bhū and āsti.

In a previous paper I have sufficiently illustrated the use of the dative after bhū as equivalent to "come," e.g. bhuvad vāryā, "came to power," and in this sense, interchangeable with a regular verb of motion, bhava, "(be-)come (to help)," and āgahi, "come (to help)." Whereas bhū, even in the indicative, with an objective dative of this sort is not uncommon (bhū with the genitive is rare), āsti in the indicative is normal with the genitive and rare with the dative.¹

Thus in 5. 65. 4, mitrāsyā hi... sumatīr āsti vidhatās, if vidhatās is not in agreement with mitrāsyā (cf. 8. 78. 7, krātvā it pūrṇām udāraṁ turāsya 'asti vidhatās), the normal construction is found, but in 6. 65. 4, idā hi vo vidhatā rātman āsti, the construction is abnormal for RV. The perfect āsa has only possessive genitive after it, and this is the case with the imperfect āsit. In 5. 30. 15, ghrarmās cit taptāh pravṛje sa āsit, the meaning is evidently (not "came to" but) "was heated

¹ The Vedic Dative Reconsidered, Trans. Am. P. Ass., vol. xxxvii, p. 87 ff. Here, as there, to avoid confusion with English 'as,' I write, āsti. References, unless otherwise marked, are to RV.

² As with other verbs of movement, the locative takes the place of the dative after bhū in AV. 15. 11. 11, nikāme nikāmasya bhavati. That bhavati here is not simply "is" may be seen from the preceding ānaṁ nikāmō gacchati. "Unto him comes his desire and he comes-to-be-in (gets to) the desire of desire." Compare, after māhyam pavatām, loc. kāme in RV. 10. 128. 2, but dat. kāmāya in the same phrase, AV. 5. 3. 3, "May (the wind) blow for me unto (at) my desire." The fact that jāgṛhi, "watch," takes either dat. or loc. shows that both are felt in a similar relation, though the meaning varies as in "look out for" and "watch over" (cf. also ādhi with loc. after the same verb). We cannot assume that one (loc.) object is felt as such and the other (dat.) is a vague "in regard to." There is here no difference of personal dat. and impersonal loc.; vayodhēyāya, gārhapātyaya, 10. 25. 8 and 86. 27 are abstract datives, "watch to give strength," "look out for the housekeeping," but prajāsv ātmāsu goṣu jāgṛhi, AV. 3. 15. 7, "watch over us," etc., loc.
unto" (for); in 10. 34. 2, sivā...māhyam āsit, the dative of course depends on sivā; in 10. 102. 6, kakārdave varṣabhō yuktā āsit, the traditional interpretation makes the dative final. There is no instance where āsa or āsit, "was," is used, as are the preterites of bhū, "(be-)came," with an object-dative. In the present indicative there are a few cases of stereotyped character, where āsti and sānti are employed with the dative, as given in the note below.¹

¹ The dative after the present of āsti seems to be almost restricted to instances evidently influenced by the prevailing use of certain nouns meaning "aid, protection, gifts," with verbs of giving, becoming, etc. Thus, like the rare exception (above) vidhatē rātman āsti, there are a few examples of the worshipper in the dative with sānti, where the subject is "gift, help," etc. The regular and prevailing use of the word vāṛūtham, for example, is after a verb meaning "become" or "extend" (protection to the worshipper). Thus 1. 58. 9, bhāvā vāṛūthāṃ grātāt; 1. 23. 21, prūta...vāṛūthaṁ tantrē māma; 7. 30. 4, yācā sūribhyā upamānā vāṛūtham; 7. 88. 6, yandhi...stuvatē vāṛūtham; 8. 12. 3, yantāśi vāṛūtham, with dative and ablative, "protection to thy servants from thy haters." It is in accordance with this that we find, in one hymn only, tēśāh hi...vāṛūtham āsti dāśūse...yād vaḥ...sunvatē vāṛūtham āsti, 8. 67. 3 and 6 (but agnīr vāṛūtham māma, "Agni of me the protection," in 1. 148. 2; so in 7. 32. 7). With "gift," dādhāti rātmanāḥ vidhatē, 4. 12. 3, may be the model for vidhatē rātman āsti; as ābhūta u vo vidhatē ratnadhyām idā naro dāśūse maryāya, 4. 34. 4, for ratnadhyām āha...sudāse, 7. 53. 3: yāthā hy āsti te...rātiḥ...dāśūse, 8. 24. 9. Yet it is more likely that the verbs dhā, rā, help to produce the dative, since "bestow" and "give" regularly call for this case. There are, however, a few examples in which this does not apply: yā te sānti dāśūse ādhrēṭā gīras, 7. 3. 8; eva hi te vibhūtāya utāyas...sadyās cit sānti dāśūse, 1. 8. 9; sōma yās te mayohbhava utāyāḥ sānti dāśūse, 1. 91. 9: yā vīnh sānti purusṛprho niyūto dāśūse nāra, 4. 47. 4; yā vaḥ śāma śāsamānāya sānti, 1. 85. 12. Though here "give to" or "become to" (the pious) a guard (śārma) is also a common phrase, 1. 58. 9, etc. Of another sort are the datives with sānti in 9. 61. 30, yā te...āyudhā tigmāṇi sānti dhūryāpe; 10. 44. 7, yē prāg uparse sānti dāvāye; 9. 78. 2; srutāyāḥ sānti yātave, "which weapons are sharp to hurt," "who are late (?) to give," "paths are to go." These are generally introduced by the imperative (future), pātave sōma astu, 1. 108. 2; sāntu...rākṣase hāṃtavā u, 5. 2. 10 (etc., see more examples below). In Avestan also the dative after 'be' is usually after a form of future sense, nārē añhat, "will be to the man"; mōī astu, "be to me," etc., but the possessive dative with the indicative or even without verbal form, "these are to me," "the flames to (= of fire)" (Casuslehre, p. 229) is also found.
On the other hand, those modal forms of āsti which (like bhū in any mode) indicate not being but going to be (becoming) take a dative which may be final or may indicate that the subject will be (i.e. is coming to) the dative object. There are, for example, scarcely any cases like that with vidhatē and āsti above, but not uncommon are such cases as 6. 68. 7, surībhyaś
\[...\] rayāḥ syāt, "wealth shall be (=come) to the Sūrīsa," and
1. 8. 5, mahītvām astu vajrīṇe, "greatness shall be (=come) to the bolt-holder." A good example of the future sense is given by 10. 7. 4, dyāubhir asmā āhābhir vāmām astu, "happiness shall be to him through (all) his days." So in 1. 147. 4, pūnar astu so asmāi, where the subject is a curse which "shall return to him"; and in 4. 1. 8, dhīyē satyām astu is "the prayer shall be realized," literally, "reality shall be (come) to the prayer."

Other examples of the future sense of āsti (in imperative, subjunctive, optative) parallel to bhū, are: asad vṛdhē, 1. 89. 5; syāma vṛdhē, 8. 63. 10; edhi no vṛdhē, 5. 9. 7; 10. 7; 16. 5 (the only case, being a repeated phrase, of edhi with final dative); rāyāḥ syāma dharūnaṁ dhiyādhyāi ("may we get to establish wealth's foundation"), 7. 34. 24; syāma bhūvanesu jivāse, 9. 86. 38; syāma te dāvāne vāsūnām, 2. 11. 1 (cf. 12 and 10. 36. 12); dānāya mānāḥ . . . astu te, 1. 55. 7 (cf. māna krṣva, "make up your mind to") with vasudēvyāya, 1. 54. 9; AV.

1 In 6. 52. 2, tāpāṇi tāsmāi vṛjināṇi santu. "his sins shall come as burnings (torments) to him" is in connection with the associated phrase, 3, "cast the burning weapon at him who hates the Brahman" (dative). Compare AV. 4. 18. 6, cakāra bhadrām asmābhyām ātmāne tāpanāṁ tu sās. "he made good for us, but for himself a burning." Any modifier may of course bring out the dative, irrespective of the verb, as in 7. 20. 5, prā . . . yāḥ nṛpyaḥ asti; 10. 15. 2, pṛtībhyo nāmo astu; and so in 1. 109. 1, nānyā yuvāt prāmatir āsti māhyam. the dative depends not on the verb asti but on prāmati, just as in the verbal form, prā manmahē śavaśāṇāya śuṣām, 1. 62. 1 (in 10. 100. 11, prāmati takes the genitive, "care of" for "care for"). In 1. 91. 15 = 7. 55. 1, sākhā susēva edhi nas, if nas is dative it depends on the adjective; so in suhāvo na edhi, 4. 1. 5 (cf. 6. 52. 6).

2 In contrast with asmākam id vṛdhē bhava, 1. 79. 11; no vṛdhē bhava, 1. 91. 10; bhāvā naḥ . . sākhā vṛdhē, 1. 91. 17; bhāvā stotībhyo āntamaṁ svastāye, 3. 10. 8 (cf. 8. 13. 3); bhāvā naḥ subhra sātaye, 5. 5. 4; bhāvā sumātus no vṛdhē, 6. 46. 3 (and 11); bhāvā vṛdhā indra rāyō asyā, 7. 30. 1; śivō bhava . . . vājasātaye, 8. 4. 18; rucē bhava, 9. 105. 5, the solitary instance with edhi (above) is typical.
3. 4. 4); asat ta utsó gṛñaté, 9. 89. 6 (the only case of this
subjunctive, in the ninth book); tće syāma devāvitaye, 10. 35. 14;
tád vām astu sáhase . . . sávas, 7. 104. 3; víśvá stotṛbhayo gṛñaté
ea santú (saúbhagā), 7. 3. 10; víśváhā 'smāi śaraṇa santv átra,
10. 18. 2. Cases of doubtful forms are common: vṛṣṭāyaḥ santv
asmé, 7. 101. 5; sumnám asmé te astu, 1. 114. 10 (5. 53. 9);
astu drávinyaṃ . . . asmé, 10. 35. 13; tće nāh santu yújas, 8.
83. 2; tán nāh pratnám sakhyám astu yuṣmén, 6. 18. 5; etc.
In the following cases the dative depends only vaguely on astu,
"be (resting) in the heart to," ayáṃ sú túbhyaṃ . . . hṛdí stóma
úpaśritaś cíd astu, 7. 86. 8; (vo astu) ayáṃ ca sómo hṛdí,
10. 32. 9; idám vácaḥ parjñáyaḥ . . . hṛdí astv ántaram, 7. 101. 5.
When the genitive is found it is possessive, not objective, as in
10. 103. 4, asmákaṃ edhy avité ráthánam (not "be to us").
So in nā'smákan asti tát táras . . . atisakte, "the strength of us
is not to be conquered," not "strength is to us," 8. 67. 19; and
in 5. 28. 3, táva dyumánáy uttamaṃi santu; 10. 51. 9, táva . .
santu būgáḥ, távā 'gne yajñás . . . astu; 1. 39. 2, yuṣmákaṃ
dstu távisi pānnyasi, the idea is not "greater glory shall (be)
come to thee," etc., but "thy glory shall be greater." This
point is frequently disregarded. In 1. 173. 10, asmáka'sad indro
vájarastas, the meaning is not "unser (or bei uns) wird Indra
sein, der den Keil hält," but "our Indra shall be a bolt-holder."
In 8. 2. 7, tríya índrasya, etc., translate "Indra's somas shall
be three"; in 1. 7. 10 (13. 10), asmákaṃ astu kévalas, "all ours
shall he be"; in 8. 31. 3, tasya dyumán asad ráthas, "his car";
in 8. 89. 4, árávaś cit te asad brhát, "great be thy glory."
This possessive genitive is the regular construction with ásti as
it often is with astu, in distinction from the sense with the
dative and astu. Thus, asmákaṃ santu būvanasya gopáś, 7.
51. 2, not "to us come," but "ours be"; tće asya santu ketávas,
9. 70. 3, "must be his beams"; tasya bhṛtá madhyamó asti,
1. 164. 1, "his brother"; ná . . . brahmánuṃ rñāṃ . . . asti, 8.
32. 16, "no debt of"; yásya . . . vṛtraḥ śúsmo ásti, 1. 100. 2,
"whose strength is foe-killing"; yá ámáṣya kravíṣo gandhó ásti,
1. 162. 10, "what smell is of flesh"; yá esám . . . mahímá satyó
ásti, 1. 167. 7, "what greatness of them is real"; ná yásya
(asya) vartá . . . ásti, 1. 40. 8; 4. 20. 7; 6. 66. 8; te rádhoras, 8.
14. 4 (so te in 5. 29. 14, ná te vartá . . . asti, must be genitive);
sárvāṃ tád astu te gṛḥtām, 8. 102. 21; tūvet tát satyám (1. 1.
6), *sc. asti, and cf. táva tát satyám astu, 1. 98. 3; tán nú satyám pávamánasyā’stu. * Jyótir yád áhne ákṛṇot, etc., 9. 92. 5.

In marked contrast, the genitive with bhū is as uncommon as it is common with ásti. I have found only 2. 24, 14, bráhmanas páter abhavat. satyó manyús; 10. 142. 3, khilyá urváráṇām bhavanti; 10. 130. 4, ágner gáyatry abhavat sayúgvā; 4. 7. 2, ágne kadá ta anuság bhúvad devásya cétanam; 6. 16. 18, nahi te púrtám aksipád bhúvan nemánáũ vaso (a doubtful construction). I think all these are really independent of bhū, not as with the dative after bhū, the object of the verb. Thus: “Bṛhaspati’s anger became real,” (not “iḥm ward”); (when the fire burns) “there arise bare spaces of (=between) the fields”; “the gáyatredi became Agni’s yoke-fellow”; “when will be the appearance of thee” (so Ludwig), not “wann wurde. . . dir,” etc. In 10. 61. 23, víprah présthaḥ sā bhī ēsām babhāva, “priest dearest to them he became,” has the same construction with préstha as in 1. 167. 10, vayám adyóndrasya présthas, and makes it unnecessary to take the genitive with bhū even as partitive, “became (one) of them” (Grassmann). The only case where the objective genitive with bhū seems to be required is 1. 17. 4, yuváku hi śácínām yuváku sumatinám bhúyáma vajadávnam, “may we become of your generous goodwill,” where the genitive is felt as a sort of partitive objective, “may we get to share in your good will.” PW assigns to this category 10. 40. 3, káṣya dhvasrá bhavathas, but it is clear that the genitive depends on dhvasá as substantive (so S.), and this case is on a par with asmákam avítā bhava, 1. 187. 2, “become our helper,” or bhává várútham maghavan maghónām, 7. 32. 7, “become the guard of the Maghavans,” and such instances (the genitive being probably independent of bhū), which are unnecessary to take into consideration. In later Vedic style this construction of the genitive as a possessive became felt as an objective and “of him an hundred wifes arose” is equivalent to “came to him.” There is thus a distinction between dative and genitive after bhū which is unhistorically expressed in PW. as “mit gen. (selten dat. loc.) der Person.” The RV. construction is prevailingly dative (loc.), the later construction is

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1 Doubtful also (genit. or dat.) is the case of vas in 4. 36. 3, tád vas. . . devéseḥ vibhvo abhavan mahítvanām. So 4. 51. 4: te, 1. 182. 21; me, 10. 40. 5.
prevailing genitive. Examples of the RV. datival usage may be found in my former article, p. 99; for the later genitival construction, compare, e. g., BAU. 3. 1. 1, Janakasyā vijijñāsā bahūva, kah svid, etc., “a desire to know came to Janaka” (became of), and PW. s. bhū, col. 315.

Some doubtful cases of āsti may be settled by parallels. With dyābhīr hito jārimā sū no astu, 10. 59. 4, compare dyābhīr asmā āhobhīr vāmām astu, 10. 7. 4. With āsti hī te ‘gne devēsv āpyam, 1. 36. 12, cf. yāyor āsti prā naḥ sakhyāṃ devēsv ādhy āpyam, 8. 10. 4, and āgne táva tyād ukhyāṃ devēsv asty āpyam, 1 105. 13 (similar forms in the same sort of clause in 7. 32. 19; 8. 27. 10). In such a case as 10. 100. 10, “body be medicine of body,” tanvō astu are not connected but tanvō... bheṣājam. In samānāṃ astu vo mānas, 10. 191. 4, the vas is to be compared with māna... astu = me astu in 10. 128. 2 and 4. So vayāṃ te (smasi) 8. 66. 13 is to be compared with smasi... eṣām, 1. 37. 15. Irrespective of āsti the word sām governs the dative, 10. 165. 1–4; 7. 35. 2, 3, 7 (sām astu te hrđē, 8. 17. 6; bhāva naḥ... sām hrđē, 8. 79. 7), so that in such a case as 5. 11. 5, tūbhīye ‘dām agne mādhumattamaṁ vācas tūbhīyam maniśā iyām astu sām hrđē (cf. 5. 63. 1, tāsmē vṛṣṭir mādhumat private divās), the dative depends on two elements besides the adjective, the verb, and the noun sām, either one of which might have produced it.1 Compare sutā īndrāya... kalāse akṣarați, madhumāṁ astu vāyavē, 9. 63. 3; tēbhīyo bhadrām... vo astu, 10. 62. 1 (in 10. 80. 2 the genit. is possessive); śivāḥ... santu sām hrđē, AV. 8. 7. 17. With bhadrā the dat. interchanges with the locative, 1. 113. 9 and 20, but in both cases there is the verb to reckon with also, devēsv ca kṛṣṇe bhadrām āpās, āpna uṣāso vāhantī jānāya... bhadrām. So in 1. 1. 6, dāśāse is caused by karisvāsi as much as by bhadrām. On the other hand, in 7. 20. 10, vāsvī sū te jāritre astu saktīs, “good to the singer be thy strength,” the dative depends more on the adj. than on the verb; cf. 6. 16. 25, vāsvī te agne sūndṛṣṭṛ isayatē máṛtyāya, without verb. In 1. 73. 10, ucāthānī... jūṣṭāni santu mānas hrđē ca, the dative “mind and heart” (equivalent to a personal form; cf. the same expression in 4. 77. 2)

1 So in 1. 189. 2, bhāva tokāya... sām yīṇa ; 5. 47. 7, tād astu... sām yīr asmābhīyam, etc. On the other hand, in 5. 74. 9, sām... vāma... asmākam astu cakṛtīs, is “our praise of you shall be weal.”
depends on jūṣṭāni rather more than on the verb. It is to be observed that kar has the same effect as āvah, "bring hither to," with an infinitive (interchanging in the same phrases) and that the infinitive itself is indistinguishable from a noun in various forms, e. g. mārtān yajāthāya kṛṇvān, "making men to (the) sacrifice," 10. 12. 1 (ā devān yajāthāya vaksi, 3. 4. 1); sā no jivātave kṛdhi, "make us to live," 10. 186. 2; māhi naś kṛdhi saṁcākṣe bhujē asyāī (inf. and noun), 1. 127. 11; tād amitrebhyo dṛṣe kuru, "this make to our foes to see," AV. 11. 9. 1. Cf. AV. 9. 2. 11, urāṁ lokām akaran māhyam edhatām . . māhyāṁ sād urvīr ghṛtān ā vahantu; AV. 10. 5. 50, "I hurl at him the bolt to head-splitting," asmāi vájram prā harāmi . . śir-sabhidāya, i.e. to split his head. While RV. has inf. yuddhāye, 10. 84. 4, AV. has ptc. noun yuddhāya, 4. 31. 4, in the same clause, "sharpen the clans to (the) fight;" cf. AV. 5. 14. 9, "we sharpen thee not vadhāya (ācakruse), to killing" (RV. 1. 61. 13, inf. yuddē = AV. 4. 24. 7, noun, yuddē?). There seems to be no real difference between such datives and that in jyōtim yād āhne ākṛṇd u lokām, 9. 92. 5, urāṁ kṣāyāya nas kṛdhi, 8. 68. 12 = AV. 7. 26. 3. 1 One "cooks for (to) him" or "cooks for (to) releasing," yām pācāti riprān nir muktyāī, AV. 12. 3. 5, just as one "comes to kill" or "comes to birth," janūṣe, or "comes to me." The dative of the type bhaśma dēśāma may be filled out with another dative of the person, māyah pāṭibhoyo jānayaḥ pariṣvāje, "wives, a pleasure to husbands to embrace," 10. 40. 10. 2 It is

1 A good case of local dative after "bring, bear," is found in AV. 18. 1. 1, when, after rāṣṭram prā visa, "enter thy kingdom," follows sā tvā rāṣṭraya sūbhṛtam bībhartu. "may he bear thee, well borne, to thy kingdom" (not "to kingship"; prāviśa is local, enter a place, etc.).

2 Cf. also in the verse cited, 9. 92. 5, dāsyave kar abhikām, "made front (attack) against the foe" (dat.), literally a "turning toward," abhi, which thus comes as near to governing a dative as is possible.

3 The preceding vāmām pitṛbhoyo yā idāṁ samerirē may owe its dative to samerirē rather than to vāmām, which is never followed by the dative, except with the idea of coming or sending, as in 10. 7. 4. āsmāi . . vāmām astu (cf. 6. 71. 6; 7. 78. 1; 8. 88. 4; 10. 42. 8). The datives in the preceding vs. 9 are worth noticing: āsmāi rīyante nivanēva sīndhavo śma āhne bhavati tāt pātivānam, "to him as into valleys run the rivers . . to him by day" (cf. vs. 5, bhūtām me āhne) comes this marriage." Cf. p. 97 of my former article.
to be observed that the personal dative stands on a par with the
infinitive, as in svār drśē, "a light to see," 1. 50. 5, and in
vāpus .. cikitūṣe, "a wonder to the wise," 6. 66. 1 (but astu
follows). In 1. 23. 21 (where tanvē māmā = māhyam), "supply
a guard to me and long to see the sun," jyōk ca sūryāṁ drśē,
the dative is really final.

Interchange with the locative, as after verbs "bestow," "put," etc. (illustrated in my former paper), is found in
svāma vāruṇe ánāgās, "may we be with (before) Varuṇa sin-
less," 7. 87. 7, as compared with ánāgaso āditaye svāma, "may
we be to Aditi sinless," 1. 24. 15; sādā tvē sumānasah svāma,
7. 4. 7, as compared (probably) with asmē, 10. 100. 4, and with
pratyān naḥ sumānā bhava, 10. 141. 1. With "help," "good-
will," etc., the locative is the normal construction, āvasi svāma,
"may we be in (his) good will," etc., 5. 65. 5; 7. 18. 3; 8. 44.
24, etc. It may be noticed here that svāma is joined with a
pte., tāranto vīśvā duritā svāma, "may we be crossing diffi-
culties," 10. 31. 1, and so with the dat. tūbhyaṁ devāya dāsataḥ
svāma, "may we be serving (to) thee the god," 7. 14. 3 (so té
tē devāya dāsataḥ svāma, 7. 17. 7; cf. 7. 37. 4, vayāṁ nú te
dāsvāṁsaḥ svāma), which depends partly on the ptc. and partly
on the verb (cf. tūbhyaṁ bhavema, cited in my former paper).

2. Ûti and other forms with bhn.

Like ájagāṁ útáye, 1. 130. 9; á cakrur agnīṁ útáye, 3. 27.
6, is bhāvā (útāye) úti. It is a mistake (Grundz. iii. 192) to
explain úti as conditioned by "the position at the end of the
pāda." Compare 6. 24. 9, sthā ā śū úrdhvā úti ārisāṇyan, not
final position, yet dative; as also 6. 29. 6; 7. 25. 1 (á pātāti);
8. 99. 7 (ítā úti); 10. 15. 4; 10. 104. 4. To determine the case
of úti some parallels may be given. I begin with "call," etc.

1 Compare AV. 10. 7. 39, where vimite (loc.) seems to refer to yāṣmāi
(dat.) in the same clause. Another example is found in the Pp. loc.
reading sūyāmā gṛhēṣu for the dat. (vulgare) sūyāmā gṛhēbhyas, AV.
14. 2. 17.

2 The interchange of acc. and dat. after compounds meaning "help,
encourage," is to be noticed, e. g. úpa-av takes either dat. or acc. like
"do good to" (below). "Conciliate to," caus. sāṁ-van, AV. 6. 9. 3,
takes indirect dat. object.
After "call (to)" three favorite datives are found in 1. 35. 1, svastāye, āvase, ātāye; īndram ā huve ātāye . . . marūtah sōmapitāye, 1. 111. 4; ātāye vā satapēyāya vā, 4. 44. 3. The infinitive after "wish": īndram uśmāsi ātāye and brahmātāye, "we wish Indra to further (and) favor our prayer to aid (us)," 1. 129. 4; cf. avatūtāye nas, 6. 9. 7. After "choose": "we mortal friends choose thee, a god, to aid" (us), 3. 9. 1; so 8. 6. 44; 8. 83. 1, tād (āvas) ā vṛūmahe vayām . . . asmāhyyam ātāye, "choose that help to aid (to) us." So with "beg," īīata ātāye, 7. 94. 5; "flow forth" to aid, 9. 66. 4. The "final dative" (purpose) is quite indistinguishable from the concrete dative here, one overlaps the other; "bring food to aid," 8. 60. 18; "come, bring food, to aid," 8. 1. 4; "drink to aid," "praise to aid," etc., 3. 37. 8; 14. 2; 4, 32. 2; 8. 5. 4; 21. 9. The double object (dat. or acc.) is common: "you get to aid (to) the singers," bahāthā jāritbhyā ātī, 1. 178. 1; na ātāya ā yātaṁ sōmapitāye, 4. 47. 3; īndram ātāye gus, "came after help," 1. 104. 2; tvā devām, . . . ātāye te 'vasa iyānāso,' amanmahi, "coming after help and aid," 5. 22. 3 (5. 2. 5, "easy to approach to aid"). Ordinarily the god "gets to aid" the suppliant, as in 8. 68. 1, "we cause thee to turn hither toward (our) good like a war-car to help." So in 8. 88. 4. "turns thee to aid," 8. 92. 7, "drive (the god) hither to help."

Not "are" but "(we) work" is to be supplied in the phrase yāthā ta ātāye, 5. 20. 4. The dative in 10. 126. 3, is influenced by nāyishthā u no nesāni, "best leaders in leading" (ātī dvēsas is only refrain). Or "come" may be supplied. At any rate, the simple "be" forms are rather carefully avoided, as not one stands after "be" alone out of the hundred odd cases of dative ātāye (ātī). Hence the dat. has local force. Half a dozen instances registered by Grassmann may be instrumental; yuṣmākotī . . . āgata, etc.; in 10. 35. 13, vīśva ātī bhavantvagnāyas followed by āvasā gamantu; 8. 97. 7, bhāvā nas . . . ātī, but cf. 10. 61. 27, bhūtā devāso ātāye "(be) come to aid."

\[1\] The seven cases of āvase "to aid" in A.V. are all after "call." e.g. tā asmā āvase huve. "I call those to aid him." This verb later takes acc. "call one," or loc., "call to bed," "to battle," etc.

\[2\] Compare īthūhyām . . . giras . . . iyānās, "songs going to (after) thee," 10. 104. 1.
That the dative is used after bhū as it is after āgam can not be doubted. With "go" itself the claim that the dative represents reference even in the vernacular and epic Sk. (vanāya gacchati as "goes with a view to forest life") is refuted by coordinate usage, e.g. in Mbh. 5. 72. 25, 34, grāmāya . . nāśaya pravrajus . . narakāyā 'va gacchati, and the fact that pravraj takes also acc. or loc. as well as dat. "forest." Other verbs implying movement of the same sort are vardh (as illustrated in the preceding paper) and its radical cognate ārdhva, e.g., śruṣṭāye devā ārdhvās, "the god erect (has raised himself for all) to hear," 2. 38. 2, as in the preceding verse he "rises to arouse" the world. Generally the two notions are united, ārdhvas tiṣṭhā na utāye, "stand up to help us," 1. 30. 6; yāsya tvām ārdhvā adhvarāya tiṣṭhasi, "whose rite thou standest erect to," (aidest), 8. 19. 10. The counterpart of this is "make erect" (to), both being combined in 1. 36. 13-14: "stand up (erect thyself) to help us; make us erect to act, to live"; compare erectus ad agendum. Compounds of sthā are used in the same way: yād . . samāsthithā yuddhāye sānśam āvīde, "when you arose to fight and get glory," 10. 113. 3 (like "lead to fight," yād yuddhāye samānāyāni, 10. 27. 2). One of the cases of final dative with āsti really depends on the same idea, sthirā vaḥ satvā āyudhā parāṇāde, "your weapons be steady (stand) to strike aside," 1. 39. 2; as the implication is found in sthā alone, tābhya 'mā bhūvanā kave mahīmna soma tathire, "stand to you unto (for) greatness," 9. 62. 27. Compare atasthāno vā esā tasmaī yad, "does not stand to (submit to) this, viz. that," ŚB. 12. 5. 5. 2; na dvitiyāya tathus, "they do not stand for another (god)," Śvet. Up. 3. 2, id est, they "stand for Rudra alone," as we say, "I will stand to that.

So ὥσ τὴν στάσιν ἐστημεν, Ἡδ. 9. 21; "stationed to" (for) ἐσ ἄρχειν,
3. 80; Latin sententiae stare. The same notion is conveyed by the (middle voice of the) verb yam, as in 9. 86. 30, tūbhyā .. yemire, “they hold themselves to thee”; I. 135. 1, tūbhy-aṁ hi .. devā devāya yemirē, “to thee, the god, the gods hold themselves” (stand true), as the same form may mean “hold oneself to” in the meaning “offer,” “yield,” with dative, thus having the same construction with other verbs “yield.” The stanza 5. 33. 10 reads:

ny āsmā devī svādhitir jihita īndraya gātūr usātīva yeme
(sāṁ yād ójo yuvāte viśvam ābhir) ánu svadhāvne kṣitāyo
namanta,

“withdraws (yields to .. offers itself to .. bow to (Īndra)).”
In I. 37. 7, ni vo yāmāya mānuso dadhrā ugrāya manyāve,
“man brings himself down to your course and mighty wrath”
is followed by jihita pārvato girīs, “the mountain yields,” both
taking the same dative (as in 8. 20. 6). Something like nīdhār
is nīsad, “sit down,” used with locative, nī duroṇe .. sasāda,
“sits down in the home” (of the fire as priest), 3. 1. 18; in
causative, vikṣu hōtāram ny āsādayanta, “established (fire)
among the clans as priest,” 10. 7. 5; and causative with the
dative, tvā .. nī hōtāramārāvārya “establish thee
unto the house as priest,” 3. 6. 3. With a personal object it is
sometimes impossible to distinguish locative and dative, because
the forms are identical as in Greek. Thus Usāne is both locative
and dative of the proper name Usānā, 6. 20. 11, usāne
kāvyāya (dat.); I. 51. 11, usāne kāvyē (loc.).

1 Another meaning of sthā alone is “stand at” (with dative) “wait
for,” as in 10. 109. 3, nā dūtāya prahyē taṣṭha eṣā, “she did not stand
(wait) to send (dat. inf.) a messenger;” 4. 54. 5, tasthuṣ savāya, “they
wait for (stand unto) the command.” Note that ānusthā with dative,
“obey (thy law),” 3. 30. 4, later yields to acc. and loc. “follow, help,”
acc. 1. 134. 1.

2 Cf. “stand” with a final dative, “thou standest to the protection of
steeds,” paripāṇāya tasthiṣe, AV. 4. 9. 2.

3 The verb nīdhār takes another sort of dative in 6. 67. 4, since it is
here “bring down,” “establish,” “make,” followed by object and
predicate adjective with a dative, like that after any other verb of simi-
lar meaning (“great, strong, the pair to mortal foe she made,” ripāye
nīḍāhās). Dhar itself takes a dative in the (middle) sense “be ready” as
in AV. 6. 141. 1, pōśāya dhriyatāṁ, “stay fast to prosperity” (i. e. be
ready in order to prosperity); SB. 11. 4. 3. 7, dānāyā ’dhriyanta, “were
ready to give.”
3. The gerundives háhya and īdyā with the dative.

The gerundive háhya is found with an instrumental of the person as agent, 1. 101. 6; 7. 22. 7; 7. 38. 1; 10. 38. 4; with instr. of means, dhibhis, etc., 6. 18. 6; 8. 96. 20 (hávyāṁ huvema); with pers. gen., 6. 21. 1 (imā u tvā . . kārōr hávyam . . hávyā havante) and 6. 23. 1; with matīnām, 3. 5. 3 and 3. 49. 3; with the loc. 2. 23. 13; 5. 17. 4 (vikṣū prá śasyate); 5. 33. 5; 6. 45. 11; 6. 61. 12; 7. 30. 2; 7. 32. 24; 8. 20. 20; 8. 70. 8; 8. 71. 15 (viśvāśu vikṣy āvītaṁ āhāyas); absolutely, 1. 116. 6; 1. 129. 6; 2. 37. 2; 2. 39. 1; 8. 1. 28; 8. 15. 16 (sā stōmyah sā hāvyah); 10. 6. 7; 10. 39. 1; 10. 89. 10; 10. 147. 2;

in the following instances:

1. 100. 1, hávyo bhāveṣu . . no bhavatu . . ūtí;
4. 144. 3, ād Im bhāgo nā hávyah sām asmād ā;
4. 24. 2, sā hávyah sā īdyah . . yāmann ā . . marīya . . vārivo dhāt;
8. 90. 1, ā nas . . hávyah indrah samāstu bhuṣatu;
8. 96. 21, sādyā jajñānō hávyo babhūva, kṛṇvāṁ āpāṇi nāryā purūrī sōmo nā pītō hávyah sākhibhyas;
and in 10. 30. 10, carkṛtyaṁ dadhatu bhāgaṁ nā nṛbhyo hávyam;
1. 33. 2, yā stotṛbhyo hávyo āsti yāman.

The last example shows that the dative is not even certain in the three cases in which it appears to be an agent-case; like asmāt, nṛbhya may be ablative. But even granting that the other examples are really datives, the fact that a "dative of agent" with hávyah occurs only once each in books one and ten, against the normal construction illustrated above, shows that an agent-dative is probably not an early construction. In 8. 96. 21, the examples already given of kar with dative show that sākhibhyas depends at least on the verb as much as on the gerundive (see below). In 3. 62. 1, yuvāvate nā tūṣya abhūvan, the dative depends on īhū, as it does in the other example cited by Delbrück, mānave śāsyo bhūs, 1. 189. 7 (cf. . purutrā hi vihāvyo babhātha, 2. 18. 7).

But īdyā with the dative demands more particular examination. A cognate gerundive is ilénya, e. g., didṛkṣēnyas . . jénya ilényo mahō ārbhāya jīvāse, 1. 146. 5, "worshipful to the small." None of the gerundives here is construed with the
dative as agent, and so in other instances, both of this form and of īdya, e. g., āgne mitró asi priyāḥ, sākhā sākhībhya, īdyaṣ, 1. 75. 4, it is difficult to see why the dative should be necessarily taken as an agent, any more than when the locative is used in the same way, e. g., ādhā hi vikṣv īdyaṇ ‘si priyāḥ no ātíthis, 6. 2. 7 (compare tvā vikṣv īdyaṃ, 4. 7. 2; ilényo vapasyo vibhāvā priyō viśāṃ ātíthis, 5. 1. 9). The adjective is as absolute as it is in 6. 1. 2, ādhā hōtā ny āsǐdō yājīyān ... īdyaḥ sān.

The fact is that sākhā sākhībhyas is a stereotyped phrase, which stands by itself, and the clause is not to be divided (as it is by Delbrück) sākhībhya īdyaṣ. In 1. 26. 3, sākhā sākhya vārenyas no one takes the dative as agent. Compare 9. 104. 5, sakhōva sākhya gātvūttamo bhava (nāryo rucē bhava, ib. 105. 5), where the dative is the same as in asmābhyaṃ gātvūttamo devēbhyo mádhumattamas, ib. 106. 6; but also 1. 53. 2, ākāmakarsānāḥ sākhā sākhībhyas, where the dative is not the object of the verbal, “not slighting desires, a friend to the friend.”

In other cases the dative is object not agent:

ā ... yajati ... sākhā sākhya vārenyas, “friend gives to friend,” 1. 26. 3.

sākhā sākhya āpacat, “friend cooked for friend,” 5. 29. 7.

sākheva sākhya ... pra ṇa āyur tāris, “extend, as friend (extends) to friend, our life,” 8. 48. 4.

pāvasva jāniyann īso ‘bhī viśvāni vāryā, sākhā sākhībhya ātāyec, 9. 66. 4.

A comparison of this example with the next shows that īdya is absolute in the latter as in the former:

pāvasva viśvacarṣane ‘bhī viśvāni kāvyā, sākhā sākhībhya īdyaṣ, 9. 66. 1.

The meaning is not here, any more than in vs. 4, “to be revered by friends,” but, as in vs. 4, “flow forth pure ... as friend to the friend, to help,” “flow forth pure ... as friend to the friend, worthy of worship.” And this should determine the meaning in 1. 75. 4 (where Delbrück translates “to be revered by friends”) to be “thou art kind, dear, a friend to the friend, worthy of worship.”

Other examples are: sākhā sākhībhya (nas) vārivah kṛṇotu, 10. 42. 11, yān me brāhma cakrā ... māhyaṃ śakhye sākhāyās, “since to me the friend (as) friends ye made a hymn,” 1. 165. 11.
This gives the norm for 8. 96. 21 (above),

krṇvān āpāśi nāryā purāṇi
sōmo nā pītā hāvyāh sākhribhyas,

"doing for his friends noble deeds he is to be invoked like Soma." Cf.

bhāvā no agne sumānā āpetān
sākheva sākhye pitāreva sādhūs,

"good as parents do thou become well-minded to us on thy approach, as friend to friend," 3.18. 1(sc. becomes well-minded).

nā sā sākhā yō nā dādāti sākhye,

"not he is friend who gives not to a friend," 10. 117. 4.

In almost every instance, therefore, the "friend to friend" clause is construed as explained above. So īdya like hāvyā can hardly stand as an example of a gerundive with the dative of agent, since there is only one example in which the dative in the sākhā sākhye phrase does not depend on a verbal idea, and apart from this phrase īdya is always absolute, like most of the gerundives of its class. It occurs in phrases, adhvaṁśy īdyaś, 3. 29. 7; 4. 7. 1; 5. 22. 1; 6. 49. 2 (viśo-viśa īdyam adhvaṁśy), and vajñēśy īdyaś, 8. 11. 1; 10. 30. 8. The only cases where the dative is certain, against three with nas (1. 12. 3; 188. 3; 10. 100. 9); two (1. 1. 2; 3. 29. 2), with the instrumental (agent); and thirty absolute cases, are the two from books one and nine; although even they are more probably absolute than real examples of the dative of the agent. The dative of the agent arises from a wrong way of looking at the adjective (gerundive). It is not a syntactical phenomenon of the later period. It is supposed to arise and die out in the early poems, sporadically taking the place of the normal instrumental or genitive (with adjective)."  

1 A companion-piece to the phrase "friend to friend" is "father to son." A study of the occurrences shows that the dative is more or less stereotyped but like loc. and genit. depends for its character partly on real relationship with adjacent words. Thus just as we have jāne sēvas, 1. 9. 4; sēvam mitrāya, 10. 119. 5; aruṣāya sēvam, 8. 7. 5; so we have pītēva soma sūnāve suśēvaḥ (sākhva sākhye), 8. 48. 4. "as father to son is kind." Other examples are 1. 1. 9, sā naḥ pītēva sūnāve 'gne sūpāyāno bhava, "as father to son (is) easy of access." in which the dat. depends on the verbal notion. (Compare AV. 12. 3. 12, pītēva putrān abhī sādh svājasva nas, "embrace us as a father his sons": ib. 5. 14. 10,
This does not assume that the adnominal dative (which like the final is also Avestan) is not primitive. It is often identical with the final. Cf. paridhīr jivanāya kām, "a defence unto living," AV. 8. 2. 25. It occurs either with āsti or bhū. Compare both in 6. 45. 26, gāur asi vīra gavyatē, āśvo aśvāyatē bhava, "thou art a cow to one seeking cows; become a horse to one seeking horses." But the stereotyped phrase (cf. Av. cīm hakha haše baraiti) is not a good illustration of the construction with īdyā.

4. The syntactical construction of verbs of speaking in RV. and AV.

In Vedic-Sanskrit we have a perfectly normal development from the use of the dative with verbs of speaking as found in Greek, Latin, German, and Avestan. The accusative personal object is not primitive, except where speak is "call" or "name"; the dative of the object is primitive. The accusative after "call," the dative after "speak" (to), as in Avestan, is the starting point. But the (Latin) construction of accusative and infinitive with a verb of saying is primitive and may be filled out with a dative of the person addressed. Compare in Avestan, "I say to thee (dative) [that] the holy one (acc.) [is] to love (= to be loved; the infinitive as passive, āfryeidyāi) by (literally, "on the part of," abl.) the holy." Compare Hübshmann's Casuslehre, pp. 179, 217. The regular construction in Avestan is the dative of the person after a verb of speaking; the accusative is not an exception to this, since it occurs only when the verb means "call," "name," "declare," usually as a double accusative. The standing phrase "Ormuzd spoke to Zoroaster" (dative) shows the normal usage; the verb meaning speak (to) takes a dative just as verbs of screaming, lamenting, praising, greeting, regularly take the dative.

It is from this point of view that we should start. We shall find that in Vedic-Sanskrit the dative yields slowly to the accu-

putra śiva pitaśān gaccha, "go as son to father."") In 10. 35. 8, pītēva sūnāve mpān no abhi cid vadhāt, "be merciful to us as father to son," the last word is governed by the corresponding form of the verb, which governs the dative of the person (accus. of the thing) in the sense "excuse this unto," and is here united with abhi, just as abhi-kṣam, a verb of similar sense, takes the dative, nas . . abhi kṣamadhvaṁ yuj-yāya, 2. 28. 3 (29. 2), or locative, abhi no virā ārvati kṣameta, 2. 38. 1, or accus., abhi nā mā ca kṣamithāḥ, 2. 38. 7.
sative (later the normal Sk. case) as the general case of the person addressed.

(a): The simplest construction with a verb of speaking is verb and direct object, either as a clause embodying what is said or as an accusative. In the first instance nothing indicates a quotation; or an iti “so” shows that the words are cited: śāśvatī nārī . . . āha bhōjanam bibhārṣi, “every woman says (proclaims) you bring enjoyment,” 8. 1. 34 (no iti); nēṅdroya astī ’ti nēma u tvā āha, “Indra is not, so many a one proclaims,” 8. 100. 3. The iti citation may be put into one clause and completed outside of it, yā īndrāya sunāvāme ’ty āha nāre, etc., 4. 25. 4 = 5. 37. 1 (without nāre). Compare, nā vocāma mā sunotē ’ti sōman, “we will not say ‘do not press soma’,” 2. 30. 7. The acc. is here impersonal: kād yād uceṁa, “what (is it) which we proclaimed?” 1. 161. 1; satyām ācus, “they proclaimed sooth,” 4. 33. 6; yāt kim ca . . . idāṁ, vādāmi, “whatsoever I proclaim here,” 6. 47. 10; vācam’ . . . citrāum vadati, “he proclaims (clamat) a clear word,” 5. 63. 6; yād ābravam prathamām, “what first I said,” 1. 108. 6; satyām bravāmi, “I speak sooth,” 10. 117. 6; rāmām it tā āhūs, “they speak right,” 3. 4. 7.

This is a common construction with vac, vad, and brā; but the example of ah is unique in the Rig Veda (in not having a complementary personal dative). In AV., however, ah as “say” (= brā or vac, with acc. alone) is not uncommon; cf. tād . . . tāthā ’ha, AV. 3. 4. 5; bahv idām . . . anṛtam āha pāru-śas, “much untruth here a man says,” AV. 11. 44. 8; tād āgnir āha, “Agni says this,” AV. 8. 5. 5 = 19. 24. 8.

(b): An acc. of the person addressed stands after the verb of speaking. Here also a distinction must be made; vac in RV. takes no such acc. Although ah occurs many times with a predicate accusative it takes the acc. of address (= “speak to him,” etc.) late and rarely (three or four times only); vac takes this accus. only in a couple of late passages; brā has the accusative of address only once outside the first and tenth books of RV. Discussion follows.

ah: The prevalent meaning is not “address” (“speak to”) but “declare,” “call,” with accusatives as direct object and

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1 The cognate acc. with vad is (not vādam but) vācam or vākām (e. g. 6. 59. 4. jōsavākān vādatas).

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predicate. Just as one may say “they say this (is) true” so one may say “they say him seer” (i.e. declare him to be a seer), RV. 10. 107. 6, that is, the construction is identical with that of the impersonal object. This often has the appearance of “address,” thus: eva tām āhur utā śṛṇve indra āko vibhaktā . . (no īti), “thus they say (declare) him (and Indra is famed as only distributor)” etc., 7. 26. 4, where “address him thus” is inappropriate, as in many other examples freely so rendered. The following examples illustrate the faintness of the line dividing “call” and “say” (with predicate, as meaning of āh): utā tvāṁ sakhyē sthirāpitam āhūs, “and many an one in friendship firm they say,” i.e. “they say is firm” or “they declare many an one firm,” 10. 71. 5. So 10. 112. 9, “they declare you most priestly” (or “say you are”); “whom do they declare hero” (or “say is hero”), etc., 10. 114. 9.

One acc. may be omitted; pāpāṁ āhur yās, etc., “evil they declare (him) who,” etc., 10. 10. 12; or the predicate may be expressed by a direct quotation: yā āhūh suraṁhit nir harē ‘ti, “who declare it (is) fragrant, take it out,” 1. 162. 12.

As tām evā rṣīn . . āhūs, 10. 107. 6; yuvāṁ id āhur bhīsājā, 10. 39. 3, mean “they call (declare) him a seer,” “they call you physicians,” and as in the example just given, an ātī clause may be substituted, so yō mā mūghaṁ yātudhānē ‘ty āha, 7. 104. 16, does not mean “who addresses me” but “who calls (proclaims) me a wizard” (or “says I am a wizard”) and neither “address” nor “say about” is the true rendering. So in 10. 34. 4, enam āhur nā jānimo nayatā baddhun etāṁ, the construction is the same as in 9. 114. 1, tām āhūḥ suprājā īti, “they proclaim him with the words (i.e. say he is) ’possessed of children’,” and the clause should be rendered “they say (proclaim him with the words) we do not know him.” Similar is utō ’m āhur nāi yō astī ‘ty enam, “and proclaim he is not,” 2. 12. 5; utāī ’nam āhūs . . asarat, 4. 38. 9 (no īti). A general

1 An apparent third accusative is syntactically an adverb, kim, in kim aṅgā=nonne: kim aṅgā tvā maghavan bhogām āhūs, “do not they declare you generous,” 10. 42. 3 (with the same construction following with śru “hear”); kim aṅgā rādharacōdānam tvā ‘hus, “don’t they declare you the helper of the wretched,” 6. 44. 10; kim aṅgā tvā’hur abhiṣaṅtipām nas, “don’t they declare you our protector from curses,” 6. 32. 3 (on nas, see under c. below).
predicate may be added: satyām īd vá u aśvinā yuvām āhur mayobhūvā, “and sooth they proclaim you are joyous,” 5. 73. 9, but this is adverbial.

The accusative of address is more nearly approximated in a few instances: rájā cid yām bhágam bhakṣi ’ty āha, “whom even a king calls (addresses) with the words ‘give a share’,” 7. 41. 2; tám ayāṁ sóma āha távā ’hám asmi, “him Soma calls (proclams, addresses) with the words ‘I am thine’,” 5. 44. 14–15; ītī tvā devā imá āhur āida, “so the gods call (address?) thee, Purūravas,” 10. 95. 18; yān mā sávō mónusa āha, “when Soma calls me” (?), followed by nirūja śīlhaḥ kṛṣe dásaṁ kṛtvāṁ hāthāśiḥ. Of these passages, those in 5. 44 and 10. 95 are referred by Arnold to C’ and C” respectively and that of 7. 41 to B’, only the last (doubtful) example being even as early as B’. In other words, the accusative of address, with ah, if it be admitted at all, belongs not to the earlier but to the later part of RV.

vac: That ah has the meanings “say” and “call” is paralleled by the use of vac “speak” (vocē, “call”) in āchā devān ācīse, “you called gods hither,” 3. 22. 3 (Ludwig, “hast her ange-sagt die götter”). Thence by way of the meaning “invoke,” vac passes into the (later customary) construction of accusative of person addressed. The process may be illustrated by: “Mighty, with this word the voice of the singer praises thee . . . we will laud thee . . . so they have called (addressed?) thee,” ītī tvā . . . avocē, 10. 115. 9. With this may be compared another late verse, 5. 2. 12, where ītī ’mām agrīm amṛtā avocē (“so they called this Agni”) follows and precedes a laudatory injunction. It is surely not necessary here to render avocē as “spoke to,” though the meaning hovers near it, as it does in 7. 28. 5, vocēmī ’d āndram maṅghāvānau enam . . . yād dādañ nas, “let us call Indra, the generous one, that he may give to us.” Compare 1. 150. 1, purū tvā dāśvān voce, “I giving (much) call thee much,” where the impersonal accusative is probably an adverb. In AV. 10. 1. 7, yās tvō ’vāca paraḥ ’ti, “who calls (or speaks to) you with the words ‘get out’,” the later sense is fairly reached. As “call” may be equivalent to “name,” the sense of RV. 10. 120. 9 = AV. 5. 2. 9. Āvocē svāṃ tanvān āndram évā, may be either “called Indra as himself” (Ludwig) or “spoke of himself as Indra” (Whitney).
brū: Instances of accusative of address with brū are rare and
found chiefly in the later books; nāsatyāv abruvan devās, “gods
addressed Aśvins,” 10. 24. 5, kād u bravas . . vīcā nūn, 10. 10. 6
(doubtful). The ačeus. after a combination of word of speak-
ing and transitive verb, 8. 48. 1, vīsve yām devā utā mārtāsā
mādhū bruvānto abhi saucārānti, does not belong here, the
meaning being “to which gods and men calling it mead come
together” (cf. áthā “bravid vrtrām índro hanisyān, “then Indra
spoke about to kill Vṛtra,” 4. 18. 11). Another passage in the
eighth book, 8. 92. 2, has puruhūtām . . sānaśrutam índra iti
bravītana; but here the row of accus. in the first half verse is a
continuation of that in the preceding, which is governed by abhī
drā gāyata, “(sing forth unto Indra the powerful) the much-
invoked, him famed of old; call with the word Indra.” In
8. 45. 37, kō nū . . sākhā sākhāyam abravit has the speech fol-
lowing and may mean “addressed,” but brū here is on the
border-line between “speak to” and “invoke” and answers
to the latter meaning in ádā cid va utā bruve, 8. 83. 9,
either “I call (= name) you so” (cf. ád u bruvāte mithunāni
nāma, “name themselves”) or “invoke,” like úpa bruve in
8. 67. 10, utā tvām . . úpa bruve, “I invoke you,” (“invoke
one to,” dat., 3. 37. 5), and so in 6. 56. 4, yād adyā tvā . .
bruvāma . . tāt sū no mām mādha, “what we invoke thee
(for), that prayer accomplish thou” (cf. 1. 185. 11, yād ihō
'pabruvē vām, and AV. 5. 22. 11, tāt tvā . . úpa bruve).
Similar is agnīm brūmas, followed by a petition (“release us
from anguish”) in AV. 11. 6. 1 ff.

Altogether in the Rig Veda instances of acc. after “address”
are few and doubtful; some are distinctly late. Of the few,
several have the meaning “call” rather than “speak to.” The
combination of (a) and (b), that is “say something to someone
(both acc.), is a familiar type in Greek and in later Sk. (cf. yan
mām vadam, Gītā, 10. 14; yac ca mām āha, Mbh. 3. 92. 16,
etc.); but in the Vedic language it is still a conspicuous solecism.
One doubtful case may be found above in a late hymn—kād u
bravas . . nūn, 10. 10. 6. There is no such construction with
vad till Ait.Br. 3. 20, and that is unique, besides being, like
the case above, a combination (ity evā ‘ham etām vācaṁ
vadanta upātiśhanta) of a verb of speaking with a verb of
approach, so that the accus. of the person depends rather
on upatisthanta, than, as Liebich explains the passage (BB. 2. 275), on vadantas. There is a similar case in AV. 15. 11. 2. Here the later construction of acc. of address is gaining ground as compared with RV. and ity enam āha, "thus addresses him," is found in 11. 3. 28 ff., as in 15. 11. 3, yād enam āha, "when he addresses him" (the only cases in AV.); but in the latter passage the preceding verse has svayām enam abhyudāya brūyāt, where the accusative is introduced by the verb of motion and probably depends upon it quite as much as on the verb of speaking; although brū shows in AV. a marked advance on RV. and takes the acc. of address: bhūnim abravit, "said to earth," 13. 1. 54; tām devā abruvan, "said gods to him," 15. 3. 1; mām abravit, "said to me," 6. 82. 2, quite as in the Brāhmaṇas.

The double construction with vac may occur in RV. 10. 80. 7, agnim mahām avocāma suvrktim, and as such is registered in the Grandriss, iii, p. 382; but it is quite doubtful, as will be seen by comparison with 2. 4. 1, huvē suvrktim... agnim; 3. 2. 3, mahām (agnim), that is, mahām and suvrktim may be adjectives with agnim. For tād vananti mā in AV. 12. 1. 58 there is an improbable v.l. vadanti. Sāyaṇa at 8. 77. 2 renders ād ḫm śavasy ābravād āurnavābhām ahiśūvam by "she addressed him (with the answer) 'Aūrṇabhāva and Ahiśuva'" ("these two demons and their like you must overcome"), but īm as ētām Īndram (abravit) is improbable (see note on this, p. 381).

(c): The accusative after a verb of speaking is often a predicate. The examples are too numerous to cite in detail (several have been given above), but typical are "what they (say, āḥūs) call fights that (is) illusion," 10. 54. 2; "they proclaim the sweet fruit on its top," āgre, i.e. say it is on its top, 1. 164. 22; "they proclaim (say there are) three connections of you in the sky"; 1. 163. 3; "don't they proclaim you the best comers" (kīm āṅgā vāṃ... gāmīsthā āhūs, 1. 118. 3 = 3. 58. 3); "how do they proclaim (call) him generous to the singer" (kathāī 'nam āhūh pāpūrima jāritrē), 4. 23. 3. All these (with āh) have predicate alone (jāritrē depends probably on pāpūrim); but one example of it has a personal dative in addition to the predicate, tān u me puṇā āḥūs, "they say to me these (are) males," 1. 164. 16 (ib. 15, 19, 46, without me). This combination might indeed be suspected in the example given above (p. 376) kīm āṅgā tvā
"hur abhiṣastipāṁ nas, 6. 52. 3; but it is improbable, as it is improbable in tvāṁ in me gopatiṁ viśva āha, "everyone calls you my protector" (not "says to me"), 7. 18. 4, which is comparable rather with the genitive construction, tvāṁ ēd āhūḥ prāmatiṁ vaso māma, "they call you my guardian," 8. 19. 29. It occurs, however, once more in AV. 2. 2. 3, samudrā āsāṁ sūdanam me āhus.¹

The origin of the predicate construction is that of apposition, agnīṁ yamāṁ mātarīśvānam āhus, "they proclaim (it as) Agni, Yama," etc., after ēkaṁ sād viprā bahudhā vaddanti, "they declare manifoldly (adv. as pred.) that which is one"; 1. 164. 46, and as such the predicate is indifferently adjective or noun "people proclaim (call) him (tām...jānā āhus) one well-endowed-with-straw," 1. 74. 5; "soma-lover they call thee," 1. 104. 9. From this to the predicate is but a step, "thence born they proclaim seer Vas. (they say seer Vas. was born thence), tāto jātāṁ ṣīṁ āhur Vāsiṣṭham, 7. 33. 13 (just like "they proclaim him seer.")"

The predicate with vāc also (as with ah) may take a supplementary dative. Thus, not only yāśya viśvāni bāstayar ēcūr vāśāni ni ēdvā, "in whose hands they proclaim all good things surely," 6. 45. 8; but also devō nas...ānāgasovacatī sūryāya, "the god shall proclaim us sinless to the sun," 1. 123. 3 (as with prā, prá yē me pitāram... rudrāṁ vocanta, "proclaimed to me Rudra as father," 5. 52. 16); perhaps also in 8. 59. 5, āvocāma satyāṁ tvēṣābhīyāṁ mahimānam indriyāṁ, "we proclaimed as true (?) to the two mighty ones Indric greatness"; cf. rtāṁ divē tād avocam prthivyā abhirāvāya prathamāṁ sumedhās, "as right this I declared to heaven and earth to hear first," 1. 185. 10.

With vād the predicate is expressed by an īti in AV. 11. 1. 7, svargō lokā īti yāṁ vādanta, "which they declare as (say is) heaven" (in AV. 6. 61. 2-3, ahāṁ satyāṁ ārtaṁ yād vādāmi, is "what false I say is true").

¹ Other pred. constructions in AV. are like those in RV.: "they proclaim thee (to be) seed of the sea," 9. 1. 2; "whom they proclaim as a star," yāṁ āhūs ē功德ā... īti, 5. 17. 4 (and so 11. 6. 7).
² With právāc also dative but with direct quotation (of what is proclaimed) following, prá nú vocaṁ ciṅṅṅṅṛṣe jānāya mā gāṁ...vadhiṣṭa, "I proclaim to the thoughtful man 'do not kill a cow,'" 8. 101. 15.
With brù the predicate occurs in 1. 161. 13, "the goat declared the dog an awakener," śvānam bastō bodhayitāram abravit. The statement in 1. 23. 20 = 10. 9. 6, apsū me sōmo abravid antār viśvāni bhēṣajā, "Soma told me all medicines (are) in water," shows again the personal dative after the accusative used as predicate (followed by agni ca viśvāsamabhuva, "and Agni (is) healing to all").

(d): When a thing is said to a person the person stands in the dative, pitrē . . . ucyate vācas, "to the father is said the word," 1. 114. 6. The meaning "declare" appears in yō . . . svāpne bhayām bhīrave māhyam āha, "if (a friend) has declared (spoken a word of) fear" to me the fearful," 2. 28. 10; dīṣa āhā viprvechatē, "he declared to (me) asking the directions," 9. 70. 9; and this may be rendered by "say," as with the impersonal object. Examples are numerous: ayūm me . . . tād āha, "this one has declared (or said) it to me," 10. 27. 18; tād . . . māhyam āhūs, "they said it to me," 1. 24. 12; samānām in me kavāyās cid āhur, "the same thing said even the seers to me" (the words said follow without iti), 7. 86. 3. With prā-ah the construction is the same, 4. 19. 10 (ādhiāh "bless," RV. 10. 173. 3; AV. 1. 16. 2, with dat.), prā te prūvaqā kāraṇāni . . . āha vidūše, though Delbrück, SF. 5. 141, appears to recognize this construction only for the prose literature ("in P ist der Dativ bei prā-ah belegt.") So with prā-vac, "proclaim" (= "teach"), ágni māhyam prē 'd u vocan manīsam, "Agni proclaimed to me (taught me) wisdom," 4. 5. 3; also in a meaning

1 With 7. 77. 2, ād im śavaay ābravid āurṇavābhām (after the question, "who are strong and famous?") "then truly she proclaimed Āurṇavābhā," compare the parallel, 8. 45. 5, práti tvā . . . vadat (words quoted, no iti); but it is wrong to assume for 77. 2 "addressed him," or a predicate, still less a double acc. pers. thing. As in 1. 144. 3, ād im bhāgo nā háyvas, Im is a mere particle and the words are to be translated as above.

2 Cf. the epic abhayā vāk, "fearless word," i.e. word of encouragement.

3 The combination práti-ah takes acc. of person in RV. 8. 96. 19, práti d anyām āhūs, "said (what precedes) to each other" (as in Up.); of thing in AV. 18. 2. 37, práty etād āha, "said this"; práti-brū "respond" (to, dat.), 4. 8. 8 (with acc. 1. 161. 3). The dative occurs after práti-vac in RV. 8. 100. 5, mānas ci me hṛdā ā práty avocat, "my mind said to my heart" (cf. tād ayānā kēto hṛdā ā vi caṣṭe. 1. 24. 12).
equivalent to "betray" and "appoint," 7. 1. 22 and 8. 27. 10 (scil. us to ill and good, respectively). So, too, prá-brú in AV. is declare = betray, i. e. "tell on," AV. 5. 22. 8, etc.; but in RV. prá-brú is "proclaim" (to, dat.), 4. 42. 7; and "bless" or "praise" ("speak for"), 1. 161. 12, yáh prábravít pró tásmá abhravítama. On právac with loc., see below.

Outside of compounds, vac itself is construed regularly with an acc. and dat., "we called (said obeisance)," ávocáma námas 5. 73. 10, "we (called) said a word to Agni," ávocáma . . agnáye vácas, 1. 78. 5; "we said a word to the seer," ávocáma kaváye vácas, 5. 1. 12; and so yád vám . . ucáthám ávocan, 1. 183. 8; kád rudráya vocéma, 1. 43. 1. The acc. is etymological (cognate, vac vácas) or not, etá te agna ucátháni . . ávocáma, 4. 2. 20; mántarái vocemá 'gnáye/ āré asmé ca śṛṇvaté, "let us call (say) a prayer to Agni who listens to us even afar," 1. 74. 1; imáin sv ásmáí hrdá śútaśtaṁ mántarái vocema, 2. 35. 2; tád divé . . vocam, 1. 129. 3; námo divé vocam, 1. 136. 6; ávocáma námo asmái, 1. 114. 11; suśútím . . vocéyam ásmái . . śṛṇóti nas, 10. 91. 13; vocés (declare) tán nas . . yát te asmé, 1. 165. 3.

Instead of a dative stands a personal locative, túbhyam . . nivácaná . . áśaśisíṣām, 4. 3. 16; ávocáma nivácanány asmin, 1. 189. 8; prá rámé vocam (sc. tát), 10. 93. 14. Doubtful is the locative in 5. 61. 18 (iti preceding), utá me vocatád ití suýtásome ráthavá postpone má kámo ápa veti me. The impersonal locative gives the subject of the conversation, generally a dispute (as later with saṁvad, vivad) ví . . aprá . . ávocanta, "disputed about water," 6. 31. 1; tváṁ hy ángá varaṇa bráviśi púñāmahé bhúri, "speakest many reproaches about Indian givers," AV. 5. 11. 7.3 Compare the use of the locative with upálabh in Ch. Up. 2. 22. 3, taṁ yadi sváraśu 'pálabheta, "if one

3 The construction of vac in AV. is as in RV. without object or with object, "declare birth of gods," AV. 2. 28. 2; 4. 1. 3; with acc. and loc. where (pred.) ib. 13. 1. 14; "what you say untrue," ib. 1. 10. 3; "speak truth," ib. 4. 9. 7; obj. with tí, várupé 'te yád úcimá, "if we said 'O Varuṇa, '" ib. 7. 83. 2; so 5. 17. 8; predicate, má má vacann aráthaśam, "declare me ungenerous," ib. 5. 11. 8 (18. 1. 36 = RV.); with dative, ásmái vápúny avocáma, ib. 5. 1. 9. In composition, právac, AV. 7. 2. 1; 2. 1. 2 (= RV. acc. dat.): ādhivac (as in RV.) is "advocate," "speak for us," AV. 6. 7. 2; no dat. with upacac, 5. 8. 6, nirvac, 9. 8. 10 (abl.).
should take him up in regard to his vowels” (reproach him for his execrable pronunciation).

With vad, which as yet has no pers. acc., “speak to” may be expressed by dative (with acc.) or by ácha with acc.; the latter is 8. 21. 6; 10. 141. 1; with práti, á (abhi- vad does not occur in RV., but in AV. 9. 6. 4, as “greet”; in the epic, vada mām and vada mām abhi are equivalents and equal to Vedic práti vad; with sam, the instr. “self”). “Speak about” (later Sk. acc.) is expressed by loc. (see the last paragraph), 10. 109. 1 and 4, tē ‘vadant prathamā brahmakilbise . . . devā etāsyām avadanta pārve (AV. 5. 17. 1). The dative, always with accusative, has the force of práti in práti tvā . . . vadat, “said to thee,” 8. 45. 5 (with address following). Thus, śraddhivāṁ te vadāmi, “I say a plausible thing to you,” 10. 125. 4; nō ṁpas-pijāṁ vaḥ pitaro vadāmi, “I say no jest to you,” 10. 88. 18; grāvabhya vācaṁ vadatā, “say a word to the stones,” 10. 94. 1; ōṣṭhāv iva mādhyā āśā vāḍantā, “like lips speaking honey to the mouth,” 2. 39. 6. The compounds do not add much to the sense, nas . . bhadrām āvada, “hither-speak good to us,” 2. 43. 2; adhāspaṭāṁ me ṣud vadata, 10. 166. 5 (>). To these datives AV. vad adds “speak discord to the foe,” 5. 21. 3; “let the wife speak a sweet word to the husband,” 3. 30. 2; “one to the other speaking what is agreeable,” anyó anyāśmāi valgū vāḍantās, 3. 30. 5 (besides the same without dat., “I speak a sweet word” and “speak discord,” with “foe” in loc. instead of dat.). In AV. právad takes acc. dat., 4. 24. 3, yāsmāi grāvāṇaḥ prāvānti nṛṇāṁ (RV. 10. 94. 1 comes near to this). The dative after vad is also used in AV. as a final, “speak unto not-giving,” ādānāya (so with ṣud-vad, AV. 5. 20. 11).

The common construction with brū is acc. dat., tād vo devā abruvan, “the gods said this to you,” 1. 161. 2; ād vām brāvāma satyāṁ ukthā, 6. 67. 10; īndrāya nānām arcata/ukthāni ca brāvītaṁ 1. 84. 5; nāmas te brāvāma, 2. 28. 8; brāvāni te gīras, 6. 16. 16; brāvīmi te vācaṁ, 1. 84. 19; kāḥ svit tād adyā no brūyāt, 10. 135. 5 (the doubtful forms belong here as dative). So in AV., ṛṭūṁ no brūta, 8. 9. 17; gharmāṁ no brūta, 4. 11. 5 (brū, 5. 11. 6). The compound ví-brū, “teach,” is used in

1 In RV. 10. 62. 4, vadati valgū vo grhē, the vas probably goes with grhē.
the same way, vyābrāvīd vayūnā mártyebbhyas, “taught to mortals wonderful things,” 1. 145. 5, as in prā-brū, “proclaim,” 1. 161. 12, etc.

(e): The personal dative without accusative does not differ from that with the accusative. Thus as we have “he declared (āhus) to me asking the directions” (above, p. 381), so we have “they declared (said) to me,” té ma āhus, with the words said following (without īti), 5. 30. 2 and 5. 53. 3. As we’ve have “declare that to us,” vocés tān nas (above, p. 382) so we have uvācā me vāruṇas, “Varuna declared to me,” with words following (without īti), 7. 87. 4. As we have “who will say that to us,” tādno brūyāt (above, p. 383), so we have sṛṇvātē te bārVīmi, “I say to you,” 10. 18. 1, what is said following (without īti). There is no essential difference between the verb with and without a direct object. So “how” and “what” (i.e. without or with an obj. acc.) occur indifferently with brū: kāthā mahē rudrāyāyā bravām, kād rāyē cikitūse bhāgāya, “how shall I speak to . . . what shall I say to,” 5. 41. 11; kāthā mitrāya . . . brāvah kād aryamna, 4. 3. 5; yād . . . brāvas . . . mitrāya . . satyām, 7. 60. 1. Again in 1. 139. 7, devēbhya bravasi is “thou shalt say to the gods,” with what is said following (without īti). In 9. 82. 4, sṛṇuhi brāvīmi te, nothing particular is “told,” translate, “listen, I speak to thee.” So brāvad yāthā . . . sudāse, “that he say to Sudās” (with speech following), 7. 64. 3; yās cikēta sā bravītum nas “who comprehends shall say to us,” 5. 65. 1 (that is, say “whose songs the god accepts,” as follows) are parallel to the later regular acc. with the words of the remark following, tam uvācā . . . īti. Of course brū also has the meaning of prābrū, as in 5. 12. 5, rjūyātē vṛjñāni bravuntās, “proclaiming evil to the pious.” In AV. cf. 5. 11. 1, kathām mahē āsrūyā bāvīr iha, “how did you speak to the great spirit” (ib. 6, prā and tāt), still keeps the dative of address which may be called the earlier Vedic type, as opposed to the acc. person (with or without acc. of thing said), which is typical of the later style. Thus verbs of speaking agree fully with verbs of motion in taking dative first and accusative later when meaning “speak to,” “go to (ward).”

The force of the dative, moreover, may be measured by its interchange with prāti and acc., just as with other verbs (as illus-
trated in my former paper). Thus práti tvā śavasí vadat, **“said the mighty one unto thee,”** 8. 45. 5 (followed by the speech without íti); áthá síraḥ práti váṁ . . . vadat, **“said (spoke) the head unto you,”** 1. 119. 9; as in 1. 161. 2, tád vo devā abruvan, **“said the gods to you.”**

As between accusative and dative used after verbs of speaking there is then, to sum up, a much greater variety in RV than is found in the Brāhmaṇas. **“Speak to”** is expressed by the acc. rarely and in late passages; **“say this to one”** by double accusatives only as an exception. The usual construction is acc. of thing and dative of person or dative of person alone, with the words said given directly (with or without íti).

This agrees with the radical meaning of the words; vad is **“sound”** (clamo, clamor), and so is used regularly of musical instruments (cf. bhan **“sound,”** bhaṅ, **“speak”),** the latest verb to take the acc. of person; vac is **“call, name,”** connected with vox, voco; brù (mrù), murmur (cf. rap, lap, **“whisper,”** “talk,” loquor), **“sound,” “speak” to, with dative; ah is **“declaro”** (āha, the **“clear,”** day; āha, **“clearly”),** just as ācaks, **“explain”** (make visible) becomes **“say”** with dat., and at last takes acc. of address (cf. dico, **“point out,”** indicate; diś **“point, show,”** like a verb of speaking in RV. 10. 92. 9, stómam vo adýā rudráya . . . námásá diśīṣṭana, **“with obeisance show [declare] your praise to Rudra”; and ádiṣṭam bhavati, **“is pointed out,”** “taught,” Ch. Up. 3. 18. 1). So bhā, **“appear,”** is connected with bhās, **“speak,”** first in Brāh.

That a word used of any sort of noise should be used also of speech is not unparalleled (ŚB. 10. 6. 5. 4). Thus in 10. 33. 1, duhsásur āgād íti ghóśa ásit, **“the evil one has come,” so was the sound.”** (=report). Cf. bhan (later with prati) in 4. 18. 6, 7. AV. appears to have śaṅs in the epic sense of **“tell”** (śaṁsa me, **“tell me,”** Sk.) in 6. 45. 1, kim áśastāni śaṁsasi, **“why do you tell untold things?”** Sk. śabdítam is **“named.”**

(f): A few cases remain where (speak) **“about”** has been given as the meaning with acc. In AV. 12. 4. 22 and 42, tám abrávīt is thus rendered. But here, as elsewhere, **“about”** is only idiomatic English for the original **“declared or proclaimed**

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1 Perhaps only “recite.” Cf. RV. 4. 3. 3. deváya sástam . . . śaṁsa (4. 16. 2, śaṁsauté ukthám); Tātt. Up. 1. 8. 1. om śom íti śastrāṇi śaṁsanti.
her," the explanatory words following; without iti in 22, but in 42, tāṁ abravin nārāda ēśa vasānām vasātame iti, "Nārāda proclaimed her with the words "she is of cows the cowest."" So in AV. 8. 10. 9, tāṁ devamāṇasyā abruvann iyāṁ eva tād veda yād ubhāya upajīvema ... iti, ""gods and men proclaimed her with the words 'she alone knows,'" etc. The only case where the object is not a whole person to be exploited by a phrase is AV. 9. 4. 12, asāhīvāntāv abravin mitrō māmāi tāu kēvalā iti, "Mitra proclaimed his knees with the words 'these (are) wholly mine.'" Of course these are the same as in RV. 4. 38. 9, utāṁ 'nam āhuḥ samithē viyāntaḥ pārā dadvikrā asarā sahāsāraś, "they proclaim him (with the words) 'he has won.'"

In AV. 18. 4. 49, yād vāṁ abhibhā ātro 'cūs, "what the portents (?) declared you (are)," instead of "said about you" is at least probable. Cf. "spoken the Jew" (=described), *Ivanhoe*, ch. 39.

The same thing holds in regard to the Brahmanic acc. "about," as in SB. 10. 3. 5. 15, ya enam nirbruvantam brūyād aniuruktāṁ devatāṁ niravocat ... iti, "if one should proclaim him speaking distinctly with the words," etc.; 8. 1. 3. 5; ib. 6. 1. 16, tam āha (brūyāt).

The effect of a "Greek accusative" is produced by this "about" rendering after verbs of speaking. Thus tad āhus, "as to this, they say" (literally "they say this" or as adv, "so they say"). But in the Brāhmaṇās this becomes stereotyped and we have (as in the Upaniṣads) tad ēsa śloko bhavati, "as to this (so) there is a verse," SB. 10. 5. 4. 16, etc. So without any verb, tad ēsa slokas, Ch. 3. 11. 1, etc.; cf. yathāi 'vāi 'tad, "as to this," AB. 7. 25; even, Māít. Up. 6. 10, athendriyārthāṁ pañca svādūni bhavanti, "the five (organs of sense) arise as to the objects of sense (acc.) in experiencing sweetness," unless bhū here (as in the epic) governs the acc., "come to."

Contrasting sharply with the variety of the Rig Veda but, as shown above, continuing the later lines of the Atharva, the Brāhmaṇās present the uniform type (tāṁ ho 'vāca; tāṁ ho 'vāca, SB. 10. 5. 5. 1; 6. 1. 10, taṁ no brūhi, SB. 10. 6. 1. 3; Āit. Br. 7. 28; agnim abravit, SB. 9. 2. 3. 49), which has given Delbrück the basis of his too sweeping rule to the effect that the regular Vedic construction is acc. of the person addressed (dative only
with acc.; "tell someone something," etc. SF. 5. 141). This is Brahmanic. So in ŚB. 10. 3. 4. 3, ātha vai no bhavān vakṣyati, "you will tell us" (see it); 10. 4. 3. 7, tebhyo vai nas tvam eva tad brūhi yathā, "do thou declare this to us, such as we are, how," etc. Usually (vac or) brū is the word for "address," not ah, though the latter occurs, āha vāyum, "spoke to wind," ŚB. 10. 3. 5. 14. In ŚB. books 8 and 9, āha (āhus) are used only in the sense proclaimed ("spoke about"), but abravita (abrūvan) fourteen times as "address" (only once as "about"); uvāca only once as "addressed," 9. 5. 1. 64 (yet four times in the book 10); ācakṣa (tan me), 11. 6. 1. 2 occurs first in Br. (then used later, as in Ch. 2. 1. 1). Here prātiśru, "answer," takes either acc., 11. 4. 1. 3 (cf. Ch. 4. 5. 1), or dat., 1. 4. 1. 10. RV. has mantray; āmantray, "speak to," ŚB. 11. 8. 4. 1, takes acc. as in Up. (below). The Br. shows also a new use of adhi, "teach" (instead of "learn"), "declare," adhīhi bhos tam agnim, "teach that Agni, boss," 10. 3. 3. 5 (cf. Ch. 7. 1. 1). In pratijñā (AV. 19. 4. 4, with vāceam, "approve the word"), med. as "answer," there is also a new use, ŚB. 2. 5. 2. 20; Ch. 4. 1. 8 (later act. as "assert"). This field has been so thoroughly worked over and is so uniform (Liebich, BB. 2. 275, says that in AB. brū and its synonyms always have acc. of pers. as of thing) that there is little to add to what has already been said, except to point out the analogy between verbs of speaking and other verbs. Exactly as with a verb of speaking the direct personal object may take the place of the indirect, so with a verb of striking we have the personal acc. or the personal dative, and in both cases a personal genitive may sometimes (see below) take the place of the other two cases. Thus we have "shoot at" with dative or objective genitive, beginning with a combination of accusative and dative, "shoot a dart (acc.) at a person" (dat.), 1. 103. 3, or, what amounts to the same thing, at a person’s body, e.g. AV. 6. 90. 1, yān te rudrā īṣum āsyad āṅgabhya hīdayāya ca, "the dart which Rudra shot at thee (thy) limbs and heart"; AV. 4. 6. 4,

1 With the radical idea of adhīi "learn," "go over," cf. Ch. 7. 1. 8, adhīga as "study" (like later adhīgam) used for the first time. Compounds vyāhar, abhi-, and udāhar, "cite, say," occur thus first in Brāh. (see Up., below). Vijnā, know, teach, becomes in caus. "address."
yās ta āsyat . . niravocam ahām viṣām, “I have exorcised (nirvāc) the poison (from the dart of him) who shot at thee.” So one may curse a person (acc., normal use) or perhaps curse at (dat.) a person, yād dudrōhitāḥ śeśīṣc striyāi, “if thou hast harmed or cursed at a woman.” Yet as “curse” regularly takes the acc., the dative idea may here be suggested primarily by druh, “injure,” which takes dative (and later, acc., loc., or gen.)

The double accusative is now fully recognized, māṅ ’tad brūṭha, “you say this to me” (followed by what is said), ŚB. 2. 2. 20, as is the dative after a verb of speaking (“bid”), “bid (the horse to) come,” etavāi brūyāt, etc.

5. The Dative in the Upanishads.

The dative of place, though not yet so common as in the epic, is well established. In my former paper, I have already cited BA. 4. 3. 19, “the bird bears itself to its nest,” sallayāyāi ’va dhriyate, which is filled out with evāyaṃ puruṣa etasmā antāya dhāvati, “hastens to that state,” as īb. 16, ā dravati buddhāntāya. That the first case was felt as a place dative may be seen from the fact that the sentence is imitated in a later Up. with the acc., viz. Brahma, 1, yāti svam ālayam. To these may be added the similar “comes to” of Ch. 4. 1. 4 (sam-i with dat. = abhi-sam-i with acc.) and a case of the antithetical dative and ablative, BA. 4. 4. 6, tasmāl lokāt pūnar eti asmāi lokāya karmanās, “from that world (abl.) he goes back to this world (dat.) of action.” Cf. ŚB. 12. 5. 2. 15, “may this (son) here be born out of thee, unto heaven,” ayaṁ tvad adhi jāyatām asāu svargāya lokāya (on jan “get to” see my former paper). In BĀU. 6. 2. 13–14, yadā marīyate/athāi ’nam agnaye haranti means “when he dies then they bring him to the fire,” a passage which marks the (Up. śv. λεγ.) word diṣṭam as later in the par-

1 In the middle voice, “curse,” śap, takes regularly a dative of one to whom one is under a curse, literally, e.g., “I have cursed myself to him” just like “promised him.” In citing the curse-word it is used like a verb of speaking “if we swear with the word” (āti), etc. In the sense “beseech,” obscene, the acc. pers. with the middle is regular, though in the epic the dative may take its place (unless the te in epic šape te is acc., as is very likely).
allel of Ch. 5. 9. 2, tam pretam [diśṭam] ito ‘guaya eva haranti.' With compounds there is the usual number of cases, karmabhyaḥ pratidhiyate, “established unto deeds,” Āit. 2. 4; tābhya gām ānayat, “led a cow to them,” 1. 2. 2; but also tasmāi trṣṇāṁ nidadhū, “laid him down a straw,” Kena 19; santatyāī (nourishes self), “for continuity” (of worlds), Āit. 2. 3; asambhedāya, “to keep apart” (with genit.), Ch. 8. 4. 1; na tam iha darsanāya labhate, “gets to see him,” “him to see,” ib. 3. 1; darsanāya caksus, “the eye is to see,” ib. 12. 4; dat. poss. ib. 4. 3. 6, yasmāi vā etad annam; BA. 1. 2. 1, bhavati. As for dat. and acc., since “hasten to” does not mark the goal, we have dat. antāya (above) but antāṁ gacchati, (acc.) when the goal is reached, BAU. 4. 1. 5 (4. 4. 3); and locative when an entrance into a person is meant, gacchancy asmin “go into him,” opposed to abl. āgacchanti (asmāt) “come out of him,” Māit. 6. 7. Compare “go” with dat. pers. tasmā enad gamayāmas, “we make this go to him,” AV. 16. 6. 4 (“carry away to,” dat. pers., ib. 3. 7. 11). The dat. in Brahma 1, svāpṇāya gacchati is not “goes to sleep” but “goes toward (the state of deep) sleep,” as may be seen by the accompanying simile (of the creeping thing). In Sannyāsa 1, aranye (loc.) gatvā is equivalent to an acc., “going to the wood” (not “going about in the wood,”) as in 2, vanaṁ gacchati. The same locative occurs in Piṇḍa 2, dehe gate paśeṣcasu, though here it is rather ‘among.’ To “prepare for,” aparasmāi dhārayasva, “prepare-yourself for another (question),” BAU. 3. 8. 5, has one of the construction of yogya “fitted for,” which takes either the dat. (or loc. or gen.) in nominal form (or inf.) in epic Sk. Cf. dhar above, p. 370, note 3.

In BAU. 5. 12. 1, the dative is used after “do good” (to), in the collocation kiṁ svad evāṁ varṇīḍuse sādhuh kuryām, kim evāṁ asādhuh kuryām, i. e. “is there any good I could do one (dat.) who has this knowledge, or any evil I could do him

1 That diśṭam anyway means the place is improbable. The dative follows “yield,” tasmā viṣjihite, “makes way to him,” BA. 5. 10. 1; “able (to),” śaknoti grahaṇāya, “able to grasp,” ib. 4. 5. 8; and in 6. 1. 7 interchanges with the locative of the subject of dispute. ahaṁ āreyase (8. dat.) vivadamāṁs, as against Ch. 5. 1. 6, loc. Instead of a place as object in 6. 2. 4, ājagāma yatra Jāibāl’s (house) was.” With vas “live,” the personal loc. is “live with him,” the dat. is “lived to” (served), Ch. 4. 2. 5, asmā uvāṣa.
The dative is here like that in Kāuś. 2. 7. (5), yad ahorātrībhyaṁ pāpaṁ karoti, “what evil he does to day and night.” Compare the analogous construction, tasmāi . . arhām cakāra, “he did him honor,” Ch. 5. 3. 6; asmā arghyaṁ cakāra, BA. 6. 2. 4; trūṇy ātmane ‘kurtu, “three for himself he made,” BA. 1. 5. 1 and 3; namo vayaṁ brahmīṣṭhāya kurmas, BA. 3. 1. 2; yajamānasya’ tmavide ‘vadānanaṁ karoti, Māit. 6. 33; pitṛ-bhyāh śrāddhatarpaṇaṁ kṛtvā, Sannyāsa 1. The locative is not used (Gītā 18. 68, bhaktim mayi parām kṛtvā, the locative is after “faith”).

After kar the genitive instead of the dative may be thought to be possessive rather than objective: BA. 6. 1. 13, tasyo me baliṁ kuruta, “make oblation of (to) me as such (cf. just below, tasyo me kim annam); ib. 6. 4. 26, asya nāna karoti; Kātha. 1. 7, tasya sāntiṁ kurvanti. In áyatanam naḥ prajāniḥi, Áit. 1. 2. 1; abhayaṁ krūruḥ viśvato nas, Mahānār. 20. 2, and tato no abhayaṁ kṛdhī, ib. 4, svastī no maghavā karotu, ib. 11; etāu me bahudhā prajāḥ karīṣyatas, Praś. 1. 4, the dative idea seems to interchange with the (poss.) genit. But the last two examples are certainly datives and probably the nas cases, because this verb has been so long used in purely dative construction. Thus in RV. there is little doubt that nas (kar) is usually dative, where asmābhyaṁ, etc., interchanges. Cf. RV. kṛdhī vārivas with nas or asmābhyaṁ; kṛdhī urū nas or śārdhāya; bhāgāṁ nas or ratified yājamānāya kṛdhī; svastī no kṛdhī or svastīm asme karati; sām (kar) with nas or dat.; sugāṁ (kar) with nas or grūtaṁ; akar te or tubhyam brahma, etc. That is, the doubtful form is by analogy syntactically dative. In AV. 7. 113. 1, yātā bhūtādviṣaṁ ’so ‘māṁśai, “that you may be having-done-what-is-hated-to-him” (?), the dat. seems to be of the same sort.

Instead of dative or genitive, Rāmop. 30 = 4. 3 (p. 501, Ānandāś. text) has stutiṁ cakruś ca jagataḥ patim, “they praise-did (i.e. praised) the lord of the world,” a periphrasis like a periph. pf., or “name-did” (with two acc. RV. 10. 49. 2, “they name-did me Indra”), or namekuryāt pitṛn, Manu 3. 217. Namaskar itself takes dative or acc., tasmāi namaskṛtvā,

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1 On the form of question, cf. RV. 7. 55. 8, kim asmān duchunāyase; Tāitt. 2. 9. 1, kim ahasāś ādhu na ’karavam kim aham pāpaṁ akaravam; Kātha 1. 5, kim svid Yamasya kartavyam.
Māit, 6. 29 ff.; 7. 10; namaskṛtya bhagavantam, Vāsud. 1; the latter being later, māṁ namaskuru, Gitā 9. 34; in loc. only epic; in disjunct. form only with dative, a (late) RV. use, 10. 34. 8; 68. 12; 85. 17. Either verb or noun (= verb) might have produced the dative.

The accusative (= “do to”) is found only in Śiras 3, kiṁ nānang asmāṁ kṛṇavat arātis, but this is RV. 8. 48. 3; cf. kiṁ tvāṁ cakāra, “what does he to thee,” RV. 10. 86. 3; kiṁ mā karan, “what do to me,” RV. 5. 30. 9; 5. 2. 3; and so kiṁ mā nindanti, “what blame they me,” RV. 10. 48. 7. With “wrong” “sin,” etc. the (double) accusative interchanges with locative: yās . . tvām āgāṇi kṛṇavat, RV. 7. 88. 6; devān āgas, 1. 185. 8; mārtān ēnas . . yāḥ kārōti 7. 18. 18 (“do the gods a wrong,” etc., double acc.); but locative of person in 10. 79. 6, kiṁ devēṣu tyāja ēnas cakartha’gnej; and so loc. in 4. 54. 3, ácittī yāc cakṛmā dāfyē jāne (“what sin commit upon the gods”). Doubtful is RV. 10. 29. 4, kād u dyumnám indra tvāvato nṛn kāyā dhiyā karase kāṁ no āgan (cf. sumnām iyakṣantās tvāvato nṛn, 2. 20. 1). The kīm sentence also introduces a dat. (= serve), as in 3. 53. 14, kiṁ te kṛṇivantī, so 2. 29. 3. To “do for” (without obj. acc.), perhaps in 8. 46. 25, where vayāṁ hi te cakṛmā bhūri dāvāne may mean “we have done much for thee that thou mayst give,” or “done for thee that thou mayst give much,” or perhaps bhūri belongs with both clauses. This is the later kiṁ te karavāṇi or karomi, whereas in tava priyam kartum and priyam kiṁ cīn mayi kartum the case of the pronoun depends on the adjective “to do what is liked of me” (dear to me).

In construing manas kar, “make up your mind (to)” “set your mind (on)” with dat. or loc., the Up. is on a par with other Sk. literature; no examples are needed. As with tapas (above), so in Ch. 6. 16. 1, paraśum asmāi tapata, “heat him an axe.”

With bhū (as with dā) the dative yields to the genitive, bhavati ha’ṣya svam, “the property becomes his,” BĀ. 1. 3. 25 (possess. in nāma yad asya bhavati, ib. 1. 4. 1). The dative of price is represented, with an inversion, by a locative of that for which something is given (nimittasaptim): sahasram etasyaṁ vāci dādmas, “we give a thousand for (on account of) this speech,” BĀU. 2. 1. 1; Kāuṣ. 4. 1.
With verbs of hearing the construction is genitive (regularly) or ablative (Ch. 7. 1. 3) of the person (cf. Ch. 4. 9. 3, śrutāṁ by eva me bhagavadṛśebhyas, "I have heard from men like you"). But in Ch. 7. 5. 2, tasmā evo 'ta śūraṇante, there is a reversion to the old dative, "they desire to listen to him." In the same work, 7. 24. 1, anyac ērhōti, and 7. 13. 1, nāī 'va te kaṁ cana śṛuyas, "hears another (thing)," and "would not hear another (person)," the accusative of the object heard is used whether impersonal or personal (the Comm. supplies śabdām "any sound," in the last example).

6. Verbs of Speaking in the Upanishads.

The usage of the Upanishads embraces inherited types. So we find as late as Kāṇṭhaś, 2 (3), prajāpatim abruvan, followed by so 'bravīd brahmaśṭhebhyas, "they addressed Prajāp." (acc.), "he spoke to them" (dat.). Ordinary usage may be illustrated by BA. 2. 1. 1, sa ho 'vācā' jāṭasātram . . brahma te bravāni 'ti, that is, the usual preterite is uvāca, the usual construction an accusative of the person addressed, but a dative of person if there is also an accusative of the impersonal object, "addressed him (acc.) 'I will tell thee (dat.) brahma." (acc.). Neither second or third sg., nor second or third pl. of the pres. act. of brū are used; instead of which are found attha, āha, —, āhus; brūte occurs in Brahma 1, and bravāma, brūtam occurs only with pra-. For uvāca are used bravīt, avocat, avadat, but not often (āha not uncommon as preterite).¹ The middle of brū is kept as such in the old Up., "call oneself," Jābālo bravithās, "call thyself J.," Ch. 4. 4. 2; bravīta and avocathās, ib. 5. 3. 4; brahmāsti-lo bravīta, BA. 3. 1. 2. In Kāuś. 2. 3, artham brutīta, "mention the thing," should be brūyat (v. l.). The active voice is used in the same (med.) way in the epic, Mbh. 4. 19. 2, and perhaps this may be recognized in BA. 4. 1. 2, yathā mātrām brūyat, "as one might say he had a mother"; in Māit. 7. 8, ity evam bruvānas follows a description! As in English, "say" is equal to "mean"; so nā 'ham bravīmi, "I don't mean" (that), without object, Ch. 7. 24. 2 (followed by iti ho' vāca); also BA. 2. 4. 13, na moham bravīmi, "I don't mean bewilderment"; so bhān, e. g. na khu aham mahābhāām

¹ Deussen's "sagen könnte" for (Ch. 5. 11. 5) uvāca, especially in view of 1. 10. 6; 4. 1. 5, is improbable.
bhaṇāmi. “I don’t mean your honor,” Śak. 3 (cf. Lat. hunc
sis, “do you mean him”). The construction of verbs of saying
is shared by those of thinking in the predicate use, jānāmy
aham śevadhīm ity anityam, “what is called treasure I know
is transient,” Kaṭh. 2. 10; sadma (tam) manye, “I regard him
as a seat (of wisdom),” ib. 2. 13; 6. 11. But the subject-object
is acc., hataś cten manyate hatam (sc. ātmānam; BG. 2. 19,
enam), ib. 2. 19; as well as nom., svayaṁ dhīrāḥ paṇḍita (v. l.
ām) manyamāṇās, ib. 2. 5; Muṇḍ. 1. 2. 8; amuṁ lokaṁ jeṣ-
yanto manyante, Ch. 8. 8. 5.

Before taking up the regular words of speaking, a few equiva-
lents may be mentioned. Common as is udāhā in later Sk.
(āhar as “speak” and, with “answer,” “bring out a reply,”
is epic; in ūp. only as “bring [to],” or “take to,” Ch. 1. 2. 1,
udgitham), it is comparatively rare here, followed by the regular
dat. acc. as in Ch. 6. 4. 5, (no no ‘dya) āṣrutam udāhārasyaṇa,
“cite us (dat.) an-unheard of thing.” It occurs only here with
ind. obj. and in BA. 6. 2. 3, “recite” (pratikas) with imper-
sonal object (AB. 7. 12. 7, “cite a Brāhmaṇa”); otherwise only in
Māit. 6. 30 ff., antro’ duḥharmah, “here they cite” (vss. ff.
without it), as it evam hy āhā in 26 introduces the same stanza (31);
as “on dit” in Śūtra (AGS. 4. 6. 15, etc.). In the epic it even
takes double acc. (“say a word to”). Another compound of
the same root vyāharat (first in Brāh. as “speak”), in BA.
1. 4. 1. is “ejaculate” (anu, Māit. 6. 6). Once or twice in the
older works (as in Brāhmaṇa), Ch. 1. 3. 3, abhyāhār (with vāc;
Kauś. 1. 6; Āit. 1. 3. 3, 11); cf. Ch. 8. 12. 4, abhyāhārāya
vā; cf. also vyācyam vyākaroti, “articulates speech,” Āit.
3. 1; nāmarūpe (vyākar), Ch. 6. 3. 2; BA. 1. 4. 7, etc.

The acc. dat. is used (or acc. is to be supplied) with vyākhyā,
as in BA. 2. 4. 4, vyākhyāsyami te (sc. etal), and so in 4. 5. 5;
cf. also anuvyākhyāsyāmi (etat te bhūyas), Ch. 8. 9. 3 ff.;
upavyākhyānānu, Ch. 1. 1. 1; Māṇḍ. 1; ptc. as noun, BA.
2. 4. 10; Māit. 6. 32, (anu-) vyākhyānāmi, “comments”; pra-
tyākhyā in BA. 6. 2. 8, ko hi tvai’ vam bruvantam arhati
pratyākhyatam, “who can refuse you.”

With vi the meaning is dis- (dispute) in vivad,1 and ex-
(explain) in vivac (with dat.), BA. 3. 8. 5; 9. 26; Ch. 5. 1. 6;

1 On Ch. 5. 1. 6 and BA. 6. 1. 7. see above, p. 389. For the locative
cf. Kaṭha 1. 29, yasminn idam vicikitsanti, “concerning which men
are here in doubt.”
3. 5; so vibrū is explain, BA. 3. 4. 2 (absol. with vyācaks and vyapadi), with acc. dat. BA. 4. 5. 4. With uktwā, “saying,” and prabrūt “proclaims” (nāma), āmantrito is “addressed,” BA. 1. 4. 1 (2. 1. 15; perph. pf. as in Ch. 4. 4. 1 and Kāuṣ. 4. 19). “Blame” for paripravocan (tvā), Ch. 4. 10. 2, is doubtful (in the epic 12. 132. 6, vac alone has this meaning, kas taṁ vā vaktum arhati). As for vac = “teach,” cf. the use after adhibhi, “teach,” in Ch. 7. 1. 1, “teach! I will teach (tell) you farther,” adhiṁt, tatas ta ārdhvam vaksyāmi. “Repeat” (learn) is given by anu in anu-ah, “recite” (BA. 5. 14. 4; cf. 6. 3. 6), anu-mantray (Kāuṣ. 2. 15 “calls after him,” tam); BA. 6. 4. 5, with mantra; anuvac and anuvad, vedo .. ananuktas, “not learned,” BA. 1. 4. 15 (5. 2. 3, anuvad “repeat”); anu-brūte, ib. 16; yat kiṁcana nūktam, “whatever one has learned,” ib. 1. 5. 17; anucāna, “a learned man,” not common, BA. 2. 1; Kāuṣ. 4. 1 (3. 2, anuvad, “repeat”); Ch. 6. 1. 2; anucānatama, BA. 3. 1. 1; praśnam anubrūhi, “answer the question,” Māit. 4. 5 (Veda-anuvacana, BA. 4. 4. 22); anucāya .. anusāsti, Tūtt. 1. 11. 1. The causative of anuvac, as “invite,” with objective dative, anuvacayati somāya, etc., is not found here (as in Sūtras). The epic admits it with objective genit. and acc. “promise to a person a thing.” Unusual words: kirti is common but unique is the verb kṛtayet, Māit. 6. 29, dat. acc.; cf. upāyanakirti, “acknowledgment of,” BA. 6. 2. 7. Instead of “spoken” we find vāga uccarati, “a voice rises,” BA. 4. 3. 5; cf. uccāriyatamātras (ābhās), Māit. 7. 11. “Talk,” bhāṣas in Kāuṣ. 2. 4, with sam, api vātād vā sambhāsāmānaṁ tiṣṭhet, “let him stand to windward and converse” (later, epic, with acc.). On bhāṣa and lap (Māitri and Kṣūr. alone have gad) see below.

The most general word for speak is vad; often used without object, e. g. “let the pair speak first,” agre vadatām, Ch. 1. 8. 2; cf. pada, “speak,” BA. 3. 9. 10 ff. So avadan (AV. ālapan) is a dumb man, BA. 4. 1. 2; yathā kaṭā avadanto vācā, “like

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1 Otherwise ā is not used with words of speaking (āhve, “call to oneself”); there is no āvad or āvac as in Vedic texts (on ālap, see below).

2 “Some recite the Sāvitrī as an anuṣṭubh .. one should recite it as a gāyatrī.” S. anuṣṭubham anvāhus .. gāyatrīm eva sāvitrīm anuṣṭubhyat; ib. 6. 4. 14 ff. anuvruvita vedam.

3 Cf. Mbh. 3. 133. 12 and 9. 51. 50. yo’nucānaḥ sa no mahān, pendent to the proverb na hāyanās, as in 12. 324. 6.
the dumb not speaking with the voice,” BA. 6. 1. 8. For this reason the combination vadati vācā is regular, and when speech is personified she uses vad; compare vācam vadanti and yena vāg abhyudyate, Kena 1 and 4 (abhirad, “address,” ib. 17);1 vācā vadan, Kāuṣ. 2. 14 and 3. 2; yat kalyāṇaṁ vadati; BA. 1. 3. 2; and vadisyāmy evā ’ham iti vāk, “said speech, ‘I will speak’,” BA. 1. 5. 21. In Ch. 5. 3. 6 = BA. 6. 2. 5, vācām abhāṣathās, and vācām bhāṣitā, BA. 6. 4. 18; yāvad bhāṣate, “as long as he talks,” Kāuṣ. 2. 5; priyam bhāṣase, BA. 2. 4. 4, there remains an old word nōt elsewhere used (till Gauḍa 4. 99 and Gītā). Another rare but old word is lap, used in causative, Ch. 4. 2. 5, alāpayiṣyathās, “make speak”; according to Ś., alūp2.

As a general word of utterance, “pronounce,” however, vac is used as in Ch. 2. 22. 5, sarve svarā ghosavanto balavanto vaktavāya, “all vowels are to be pronounced voiced and strong.” “Called” is ucyate, Māitrī 2. 6. So “count” (not gaṇ), yāvanto nividy ucyante, BA. 3. 9. 1; ākhyāyante (gaṇāsas), BA. 1. 4. 12.

Perhaps the distinction is best given at this period by vad = speak, vac = say. Thus “said elsewhere,” and “said before” are anyatāpya uktam, prāguktam, Māitrī 2. 6; 3. 3; 6. 4 and 5; and 5. 2.

Spoken words are indicated by “iti” without verb, passim, or with vac added, ity uktvā, Ch. 2. 24. 10 ff.; tathe ’ti ha yajamāna uvāca, ib. 1. 11. 3; sometimes followed by a speech ending with another iti, as in Ch. 1. 11. 3, tathe ’ty atha iti, “yes (said he), but, etc.,” where the speech is resumed and then again marked as ended. So ato khalv āhus, BA. 4. 4. 5 (4. 3. 14) may register an objection, “but they say”; yet compare atho ’tāpy āhus, iti (and moreover), Ch. 2. 1. 3. ‘No’ said he, and ‘yes’ said he, are expressed by ne ’ti ho ’vāca and tathā or om ity uvāca (mā . . iti “No!”), BA. 6. 2. 1, etc. But a quotation is more often given with a set phrase, as in Māitrī 2. 2, ity evam by āha, “so he (one) says” (and so in ff. 4. 3; 4. 6; 6. 1. ff.); ity evāi ’tad āha, with ity abhravīt,3

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1 But abhīvac, abhyuktam, “declared,” is used only in a phrase, tad etad ṛcā, BA. 4. 4. 23; Kāuṣ. 1. 6, slokena; Mup. 3. 2. 10; Praś. 1. 7.
2 Ābrahāvī is gnomic here: astī brahme’ti brahmavidyāvid abhravīd brahmādvāram idam ity evāi ’tad āha yas tapasā’ pahapatpāpamā, “Brahma is, so says he that possesses brahma-knowledge; this is the brahma-door, so also he says, who is freed from evil through austerity” (Comm. etad as ‘this’; but see below).
Mātrī 4. 4; sa ha smā'ha . . iti, BA. 5. 12. 1; and the formula iti ha smā'ha followed by the name of the person quoted, Śaṅdilyas, Ch. 3. 14. 4; Kāṣṭhakas, Kāuṣ., 2. 1, 6; Pāṇga, 2-2; Yājñavalkyas, BA. 1. 4. 3 (5. 1. 11). Another phrase is introduced by tad dha, as in tad dha smā'ha Prātrdaḥ pitaram . . iti, BA. 5. 12. 1; tad (but Ś. tad as brahma here) dho 'cus . . iti, BA. 6. 1. 7; with uvāca, ity ho 'vāca, Ch. 1. 8. 3 ff., 5. 12. 1; BA. 5. 14. 8; Mātrī, 2. 2; Kena 26; sa ho 'vāca . . iti, Kāuṣ. 1. 1; 4. 3; Ch. 1. 11. 2; 4. 3. 5; 4. 4. 4; 4. 10. 3 and 5; BA. 3. 1. 2; Kaṭh. 1. 4; te ho 'cus, ib. 5; uvāca . . iti Ch. 4. 4. 5.

The plural regularly indicates "they say" (on dit): tad āhus . . iti, BA. 3. 9. 9 (ity ācakṣate, ib.); eki-bhavati na vadati 'ty āhus, BA. 4. 4. 2; tad (utā 'py) āhus . . iti (meaning by another iti), Ch. 2. 1. 2; 7. 11. 1; (ity) eva tad āhus, Ch. 2. 1. 2 and 3; tasmād āhus . . iti, ib. 3. 17. 5; with vadanti . . iti. Ch. 2. 24. 1, the subject is definite, brahmavādinas; but in Ch. 6. 4. 5, tad vidvānā āhus; so Mātrī 6. 7; "some say," ity eka āhus, BA. 5. 12. 1; ity u hāi 'ka āhus, BA. 1. 3. 27 (5. 12. 1); 1. 5. 15; tad dhāi 'ka āhus, Kāuṣ. 3. 2; Ch. 6. 2. 1; atrāi 'kā āhus . . iti, Mātrī 6. 30. The optative having this indefinite subject is supplied by brū: yas . . brūyāt . . iti, Ch. 1. 8. 6; brūyāt . . iti, "let him say," Ch. 3. 16. 2 ff.

The construction of these verbs may be arranged as above, thus: they take (a) an impersonal acc.; (b) a personal acc.; (a)+ (b); (c) a predicate acc.; (d) an impersonal acc. and personal dative; (e) a personal dative. Finally the acc. may be interpreted as the object not of address but of discussion (f) "about" which or whom something is said.

(a) impers. acc. : kim bravīmi, Ch. 6. 7. 2; tad bravītva Ch. 6. 1. 4; yam eva vācām abhāṣātuh (tām eva me brūhi, ref. above); satyaṁ vādathi, Ch. 7. 17. 1; (artham) vadet, "tell the subject," Ch. 5. 11. 6; yad avocam . . iti . . ity eva tad avocam, "in saying this I said (meant) that," Ch. 3. 15. 5; iti sa yadāhā . . ity evāi 'tad āha, "when he says . . he means," BA. 1. 3. 28.

(b) pers. acc.: putram āha . . iti, BA. 1. 5. 17; taṁ jāyo 'vāca . . iti, Ch. 1. 10. 7; 4. 10. 2 ff.; tam āha, Kāuṣ. 1. 6;

1 This is found in Ch. 1. 3. 6, etc.; chiefly old Up.; tam . . indra ity ācakṣate (v. l. indram ity), BA. 4. 2. 2; Āit. 1. 3. 14; yad bhūtaça ca . . ity ācakṣate, BA. 3. 8. 3; Tātt. 1. 8. 1, etc.; Kāuṣ. 2. 5 (4) and 15 (10); pratācakṣa is "refuse," Tātt. 3. 10. 1; Kāuṣ. 2. 1.
Aspects of the Vedic Dative.

dikṣitam āhuḥ satyaṁ vade 'ti, BA. 3. 9. 23; paśyantam āhus . . iti, BA. 4. 1. 4; vācam (pers.) ūcuss, BA. 1. 3. 2; anyad vadet, "speak to that other," BA. 4. 3. 31; iti ha Kausitakiḥ putram uvāca, Ch. 1. 5. 2, 4; 1. 8. 3, 6; tam uvāca, sa ha tam uvāca . . iti, Ch. 1. 10. 2, 8 ff.; 4. 1. 5; 4. 1. 7; 4. 4. 4, 5; 5. 3. 1; 5. 3. 4; 6. 7. 3; iti mā bhagavān avocat, Ch. 1. 11. 4; usually in standing phrases, sā hāi 'nam uvāca . . iti, Ch. 4. 4. 2; taṁ ha pito 'vāca . . iti, ib. 6. 1. 1; taṁ ho 'vāca, Kāuś. 1. 3 ff.; Kena 25; tān ho 'vāca . . iti, Ch. 1. 12. 3; 5. 1. 7; 11. 4 and 7; Mātrī 2. 3; 4. 1, etc.; BA. 3. 1. 2; atha ho 'vāca Satayajñam . . iti, Ch. 5. 13. 1 ff.; tāu ha Prajāpatir uvāca kim . . iti, Ch. 8. 7. 3 ff.; atha hāi nam . . uvāca . . iti . . iti ho 'vāca, "he addressed him and said," Ch. 1. 11. 1. With iti may go tad etc. as in tad dha smā 'ha . . pitaram . . iti, BA. 5. 12. 1, where the pronoun may be adverbial or bring the clause under (a) + (b), below.

The clause above, tāu ha Prajāpatir uvāca kim, etc., Ch. 8. 7. 3, implies "ask," and this is not a rare connotation, cf. āhus in Ch. 8. 6. 4. The accusative also occurs in a good many cases after a combination of verbs of speaking and transitive (motion) verbs as in Kāuś. 4. 1, Ajātaśatrum etyo 'vāca . . iti; Ch. 1. 12. 2, tam . . upasametyo 'cus . . iti; and so ib. 3; 4. 4. 3; 5. 1. 7, pitaram etyo 'cus; ib. 12; cf. taṁ ho 'vāca 'nanuśiya vāva kila mā bhagavān abravid anu tvā 'śisam iti, "he addressed him (saying) 'without indeed instructing me spake (addressed?) my lord (saying) I have instructed thee?,'" Ch. 5. 3. 4 (see note).¹

I have been at pains to give the many examples of this construction with other verbs in order to show its comparative rarity with brā. This marks the later epic style sharply from that of the Upaniṣads and is one of the countless minor points

¹ This verb anuśās, "teach," Ch. 4. 2. 2, takes dat. and acc. in anu ma etāṁ devatāṁ śādhi : obj. acc. in Kena 8 (tad); pers. acc. BA. 1. 5. 17, etc.; Tāttt. 1. 11. 1; Ch. 4. 2. 4; 4. 9. 2, etc. In Mātrī 4. 1. anuśādi tvam (asmākam ! so Comm.) the words gatir anyā na vidyate follow, and it is rather harsh to connect asmākam with this clause; but see below. As there is always elsewhere an obj. pers. or impers. mā (above) would seem to be governed by anuśāsyā. There is no case of double acc. with this verb (as in epic). The meaning teach may also be given by śādhi-i, as in Tāttt. 3. 3. 1. by vijñāpayya, with two acc. (epic gen. as 'say' to), Ch. 6. 5. 4 (pers. acc. alone in phrase of Kāuś. 1. 1. etc.); Kāuś. 3. 1. etc.
always emerging to correct unhistorical bias in regard to the age of the epic.

With the optative, in Ch. 2. 22. 3, sa tvā prativaksyati 'ty enam brūyāt; nāi 'vāi 'nam brūyus pitṛhā 'sti 'ti, ib. 7. 15. 3 (answers to evāi 'nam ālus, ib. 2, "say to him"); taṁ ced brūyus . . . iti ("if they should say to him . . . " followed by sa brūyēt . . . iti); ib. 7. 15. 4; 8. 1. 1 ff.

As a preterite, enam abruvan . . . iti, Āit. 1. 2. 1; tā abrāvīt, Āit. 1. 2. 3 (5, abrūtām); athāi 'nam abrūma . . . iti, BA. 3. 3. 1; so 'brāvīt Patañcalam kāpyaṁ yājñikāṅś ca . . . iti, BA. 3. 7. 1 (three times); iti rājānam abrāvīt, Mātrī 1. 2; prajāpatim abruvan (taṁ ho 'vāca), ib. 2. 1 and 3; tam abrāvīt, Kātha 1. 16 (no iti); and combined with a verb of instructing, Ch. 5. 3. 4 (above).

These few cases should be compared with the multitude of pers. acc. after ah, vac, of the Upaniṣads and with the regular māṃ, tam, etc. abrāvīt of the epic, where it has become a formula. It is the more surprising since the preterite of brū without pers. acc. is common enough in Up.

Unique is vad with person. acc. In Ch. 5. 3. 7, yathā mā tvam avadas, "since you have addressed me" (the construction belongs to a later period). It is not in the BA. 6. 2. 8 parallel.

In BA. 5. 14. 8, etad dha vai tad Janako Vāideho Buḍilam Āśvarāśvīm uvāca (yan nu ho tadgāyatāvid abṛthā ātha kathaṁ hasti bhūto vahasi 'ti), there is a combination of the impersonal and personal accusative which, however, may be no more than a combination of the impers. as adv. with the person. acc.: "J. spake thus to V.," or "this following said J. to V."
The Comm. takes tat as tatra, "in this regard." Compare the usual phrase tad dhāi 'tad in (d) below. This combination of (a) and (b) is common enough later, but rare in the Upaniṣads. In so late a thing as Piṇḍa 1. 1, brahmaṇam idam abruvan there is a parallel to yan māṁ vadasi, Gitā 10. 14; but earlier Up.  

1 PW. gives no examples earlier than the epic for vad, "address," with pers. acc.; but see below for a doubtful case in Ch. Of course abhivad in this sense is common BA., Ch., Kena, etc.; also as "speak about," abhyūde, Ch. 4. 14. 2; samudire, "spoke among themselves," ib. 4. 10. 4 (see below); vivad, "dispute," locative, Ch. 5. 1. 6, etc.; ati, ib. 7. 16. 1 (Mātrī 4. 5, ativādy asi); anu', Kāuṣ. 3. 2; BA. 5. 2. 8; pratī', Kātha 1. 15 (above).
scarcely recognize the construction. Just as above we have vad uniquely with pers., so the earliest case here is with vad, yathā mā tvam tadāi 'tān avadas, Ch. 5. 3. 5. But to understand this clause it must be observed that with etān the word praśnān "questions" is to be supplied, and the construction may be that of a verb of asking, "as thou hast (said) asked me these (questions)," as just before this stands pañca mā praśnān aprākṣit, "he asked me five questions," with the (regular) double acc. The passage seems to be incomplete (so Deussen); in form it is like that of 5. 3. 7 (above, yathā mā tvam avado yathā). Another passage in Chānd. also presents a difficulty like that of the combination-construction spoken of above: 5. 11. 7, tān ho 'vāca prātar vaḥ prativaktā 'smi 'ti .. tān hā 'nupālayā 'vāi 'tad uvāca, "he addressed them (saying) 'I will reply to you in the morning .. thus [this] even without initiating them he said." Here the personal acc. is induced primarily by the gerund and etad is adverb rather than object (i. e. "without initiating them he spoke as follows"). Compare below (d) the note on prati-compounds.

It is a mark of the lateness of Mātrī that the personal object in this class of verbs is found in the genitive, tad asmākam brūhi (cf. anuśādhi asmākam, above, but the latter is doubtful), 2. 3, preceded by vidyā .. asmākam bhagavatā Mātrīnā 'khyyāta 'haṁ te kathayeśyāmi. So in 4. 5, śreyāḥ katamo yaḥ so 'snākam brūhi, "tell us which is the better part (not with Max Müller "which is best for us"). Also in 7. 10, etesām uktam, "declared to." In 1. 2. (sc. ātmatattvam), no (=asmabhīyam acc. to Rāmat.) brūhi, may be genitive (the genit. in BA. 6. 2. 6, mānuśānām brūhi, is partitive). In Śvet. 6. 23 (also a late Up.) tasyāi 'te kathitā hy arthaḥ prakāsante mahātmanas, the genitive may depend on kath (as above in Mātrī), especially since prakās (a common verb) takes no such (Up.) objective case. Later Sk., though retaining the dative as well, uses this genit. construction; doubtful are me, te, Gītā 10. 19, hanta te

1 Cf. also the late vocabulary: sūcay, "describe," 3. 1; uṣantī=opine, 2. 7; bhūtātmāna, tanmātra, mahābhūta, 3. 2; cakravartī, 1. 4; tatētha, 6. 10. 16; mātṛka, 7. 11. These words are all late (cf. my Great Epic, p. 88 ff.); cf. also gad, which, as nīgad, occurs in Sūtras (in Mbh. 8. 88. 29 it takes double acc.), and once in Kṣur. Up. 10, otherwise only in Mātrī 1. 2, gāthāhām jagāda. Cf. also nāṭa, raṅga, etc. in Mātrī 7. 8.
kathayisyami, etc. In Kena 32, uktā ta upaniṣad...ta upaniṣadam abhūma, the te is probably dative (as below).

The predicate acc. (c) is not often found but is represented (both adj. and noun) sufficiently in the older Up., no bhavān purānuṇiṣṭhān avocat, "you said I was instructed," BA. 6. 2. 3 (so ib. 1. 5. 17, putram...lokyam āhūs); the periphrasis with iti, āhūr darsapūṇamāsāv iti, "they assert the new- and full-moon sacrifices" (to be intended), ib. 1. 5. 2. Cf. manoyuktam bhakte'ty āhūs, Kaṭha 3. 4 (3. 1, vadanti with pred. acc.). In Ch. mahāntam asya mahimānam āhūs, "great they say is the greatness of him," 4. 3. 7; cf. yan na suvijñeyam āṭha, Kaṭha 1. 22; indriyāṇi hayān āhūs, ib. 3. 4; 6. 10; yenā 'hur mano matam, "whereby they say thought is thought," Kena 5; tam āhūr agryam puruṣam mahāntam, Śvet. 3. 19. Compare also BA. 4. 4. 9, tasmin...nilam āhūs, "on it they say is dark-blue."

As predicate with vac, "teach," prāṇāṁ ca hā 'smāi tad ākāśāṁ co 'cūs, "they taught him (declared to him) that (Brahma) as breath and space," Ch. 4. 10. 5 (after asmāi pravṛtvāṇa, "let us teach him").

With vad, Tāttt. 1. 1. 1, tvām eva brahma vadisyāmi, "I will declare thee as Brahma," only here and ff. (1. 12. 1), till the later Up.

After a verb of perception it is noticeable that the nom. in a simile may stand in agreement with the obj. accus.: tā aśme 'va...sthaṇur iva tiṣṭhamānā aparśyat, "he saw them (acc.) standing (acc.) like a stone (nom.), like a post (nom.)." Mātrī 2. 6; cf. with kar, ibid., sa vāyur ivā 'tmānaṁ kṛtvā, "making himself (acc.) like wind (nom.)."

The impersonal acc. and personal dative (d). The construction is too common to require a heap of instances; it will suffice to show how contiguous, almost inseparable in Sk. are the shades of meaning in "speak," "proclaim," "teach," as rendered in English; to illustrate the usual phraseology; and to interpret doubtful by means of certain examples. The points can be taken together.

tam (udgītham)....Udrasāṇḍilyāyo 'ktvā 'vāca...iti, "on declaring (teaching) this to U. he said...," Ch. 1. 9. 3; tad dhāi 'tad....Krṣṇāyo 'ktvā 'vāca...iti, Ch. 3. 17. 6 (here the

1 Epic construction with acc. has dat. e.g. kathayāmāsa Śatrughnāya kathās, R. 7. 71. 5.
pronoun refers to the view just explained); tad dhāi 'tad 
Brahmā Prajāpataya uvāca . . . putrāya pitā . . . provāca . . . tat 
putrāya . . . prabrūyāt, Ch. 3. 11. 4–5; tad dhāi 'tat Satyakāmo 
Jābālo Gosrūtaye . . . ukto 'vāca yady apy enac chuskāya 
sthānave brūyāt . . . iti, Ch. 5. 2. 3. Here the same construc-
tion is used with the verb of speaking and that of proclaiming 
or teaching, viz. the dative of the person, and this is the case 
in brahma me vakṣyati, BA. 2. 1. 15, as īb. 2. 5. 16, idān vāi 
tan madhu . . . Asvibhyāṃ uvāca. So tat tubhyam avocan, BA. 
6. 2. 4; tāṁ vidyāṁ tubhyāṁ vakṣyāmi, ib. 8 (cf. ib. 6. 3. 7). 
Hence in te 'haṁ tad vakṣyāmi, BA. 4. 2. 1; tad eva me brūhi, 
ib. 2. 4. 3; tāu (prāśāṇu) me brūhi, ib. 3. 8. 2 ("tell i. e.: 
answer me these questions"); but in 1, "I will ask him two 
questions, double acc. with prakṣyāmi, followed by tāu cen me 
vakṣyati); yat te kaścid abravit, ib. 4. 1. 2; brahmaṇaś ca te 
pādam bravāṇī 'ti bravītu me bhagavān iti tasmāi ho 'vāca . . 
agnis ūte pādaṁ vakte 'ti, etc., Ch. 4. 5. 2–6. 1 ff.; bhagavān's 
tv eva me kāme brūyāt, Ch. 4. 9. 2; tan me bhagavān bravītu, 
Ch. 7. 1. 5 ff.; tam eva no brūhi, Ch. 5. 11. 6; ukta ta upaniśad, 
Kena 32; the same dative is to be assumed as follows prabrū, 
e. g., prabrūhy asmā iti tasmāi hā 'procyāi 'va, Ch. 4. 10. 2. 
Cf. brahma te bravāṇī, Kāuṣ. 4. 1; tat te bravāṇī, Katha 2. 15 
(tām uvāca tasmāi, Katha 1. 15, tam uvāca 'higire, Mund. 1. 1. 2). 
So also with a verb of explaining, tam me vyācaksya, BA. 3. 4. 
1; (etad) vyākhyaśyāmi te, vyācaksānasya tu me nididhyāsava, 
BA. 2. 4. 4 = 4. 5. 5; ye nas tad vyācaksaksire, Kena 3 (vica-
caksire, Íś. 10, 13); tāṁ cen me na vivakṣyasi, BA. 3. 9. 26. 
The construction is just that of giving something to one; cf. 
the parallel in Maitri 6. 29, etad guhyatamam . . nāśautāya 
kirtayet . . sarvagunāsampannāya dadayāt. 
So also pratipad "declare," which occurs with vācam as early 
as RV., takes acc. and dat.; prakṣyanti mām . . tebhya na sar-
vam iva pratipatsye, "they will question me and I shall very 
likely not declare to (answer) them everything." Ch. 5. 11. 3 
(acc. without dat. ib. 6. 7. 4). 1

1 In BA. 1. 4. 8, pratipe de is "declared" (no pers. obj.), but ib. 3. 8. 1, 
as in Ch. 4. 9. 2, it is "replied" (to a question). Usually in speech-words 
prati takes an acc. pers., as in Ch. aprācham mātaramā sā mā pratyā- 
bravit, "I asked mother, she answered me" (as follows), Ch. 4. 4. 4; tam 
u ha paraḥ pratyuvāca, "and the other answered him," Ch. 4. 1. 3 and
(e) personal dative without non-personal accusative. Here it is not always clear whether the word means "declare (this to)" or simply "speak (to)." In many cases the iti following or the object to be supplied suggests that the former is the proper meaning, as also when the passive form implies "addressed" as "instructed" (te... tathoktasya mayā, "of thee thus instructed by me," Ch. 1. 11. 5). Thus in Ch. 4. 5. 2; 6. 3 ff., te pādam bravānī 'ti, bravītu me bhagavān iti, tasmāi ho 'vāca... iti (with a paragraph of instruction before iti), it is evident that bravītu = pra and uvāca is "declared (it) to him." Similar is the tasmāi ho 'vāca in 4. 2. 5, although no iti follows (agnī te pādaṁ vaktā, 4. 6. 1, etc., shows the object). Compare ib. 4. 10. 4, atha hā 'gnayāḥ samudire... hantā 'smāi pravāvame 'ti, tasmāi ho 'cus... iti; 4. 14. 1-3, te ho 'cus... 'acāryas tu te gatiṁ vakte 'ti... kim... te 'vocan... aham tu tad vaksyāmi... bravītu me... tasmāi ho 'vāca, although no iti follows the final word, and uvāca may here be rendered "he spoke to him" or "he declared it to him." But it is safe to assume that the dative regularly implies an accompanying accusative, as in kathāṁ te nā 'vaksyam (cf. tasmāi hā 'pracya, 4. 10. 2, "not teaching him"), "why shouldn't I have told (taught) you," 5. 3. 5, save in cases where an iti precedes. But even with a precedent iti it is probable that an acc. is really to be supplied. Thus in BA. 3. 7. 1, after a description of the string and "inward director," as described by the Gandharva, Gautama says iti tebhayo 'bravit tad aham veda, which may be "thus he spoke to them (and so I know)" or "thus he described (it) to them (and I know it)." The latter, however (cf. abravit with acc. just before), is preferable. Müller translates, "Thus did he say to them, and I know it"; Deussen, "da erklärte er es jenen, und so weiss ich es." In BA. 4. 1. 2 (preceeded in 1 by tām ho 'vaca), abravīn me...

2. 3.(ib. 5. 11. 7, pratīvaktā 'smi, without objective, and so pratiśūtrāva, ib. 4. 5. 1 and elsewhere). The apparent double acc. in Ch. 7. 15. 2 with pratyah is due to one being used adverbially, pitaraṁ kihcicd bhrām iva pratīyāha, "he answered his father something rude" (= somewhat rudely). In AV. this combination has only acc. impers. obj.; in Kāṣṇ. 1. 2, tāṁ yaḥ pratīyāha, tam pratibrūyāt (prati with ācakṣ and with ākhyā, BA. 6. 2. 8; Kāṣṇ. 2. 1; Tāitt. 3. 10. 1, is "speak again"="refuse," ko hi tv evam bruvantam arhati pratīyākhyātum, etc.). In Kātha 1. 1. 15 pratīvadhāt (tat) in "repeated" (a late meaning). "Address" (acc.) and "reply" (absol.), are ah and pratyah, BA. 1. 5. 17.
vāg vāi brahmaṃ 'ti, "he said to me . . . 'speech is Brahma'," the quotation corresponds to a preceding yat te kāścid abravīt, "what any one did say to you," and in the following, na me 'bravīt has an object accusative understood ("he did not tell me the resting-place"). In BA. 5. 2. 1 ff. bravita nas . . tebbho āhita'kad aṅkāram uvāca da iti . . dāmyate 'ti na ātthe 'ti (the next begins enam ācīras, "they addressed him"), there can be no doubt (pace PW.) that nas is dative, as in BA. 5. 12. 1, tasmā u hāi 'tad uvāca vi 'ti, etc.; cf. tām (vidyām) tv aham tubhyam vākyāmi (cited above).

But in Gītā 12. 8, nivāsīyasii mavy eva atā ārdhvaṁ, na saṁsāyā, "after this" is unquestionably the meaning of atā ārdhvaṁ. So also in BA. 4. 3. 14 ff. atā ārdhvaṁ vimoksāya brāhi and in Ch. 7. 1. 1, tatas ta ārdhvaṁ vāksyāmi, the only places where this phrase appears with verbs of speaking, it is better to take the phrase adverbially than (as Deussen does) equivalent to a noun, "speak farther than this for salvation," "I will speak to you farther than this." It would be to draw too fine a line to say that the dative cannot still be used alone; although the tendency is to restrict the dative after a verb of speaking to instances where the direct object is expressed or understood.

An apparent difference between sg. and pl. is observable in Praśna. Thus in 1. 2, tān ha sa ṛṣir uvāca . . sarvaṁ ha vo vāksyāma iti, "the seer addressed them with the words I will tell you (it) all," but ib. 4, tasmāi sa ho 'vāca, and so in 2. 2; 3. 2 (also te 'ham bravīmi); 4. 2; 5. 2 (6. 1, tam abrūvam and te na'vāksyam); 6. 2; but in 6. 6 again, tān ho 'vāca. In both uvāca means "said to," followed by what is said; but when the dative is used an explanation follows, so that it is equivalent to "I will teach you as follows," "he taught them as follows"; whereas no explanation follows in the case of tān uvāca, one example of this introducing and the other concluding the whole discussion, "he addressed them" (but without instruction), as is the case with tam abrūvam, "I addressed him."

So in Kātha, vae and brū with personal acc. are "speak to," 1. 4; 1. 16, with acc. of thing, expressed or understood, "tell" (= prabrū), e. g. brūhi na tas tat, "explain it to me," 1. (13, 14) 15, 29; cf. 2. 15, tat te (padam) saṁgrahena bravīmi (ib. 5. 6) with Gītā 8. 11, tat te padam saṁgrahena pravakṣye. In 1. 15, the
The accusative “about” whom or which anything is said. This is a recognized type, but it is not common in Up. and certainly a good many (if not all) cases even here are really acc. after a verb of declaring or addressing. For example, in BA. 3. 9. 10, veda vā ahaṁ tam puruṣam...paraṁṣaṁ yam ātha, “I know the person whom thou declarest (as) the final source;” although “of whom (i.e. about whom) thou speakest” (Müller) is correct enough as an English version. Again, in BA. 6. 4. 28, tāṁ vā etam āhur atipitā bataḥ śrīs, Müller and Deussen render “they say of such a son;” but the second person shows that the literal meaning is “they address him with the words ‘thou has become superior to thy father!’” (so Böhtlingk). Compare BA. 3. 9. 22, pratirūpaṁ jātam āhur hṛdayaṁ āvṛttesaḥ iti, “they say to a son who is the image of his father’s heart” (better than with Böhtlingk “they say of a son”). Such also is the meaning given by Böhtlingk and Müller (not by Deussen) to the acc. in BA. 1. 4. 8, sa yo ‘nyam ātmanah priyam bruvaṁam brūyat priyam āsrito ti śvaro ha tathā ‘va śyāt, “he may be sure of it who says ‘he will lose what is dear’ to one who declares another than the self (to be) dear.” It is at least very doubtful whether anyone of these examples is to be rendered by “about.” In the passive construction, as in Ch. 4. 1. 4, sa mayā ‘tad uktas (not “spoken about”) but “herewith is he declared by me” is the literal meaning. So in the constant use of āhūs, as in ity evai ‘nam āhūs, “so they declare him,” Ch. 7. 5. 2; kam enam ātha, ib. 4. 1. 3, 5; adadānam...āhū āsuro bate ‘ti, ib. 8. 8, 5; satyaṁ vadam tamar āhū ādharmaṁ vadati ‘ti, “they declare that one who speaks true speaks right,” BA. 1. 4. 14 (compare instances of predicate with iti, above). Similar is the usage with ācakṣa, not only in tāṁ Skanda ity ācakṣate, “him they call Skanda,” Ch. 7. 26. 2; tāṁ yajña ity ācakṣate, “what they call sacrifice,” Ch. 8. 5. 1; sa brahma tyad ity ācakṣate, “breath (sa, sc. prāṇaḥ) is brahma that you, they say,” BA. 3. 9. 9; but also in tasmād enam svapito ‘ty ācakṣate, “they declare him asleep,” Ch. 6. 8. 1 (not with PW., deshalb sagt

1 In Ait. 1. 3. 13, kim ibh ‘nayam vāvadiṣat, the meaning seems to be “what would one say (to be) other” (this form, ‘vāvadiṣat or vāvadiṣat (?) is found in the Senāra text as well as in Ānandās.).
man von ihm), predicate with iti as if double acc. All these go back to and rest in the utterance-idea solely, “one proclaims it,” with or without predicate. Compare ne ’yāyate svapiti ’ty ācakṣate, “(when a man) does not move they declare he sleeps,” Praśna 4. 2; goaśvam iha mahime ’ty ācakṣate, “they regard cattle as greatness,” Ch. 7. 24. 2; vatsām jātam āhur atṛṇāda iti, BA. 1. 5. 2; puruṣam pretam āhur vyasraṇisita ’syā ’ṅgānī ’ti, “they describe the dead with the words ‘his limbs have relaxed’,” BA. 3. 7. 2. So saṃvad with acc. and following quotation, Āit. Br. 3. 2, is “together describing the child they say ‘it wants to hear.’ ” The expression “about” is rendered clearly by the locative, not only with vivad (med.), above, but with this saṃvad, as in BA. 2. 1. 2 and the corresponding passage in Kāuṣ. 4. 1, mā māi ’tasmin saṅvadidisthās (v. l. saṃvāda-vaidysthās, “do not address me (v. l. make me converse) about him.” Cf. agnihotre samudāte (v. l. īdatuḥ), BA. 4. 3. 1. An emendation in this last passage makes sam enena vadiṣya iti out of sa mene na vadiṣya iti, a doubtful form for this period. 1

In the Upanishad period, as in that of the Saṁhitās, I have gone very minutely into the construction of words of speaking, because they have never been exhaustively worked over and the material is syntactically important. To sum up: The earliest Vedic use admits a dative of the person after a verb of speaking, whether an accusative (of what is said) accompanies the dative or not. At the end of the Rig Veda and in the Atharva Veda (where the later Brahmanic style is beginning to get the upper hand), this construction yields to the use of a personal accusative after some of the verbs of speaking, just as the dative with “praise” or “sing” yields to the accusative. In the Upanishads, the usage is Brahmanic, that is, the accusative has become regular, but the dative is also found occasionally, and as with other verbs (and in patois) the objective genitive begins to be substituted (compare sparh, “desire,” first with dative, later with genitive of thing or person, and also with acc. of pers., and as “envy,” in its later sense, with any of the three cases).

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1 The Comm. as “he thought I will not say anything to,” na vadiṣye kith cid api rājīte. For reasons against the sam enena v. l., cf. Deussen, Sechzig Up., p. 463.
In concluding (for the present) this investigation of the dative case, I would call attention again to the point so often ignored by classical scholars, to whom the dative still remains a "personal case," that, namely, the great mass of dative infinitives must be duly weighed in the balance of meaning before one can pronounce the case especially a case of personal regard. The dative is quite as much an infinitive case as it is a personal case; is, in fact, the chief infinitive case. Then again, as to its being a place-case and as to the identity (from vagueness) of ablative and dative in Sanskrit plurals, we have living specimens as parallels. For example, as friend Grierson reminds me, there is the Shan ending ṭi, "to" and "from," the word itself meaning "place," and being used with person or place indifferently to indicate "to" or "from" according to the context (see Ling. Surv., vol. 2, p. 92).
PROCEEDINGS

OF THE

AMERICAN ORIENTAL SOCIETY,

AT ITS

MEETING IN PHILADELPHIA, PA.

1907.

The annual meeting of the Society was held in Philadelphia, Pa., on Thursday and Friday of Easter week, April 4th and 5th, in the rooms of the American Philosophical Society, 104 South 5th street.

The following members were present at one or more of the sessions:


Total, 58

The first session began on Thursday morning at quarter past eleven, with Professor Toy in the chair.

In the absence of Professor Moore, the chair appointed Professor Hopkins to act as Recording Secretary.

The reading of the minutes of the last meeting, held in New Haven, Conn., April 17th and 18th, 1906, was dispensed with, vol. xxviii.
having already been printed in the Twenty-seventh volume of
the Society's Journal.

On motion of Professor Lanman it was voted to omit in
future from the manuscript record of the minutes such matter
as is to appear in printed form in the Society's Journal.

The Committee of Arrangements, through Dr. Talcott
Williams, welcomed the Society to Philadelphia, and announced
that the University Club extended its privileges to the mem-
bers of the Society during their stay in Philadelphia; that a
luncheon would be given to the Society by the Oriental Club on
Thursday at one o'clock; that the Historical Society invited the
Society to a reception on Thursday evening; and that arrange-
ments had been made for a dinner on Friday evening at seven
clock, at the Hotel Edouard.

The succeeding sessions of the Society were appointed for
Thursday afternoon at half past two, Friday morning at ten,
and Friday afternoon at half past two.

The Corresponding Secretary, Professor Hopkins, reported
as follows:

Letters of acceptance have been received from all those
elected to membership at the last meeting with the exception
of two elected to corporate membership. It is desirable that
members should not be proposed for membership in future
before their assent has been received. Several members unable
to be present have sent greetings to the Society. A notice was
received from the Smithsonian Institution announcing the death
of Samuel Pierpont Langley, late Secretary of that institution.
To the list of our exchanges have been added Al-Machriq, The
Catholic Press, Beirut, Syria; Le Monde Oriental, Upsala,
Sweden; and the American Journal of Archaeology. The Free
Museum of Science and Art, University of Penna., has been
added to the list of recipients of the Journal.

The following extract from a letter received from Mr.
Montgomery Schuyler, of the American Legation at Bucharest,
relative to his former residence in Siam, was then read by the
Corresponding Secretary:

Hitherto the French are the only people to take an interest in the
wonderful ruins in Siam and Indo-China, but I am sure that we could
do fine work in that field if the attention of our Orientalists were drawn
to it in the proper manner. The number of fascinating problems for the
investigator in that part of the world is so large that I was simply over-
whelmed during my residence in Siam, and my transfer to Roumania
and Servia after a year gave me too little opportunity for study in the
Far East ... Even the inscriptions in Sanskrit which are being con-
stantly found in Siam in the ruined "wats" have never been properly
studied by well-equipped students. One day as I was walking by chance
on one of the terraces of the large temple at the town of Prapatoom I
came across an inscription in Devanagari characters which I am sure
would have been of interest, but unfortunately I was not able to stop to
make a satisfactory tracing of it and I have never been there since that
time. If the Carnegie or some other fund would devote a small part of
its revenue to aiding archeological research in Siam it would be well
repaid by the results. The Pali used in the Siamese Buddhist works is
another subject full of interest.

The President of the Society, Professor Toy, has handed his
resignation to the Secretary. Professor Torrey, as will appear
from the report of the editors, has resigned from the post of
Semitic editor.

The Secretary has to announce the death of the following
members of the Society.

HONORARY MEMBERS.
Professor Ceriani, of the Ambrosian Library at Milan.
Professor Ferdinand Justi, of Marburg, Germany.

CORPORATE MEMBERS.
Professor Hoppin, of Yale University.
Rev. Mr. E. J. Young, of Waltham, Mass.

SECTION FOR THE HISTORICAL STUDY OF RELIGIONS.
Rev. Charles S. Sanders, of Aintab, Turkey.

CORRESPONDING MEMBERS.
Professor G. I. Ascoli, of Milan.
Dr. A. G. Passati, of Athens, Greece.

Tributes were paid to Professors Ceriani and Ascoli by Pro-
fessor Bloomfield; to Professor Ceriani by Professors Lanman
and Gottheil; to Professor Justi by Professor Jackson; to Pro-
fessor Hoppin and Rev. Mr. Sanders by Professor Ilopkins;
and to Mr. Newell by Professor Toy.

The report of the Treasurer, Professor F. W. Williams, was
presented, as follows:

The Treasurer has the honor of presenting his annual report of the
financial condition of the Society to its members. The items in his
account do not differ materially from those of preceding years except-
ing in the sum of $899.60 devoted to binding, a sum which will have to
be nearly doubled this year before the periodicals and journals in the
library are brought into a safe and useful condition. This expenditure
has been more than offset during the past year by the receipt of $411.54 from sales of our own publications, an unusual amount which we cannot hope to equal in another year. The cost of printing the Journal of the Society comes to $1728.16, which with the honorarium to its editors and incidental expenses brings the total yearly disbursement to almost exactly $2000.00, not including charges for the library. Against this expenditure we have received this year a gross revenue of $1907.84—a decidedly larger amount than our average. The deficit has been met by withdrawing $384.48, the Life Membership Fund and accrued interest deposited in the Suffolk Savings Bank. As the Bradley and Coheal Funds cannot be used for the general expenses of the Society, there are now only the remaining accumulations of some $255.00 in accrued interest and the thirteen shares of Bank Stock to be drawn upon to meet an annual deficit of about $490.00, which may be considered as normal under the present policy of the Society. To maintain the high quality of its scholarly work and influence the Society should be able to count upon the support of at least three hundred and fifty paying members and the interest upon invested funds to the amount of ten thousand dollars.

RECEIPTS AND DISBURSEMENTS BY THE TREASURER OF THE
AMERICAN ORIENTAL SOCIETY FOR THE YEAR
ENDING DECEMBER 31, 1906.

RECEIPTS.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance from old account, Dec. 31, 1905</td>
<td>$482.79</td>
</tr>
<tr>
<td>Dues (309) for 1906</td>
<td>$1044.75</td>
</tr>
<tr>
<td>&quot; (54) for other years</td>
<td>264.47</td>
</tr>
<tr>
<td>&quot; (18) for Hist. S. R. Sect.</td>
<td>36.00</td>
</tr>
<tr>
<td>Sales of publications</td>
<td>411.54</td>
</tr>
<tr>
<td>Life Membership Fund</td>
<td>300.00</td>
</tr>
<tr>
<td>State Nat. Bank Dividends</td>
<td>109.10</td>
</tr>
<tr>
<td>Annual Interest, Suffolk Savings Bank</td>
<td>13.44</td>
</tr>
<tr>
<td>&quot; Prov. Inst. for Savings</td>
<td>37.75</td>
</tr>
<tr>
<td>&quot; Nat. and Conn. Savings Banks</td>
<td>.79</td>
</tr>
<tr>
<td>**</td>
<td>$2207.84</td>
</tr>
<tr>
<td>**</td>
<td>$890.63</td>
</tr>
</tbody>
</table>

EXPENDITURES.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>T., M. &amp; T. Co., printing vol. XXVII</td>
<td>$311.04</td>
</tr>
<tr>
<td>&quot; vol. XXVII</td>
<td>772.32</td>
</tr>
<tr>
<td>&quot; sundry</td>
<td>43.13</td>
</tr>
<tr>
<td>&quot; paper</td>
<td>143.80</td>
</tr>
<tr>
<td>Binding</td>
<td>869.60</td>
</tr>
<tr>
<td>Honoraria to editors</td>
<td>200.00</td>
</tr>
<tr>
<td>Librarian, postage and express</td>
<td>29.29</td>
</tr>
<tr>
<td>Treasurer, postage</td>
<td>1.84</td>
</tr>
<tr>
<td>Balance to general account</td>
<td>830.61</td>
</tr>
<tr>
<td>**</td>
<td>$2690.63</td>
</tr>
</tbody>
</table>
### Report of Treasurer.

**STATEMENT.**

<table>
<thead>
<tr>
<th>Description</th>
<th>1905</th>
<th>1906</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Bradley Type Fund (N. H. Savings Bank)</td>
<td>$2,297.44</td>
<td>$2,414.21</td>
</tr>
<tr>
<td>II. Coheal Publication Fund (Pr. Inst. Savings)</td>
<td>1,000.00</td>
<td>1,000.00</td>
</tr>
<tr>
<td>III. State National Bank Shares</td>
<td>1,950.00</td>
<td>1,950.00</td>
</tr>
<tr>
<td>IV. Life Membership Fund (Suffolk Savings Bank)</td>
<td>960.00</td>
<td>960.00</td>
</tr>
<tr>
<td>V. Connecticut Savings Bank deposit</td>
<td>5.52</td>
<td>5.92</td>
</tr>
<tr>
<td>VI. National Savings Bank deposit</td>
<td>10.50</td>
<td>11.23</td>
</tr>
<tr>
<td>VII. Accrued Interest in II</td>
<td>69.63</td>
<td>107.88</td>
</tr>
<tr>
<td>VIII. &quot; &quot; IV</td>
<td>81.04</td>
<td>94.48</td>
</tr>
<tr>
<td>IX. &quot; &quot; V and VI</td>
<td>.34</td>
<td>1.13</td>
</tr>
<tr>
<td>X. Cash on hand</td>
<td>331.78</td>
<td>117.62</td>
</tr>
<tr>
<td></td>
<td><strong>$6,046.25</strong></td>
<td><strong>$5,701.97</strong></td>
</tr>
</tbody>
</table>

Professor Jackson reported on the subscription made by members of the Society to the Oriental Bibliography and asked for further contributions.

The report of the Auditing Committee, Mr. J. D. Jackson and Mr. A. P. Stokes, was presented through the Secretary, as follows:

In the absence of my colleague, Mr. John Day Jackson, I have made an audit of the accounts of the American Oriental Society and hereby certify that I have examined the account-books of the Treasurer of the Society and have found the same correct, and that the foregoing statement showing the total assets to be $5701.97 and the total receipts and expenses for the year to balance at $2690.68 is correct. I have also compared the bills and vouchers, and statements of balances accompanying the same and have found them to be correct.

**Anson Phelps Stokes, Jr.**

*Auditor for the Society.*

The Librarian, Professor Hanns Oertel, presented his report, as follows:

**A Statement of the Present Condition and Urgent Needs of the Library of the American Oriental Society submitted to the members at the April meeting at Philadelphia, 1907.**

Article II of the constitution of the American Oriental Society enumerates four "objects contemplated by this Society." Of these four the third and the fourth involve an expenditure of money. They are: "3. The publication of memoirs, transactions, vocabularies, and other communications presented to the Society" and "4. The collection of a library and cabinet."

It is thus clear that the founders of the Society and the framers of its constitution wisely attributed equal importance to the publication of the Society's Journal and the collection of the Society's Library. As the Journal was to be an outlet for the scientific activity of the Society so its Library was intended to become a handy tool for its members and an important depository for Oriental books in this country.
But in the matter of money appropriations this theoretical and desirable equality of the Journal and the Library has never received recognition.

The annual appropriations for the publication of the Journal are about $1900 (viz. about $1700 for the printing of the Journal and $200 as honorarium for the editors). The annual appropriation for the Library usually has been about $30 (i. e. just enough to defray the cost of postage and express). At no time has it been sufficient to allow even the binding of our accessions, which has resulted in an accumulation of many unbound volumes. The past year was the first in which the sum of $870 was drawn from the treasury for the purpose of binding a part of the large accumulation of unbound volumes.

The policy of assuming that the Library will run itself tends to result in loss and disorder and cannot safely be continued in the future. There are two logical ways of dealing with the Society’s Library. One is to leave it in a chaotic state and destroy its usefulness but effect a saving of money. The other is to make it useful to our members and keep it in proper condition. (It should be borne in mind that section IV of the By-Laws imposes upon the Librarian the duty of keeping a catalogue of all books belonging to the Society.) The minimum cost of this has been estimated in the Report which follows. An inadequate, careless, or incomplete cataloguing will be a source of vexation only, involving the outlay of money without obtaining adequate returns.

The experience of the past year has clearly shown that in the management of a Library of the size of ours there is a large amount of work with which the Librarian cannot be charged. Just as little as the editors of the Journal can be expected to set type, print, and mail the Journal (though a saving might thus be effected), just so little can the Librarian be charged with the clerical work of typewriting catalogue-cards, labelling, accessioning, and acknowledging. In the present state of the Library the supervision of these things and assistance in cataloguing consumes a very large amount of time and is all that can be expected of him. Provision should be made so that competent help may be procured and paid for. In this case, and in this case only, can we hope to have within a reasonable time a Library which, by means of a carefully printed catalogue, will be useful to all our members and of which the Society need not be ashamed.

As the Treasurer’s Report shows an annual and chronic deficit of about $300 and as the appropriation for the Journal cannot be cut down without most seriously interfering with the Society’s activity and standing, it becomes a most serious and pressing problem to take at once such steps as will increase the Society’s revenues.

II. The work done this year: April 1906—April 1907.

The work done during the past year consisted

A. In drafting a general scheme for cataloguing the Society’s Library:
B. In cataloguing a part of the old books; and
C. In taking care of the accessions.

The old books catalogued were
1. The printed manuscript-catalogues.
2. The Bibliotheca Indica (3 series) and the Bombay Sanskrit Series.
3. The Serials of which the Society has about 100 sets in progress of publication and 50 no longer published.

In the majority of cases these books, before they could be catalogued, had to be bound and labelled. Much time is consumed in preparing some of them for the binder (e.g., the volumes of the Bibliotheca Indica). The character of our books is, moreover, such that the gathering of the data necessary for properly cataloguing them requires not only much time and labor but also assistance of a very high class, both difficult to obtain and expensive. The task was further complicated by the necessity of making out lists of the volumes wanting in every series. These lists of desiderata were mailed in February to the Learned Societies, Academies, etc., with which the Society exchanges, with a request to assist us, as far as possible, in completing our sets, and it is hoped that these requests will meet with a generous response. This particular phase of the work, however, impressed in the strongest possible way the absolute necessity of keeping a careful watch over our serial accessions, in order to avoid gaps which often cannot be filled after the lapse of a certain time.

About 1550 volumes have been labelled and about 1500 volumes have been catalogued.

Expenses. For the binding of books $989.66 were spent. In order to help defraying this expense a circular letter addressed to the larger Libraries of the world was sent out, offering to them the full set of our Journal at the reduced price of $63.75 and single volumes at 20% discount. As a consequence, $304 were turned into the treasury, received from such special sales of our Journal, and a bill for $88.75 is still outstanding. (This sum of $287.75 is over and above the usual sale of the Journal.)

For the rest of the work none of the Society's money has been expended. But a statement of the cost is here appended.

1. The work done in preparing the books for the binder and labelling them may be estimated at 40 working days of an assistant at $2. This does not include the expert help necessary to prepare volumes like those of the Bibliotheca Indica for the binder, but takes into account the simple manual work only.

2. The work done in cataloguing the books may be estimated at $255. This is on the supposition that 85 working days at $3 would be consumed in this work, which allows for about 18 titles a day. The nature of the books in our Library makes such a figure, if anything, too high; and the wages are put at an exceedingly low figure.

To this should be added--

For assisting in drafting the general plan for the arrangement of the Society's Library, 3 days' services of a cataloguer at $3, amounting to $9.
For making out, etc., of the list of desiderata 10 days' time of such a cataloguer, amounting to $30.

The sum total of the cost of cataloguing this portion of the old books of the Library would, therefore, have amounted to $374.

To this should be added about $85 for taking care of the annua accessions to the Library (accessioning, acknowledging, etc.). [See the detailed statement below, IV.]

The money value of the work so far expended on the Society's Library, exclusive of binding, janitor services, and other items of such character, is therefore equivalent to about $486, figuring wages at the lowest possible cost. In reality, $500 would probably come nearer to what we should have had to expend on this work. For the successful completion of this work the Society stands indebted to Miss Margaret D. Whitney [see Librarian's Report, Journal vol. 27, p. 468-9]. Miss Whitney did not only herself spend a part of each day at the Library but also obtained the assistance of a number of ladies, and collected a small sum of money to hire additional help.

III. The work that remains to be done to bring the cataloguing of the Society's Library up to date. Estimated Cost.

1. Binding. It is estimated that about one-half of the unbound books in the Library have now been bound. The expense so far has been about $370. There remain then a little less than one-half of unbound volumes. It is estimated that the cost of binding these will be $350.

Note 1: It is impossible to keep books and periodicals in proper order and condition without binding them. It is equally impossible to let them go out of the Library unless they are bound. Consequently the usefulness of our Library is impaired in proportion to the number of unbound volumes, especially as most of our members cannot consult the books in New Haven.

Note 2: It should be borne in mind that about two-thirds of last year's expense for binding was defrayed by money derived from an extraordinary and special sale of our Journal. The market for such a sale is now exhausted and a similar income cannot be looked forward to for the ensuing year.

2. Cataloguing. Apart from new accessions there remain now uncatalogued about 3500 books.

(a) Labelling. The proper labelling and stamping of these (assuming that 100 books can be handled in the course of a working day) will occupy 85 days of an assistant at $2, with a total cost of $70.

(b) Cataloguing proper. There are about 250 volumes labelled and stamped but not yet properly catalogued and with the other 3300 books the number of books to be catalogued may be estimated at 3750. This task should occupy about 190 working days of a cataloguer at $3, with a total cost of $570. This calculation supposes that he will handle about 18 titles a day. This figure may seem low, but the difficulty of determining the proper details of entries is so great that even with the help of expert advice the work will be slow. The use of accented type in the typewriting of transliterated titles is, of itself, a source of considerable delay.
The total cost of cataloguing the remaining portion of the Library may thus be estimated at $900.

IV. Estimated Cost of administering the Library after it has been brought up to date. Estimated Annual Budget of the Library.

1. Serials. We have about 95–100 serials which increase every year by a volume. Almost all of these come unbound, the majority in fascicles. They require (a) binding, (b) accessioning, (c) labelling and stamping, (d) acknowledging, and (e) cataloguing.

(a) Binding. The cost may be estimated at $1 per volume. On the basis of 100 accessions this item would amount to $100.

(b, c, d) Accessioning, labelling of bound volumes, stamping and acknowledging. This may be estimated to consume about 8 days of an assistant at $2. Total expenses $16.

(e) Cataloguing. Assuming that of the 100 volumes 90 per cent are continuations of old series and 10 per cent are new (such as fascicles of the Bibliotheca Indica), involving some search, it is estimated that four working days of a cataloguer at $3 will be required. Total cost $12.

2. New books. Annual accessions from this source may be roughly estimated at from 175–200. About 75 per cent. of these are bound. The expense involved would be

(a) Binding 50 vols. at $1 apiece—$50.

(b) Labelling, 2 days’ work of an assistant at $2—$4.

(c and d and e) Accessioning, acknowledging, and cataloguing. Estimating 20 titles a day, 10 working days of a cataloguer at $3—$90.

3. Estimated postage for sending foreign and home acknowledgments—$10.


5. Library-cards, stationery, etc.—$10.

6. There should be a regular annual allowance

(a) for the purchase of odd volumes to complete a set or series where the volume or volumes lacking are out of print or cannot be obtained as a gift.

(b) for the purchase of certain necessary bibliographical helps, such as Aufrecht’s Catalogus Catalogorum or Minerva. Something like $50 should be appropriated for this purpose.

The Annual Budget would thus amount to $298.

The Library thus urgently needs (1) an appropriation of $1000 to be expended in cataloguing the remaining portion of the books, and (2) an annual appropriation of $300 (i.e. about one-sixth of what is at present appropriated for the Journal).

All of which is respectively submitted by your Librarian.

New Haven, Conn. March 20th, 1907.

On motion of Professor Jackson the Society expressed its thanks to Miss Margaret D. Whitney and the ladies who helped her in preparing a catalogue of the library, and to Mr. Julius
Hotechkiss, to Mr. Schwab of the Yale Library, and to Mr. Whitney of the Branford library, for aiding in the same work.

The report of the Editors of the Journal, Professors Hopkins and Torrey, was presented by Professor Hopkins, as follows:

The twenty-seventh volume of the Journal was issued in two parts; the First Half appearing August 1st, 1906, and the Second Half March 13th, 1907. The volume contained 489 pages in all, or 464 pages exclusive of the Proceedings, List of Members, etc.

The Editors wish to call attention once more to the fact of an annual deficit of about three hundred dollars, due to the cost of publication of the Journal. So long as the Journal continues to have its present size, this annual deficit will be unavoidable. The Editors feel strongly that the size of the Journal ought not to be reduced, and that the change from two numbers to one number yearly would be unfortunate. Extensive and careful inquiry has shown that the cost of printing in New Haven is not greater than it would be elsewhere in America. There is great need, therefore, that the income of the Society be increased without delay by at least the amount of this deficit.

The members of the Society who contribute papers for publication in the Journal are urged to give them as nearly as possible their final form before sending in the manuscript to the editors. The re-writing of articles after they have been put in type has caused great waste of time and money, nearly every year, as well as a good deal of unnecessary delay in the appearance of the Journal.

The Editor of the Semitic section of the Journal, who has just completed his seventh year of service, finds himself obliged to resign his office, owing to pressure of other work, and has asked the Directors to appoint another in his place.

The following persons, recommended by the Directors, were elected members of the Society:

HONORARY MEMBERS.
Professor Hartwig Deringe, Professor T. W. Rhys Davids.

CORPORATE MEMBERS.
Prof. J. Cullen Ayer.
Miss Alice M. Bacon.
Prof. George R. Berry.
Prof. Julius A. Bewer.
George F. Black.
Rev. Philip Blanc.
Prof. Albert T. Clay.
Prof. Hughell E. W. Fosbroke.
Marquis Antoine Frabasilius.
Mr. Leo Frachtenberg.
Prof. J. B. Game.
Rev. Elihu Grant.
Mrs. Louis H. Gray.
Rev. Dr. W. M. Groton.
Rev. Dr. W. J. Hinkie.
Miss Lucile Kohn.
Miss E. J. Letson.
Mr. J. Renwick Metheny.
Prof. Lucius H. Miller.
Mr. J. B. Sargent.
Prof. Charles M. Shepard.
Captain C. C. Smith.
Mrs. Sara Yorke Stevenson.
Prof. George Sverdrup.
Prof. William C. Thayer.
MEMBERS OF THE SECTION FOR THE HISTORICAL STUDY OF RELIGIONS.

Mr. M. A. Lane.  Prof. Patterson DuBois.

The committee appointed at New Haven to nominate officers (Messrs. Moore, Jackson, and Jastrow: see Journal, vol. 27, p. 471) reported through Professor Jackson as follows:

The committee, having received the resignation of Professor Toy from the presidency, nominate as his successor one of the Vice-Presidents, Professor Lanman, whose long services to the Society render this recognition peculiarly appropriate and whose rank as a scholar makes him a most fitting candidate. In regard to the Secretaries, Treasurer, and Librarian, the Committee see no reason to make any changes, and they therefore nominate the following officers:

President—Professor Charles Rockwell Lanman, of Cambridge, Mass.
Vice-Presidents—Dr. William Hayes Ward, of New York; Professor Maurice Bloomfield, of Baltimore; Professor Paul Haupt, of Baltimore.
Corresponding Secretary—Professor E. Washburn Hopkins, of New Haven, Conn.
Recording Secretary—Professor George F. Moore, of Cambridge, Mass.
Secretary of the Section for Religions—Professor Morris Jastrow, Jr., of Philadelphia.
Treasurer—Professor Frederick Wells Williams, of New Haven, Conn.
Librarian—Professor Hanns Oertel, of New Haven, Conn.
Directors—The officers above named; and President Daniel Coit Gilman, of Washington; Professor Crawford Howell Toy, of Cambridge, Mass.; Professor Robert F. Harper, of Chicago; Professors Richard Gottheil and A. V. W. Jackson, of New York; Professor Henry Hyvernat, of Washington; Professor Charles C. Torrey, of New Haven.

The officers thus nominated were unanimously elected. Professor Hopkins reported from the Directors that they had ordered power of attorney to be given to E. Washburn Hopkins to act for the Treasurer, Professor F. W. Williams, during the absence of Professor Williams from the country. Professor Jewett, Dr. Gray, and Professor Barton were appointed by the Chair a committee to nominate officers at the first session of the next annual meeting.

At quarter past twelve Professor Toy delivered his address entitled "A Review of Work in the Oriental Languages during the Past Year."

At one o'clock the Society took a recess till half past two.

At two forty-five the Society met for its second session and proceeded to the reading of papers, Professor Lanman being in the chair. The following communications were presented:
Professor Barton, of Bryn Mawr College, Methods of investigating the origin of the Cuneiform Syllabary.—Remarks were made by Professor Jastrow.

Professor Bloomfield, of Johns Hopkins University, On repeated verse lines and stanzas in the Rig Veda [read in abstract].

Rev. Mr. Chandler, of Madura, India, Nayaka Kingdoms in South India.—Remarks were made by Professor Lanman.

Mr. Aaron Ember, of John Hopkins University, Word-formation and loan-words in Modern Hebrew.

Dr. Foote, of Johns Hopkins University, Note on Amos i. 3.

Dr. L. H. Gray, of New York, On certain Persian and Armenian month-names as influenced by the Avestan.

Professor Haupt, of Johns Hopkins University, Xenophon’s account of the fall of Nineveh.

Professor Hopkins, of Yale University, The sniff-kiss in ancient India.—Remarks were made by Rev. Mr. Chandler, Professors Mueller, Lanman, and Toy.

Professor Jackson, of Columbia University, Some notes on the history of India.

Professor Lanman, of Harvard University, Palicisms in the Sanskrit of the Tantra-ākhyāyikam.—Remarks were made by Professor Hopkins and Mr. Michelson.

At five o’clock the Society adjourned, to meet on Friday at ten o’clock.

The Society met on Friday morning at ten o’clock with Professor Lanman in the chair. The following communications were presented:

Mr. Michelson of Ridgefield, Conn., Notes on the inscriptions of Asoka.—Remarks were made by Professors Lanman and Hopkins.

Mr. J. H. Moore, of Columbia University, A metrical analysis of the Pālī Itivuttaka, a collection of discourses of Buddha.—Remarks were made by Mr. Michelson and by Professors Lanman and Hopkins.

Professor Mueller, of Philadelphia, Observations on the letter ’beth in Northern Semitic.

Mr. Ogden of Columbia University, Some examples of Sāyaṇa’s treatment of the Vedic subjunctive.—Remarks were made by Professors Bloomfield, Haupt, Hopkins, Gottheil, and Mr. Michelson.

Professor Johnston, of Johns Hopkins University, Notes on *nubattu* and *w'ilatu.*—Remarks were made by Professors Jastrow and Bloomfield.

Mr. Oliphant, of Johns Hopkins University, A study of the Vedic dual; the dual of bodily parts.

Professor Prince, of Columbia University, [two papers read in abstract] A Sumerian hymn to Nergal, and The English
Rommany jargon of the American roads.—Remarks were made by Professor Jastrow, Dr. Ward, and Professors Lanman, Bloomfield, and Hopkins.

Dr. Gray, of New York, On the Madras text of Subandhu’s Vāsavadattā.—Remarks were made by Professor Hopkins.

Professor Haupt, of Johns Hopkins University, [two papers read in abstract] The cuneiform name of the cachalot, and The etymology of cabinet.

Professor Jackson, of Columbia University, [read in abstract] Merv, the ancient Zoroastrian city in Turkistan.

Professor Johnston, of Johns Hopkins University, Some new cuneiform letters.

At one o’clock the Society took a recess till half past two.

At half past two the Society met for a short business session before resuming the reading of papers.

The Corresponding Secretary reported for the Directors that the next annual meeting would be held in Cambridge, Mass., beginning on April 23d, 1908. A committee of arrangements was appointed, consisting of Professors Lanman, Lyon, and Hopkins.

The Directors further reported that they had appointed Professors E. Washburn Hopkins and Professor Lewis B. Paton Editors of the Journal for the ensuing year. Professors Torrey and Mr. Anson Phelps Stokes, Jr., were appointed auditors for the year 1907–1908.

The following resolution was unanimously adopted:

The American Oriental Society desires to express sincere thanks to the American Philosophical Society for the use of its rooms; to the Oriental Club and Historical Society of Philadelphia for their generous hospitality; to the University Club of Philadelphia for courtesies extended to the Society; and to the Committee of Arrangements for their efficient services.

At two forty-five the reading of papers was resumed with Professor Toy in the chair.

The following communications were presented:

Miss Margaretta Morris, of Philadelphia, Magic and morals in Borneo.—Remarks were made by Professors Jastrow, Hopkins, and Toy.

Professor Clay, of the University of Pennsylvania, The Aramaic endorsements on the business documents of Murāshā Sons.—Remarks were made by Professor Toy.

Professor Jastrow, of the University of Pennsylvania, The liver in Babylonian divination.

Mr. Metheny, of Philadelphia, Road-notes in Cilicia and Northern Syria.—Remarks were made by Dr. Ward.

Rev. Mr. Chandler, of Madura, India, The Jesuit Mission in Madura in the seventeenth century.
Dr. Foote, of the Johns Hopkins University, Visiting sins upon the innocent.—Remarks were made by Professor Toy.

Professor Lanman, of Harvard University, Buddhaghosa and his treatise on Buddhism entitled The Way of Purity.

Professor Montgomery, of the Protestant Episcopal Divinity School, An Aramaic inscription from Guzney, Cilicia.—Remarks were made by Professor Jastrow.

Mr. Welden, of the University of Pennsylvania, A Note to Rig Veda, 10. 137. 7.—Remarks were made by Professor Hopkins.

At five o'clock the Society adjourned, to meet in Cambridge, Mass., April 23d, 1908.

The following communications were read by title:

Professor Barton, of Bryn Mawr College, The text and interpretation of Ecclesiastes 51st.

Dr. Blake, of Johns Hopkins University, (a) A bibliography of the Philippine languages; (b) Contributions to comparative Philippine grammar. II. The numerals; (c) Connective particles in the Philippine languages; (d) Notes on Hebrew phonology.

Professor Gottheil, of Columbia University, Hassan ibn Ibrâhim ibn Zâlîk and his Ta'rikh Misr wa-Fad'âliha.

Professor Haupt, of Johns Hopkins University, The name Istar.

Professor Hopkins, of Yale University, Aspects of the Vedic Dative.

Mr. Michelson, of Ridgefield, Conn., Preliminary report on the linguistic study of the Vâyu Purâna.


Professor Mueller, of Philadelphia, The last years of the Persian rule in Egypt.

Mr. Oliphant, of John Hopkins University, Was there a lost myth—Indra and the Ants?

Mr. Quackenbos, of Columbia University, Classical allusions to the pearl and pearl-fisheries of Persia and India.

Dr. Yohannan, of Columbia University, Persian Notes.
LIST OF MEMBERS.

REVISED, DECEMBER, 1907.

The number placed after the address indicates the year of election.

I. HONORARY MEMBERS.

M. AUGUSTE BARTH, Membre de l’Institut, Paris, France. (Rue Garancière, 10.) 1898.

DR. RAMKRISHNA GOPAL BHANDARKAR, C.I.E., Dekkan Coll., Poona, India. 1887.

JAMES BURGESS, LL.D., 22 Seton Place, Edinburgh, Scotland. 1899.


Prof. BERTHOLD DELBRÜCK, University of Jena, Germany. 1878.

Prof. FRIEDRICH DELITZSCH, University of Berlin, Germany. 1893.

Prof. HARTWIG DEBENBOURG, 30 Avenue Henri-Martin, Paris, France. 1907.

Prof. ADOLPH EMAN, Steglitz, Friedrich Str. 10/11, Berlin, Germany. 1903.

Prof. RICHARD GABBE, University of Tübingen, Germany. (Biesinger Str. 14.) 1902.

Prof. KARL F. GELDNER, University of Marburg, Germany. 1905.

Prof. M. J. DE GOEJE, University of Leyden, Netherlands. (Vliet 15.) 1899.

Prof. IGNAZ GOLDBERG, vii Holló-Utcza 4, Budapest, Hungary. 1906.


Prof. IGNACIO GUIDI, University of Rome, Italy. (Via Bottegone Oscura, 24.) 1893.

Prof. HENDRIK KERN, 45 Willem Barentz-Straat, Utrecht, Netherlands. 1893.

Prof. FRANZ KIELHORN, University of Göttingen, Germany. (Hainholzweg, 21.) 1887.

Prof. ALFRED LUDWIG, University of Prague, Bohemia. (Königliche Weinbirge, Kramerius-gasse 40.) 1898.

Prof. GASTON MASPERO, Collège de France, Paris, France. (Avenue de l’Observatoire, 24.) 1898.

Prof. THEODOR NOELDEKE, University of Strassburg, Germany. (Kalbengasse 16.) 1878.

Prof. RICHARD PISCHEL, University of Berlin, Germany. (Halensee, Joachim Friedrichstrasse 47.) 1902.

Prof. EDUARD SACHAU, University of Berlin, Germany. (Wormser Str. 12, W.) 1897.
II. CORPORATE MEMBERS.

Names marked with † are those of life members.

Rev. Dr. Justin Edwards Abbott, Tardeo, Bombay, India. 1900.
Miss May Alice Allen, 256 Edgewood Ave., New Haven, Conn. 1906.
Mrs. Emma J. Arnold, 275 Washington St., Providence, R. I. 1894.
Prof. William R. Arnold, Theological Seminary, Andover, Mass. 1893.
Dr. Kanichi Asakawa (Yale University), 385 Winthrop Ave., New Haven, Conn. 1904.
Miss Alice M. Bacon, 4 Mansfield St., New Haven, Conn. 1907.
Hon. Simon E. Baldwin, LL.D., 44 Wall St., New Haven, Conn. 1898.
LeRoy Cair Barret, Princeton, N. J. 1903.
Prof. George A. Barton, Bryn Mawr College, Bryn Mawr, Pa. 1888.
Prof. L. W. Batten, 232 East 11th St., New York. 1884.
Prof. Harlan P. Beach (Yale University), Kuling, China. 1898.
Prof. Willis J. Beecher, D.D., Theological Seminary, Auburn, N. Y. 1900.
Harold H. Bender, Johns Hopkins Univ., Baltimore, Md. 1906.
Prof. George R. Berry, Colgate University, Hamilton, N. Y. 1907.
Prof. Julius A. Bewer, 700 Park Ave., New York, N. Y. 1907.
Dr. William Sturgis Bigelow, 60 Beacon St., Boston, Mass. 1894.
Prof. John Binney, Berkeley Divinity School, Middletown, Conn. 1887.
George F. Black, Lenox Library, Fifth Ave. and 70th St., New York, N. Y. 1907.
Dr. Frank Ringgold Blake (Johns Hopkins Univ.), Dixon Park, Mt. Washington, Md. 1900.
Rev. Philip Blanc, Johns Hopkins University, Baltimore, Md. 1907.
Rev. David Blaustein, Educational Alliance, 197 East Broadway, New York, N. Y. 1891.
Frederick J. Bliss, Clifton Springs, New York.
Francis B. Bledgett, General Theological Seminary, Chelsea Square, New York, N. Y. 1906.
Prof. Carl August Blohmren, Augustana College and Theol. Seminary, Rock Island, Ill. 1900.
List of Members.

Prof. Maurice Bloomfield, Johns Hopkins University, Baltimore, Md. 1881.
Dr. Alfred Boissier, Le Rivage près Chambéry, Switzerland. 1897.
Dr. George M. Bowling, Catholic Univ. of America, Washington, D. C. 1896.
Prof. James Henry Breasted, University of Chicago, Chicago, Ill. 1891.
Prof. Chas. A. Briggs (Union Theological Seminary), 700 Park Ave., New York, N. Y. 1879.
Prof. C. A. Brodie Brockwell, McGill University, Montreal, Canada. 1906.
Dr. Paul Brönnele, 73 Burdett Ave., Westcliff-on-Sea, England. 1903.
Prof. Francis Brown (Union Theological Seminary), 700 Park Ave., New York, N. Y. 1881.
Prof. Carl Darling Buck, University of Chicago, Chicago, Ill. 1892.
Dr. Paul Carus, La Salle, Illinois. 1897.
Miss Eva Channing, Hemenway Chambers, Boston, Mass. 1883.
Prof. Albert T. Clay (Univ. of Penna.), 415 South 44th St., Philadelphia, Pa. 1907.
† George Wetmore Colles, 62 Fort Greene Place, Brooklyn, N. Y. 1882.
Prof. Hermann Collitz, Johns Hopkins University, Baltimore, Md. 1887.
Miss Elizabeth S. Colton, Easthampton, Mass. 1896.
C. Everett Conant, Translator-Interpreter Executive Bureau, Manila, P. I. 1905.
William Merriam Crane, 16 East 37th St., New York, N. Y. 1902.
Prof. John D. Davis, Princeton Theological Seminary, Princeton, N. J. 1888.
Lee Maltbie Dean, Westbrook, Maine. 1897.
Prof. Alfred L. P. Dennis, Madison, Wis. 1900.
James T. Dennis, University Club, Baltimore, Md. 1900.
David J. Doiherty, M.D., 456 Lasalle Ave., Chicago, Ill. 1905.
Dr. Harry Westbrook Dunning, 5 Kilsyth Road, Brookline, Mass. 1894.
Mrs. William M. Ellicott, 106 Ridgewood Road, Roland Park, Md. 1897.

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Prof. LEVI H. ELWELL, Amherst College, Amherst, Mass. 1883.
Rev. Prof. C. P. FAFNANI, 772 Park Ave., New York, N. Y. 1901.
Prof. EDWIN WHITFIELD FAY (University of Texas), 200 West 24th St.,
Austin, Texas. 1888.
ERNST F. FENOLLOSA, 159 Church St., Mobile, Ala. 1894.
Prof. HENRY FERGUSON, St. Paul's School, Concord, N. H. 1876.
Dr. JOHN C. FERGUSON, 110 Bubbling Well Road, Shanghai, China.
1900.
Prof. RALPH HALL FERRIS (Theological Seminary), 45 Warren Ave.,
Chicago, Ill. 1905.
1905.
†Lady CAROLINE DE FILIPPI FITZ GERALD, 167 Via Urbana, Rome, Italy.
1886.
Rev. WALLACE B. FLEMING, Maplewood, N. J. 1906.
Rev. THEODORE C. FOOTE, Johns Hopkins University, Baltimore, Md.
1800.
†FRANK B. FORBES, 65 Marlborough St., Boston, Mass. 1884.
Prof. HUDELL E. W. FOSBROKE, Nashotah House, Nashotah, Wis. 1907.
MARQUIS ANTOINE FRANASILIS, 1017 East 187th St., New York, N. Y.
1907.
LEO J. FRACHTENBERG, Tuscarora P. O., Middleport, Ont. 1907.
Rev. JAS. EVERETT FRANK (Union Theological Sem.), 700 Park Ave., New
York, N. Y. 1892.
Prof. ISRAEL FRIELANDER (Jewish Theological Seminary), 1549 St.
Nicholas Ave., New York, N. Y. 1904.
Dr. WILLIAM H. FURNES, 3d, 1906 Sansom St., Philadelphia, Pa. 1897.
Prof. J. B. GAMBLE, State Normal School, Cape Girardeau, Mo. 1907.
Dr. FLETCHER GARDNER, 202 East Kirkwood Ave., Bloomington, Ind.
1905.
ROBERT GARRETT, Continental Building, Baltimore, Md. 1903.
Prof. BASIL LANEAU GILDESLEEVE, Johns Hopkins Univ., Baltimore,
Md. 1858.
Dr. DANILO COIT GILMAN, 614 Park Ave., Baltimore, Md. 1857.
Prof. WILLIAM WATSON GOODWIN (Harvard Univ.), 5 Follen St., Cam-
bidge, Mass. 1857.
Prof. RICHARD J. H. GOTTHEIL, Columbia University, New York, N. Y.
1880.
Miss FLORENCE A. GRAGG, 26 Maple Ave., Cambridge, Mass. 1906.
Prof. ELIHU GRANT (Smith College), Northampton, Mass. 1907.
LOUIS H. GRAY, 354 Summer Ave., Newark, N. J. 1897.
Mrs. LOUIS H. GRAY, 354 Summer Ave., Newark, N. J. 1907.
Miss LOUISE H. R. GRIEVE, M.D., Satara, Bombay Presidency, India.
1898.
Miss LUCIA C. GRAEME GRIEVE, 462 West 151st St., New York, N. Y.
1894.
List of Members.

Prof. Louis Grossmann (Hebrew Union College), 2312 Park Ave., Cincinnati, O. 1890.

Rev. Dr. W. M. Grout, Dean of the Protestant Episcopal Divinity School, 5000 Woodlawn Ave., Philadelphia, Pa. 1907.

Chas. F. Gunther, 210 State St., Chicago, Ill. 1889.

George C. O. Haas, 64 East Seventh St., New York, N. Y. 1903.

Dr. Carl C. Hansen, Lakawn Lampang, Laos, Siam (via Brindisi, Moulmain, and Raheng). 1902.

Paul V. Harper, 59th St. and Lexington Ave., Chicago, Ill. 1906.

Prof. Robert Francis Harper, Univ. of Chicago, Chicago, Ill. 1886.

Prof. Samuel Hart, D.D., Berkeley Divinity School, Middletown, Conn. 1879.

Prof. Paul Haupt (Johns Hopkins Univ.), 2511 Madison Ave., Baltimore. 1883.

Dr. Henry Harrison Haynes, 6 Ellery St., Cambridge, Mass. 1892.

Edward A. Henry, 70 Middle Divinity, University of Chicago, Ill. 1906.


Prof. Hermann V. Hilprecht (Univ. of Pennsylvania), 403 South 41st St., Philadelphia, Pa. 1887.

Rev. Dr. William J. Hinke, 28 Court St., Auburn, N. Y. 1907.

Prof. Friedrich Hirth (Columbia Univ.), 501 West 113th St., New York, N. Y. 1903.

Prof. Charles T. Hock (Theological Seminary), 220 Liberty St., Bloomfield, N. J. 1903.

†Dr. A. F. Rudolf Hoernle, 8 Northmoor Road, Oxford, England. 1893.


Prof. Franklin W. Hooper, 502 Fulton St., Brooklyn, N. Y. 1906.

†Prof. E. Washburn Hopkins (Yale Univ.), 290 Lawrence St., New Haven, Conn. 1881.

Chas. E. Horn, 5836 Drexel Ave., Chicago, Ill. 1906.

Rev. Dr. Thomas P. Hughes, Kings Park, Long Island, N. Y. 1906.

Rev. Robert E. Hume, Ahmednagar, India. 1900.

Miss Annie K. Humphrey, 1114 14th St., Washington, D. C. 1873.

Miss Mary Ina Hussey, Ocean Grove, N. Y. 1901.


Prof. Henry Hyvernat (Catholic Univ. of America), 3405 Twelfth St., N. E. (Brookland), Washington, D. C. 1889.

Prof. A. V. Williams Jackson (Columbia Univ.), 10 Highland Place, Yonkers, N. Y. 1885.

John Day Jackson, 86 Crown St., New Haven, Conn. 1905.

Prof. Morris Jastrow, Jr. (Univ. of Pennsylvania), 248 South 23d St., Philadelphia, Pa. 1886.

Prof. James Richard Jewett, 5757 Lexington Ave., Chicago, Ill. 1887.

Prof. Christopher Johnston (Johns Hopkins University), 21 West 20th St., Baltimore, Md. 1889.


Miss Eliza H. Kendrick, 45 Hunnewell Ave., Newton, Mass. 1896.

**Prof. Charles Foster Kent** (Yale Univ.), 406 Humphrey St., New Haven, Conn. 1890.

**Prof. George L. Kittredge** (Harvard University), 9 Hilliard St., Cambridge, Mass. 1899.

**Nicholas A. Koenig**, 80 West 12th St., New York, N. Y. 1906.


**Miss Lucile Kohn**, 1138 Madison Ave., New York, N. Y. 1907.

†**Prof. Charles Rockwell Lanman** (Harvard Univ.), 9 Farrar St., Cambridge, Mass. 1876.


**Berthold Laufer**, Field Museum of Natural History, Chicago, Ill. 1900.


**Miss E. J. Letson**, Society of Natural Science, Library Building, Buffalo, N. Y. 1907.

**Prof. Charles E. Little** (Vanderbilt Univ.), 308 Gowday St., Nashville, Tenn. 1901.

**Prof. Enno Littman**, Schweighäuser Str. 24th, Strassburg, i/Elze., Germany. 1902.


**Prof. Duncan B. Macdonald**, Hartford Theological Seminary, Hartford, Conn. 1893.

**Rev. Charles S. Macfarland**, 37 Bayview Ave., South Norwalk, Conn. 1898.


**Dr. Albert A. Madsen**, Durham, Conn. 1906.

**Prof. Herbert W. Magoun**, 70 Kirkland St., Cambridge, Mass.

**Prof. Max L. Margolis**, Hebrew Union College, Cincinnati, Ohio. 1890.


**Prof. Winfred Robert Martin**, Hispanic Society of America, West 150th St., New York, N. Y. 1889.

**Isaac G. Matthews**, McMaster Univ., Toronto, Canada. 1906.


**Martin A. Meyer**, 22 St. Francis Place, Brooklyn, N. Y. 1906.

**Truman Michelson**, R.F.D. 48, Ridgefield, Conn. 1899.

**Prof. Lucius H. Miller**, Princeton University, N. J. 1907.

**Mrs. Helen L. Million (née Lovell)**, Hardin College, Mexico, Mo. 1892.

**Prof. Lawrence H. Mills** (Oxford University), 119 Iffley Road, Oxford, England. 1881.
List of Members. 427

Prof. Edwin Knox Mitchell (Hartford Theol. Sem.), 57 Gillette St., Hartford, Conn. 1898.
Roland H. Mode, 3836 Drexel Ave., Chicago, Ill. 1906.
Prof. J. A. Montgomery (P. E. Divinity School), 6806 Green St., German-
town, Pa. 1903.
Prof. George F. Moore (Harvard University), 3 Divinity Ave., Cam-
bridge, Mass. 1887.
Justin Hartley Moore, 8 West 119th St., New York, N. Y. 1904.
†Mrs. Mary H. Moore, 3 Divinity Ave., Cambridge, Mass. 1902.
[Miss Margaretta Morris. See Mrs. S. B. Scott.]
Prof. Edward S. Morse, Salem, Mass. 1894.
Rev. Dr. Philip S. Moxom, 83 Dartmouth Terrace, Springfield, Mass.
1898.
Rev. Prof. A. J. Elder Mullan, S.J., Georgetown University, Washing-
ton, D. C. 1889.
Mrs. Ethel Watts Mumford, 31 West 81st St., New York, N. Y. 1904.
Dr. William Muss-Arnolt, Public Library, Boston, Mass. 1906.
Rev. Jas. B. Nies, Hotel Margaret, Columbia Heights, Brooklyn, N. Y.
1906.
Rt. Rev. Mgr. Dennis T. O'Connell, D.D. (Catholic University), Wash-
ington, D. C. 1903.
Prof. Hanns Oertel (Yale Univ.), 2 Phelps Hall, New Haven, Conn.
1890.
Char. J. Oden, 250 West 88th St., New York, N. Y. 1906.
Miss Ellen S. Oden, St. Agnes School, Albany, N. Y. 1898.
Samuel G. Oliphant, Johns Hopkins Univ., Baltimore, Md. 1906.
Prof. Paul Oltramare (University of Geneva), Ave. de Bosquets, Ser-
vette, Genève, Switzerland. 1904.
John Orne, 104 Ellery St., Cambridge, Mass. 1890.
Rev. Dr. Charles Ray Palmer, 562 Whitney Ave., New Haven, Conn.
1900.
Prof. Lewis B. Paton, Hartford Theological Seminary, Hartford, Conn.
1894.
Prof. Walter M. Patton, Baker Univ., Baldwin, Kansas. 1903.
Dr. Charles Peabody, 197 Brattle St., Cambridge, Mass. 1892.
Prof. Ismar J. Peritz, Syracuse University, Syracuse, N. Y. 1894.
Prof. Edward Delavan Perry (Columbia Univ.), 542 West 114th St.,
New York, N. Y. 1879.
Rev. Dr. John P. Peters, 225 West 99th St., New York, N. Y. 1882.
Prof. David Philipson (Hebrew Union College), 3947 Beechwood Ave.,
Rose Hill, Cincinnati, O. 1880.
William Popper, University of California, Berkeley, Cal. 1897.
Prof. Ira M. Price, University of Chicago, Chicago, Ill. 1887.
Prof. John Dunley Prince (Columbia Univ.), Sterling, Rockland Co., N. Y. 1888.

GEORGE PAYN QUACKENBOS, 331 West 28th St., New York, N. Y. 1904.
Prof. F. P. RAMSAY (S. W. Presbyterian University), Clarksville, Tenn. 1889.

DR. GEORGE ANDREW REINZER, The Pyramids, Cairo, Egypt. 1891.

1900.

J. NELSON ROBERTSON, 294 Avenue Road, Toronto, Ont. 1902.

RENJ. W. ROBINSON, 700 Park Ave., New York, N. Y. 1906.

EDWARD ROBINSON, Metropolitan Museum of Art, New York, N. Y. 1894.

REV. DR. GEORGE LIVINGSTON ROBINSON (McCormick Theol. Sem.), 10
Chalmers Place, Chicago, Ill. 1892.

HON. WILLIAM WOODVILLE ROCKHILL, Peking, China. 1880.

Prof. JAMES HARDY ROPES (Harvard University), 13ollen St., Cam-
bridge, Mass. 1893.

WILLIAM ROSENAU, Johns Hopkins Univ., Baltimore, Md. 1897.

MISS ADELAIDE RUDOLPH, 18 Wilbur St., Cleveland, O. 1894.

MRS. JANET E. RUUTZ-REES, Rosemary Cottage, Greenwich, Conn. 1897.

MISS CATHERINE B. RUNKLE, 15 Everett St., Cambridge, Mass. 1900.

ARTHUR W. RYDER (University of California), 2337 Telegraph Ave.,

Berkeley, Cal. 1902.

MRS. EDW. E. SALISBURY, 237 Church St., New Haven, Conn. 1906.

REV. DR. FRANK K. SANDERS, 22 Rockview St., Jamaica Plain, Mass.
1897.

JOHANN F. SCHELTEMA, care of Messrs. Kerkhoven & Co., 115 Heeren-
graacht, Amsterdam, Holland. 1906.

DR. H. ERNEST SCHMID, White Plains, N. Y. 1866.

Prof. NATHANIEL SCHMIDT, Cornell University, Ithaca, N. Y. 1894.

MONTGOMERY SCHUTLER, JR., First Secretary of the American Embassy,
St. Petersburg, Russia. 1899.

GILBERT CAMPBELL SCOGGIN, 67 Kirkland St., Cambridge, Mass. 1906.

†MRS. SAMUEL BRYAN SCOTT, (née Morris), 124 Highland Ave, Chestnut

REV. WILLIAM G. SEIPLE, 78 Higaishi Sambancho, Sendai, Japan. 1902.

J. HERBERT SENTER, 10 Avon St., Portland, Me. 1870.

Prof. CHARLES N. SHEPARD (General Theological Seminary), 9 Chelsea
Square, New York, N. Y. 1907.

CHARLES C. SHERMAN, 65 Irving Place, New York, N. Y. 1904.

†The Very Rev. JOHN R. SLOTTBEY, 261 Central Park West, New York,
N. Y. 1903.

Captain C. C. SMITH, Presidio of San Francisco, Cal. 1907.

Prof. HENRY PRESERVED SMITH, Theological School, Meadville, Pa. 1877.

JOHN M. P. SMITH, University of Chicago, Ill. 1906.

EDWARD H. SPEEKER, Johns Hopkins Univ., Baltimore, Md. 1884.

Prof. HANS H. SPRUEZ, Ph.D., Jerusalem, Syria. 1899.

Prof. CHARLES C. STEARNS, Pomona College, Claremont, Cal. 1899.

REV. JAMES D. STEELE, 15 Grove Terrace, Passaic, N. J. 1902.

1907.
List of Members.

Rev. Anson Phelps Stokes, Jr., Yale University, New Haven, Conn. 1900.
Prof. George Sverdrup, Jr., Augsburg Seminary, Minneapolis, Minn. 1907.
Henry Osborn Taylor, Century Association, 7 West 43d St., New York, N.Y. 1899.
Prof. William C. Thayer, Lehigh University, Bethlehem, Pa. 1907.
Eben Francis Thompson, 311 Main St., Worcester, Mass. 1906.
Rev. Dr. J. J. Tierney, Mount St. Mary's College, Emmitsburg, Md. 1901.
Prof. Henry A. Todd (Columbia University), 824 West End Ave., New York, N.Y. 1885.
Olaf A. Toftte, 1113 Washington Blvd., Chicago, Ill. 1906.
†Prof. Charles C. Torrey (Yale University), 67 Mansfield St., New Haven, Conn. 1891.
Prof. Crawford H. Toy (Harvard University), 7 Lowell St., Cambridge, Mass. 1871.
Addison Van Name (Yale Univ.), 121 High St., New Haven, Conn. 1863.
Rev. Dr. William Hayes Ward, 130 Fulton St., New York, N.Y. 1869.
Miss Cornelia Warren, Cedar Hill, Waltham, Mass. 1894.
Prof. William F. Warren (Boston Univ.), 131 Davis Ave., Brookline, Mass. 1877.
Rev. W. Scott Watson, West New York, New Jersey. 1893.
Pres. Benjamin Ide Wheeler, University of California, Berkeley, Cal. 1885.
Prof. John Williams White (Harvard Univ.), 18 Concord Ave., Cambridge, Mass. 1877.
Miss Maria Whitney, 2 Divinity Ave., Cambridge, Mass. 1897.
Mrs. William Dwight Whitney, 227 Church St., New Haven, Conn. 1897.
Prof. Frederick Wells Williams (Yale Univ.), 135 Whitney Ave., New Haven, Conn. 1895.
Rev. Dr. William Copley Winslow, 525 Beacon St., Boston, Mass. 1885.
III. MEMBERS OF THE SECTION FOR THE HISTORICAL STUDY OF RELIGIONS.

Rev. Dr. Samuel H. Bishop, 500 West 122d St., New York, N. Y. 1898.
Samuel Dickson, 901 Clinton St., Philadelphia, Pa. 1899.
Prof. Patterson Du Bois, 401 South 40th St., Philadelphia, Pa. 1907.
Prof. Arthur L. Gillett, Hartford Theological Seminary, Hartford, Conn. 1898.
Charles B. Gulick (Harvard University), 18 Walker St., Cambridge, Mass. 1899.
Prof. George T. Ladd (Yale Univ.), 204 Prospect St., New Haven, Conn. 1898.
M. A. Lane, 451 Jackson Blvd., Chicago, Ill. 1907.
Rev. Dr. Minot J. Savage, 34th St. and Park Ave., New York, N. Y. 1898.
Prof. Edwin R. Seligman (Columbia Univ.), 324 West 86th St., New York, N. Y. 1898.
Prof. William G. Sumner (Yale Univ.), 240 Edwards St., New Haven, Conn. 1898.
Prof. Charles Mellen Tyler, Cornell University, Ithaca, N. Y. 1904.
Prof. R. M. Wenley, University of Michigan, Ann Arbor, Mich. 1898.
Rev. G. E. White, Anatolia College, Marsovan, Turkey [papers to German Consulate (White), Samsoun, Turkey.] 1908.

Number of Members of all Classes, 312.

Societies, Libraries, to which the Publications of the American Oriental Society are sent by way of gift or exchange.

1. AMERICA.

Boston, Mass.: American Academy of Arts and Sciences.
Chicago, Ill.: Field Museum of Natural History.
NEW YORK: American Geographical Society.
PHILADELPHIA, PA.: American Philosophical Society.
    Free Museum of Science and Art, Univ. of Penna.
WASHINGTON, D. C.: Smithsonian Institution.
    Bureau of American Ethnology.
WORCESTER, MASS.: American Antiquarian Society.

II. EUROPE.

AUSTRIA, VIENNA: Kaiserliche Akademie der Wissenschaften.
    Anthropologische Gesellschaft.

PRAGUE: Königlich Böhmische Gesellschaft der Wissenschaften.

DENMARK, ICELAND, REYKJAVIK: University Library.

FRANCE, PARIS: Société Asiatique. (Rue de Seine, Palais de l'Institut.)
    Bibliothèque Nationale.
    Musée Guimet. (Avenue du Trocadéro.)
    Académie des Inscriptions et Belles-Lettres.
    École des Langues Orientales Vivantes. (Rue de Lille, 2.)

GERMANY, BERLIN: Königlich Preussische Akademie der Wissenschaften.
    Königliche Bibliothek.
    Seminar für Orientalsche Sprachen. (Am Zeughaus 1.)

GÖTTINGEN: Königliche Gesellschaft der Wissenschaften.

    (Friedrichstr. 50.)

LEIPZIG: Königlich Sächsische Gesellschaft der Wissenschaften.
    Leipziger Semitistische Studien. (J. C. Hinrichs.)

MUNICH: Königlich Bayerische Akademie der Wissenschaften.
    Königliche Hof- und Staatsbibliothek.

TÜBINGEN: Library of the University.

GREAT BRITAIN, LONDON: Royal Asiatic Society of Great Britain and Ireland.
    (22 Albemarle St., W.)
    Library of the India Office. (Whitehall, SW.)
    Society of Biblical Archaeology. (37 Great Russell St., Bloomsbury, W.C.)
    Philological Society. (Care of Dr. F. J. Furnival, 3 St. George's Square, Primrose Hill, NW.)

ITALY, FLORENCE: Società Asiatica Italiana.

ROME: Reale Accademia dei Lincei.

NETHERLANDS, AMSTERDAM: Koninklijke Akademie van Wetenschappen.

LEYDEN: Curatorium of the University.

RUSSIA, HELSINKI: Société Finno-Ougrienne.

ST. PETERSBURG: Imperatorskaja Akademija Nauk.
    Archeologiji Institut.

SWEDEN, UPPSALA: Humanistiska Vetenskaps-Samfundet.
III. ASIA.

CALCUTTA, GOV'T OF INDIA: Home Department.
CEYLON, COLOMBO: Ceylon Branch of the Royal Asiatic Society.
CHINA, SHANGHAI: China Branch of the Royal Asiatic Society.
TONKIN: l'École Française d'extrême Orient (Rue de Coton), Hanoi.
INDIA, BOMBAY: Bombay Branch of the Royal Asiatic Society.
   The Anthropological Society. (Town Hall.)
CALCUTTA: The Asiatic Society of Bengal. (57 Park St.)
   The Buddhist Text Society. (86 Jauu Bazar St.)
LAHORE: Library of the Oriental College.
SIMLA: Office of the Director General of Archaeology. (Bermore, Simla, Punjab.)
JAPAN, TOKYO: The Asiatic Society of Japan.
JAVA, BATAVIA: Bataviaasch Genootschap van Kunsten en Wetenschappen.
KOREA: Branch of Royal Asiatic Society, Seoul, Korea.
NEW ZEALAND: The Polynesian Society, New Plymouth.
PHILIPPINE ISLANDS: The Ethnological Survey, Manila.
SYRIA: The American School (care U. S. Consul, Jerusalem).
   Revue Biblique, care of M. J. Lagrange, Jerusalem.
   Al-Machriq, Université St. Joseph, Beirut, Syria.

IV. AFRICA.

EGYPT, CAIRO: The Khedivial Library.

V. EDITORS OF THE FOLLOWING PERIODICALS.

The Indian Antiquary (Education Society's Press, Bombay, India).
Wiener Zeitschrift für die Kunde des Morgenlandes (care of Alfred Hölder, Rothenthurm-str. 15, Vienna, Austria).
Zeitschrift für vergleichende Sprachforschung (care of Prof. E. Kuhn, 3 Hess Str., Munich, Bavaria).
Zeitschrift für die alttestamentliche Wissenschaft (care of Prof. D. Karl Marti, Marienstr. 25, Bern, Switzerland).
Beiträge zur Assyriologie und semitischen Sprachwissenschaft. (J. C. Hinrichs'sche Buchhandlung, Leipzig, Germany).
Oriental Bibliography (care of Prof. Lucian Scherman, 18 Ungerer Str., Munich, Bavaria).
The American Antiquarian and Oriental Journal, 438 East 57th St., Chicago, Ill.
American Journal of Archaeology, 65 Sparks St., Cambridge, Mass.
Transactions of the American Philological Association (care of Prof. F. G. Moore, Hanover, N. H.).
Le Monde Oriental (care of Prof. K. F. Johansson, Upsala, Sweden).

RECIPIENTS: 312 (Members) + 70 (Gifts and Exchanges) = 382.
REQUEST.

The Editors request the Librarians of any Institution or Libraries, not mentioned above, to which this Journal may regularly come, to notify them of the fact. It is the intention of the Editors to print a list, as complete as may be, of regular subscribers for the Journal or of recipients thereof. The following is the beginning of such a list.

Andover Theological Seminary.
Boston Public Library.
Brown University Library.
Chicago University Library.
Columbia University Library.
Cornell University Library.
Harvard Sanskrit Class-Room Library.
Harvard Semitic Class-Room Library.
Harvard University Library.
Nebraska University Library.
New York Public Library.
Yale University Library.
CONSTITUTION AND BY-LAWS

OF THE

AMERICAN ORIENTAL SOCIETY.

With Amendments of April, 1897.

CONSTITUTION.

ARTICLE I. This Society shall be called the AMERICAN ORIENTAL SOCIETY.

ARTICLE II. The objects contemplated by this Society shall be:—
1. The cultivation of learning in the Asiatic, African, and Polynesian languages, as well as the encouragement of researches of any sort by which the knowledge of the East may be promoted.
2. The cultivation of a taste for oriental studies in this country.
3. The publication of memoirs, translations, vocabularies, and other communications, presented to the Society, which may be valuable with reference to the before-mentioned objects.
4. The collection of a library and cabinet.

ARTICLE III. The members of this Society shall be distinguished as corporate and honorary.

ARTICLE IV. All candidates for membership must be proposed by the Directors, at some stated meeting of the Society, and no person shall be elected a member of either class without receiving the votes of as many as three-fourths of all the members present at the meeting.

ARTICLE V. The government of the Society shall consist of a President, three Vice Presidents, a Corresponding Secretary, a Recording Secretary, a Secretary of the Section for the Historical Study of Religions, a Treasurer, a Librarian, and seven Directors, who shall be annually elected by ballot, at the annual meeting.

ARTICLE VI. The President and Vice Presidents shall perform the customary duties of such officers, and shall be ex-officio members of the Board of Directors.

ARTICLE VII. The Secretaries, Treasurer, and Librarian shall be ex-officio members of the Board of Directors, and shall perform their respective duties under the superintendence of said Board.

ARTICLE VIII. It shall be the duty of the Board of Directors to regulate the financial concerns of the Society, to superintend its publications, to carry into effect the resolutions and orders of the Society, and to exercise a general supervision over its affairs. Five Directors at any regular meeting shall be a quorum for doing business.

ARTICLE IX. An Annual meeting of the Society shall be held during Easter week; the days and place of the meeting to be determined by the Directors, said meeting to be held in Massachusetts at least once in three
years. One or more other meetings, at the discretion of the Directors, may also be held each year at such place and time as the Directors shall determine.

ARTICLE X. There shall be a special Section of the Society, devoted to the historical study of religions, to which section others than members of the American Oriental Society may be elected in the same manner as is prescribed in Article IV.

ARTICLE XI. This Constitution may be amended, on a recommendation of the Directors, by a vote of three-fourths of the members present at an annual meeting.

BY-LAWS.

I. The Corresponding Secretary shall conduct the correspondence of the Society, and it shall be his duty to keep, in a book provided for the purpose, a copy of his letters; and he shall notify the meetings in such manner as the President or the Board of Directors shall direct.

II. The Recording Secretary shall keep a record of the proceedings of the Society in a book provided for the purpose.

III. a. The Treasurer shall have charge of the funds of the Society; and his investments, deposits, and payments shall be made under the superintendence of the Board of Directors. At each annual meeting he shall report the state of the finances, with a brief summary of the receipts and payments of the previous year.

III. b. After December 31, 1896, the fiscal year of the Society shall correspond with the calendar year.

III. c. At each annual business meeting in Easter week, the President shall appoint an auditing committee of two men—preferably men residing in or near the town where the Treasurer lives—to examine the Treasurer's accounts and vouchers, and to inspect the evidences of the Society's property, and to see that the funds called for by his balances are in his hands. The Committee shall perform this duty as soon as possible after the New Year's day succeeding their appointment, and shall report their findings to the Society at the next annual business meeting thereafter. If these findings are satisfactory, the Treasurer shall receive his acquittance by a certificate to that effect, which shall be recorded in the Treasurer's book, and published in the Proceedings.

IV. The Librarian shall keep a catalogue of all books belonging to the Society, with the names of the donors, if they are presented, and shall at each annual meeting make a report of the accessions to the library during the previous year, and shall be farther guided in the discharge of his duties by such rules as the Directors shall prescribe.

V. All papers read before the Society, and all manuscripts deposited by authors for publication, or for other purposes, shall be at the disposal of the Board of Directors, unless notice to the contrary is given to the Editors at the time of presentation.

VI. Each corporate member shall pay into the treasury of the Society an annual assessment of five dollars; but a donation at any one time of seventy-five dollars shall exempt from obligation to make this payment.
VII. Corporate and Honorary members shall be entitled to a copy of all the publications of the Society issued during their membership, and shall also have the privilege of taking a copy of those previously published, so far as the Society can supply them, at half the ordinary selling price.

VIII. Candidates for membership who have been elected by the Society shall qualify as members by payment of the first annual assessment within one month from the time when notice of such election is mailed to them. A failure so to qualify shall be construed as a refusal to become a member. If any corporate member shall for two years fail to pay his assessments, his name may, at the discretion of the Directors, be dropped from the list of members of the Society.

IX. Members of the Section for the Historical Study of Religions shall pay into the treasury of the Society an annual assessment of two dollars; and they shall be entitled to a copy of all printed papers which fall within the scope of the Section.

X. Six members shall form a quorum for doing business, and three to adjourn.

SUPPLEMENTARY BY-LAWS.

I. FOR THE LIBRARY.

1. The Library shall be accessible for consultation to all members of the Society, at such times as the Library of Yale College, with which it is deposited, shall be open for a similar purpose; further, to such persons as shall receive the permission of the Librarian, or of the Librarian or Assistant Librarian of Yale College.

2. Any member shall be allowed to draw books from the Library upon the following conditions: he shall give his receipt for them to the Librarian, pledging himself to make good any detriment the Library may suffer from their loss or injury, the amount of said detriment to be determined by the Librarian, with the assistance of the President, or of a Vice President; and he shall return them within a time not exceeding three months from that of their reception, unless by special agreement with the Librarian this term shall be extended.

3. Persons not members may also, on special grounds, and at the discretion of the Librarian, be allowed to take and use the Society's books, upon depositing with the Librarian a sufficient security that they shall be duly returned in good condition, or their loss or damage fully compensated.
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For any of the above, address the Librarian of the Society, Professor Hanns Oertel, New Haven, Connecticut. Members can have the series at half price. To public libraries or those of educational institutions, Vol. I. No. 1 and Vols. II. to V. will be given free, and the rest sold at a discount of twenty per cent.
NOTICES.

TO CONTRIBUTORS.

Fifty copies of each article published in this Journal will be forwarded to the author. A larger number will be furnished at cost.

Arabic, Persian, Syriac, (Jacobite and Nestorian), Armenian, Coptic, Ethiopic, Sanskrit, Tamil, Chinese, and Japanese fonts of types are provided for the printing of the Journal, and others will be procured from time to time, as they are needed.

GENERAL NOTICES.

1. Members are requested to give immediate notice of changes of address to the Treasurer, Prof. Frederick Wells Williams, 135 Whitney avenue, New Haven, Conn.

2. It is urgently requested that gifts and exchanges intended for the Library of the Society be addressed as follows: The Library of the American Oriental Society, Yale University, New Haven, Connecticut, U. S. America.

3. For information regarding the sale of the Society's publications, see the next foregoing page.

4. Communications for the Journal should be sent to Prof. E. Washburn Hopkins or Prof. Charles C. Torrey, New Haven.

CONCERNING MEMBERSHIP.

It is not necessary for any one to be a professed Orientalist in order to become a member of the Society. All persons—men or women—who are in sympathy with the objects of the Society and willing to further its work are invited to give it their help. This help may be rendered by the payment of the annual assessments, by gifts to its library, or by scientific contributions to its Journal, or in all of these ways. Persons desiring to become members are requested to apply to the Treasurer, whose address is given above. Members receive the Journal free. The annual assessment is $5. The fee for Life-Membership is $75.

Persons interested in the Historical Study of Religion may become members of the Section of the Society organized for this purpose. The annual assessment is $2; members receive copies of all publications of the Society which fall within the scope of the Section.