JOURNAL
OF THE
AMERICAN ORIENTAL SOCIETY.

EDITED BY
24544

JAMES RICHARD JEWETT, AND HANNS OERTEL
Professor in Harvard University, Cambridge, Mass.
Professor in Yale University, New Haven, Conn.

THIRTY-FIRST VOLUME

891.05
J.A.O.S.

THE AMERICAN ORIENTAL SOCIETY.
NEW HAVEN, CONNECTICUT, U.S.A.
MCMXI.
A copy of this volume, postage paid, may be obtained anywhere within the limits of the Universal Postal Union, by sending a Postal Money Order for six dollars, or its equivalent, to The American Oriental Society, New Haven, Connecticut, United States of America.
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**CENTRAL ARCHAEOLOGICAL LIBRARY, NEW DELHI.**

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ERRATA.

In vol. 30, p. 359, line 14, read “refuge” for “refuse”; p. 365, foot-note 1, line 4, read “Vasistha” for “Vasishtha”; p. 371, note 1, line 2, read “dvipas” for “dvipas”; p. 372, line 29, read “beside” for “besides”; and p. 372, line 33, read “Symplegades” for “simple edges.”
PROCEEDINGS

OF THE

AMERICAN ORIENTAL SOCIETY,

AT ITS

MEETING IN CAMBRIDGE, MASSACHUSETTS.

1911.

The annual meeting of the Society, being the one hundred twenty-third meeting, was held in Cambridge, Massachusetts, on Wednesday and Thursday of Easter week, April 19th and 20th.

The following members were present at one or more of the sessions:

Aitken,
Arnold,
Atkinson,
Barrett,
Bloomfield,
Carus,
Channing, Miss,
Clay,
Edgerton,
Ember,
Gellat,
Hans,
Haupt,
Hoyt, Miss,
Hussey, Miss
Jastrow,
Kailner,
Miss Kendrick,
Kent, R.G.
Kyle,

Lanman,
Lyon,
Moore, G. F.,
Moore, Mrs. G. F.
Muss-Arnolt,
Oertel,
Ogden, C. J.,
Ogden, Miss
Oliphant,
Orne,

Reisner,
Rudolph, Miss
Steele,
Toy,
Vanderburgh,
Ward, W.H.
Warren, W. F.,
Winslow,
Wood,

Total: 39.

The first session was held in the Phillips Brooks House, on Wednesday morning, beginning at eleven o'clock; the President, Professor Maurice Bloomfield, being in the chair.

The reading of the minutes of the meeting in Baltimore, March 31st-April 2nd, 1910, which had been already printed in the Journal (vol. 31, pp. i-ix), was dispensed with.

The Committee on Arrangements presented its report, through Professor Lyon, in the form of a printed programme. The succeeding sessions were appointed for Wednesday afternoon.
at half past two, Thursday morning at half past nine, and Thursday afternoon at half past two. It was announced that a luncheon would be given to the Society by its resident members at the Colonial Club on Wednesday at one o'clock, and that arrangements had been made for a subscription dinner at the same place on Thursday evening at seven o'clock. The Colonial Club extended its courtesies to the members of the Society during their meeting.

REPORT OF THE CORRESPONDING SECRETARY.

The report of the Corresponding Secretary, Professor A. V. Williams-Jackson, was presented by Dr. Haas as follows:

During the course of the year the Secretary has had pleasant correspondence not only with persons interested in Oriental matters who have inquired as to the aims and activities of the Society, but also with some fellow-members in more distant parts, such as Major C. C. Smith, in the Philippines, Dr. Edward P. Hume, of China, Dr. Justin E. Abbott, of Bombay, (who is now in this country), and with a number of colleagues in Europe. Letters of acceptance have been received from all those elected to membership at the last meeting.

Among the formal communications received may be mentioned invitations to participate in the International Congress of Orientalists, to be held at Athens in 1912, and in the Universal Races Congress, which will take place in London this July; a request for co-operation from the George Washington Memorial Association of America; and a letter from Professor Snouck Hurgronje, of Leiden, calling upon the members of the Society to aid in the publication of the Encyclopaedia of Islam. All of these communications have been duly acknowledged and laid before the Directors for consideration.

The Secretary has to record the loss of three members by death during the past year.

The Rev. Dr. Henry N. Coon, of New York, who was a member of the Society since 1875, died in April 1910, at an advanced age.

Mr. Thomas W. Kinoshita, who died at Shanghai in the autumn of 1910, was a recent accession to our number, having joined the Society in 1909. Although an architect by profession, he was an indefatigable student and had considerable knowledge of the classical Chinese literature. He was the author of many articles on Chinese subjects and made several happy poetical translations from the Odes of the Shih Ching.

Professor William G. Sewall, of Yale University, who died in April 1910, became a member of the Section for the Historical Study of Religions in the year 1898.

In closing this report, which will be presented during the absence of the Secretary on another journey to India and the East, he desires to express his appreciation of the willing co-operation of all concerned in the work and to add a hearty wish for the continued welfare of the Society.
REPORT OF THE TREASURER.

The annual report of the Treasurer, Professor F. W. Williams, was presented by the Recording Secretary, as follows:

Receipts and Disbursements by the Treasurer of the American Oriental Society for the year ending Dec. 31, 1910.

Receipts.

Balance from old account, Dec., 1909 .................................. $ 715.04
Dues (185) for 1910 .......................................................... 914.41
   (33) for other years ..................................................... 165.00
   (12) H. S. R. Section ................................................... 24.00
   $ 1,103.41
Sales of Journal ............................................................ 295.69
State National Bank Dividends .......................................... 127.93
   $ 2,242.07

Expenditures.

Printing Journal, Volume XXX ........................................... 1,102.38
Sundry printing and addressing .......................................... 65.87
Typewriter ........................................................................ 4.00
Editor's Honorarium .......................................................... 100.00
Treasurer, Postage ............................................................ 13.55
Subvention to Orientalische Bibliographie ......................... 95.33
Balance to new account ..................................................... 860.94
   $ 2,242.07

Statement.

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<td>Interest, Coheal Fund</td>
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<td>Cash in hand</td>
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The Treasurer in presenting his report for the year 1910 calls the attention of the members of the Society to a falling off in receipts from dues owing chiefly to an unusual number of delinquencies in paying the annual assessment. He takes occasion to remind them again that on failing to pay two years in succession they are dropped from the list of members unless good reason is given for a longer delay. The total receipts during the past year show a falling off ($1527.03 against $1813.37), leaving out the small sum of interest from the Savings Bank interest, which being left in the banks is removed from the Treasurer's debit and credit account and reported in the annual Statement. The cost of printing and mailing the Journal has been reduced from about $1800 to $1102.
REPORT OF THE AUDITING COMMITTEE.

The report of the Auditing Committee, Professors Torrey and Oertel, was presented by the Recording Secretary, as follows:

We hereby certify that we have examined the account book of the Treasurer of this Society and have found the same correct, and that the foregoing account is in conformity therewith. We have also compared the entries in the cash book with the vouchers and bank and pass books and have found all correct.

CHARLES C. TORREY, { Auditors.
HANNES OERTEL,

NEW HAVEN, Conn., April 10, 1911.

REPORT OF THE LIBRARIAN.

The Librarian, Professor Hanns Oertel, presented his report as follows:

By arrangement with the Librarian of Yale University the work of accessioning of new books was carried on during the past year by the regular staff of the University Library. In the same way the University Library took charge of the sales of the Journal, covering all necessary correspondence and the collecting of bills. For this service the Society paid a nominal charge.

The Library has received from Professor Jewett one hundred dollars, this being the amount of his honorarium as editor of the Journal and a further sum of one hundred dollars for defraying the expenses of the Library.

REPORT OF THE EDITORS.

The report of the Editors, Professors Oertel and Jewett, was presented by Professor Oertel, as follows:

From the financial point of view the printing of the Journal abroad has resulted in a decided saving (see the Treasurer’s Report). It has also been possible to use a greater variety of Oriental type without any appreciable increase of cost, and, in spite of the distance, the four parts of the Journal have appeared fairly punctually at the beginning of each quarter. But as it is manifestly impossible to allow authors more than two proofs, the editors would urge contributors to prepare their MS. carefully for the press, to make corrections as plainly as possible, and to avoid extensive alterations and additions. If additions are unavoidable, they should be added at the end of the article.

ELECTION OF MEMBERS.

The following persons, recommended by the Directors, were elected corporate members of the Society:
CORPORATE MEMBERS.

Rev. Mr. D. F. Bradley, Cleveland, O.
Professor R. E. Brimmow, Princeton, N. J.
Mrs. Francis W. Dickins, Washington, D. C.
Mr. E. A. Gellot, Ozone Park, L. I., N. Y.
Mr. W. S. Howell, New York, N. Y.
Mr. R. L. Kortkamp, Hillsboro, Ill.
Rev. Dr. E. S. Roussaniere, Boston, Mass.
Mr. R. H. Rucker, New York, N. Y.
Mr. E. R. Soane, Muhammedah, Persian Gulf.
Rev. Mr. H. B. Vanderbogart, Middletown, Conn.
Professor J. E. Wishart, Xenia, O.
Mr. R. Zimmermann, Berlin, Germany.

OFFICERS FOR 1910-1911.

The committee appointed in Baltimore to nominate officers for the ensuing year, consisting of Professors E. Washburn Hopkins, Christopher Johnston, and Barrett, reported through Professor Barrett.

The election of a Secretary for the Section for Religions was postponed to Friday morning.

The officers nominated by the committee were duly elected, as follows:

President—Professor George F. Moore, of Cambridge.
Vice-Presidents—Professor Paul Haupt, of Baltimore; Professor Robert F. Harper, of Chicago; Professor Charles C. Torrey, of New Haven.
Corresponding Secretary—Professor A. V. W. Jackson, of New York.
Recording Secretary—Dr. George C. O. Haas, of New York.
Treasurer—Professor Frederick Wells Williams, of New Haven.
Librarian—Professor Albert T. Clay, of New Haven.

Directors—The officers above named, and Professors Crawford H. Toy and Charles R. Lummus, of Cambridge; E. Washburn Hopkins and Hanna Oertel, of New Haven; Maurice Bloomfield, of Baltimore; George A. Barton, of Bryn Mawr; Dr. William Hayes Ward, of New York.

The President, Professor Maurice Bloomfield, of Johns Hopkins University, delivered the annual address on "The Religion of the Sikhs".

After the Presidential address the Society proceeded to the hearing of communications.

Professor Paul Haupt, of Johns Hopkins University, presented a communication on Some Difficult Passages in the Cu-neiform Account of the Deluge.

At one o'clock the Society took a recess until half past two.

SECOND SESSION.

At half past two o'clock the Society reassembled in the Phillips.
Brooks House, and the presentation of communications was resumed, as follows:

Miss S. F. Hoyt, of Baltimore: The Name of the Red Sea. Professor R. G. Kent, of the University of Pennsylvania: The Etymology of Syriac dastāhrā.
Dr. C. J. Ogden, of Columbia University: References to the Caspian Gates in Ammianus Marcellinus.
Miss E. S. Ogden, of Albany: A Conjectural Interpretation of Cuneiform Texts (v. 81. 7–27). — Remarks were made by Professors Jastrow and Bloomfield.
The Rev. Dr. F. A. Vanderburgh, of Columbia University: The Babylonian Legends published in Cuneiform Texts (xxv. 1–6).
Professor M. Jastrow, Jr.: The Chronology of Babylonia and Assyria. — Remarks were made by Mr. Kyle and by Professor Wiener.

At five o'clock the Society adjourned to Thursday morning, at half past nine.

THIRD SESSION.

The Society met at quarter before ten o'clock in the Phillips Brooks House, President Bloomfield presiding. The reading of communications was resumed as follows:

Dr. Edgerton, of Johns Hopkins University: Later history of the Sanskrit suffix ka. — Remarks by Professors Lanman and Bloomfield, and Dr. C. J. Ogden.

Dr. A. Ember, of Johns Hopkins University: Semito-Egyptian words. — Remarks by Professor Haupt, Mr. Kyle, and Professor Bloomfield.

Professor S. G. Oliphant, of Olivet College: The elliptic dual and the dual dvandva. — Remarks by Dr. Edgerton, Dr. C. J. Ogden, and Professor Bloomfield.

The President announced that a telephone message had just been received from Colonel Thomas Wentworth Higginson, one of the oldest members of the Society, sending his greetings to the Society and regretting that he was prevented by the inclemency of the weather from attending the sessions today. It was voted that the Society send its greetings to Colonel Higginson and express its regret that he was unable to be present. Professor Lanman was asked to communicate this vote to Colonel Higginson, and also to send a salutation from the Society to Professor W. W. Goodwin. Professor Lyon was requested to do the same to Professor C. H. Toy, who has been for forty years a member of the Society.
Mr. E. A. Gellot: Monosyllabism of the Semitic Languages. — Remarks by Professors Lyon, Haupt, Kent, and Bloomfield. Professor Paul Haupt, a Vice-President of the Society, took the chair.

Professor M. Bloomfield, of Johns Hopkins University: Final account of the work on Rig-Veda Repetitions. Miss S. F. Hoyt, of Baltimore: The Holy One in Psalm 16:10. — Remarks by Dr. Ember.

Dr. B. B. Charles, of Philadelphia: The autobiography of Ibn Sinā; presented by title by Professor Jastrow.

Dr. A. Ember, of Johns Hopkins University: The etymologies of Aramaic teḥēnā and Hebrew gāhar, ṣēlem, etc.

At one o'clock the Society took a recess until half past two o'clock.

FOURTH SESSION.

The Society met at a quarter before three o'clock in the lecture-room of the Semitic Museum, with Vice-President Haupt in the chair. A communication was presented by Miss S. F. Hoyt, of Baltimore: The etymology of religion.

At three o'clock President Bloomfield took the chair. Professor Oertel reported for the Directors that they had appointed the next annual meeting of the Society to be held in New York, on Tuesday, Wednesday, and Thursday of Easter week, April 9th, 10th, and 11th, 1912.

They had reappointed as Editors of the Journal, Professors Oertel and Jewett.

The Directors further recommended the adoption of the following resolutions concerning the Section for the Historical Study of Religions:

1. That the American Oriental Society emphasize more forcibly in the future the inclusion of the historical study of religions in its scope.

2. To discontinue the separate Section for the Historical Study of Religions.

3. To invite the members of the present Section for the Historical Study of Religions to become corporate members of the Society.

4. That one special session of the meeting be devoted to papers dealing with the historical study of religion in its widest scope (including primitive religions, European religions, etc.)

5. That the Constitution be amended by the omission of the words "Secretary of the Section for the Historical Study of Religions" in Article V, by the omission of Article X entire, and by the renumbering of Article XI as Article X; that the By-Laws be amended by the omission of Article IX and the renumbering of Article X as Article IX.
It was moved that the report be adopted, and that the proposed changes in the Constitution and By-Laws be made. This motion was carried, necine contradicente.

Professor Oertel moved a vote of thanks to the authorities of Harvard University, to the Governors of the Colonial Club, and to the Committee of Arrangements, Professors Lyon and Lanman.

On motion of Dr. Haas, the thanks of the Society were tendered to Professor Oertel for his services as Librarian.

The President, Professor Bloomfield, announced that he had appointed as a Committee on Arrangements for the next annual meeting Professors Gottsill and Jackson, and Dr. Haas, of Columbia University; as a Committee to nominate officers to be elected at the next annual meeting, Professors Lanman and Lyon, of Harvard University, and Dr. C. J. Ogden, of Columbia; as Auditors to audit the accounts of the Treasurer, Professors Torrey and Oertel, of Yale University.

Communications were presented as follows:

Dr. W. H. Ward, of New York: The Zadokite document.

Professor George Moore, of Harvard University: A hitherto unknown Jewish sect; Schechter, Documents of Jewish Sectaries I.

Professor D. G. Lyon, of Harvard University: Notes on a Canaanite cemetery.

Miss A. Rudolph, of Cleveland: The outlook for Oriental studies in Cleveland.

Professor W. F. Warren, of Boston University: Why does Plutarch describe the moon as bi-perforate?

At quarter after five o'clock the Society adjourned to meet in New York, on Tuesday, of Easter week, April 9th, 1912.

The following communications were read by title:

Rev. Dr. J. E. Abbott: The Fire Temple at Baku and its inscriptions.

Professor K. Asakawa, of Yale University: The parallels of the Frankish precaria and beneficium in the mediaeval history of Japan.

Professor G. A. Barton, of Bryn Mawr College:

(a) On the etymology of Ishtar;

(b) Notes on Babylonian and Assyrian systems of measures;

(c) Improvements in the renderings of the Blau monuments, the Scheil tablet, and the Hoffman tablet (J. A. O. S. 22, 118–128; 23, 21–28).

Dr. F. R. Blake, of Johns Hopkins University:

(a) The original meaning of the Semitic intransitive verbal forms;
(b) The Hebrew metheg.
(c) Relative clauses in Tagalog.
Rev. Mr. J. L. Chandler, of Madura, Southern India Hinduism as taught in Hindu Schools.
Dr. B. B. Charles, of Philadelphia: The autobiography of Ibn Sina.
Mr. C. E. Conant, of the University of Chicago: Monosyllabic roots in Pampanga.
Dr. A. Ember, of Johns Hopkins University:
(b) Scriptio plena of the Hebrew imperfect iqtol.
Professor E. W. Fay, of the University of Texas: Indo-Iranian word-studies.
Professor Paul Haupt, of Johns Hopkins University:
(b) The four Assyrian stems la'u;
(d) Biblical and Oriental articles in the new edition of the Encyclopaedia Britannica, and the Islamic Encyclopaedia.
Professor Margolis, of the Dropsie College: The Washington manuscript of Joshua.
Professor W. Max Müller, of the University of Pennsylvania General account of a papyrus collection recently acquired by the University of Pennsylvania Museum.
Professor J. D. Prince, of Columbia University: A divine lament (Cuneiform Texts, xv. 24, 25).
Mr. G. P. Quackenbos, of New York: An unedited Sanskrit poem of Mayura.
Rev. Dr. W. Rosenau, of Johns Hopkins University:
(a) The term ב illicit in the Talmud.
(b) The Talmudic proclitic רפ.
(c) Some Talmudic compounds.
Professor G. Svedrup, Jr., of Augsburg Seminary, Minneapolis: A letter from the Mahdi to General Gordon.
Dr. A. Yohannan, of Columbia University: Some references in Arab writers to the ancient city of Merv.
LIST OF MEMBERS.

The number placed after the address indicates the year of election.

I. HONORARY MEMBERS.

M. Auguste Barth, Membre de l'Institut, Paris, France. (Rue Garani-
rière, 10.) 1898.

Dr. Ramkrishna Gopal Bhadarkar, C. L. E., Dekkan Coll., Poona, India.
1887.

James Burges, I. L. D., 22 Seton Place, Edinburgh, Scotland. 1899.

Prof. Charles Clermont-Ganneau, 1 Avenue de l'Alma, Paris. 1900.

1907.

Prof. Berthold Delbrück, University of Jena, Germany. 1878.

Prof. Friedrich Delitzsch, University of Berlin, Germany. 1893.


Prof. Adolph Erman, Berlin-Steglitz-Dahlem, Germany, Peter-Lennést. 72.
1903.

Prof. Richard Garbe, University of Tübingen, Germany. (Bießinger
Str. 14.) 1902.

Prof. Karl F. Geldser, University of Marburg, Germany. 1905.

Prof. Ignaz Goldemberg, vii Holló-Utcza 4, Budapest, Hungary. 1906.

George A. Grieveson, C.I.E., D.Litt., L.C.S. (retired), Rathfarnham,
Camberley, Surrey, England. Corporate Member, 1899; Hon., 1905.

Prof. Ignazio Guidi, University of Rome, Italy. (Via Botteghe Oscure 24.)
1893.

Prof. Hermann Jacobi, University of Bonn, 59 Niebuhrstrasse, Bonn, Ger-
many, 1909.

Prof. Hendrik Kern, 45 Willem Barentz-Straat, Utrecht, Netherlands. 1893.

Prof. Alfred Ludwig, University of Prague, Bohemia. (Königliche Wein-
berge, Krameriusgasse 40.) 1896.

Prof. Gaston Marpeau, Collège de France, Paris, France. (Avenue de
l'Observatoire, 24.) 1895.

Prof. Eduard Meyer, University of Berlin, Germany. (Gross-Lichterfeid-
West, Mommsenstr. 7) 1908.

Prof. Theodor Nöldeke, University of Strassburg, Germany. (Kalbe-
gasse 16.) 1878.

Prof. Hermann Oldenberg, University of Göttingen, Germany. 1910.
(27/29 Nikolausberger Weg.)

Prof. Eduard Sachau, University of Berlin, Germany. (Wormserstr. 12, W.)
1887.
List of Members.

Emile Senart, Membre de l'Institut de France, 18 Rue François Ier, Paris, France. 1908.
Prof. Julius Wellhausen, University of Göttingen, Germany. (Weberstr. 16a.) 1902.
Prof. Ernst Windisch, University of Leipzig, Germany. (Universitätsstr. 15.) 1890.

II. CORPORATE MEMBERS.

Names marked with * are those of life members.

Rev. Dr. Justin Edwards Abbott, Irvington, N. Y. 1900.
Dr. Cyrus Adler, 2041 North Broad St., Philadelphia, Pa. 1884.
Miss May Alice Allen, Williamstown, Mass. 1906.
Prof. Kanichi Asakawa (Yale Univ.), 870 Elm St., New Haven, Conn. 1904.
Horn. Simon E. Baldwin, LL.D., 44 Wall St., New Haven, Conn. 1896.
Prof. LeRoy Cark Barnett, Trinity College, Hartford, Conn. 1903.
Prof. George A. Barton, Bryn Mawr College, Bryn Mawr, Pa. 1888.
Prof. I. W. Batten, 232 East 11th St., New York. 1894.
Prof. Harlan P. Beach (Yale Univ.), 348 Willow St., New Haven, Conn. 1898.
Prof. Willis J. Brecher, D.D., Theological Seminary, Auburn, N. Y. 1900.
Dr. Harold H. Breden, Princeton University, Princeton New Jersey. 1906.
Prof. George R. Berry, Colgate University, Hamilton, N. Y. 1907.
Prof. Julius A. Bewer (Union Theological Seminary), Broadway and 120th St., New York, N. Y. 1897.
Dr. William Sturgis Bissell, 60 Beacon St., Boston, Mass. 1894.
Prof. John Benney, Berkeley Divinity School, Middletown, Conn. 1887.
Rev. Dr. Samuel H. Bishop, 500 West 122d St., New York, N. Y. 1898.
Dr. George F. Black, N. Y. Public Library, Fifth Ave. and 42d St., New York, N. Y. 1907.
Dr. Frank Ringgold Blake, Windsor Hills, Baltimore, Md.
Rev. Philip Blanc, St. Johns Seminary, Brighton, Md. 1907.
Rev. Dr. David Blaustein, The New York School of Philanthropy, 105 East 22d St., New York, N. Y. 1894.
Dr. Frederick J. Biss, Protestant Syrian College, Beirut, Syria. 1898.
Francis B. Blodgett, General Theological Seminary, Chelsea Square, New York, N. Y. 1906.
Prof. Carl August Blomgren, Augustana College and Theol. Seminary, Rock Island, Ill. 1900.
Prof. Maurice Bloomfield, Johns Hopkins University, Baltimore, Md. 1881.
Dr. Alfred Boissier, Le Rivage près Chambéry, Switzerland. 1897.
List of Members.

Dr. George M. Bolling (Catholic Univ. of America), 1784 Corcoran St., Washington, D. C. 1896.


Rev. Dr. Dan Freeman Bradley, 2905 West 14th St., Cleveland, Ohio, 1911.

Prof. Renward Brandstetter, Reckenbühl 18, Villa Johannes, Lucerne, Switzerland. 1908.

Prof. James Henry Brockwell, University of Chicago, Chicago, Ill. 1891.

Prof. Chas. A. Briggs (Union Theological Sem.), Broadway and 120th St., New York, N. Y. 1879.

Prof. C. A. Brodie Brockwell, McGill University, Montreal, Canada. 1906.

Prof. Francis Brown (Union Theological Sem.), Broadway and 120th St., New York, N. Y. 1881.


Prof. Rudolph E. Brücknow (Princeton Univ.) 49 Library Place, Princeton, N. J. 1911.

Prof. Carl Darling Buck, University of Chicago, Chicago, Ill. 1892.

Hammond H. Buck, Division Sup't. of Schools, Alfonso, Cavite Provinces, Philippine Islands. 1908.


Prof. Howard Crosby Butler, Princeton University, Princeton, N. J. 1908.


Dr. Paul Carus, La Salle, Illinois. 1897.


Rev. John L. Chandler, Madura, Southern India. 1899.

Miss Eva Channing, Hemsway Chambers, Boston, Mass. 1883.

Dr. F. D. Chester, The Bristol, Boston, Mass. 1891.

Walter E. Clark, 37 Walker St., Cambridge, Mass. 1906.

Prof. Albert T. Clay (Yale Univ.) New Haven, Conn. 1907.

*Alexander Smith Cochran, Yonkers, N. Y. 1908.

*George Whitmore Colles, 62 Fort Greene Place, Brooklyn, N. Y. 1889.

Prof. Hermann Collee, Johns Hopkins University, Baltimore, Md. 1887.

Miss Elizabeth S. Colton, 23 Park St., Easthampton, Mass. 1896.

Prof. C. Everett Conant, Indiana University, Bloomington, Indiana. 1905.

William Merriam Crane, 16 East 37th St., New York, N. Y. 1902.


Dr. Harold S. Davidson, 1700 North Payson St., Baltimore, Md. 1908.

Prof. John D. Davis, Princeton Theological Seminary, Princeton, N. J. 1888.

Irving C. Demarest, 54 Essex St., Hackensack, N. J. 1909.

Prof. Alfred L. F. Denis, Madison, Wis. 1900.

James T. Dennis, University Club, Baltimore, Md. 1900.

Mrs. Frances W. Dickens, 2015 Columbia Road, Washington, D. C. 1911.


Dr. Harry Westbrook Dunigan, 5 Kilsyth Road, Brookline, Mass. 1894.

List of Members.

Dr. Franklin Edgerton, Johns Hopkins University, Baltimore, Md. 1910.
Mrs. William M. Elliott, 106 Ridgewood Road, Roland Park, Md. 1897.
Prof. Levi H. Elwell, Amherst College, 5 Lincoln Ave., Amherst, Mass. 1888.
Prof. Edwin Whittfield Fay (Univ. of Texas), 200 West 24th St., Austin, Texas. 1888.
Prof. Henry Ferguson, St. Paul’s School, Concord, N. H. 1876.
Dr. John C. Ferguson, 16 Love Lane, Shanghai, China. 1900.
*Lady Caroline Dr. Filippo Fitzgerald, 167 Via Urbana, Rome, Italy. 1886.
Rev. Theodore C. Foote, Rowland Park, Maryland. 1900.
Prof. Hugill E. W. Fosbrooke, 6 Acacia St., Cambridge, Mass. 1907.
Dr. Leo J. Frachtenberg, Hartley Hall, Columbia University, New York, N. Y. 1907.
Prof. Jas. Everett Frame (Union Theological Sem.), Broadway and 129th St., New York, N. Y. 1892.
Dr. Herbert Friedenwald, 355, 2nd Ave., New York, N. Y. 1909.
Prof. Israel Friedlaender (Jewish Theological Sem.), 61 Hamilton Place, New York, N. Y. 1904.
Robert Garrett, Continental Building, Baltimore, Md. 1903.
Miss Marie Gelbich, Prospect Terrace, Park Hill, Yonkers, N. Y. 1909.
Eugene A. Gellot, 1429 Chester Ave., Orange Park, L. I., N. Y. 1911.
Prof. Basil L. L. Gilmor (Jewish Theological Sem.), Johns Hopkins University, Baltimore, Md. 1858.
Prof. William Watson Goodwin (Harvard Univ.), 5 Folliot St., Cambridge, Mass. 1857.
Miss Florence A. Graft, 26 Maple Ave., Cambridge, Mass. 1906.
Prof. Enoch Grant (Smith College), Northampton, Mass. 1907.
Mrs. Ethel Watts Gushaw Grant, 81 West 81st St., New York, N. Y. 1904.
Dr. Louis H. Gray, 291 Woodside Ave., Newark, N. J. 1897.
Mrs. Louis H. Gray, 291 Woodside Ave., Newark, N. J. 1897.
Miss Lucie C. Graeme Grieve, 462 West 161st St., New York, N. Y. 1894.
Prof. Louis Grossman (Hebrew Union College), 2212 Park Ave., Cincinnati, O. 1890.
Rev. Dr. W. M. Groton, Dean of the Protestant Episcopal Divinity School, 5000 Woodlawn Ave., Philadelphia, Pa. 1907.
*Dr. George C. O. Harr, 254 West 136th St., New York, N. Y. 1903.
Miss Luise Harbinger, 1230 Amsterdam Ave., New York, N. Y. 1909.
Dr. Carl C. Hansen, Si Phya Road, Bangkok, Siam. 1902.
Paul V. Harper, 59th St. and Lexington Ave., Chicago, Ill. 1906.
List of Members.

Prof. Robert Francis Harper, University 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, Md. 1883.

Dr. Henry Harrison Haynes, 6 Ellery St., Cambridge, Mass. 1892.
Prof. Hermann V. Hilprecht, 807 Spruce St., Philadelphia, Pa. 1887.
Rev. Dr. William J. Hinke, 28 Court St., Auburn, N. Y. 1907.
Prof. Führich Hirth (Columbia Univ.), 501 West 113th St., New York, N. Y. 1903.

Prof. Charles T. Hock (Theological Sem.), 220 Liberty St., Bloomfield, N. J. 1903.
*Dr. A. F. Rudolf Hoernle, 8 Northmoor Road, Oxford, England. 1893.
Rev. Dr. Hugo W. Hoffmann, 306 Rodney St., Brooklyn, N. Y. 1899.
*Prof. E. Wailes Hopkins (Yale Univ.), 299 Lawrence St., New Haven, Conn. 1881.

Wilson S. Howell, 416 West 118th St., New York, N. Y. 1911.
Henry R. Howland, Natural Science Building, Buffalo, N. Y. 1907.
Miss Sarah Fenton Hoyt, 17 East 95th St., New York, N. Y. 1910.
Dr. Edward H. Humé, Changsha, Hunan, China. 1909.
Miss Annie K. Humphrey, 1114 14th St., Washington, D. C. 1873.
Miss Mary Ina Hussey, 4 Bryant St., Cambridge, Mass. 1901.
Prof. Henry Huxham (Catholic Univ. of America), 3406 Twelfth St., N. E. (Brookland), Washington, D. C. 1889.
Prof. A. V. Williams Jackson, Columbia University, New York, N. Y. 1885.

Prof. Morris Jastrow (Univ. of Pennsylvania), 248 South 23rd St., Philadelphia, Pa. 1888.
Prof. Christopher Johnston (Johns Hopkins Univ.), 21 West 20th St., Baltimore, Md. 1889.


Miss Eliza H. Kentick, 45 Humphreys Ave., Newton, Mass. 1896.
Prof. Charles Foster Kent (Yale Univ.), 406 Humphrey St., New Haven, Conn. 1890.
Prof. George L. Kittredge (Harvard Univ.), 9 Hilliard St., Cambridge, Mass. 1899.

Miss Lucile Kohn, 1138 Madison Ave., New York, N. Y. 1907.
Richard Lee Kortkamp, Hillsboro, Ill.
Rev. Dr. M. G. Kyle, 1132 Arrow St., Frankford, Philadelphia, Pa. 1909.
Prof. George T. Ladd (Yale Univ.), 204 Prospect St., New Haven, Conn. 1898.

M. A. Lane, 451 Jackson Boulevard, Chicago, Ill. 1907.
*Prof. Charles Rockwell Lanman (Harvard Univ.), 9 Farrar St., Cambridge, Mass. 1876.
List of Members.

Dr. Berthold Laufer, Field Museum of Natural History, Chicago, Ill. 1900.


Prof. Charles E. Little (Vanderbilt Univ.), 19 Linden Avenue, Nashville, Tenn. 1901.

Perceval Lowell, 53 State St., Boston, Mass. 1893.

Rev. Fernando Lugsheider, 88 Blochêr Street, New York, N. Y. 1908.

Dr. Albert Howe Lyttle, 153 South Cedar Ave., Oberlin, Ohio. 1909.


Albert Morton Lythgoe, Metropolitan Museum of Art, New York, N. Y. 1899.

Prof. Duncan B. Macdonald, Hartford Theological Seminary, Hartford, Conn. 1893.

William E. W. Mackinlay, 1st Lt., 11th U. S. Cavalry, Fort Ethan Allen, Vt. 1904.

Rev. Dr. Albert A. Madsen, 22 Court Street Ave., Newburgh, N. Y. 1906.

Prof. Herbert W. Magoun, 70 Kirkland St., Cambridge, Mass. 1887.

Prof. Max L. Margolis, 1319 Diamond St., Philadelphia, Pa. 1890.

Prof. Allan Marquand, Princeton University, Princeton, N. J. 1888.

Prof. Winfred Robert Martin, Hispanic Society of America, West 156th St., New York, N. Y. 1889.

Isaac G. Matthews (McMaster Univ.), 509 Brunswick Ave., Toronto, Canada. 1906.

C. 0. Sylvester Mason, 64 West 144th St., New York, N. Y. 1910.


Mrs. Helen L. Million (née Lovell), Hardin College, Mexico, Mo. 1892.

Prof. Lawrence H. Mills (Oxford Univ.), 218 Ifsley Road, Oxford, England. 1881.

Prof. J. A. Montgomery (P. E. Divinity School), 6806 Green St., Germantown, Pa. 1903.

Prof. George F. Moore (Harvard Univ.), 8 Divinity Ave., Cambridge, Mass. 1887.

Dr. Justin Hartley Moore, 549 Springsdale Ave., East Orange, N. J. 1904.

*Mrs. Mary H. Moore, 3 Divinity Ave., Cambridge, Mass. 1902.

Charles J. Morse, 1825 Ashbury Ave., Evanston, Ill. 1909.

Prof. Edward S. Morse, Salem, Mass. 1894.

Rev. Hans K. Moura, 316 Third St., Watertown, Wis. 1906.

Prof. W. Max Müller, 4908 Market St., Philadelphia, Pa. 1905.

Mrs. Albert H. Munsell, 65 Middlesex Road, Chestnut Hill, Mass. 1908.

Dr. William Muns-Annely, Public Library, Boston, Mass. 1887.


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Prof. Hanns Ortel (Yale Univ.), 2 Phelps Hall, New Haven, Conn. 1890.
Dr. Charles J. Ogden, 250 West 88th St., New York, N. Y. 1906.
Miss Ellen S. Ogden, St. Agnes School, Albany, N. Y. 1898.
Prof. Samuel G. Olyphant, Olivet College, Olivet, Mich. 1906.
Prof. Paul Oltramare (Univ. of Geneva), Ave. de Bosquet, Servette, Genève, Switzerland. 1904.
Dr. John Orne, 104 Ellery St., Cambridge, Mass., 1890.
Rev. Dr. Charles Ray Palmer, 592 Whitney Ave., New Haven, Conn., 1909.
Prof. Lewis B. Paton, Hartford Theological Seminary, Hartford, Conn., 1894.
Prof. Walter M. Patton, Wesleyan Theological College, Montreal, Canada, 1903.
Dr. Charles Peabody, 197 Brattle St., Cambridge, Mass., 1892.
Prof. Iman J. Penzo, 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 29th St., New York, N. Y. 1882.
Walter Petersen, Bethany College, Lindsborg, Kansas, 1909.
Prof. David Philipson (Hebrew Union College), 3947 Beechwood Ave., Rose Hill, Cincinnati, O. 1889.
Dr. William Popper, University of California, Berkeley, Cal. 1897.
Prof. Ira M. Price, University of Chicago, Chicago, Ill. 1887.
George Pats Quachmnen, 331 West 28th St., New York, N. Y. 1904.
Prof. George Andrew Rehnke, Harvard University, Cambridge, Mass. 1891.
Prof. Philip M. Rhinelander (Episcopal Theological Sem.), 26 Garden St., Cambridge, Mass., 1908.
J. Nelson Robertson, 294 Avenue Road, Toronto, Ont. 1902.
Prof. Fred Norrie Robinson (Harvard Univ.) Longfellow Park, Cambridge, Mass. 1900.
Rev. Dr. George Livingston Robinson (McCormick Theol. Sem.), 4 Chalmers Place, Chicago, Ill. 1892.
Hon. William Woodville Rockhill, American Embassy, Constantinople, Turkey. 1889.
Prof. James Hardy Rogers (Harvard Univ.), 13 Pollen St., Cambridge, Mass. 1883.
Dr. William Rosenau, Johns Hopkins University, Baltimore, Md. 1897.
Rev. Dr. Edward S. Roumanier, 56 Chestnut St., Boston, Mass. 1911.
Robert Hamilton Rocker, 27 Pine Street, New York, N. Y. 1911.
Miss Adelade Rudolph, 2996 East 100th St., Cleveland, O. 1894.
Mrs. Janet E. Ruetz-Rees, Roscrany Cottage, Greenwich, Conn. 1897.
List of Members:

Miss Catharine R. Runkle, 15 Everett St., Cambridge, Mass. 1900.
Mrs. Eow. E. Salsbury, 237 Church St., New Haven, Conn. 1906.
Prof. Frank K. Sanders, Washburn College, Topeka, Kan. 1897.
George V. Schick, Johns Hopkins University, Baltimore, Md. 1909.
Prof. Nathaniel Schmidt, Cornell University, Ithaca, N. Y. 1894.
Montgomery Schuyler, Jr., American Embassy, Tokyo, Japan. 1899.
Dr. Gilbert Campbell Scoomin, University of Missouri, Columbia, Mo. 1906.

Dr. Charles P. G. Scott, 1 Madison Ave., New York, N. Y. 1896.
Rev. Dr. William G. Seiple, 125 Techihiidai, Sendai, Japan. 1902.
J. Herbert Senter, 10 Avon St., Portland, Maine. 1870.

Prof. Charles N. Shepard (General Theological Sem.), 9 Chelsea Square, New York, N. Y. 1907.
*John R. Slattery, 14, rue Montaigue, Paris, France. 1903.
Major C. C. Smith, P. S., Manila, Philippine Islands. 1907.
Prof. Henry Preserved Smith, Theological School, Meadville, Pa. 1877.
Prof. John M. P. Smith, University of Chicago, Chicago, Ill. 1906.

Prof. Edward H. Spieker, Johns Hopkins University, Baltimore, Md. 1884.
Rev. Dr. James D. Steele, 15 Grove Terrace, Passaic, N. J. 1892.
Mrs. Sara Yonge Stevenson, 207 South 21st St., Philadelphia, Pa. 1907.
Rev. Allen Phelps Stokes, Jr., Yale University, New Haven, Conn. 1900.
Prof. George Svedrup, Jr., Augsburg Seminary, Minneapolis, Minn. 1907.
Esenk Francis Thompson, 311 Main St., Worcester, Mass. 1906.
Prof. Henry A. Todd (Columbia Univ.), 624 West End Ave., New York, N. Y. 1885.
Olaf A. Tovpen, 856 Washington Boulevard, Chicago, Ill. 1906.
*Prof. Charles C. Tower (Yale Univ.), 67 Mansfield St., New Haven, Conn. 1891.
Prof. Crawford H. Torrey (Harvard Univ.), 7 Lowell St., Cambridge, Mass. 1871.
Rev. Sydney N. Usher, St. Bartholomew's Church, 44th St., New York, N. Y. 1909.
Rev. Harvey Boardman Vanderhoft, Berkeley Divinity School, Middletown, Conn. 1911.
Rev. Dr. Frederick Augustus Vanderburg, 53 Washington Sq., New York, N. Y. 1908.
Addison Van Name (Yale Univ.), 121 High St., New Haven, Conn. 1883.
Rev. Dr. William Hayes Ward, 130 Fulton St., New York, N. Y. 1889.
Miss Cornelia Warren, Cedar Hill, Waltham, Mass. 1894.
Prof. William F. Warren (Boston Univ.), 131 Davis Ave., Brookline, Mass. 1877.
Prof. R. M. Wensley, University of Michigan, Ann Arbor, Mich. 1898.
Pres. Benjamin Ide Wheeler, University of California, Berkeley, Cal. 1885.
Prof. John Williams White (Harvard Univ.), 18 Concord Ave., Cambridge Mass. 1877.
*Miss Margaret Dwight Whitney, 227 Church St., New Haven, Conn. 1908.
Mrs. William Dwight Whitney, 227 Church St., New Haven, Conn. 1897.
Hon. E. T. Williams, U. S. Legation, Peking, China. 1901.
Prof. Frederick Wells Williams (Yale Univ.), 133 Whitney Ave., New Haven, Conn. 1895.
Dr. Talcott Williams ("The Press"), 916 Pine St., Philadelphia, Pa. 1884.
Rev. Dr. William Cooley Winslow, 525 Beacon St., Boston, Mass. 1885.
Rev. Dr. Stephen S. Wise, 23 West 90th St., New York, N. Y. 1894.
Prof. John E. Whitehead, Xenia, Ohio. 1911.
Dr. Louis B. Wolfenson, 1620 Madison St., Madison, Wis. 1904.
William W. Wood, Shirley Lane, Baltimore, Md. 1900.
Prof. James H. Woods (Harvard Univ.), 2 Chestnut St., Boston, Mass. 1900.
Dr. William H. Worrell, 53 Fremont Street, Hartford, Conn. 1910.
Rev. Dr. Abraham Yohanan, Columbia University, New York, N. Y. 1894.

(Total, 292.)
List of Members.

Societies, Editors, and Libraries, to which the Publications of the American Oriental Society are sent by way of gift, exchange, or purchase.

I. America.

Boston, Mass.: American Academy of Arts and Sciences.
Chicago, Ill.: Field Museum of Natural History.
Free Museum of Science and Art, Univ. of Penna.
Bureau of American Ethnology.

II. Europe.

Austria, Vienna: Kaiserliche Akademie der Wissenschaften.
(Josephsplatz 1.)
Anthropologische Gesellschaft.
Prague: Königlich Böhmische Gesellschaft der Wissenschaften.

Denmark, Iceland, Reykjavik: University Library.

Musée Guimet. (Avenue du Trocadéro.)
Académie des Inscriptions et Belles-Lettres.
École des Langues Orientales Vivantes. (Rue de l’Ille, 2.)

Germany, Berlin: Königlich Preussische Akademie der Wissenschaften.
Königliche Bibliothek.
Seminar für Orientalsche Sprachen. (Am Zoeghause 1.)

Darmstadt: Grossherzogliche Hofbibliothek.
Göttingen: Königliche Gesellschaft der Wissenschaften.
(Friedrichstrasse 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, S.W.)
Society of Biblical Archaeology. (37 Great Russell St., Bloomsbury, W.C.)
Philological Society. (Care of Dr. F. J. Furnivall, 3 St. George’s Square, Primrose Hill, N.W.)

Italy, Bologna: Reale Accademia delle Scienze dell’ Istituto di Bologna.
Florence: Società Asiatica Italiana.
Rome: Reale Accademia dei Lincei.
List of Members.

NETHERLANDS, AMSTERDAM: Koninklijke Akademie van Wetenschappen.
THE HAGUE: Koninklijk Instituut voor Taal, Land-, en Volkenkunde van Nederlandsch Indië.
LEIDEN: Curatorium of the University.
RUSSIA, HELSINKI: Société Finno-Ougrienne.
ST. PETERSBURG: Imperatorskaja Akademija Nauk, Archeologiji Institut.
SWEDEN, UPPSALA: Humanistiska Vetenskaps-Samfundet.

III. ASIA.

CHINA, SHANGHAI: China Branch of the Royal Asiatic Society.
TONKIN: l'Ecole Francaise 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 Jau Bazar St.)
Home Dept., Government of India.
LAHORE: Library of the Oriental College.
SIMLA: Office of the Director General of Archaeology. (Benmore, Simla, Punjab.)
CEYLON, COLOMBO: Ceylon Branch of the Royal Asiatic Society.
JAPAN, TOKYO: The Asiatic Society of Japan.
JAVA, BATAVIA: Bataviasch Genootschap van Kunsten en Wetenschappen.
KOREA: Korea Branch of the 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, Rothenburstr. 15, Vienna, Austria).
Zeitschrift für vergleichende Sprachforschung (care of Prof. E. Kuhn, 3 Hess Str., Munich, Bavaria).
Zeitschrift für die attestamentliche Wissenschaft (care of Prof. D. Karl Marti, Marienstr. 95, Bern, Switzerland).
Beiträge zur Assyriologie und semitischen Sprachwissenschaft. (J. C. Hinrichs’sche Buchhandlung, Leipzig, Germany.)
List of Members.

Orientalische Bibliographie (care of Prof. Lucian Scherman, 18 Ungererstr., 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, Columbia University, New York, N. Y.

Le Monde Oriental (care of Prof. K. F. Johansson, Upsala, Sweden).

Panini Office, Bhuvaneswari, Asram Allahabad Bahadurgany, India.

VI. LIBRARIES.

The Editors request the Librarians of any Institution or Libraries, not mentioned below, 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 Athenaeum, Boston, Mass.

Brown University Library.

Buffalo Society of Natural Science, Library Building, Buffalo, N. Y.

University of California Library, Berkeley, Cal.

Chicago University Library.

Columbia University Library.

Connemora Public Library, Madras, India.

Cornell University Library.

Harvard Sanskrit Class-Room Library.

Harvard Semitic Class-Room Library.

Harvard University Library.

Hebrew Union College, Cincinnati, O.

Johns Hopkins University Library, Baltimore, Md.

University of Michigan, Ann Arbor, Mich.

Minneapolis Athenaeum, Minneapolis, Minn.

Nebraska University Library.

New York Public Library.

Rochester Theological Seminary, Rochester, N. Y.

Yale University Library.

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CONSTITUTION AND BY-LAWS

OF THE

AMERICAN ORIENTAL SOCIETY.

With Amendments of April, 1897 and 1911.

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 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 day 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.** 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.

   **b.** After December 31, 1896, the fiscal year of the Society shall correspond with the calendar year.

   **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 further 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 assess-
ment 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. 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 com-
pensated.
Until further notice the

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2. To those who are not members of the Society the price of the current volume is six dollars, carriage to be paid by the purchaser.

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The Dates of the Philosophical Sūtras of the Brahmans.—

By HERMANN JACOBI, Professor in the University of Bonn, Germany.

Subject of the investigation.—Some of the Sūtras of the six orthodox philosophical Systems of the Brahmans refer to Buddhist doctrines and refute them. As we are now sufficiently acquainted with Buddhist philosophy and its history, we can attempt to make out the peculiar school of Buddhist philosophy which is referred to in a passage of a Sūtra, and thus to determine the date, or rather terminus a quo, of the Sūtra in question. Our inquiry will be chiefly concerned with the Sūnyavāda or philosophical nihilism, and with the Vijñānavāda or pure idealism. The former is the philosophy of the Mādhyamikas; the latter is that of the Yogācāras. It may be premised that both these systems admit the Kṣanikavāda or the theory of the momentariness of everything, so far at least as is consistent with their peculiar principles; to these I will now briefly advert. The Sūnyavāda maintains that all our ideas, if analysed, contain logical impossibilities or self-contradictions, and that therefore nothing real can underlie them; and that that upon which they are based is a nonentity or the void (sūnya, nirupākhyā). This system was established by Nāgārjuna, who flourished

1 Abbreviations: M.S. = Mīmāṃsā Sūtra; B.S. = Brahma Sūtra (Vedānta); V.D. = Vaiśeṣika Darśana; N.D. = Nyāya Darśana; Y.S. = Yoga Sūtra; S.S. = Sāṅkhya Sūtra.

2 The Sūnyavāda may be compared with the philosophy of Zeno, who by a similar method tried to refute the common opinion that there exist many things of a changing nature. Aristotle called Zeno ὀπαρῆς τῆς δῦνου; the same may be said of Nāgārjuna whose Mādhyamikasūtras set the example for the dialectical literature of the Hindus which reached its height in Śrīharṣa's Khaṇḍa-Khaṇḍa-Khādya. It deserves to be remarked that in this regard also the Vedāntin of Śaṅkara's school follows in the track of the Sūnyavādin.

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about the end of the second century A.D. The Vijnanavada contends that only consciousness or vijnana is real. There are two kinds of vijnana: 1. alaya-vijnana or consciousness proper, which lasts till the individual reaches Nirvana (alaya); and 2. pravrtti-vijnana or the thoughts of the same individual concerning objects. The latter is produced from alaya-vijnana. The Vijnanavada was established by Asanga and his younger brother Vasubandhu, who seem to have flourished during the latter part of the fifth century A.D. To this school belong Dignaga and Dharmakirti, the greatest Buddhist philosophers and writers on Logic (pramana). Dignaga attacked Vatsyayana’s Nyayabhasya, and was answered by the Uddyotakara (6th century A.D.) in the Nyayavarttika. Dharmakirti, who further developed Dignaga’s philosophy, appears to have flourished about the middle of the seventh century A.D.

It will be our task to examine closely the Buddhist doctrines controverted in the philosophical Sutras in order to decide whether they belong to the Snyavada or to the Vijnanavada. On the result of our inquiry will depend the presumable date of the Sutras in question. If they refer to the Vijnanavada, they must be later than the fifth century A.D.; if however this is not the case, and we can assign to them an acquaintance with the Snyavada only, they must date somewhere between 200 and 500 A.D.

Doubts about the conclusiveness of this argumentation.—Even if we should succeed in recognising the true origin of the controverted doctrines, still it might be doubted whether the few passages on which we must rely for proof, form a genuine part of the work in which they occur, or are a later addition. For the aphoristic style of the Sutras, the somewhat desultory way of treating subjects, and the loose connexion of the several parts (adhikaranas) in most of these works make the insertion of a few Sutras as easy as the detection of them is difficult. The text of the Sutras as we have them is at best that which the oldest Scholiast chose to comment upon, and it cannot be

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1 A contemporary of Nagarkarma was Aryadeva. A poem ascribed to him has been edited in JASR. 1888. As in that poem the zodiacal signs (rathas) and the weekdays (varahas) are mentioned, it can not be earlier than the third century A.D.

safely traced further back. The uncertainty occasioned by the nature of our texts is, however, in the present case partly remedied by the repeated allusions in one text to the same doctrines, or by the occurrence in two Sūtraworks of the same discussion with the same arguments. These facts make it probable that the topic in question was one which at that time a Sūtrakāra considered himself bound to discuss.

Another objection may be raised against our chronological argument. It may be said, and not without a considerable amount of plausibility, that even before Nāgārjuna had brought the Śūnyavāda into a system, similar opinions may already have been held by earlier Buddhist thinkers; and the same remark applies to the Vijñānavāda. Therefore, it may be argued, a reference to doctrines of the Śūnyavāda or Vijñānavāda, need not be posterior to the definite establishment of these systems. On the other hand, however, it is almost certain that a Sūtrakāra would not have thought it necessary to refute all opinions opposed to his own, but only such as had successfully passed the ordeal of public disputation. For only in that case would the doctrines themselves and the arguments pro and contra have been defined with that degree of precision which rendered their discussion in aphorisms possible to the author and intelligible to the student. Now when a philosopher succeeds in upholding his individual opinions against all opponents in public disputation, he is henceforth considered the founder of a new school or sect, and the author of its tenets. Therefore we may be sure that a discussion of Śūnyavāda or Vijñānavāda opinions in a Sūtra must be referred to the period after the definite establishment of those schools.

**Origin and development of the views here presented.**—I conceived the general ideas set forth above and began to work them out in the summer of 1909. My first impression, supported by the comments of Śaṅkara and Vācaspatimiśra and others, was that the Sūtras, especially B.S. and N.D., refer to the Vijñānavāda. On a closer examination, however, of the evidence, I became convinced that they really refer to the Śūnyavāda, and that the later commentators had brought in the Vijñānavāda because that system had in their time risen to paramount importance. I had nearly finished my article

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1 Compare my remarks on the Dhvanikāra in ZDMG. 56, 409f.
when Professor von Stcherbatskoi told me that he had treated the question about the age of the philosophical Sūtras in his work *Теорія познання и логіка по ученію позднійших Будд*истов, часть II, St. Petersburg, 1909, and had arrived at the conclusion that the Sūtras refer to the Viśṇuvaṛā. He kindly sent me an abstract in English of his arguments, which I subjoin for the benefit of those readers who, like the author of this paper, cannot read the Russian original.

In his work "Epistemology and Logic as taught by the later Buddhists" Mr. Stcherbatskoi maintains (p. 29) that the Sūtras of the chief philosophical systems in their present form do not belong to that high antiquity to which they commonly are assigned, nor to those half-mythical authors to whom tradition ascribes them. The philosophical systems themselves have been evolved at a much earlier period than that in which the Sūtras were written. The Sūtras in their present form must have been elaborated during the period subsequent to the formation of the Yogācāra school (Viśṇuvaṛā), and their authorship has been attributed to writers of a high antiquity in order to invest them with greater authority. In a previous paper (Notes de littérature bouddhique, Musée nouv. série, vol. vi, p. 144), Mr. Stcherbatskoi had already established, on the authority of the Tibetan historian Bouston, that the Viśṇuvaṛā system (Buddhist idealism), professed by a part of the Yogācāra school, was clearly formulated for the first time by Vasubandhu in his celebrated Five Prakaraṇas. As Vasubandhu could not have lived much earlier than the fifth century A.D., it follows that those philosophical Sūtras which refer to his doctrine, in order to refute it, cannot have been written at an earlier time.

It is well known that Buddhist idealism is mentioned, and that its tenets are refuted, in the Sūtras of Bādarāyaṇa and of Gotama. Thus B.S. ii. 2. 29 refutes the doctrine of the non-existence of external things. Again, ii. 2. 30 refutes the erroneous opinion of those who admit solely the existence of a series of mental impressions unsupported by external objects, and, arguing from the Buddhist's point of view, demonstrates that a series of mental impressions (internal cognitions) could not exist, unless there were external objects to produce the impression. Once more, B.S. ii. 2. 31 maintains, according to Śaṅkara's interpretation, that, inasmuch as, according to Buddhist doctrine, the stream of internal cognition consists of a series of separate moments, it cannot have actual existence on account of its momentariness.

It appears upon consideration of these Sūtras that their author is bent upon refuting the doctrine which proclaims 1. the unreality of the external world, and 2. the actuality of an internal consciousness which consists of a series of cognitional acts. Both these tenets are characteristic of Buddhist idealism which developed subsequently to the nihilistic doctrine of the Madhyamikas. The latter denied the reality of the internal consciousness as well as that of the external world.

In his commentary, Śaṅkara corroborates our opinion, inasmuch as
he avers that the above mentioned Sūtras refute the doctrine of those who maintain that the stream of our consciousness is an altogether internal process, existing only so far as it is connected with the mind. Now it is well known that the Vijnānavādins alone professed the doctrine that pramāya and pramāṇa and pramāṇaphala have existence only so far as they are connected with the mind (cf. p. 418 of vol. i of Thibault’s translation of B.S.; Ślokav. iv. 74 ff.; Nyāyabindu, i. 18, ii. 4). Sankara mentions likewise the scholastic argument against realism of which Dignāga made use at the opening of his work Ālamkanāparikṣā (cf. Tan-jour, mdc v. 95). This work, in which the main tenet of idealism (Vijnānavāda, otherwise termed Nirālamkanavāda) is proved, is one of the fundamental works of the school. The argument starts from the antinomic character of the ideas of the whole and of the parts, and states that the external object can be neither the whole, nor can it consist of atoms (indivisible partless things; cf. p. 419 in Thibault’s transl. of B.S.).

Further we find in the Nyāyasūtras a refutation of Buddhist idealism, namely in iv. 2.26—35. It is worthy of note that the Buddhist doctrine is referred to in the course of an argument upon the nature of atoms—thus as it were answering the considerations which we likewise find in the work of Dignāga in favor of the Nirālamkanavāda. The Nyāyasūtras maintain the indivisibility of atoms, and, while refuting the opposed opinions touching this point, they refer to the Buddhists, to the Madhyamikas (who denied the existence of atoms), and to the idealists (who admitted atoms to be a percept of the mind or an idea). In the Tātparya-ṭikā, p. 458, Vācaspatimīśra averts that the Sūtra, N.D. iv. 2.24 implies a refutation of the Madhyamika doctrine, while the Sūtras iv. 2.26—35 are directed against those who proclaim that all ideas of external things are false (ibid. p. 461). It is thus established by the testimony of Vācaspatimīśra and of Vātsyāyana (Nyāya-bhāṣya, p. 233, 6) that Sūtra iv. 2.26 is directed chiefly against the school of the Vijnānavādins.

Though the philosophical Sūtras of the remaining systems do not contain any clear reference to the Vijnānavadinus, yet it has been noted that some of the Sūtras display a remarkable knowledge of each other. To judge by the whole tone and drift of the philosophical Sūtras, they must be the production of one and the same literary epoch.

On the basis of what has been here said, it can be averred with a considerable degree of probability that the philosophical Sūtras of the chief systems belong approximatively to one and to same period, a comparatively late one, and can in no wise be attributed to those venerable authors to whom tradition ascribes them.

Improbability of this view.—As stated before, I too entertained at first the opinion expressed by Professor von Stecherbatskoi, but I was induced to give it up by reason of the following chronological considerations. As the Nyāyabhāṣya was criticised by Dignāga, its author Vātsyāyana (Pakṣilasvāmin) must be earlier than the latter, by at least ten or
twenty years, since it is not Vātsyāyana, but the Uddyotakara (Bhāradvāja) who answered Dignāga. He may therefore have flourished in the early part of the sixth century or still earlier. Now Vātsyāyana is not the immediate successor of Aksapāda Gautama, the author of the Sūtra; for, as Professor Windisch pointed out long ago, Vātsyāyana incorporated in his work, and commented upon them, sentences of the character of Vārttikas which apparently give in a condensed form the result of discussions carried on in the school of Gautama. Hence Gautama must have been separated by at least one generation from the Bhāṣyakara, and can therefore not be placed after the last quarter of the fifth century. Thus if we accept the latest possible date for the composition of the N.D., it would fall in a period when the Vijñānavāda could scarcely have been firmly established. The V.D. is probably as old as the N.D.; for V.D. iv. 1. 6 is twice quoted by Vātsyāyana, namely in his comment on N.D. iii. 1. 33 and 67, and V.D. iii. 1. 16 is quoted by him in his comment on N.D. ii. 2. 34, and the Uddyotakara quotes the V.D. several times simply as the Sūtra or Śāstra, and once calls its author Paramarśi, a title accorded only to ancient writers of the highest authority. We are therefore almost certain that two Sūtras at least, N.D. and V.D., preceded the origin of the Vijñānavāda, or rather its definite establishment: and the same assumption becomes probable with regard to some of the remaining Sūtras, because the composition of the Sūtras seems to be the work of one period

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1 This result is supported by collateral proofs. 1. When commenting on N.D. i. 1. 5, Vātsyāyana gives two different explanations of the terms pūrvavat, sāyvat, sāmānyato dyāvan, the names of the three subdivisions of inference, showing thereby that the meaning of these important terms had become doubtful at his time. 2. In his concluding verse, which however, is wanting in some MSS., Vātsyāyana calls Aksapāda a Rśi, which he would not have done, if he had not considered the Sūtrakara as an author of the remote past.

2 See Bodhis's Introducution (p. 23) in Tarkaśaṅkraha BSS., 1897.

3 At this point I may mention that Professor von Stecherbatakol, when passing through Bonn on his way to India in December 1909, told me that he had meanwhile studied the first pariccādha of Dignāga's Pramāṇavāsamañcaya, in the Tānjoj. Dignāga giving there his definition of pratyākṣa (perception) and refuting the opinions of the Mimamsa, Nyāya, Vaiśeṣika, and Sāṅkhya, quotes N.D. i. 1. 4 and several Sūtras of V.D. which treat of pratyākṣa.
rather than of many. In order to prove this assumption to be true, we must show, as stated above, that the Buddhist doctrines refuted in several Sūtras need not be interpreted as belonging to the Vijñānavāda, but that the discussion in the Sūtra becomes fully intelligible if understood as directed against the Śaṅkaraṇa.

**Difficulty of distinguishing both systems in our case.**—The point at issue is whether perception (pratyakṣa) is a means of true knowledge (pramāṇa) or not. The realistic view, strictly maintained by the Nyāya and Vaiśeṣika philosophies, is that by perception we become truly cognizant of real objects. The Śaṅkaraṇa, Nihilism or Illusionism, contends that no real objects underlie our perceptions, but that those imagined objects as well as our ideas themselves are intrinsically illusory, in other words, they are nonentities or a mere void. On the other hand, the Vijñānavāda declares that our ideas or mental acts (perception included) are the only reality, and that external objects (since they have no existence) are not really perceived and do not cause our ideas about them, but are produced, so far as our consciousness is concerned, by ideas existing independently of objects. It will thus be seen that both Vijñānavāda and Śaṅkaraṇa are at one as far as regards the unreality of external objects; and therefore a refutation of this theory may be directed against the one of these doctrines as well as the other. Commentators chose between them as suited their purpose. Thus Kumārila, commenting on a passage which will be dealt with later, makes the following remarks:¹

"(Among the Baudhās) the Yogācāras hold that 'Ideas' are without corresponding realities (in the external world), and those that hold the Madhyamika doctrine deny the reality of the Idea also. To both of these theories, however, the denial of the external object is common.² Because it is only after setting aside the reality of the object that they lay down the Saṃvid (falsity) of the 'Idea.' Therefore on account of this (denial of the reality of external objects) being common (to both), and on account of (the denial of the reality of the 'Idea') being based upon the aforesaid denial of the external

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¹ Ślokavārttika, translated by Gangānātha Ḫā, p. 130, 14—16 (Bibliotheca Indica).
² Similarly Śrīdhara ad Praśastipadabhāṣya p. 229 speaks of nirālambanaṁ viṣṇuṇam ivaḥ śahum Mahāyānikānum.
object,—the author of the Bhāṣya has undertaken to examine the reality and unreality of the external object." And accordingly Kumārila interprets his text in such a way as to make it serve as a basis for the refutation first of the Viśiṇavāda and then of the Śuṇya-vaṇḍa. He, as well as Śaṅkara and Vācaspatimīśra and later authors who wrote when the Viśiṇavāda had become the most famous Buddhist philosophy, felt of course bound to refute it; and if the text they commented upon still ignored the Viśiṇavāda and combated the Śuṇya-vaṇḍa only, they could introduce their refutation of the Viśiṇavāda by doing just a little violence to their text. That such was actually the case, is the thesis I want to prove.¹

Mentioning of the Viśiṇavāda in the Śaṅkhya Sūtra.—Before examining those texts which give rise to doubts regarding the particular school combated, I briefly advert to one which beyond doubt discusses the Viśiṇavāda doctrine. I refer to the Śaṅkhya Sūtra. In that work the principal doctrines of the four philosophical schools of the Buddhists are discussed: those of the Vaibhāṣikas i, 27—33, of the Saṅgrāntikas i, 34—41, of the Viśiṇavādins i, 42, and of the Śuṇya-vaṇḍins

¹ Remarks on the development of the Śuṇya-vaṇḍa.—Like Kumārila, other brahmanical philosophers treat the Śuṇya-vaṇḍa as the logical sequence of the Viśiṇavāda or as a generalization thereof; but the true or historical relation is just the reverse: the belief in the unreality of external things is a restriction of the previously obtaining and more general belief in the unreality or illusory nature of everything whatever, consciousness included. Buddhist Nihilism or Illusionism, introduced and supported by a splendid display of the novel dialectic art, seems to have deeply impressed and invaded the Hindu mind of that period. But realistic convictions or habits of thought could not be wholly eradicated; they entered into various kinds of compromise with Illusionism. The belief in the transcendent reality and oneness of Brahma as taught in the Upaniṣads admitted a combination with Illusionism in the Māyāvāda of the Vedāntins of Śaṅkara's school, nicknamed Pracchanna-bauḍdhās, who maintained that Brahma alone is real and that the phenomenal world is an illusion (see Sukhanekar, The teachings of Vedānta according to Rāmānuja in WZKM, vol. xii). On the other hand, the 'cogito ergo sum' proved irresistibly self-evident to many Mahāyānists also, and led them to acknowledge the reality of consciousness. These were the Viśiṇavādins or pure Idealists. But the great Logicians of this school seem to have further encroached on its principles; for Dharmakīrti, in this particular point also probably following Dignāga, declared the object of perception to be svakṣaṇa, i.e. the catena or series (saṅkīna) of kṣaṇas to be paramārtha, i.e. really existing.
i, 43—47. The Sûtra referring to the Vijñānavādins reads thus: *na vijñānamātram bāhyapratîteḥ*; 'Not Thought alone because of the conception of the external.' The next Sûtra (43): *tadabhâve tadabhāvāc chûnyam tarhi*. 'Since as the one does not exist, the other too does not, there is the void then' is according to Vijñānabhisãku a refutation of the Vijñānavāda, but according to Aniruddha the statement of the Śûnyavâda which is discussed in the following Sûtras. However this may be, there can be no doubt that here both the Vijñānavâda and the Śûnyavâda are discussed, in that sequence which (as stated in the last note) has become customary for later theoretical writers. Now it is admitted on all sides that the Sânkhya Sûtra is a very late, or rather a modern, production, and that it does not rank with the genuine philosophical Sûtras. Therefore the fact that the Sânkhya Sûtra mentions the Vijñānavâda does in no way prejudice any one in deciding the question whether the Sûtras of the other systems also were acquainted with it. Perhaps it might be said that the directness of reference to the Vijñānavâda in the Sânkhya Sûtra shows what we should expect to find in the other Sûtras if they did really know and refute that doctrine.

1. Nyâya.

I begin our inquiry with the examination of the passage N.D. iv. 2, 25ff., which, according to Vâcaspatimiśra, is directed against the Vijñānavâdins; for, as explained above, chronological considerations make it almost certain that our Sûtra was composed before the establishment of the Vijñānavâda, and therefore entitle us to doubt, in this matter, the authority of the author of the Tâtparya Tīkā. The subject treated in those Sûtras, namely, whether perception is a means of true knowledge, is connected with and comes at the end of a discussion of, other subjects which for the information of the reader must briefly be sketched. First comes the problem of the 'whole and its parts,' iv. 2, 4ff. The adherents of Nyâya (and Vaiśeṣika) maintain that the whole is something different (*arthântara*) from the parts in which it 'inheres,' an opinion which is strongly combated by other philosophers. Connected

*Aniruddha's Commentary, Garbe's translation, in BL., page 28.*
with this problem is the atomic theory, which is discussed in 14ff. After Sūtra 17, Vatsyāyana introduces an opponent, a denier of perception, who thinks that everything is non-existent (ānupalambhikāḥ sarvam nāstīti manyamānah). There can be no doubt that an adherent of the Sūnyāvāda is meant. He attacks the atomic theory, 18—24, and is refuted in 25 thus: "as your arguments would lead us to admit a regressus in infinitum (by acknowledging unlimited divisibility) and as a regressus in infinitum is inconsistent with sound reason, your objection is not valid (anavasthākāritvād anavasthānupapattet ca pratisedhāh). Vatsyāyana, after explaining this Sūtra, continues: (An opponent objects:) what you say with regard to notions (buddhi), that their objects are really existing things, (that cannot be proved). These notions are intrinsically erroneous (mithyābuddhayas); for if they were true notions, (tattvabuddhayas) they would, on being analysed by the understanding, teach us the true nature of their objects." The argument of this opponent is stated in Sūtra 26 which the above passage serves to introduce, and runs thus: "If we analyse things, we do not (arrive at) perceiving their true nature (or essentia); this not-perceiving is just as, when we take away the single threads (of a cloth), we do not perceive an existing thing (that is called) the cloth." Vatsyāyana explains: "(This is) just as on distinguishing the single threads (of a cloth): this is a thread, this is a thread, &c. &c., no different thing is perceived that should be the object of the notion cloth. Since we do not perceive the essentia, in the absence of its object, the notion of a cloth, that it exists, is an erroneous notion. And so everywhere." Sūtras 27 and 28 contain the counter-arguments, and Sūtra 29 adds to them the following: "And because by right perception (pramāṇatas, viz. upalabdhyā) we come to know things (whether and how they are)." Sūtra 30 gives a proof for this view: pramāṇānuṇaṁpattiyapattibhyāṁ. Vatsyāyana explains: 'Now then the proposition that nothing exists is against reason; why? (answer): pramāṇānuṇaṁpattiyapattibhyāṁ. If there is proof pramāṇa (in favour of the proposition) that nothing exists, (this proposition that) nothing exists, sublates the (existence of) proof as well. And if there is no proof for it, how can it be established that nothing exists? If it is regarded to be established without proof, why should (the contrary) that all things do exist, not be regarded as
established?" Here it is quite clear that the opponent whom Vātsyāyana refutes, is a Śūnyavādin just as in Sūtra 17. For there is no indication that Vātsyāyana in the mean time has changed front, and that the opponent in Sūtra 26 is not a Śūnyavādin, but a Vijnānavādin. The latter contends that external things do not exist (bāhyārthā na santi), while Vātsyāyana (on 27) makes his opponent uphold sarvabhāvānām yathā-
tmyānupadādhibh. Moreover, this opponent maintains that "notions about things are erroneous notions (mithyāuddhayas)," and this is primarily the view of the Śūnyavāda. The fundamental principle of the Vijnānavāda is that ideas only (vijñāna) are really existent, and not that they are erroneous ideas. That Vātsyāyana really has in view the opinions of the Śūnyavādins, may be seen from his concluding words in 36, "therefore erroneous notions too are really existing," and in 37, where he speaks of his opponent as one for whom "everything is without essence and unreal" (mirātmakam nirupākhyom sarvam). Nevertheless Vācaspatimiśra,1 commenting on Vātsyāyana’s words in Sūtra 25 translated above ("An opponent objects: what you say," &c.), remarks that the opponent is a Vijnānavādin. That he is mistaken, we have seen, and a general cause of such a mistake on the part of later commentators has been given above, p. 7. In the present case we can watch the gradual development of this misrepresentation. For in his comment on 26 the Uddyotakara again introduces the opponent’s argument that every part of a thing may be regarded as a (minor) whole consisting of minor parts, and that this analysis may be continued not only down to atoms but in infinitum till everything is dissolved into nothing. Now as Professor von Stcherbatsko informs us (see above p. 5), Dignāga in his work Ālambanaparikṣā makes the discussion of the problem of ‘the whole and its parts’ the basis of his exposition of the Vijnānavāda. Therefore the Uddyotakara, who answers Dignāga’s attacks on Vātsyāyana, avails himself of an opportunity to undermine the antagonist’s basis of argumentation. And Vācaspatimiśra, knowing what was the starting-point of Dignāga’s speculations, and seeing that it was exhaustively treated by the authors of the Sūtra and the Bhāṣya, was easily misled to believe that they were defend-

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1 Nyāyavrāttikatātparyāṅkā (viz. S. S.), p. 460, 3d line from below.
ing it against the Vijnānavāda. Being separated from them by 400 years or more, he was ignorant of their historical interrelation, and consequently interpreted the philosophical discussion in the text before him from a merely theoretical point of view. For, as indicated above, a rational refutation of the Śānyavāda was naturally divided into two parts, the first proving the reality of objects and the second the reality of ideas; and a theoretical construction could well treat the Śānyavāda as the logical outcome of the Vijnānavāda, and take the first part of the refutation of the Śānyavāda as directed against the Vijnānavāda.

We proceed in our analysis of the Sūtra. After the last passage translated above, we have another objection of the Illusionist in Sūtras 31 and 32. "Like the erroneous belief in the objects seen in a dream is this belief in the means of true knowledge and the things known through them erroneous," Vatsyāyana explains: "Just as in a dream the objects seen in it are not real, while there is belief in them, so the means of knowledge and the things known through them are also not real (na santi), though there is belief in either." Sūtra 32 completes this argument: "Or like magic, fata morgana, and mirage." As this argument serves to demonstrate that pramāṇa and prameya are an illusion, it is evident that the opponent is a Śānyavādin. The next Sūtra 33 answers his objection, in pointing out that 'he has established nothing, as he has given no reason' for declaring (1) that the belief in pramāṇa and prameya is like that in objects seen in a dream and not like the perception of objects in the waking state, (2) that in a dream non-existing things are perceived. This argument of the Sūtra is supplemented in the Bāṣya by another formulated in what looks like a Vārttika; it comes to this. If you say that things seen in a dream do not exist because they are no more seen in the waking state, you must admit that those seen in the waking state do exist; for the force of an argument is seen in the contrary case, viz. that things exist because they are seen. The Uddyotakara enlarging upon this argument unmistakably introduces Vijnānavāda views; for he speaks of things independent of the mind (cittavijayatirikā) and uses the term vijñāna; but there is no trace of all this in the Bāṣya. The Sūtra then goes on to explain the belief in things seen in a dream and other topics con-
nected with the subject in hand which, however, do not concern us here.

To sum up: our investigation has proved that neither the Śūtra nor the Bhāṣya refer to the Viśṇu-avāda, and that the whole discussion is perfectly intelligible if we consider it as meant to refute the Śūnyavāda.¹

2. Vedānta and Mīmāṁsā.

Brahma Śūtra, 2nd Adhyāya; 2nd Pāda, contains a discussion and refutation of other philosophical systems. The Śūtras 18—32 deal with Buddhist philosophy. Śūtras 18—27 deal with the doctrines of the Sarvāstivādins; and 28—32, according to Śaṅkara, with those of the Viśnunavāda. Rāmānuja agrees with Śaṅkara in so far as he also refers Śūtras 28—30 to the Viśnunavāda, but he differs from him in that he interprets the last Śūtra² as containing a refutation of the Śūnyavāda. For convenience of reference I subjoin the text of the Śūtras 28—32 and the translation of them by Thibaut according to Śaṅkara's and Rāmānuja's interpretation:

\[
\begin{align*}
nābhāva upalabdheḥ & 28 \\
vaidharmyāc ca na svamādiveṣa & 29 \\
na bhāvo 'nupalabdheḥ & 30 \\
ksaṇikatvāc ca & 31 \\
sarvadhānamapattēṣ ca & 32,
\end{align*}
\]

I. Śaṅkara's interpretation, SBE, vol. xxxiv, p. 418ff.:

The non-existence (of external things) cannot be maintained, on account of (our) consciousness (of them), 28.

And on account of their difference of nature (the ideas of the waking state) are not like those of a dream, 29.

The existence (of mental impressions) is not possible (on the Buddhist view) on account of the absence of perception (of external things), 30.

And on account of the momentariness (of the ālayavijñāna it cannot be the abode of mental impressions), 31.

And on account of its general deficiency in probability, 32.

¹ If the Śūtrakāra knew the Viśnunavāda, we should expect him to combat it in ii,1,8 ff., where pratyuṣṭādityām apramāṇyam is discussed. But in that place even Vācaspatimāra (p. 249) assigns this opinion to the Madhyamikas.

² He omits Śūtra 31 of Śaṅkara's text.
II. Rāmānuja's interpretation, SBE. xlviii, p. 511 ff.:

Not non-existence on account of consciousness, 27.¹

And on account of difference of nature (they are) not like dreams, 28.

The existence [of mere cognitions] is not on account of the absence of perception, 29.

[Here ends the adhikarana of perception.]

And on account of its being unproved in every way (viz. that the Nothing is the only Reality), 30.

Now it would be rather surprising if the Śūnyavāda had been ignored by the Brahma Sūtra as Śaṅkara in his treatment of the above Sūtras would make us believe; he says that Śūnyavāda is thoroughly irrational and may therefore be left out of account. But the Śūnyavādins were once formidable opponents, and it would have delighted an orthodox dialectician to expound their unreasonableess. Rāmānuja apparently was conscious of this deficiency and therefore introduced the refutation of the Śūnyavāda in the very last Sūtra. But this Sūtra contains only an argument, and if Rāmānuja be right, we search in vain in the preceding Sūtras for the statement, or even a hint, of the doctrine he wishes to refute. However this Sūtra reads like a finishing blow dealt to a vanquished opponent whose arguments the author had just been refuting. That this opponent was a Śūnyavādin becomes probable if we compare the Sūtras in question with those in N.D. which we have examined above and, which, as we have seen, refer to the Śūnyavāda only. For Sūtra 29: vaiddhuryac ca na swapnādi vrat, deals with the same argument which is stated in N.D. 31 f.: swapnābhūmānāvād ayam pramāṇaprameyābhīmānaḥ; māyāgandharvanagaramatraṣagātāmikāvavād vā. The ādi in swapnādi vrat means according to Śaṅkara māyādī, in other words the things fully enumerated in the second of the quoted Sūtras of N.D. As the argument in N.D. and B.S. is the same, it is almost certain that the same doctrine is discussed in both works, and as the doctrine refuted in N.D. is the Śūnyavāda, it is highly probable that it is meant in B.S. also. Though we have thus very weighty reasons for not trusting Śaṅkara, Rāmānuja, and all the later commentators in their inter-

¹ Rāmānuja's numbering here differs from that of Śaṅkara. In order to avoid confusion I shall refer to the latter only.
pretation of the passage under consideration, still the almost deliberately enigmatical character of the Sūtras would make it a hazardous task to explain them without the aid of tradition. Fortunately, however, the same philosophical problem aphoristically discussed in those Sūtras has been dealt with at considerable length by an other ancient author.

For Śabarasaśāmin, the Bhāsyakāra of the Mīmāṃsā Sūtra, after having commented on M.S. i, 1, 5 transcribes a long passage from the unknown Vṛtti, which begins in the edition of the Bibliotheca Indica on p. 7, line 7 from below, and ends on p. 18, line 6, as the editor remarks in a footnote p. 18.1 The whole passage is without doubt by the Vṛttikāra; it gives an explanation of Sūtras 3—5, and is introduced by Śabarasaśāmin at the end of his own comment on Sūtra 5. It is therefore a matter of no little surprise to find that Kumārila-bhaṭṭa in the Ślokavārttika (on Sūtra 5) assigns only the first part of this passage, viz. from p. 7, 1.7 from below, down to p. 8, 1.8 from below, to the Vṛttikāra; and accordingly his comment on this part only bears the title Vṛttikāragrantha in the edition of the Ślokavārttika in the Chowkhamba Sanskrit Series, p. 212, 216. Kumārila himself refers to the author of this part of the passage as the Vṛttikāra, ib., p. 136; but he refers to the author of the following part (which is actually the work of the same author) as Bhāsyakṛt, p. 221 (v. 16) and Bhāsyakāra, p. 224 (v. 29), i.e., Śabarasaśāmin. That part which Kumārila ascribes to the Vṛttikāra, contains the explanation of Sūtra 3 and part of Sūtra 4 only. If Kumārila were right, this passage should have been quoted by Śabarasaśāmin at the end of his comment on Sūtra 4, and not, where he actually introduces it, at the end of his comment on Sūtra 5. Kumārila does not notice nor attempt to account for the fact that Śabarasaśāmin, on his assumption, twice interprets part of Sūtra 4 and the Sūtra 5, once at the proper place, and then

1 Śabarasaśāmin introduces this passage by the following words: Vṛttikāra te anyathā 'nam grantham varṇasyaśāmākāra, tasya niḥśatturārthasātity evamādite. We first have a comment on Sūtra 3; the comment on Sūtra 4 commences p. 8, 1.2, that on the second part of Sūtra 4 (ummitum, &c.) on p. 12, 1.2 from below; on p. 11, 1.2 from below, begins the comment on Sūtra 5, and that on the last part of the same Sūtra on p. 17, 1.10 (anyatīrthak ca); or the mepalabhi, p. 17, last line; tat pramāṇam (Būdarāyanaśya) anupakṣatvāt, p. 18, l. 9.
again after what he contends to be the end of the quotation from the Vṛttikāra. And any lingering doubt that also the second part of the passage ending on p. 18, l. 6, is not by Śabaravāmin, is removed by the passage that comes after it. For there (p. 18, l. 7, 14, 16; p. 24, l. 9) he controverts and sets right some assertions in the preceding part which according to Kumārila is not by the Vṛttikāra. Whether Kumārila himself or some predecessor of his was the author of this error, we do not know; but we can well understand how it crept in. For Śabaravāmin, whose habit is not to make long quotations, apparently inserted this passage from the Vṛttikāra because it contains a discussion of peculiar Mīmāṃsaka doctrines, e.g., on the six pramānas, for which his succinct commentary on the Sūtras of Jaimini would not otherwise have offered an opportunity. In quoting and not criticising, those doctrines, he intimated his acceptance of them; and Kumārila therefore, misled by Śabaravāmin’s words Vṛttikāras tu anyathe ’nam grantham vannayāmecaḥkāra, ascribed to the Vṛttikāra only that part of his exposition where it obviously differs from Śabaravāmin’s comment, not the remaining part which chiefly contains the additional matter. This second part was so important for the Mīmāṃsaka philosophy, that Kumārila devoted to the discussion of its contents little less than half the volume of his Ślokavārttika. He had therefore a strong motive to ascribe this part of the quotation to Śabaravāmin on whose Bhāṣya he wrote his Vārtti. But from the fact that he did so, we may perhaps conclude that at his time, or earlier, the original work of the Vṛttikāra had been lost or at least had ceased to be studied at all; for otherwise he could not have committed or repeated this gross error.

Now the question arises as to who is the author of the Vṛtti from which the passage under consideration has been taken. Ganganātha Jhā in his admirable translation of the Ślokavārttika, p. 116, note (17) says with regard to this passage: “Kārikās 17—26 expound the view of the author of the Vṛtti (Bhavadāsa).” However, the name of Bhavadāsa is not given by Pārthasārathi commenting on the passage in question (printed text, p. 212—216); but on p. 11, commenting on v. 33, in which Kumārila adverts to a controverted opinion brought forward in other commentaries vṛtyantaresu, he mentions as the authors ‘Bhavadāsa and others,’ in accordance with
Kumārila’s statement in v. 63, p. 21. On these passages, it would seem, Gangānātha based his conjecture, which in my opinion is unacceptable. For if an author is referred to simply by the title Vṛttikāra, an authority of high rank must be intended, as is seen in many other cases; and it is not at all likely that Kumārila would have ranked such an authority together with other commentators, as he did with regard to Bhavadāsa in the phrase vṛttyantaraṃ. If there had been more than one Vṛtti, then it would have been inaccurate to speak of the Vṛttikāra. And besides, the Bhāṣya contains no reference to Bhavadāsa; Kumārila must therefore have learned Bhavadāsa’s opinion from his work. But as shown above, he most probably did not know the original work of the Vṛttikāra. Hence it would follow that the Vṛttikāra is not to be identified with Bhavadāsa.

The same scholar ascribes, on p. III of the introduction of his work named above, the Vṛtti to the revered Upavarsa. But as the bhagavān Upavarsa is mentioned in the very passage from the Vṛttikāra, he must be not only different from, but also considerably older than, the latter; for the title bhagavān is given only to authors of high authority and some antiquity.

As thus both conjectures of Gangānātha Jhā about the author of the Vṛtti can be shown to be wrong, I venture to advance one of my own. Rāmānuja quotes a Vṛtti on the Brahma Sūtra by Rodhāyana and refers to him as the Vṛttikāra. Now I think it probable that Rodhāyana wrote the Vṛtti not only on the Uttar Mīmāṃsā (i.e. B.S.), but also on the Pūrva Mīmāṃsā, just as Upavarsa, the predecessor of the Vṛttikāra, commented on both Mīmāṃsās. For, according to Śaṅkara ad B.S. iii, 3, 53, Upavarsa in his commentary on M.S. referred to his remarks in the Śāstra, i.e. his commentary on B.S. And Śaṅkarasvāmin also was equally versed in the Uttar and the Pūrva Mīmāṃsās; for a lengthy dissertation on the existence of the soul, called Ātma-vāda, (p. 19, 1.3—p. 24, 1.9 of the printed text) in his Bhāṣya reads like part

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1 Hall, Index, p. 167, says with reference to the Śākara Bhāṣya “Kṛṣṇa Deva states, in the Tūtra Cudāmaṇi, that a Vṛtti was composed on this work, by Upavarsa.” If Kṛṣṇa Deva is right, his Upavarsa must be a different person from our Upavarsa.


Vol. xxxi. Part I.
of a Vedānta treatise. Śaṅkara ad B.S. iii, 3, 53 says: 'with regard to that passage that the Ācārya Śabarāsvāmin took (his subject) from B.S. iii, 3, 53, and treated it in the pramāṇalakṣaṇa (i.e. ad M.S. 1, 5). The meaning of this statement is that Śabarāsvāmin by anticipation discussed the existence of the soul in the Bhāṣya on M.S. i, 1, 5, while the proper place for this subject is in a commentary on B.S. iii, 3, 53; we can not safely conclude from Śaṅkara's words, that Śabarāsvāmin actually wrote a commentary on B.S., and even less, that he transcribed the passage in question from it (for it is clearly worded with reference to the context in which it now stands). But at any rate it is evident that at Śabarāsvāmin's time the Pūrva and Uttara Māṁśās still formed one philosophical system, while after Kumārila and Śaṅkara they were practically two mutually exclusive philosophies.

After this necessarily long digression we return to the examination of that part of the passage from the Vṛttikāra which relates to the Hauḍhā doctrines. It consists of two sections called Nirālambamavāda and Śuṇyavāda in the Śloka-vārttika where the discussion of it is introduced by the remarks translated above, p. 7. The author, i.e., the Vṛttikāra, has explained in the preceding part that perception is a means of right knowledge provided that no defect (doṣa) vitiates any of the parts or elements which combined constitute perception; he then goes on as follows:

"(An opponent objects:) 'All cognitions (pratyāga) are without foundation (in reality) just like a dream; for we recognise in a dream that it is the nature of cognition to be without foundation. A waking person also has cognitions, e.g. of a post or a wall; and therefore this cognition also is without foundation.' We answer: a waking man's notion (e.g.) 'this is a post' is a positively ascertained one; how is it possible that it should turn out wrong? 'The notion in a dream also was, just in the same way, a well ascertained one; previous to the awakening there was no difference between the two.' You are wrong; for we find that (what we saw) in a dream, turns out wrong; but we find that (what we saw) in the other case (i.e. in the waking state), does not turn out wrong. If you say that on account of the class-characteristic (cognition as a
genus) (the same predication) will hold good in the other case, (we reply as follows). If you mean that the cognition in a dream is wrong because it is a cognition, then of course the cognition of a waking man must be wrong too. But if cognition is (taken to be) the reason that something is so as it is cognised (and not different), then it is impossible to say that this cognition (viz. one in a dream) is different (i.e. wrong) because it is a cognition. (Not from the nature of cognition by itself), but from something else we come to know that cognition in a dream is wrong on account of its being opposed to truth. "How do you ascertain this?" In the following way because a sleepy mind is weak, sleep is the reason for the wrongness (of cognition) in a dream; in dreamless sleep (the mind) is absent altogether; for one without any consciousness whatever, is said to be in dreamless sleep. Therefore the cognition of a waking man is not wrong. "But the sensorium of a waking man also may be vitiated by some defect." If so, the defect may be found out! "While one dreams, a defect is not found out." It is; for on awakening we find out that the mind had been vitiated by sleep."

The problem discussed in the preceding passage is the same as that in N.D. iv, 2, 31—33, see above, p. 12. The point at issue is this. Perception in a dream cannot be said to be wrong, unless some other perception is admitted to be true, in contradistinction to which that in a dream could be recognised to be wrong. As the opponent maintains that all cognitions are wrong, his argumentation from dreams is without meaning. I now continue the translation of the passage from the Vṛtti-kāra:

"(The opponent says: 'The cognition itself) is a void. For we do not perceive a difference of form in the object and the idea of it; our idea is directly perceived, and therefore the so-called object which should be different from the idea, is a non-entity." (Answer:) Well, this would be the case, if the idea had the form (or shape) of its object. But our idea is without form, and it is the external object which has the form; for the object is directly perceived as being in connexion with a locality outside of ourselves. An idea caused by perception is concerned with an object, and not with another idea; for every idea lasts but one moment, and does not continue to exist while another idea comes up. (The opponent says:)

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While this second idea is originating, it becomes known (to the first idea) and, at the same time, it makes known to it the object, just as a lamp (illumines and makes thus known things). We reply: This is not so. For before the object has become known, nobody is conscious of having the idea, but after the object has become known (to us), we become aware by inference that we have an idea concerning it; it is impossible that both these processes should be simultaneous. (The opponent says:) 'We do not contend that we know the object before the idea has originated, but after it has originated; therefore the idea originates first, and afterwards the object becomes known.' (We reply:) Quite right! The idea originates first, but it is not the idea that first becomes known. For as will occur occasionally, we say of an object which we do know, that we do not know it. Moreover it is the very nature of every idea to be always and necessarily bound up with the name of (or a word denoting) its object. Therefore an idea is intimately connected with a name, but that which is not intimately connected with a name is termed 'directly perceived.'—And furthermore, if (the object and the idea) had the same form, this would sublate the idea and not the object which is directly perceived. But there is no such uniformity (between the object and its idea, as you assume); for by inference we become cognizant of the intrinsically formless idea, but we directly perceive the object together with its form. Therefore cognition is based on the object.—And furthermore, the notion of (e.g.) a piece of cloth has an individual cause (in this sense, that we have the idea of the cloth) only when threads form the material cause (of the object, viz. the cloth). For if this were not the case, a man of sound senses might

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1 We are not conscious of having an idea concerning it.

2 The printed text is wrong. Instead of 'tasmin na utapadekey buddhah, utapadekey ca na pratyaksam' we must read 'tasmin utapadekey buddhah, utapadekey ca na na pratyaksam.'

What is meant is this: An abstract idea is always coupled with a word expressing its object; but this is not the case when we directly perceive a thing. Therefore perception is thus defined in N.D. i, 1, 4: indriyarthasaivakarotpannam jadnam utapadekeyam api bhojicari evam nityam pratyaksaṁ. Instead of utapadekeyam the Buddhists say more accurately kalpamipodham. The definition of pratyaksa, Niyakhinī i, is pratyakṣaṁ kalpamipodham abhārentaṁ, and kalpanāpoṭha is defined (ibidem) abhikāpasamṣeṣagogyapratibōha-sanyapattī kalpanā, tasya rāhitam.
have the notion of a jar though threads had been used (in
the production of the object in question); but that is not the
case. Therefore cognition is not without foundation (in ex-
ternal objects), and consequently direct perception does not
convey erroneous knowledge."

In this part of the passage from the Vṛttikāra, the opponent
whose arguments are refuted is without doubt a Śūnyavādīn.
This is not only the opinion of Kumārila (see original, p. 268
to 354, translation, p. 148—182), but it is unmistakably in-
dicated by the word, with which this part opens, viz. śūnyas
tu. But if we consider the arguments brought forward, by
themselves, we might be led to believe that their object is to
prove that only the idea has real existence. And on the other
hand in the first part the illusory character of all ideas or
cognitions is discussed; and this is properly the view of the
Śūnyavādins. Nevertheless Kumārila would make us think
that the Vijñānavādins are combated in this first part to
which he gives the title Nirālambanavāda (see original, p. 217
to 268; translation, p. 119—148). At first sight the text itself
seems to speak in favour of his view; for it opens with the
opponent’s statement that the pratyayas are nirālambana. But
very weighty reasons prove, in my opinion, that Kumārila’s
view is wrong. (1) As said above, the problem discussed in
the first part of our text is the same as in N.D. iv, 2, 31—33,
and we have demonstrated above that not only these Śūtras,
but also Vātsyāyana’s comment on them have in view the
Śūnyavāda only. (2) The technical terms peculiar to the
Vijñānavāda, e.g. vijnāna, ālayaviññāna, pravṛttivijnāna, vāsanā,
are absent from our passage, and instead of them only such
words as pratyaya, and buddhi, and jñāna (which are common
to all Indian philosophers) are used. (3) The only argument
discussed is that waking-cognitions being like dream-cognitions
are likewise illusory, and as has already been said, this is not
an opinion which is peculiar to the Vijñānavādins. (4) The
division of the whole passage into two parts, of which the first
combats the Nirālambanavāda, and the second the Śūnyavāda,
is quite arbitrary. There is in truth but one subject of dis-

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1 The meaning of this argument is that the object is not caused by the
idea, but it has a cause which is independent of the idea, viz. the material
from which the object or the thing is produced.
cussion in the whole passage, viz. that which is stated at the beginning of the first part, and which is repeated at the end of the second: nirālambanam pratyayah. And therefore the whole text must be directed against the Śūnyavāda because this is avowedly the case in the second.1

In the introductory remarks it has already been explained how later commentators came to interpret a refutation of the Śūnyavāda as one of the Vijñānavāda. If radical Scepticism, represented by the former, attacked the validity of perception as a means of true knowledge, it is natural that it brought forward arguments which might be used also by pure Idealism, represented afterwards by the Vijñānavāda. But it is worthy of note that all these arguments on which the Vijñānavadins based their idealistic system, had already been advanced by the Śūnyavādins. Thus it is evident that the Vijñānavāda was potentially contained in the Śūnyavāda, and that Asaṅga and Vasubandhu, who founded the idealistic school of Buddhist philosophy, were largely indebted to their predecessors.

The result of the preceding inquiry, viz. that the controversy in the passage from the old Vṛttikāra is about Śūnyavāda opinions only, a fortiori holds good with the Vedānta Sūtras also. But that passage may also serve us as a commentary on B.S. ii, 2, 28–32. I have above identifed conjecturally our Vṛttikāra with Boddhājana who wrote a Vṛtti on B.S.; if this be true, it is most likely that in our passage he should have given the essence of his comment on the quoted Sūtras in B.S., which are concerned with the same problem. But if my conjecture is not accepted, then the case is similar to that of Śābhasvāmin, who, when expounding the Atmavāda in his Bhāṣya on M.S., anticipates the Sūtras of B.S. in which this topic is discussed. In the same way our author who wrote

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1 I draw attention to another passage, p. 14f., though it is not conclusive for the question in hand. There the Vṛttikāra discusses the problem about the meaning of words, and touches the problem of the whole and its parts. The opponent denies that there is such a thing as a wood, a hard, &c., and goes on to object to perception as a means of true knowledge 'the trees also are non-existent.' The answer is: 'If you say this (we need not enter into a renewed discussion; for this view of the Mahāyānakas has already been refuted' (pratyutpāt sa mahāyānakah pākaḥ). This is apparently a reference to the passage translated in the text and the followers of the Mahāyāna are spoken of without the distinction of Mahāyānakas and Yogācāras.
the Vyrti on M.S. must have regarded Purva and Uttara Mimamsa as the two interconnected parts of one uniform system; and when he treated a subject which properly belongs to the Uttara Mimamsa, he must have treated it in conformity with the latter. We actually find in the passage from the Vyrtikara the substance of a commentary on B.S. ii, 2, 26—32, disposed in nearly the same order as that of those Sutras, as will now be proved. The substance of the first part of the passage is epitomised in Sutras 28 and 29: na 'bhava upalabdheh; saiharmyac ca na svamudivat. We may paraphrase these two Sutras in accordance with the explanation of the Vyrtikara as follows: "The objects of cognition are not nouentities (i.e. cognition is not without foundation in the external world: na niralambanah pratyayah), because we actually perceive external objects. 28. Nor is our cognition similar to dreams, &c., because there is a real difference of cognition in the state of waking and that of dreaming 29". The next two Sutras contain in a condensed form the substance of the second part of our passage, na bhavo 'upalabdheh 30. "(An idea) cannot be the real object (underlying cognition, as proved in Sutras 28 and 29), because (the idea) is not the object of direct perception." In the passage from the Vyrtikara the opponent maintains: 'our idea is directly perceived (pratyaksayah ca no buddhih), and the author refutes him by showing that an idea is not perceived, but that we become aware of having an idea by inference. This is the substance of Sutra 30. The next Sutra: ksanikatvac ca (31): "And because cognition has but momentary existence" is explained by the Vyrtikara in the passage beginning: 'for every idea lasts but one moment' (ksanikah hi sa). The meaning is of course that one idea cannot perceive another; for while the first exists, the second has not yet come into existence; and when the second has come into existence, the first has ceased to exist. The last Sutra: sarvatd 'nupappatvoc ca (32) "And because it is unreasonable in every way" gives occasion to the Vyrtikara's remarks beginning with 'But there is no such uniformity' (api ca kaman, &c.).

Thus it will be seen that with the help of the passage from the Vyrtikara we can fully and consistently explain the original Sutras. And I venture to presume that this interpretation comes nearer the meaning of the original, than that given either by Saikara or Ramanuja; for these commentators living
several centuries after the Vṛttikāra did violence to the text because they felt obliged to introduce into their comments the substance of controversies which happened long after the time of the Sūtrakāra.

The preceding inquiry has proved that the Śūnyavāda only has been confuted in the Brahma Sūtras and in the Vṛtti quoted by Śabararsvāmin. These two works must therefore have been composed in the period between 200 and 500 A.D., according to what has been said in the beginning of this paper. I am inclined to think that Śabararsvāmin also must be assigned to the same period, since he also appears to ignore the Viśnunāvāda and to refer to the Śūnyavāda when controverting the Buddhist denial of the soul (p. 20f). There a Buddhist combats the argument that knowledge (vijñāna) presupposes a knower (vijñātī), and explains that knowledge and memory can be accounted for by the assumption of skandhas or rather a santāna of momentary skandhas. He concludes: tasmāc chindnā yē skandhayakhāh, "therefore nothing real is behind the skandhas." This doctrine is of course common to all Buddhists, but the expression used here, śūnya, seems to betray the Śūnyavādin. And besides, in this controversy, especially where the real meaning of aham, is discussed, a Viśnunāvādin would have introduced his term ālayavijñāna; but no special terms of the Viśnunāvāda are used by Śabararsvāmin. It is therefore probable that he wrote before the establishment of the Viśnunāvāda. His archaic style also speaks in favour of an early date.¹

3. Yoga.

In Yoya Śatra, iv, 15f., the Buddhist denial of the external world is briefly discussed. Śutra 15: vastusāmye cittah vedat tayor vivaktah panthāh. "Since the same object (is perceived by many persons) and causes various impressions on their mind, they (i.e., the objects and the ideas caused by them) must be two different things." This is apparently a refutation of the Nirālambanavāda, but it does not appear whether it is intended against the Śūnyavāda or the Viśnunāvāda.

¹ Cf. Bühlcr in SBE., vol. xxv, p. CXII. After the preceding discussion it is perhaps superfluous to state that I cannot subscribe to the exaggerated chronological estimate of that scholar.
Sūtra 16: na cai 'hacittatantram vastu; tad ayramāyānakaṃ, tadā hiṃ syat? "Nor can the existence of an object be dependent on the mind of one observer; for when (his mind being absent) it is not observed at all, (pray) what would become of the object?" (cf. S.S. 0.43) Here, I think, the meaning of the Sūtra will be best understood, if we assume the opponent to be an adherent of the Vījñānavāda. For in that philosophy the alayavijnāna which represents the self-consciousness of the individual person, contains the vāsanās (= saṃskāras) which becoming mature (paripāka) produce the pratyavijnāna or the thoughts concerned with objects. According to this theory the object is dependent on pratyavijnāna or, in common language, on the mind of the observer. If this interpretation is right, Patañjali must be later than the middle of the 5th century A.D. At any rate he cannot be earlier than the 3rd century A.D.

Even the earlier of these two dates is at variance with the prevailing opinion that Patañjali the author of the Yogasūtra is the same Patañjali who composed the Mahābhāṣya. For Patañjali is said to have written the Yogasūtra, the Mahābhāṣya, and a work on medicine. This tradition, however, cannot be traced to an ancient source. Nevertheless European...
scholars are inclined to give it credit, e.g. Lassen, *Ind. Alt.*, I, p. 999, Garbe, *Sāṅkhya-philosophie*, p. 26, note, and *Sāṅkhya und Yoga*, p. 36, and others; and accordingly they place Patañjali in the 2nd century B.C. But it can be shown on internal evidence that the author of the Mahābhāṣya cannot be identical with the author of the Yogasūtra. It is worth while definitely to establish this point.

Professor Garbe admits that there are no special coincidences between the language of the Yogasūtra and the Mahābhāṣya, and accounts for this want of agreement by the difference of the subject of both works. But on the other hand we certainly might expect that the greatest grammarian of his age should have observed the rules of his grammatical work when he wrote another on Yoga. Yet in Y.S. i, 34 he writes *pracchārdanavindhāraṇāvabhīyām* instead of *vindhārṇavapracchārdanāvabhīyām* as it ought to be according to the rule *laghvāksaram* (i.e., *πιεράμ*) in *vārttika* 5 of ii, 2, 34; and here the meaning of the two parts of the compound furnishes no reason for altering their grammatical order, as might perhaps he pleaded for the order in *sarvārthāhakāgratayoh* iii. 11 instead of *ekāgratāsakriyāh* as postulated by Pāṇini’s rule *ajāyadantam* ii, 2, 33. A similar case is *grahītyagranagrāhyेतु* in i, 41. Vācaspatimśra says when commenting on that Sūtra: 1 “the order of the members of the compound as given in the Sūtra is irrelevant, because it is opposed to the order required by the subject (viz. *grāhyagranagrāhyāt*).” Now grammar is in favour of that very order which is also required by the subject; for this order is in accordance with Pāṇini’s rule: *alpāctarām* ii, 2, 34: “In a Dravandva the member of fewer syllables should come first.” And though a deviation from this rule might be defended, still the grammarians seems to have regarded it as an irregularity better to be avoided. 2 At any rate our

1 *tatra grahītyagranagrāhyētāḥ* iti *acitraḥ pāṭhakramo ‘chakramavo pirodāhām na ‘darmātīyaḥ.*

2 Patañjali discusses the question whether the rule *alpāctarām* applies to compounds of more than two members, to which alone the comparative *alpāctarām* would seem to apply. He adduces two verses which contain three-membered dvandvas: *ṣvetāṃbārakhetārasyāḥ* and *ṣīdaya- pattirāmekedānām* Kātyāyana in *vārttikā* 1 accounts for these ex-
case would have given cause to a grammarian to consider the order in which he should place the members of the compound, and he certainly would not have chosen that order which could be impugned for reasons derived from grammar and from the nature of the subject. The reason why the author of the Sūtra placed grāhīty first in the dvandva, was perhaps a linguistic instinct that words not ending in a or ā should come first, a rule which grammarians restrict to words ending in i and u (dvandva ghi ii. 2. 33).

On the other hand it can be shown that the author of the Mahābhāṣya held philosophical ideas which differed considerably from those of Yoga and Sāṅkhya. Commenting upon Varātika 53 ad i, 2, 64 he discusses a kārikā on the meaning of gender: the feminine denotes the congelation (saṃstya-ā), the masculine the productivity (prasaṇa) of the qualities (guna); sound, touch, colour, taste, and smell. “All individual things (mūrtayas) are thus constituted, they are qualified by congelation and productivity, possessing sound, touch, colour, taste, and smell. Where there are but few qualities, there are at least (avaratas) three: sound, touch, and colour; taste and smell are not everywhere.” This is a very crude theory about the qualities and one that is very far removed from the refined speculations of the Sāṅkhya and Yogas about the tanmātras and mahābhūtas. Therefore, since the author of the Yogasūtra does not conform to the grammatical rules taught by the author of the Mahābhāṣya, and because the latter is ignorant of the philosophical views of the former, they cannot be identical, but must be two different persons.

Having shown that the only argument for the great antiquity of the Yogasūtra is fallacious, I shall now bring forward internal evidence for a rather late date of that work. The Yogasūtra of Patañjali is described as being part of the Sāṅkhya system (yogasūtre sāṅkhya-pravacane); and it is well known that it generally conforms to the Sāṅkhya. But there are some Yoga doctrines which differ from the Sāṅkhya. Yoga admits the Īśvara, while Sāṅkhya is essentially atheistic; and

exceptions by assuming that the two last members are a dvandva (sāṅkhyaśāsana) and form the second member of the whole dvandva (atantre tāvanirodha sāṅkhyaśāsanaḥ vartādhyena samāsah).
this peculiarity of the Yoga seems to be very old, since it is mentioned in so ancient a work as the Mahābhārata (xii. 300. 3 ff.). But there are other Yoga doctrines not countenanced by Sāṅkhya, which are clearly adoptions from other systems. They are the following:

(1) The doctrine of Sphoṭa has been adopted from the Vaiyākaraṇas; it is expounded in the Bhāṣya ad iii. 17. This theory is however not directly mentioned in the Sūtra, and its introduction rests entirely on the authority of the Bhāṣya. (2) The doctrine of the infinite size of the antahkaraṇa seems to have been adopted from the Vaiśeṣika philosophy (ātman). It is given in the Bhāṣya on iv. 10 and there ascribed to the 'Ācārya.' (3) The atomic theory which originally belonged to the Vaiśeṣika is clearly referred to by Patañjali in i. 40 (cf. Bhāṣya on iii. 44). (4) The doctrine that time consists of kṣaṇas, which was first put forth by the Saṅrāntikas, is clearly assumed in iii. 52, though the details are explained in the Bhāṣya only.—The Sphoṭavāda and the Manovaibhavavāda (1. and 2.) may be later additions to the system, but the Paramāṇuvāda and the Kṣanikavāda must be ascribed to Patañjali and cannot be later than him. That he did adopt them, directly or indirectly, from the Vaiśeṣikas and Buddhists, though of course not in their original form, presupposes that these doctrines had somehow ceased to be shibboleths of hostile schools, and that the general idea underlying them had been acknowledged by other philosophers too. We know that this has been the case with regard to the atomic theory which has also been admitted by Buddhists, Jainas, Ajivikas, and some Miṃmāṃsakas. The Kṣanikavāda, in an altered and restricted form, has been adopted by the Vaiśeṣikas. For according to them some qualities (guṇas) exist for three kṣaṇas only, e.g., sound originates in one kṣaṇa, persists in the second, and vanishes in the third. This is a kind of Kṣanikavāda so changed as to avoid the objections to which the original doctrine was exposed. Still it must be remarked that even this altered form of the Kṣanikavāda is not yet found in the

1 See Garbe, Sāṅkhya und Yoga, p. 49 ff.
3 See my article quoted in the last footnote.
Sūtra, but is first taught in the Praśastapādabhāṣya, p. 287. This adoption of originally heterodox doctrines by Patañjali therefore unmistakably points to a relatively modern time, and thus it serves to confirm the result at which we arrived by examining the allusions to Buddhist doctrines contained in Y.S.; namely, that the Yogasūtra must be later than the 5th century A.D. It is probably not far removed in time from Īśvara Kṛṣṇa, the remodeler of Sāṅkhya.

Nor can an objection be raised against this date from the remaining literature of the Yoga. For the Bhāṣya by Vyāsa, which is next in time to the Sūtra, contains nothing that would make the assumption of an earlier date necessary. Garbe places Vyāsa in the seventh century (l.c., p. 41); and though his estimate is supported only by a legendary account of Vyāsa’s pupils, still it is not improbable in itself.

The results of our researches into the age of the philosophical Sūtras may be summarized as follows. N.D. and B.S. were composed between 200 and 450 A.D. During that period lived the old commentators: Vātsyāyana, Upavarsa, the Vṛttikāra ( Bodhāyana?), and probably Śaharavāmin. V.D. and M.S. are about as old as, or rather somewhat older than, N.D. and B.S. Y.S. is later than 450 A.D., and S.S. is a modern composition.

1 V.D. ii. 2. 31 teaches that sound is produced by conjunction and disjunction and sound. This is the germ of an undulatory theory of the transmission of sound in India; but the details of this theory, containing the above mentioned doctrine of the three kṣṇas, are not yet worked out in the Sūtra.
Hilprecht's Fragment of the Babylonian Deluge Story
(Babylonian Expedition of the University of Pennsylvania, Series D, volume V, fasc. I).—By George A. Barton, Bryn Mawr College, Bryn Mawr, Pa.

On Saturday morning, March 19th, the daily press of Philadelphia and other cities contained announcements of the discovery, by Professor Hilprecht, of a new version of the story of the deluge, which antedated all the accounts previously found and which vindicated the correctness of the statements of the Priestly Document of the Pentateuch. Interest was increased when in the Old Penn Weekly Review of the University of Pennsylvania of March 19th Dr. Hugo Randau, commenting on the discovery, wrote: "It is safe to say that this publication, based upon one of the most remarkable finds in the Temple Library of Nippur, is destined to usher in a new period in the history of religion."

The speedy publication of the tablet itself together with Prof. Hilprecht's interpretation enabled us to examine both in detail.

The Nippur version of the Deluge Story
The text of the tablet is given below followed by Professor Hilprecht's transliteration and translation as they appear on pp. 48 and 49 of The Babylonian Expedition of the University of Pennsylvania, Series D, Volume V, fasciculus 1 (Philadelphia 1910).

(p. 48) Transliteration.

1. ........................................... (?)-ṣa(?)-ṣi-il(?) i-(?)... (?)-la
2. ........................................... a-pa-ak-šar
3. ........................................... ka-la ni-ši iš-te-niš i-za-baš
4. ........................................... ti la-am a-bu-bi wa-ši-e
5. ........................................... (?)-a-nima-la i-ba-ak-ša-úlu-kinub-bi-kui-pi-ut-tuḫu-ru-ša
6. ........................................... te-elippu ra-be-tu bi-ni-ma
7. ........................................... ga-be-e gab-bi lu bi-nu-uzu-sa
8. ........................................... ši-i lu lu-šu-magurgurrum ba-bi-lu na-at-rat na-piš-tim
9. ........................................... -ri(?)-zu-lu-la dān-na zu-ul-lil
10. ........................................... te-i-pu-ša
11. ........................................... lam(?)-ša-ma-an ši-rim iš-sur ša-me-š
12. ........................................... ku-um mi-ni
13. ........................................... (?)-u ki[n]-ta ru(?)-
14. ........................................... u]

(p. 49) Translation.

1. ........................................... "thee,
2. ........................................... "the confines of heaven and earth" I will loosen,
3. ........................................... "[a deluge I will make, and] it shall sweep away all men together;
4. ........................................... "[but thou seek] life before the deluge cometh forth;
5. ........................................... "[For over all living beings], as many as there are,
6. ........................................... "I will bring overthrow, destruction, annihilation.
7. ........................................... "Build a great ship and
8. ........................................... "total height shall be its structure.
9. ........................................... "it shall be a house-boat carrying what has been saved of life.
10. ........................................... "with a strong deck cover (it).
11. ........................................... "[The ship] which thou shalt make,
12. ........................................... "[into it bring] the beasts of the field, the birds of heaven,
13. ........................................... "[and the creeping things, two of everything] instead of a number,
14. ........................................... "and"

In the present paper it is proposed: 1. To examine the interpretation of the text. 2. To discuss the evidence for the age of the document, and 3. To discuss its bearings on the Bible.

I. As to the interpretation:

In line 1 Hilprecht interprets only the last sign ka, rendering it "thee." In the absence of what preceded we do not know whether this is right or not. Even if a pronominal suffix, it was, perhaps, dependent on a noun, and to be rendered "thy."

In line 2 the only legible syllables are ap-pa-as-sur, "I will loosen" or "let loose." Hilprecht supplies before it, usurā-(or hippāt)samē u irstim, and renders: "the confines of heaven and earth I will loosen." He refers for authority to Jensen in KB, VI, 520, where Jensen quotes a conjectural emendation made by Haupt in Schrader's KAT to line 2 of DT, 42, published in Haupt's NE, p. 131. What really stands in that text is kimu kimp-pa-ti. No mention of heaven and earth appears on that tablet, nor the verb ap-pa-as-sur. To base a conjectural emendation on another conjectural emendation to another passage which stood in another context, is insecure ground.

In line 3 the words that stand are very clear: ha-la ni-si iš-te-nī i-za-bat, "all the people together it shall seize." i-za-bat being clearly for i-za-bat, the future of šabātu, "to seize," "take." While Hilprecht recognizes the "possibility" of this reading, he "prefers" to regard it as from the stem šabātu, "to beat," "to strike." Why this common form, written as it often is in the time of the Cassites and of Hammurabi, should be discarded for one that presupposes the difficult phonetic change of š to x and the unnecessary change of t to t, is because Jensen had noted (KB, VI, 531), that šabātu was the technical term used of the deluge!

1 Hommel, who has defended Hilprecht's main positions in articles published in the Frankfurter Zeitung of April, 19, 1910 and the Expository Times for May, 1910, improves upon Hilprecht's rendering by boldly inserting from Gen. 711 the words "the springs of the deep", making the line read: "the springs of the deep will I loose." Besold, Frankfurter Zeitung, May, 21, 1910, renders "I will loose a hamm." Prince and Vanderburgh AJSI, XXVI (July, 1910), p. 300, note that it is ordinarily used of loosening a curse. It is clearly uncertain how the line began.

3 So also Prince and Vanderburgh.
In line 4 we can make out the signs: ti la-am u-bu-bi ma-xe-e. Disregarding the first sign the three remaining words clearly mean, as Hilprecht has translated them, "before the deluge comes forth." The ti belongs to a lost word. Hilprecht fills it out u at-la-ma xe-i (or bul-lit)nap-ta-ti on the ground that in the "first Nineveh version" 11, 25 ff. these phrases appear. A part of them do appear there, it is true, but in a different order. In reality no one knows what stood at the beginning of this line. Ti might belong to any feminine or abstract noun.

Of line 5 Hilprecht has correctly transliterated the visible signs, and disregarding the u-ni at the beginning, which belong to a lost word, his rendering of the remainder ("as many as there are, I will bring overthrow, destruction, annihilation") may pass. What is to be supplied at the beginning is uncertain. Hilprecht's guess may in this case be right.

In lines 6 and 7 Hilprecht wisely refrains from filling out the broken lines,¹ and as his rendering of the Semitic is possible no comment is necessary.

In line 8, however, we come upon more difficulties. The sign which he renders bil certainly does not have that value. It is in reality two signs sum-ša.² The preceding sign, which Hilprecht reads ba may be ma. The sign which he reads at is probably a carelessly written ši. We should, therefore, probably read ... ši-i-nu "MA-GUR-GUR-ma sum-ša lu-na-si-rat na-pis-tim,... "a GUR-GUR boat indeed is its name, verily it is a savior of life". Perhaps we should render... "a GUR-GUR boat, and its name is Lu-nasirat napisitim".

Evidence that the Babylonians gave such names to their boats is, however, wanting. The three signs after GUR-GUR

¹ Not so, however, Hommel. Taking a hint from Gen. 6:4 he supplies in line 6 "Take wood and pitch", so as to make the whole "Take wood and pitch and build a great ship". In line 7 he also supplies from Gen. 6:1 the word "cubits" and reads "and... cubits be its complete height".

² In all the writer's researches for his forthcoming volumes on the Origin and Development of Babylonian Writing he has met with no instance of "at" made in this way in any period of the writing. Professor Clay, who has edited as many documents from the Cassite period as any other living scholar agrees with the writer that the reading is sum-ša. Bebold questions Hilprecht's reading, but suggests no other.

³ Prince and Vanderburgh, op. cit. show that we should not read "house-boat", but a "navigable vessel", i.e. one that can be steered without difficulty.
might also be read ba-taq-ša — "its crack". Were we sure that the line referred to stopping the cracks with pitch, this would be attractive. The line is too broken for certain interpretation, but Hilprecht's interpretation is clearly wrong.

Hilprecht renders line 9 (..... zu-la-la dan-na zu-ul-lil), "with a strong deck cover it", and claims that this conclusively proves the ordinary rendering line 31 of the well known version, "upon the deep launch it," wrong. In this he is, perhaps, right, but his statement (p. 56) that ʾeṣ (Gen. 6:15) means "roof" and not "window" is not new. It is found in Brown, Driver and Briggs, Hebrew and English Lexicon, 844a.

In line 10 Hilprecht's conjecture of "The ship" before te-in-pu-šu is as probable as any other.

In line 11, we clearly have "the beasts of the field and the birds of heaven" referred to (u-ma-am ši-rim iš-sur ša-a-mi), and no fault need be found with Hilprecht's guess that we should supply at the beginning "into it bring."

Upon line 12 Hilprecht stakes a great deal, and his treatment of it is really astounding. The only signs visible in the line are..... ku-am-mi-ni. Hilprecht divides this ku-am mi-ni, and translates, "instead of a number". He then supplies from the P Document of the Old Testament, without even telling us what the Babylonian form of the words would be, "and the creeping things, two of everything," making the whole read: "[and the creeping things two of everything!] instead of a number."

If now we compare the passage with what Hilprecht calls the Nineveh version 11, 84ff., it becomes certain that this rendering rests on a most uncertain basis. Li. 84—86 of the copy in the British Museum tell of three classes of living things that went into the ship: bu-ul širi, u-ma-am širi ("cattle of the field, beasts of the field") formed one class. That class is represented in Hilprecht's tablet by "beasts of the field and birds of heaven," which forms a more beautiful line and avoids tautology. Another class was the "family" (kim-ti) of Par-napishtim which appears in the last fragmentary

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1 Hilprecht's friend Kittel has pointed out, Theologisches Literaturblatt, XXXI, col. 243 (May, 27, 1910), that one could as well supply "seven of everything" and obtain agreement with the J document. It would certainly be quite as justifiable as that which Hilprecht has done.
line of Hilprecht's tablet as *kin-ta.* The third class, the artisans or people, was expressed by *um-ma-a-nu.* This class probably occurs in Hilprecht's text in the line under discussion (line 12), but he has not recognized it. We should read ... *ku um-mi-ni,* taking *ku* as the final syllable of some lost word. Probably that word is supplied for us in the fragment published by Père Scheil (cf. *Rec. de Travaux,* XX, p. 58, l. 20), in which we have the word *li-il-li-ku.* If now we supply the remainder of the missing word thus *li-il-li-ku um-mi-ni,* we obtain: "let the artisans (or people) come." This rendering supposes that *ummini* is the plural of a variant form of *ummadu,* just as we have *surruini* for *sururāni* and *kurummutu* for *kurummutāti.* Māri *ummanu,* of the Nineveh version shows that the Deluge writers did not regard the collective *ummani* alone as a sufficient plural.

More extraordinary and inexplicable still, however, is Hilprecht's note on line 12. He equates *mi-nu,* which we have shown to be a part of *um-mi-nu,* with the Heb. יִסָּה, "species," which occurs so often in the P document in the phrase *יהָ נָסְלָה* or *יִשָּרל,* meaning "according to its kind," and claims that the occurrence of *minu* in his tablet in this connection proves that יִסָּה means "number." He further states that if we insert this meaning wherever יִסָּה occurs in the P document, the sense is improved; and on p. 65 of his pamphlet he actually translates Gen. 6:19, rendering נָסְלָה "instead of a number." י in Hebrew never means "instead of," even Hilprecht can find no Biblical parallel, all the corroborative passages which he cites

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1 Prince and Vanderburgh. (*op. cit.*) declare that Hilprecht has no right to read *Kina-Tea* here. It is true that the tablet is crumbling at this point, but I see no reason for seriously questioning Hilprecht's reading.

2 Bezold questions whether instead of *ku-um* we should not render *SU-NIGIN mi-ni,* "the total number." Prince and Vanderburgh read *kiin mi-ni,* "the dwelling of a number," understanding it to mean that the GUR-GUR boat shall be the dwelling of a number. Some may prefer one of these explanations to that offered above. The text is so fragmentary that we are all groping in the dark. These explanations, however, show how insecure Hilprecht's interpretation is.

3 The kindred word *ummadu,* "people," makes one of its plurals by the form *ummadu,* (HWB, 87a). A plural *ummadu* from a singular *umma* would be analogous to this; it also finds analogy in the change of the plural ending *-an* to *-en*; cf. Delitzsch, *Assyrische Grammatik,* § 62, a, 3.)
use 5, as he himself confesses, in the sense of "to" or "for." The word יָדָּו, moreover, cannot possibly mean "number." One has but to substitute "number" for יָדָּו and "instead of" for 5 in any random passage in Gen. 1 to see how absurd Hilprecht's contention is. Take, e.g., Gen. 1:12: "Let the earth bring forth grass, herb seeding seed instead of a number and trees bearing fruit, the seed of which is in it instead of a number." What nonsense! Hilprecht endeavors (p. 57 ff.) to gain help for this impossible meaning by making it seem that Wellhausen and Delitzsch favor it. He says that Wellhausen had pronounced the word a riddle, but he gives no reference to a work of Wellhausen. The fact is he quotes the remark from Delitzsch, Hebrew Language in the Light of Assyrian Research, 1883, p. 70 f. and Prolegomena eines neuen Hebräisch-Aramäischen Wörterbuches p. 143. Delitzsch gives no reference for the remark, and Hilprecht evidently does not know where to find it in the voluminous works of Wellhausen. The statement looks very much like a free quotation on the part of Delitzsch of a remark of Wellhausen Prolegomena zur Geschichte Israels, 5th ed., p. 396 (cf. his English History of Israel p. 389). Wellhausen says: " יָדָּו (kind), a very peculiar word, especially in the form lemincheh, is found outside this chapter [Gen. 1] and Lev. 14, Gen. 6:20 7:14, only in Deut. 14 and Ezek. 47:10." That is all he says about it, and he clearly translates it "kind," never hinting that there is any doubt as to the signification, but only remarking that the word itself is peculiar.

As to Delitzsch, in his Hebrew Language (1883) he expressed the conjecture that it might be "ultimately derived from the Assyrian word "number." He would render e.g. Gen. 1:11: "Let the earth bring forth grass, herb seeding seed according to its number," understanding the last phrase to be equivalent to the Assyrian "as many as there are." This conjecture, however, he withdrew in 1886 (Prolegomena p. 149), where he says: "I have expressed in Hebrew Language p. 70 f. the guess that originally it יָדָּו was borrowed from the Bab.-Assyr. minu 'number'... I am quite prepared to give this conjecture up." It was a rash theory of Delitzsch's youth, which he abandoned twenty-four years ago.

As is well known, יָדָּו is the regular word in Jewish

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1 Compare the remarks of Kittel on this point, op. cit. note to col. 243.
Aramaic and Syriac for "species," "kind," and Professor Haupt has shown that it occurs in Assyrian also (see JAOS XXV 71).

We have now examined Professor Hilprecht's interpretation of the text, with the result, that, while in many of the less important parts of the little tablet his interpretation is sound, he has drawn too freely throughout upon his imagination in filling out the broken lines, and in the one passage upon which he lays most stress, as having a bearing upon Biblical criticism, he has not only hazardously rendered the cuneiform text, but filled out a broken line from the Bible itself in a most improbable way, and grossly mistranslated his Hebrew.

2. We now turn to the evidence for the age of the tablet. Professor Hilprecht claims that the tablet was composed between 2137 B.C. and 2005 B.C. He bases this claim on three kinds of evidence, A. The stratum in which the tablet was found, B. Palaeographical evidence, C. Linguistic peculiarities. Let us examine each of these in turn.

A. Hilprecht says on p. 1 of this Deluge publication, (i.e. Bab. Exp. of the University of Pennsylvania, Series D, Vol. V, Faciculus I), that the tablet was found "while unpacking and examining two boxes of cuneiform tablets from our fourth expedition to Nippur." On p. 36 of the same publication he says: "it was found intermingled with the dated and undated tablets of the lowest of the three strata of "Tablet Hill".

Now the tablet was clearly found before Hilprecht himself reached Nippur, for he had not seen it until October 1909. Indeed, in a foot note on p. 1 he excuses himself for having overlooked it in Constantinople in 1901.1 * An important point

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1 The writer is reluctantly compelled to believe that Hilprecht's foot note is deliberately misleading and that the following statements of Hilprecht in the So-called Peters-Hilprecht Controversy are untrue. Hilprecht says on p. 191: "My examination at Constantinople of at least 40,000 tablets from the Third and Fourth Expeditions merely strengthened my conviction. And indeed in setting this number at 40,000 I do not mention enough, for I practically examined to some extent every tablet taken to Constantinople from both these expeditions." Again he says on p. 389: "I had personally examined all the tablets excavated by the fourth expedition in 1902." [Italics, mine.]

My reasons for doubting the truth of these statements are as follows:—

Dr. G. R. Gordon, who was appointed Director of the Museum of the University of Pennsylvania in February 1910, sent me an invitation on June 14th, 1910 to come and see what Babylonian material the Museum
is, that in BE., Series D, Vol. I, p. 509 Professor Hilprecht has himself said some interesting things about the methods of work followed by the fourth expedition before his arrival. He says: "Our knowledge as to how and precisely where the tablets were found is extremely limited. As I must depend exclusively on Haynes' official entries and records for this important question, I deem it necessary to submit a specimen of my only written source of information for the time prior to my arrival when most of the tablets were taken out of the ground. I quote literally from his diary. 'Jan. 16, 1900: 30 sound tablets from a low level in Tablet Hill' (To

contained. His letter stated that "these tablets are now accessible to all Babylonian scholars". I accepted his invitation and visited the Museum on June 17th. Dr. Gordon informed me then that a similar invitation had been sent to all American Assyriologists. In the basement room of the museum, where many boxes of tablets have repose unpacked, some of them for twenty years, I saw a box of tablets from the fourth Expedition, which was just opened and the contents of which a workman was beginning to clean. Some of these tablets were wrapped in paper which had clearly been put about them while they were still damp, for it had dried on, and came off with the greatest difficulty.

I then recalled that Mr. Clarence S. Fisher, who was the architect of the fourth Expedition and who helped pack these tablets was once, while Fellow in Architecture at the University, asked to assist in unpacking some of these very boxes and had declared in an article in the Philadelphia Public Ledger of Feb. 4, 1907 that this paper was the same which they had wrapped about the tablets at Nippur while they were yet wet. An examination of the boxes and the tablets convinced me that Mr. Fisher's statements are true, and that Hilprecht's explanation given in BE., XXV, p. viii ff., and the So-Called Peters-Hilprecht Controversy, p. 307 ff., viz.: - that the boxes were wet by rain in Constantinople will not hold.

Further, of tablets in the box which were not so wrapped, a large number were covered with mud and gypsum, sometimes to the thickness of \( \frac{3}{16} \) inch. It is clear that no scientific examination of such tablets could have been made in Constantinople. In view of these facts no comment is necessary on the quotations from Hilprecht made above.

It is to be hoped that many Assyriologists will accept Dr. Gordon's invitation and obtain first hand evidence on this point as well as upon some of those mentioned below.

Since Professor Clay convinced the Museum authorities some years ago that Professor Hilprecht's carelessness had let a large number of tablets crumble to dust, it has rigidly shut every one from this tablet room. The action of the new Director accordingly means much to science.
this statement Hilprecht adds a foot note which reads: "I cannot even find out in which section of the large mound he unearthed these particular tablets. Nor is the slightest indication given by him as to whether he worked in a room, or found the tablets loose in the earth, or in both." To continue his quotation of Haynes' diary. "Many large fine fragments of tablets, 1 pentagonal prism, 7 3/4 inches long; its five sides from 1 to 2 1/8 inches wide." Three or four other quotations from Dr. Haynes' diary follow, all of the same import. The only definite statement is that the tablets were found at a "low level" in "Tablet Hill."

Again, in the So-Called Peters Hilprecht Controversy, p. 196, after saying in substance that Dr. Haynes simply numbered his boxes of tablets 1, 2, 3, 4, etc., and that he (Hilprecht) could only determine their locality by the dates at which Dr. Haynes was digging in certain localities, as e.g. on the west side of the Shatt-en-Nil, Hilprecht continues: "It would have been useful for me if the marking had been such as would indicate also the height of the stratum and the exact position; but Dr. Haynes could not attempt to do it, since he was alone in the field, and Mrs. Haynes never attempted to do it; consequently I must now infer ... by other means, to which stratum the tablets belong".

If we turn now to p. 132 of the same work, we find that Hilprecht has there published the testimony of Mrs. Haynes.

1 In connection with this declaration that no record was kept of the "stratum" the reader should compare a statement by Professor Hilprecht published in all the daily papers of Philadelphia on April 23rd, 1910. Hilprecht there declares that he only meant that Dr. Haynes did not keep a record of the exact position in which every single tablet had been found, and says that "the stratum of the temple library, the place of its discovery, and the precise number of boxes coming from a certain locality are absolutely known". The reader should note how this statement in part flatly contradicts that quoted in the text above, and should also note the adroit wording of the last part of the sentence. The word "stratum" is introduced here, so that a casual reader gains the impression that Hilprecht asserts that Haynes kept a record of the strata from which tablets came. While the sentence does give that impression, he could, if pressed later, say that he only declared that the stratum of the library was known. This is an excellent example of Hilprecht's habit of endeavoring by adroit wording to convey one impression, while he retains the power of declaring later that he did not say what he has seemed to say. It is this kind of writing that has destroyed the confidence of American scholars in him.
who was present when the so-called library was discovered. Her testimony shows that the general level at which tablets were found was known, but that the tablets were not found in strata at all. They were found, Mrs. Haynes says, in different rooms, dumped in such great heaps in the middle that the men could separate them only with the greatest difficulty, and that these heaps appeared as though the tablets had been thrown from shelves at the sides of the room. Imagine a library of account books thrown into the middle of the room from the shelves, would there be \textit{strata} in it? If the books had been arranged chronologically on the walls, would they be chronological in the heap on the floor?\footnote{Since the above paragraph was written my visit to the Museum of the University of Pennsylvania mentioned in the previous note has afforded proof that the supposition as to the mingling of tablets from different periods in the boxes is true. Dr. Gordon allowed me to see four or five boxes the contents of which had just been cleaned, and this was true of each box.}

From these statements of Hilprecht himself it is clear that he has not in his possession any definite data about strata.

B. Hilprecht remarks (p. 3) that the "writing employed" (in the documents from the supposed stratum in question) "is the script of the early Babylonian period in its various varieties." This is a very vague statement. I venture to think that if the stratum referred to really existed, there are several varieties of early Babylonian writing that were not found in it — such, for example as those of Ur-Nina, Lugalanda etc. Every Assyriologist knows, however, that in the period of Hammurabi a variety of scripts were used. The laws of Hammurabi, for example, and many of his inscriptions, are written in a fairly archaic script — a script readily distinguishable from that of the time of Gudea, as Gudea's is from the earlier periods, but still fairly archaic. There are also scripts which approximate in archaic coloring to that of the laws, but side by side with these there came into use at this time a cursive script, which is indistinguishable from the script of the Cassite period, and many of the features of which persisted into the Neo-Babylonian period.

The writer has taken pains to compile a table, which is here reproduced, by means of which an intelligent idea of the bearing of palaeography upon the date of the tablet may be
scientifically estimated. In five successive columns 37 signs are arranged. The signs of col. i represent the time of the Second dynasty of Ur, with the exception of two which are taken from Gudea (Stat. B, vi, 34 and Cyl. B, xiv, 12). In col. ii are signs from a tablet in the Harvard Semitic Museum dated in the reign of Ellil-bani¹, one of the later kings of the dynasty of Išin, who ruled about 2100 B.C.—the very time from which Hilprecht claims that his tablet came. It is a business document. It is well known that business tablets were written in a less archaic script than that employed by the scribes of the same period for literary work, and yet the script of col. ii is much more archaic than that of col. iv in which are placed signs from Hilprecht's deluge fragment. In col. iii are collected signs from the Temple Archives of Nippur of the time of the First Dynasty of Babylonia, published by Poebel in BE, VI, 2. In col. iv, signs from Hilprecht’s deluge fragment, and in col. v, signs from the Cassite sign list compiled by Clay in BE, XIV.

The tablets published by Poebel in BE, VI, 2 were selected for comparison because they were written at Nippur. A comparison of Poebel’s volume with Ranke’s (BE, VI, 1) and Scheil’s publications of texts from Abu Habba² reveals the fact that at the time of the First Dynasty of Babylon the scribes of Nippur were using a considerably more archaic script than the scribes of Sippar.

A comparison of the signs in this list produces the following results. Of the 37 signs compared, 9 (SAR, A, PA, NI, ŠI, PU, PI, LU, ŠU) undergo no marked development. They are the same in all the five columns. Twenty-one signs on Hilprecht's tablet agree closely with Cassite forms but show decided development over all the other columns, even over that containing signs from Nippur tablets of the first dynasty of Babylon. These signs are İS, AM, SI, E, UB, RU, RA, MA, ŠUM, SA, KAL (DAN), IL, TE, IB, UM, TA, KA, PIŠ, KIN, ZU, UL. Four signs (LA, TIM, NA, NU), have the same form as those of the first dynasty tablets and as the Cassite tablets also, but differ from the earlier periods. There

¹ A photograph of the tablet was kindly furnished me by Professor D. G. Lyon.
² Une saison de fouilles à Sippar, Paris, 1902.
are but two signs (NE and BI) which differ from Cassite forms in favor of an earlier period, while one (KAB) is intermediate in form between forms of the First Dynasty and those of Clay's Cassite list.

Of the twenty-eight signs which can be counted as evidence; therefore 26 favor the Cassite date as against two which are opposed to it. The evidence is 21 to 7 against a date earlier than the time of the First Dynasty. This is the verdict of palaeography concerning the date of the tablet. Had Hilprecht bought the tablet in the market so that one could plausibly connect it with Sippar, an earlier date would be more thinkable.

C. On p. 39 Hilprecht urges that the use of PI — wa and of binuzza — binùssā point to the period of the first dynasty of Babylon. It is true that these phenomena appear in first dynasty documents, but they are also occur of the Cassite period, and in part of later periods.

With reference to PI — wa three remarks should be made. 1. PI is used in inscriptions of the First Dynasty both for wa and wez. Thus in the laws of Hammurabi we have a-PI-tum for a-wa-tum and a-PI-la-tum for a-we-la-tum. The two usages go together; we find both in the Cassite period. Thus Kadaschman-Ellil in the El-Amarna letters writes the name of Amenophis III of Egypt Ni-mu-PI-ri-ya for Ni-mu `'wa-ri-ya'.

In this connection it may not be out of place to remark, since Hilprecht has asserted in a newspaper article that in the El-Amarna letters PI — a never wa, that in the name Ni-mu-ri-ya the consonant we occurs after the vowel w and before a, and would certainly be pronounced we. The fact that the name is Egyptian and not Babylonian is no proof that in the form of it written in Babylonia the ordinary phonetic laws did not apply. The hieroglyphic Egyptian did not write the vowels. Ni-im-mu `'wa-ri-ya and Ni-im-mu-`wa-ri-ya are attempts to represent the Egyptian N-b-`m-t-re, the Egyptian vowels being unknown. In the Babylonian form b is assimilated to the following m, t is elided, and the vowel a follows w. It would be inevitable among a Semitic people that between the u and a the w should slip in to help the pronunciation. There is no more ground for doubting that PI was pronounced wa in this word because there was no w in the Egyptian form of the word than there is for supposing that ya at the end of the word was not pronounced ya because the Egyptian does not contain either letter of that syllable. The fact that in the Tell el-Amarna Tablets in the British Museum, No. 1, 2, the name is spelled Ni-`b-ba-ri-α in no way affects the above argument, as that letter was written in Egypt and does not represent the Babylonian pronunciation.
and \text{Ni-mu-PI-ri-ya} for \text{Ni-mu-wa-ri-ya} (see Abel and Winckler, \textit{Thontafelsfund von Tell-El-Amarna}, No. 1: 1; 2: 1). In BE, XIV, No. 58, 1 we also find \text{a-PI-lu-tum} for \text{a-we-lu-tum}. The same usages are also found in copies of the Greek period. In Reisner's \textit{Sumerisch-Babylonische Hymnen}, No. 55, 69, we have \text{a-PI-tim} for \text{a-wa-tim}, and in No. 2 rev. 27 \text{a-PI-lu-tu} for \text{a-we-lu-tu}. It is clear, then, that where we find one usage we find the other.

2. The evidence just adduced shows that PI = \text{wa} is not a mark even of a First Dynasty date, to say nothing of a date in the time of the Isin dynasty, for it is found in the Cassite period and even in the Greek period.

3. PI is defined in H R, 39, No. 2, 14 as a where it is used in writing the word \text{a-su-n}—the very word under discussion in Hilprecht's tablet. In I R, 52, No. 4, 3 PI-\text{aš-rat} stands for \text{a-aš-ru} (Cf. Ball, PSBA, X, 290). Here PI must equal a, for the root is a \text{\textupsig^2} (\text{\textupsig^2}). In the word \text{ti-PI-mat} (K, 5298, cf. AL^2, p. 26, n.) PI might stand either for \text{wa} or \text{u}. In the Neo-Babylonian period it was used at Nippur, from which Hilprecht says his deluge tablet came, at the beginning of several words. Thus Nebuchadrezzar, BE, I, No. 85, i, 10 uses PI-\text{aš-rat} for \text{a-aš-rat}. Nabu-na'id, BE, No. 84, i, 6 has PI-\text{aš-ib} for \text{a-aš-ib}; in i, 15, PI-\text{aš-ru-um} for \text{a-aš-ru-um}; in ii, 33, PI-\text{ar-ka-at} for \text{wa-ar-ka-at} or \text{a-ar-ka-at}; in ii, 45, PI-\text{aš-ri-im} for \text{a-aš-ri-im}; and in ii, 52, \text{lu-nu-PI-aš-ri-im} for \text{lu-u-wa-aš-ri-im} or \text{lu-u-a-aš-ri-im}. It is not certain that any of these were pronounced \text{wa}, but when the sign was part of a \text{\textupsig^2} word it may still have had the value \text{wa}; that, however, we cannot confidently affirm, for already in the time of the

\begin{footnote}
1 In connection with this passage it may be well to note an illustration of Professor Hilprecht's methods of answering his critics. Professor Clay, in an article published in the \textit{Philadelphia Evening Bulletin} of April 10, 1910, had cited PI (a)-\text{u-a}, II, R, 39, No. 2, 14, but in printing it the typesetter had accidentally made the reference read No. 2, 4. Professor Hilprecht in the newspaper article of April 23, 1910, referred to above, showed that he recognized the real reference by remarking that PI here has the rare Neo-Babylonian value \text{a}, but in order to make Professor Clay appear ridiculous, he chose to translate II R, 39, No. 1, 4, which happens to be PI-\text{u-a}, remarking this passage will doubtless be read by every beginner in Assyrian PI-\text{u-a}, "to open" (namely, "the mouth"). It must be said that such an act is disingenuous, especially as he intimates that Clay may have intentionally misrepresented the case!
\end{footnote}
first dynasty of Babylon we find wa-ar-hu-un, "month" (King's Letters and Inscriptions of Hammurabi, No. 14, 5) by the side of arhu (No. 27, 10; cf. also Laws of Hammurabi, xxxix, 11, 15 and xlii 52 and Brockelmann's Vergleichende Grammatik der semitischen Sprachen, § 49, h. a). Apparently the initial w had begun to disappear very early. As a result of observing these facts we may affirm that the one occurrence of PI = wa in Hilprecht's tablet (occurring in wa-ṣi-e) does not prove that the tablet is earlier than the Cassite period, and that it may be that we should read a-ṣi-e in which case we have a purely Neo-Babylonian form, which is not a mark even for a Cassite date.

In the Cassite period we have the following parallels to hinnuzu: Belit-su-nu (which would regularly become Belit-su-nu) is in BE, XV, 149, 38 written Belitu-nu; the same name with the loss of the t, according to another well-known phonetic law, is spelled in BE, XV, No. 188, 1v, 20 Beliti-su-nu (cf. No. 196, rev. 26, where it is spelled Beli-su-nu), and Enlil-uballit-su is in BE, XIV, 33, 9 Enil-uballit-su. Outside of proper names the following examples may also be cited, viz: qa-az-zu for qa-at-ṣu, "his hand" occurs in BE, XV, No. 158, 5 and in the Kudurrus of Melishikhu, i, 26, Délégation en Perse, II, opposite p. 98; also pu-az-zu for pu-ṣu-ṣu, "in front of him" or "instead of him", BB, XIV, No. 11, 6.

Hilprecht also claims as a mark of the early date of his tablet the occurrence of the mummation in two words, sīrim and napištim. It happens, however, that no more can be inferred from the mummation of these words than from the use of PI for wa, since in both cases the mummation continued to be used down to the time of Assurbanipal. Sīrim has the mummation as late as the time of Nabu-na'id (see V. R. 63, 41²), and napištīm occurs in the annals of Assurbanipal, e.g. 1 R. 9, 33.

The philology of the tablet, then, no more than its paleography carries us back of the Cassite period. The fragment

¹ There is some uncertainty about the matter, as the word which scholars transliterate arju is written ideographically; but that it should be transliterated without the initial w is the opinion of Schell (Délégation en Perse, Vol. IV, pp. 114, 127), of R. F. Harper (Code of Hammurabi, pp. 92, 106 and 155), of T. W. King (op. cit. III, 267), and Brockelmann (Vergleichende Gram. der sem. Sprachen, § 49, b, e).
of the deluge story dated in the reign of Ammi-sadugga, discovered some years ago by Père Scheil and now preserved in The Morgan Library in New York City, still antedates by some centuries all other accounts of the deluge which are known.

3. We now come to the claim that this fragment contains a text so strikingly like that of the Priestly Document of the Pentateuch that the antiquity of the tradition of that Document is vindicated from the aspersions of critics. What little need be said upon this point has already been anticipated. Any resemblance, which the text of this document has been supposed to present to the Priestly text over and above other Babylonian accounts of the deluge is based, as has been shown above, on an unscientific handling of the Babylonian text, a mistranslation of the Hebrew text, and upon pure imagination.

Post Script.

Since the above article was sent to press a German edition of the deluge fragment has reached me. It bears the title Der neue Fund zur Sintflutgeschichte aus der Tempelbibliothek von Nippur von H. V. Hilprecht, Leipzig, 1910. In this edition there are a number of new features which call for a few comments.

1. Bezold in the article quoted above had said that he had every reason to doubt that Hilprecht first saw this tablet in October 1909. Having no authoritative information as to the grounds of Bezold's doubt, and wishing to be fair to Hilprecht, this sentence was not referred to above. Authoritative information is now at hand, that Hilprecht wrote Bezold two years ago informing him that he was absolutely sure that he had found a fragment of the deluge story. Hilprecht would now have us believe (see p. 19 ff.) that this letter referred to "a new fragment of the Deluge tablet" mentioned as absolutely certain in the So-called Peters-Hilprecht Controversy, p. 289, which he had referred to in his English edition of The Earliest Version of the Babylonian Deluge Story (i.e. BE, Series D, Vol. V), p. 33 n. in these words: "Possibly we have another exceedingly small fragment of the Deluge Story from the second expedition, too small to be determined accurately."

One cannot but be grateful to Hilprecht for telling us that these two passages refer to the same thing. He has thereby revealed a standard by which to judge other confident state-
ments of his in the So-called Peters-Hilprecht Controversy. Scholars cannot be expected to attach a higher value to those statements than Hilprecht himself does.

A comparison of these passages tends strongly to confirm the conviction that Bezold's doubts were well founded.

2. Hilprecht endeavors on p. 19 of the new German edition to break the force of his former declarations concerning the fact that Dr. Haynes kept no adequate records of where the tablets were found. His remarks on this point are the same in substance as those printed in the newspaper articles of April 23rd, 1910, which have been disposed of above on p. 38.

3. We learn on p. 25 that Professor Lyon of Harvard sent Professor Hilprecht a copy of the tablet of Ellil-bani, which is quoted above, at the same time that he sent one to me. Hilprecht admits that the writing on this tablet is more archaic than on his fragment, but claims to know some unpublished material from Zambia and Damîq-ilišu of the same dynasty which is not in such archaic writing.

In view of the evidence presented above, one must decline to give this much weight to this statement until the material is published.

Indeed there is no reason to believe that religious or mythological texts were written in Semitic as early as the dynasty of Isin.

4. On p. 50 Hilprecht says that my suggestion that the ku of ku um-mi-ni may belong to a form of the verb alâku is impossible in the context because it is not the technical term for entering a ship. The reader should note that it is shown above, p. 35 to occur in a deluge fragment in an analogous context. That it was the technical term for entering the ship I never implied.

5. In a foot note on p. 50 Hilprecht declares that when I wrote the first draft of the above article part of which was published in the Philadelphia Ledger of Apr. 3, 1910, I did not consult the cuneiform text of the Nineveh version of the Deluge but used Jensen's translation in KB, VI. His evidence is (forsooth!) that I rendered ummâni, "artisans or children" and Jensen renders it Handwerker(söhne).

The evidence presented has no connection whatever with the conclusion drawn. Every tyro in Semitic would know that Jensen's söhne is the translation of mûrî in the phrase mûrî
uumāni and that he bracketed it because it has no more significance than ḫq in the phrase ḫq ḫq, literally "children of Israel," but really "Israelites." To suppose that Jensen meant it as an alternative for "children" and to be misled by it, is a piece of reasoning worthy of Hilprecht himself! I cannot truthfully plead guilty to it. Hilprecht seems to be ignorant of the fact that in Muss-Arnolt's Assyrian-Dictionary, p. 58 a, uumāni — "young man" and that a number of new passages have come to light which bear out this meaning (See Jastrow's Die Religion Babyloniens und Assyriens, II. p. 657, n. 4). It was in reality from pondering these passages that I was led to waver as to whether uumāni in the deluge fragment might not mean "children", but afterward abandoned the idea, because the "children" must be included in the "family" (kiṭtu).

Naturally in working up the article I consulted Jensen's work along with that of other Assyriologists. Not to have done so would have been unscholarly, but this is no evidence for Hilprecht's false statement that I did not consult the original. If this reasoning were sound one could prove by it that Hilprecht cannot read cuneiform at all, for on p. 27 of his German edition, where his argument demands citations from the cuneiform texts, he cites only the transliterations of Knudtzon and Jensen!

6. Hilprecht declares on p. 51 that my suggestion that um-mi-ni may be a variant of um-ma-ä-ni is impossible. His words are: "eine solche Schreibweise ist für das Altbabylonische direkt ausgeschlossen".

With reference to this statement two remarks should be made:

1. The tablet is not Old Babylonian as has been convincingly proven above.

2. Whatever the tablet is Hilprecht himself (see p. 47) presupposes an analogous scribal change of i or e to a in nāṭrat, on which he still insists instead of the more probable nāṣirat. Vowel changes seem to be perfectly legitimate when it suits his purpose, but otherwise they are impossible!
Some Rig-Veda Repetitions.—By MAURICE BLOOMFIELD,
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The Rig-Veda contains repeated stanzas, hemistichs, and
single verse lines (pāda) which amount to a total of between
1500 and 1600 pādās—more precisely about 1560. They are
repeated an average of nearly 2½ times, making a total of
about 3560 pādās. This count does not include such as are
repeated, for one reason or another, in the same hymn. Of
such there are about 60, making a total of about 120, exclusive
of rhetorical concatenations between successive stanzas; the
latter also result in pairs that are so much alike as to be
almost identical. Again, a fortiori, this count does not include
refrain pādās which abound in the Rig-Veda. Of these there
are just about 150, repeated a total of about 1000 times.
Thus the total of repeated pādās in the RV., aside from
sameness due to catenation is about 1770, repeated about
4680 times; it involves quite a little more than one tenth of
the entire Rig-Veda collection.

I have been engaged for some time with a statistical and
critical study of this material,¹ and I wish now to show by a
number of selected examples how these repetitions can be made
helpful for the interpretation of the text, the proper estimate
of its metrical habits, and, above all, the relative chronology
of the hymns or stanzas which contain the repeated materials.

1. The meaning and etymology of īśmin.

5. 87. 5 (Evayāmarat Ātreya; to the Maruts).
svanō nā vō maṇāvān rejāyad vrṣa tvesō yaiś taviśā evayāmarat,
yuṇa sāhanta pūjāta svārociṣa sthūraṃāno hiraṇyāyīḥ svāyu-
dhāsa īśmināḥ.

7. 56. 11 (Vasiṣṭha; to the Maruts)
svāyudhāsa īśmināḥ sunisersa utā svayām tanvāḥ cāmbhamānāḥ.

¹ Cf. JAOS, xxix, pp. 287 ff.
The hieratic word *imīn* occurs, as far as I know, only four times, all in the RV. Yāska deals with the word in Nirukta 4.16, to no purpose. All Western authorities derive the word from the root *im* 'impel,' or the noun *im* 'strength;' they translate by something like 'hasting,' 'driving,' or 'strengthy.' Under such construction *imīnāh* in 7.56.11 is badly coordinated with its surroundings, because it is preceded and followed by words designating the warlike, or personal equipment of the Maruts. It can be made plain that *imīn* also is such a word, being = *iṣu-min* 'armed with arrows.' In sense the word is a perfect equivalent of *iṣu-mant.* For the omission of *u* before *m* I may simply refer to Wackernagel, *Altindische Grammatik,* 1.59, with the additional remark that the loss of *u* before *m* seems, by the terms of *imīn,* no less organic than the loss of *u* before *v.*

In RV. 5.22.16 the crested Maruts are said to call upon their father Rudra, *ādāḥ pitāram imīnām vocantā cilivasah.* The translation 'stormy' for *imīnām* suits Rudra, of course. Still more to the point is 'armed with arrows;' see *rudrāya kṣiprēsava,* 'for Rudra whose arrows are swift,' RV. 7.46.1; *rudrāḥ vāsūḥ,* 'Rudra whose arrows are strong,' RV. 5.42.11. In the Čaturudriya sections of the Yajur-Vedas we have *namas tigmesava,* and *namas tikmesave,* both, of course, referring to Rudra; see my Vedic Concordance under these items. In AV. 1.19.3 we have *rudrāḥ caraṇavāyūtin māmāmitraṁ vi viḍhyatu,* 'may Rudra hit these my enemies with a volley of arrows;' cf. also RV. 10.125.6; AV. 15.5.5. Rudra's missile (*rudrāya hetik *) is dreaded in every book of Vedic literature. A typical expression is (see Conc.):

\[ pari \text{ no (no) rudrasya hetir vṛṇaktu } \]
\[ pari \text{ no heti rudrasya vṛṣyāḥ (vṛṣyāt) } \]
\[ pari \text{ tvā (so) rudrasya hetir vṛṇaktu } \]
\[ pari \text{ vo heti rudrasya vṛṣyāḥ (vṛṣyāt). } \]

Rudra is really the typical archer (āstar) of the Veda: RV. 10.64.8; AV. 6.93.1. The archer is described as *iṣu-mant,* of course: RV. 2.42.2; cf. AV. 20.127.6. The equation *imīn* = *iṣu-mant* follows automatically.

Otherwise *imīn* is an attribute of the Maruts. They are described as *swāyudhāsa imīnāh,* 'having strong weapons and arrows,' RV. 5.87.5; 7.56.11; *as vācimanta imīnāh,* 'armed with axes and arrows,' RV. 1.87.6. But in RV. 5.57.2
they are vācimanta ṛṣimánto sudhāsavāna iṣumantah, 'armed with axes, spears, bows, and arrows,' and so, again, iṣin in = iṣumant. Cf. also RV. 5. 53. 4; 8. 20. 4. 12, and the ṭhata- rudriya formula, nāma iṣumadhyo dhanvāyibhyat (or, dhanvāvi bhayaat) ca; see Concordance. It is scarcely necessary to state that iṣinah and iṣumantah are metrical doublets, and that, of the two, iṣinah is the secondary formation, as, e.g. ojasvin: ojavant; bhrājasvin: bhrājavant; see Conc., under indrānasvinu, and sūrya bhrājīsḥa. Stems in -vin and -min are primarily, and in the main, -vant and -man ant stems modulated over into -in-stems.

2. On the meaning of kīrī.

6. 23. 3 (Bharadvāja; to Indra)
pātā snātam indro astu sūman prānenir ugrō jarīthram uḍī, kārtā virāya sāvyaya u lokāṁ dātā váṣu stuvatē kirāye cit.

6. 44. 15 (Gaṇavīn Bārhaspatya; to Indra)
pātā snātam indro astu sūman hānta vṛtrāṁ vājreṇa mandasānah, gānta yujñāṁ paravāṭaṁ ciṁ ucca váṣur dhūnām avitā kārūdhāyaḥ.

By italicizing the two words kirāye in 6. 23. 3, and kārūdhāyaḥ 'nourishing poets,' in 6. 44. 15, I have indicated my belief that kīrī means 'poet.' Pischel, Ved. Stud., I, 216 ff., following Ludwig, Der Rig-Veda, vol. vi, p. 105, takes kīrī in the sense of 'miserable, poor,' contending that the word nowhere means 'poet.' Why not here in 6. 23. 3, where the antithesis between virāya sūṣcaye and stuvatē kirāye cit is positively fundamental? The rich gentleman who presses the soma for the gods, and ‘aye the poet who has only his song of praise to offer to the gods’—that is what stuvatē kirāye cit means—are contrasted most effectively (cf. 7. 97. 10). So also in 1. 31. 13 rātāhavyah, ‘he who gives the offering,’ and kīrī cin māntrām, ‘the poet with his mantra only.’ In 2. 12. 6 we have codita yo brahmaṇo nādhvānāsya kārēh, ‘(Indra) who promotes the needy Brahman poet.’ The word kīrī has the side meaning ‘poor’ only in so far as the poets of the Veda are constitutionally and congenitally poor. The normal state of the Brahman poet and priest is expressed explicitly in AV. 7. 103: ‘What gentleman (kṣatriya), desiring to improve his condition, will get us (the priests) out of this wretched plight? Who desireth to sacrifice, who to give bakaheesh? Who shall gain
long life with the gods?”¹ I am sure that in this way the word ḥṛi in the sense of ‘poet,’ with the implication that poets, in contrast with their employers, are, as a rule, poor men, will be finally placed upon solid ground. And so ḥṛi and karu and kṣṭa, all from the set-root kari (cf. śṛiti, ‘act of praising;’ I. E. type śṛiti), need not be separated etymologically. In R.V. 5. 4. 10, yas tvā hṛdyā kariṇā manyamāno johavīmi, means ‘I, who remember thee with a heart full of praise, fervently call upon thee.’ Geldner, in his R.V. Glossary, under hṛi, remarks that Sāyaṇa takes hṛi in the sense of ‘poet.’ Geldner believes in Sāyaṇa more than I do; it would have been well to have listened to him in this instance, not because Sāyaṇa knows anything special about the word, but because it is antecedently unlikely that a Hindu could err in the case of word which must suggest to him the root karī, ‘praise.’

3. On the ethnical or geographical term āṃbara.

1. 47. 7 (Prasankya Kāṇva; to the Aṣvinī)
yān nāṣatyā parāvāti yād vā sthō ādhī turvāce, āto rāthena savṛtā na á gataṁ sakām sūryasya raĉmibhīḥ.

8. 8. 14 (Sadbhavanśa Kāṇva; to the Aṣvinī)
yān nāṣatyā parāvāti yād vā sthō ādhī āṃbara, átaḥ sahaśraṇirnī rāthenā yātām aṣvinā.

The confrontation of the two stanzas throws some light on the word āṃbara in 8. 8. 14. The Pet. Lex. started by giving it the meaning ‘umkreis,’ ‘umgebung,’ (with an fanciful derivation from ana-var). Ludwig, 66, renders the two words ādhī āṃbara by ‘oben im luftkreise.’ I think that if this scholar had remembered his own rendering (25) of ādhī turvāce, in 1. 47. 7, by, ‘über den Turvāca,’ he would have rendered ādhī āṃbara by, ‘über den Ambara’ (whatever that is). Grassmann, ii, 51, renders 1. 47. 7’, ‘ob ihr bei Turvāca verweilt;² but, in i, 406, he renders 8. 8. 14, ‘wenn in der Nähe ihr verwelt.’ Again the parallelism between ādhī turvāce, and ādhī āṃbara is obliterated.

The Nighanṭuvas have played mischief with āṃbara. There are two treatments of the word. In 1. 3 it figures among

¹ See Bloomfield, The Atharva-Veda (Grundrisse der Indo-Arischen Philologie), p. 77. For Brahmanas in need see further R.V. 6. 44. 10; 8. 80. 3; and 10. 24. 3.
the sixteen words for ‘midair’ (antarikṣa). That, I presume, is at the root of the Pet. Lex.’s rendering. In 2. 16 it appears in a list of eleven words for ‘near’ (antika). Thence, perhaps, Grassmann’s ‘in der Nähe.’ Unfortunately 2. 16 contains also turvaçe, in the very same locative case of 8. 8. 14. The absurdity of such glossography is really appalling. The only excuse for the appearance of the two words in this list is that they are both contrasted in the RV. stanzas above with parāvāti, ‘at a distance.’ The enticement lies in the frequent contrast between parāvāti and arvāvāti, e.g., RV. 8. 97. 4, yāc chakrāsi parāvāti yād arvāvāti vytrahan. I should not wish to go so far as to say that the school of interpretation which bred these glosses actually meant that both ambaram (sic) and turvaçe were adverbs — antike, ‘near.’ They probably conceived them to be things or places near at hand (in contrast with parāvāti). Yet their statement was misleading enough to lead astray so very distinguished a scholar as Grassmann. It would pay well to work through the Nighaṇṭuvas and Yāsaka to discover in what way they arrived at their many equally stunning results.

One gain accrues from this discussion. If turvaçe is beyond doubt an ethnical or geographical designation, then ambare also is the name of a people, or a land. As such it occurs in the Brhamasūtra, and elsewhere; see Böhtlingk’s Lexicon, s. v. In his Prolegomena, p. 263, note, Oldenberg thinks that possibly 8. 8. 14 is less original than 1. 47. 7, but this opinion may be due to the current lop-sided interpretation of ambare. With ambare in an ethnical sense, I see no reason for discriminating against 8. 8. 14.

4. An exceedingly wonderful horse.

1. 152. 5 (Dirghatamas Ānacāthya; to Mitra and Varuna) anaçvō jātō anabhīṣṭār ārēvā kāṇikratāt patayād ārādhvāsānuh, acitāmaḥ brāhmaḥ jujuṣur yuvānaḥ prā mitrā dhāma vārune grñṇātaḥ.

4. 36. 1 (Vāmadeva; to the Rbhus) anaçvō jātō anabhīṣṭār ukhyō ráthas triṇakṛatāḥ pāri vartate rájāḥ, mahād tād vo devyāsyat pravācaṇāṁ dyām ōbhavaḥ prthivim yāc ca pūṣyatha.
In 4. 36. 1 the ṛhhus are said to have fashioned a chariot, fit to be praised in hymns, because without horse or bridle it courses with three wheels through the air. Since it is three-wheeled it seems to be the chariot of the Aṛivins (cf. 1. 120. 10). That sort of a vehicle is, the lord knows, marvelous enough, but it will pass in the light of mythic fancies and ethnological parallels elsewhere. Similarly, in 6. 66. 7 the Maruts are described, along the same line of fancy even more energetically, as crossing the air without span of deer or horses, without charioteer, and without bridle. Now in 1. 152. 5 (above) the mystery is heightened to the second power, as it were. Ludwig, 97: 'ohne ross geboren, ohne zügel der renner, wiehernd fliegt er mit aufgerichteten rücken.' Grassmann, ii, 153: 'Geboren ohne Ross und Zügel, wiehernd fliegt auf der Renner mit erhobenem Rücken.' Geldner and Kueg, Siebzig Lieder, p. 13, more diplomatically, but less close to the text, and its parallel in 4. 36. 1: 'Sich bäumend schießt nach oben mit Gewieher der Renner ohne Zügel, der kein Ross ist.'

Any attempt to extract a picture with clear outline out of 1. 152. 5: will prove quite futile; the pāda is built by a secondary poetaster upon the previously existing pāda 4. 36. 1: 'he goes' his model 'one better,' and loses himself in mock-mythic fatuity—one of the standard failings of his class. What he had in mind may perhaps, after all, be expressed by 'the steed which is yet no horse and goes without bridle.' Or, 'the steed which is born from no horse,' &c. In any case the present parallel offers a clear case of relative chronology: 1. 152. 5 is later than 4. 36. 1.

5. The Bull-Cow.

4. 3. 10 (Vāmadeva; to Agni)
ṛṭena lū āsā vrṣabhāḥ cād āktāḥ pūrṇāḥ pāyasā prṣṭhyēṁa, āśpandamānō acarad vayodhā vṛṣṇā sākṛāṁ duṣṭhe ṗṛṣṇir udhaḥ.

'In accord with the divine law, indeed, Agni, the bull, the man, has been annotated with the heavenly fluid. Unwavering he moved, strength-bestowing; he the bull, the Prṣṇi-cow, has milked his bright udder.' The paradox in pāda ḍ between vṛṣṇā, 'bull,' and ṗṛṣṇi, 'heavenly cow' (especially, 'mother of the Maruts') has led the interpreters in various directions. Ludwig, 330, changes ṗṛṣṇir to ṗṛṣner, 'es melkte der stier der Prṣṇi helles enter;' in his commentary he retains ṗṛṣṇir but takes
vṛṣā with the preceding pāda, so as to avoid the paradox: 'nicht zuckend ohne anstrengung gieng der lebenksrakt schaffende stier, ihr helles euter liess Prṛṇī fließen.' Grassmann's rendering, i. 112, 'der Same strömt dem Stier, der Kuh das Euter,' is negligible, in the light of the parallel pāda, 6, 66, 1a. Oldenberg, SBE. xlv, 326, does not quite do justice to pṛṇir in his rendering, 'the speckled bull has poured out his bright udder.' I think that Bergaigne, ii, 397, 398, is unquestionably right in assuming a paradoxical 'tanreau-vache,' here, and in other passages mentioned by him. The daring metaphor is, that Agni shoots out his flames from his bright udder; he, a bull, is thereby also a pṛṇī, the heavenly, yielding cow, par excellence. Although the conception is very effective, it is, nevertheless, modelled after a simpler one of which we have the exact record:

6. 66. 1 (Bharadvāja; to the Maruts)

vāpur nā tāc cikitūse cid astu samānām nāma dhenū pātyamānam,
mārteśv anyād dohāse pīpāya sakṣe chukrām dudhāhe pṛṇir

Ludwig, 696, translates the stanza very cleverly, as follows: 'Ein wunder muss sein selbst dem weisen, was den gemeinsamen namen Kuh hat; das eine schwoll dass die menschen es melkten, einmal nur hat Prṛṇī ihr helles euter gemolken.' In 6. 48. 22 we have a similar statement, pṛṇyā dudhām sakṣe pāyāh. Max Müller, in a note to his similar translation, SBE. xxxii. 370, explains that dhenā, a cloud, yields rain but once, or that Prṛṇī gave birth but once to the Maruts. The first alternative seems likely to me, as it does to Bergaigne, i. 321; ii. 399. The pertinence and originality of the repeated pāda in 6. 66. 1 is established beyond peradventure by the parallel in 6. 48. 22; equally certain is, that the metaphor which turns Agni in 4. 3. 10 into a 'bull Prṛṇī who milked his bright udder' is the work of a later poet who is unquestionably bending to his purpose the very wording of a familiar mythological conceit, current in his time as kind of mystery (brahmodyā) about Prṛṇī. Cf. v. Brdke, Festgruss an Roth, p. 123; Oldenberg, Rig-Veda Noten, p. 268.
6. 'In the maw of the biter' (úpā srākvesu bāpsatah).

7. 55. 2 (Vasiṣṭha; Prasūapiniḥ [sc. rcaḥ])
yad arjuna sārameya datāḥ piṣaṅga yāchase,
viva bhṛājanta śṭāvān úpā srākvesu bāpsata ko niṣa svapa.

'When, o white-brown Sārameya (dog), thou doest show thy teeth, then, as it were, spears shines in the maw of thee biting—sleep thou deeply.' Cf. Pischel, *Ved. Stud. ii.* 55 ff.; Foy, *KZ.* xxxiv. 257; Oldenberg, *ZDMG.* lxi. 823. Pischel, p. 58, renders bāpsataḥ here, erroneously and unnecessarily, by 'kunreßend,' though admitting 'verzehrend,' 'fressend,' as the meaning of the word on p. 63. In this way he places out of accord the repeated pāda, úpā srākvesu bāpsataḥ, in another stanza:

8. 72. 15 (Haryata Prāgātha; to Agni, or Haviṣāṁ Stutiḥ)
úpā srākvesu bāpsataḥ kṛuvāte dharūnām divi,
indre aṅgā nāmaḥ svāḥ.

Pischel, l.c., p. 58, thinks this repetition an instructive example, calculated to show that the same words do not have the same sense everywhere. The same words, taken singly, of course not, tho even in this matter we may remember Bergaigne's warning against splitting up too much. But the same pāda, that is a more ticklish matter. My own, more extensive investigations of repeated pādas show that they have as a rule the same value, wherever they occur. He translates, p. 59: 'Wenn ihn (die Presssteine) im Maule zermalmt haben, machen sie ihn (that is, Soma) zum Tragepfeiler am Himmel. Ver­ehrung sei Indra, Agni, Svar.' In the line of Pischel's own thought we could but translate: 'They that eat him in their maws make (or build) support in heaven.' But I see no reason to take it for granted that bāpsataḥ are the ádārayaḥ, or press­stones, because the verb in question is used of things other than the press-stones as well; see Pischel, *ibid.,* p. 63; Aufrrecht, *KZ.* xxxiv. 459. The subject of kṛuvāte seems to be the same as that of the preceding stanza, 8. 72. 14, namely the substances added to soma (milk, &c.), of which it is there said that they know their own belongings as a calf its mother; that is, they know that they belong to soma: tē jānata svāṁ okyāṁ sāṁ vatsāso nā māṭbākīḥ. The hymn 8. 72, as a whole, is obscure and mystically ritualistic, but it will be safe to translate 8. 72. 15 verbally: 'in the maw of consuming (soma) they (the ingredients of the soma mixture) create support in
heaven. To Indra, Agni obeisance, light.' Now in 9. 73. 1, it seems to me, we have the true parallel to the pada, āpā srākvesu bāpsataḥ in 8. 72. 15. The first hemistich of the former stanzas reads: srākvesa śanātaka dhāmatāḥ sām asvarām rāṣya yōnā sām aranta nābhayaḥ. Grassmann, ii, 242, renders aptly, though not literally: 'Im Schlund des Tropfens, welcher gährt, in Opfers Schoos vereinten strömend jetzt verwandte Tränke säch.' One thing is certain, it is a question in this stanza, as well as in 8. 72. 14, 15, of soma and his admixtures (cf. Grassmann's introductions to the two hymns); bāpsataḥ as well as dhāmatāḥ is genitive singular, applied to soma as consuming, or amalgamating with himself his admixtures. In this way āpā srākvesu bāpsataḥ means 'in the jaw of him that bites,' in both of its occurrences (cf. e. g., bhāsmānā datā, 10. 115. 2). I can discover no criterion which points out the relative chronology of the two stanzas, but the metaphoric character of the repeated pada in 8. 72. 15 rather points to its secondary origin.

7. An assumed parenthesis verified by a repeated pada.

1. 10. 7 (Madhuchandas Vaiṣṇāmitra; to Indra) suvīrātām sunirājām indra tvādātām id yācaḥ, gāvām āpā vrajām vṛdhī kruṣvā rādho adriyāḥ.

2. 40. 6 (Vaiṣṇāmitra; to Indra) gırvaṇaḥ pālī naḥ sutāṁ mādhār dhārábhir ajyase, indra tvādātām id yācaḥ.

Ludwig, 449, renders 1. 10. 7: 'ganz offen da liegend, leicht zu gewinnen, Indra, ist der ruhm, der von dir verliehen wird, Öffne den stall der rinder, schaffe gewährung, steinbewerter.' Grassmann, ii, 9: 'Leicht zu eröffnen, zu empfangen ist der Schatz, den, Indra, du verleihst; so öffne uns die der Rinder Stall, und schenk uns Gut, o Schleuderer.' Neither rendering of the first hemistich is good; Grassmann's yācaḥ as 'Schatz' is especially indefensible. As a matter of fact the second pada is a parenthesis; it feels like a foreign body. The stanza makes perfect sense without it: 'Open the stable of the cows that is easy (for thee) to open, easy to drive out from; show thy kindness, O god of the press-stone.' The parenthetic

* For adriyāḥ see the author, ZDMG. xlivít. 572.
pāda b, indra teśātām id yāṣah, appears in proper connection at 3. 40. 63.

It is well to compare the translations of 3. 40. 6 with those of 1. 10. 7\(^a\); they reveal extreme inconsistency in the renderings of the repeated pāda. Ludwig, 505: lieder liebender, trink unsern saft, in madhuströmen badest du; Indra, von dir wird diese herrlichkeit geerntet.' Grassmann, i. 86: 'Den Liedern hold geniess den Trank, du wirst mit süssen Strom gesalbt. Von dir ist, Indra, Glück geschenkt.' The repeated pāda fits here perfectly: Indra bestows prosperity or glory in return for abundant soma. It requires no too great boldness to assume that the traditional Madhuchandas Viṇṇaśūtra of 1. 10. 7 borrowed the pāda in question from the hymn of the traditional Viṇṇaśūtra of 3. 40. 6. Note that 1. 10. 7 shares another of its pādas, namely, kṛṣṇaśū rūdha adīrīvaḥ with 8. 64. 1. In this way, that is by regarding 1. 10. 7\(^a\) as an awkward interpolation, we are saved the necessity of regarding 1. 10. 7\(^b\) as a separate sentence, and supplying a verb from the preceding stanza, as suggests Oldenberg, Rig-Veda Noten, p. 13. It is interesting to add that the extraneous character of 1. 10. 7\(^b\) was clear to Aufrecht's mind in the year 1888 (see Festgruss an Otto von Böhtlingk, p. 2), tho he did not know that the pāda was borrowed, or, at least, repeated elsewhere.


1. 124. 3 (Kakṣīvat Dāīrghatamaśa; to Uṣas)

eṣa dīvō duhitā prāty adarci jyotīr vāsānā samanā purāstāt, rtāṣya pānthām ānu eti sādhā prajñātivā nā diśo mināti.

5. 80. 4 (Sātyaśravaśa Tīrtha; to Uṣas)

eṣa vyēni bhavati dvibārā śākapūrṇānī tanvām purāstāt, rtāṣya pānthām ānu eti sādā prajñātivā nā diśo mināti.

We have not the means of deciding which of these two stanzas is entitled to priority. But one point is certain: the two pādas of the repeated hemistich are so well knit together as to preclude their having been composed in the first place separately: 'straight does she (the daughter of Heaven, Uṣas) go along the path of rū (divine law); as one who knows (the way) she does not miss the directions.' Now we find the pāda, rtāṣya pānthām ānu emi sādhūyā (sādhūyā, neat
jagati variant for the tristubh cadence in *sādhū*), in another place:

10. 66. 13 (Vasakaraṇa Vāsukra; to the Vicye Devāh)
dāivyā hōtārā prathāmā purōhita ṛtáṣya pāṇīthām ānv emi sādhuyā,
ksētrasya pātīm prātivecām mahe vicyān devān amṛtān āpra-
yuchataḥ.

Ludwig, 228, tries the *tour de force* of translating the first two pādas in one construction: 'den beiden gottlichen hotar als den ersten purohita geh ich glücklich nach den weg der
ordnung.' Grassmann, ii. 353, not unsimilarly, 'Den gott-
priestern, als den ersten Priesterpaar folg graden Wegs ich
auf dem Pfad des rechten Werkes.' And again Bergaigne,
iii. 241: 'Je suis exactement les deux sacrificateurs divins, les
premiers *purohita* sur le chemin du *ṛta*.' I do not regard
these translations as correct, first, because they impose a different
meaning upon ānv emi in 10. 66. 13 from that of ānv etī in
1. 124. 3; 5. 80. 4; secondly, because ānv + i does not govern
two accusatives; cf. in addition 3. 12. 7 (where there are two
verbs, āpa prā yanti, and ānu yanti); 7. 44. 5; and 8. 12. 3.
The facts are these: in 10. 66. 13 ṛtáṣya pāṇīthām ānv emi sādhuyā is a parenthesis suggested by the ritualistic
dāivyā hōtārā prathāmā purōhita, who are stock figures in the seventh
or eighth stanzas of the *āpri*-hymns: see 2. 3. 7; 3. 4. 7 = 3.
7. 8; 10. 110. 7, and cf. of the more recent literature on the
*āpri*-sūktas, Bergaigne, *Recherches sur l'Histoire de la Liturgie
Védique*, Journal Asiatique, 1889, pp. 13ff.; Oldenberg, *SBE.*
xlvi. p. 9. The stanza 10. 66. 13, therefore, is to be rendered:
'We implore the two divine Hotar, the first Purohitas—straight
do I go along by the path of the divine law (here the ritual-
istic ṛtā, or sacrificial law)—we implore the Lord of the Field,
our neighbour, and all the immortal gods, the unfailing.' There
can be no doubt that the repeated pāda means about the
same thing in all three places, and that the author of 10. 66.
13 has borrowed it with loose and slightly secondary adaptation
to the theme which he had in hand.


1. 92. 11, and 1. 92. 12 (Gotama Rāhūgaṇa; to Uṣas)
vyrnvaṭi divó āntāṁ abodhy āpa svāsāram sanūtār yuyoti,
pramāṇāt manugā yugāni yōṣā jārasya cākṣasa vi bhati.
paçān nā citrā subhāgā prathānā sindhur nā kśoda urviyā vy āçvāit,
āminati daivyāni vratāni sūryasya ceti raçmībhūr drçānā.

The two repeated pādas occur together in one stanza:
1. 124. 2 (Kakāyvat Dāirghatamasa; to Uṣas)
āminati daivyāni vratāni praminati manugā yugāni,
iyūśīnām upamā çāçvātinām ayatīnām prathamōṣā vy ādyāut.

There can be no question but what 1. 124. 2 is the source of the
repeated pādas in 1. 92. 11 and 12. The antithesis between
āminati and praminati, and iyūśīnām and ayatīnām cannot
but be intentional and primary. Note also the parallelism
between āminati and ayatīnām; and praminati and iyūśīnām.

On the other hand, we ought to allow full weight to the really
senseless non sequitur of the second hemistic in 1. 92. 11:
'reducing the ages of men, the woman shines by the light of
her paramour (the sun).' For the meaning of yugā 'age,' i.e.
'period of time,' see Bāl Gangādhar Tilak, The Arctic Home
in the Vedas, p. 176. The second hemistic of 1. 124. 2 recurs,
with the variants vibhātinām for ayatīnām, and āçvāit for
adhyāut (cf. āçvāit in 1. 92. 11), in 1. 113. 15. The probability
is that this stanza also is secondary, because vibhātinām
disturbs the antithesis between iyūśīnām and ayatīnām, and
because the connection between its two hemistichs is sufficiently
loose:

āvāhanti āsya vāryāni citrām ketām kṛpate cēkiyānā,
iyūśīnām upamā çāçvātinām vibhātinām prathamōṣā vy āçvāit.

'Stanza 1. 124. 2 is the high-water mark of Vedic composition.
The two antitheses āminati . . . praminati and iyūśīnām . . . aya-
tīnām mark as later imitations all repetitions that disturb this
balance. The relation of the two pairs of antithetical words
may be expressed in the proportion: āminati : ayatīnām = pram-
inati : iyūśīnām. Or by the diagram:

\[
\begin{align*}
\text{āminati} & \quad \text{praminati} \\
iyūśīnām & \quad \text{ayatīnām}
\end{align*}
\]
io. A solecism.

1. 8. 5 (Madhuchandâs Vâcyamitra; to Indra)

mahân indraḥ parāc ca nā mahatvām astu vajriṇē, 
dyāur nā prathīndā gāvah.

‘Great is Indra, aye more than great: may greatness be to
him that wields the club, strength extensive as the sky.’ Pāda c
is repeated in the following Vâlakhulya stanza:

8. 56 (Vâl. 8), 1 (Pradhrâ Kânya; Dânastuti of Praskanâ)

prâti te dasyaveyvrka rádho adarçy áhrayam,
dyāur nā prathīndā gāvah.

Ludwig, 1018: ‘O Dasyaveyvrka! deine unerschöpfliche gabe
zeigte sich, als fülle wie der himel an breite.’ Grassmann,
i, 503: ‘Es hat sich gezeigt, O Dasyaveyvrka, dein reichliches
geschenk, wie der himmel breitet sich dein ruhm aus.’ Since
gâvah means neither ’fülle,’ nor ’ruhm,’ the secondary application
of the Vâlakhulya pâda is clear. The use of the pâda is a
mere solecism in this connection. The words rádho áhrayam
are best rendered by ’gift that is not shabby.’

ii. From real to mystic.

1. 22. 21 (Medhâtitli Kânya; to Višnu)

tâd viprâso vipanyâvo jâgrâvânsah sâm indhate,
viṣṇor yât paramāṁ padâm.

3. 10. 9 (Viçyamitra Gâthina; to Agni)

tâm tvâ viprâ vipanyâvo jâgrâvânsah sâm indhate,
ahavyâvah ámartyâm sahovyâdham.

The repeated first hemistich appears in primary application
in 3. 10. 9: ’The bards, skilled in song, on waking, have kind-
led thee (Agni, fire).’ The application of the same idea in
1. 22. 21 is mystic: the bards kindle the highest stepping place
of Višnu, the sun-fire at its zenith, the abode of the blessed.
Cf. 1. 22. 20; 1. 154. 5; 10. 1. 3 &c., and Hillebrandt, Vedische
Mythologie, i. 354. We may admire the ingenuity which enables
the epigonal poet to express the thought that the inspired
song of the poets kindles the light of the heavens, but the
fact remains that he has adapted an ordinary sense motif
effectively, yet mechanically, to his high idea. Without the
former (3. 10. 9) we should have hardly had the latter. Cf. also
Oldenberg, Rig-Veda Noten, p. 17.
12. How an Indra line is turned into a Rudra line.

3. 22. 7 (Viṣṇu-mitra; to Indra)
yājāma in nāmasā vyuddhām indraṁ bhāntam ṛṣvām ajāraṁ yuvānam,
yāśya priyā mamāturm yajñīyaṇyaṁ nā rōdasā mahimānaṁ mamāte.
6. 19. 2 (Bharadvāja; to Indra)
indram evā dhiśānaṁ sātaye dhād bhāntam ṛṣvām ajāraṁ yuvānam,
Aśūbhena cāvasā çūcuvānsam sadyaḥ cīd yo vāyūdhē āśāmi.
6. 49. 10 (Rjiçvan Bharadvāja; to Rudra)
bhāvanasya pitāraṁ girihir ābhī rudrāṁ divā vardhaya rudrāṁ aktāu,
bhāntam ṛṣvām ajāraṁ suśumnām ēdhag ghuveṇa kavinesi-
tāsaḥ.

In the two Indra stanzas the pada, bhāntam ṛṣvām ajāraṁ yuvānam, agreeing with indram, is altogether fit. Certainly ajāraṁ yuvānam, 'youth that does not age,' with its obviously intentional implied antithesis, is a better sequence of words than ajāraṁ suśumnām, 'ageless and kind,' in the Rudra stanza. In adapting the pada to Rudra (Ciṇa) the need of mentioning his precarios kindness was sufficiently urgent to procure the change. Cf. his epithets mīdhvaṁ and cīvaḥ; his hāsto mṛlayākuṁ in 2. 33. 7; and more directly such a passage as 2. 33. 1, ā te pitar marutūṁ suṁnam etu. See also 1. 43. 4 and 2. 33. 6.—For 3. 32. 7 see Oldenberg, Rig-Veda Noten, p. 244; for dhiśānaṁ in 6. 19. 2, Geldner, Ved. Stud. ii, 88.

13. How a Rbhus line is addressed to the Press-stones.

3. 60. 3 (Viṣṇu-mitra; to the Rbhus)
indrasya sakhyām rbhāvaḥ sām ānacur mānør nāpata apāso
dadhanvire,
sāudhanvanāso amṛtavām ērire viṣṭvī çāmibhiḥ suktaḥ su-
kṛtyāva.

The Rbhus have obtained the friendship of Indra; they, the children of Manu, the workers, have bestirred themselves. The Sāudhanvanas, laboring on (pious) tasks, have obtained immortality, they the pious workers, through their pious work! Cf. Ludwig, 164; Grassmann, i. 103; Bergaigne, i. 69, note; ii. 403, 409, 412, 418; Ryder, Die Rbhus im Ṛgveda, pp. 21,
22. 25. The fourth pada is of the very essence of the Ribhu myth (see especially 4. 33. 4; 4. 35. 2, 7, 8); there can be no question as to its primary character. This pada, with a single, obviously ritualistic variant, appears again, to wit:

10. 94. 2 (Arbudha Kādraveya Sarpa; to the Press-Stones) ete vadanti caṭāvat sahāsravad abhi krandaṇti hāritebhir āsābhīh,

vistvī grāvānah sukīṭaḥ sukṛtyāya hōtuc cit pūrve havirādyam aṣaṭa.

'They speak a hundredfold, a thousandfold, shout to us with their yellow mouth; the press-stones, laboring, they the pious workers, through their pious work, have come to the eating of the havis before even the Hotar.' Exact technical proof that the repeated pada is here modulated secondarily cannot be rendered, but I am, nevertheless, certain that of the two phrases vistvī cānimbhīh, in 3. 60. 3, and vistvī grāvānah in 10. 94. 2, the former is the mother; cf. viveṣa ... cānimbhīh in 5. 77. 4, and the interesting epithets of the Ribhus in their nivi, C Ç. 8. 20, vistvī svapasah, and cāmaya cānimśhāh. The expression sukīṭaḥ sukṛtyāya also belongs primarily to divine beings; secondarily to a ritualistic instrument like the press-stones.

14. Principal and relative clause as a criterion of relative chronology.

1. 39. 6 (Kānya Ghāura; to the Maruts) úpo rātheṣu pṛṣṭatv ayugdīvam pṛṣṭir vahati rōhitah, á vo yāmāya prthivī cid acrod abhīhavanta mānasah.

'And ye have hitched the spotted mares to your chariot; a red stallion acts as leader. Even the earth hath listened at your approach, and men were frightened.' Cf. Ludwig. 675; Grassmann, ii. 43; Max Müller, SBE. xxxii. 97. The word pṛṣṭatv which the translators render by 'antelopes' means in fact 'spotted mares,' because the Maruts have the epithet pṛṣṭadgaṇa. See Bergaigne ii. 378, and, very explicitly, Nāgān-tuka 1. 15; Brhaddevala 4. 144 (catalog of the spans of the gods) where we have the express statement, pṛṣṭatvo 'cvas tu marutām. The word pṛṣṭi (pra + sti, like abhiṣiti, āpasi, and pārīṣti) means literally 'being in front,' 'leading horse.' It is the analog of purāgavā and πρόβας, 'leading steer.' Both refer
to what is known as a 'spike-team,' or, 'unicorn.' To a team of two animals a third is hitched in front for better guidance. See the author in American Journal of Philology, xxix, 78 ff.

The pāda, prāṣṭir vāhati rōhitah, is repeated in a closely related stanza to the Maruts:

8. 7. 28 (Punarvatsa Kāva; to the Maruts)
yād esāṁ prāṣṭir rāthe prāṣṭir vāhati rōhitah,
yānti çubhṛa riṃāṁ apāḥ.

'When the red stallion guides as a leading horse their speckled mares at the chariot, then the bright Maruts approach and let the waters flow.' Subtly, and yet in a peculiarly certain way, this stanza is secondary, directly patterned after 1. 39. 6. The entire characteristic and imaginative description of the span of the Maruts in 8. 7. 28 is crowded incidentally, as it were, into a subordinate clause (note orthotone vāhati in 8. 7. 28; enclitic vahati in 1. 39. 6), whereas in 1. 39. 6 the description is the set theme of the first hemistich. I cannot doubt that this important bit of mythography was first stated in the explicit terms of 1. 39. 6, before it could be referred to incidentally, yet in the very same words, in 8. 7. 28.

15. Attraction to the Vocative.

1. 30. 21 (Çunahçepe Añjgari, alias Devarata; to Uṣas)
vayāṁ hi te āmanmahy āutād ā parākāt,
āçṛ ṇa citra aruṣī.

4. 52. 2 (Vāmadeva; to Uṣas)
açṛeva citrāruṣi mātā gāvān rīvārī,
sākhabhūd açvinor usāḥ.

Bergaigne, La Syntaxe des Comparaisons Védiques (Mélanges Renier, p. 75 ff; especially, p. 77, note 1), and Pischel, Ved. Stud. i. 91 ff, have treated the phenomenon of case attraction in comparisons; they show that the primary word in a comparison attracts to its own case-form the secondary, or simile word. On page 92 Pischel remarks that he has found scarcely more than one case of attraction to the vocative, namely, āçṛ

na citre aruṣī. But he has failed to note the parallel, which puts the stamp of imitativeness upon 1. 30. 21. I do not wish to say that the vocative attraction in 1. 30. 21 violates any habit, notwithstanding its rareness, especially as Delbrück, Alkindische Syntax cites, correctly, one more case from the
first book, 1. 57. 3. But of the two repeated pādas, above, one must be the model, and that is 4. 52. 2, making it likely, after all, that the construction in 1. 30. 21 is for the nonce. We must not forget the cases in which the secondary or simile word is in the nominative, while the primary word is in the vocative, e.g., 1. 16. 5; 1. 36. 13; 7. 13. 3 &c. More precisely, therefore, āgva nā in 1. 30. 21, imitates acvēva in 4. 52. 2. It is significant that all previous discussions of this vocative construction were without reference to the parallel nominative construction, tho the interdependence of the two is not to doubted, especially as the final cadence of both lines is irregular (~ ~ ~ ~), and it is not to be supposed that two poets would happen upon the same metrical irregularity.

16. How a repeated pāda may teach construction.

6. 5. 1 (Bharadvāja Bāhraspatya; to Agni)

huve vah sumum sāhaso yuvānam ādroghavācaṁ matibhir āvīṣṭham,

yā invatī drāvinā prācēta viqva varani puruvāro adhrūk.

‘I call for you the son of might, the youth: him whose word is not false, the youngest (I call) with prayers, &c.’

6. 22. 2 (Bharadvāja; to Indra)

tām u nāḥ pūrve pitāro nāvagyāḥ saptā viprāso abhi vājāyantab, naksaddābhānh āturīṁ parvateśṭham ādroghavācaṁ matibhiḥ āvīṣṭham.

The modulation of the repeated pāda is interesting: āvīṣṭham for Agni (see Macdonell, Vedic Mythology, p. 91); āvīṣṭham for Indra. Čavast is Indra’s mother; see the author in ZDMG. xlviii. 548, and cf. āvīṣṭha in Grassmann’s Lexicon. The word ādroghavācaṁ does not determine the prior place of the repeated pāda. Though Indra is depicted in the Brāhmaṇas as a good deal of a liar, still in the Rig-Veda this euphemistic epithet is assigned not only to him but also to Agni; see Bergaige, iii. 181, 187.

The value of the repeated pāda lies in its definite settlement of the meaning and government of matibhiḥ. Ludwig, 546, takes matibhiḥ āvīṣṭham in 6. 22. 2d together in the sense of ‘gedankenstarksten.’ This is disproved by the parallel words matibhir āvīṣṭham in 6. 5. 1b. This cannot mean ‘gedanken-jungster.’ Translate 6. 22. 2: ‘Him our Fathers of yore... (have called) with their prayers, him whose word is not false, the strongest.’ Cf. Grassmann, i. 253.
17. How a repeated pāda may teach a point or two in morphology.

4. 17. 3 (Vāmadeva Gautama; to Indra)

bhinād girūṇa čāvasā vājram iṣṇām avishkravānāh sahasānā ójaḥ,
vādhid vytrām vājrena mandasānāh sāram āpo jávasā hatāvṛṣṇiḥ.

He cleft the mountain, hurling his club with might, manifesting, exerting his strength. He hath slain Vytra with his club, rejoicing; the waters flowed in haste as soon as their bull (master) had been slain. The third pāda is repeated with a change from the third person verb vādhid, to the first person verb vādhim in an imitative stanza:

10. 28. 7 (Vasukrapatni; to Indra)
evā hi māṁ tavāsan jagñur ugrāṁ kārman-karman vṛṣṇapam
indra devāh,
vādhim vytrām vājrena mandasānāḥ, pa vrajāṁ mahinā dācāṣe vam.

This stanza is, of course, put into the mouth of Indra. Ludwig, 970, in his note, suggests convincingly indradevāh for indra devāh; Grassmann, ii. 515, also scents the difficulty at that spot. Translate: 'Thus they whose god is Indra (that is, the pious) knew me (Indra) to be a mighty and strong bull in every task; I have slain Vytra with my club, rejoicing, with might I have opened the stable for the pious.' There can be no doubt that pāḍa c with its precarious analogical vādhim (also 1. 165. 8) is a direct copy of 4. 17. 3. This is shown further by the nonce-formation vam in pāḍa d which is again analogical. Grassmann naïvely explains it in his Lexicon, column 1321, as 'aus varam,' but it is a product of proportional analogy which helps to fill in a smooth paradigm: vam, voh, vah. Both vādhim and vam reflect the difficulty of stating secondarily the deeds of Indra in the first person, because they were originally conceived in the third person. We must note that voh, like vam, always stands at the end of a pāda. The grammatical forms mentioned are peculiarly sound criteria for determining the relative chronology of the two stanzas.

18. A truncated line, unchanged in meaning.

1. 80. 10 (Gotama Rāhugana; to Indra)
indro vytrāsya távismu nir-ahān sahasā sāhāḥ,
mahāt-tād asya pāṁsyaṁ vytrāṁ jaghānvaṁ asṛjād ārcann ānu
svarājyaṁ.
This case is remarkable, because it is both definite and simple. The fourth pada fails to end in an iambic dipody, and its verb has no object. Ludwig, 460, translates diplomatically 'als er den Vṛtra getötet liess er fliessen;' Grassmann, ii. 80, more freely, 'schlug Vṛtra und ergoss die Fluth.' But the Rig-Veda tells in unmistakable language that the pada is the truncated torso of another pada, regular in its final cadence and the preceding anapast, and duly furnished with that object which every reader of this Veda would supply anyhow, namely sindhun:

4. 18. 7 (Saṁvāda Indrāditvāmadevānām)
kim u śvid asmāi nivido bhanantēndrasāvādyām didhiśanta āpaḥ,
māmāitān putrō mahatā vadhēna vṛitrān jaghanvān aṣṛjād vī sindhun.

4. 19. 8 (Vāmadeva; to Indra)
pūrvir uśāsāḥ ċarādaç ca gūrtā vṛitrān jaghanvān aṣṛjād vī sindhun,
paṛiśhitā atrnād badbadhānāḥ śrā indraḥ śravītave prthivyā.

From these padaś a later poet over-familiarly has extracted the short form to suit his metre. Cf. also Oldenberg, Rig-Veda Noten, p. 83, to RV, 1. 82. 2.

19. A line soldered together from two, and vastly changed in meaning.

1. 142. 3 (Dirghatamas Āucathya; Āpī-stanza to Narācañṣa) gūcīḥ pāvakā ādbhuto mādhāya yajñām mimikṣati,
narācāṇaḥ trir ā divō devō devēsu yajñīyaḥ.
8. 13. 19 (Nārada Kāṇva; to Indra)
stoṭā yāt te ānuvrata ukthāny rtudhā dadhē,
gūcīḥ pāvakā ucyate sā ādbhutāḥ.
9. 24. 6 (Vićvamanas Viṣvāya; to Pavamāna Soma)
pāvasva vṛtrahantanoktheblir anumādyāḥ,
gūcīḥ pāvakā ucyate.
9. 24. 7 (The same)
gūcīḥ pāvakā ucyate sómāḥ sutāsyā mādhvāḥ,
devāvīr aghaçāṇasahā.

Stanza 8. 13. 19 offers a remarkably convincing instance of secondary workmanship, both from the point of view of form and contents. As regards the form, 8. 13. 19c is evidently
pieced together; it consists in fact of two pādās. sō adbhutah is the usual and secondary tetrasyllabic refrain pāda which marks the artificial workmanship of 8. 13 throughout. The two parts of 8. 13. 19e are derived respectively from 9. 24. 7 and 9. 24. 8. As regards the meaning, the entire group of repeated pādās shows that the expression, ācīcī pāvakā ucyaṭe sō adbhutah, can be applied to a devoted poet (stotā ṛṇuvaṭāḥ, in pāda 8. 13. 19e) only in a secondary, hyperbolic sense. The poet is said to be (ucyaṭe) the possessor of the divine attributes, ācīcī pāvakā adbhutah; in reality he is no such a thing. If we press the point the poet who devotedly sings songs of praise that accompany the oblations of Soma assumes the attributes of Soma himself (9. 24. 6, 7). Aufrecht, in the Preface to his second edition of the Rig-Veda, p. xxxv. writes anent 8. 13. 19e: 'Wer? der stotṛ oder Indra? In dem Kopfe der Uebersetzer steigt keine Ahnung von einer Schwierigkeit auf. Die Attribute passen nur auf Agni oder Soma.' Sāyana, indeed, whom some scholars still would fain regard as an authority, imposes the pāda upon Indra. But the text is clearly, otherwise, and its oddity is explained by its obvious secondary origin.

20. A scooped out pāda.

1. 144. 7 (Dirghatamas Aucaṭy:; to Agni)
āgne juṣasva prāti harya tād vāco māṇḍra svādhāva ṛṭajata sūkrato,
yō viṣvātāb ṭṛatām āśi darṣatō raṅvāḥ sāūdrṣṭāu pitumāniva ksāyaḥ.

'O Agni, enjoy and delight in this song, O lovely, blissful, ṛṭa-begotten, highly intelligent (god), who art turned toward us on all sides, conspicuous, lovely to behold like a dwelling rich in food.' The second pāda has a curious parallel:

8. 74. 7 (Gopavana Ātreya; to Agni)
iyāṁ te nāvyāṁ matir āgne adhāyā asmād ā,
māṇḍra sū劫a sūkrato 'muṣa dāsmāṭīthe.

'This quite new song was furnished thee by us, O Agni, lovely, well-born, highly intelligent, wise, wonderful guest.' The pāda māṇḍra sū劫a sūkrato — māṇḍra svāḍhāva ṛṭajata sūkrato, and it seems to me likely that the longer pāda is the original; note the anapaest after its caesura. The shorter
pāda is the result of a sort of scooping out of the longer in the middle. Cf. the relation of āriṣṭah sārva edhate, 1. 41. 2; 8. 27. 16, to āriṣṭah sā mārto viṣva edhate, in 10. 63. 13. Their relation may be almost expressed in the formula āriṣṭah sā [mārto viṣva edhate. Here, however, the shorter pāda is the original, from which the metrically imperfect longer pāda is derived by additions which do not add to the sense.

21. How one line begets two others.

1. 1. 8 (Madhuchandas Vaiśvāmitra; to Agni)

rājantam adhvarāṇāṁ gopām rtāya didivim, vārdhamānaṁ svē dāme.

1. 45. 4 (Praskaṇva Kāṇva; to Agni)

māhikerava utāye priyāmedhā ahūṣata, rājantam adhvarāṇāṁ agnim cakraṇa cocīṣa.

8. 8. 18 (Sadhvanāsa Kāṇva; to the Aśvins)

ā vām viṣvabhīr utihīḥ priyāmedhā ahūṣata, rājantāv adhvarāṇāṁ āśvinā yāmahūtiṣu.

1. 27. 1 (Cunahçepta Ājigmari; to Agni)

āśvam nā tvā vāraṇavatam vandādhyā agnim nāmabhīḥ, sanrājantam adhvarāṇāṁ.

The original form of the repeated pāda is doubtless rājantam adhvarāṇāṁ, an Agni motif; cf. such expressions as, pātir hy adhvarāṇāṁ agne, in 1. 44. 9; or, (agnin) netāram adhvarāṇāṁ, in 10. 46. 4. Oldenberg, Prolegomena, p. 262, rightly regards the group of hymns ascribed to Praskaṇva (1. 44—50) as related to and prior to the Vatsa group (8. 6—11). The pāda, rājantāv adhvarāṇāṁ, as applied to the Aśvins in 8. 8. 18, is obviously secondary in sense; it is equally clear that the trickily trochaic pāda, sanrājantam adhvarāṇāṁ in 1. 27. 1 is secondary both in form and sense. The chronological relation of the pādas may be expressed as follows:

rājantam adhvarāṇāṁ

sanrājantam adhvarāṇāṁ  rājantāv adhvarāṇāṁ.


The *RGH* Law in Philippine Languages.—By CARLOS EVERETT CONANT, Professor in the University of Chattanooga.

The attention of investigators in the field of Indonesian phonology was early attracted to the remarkable correspondence of *r, g, h, and y* seen in Toba and Malay *urat*: Tagalog *ugat*: Dayak *what*: Lampong *oga* 'vein, nerve, sinew'.

The first formal statement of this varied representation of an originally single phonic element was made by the Dutch scholar H. N. van der Tuuk in what is known as the first van der Tuuk law, the phenomena of which have been further examined and classified by others, notably Brandes, Kern, Adriani, and Brandstetter.

According to this law the IN\(^1\) parent speech possessed a certain consonantal sound which, being lost in some languages,

\(^1\) Abbreviations used in this paper:

<table>
<thead>
<tr>
<th>Ach.</th>
<th>Achinese</th>
<th>Inb.</th>
<th>Inihaloi</th>
<th>NJav.</th>
<th>New Javanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bgb.</td>
<td>Bagobo</td>
<td>Iran.</td>
<td>Iranun</td>
<td>Ofvor.</td>
<td>Old Favor-</td>
</tr>
<tr>
<td>Bis.</td>
<td>Bisaya</td>
<td>Jav.</td>
<td>Javanese</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bug.</td>
<td>Bagis</td>
<td>Lamp.</td>
<td>Lampong</td>
<td>Phil.</td>
<td>Philippine</td>
</tr>
<tr>
<td>Chro.</td>
<td>Chamorro</td>
<td>Mad.</td>
<td>Madurese</td>
<td>Sang.</td>
<td>Sangir</td>
</tr>
<tr>
<td>Day.</td>
<td>Dayak</td>
<td>Mak.</td>
<td>Makassar</td>
<td>S.-Bik.</td>
<td>Samar-Leyte</td>
</tr>
<tr>
<td>Duz.</td>
<td>Duzon</td>
<td>Mal.</td>
<td>Malay</td>
<td>[Bisya]</td>
<td></td>
</tr>
<tr>
<td>Favor.</td>
<td>Favorlang</td>
<td>Mentw.</td>
<td>Mentawai</td>
<td>Sbl.</td>
<td>Sambal</td>
</tr>
<tr>
<td>Form.</td>
<td>Formosan</td>
<td>Mgd.</td>
<td>Magindanau</td>
<td>SForm.</td>
<td>Singkan-For-</td>
</tr>
<tr>
<td>Ibg.</td>
<td>Ifiang</td>
<td>Mkb.</td>
<td>Minahahau</td>
<td>[mosan]</td>
<td></td>
</tr>
<tr>
<td>Ilk.</td>
<td>Ilokoi</td>
<td>Mlg.</td>
<td>Malagasi</td>
<td>Sumb.</td>
<td>Sumbanese</td>
</tr>
<tr>
<td>IN</td>
<td>Indonesian</td>
<td>Mongd.</td>
<td>Mongondou</td>
<td>Sand.</td>
<td>Sundanese</td>
</tr>
</tbody>
</table>

Tag. Tagalog | Tir. | Tirurai |

\* Bis. includes the three great Bisaya dialects, Cebuan, Panayan, and that of Samar and Leyte, except on pp. 83, 84, and 85, where it includes only the first two named, the last being indicated by S.-Bis.
like Old Javanese, became in others variously \( r \); as in Toba, Karo, Čam, and Malay; \( g \), as in Tagalog, Bisaya, Formosan, Pinosakan, and Chamorro; \( h \), as in Dayak, Sangir, and Bulu; and \( y \), as in Lampang, Gayo, and Pampanga.

The following comparative table will illustrate the most natural operation of the law, that is, where the RGH consonant is intervocalic and hence least liable to the influence of secondary phonetic laws.

<table>
<thead>
<tr>
<th></th>
<th>( H )</th>
<th>( G )</th>
<th>( H )</th>
<th>( Y )</th>
<th>Zero</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toba</td>
<td>urat</td>
<td>OForm, ugit</td>
<td>Day. uhat</td>
<td>Lamp. oya</td>
<td>OJav. uwad</td>
</tr>
<tr>
<td>Mal.</td>
<td>urat</td>
<td>Favor. oggach</td>
<td>Bula ohad</td>
<td>Gayo uyot</td>
<td>XJav. uwat</td>
</tr>
<tr>
<td>Ach.</td>
<td>urat</td>
<td>Tag. ugit</td>
<td>Sang. iha</td>
<td>Pamp. uyot</td>
<td>Nias uwo</td>
</tr>
<tr>
<td>Mkh.</td>
<td>urat</td>
<td>Bis. ugit</td>
<td></td>
<td>Batan uyat</td>
<td></td>
</tr>
<tr>
<td>Mak.</td>
<td>urat</td>
<td>Mongd. ugit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bug.</td>
<td>urat</td>
<td>Chro. gugat</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The languages of the OJav. type have developed a parasitic labial glide \( w \) between the two vowels thrown together by the loss of the RGH consonant. Chro. gugat has an initial parasitic \( y \), as in gunum 'six'. The phonetic changes seen in the other non-Philippine examples are due to the regular operation of secondary laws, and need not be detailed here. The Malagasi cognate uzatra shows \( z \) for RGH, as in Mlg. zahitra 'raft', beside Mal. rakit, Bis. gakit. This \( z \) is shown by Ferrand to have evolved from a spirant \( y \) in OMLg. In Mlg. way, vey 'burning coals', beside Mal. bara, Tag. biqa, this spirant seems to have coalesced with the Mlg. \( i \), the frequent representative of IN a in final position. The RGH consonant in final position is lost in Mlg., as in several other IN speech groups, e.g. Mlg. uhi, uhu 'tail', beside Mal. ikor, Toba iher, Bis. ikog. Further it also becomes \( r \) medially, e.g. Mlg. awuratra 'North', beside Mal. barat, Tag. habaga, Bulu anahat. Čam has \( r \) initially and medially, but drops the RGH consonant finally, with compensatory lengthening of the preceding vowel; e.g. Čam ratur 'hundred', beside Mal. ratus, Bis. gatus; Čam barå 'shoulder', beside Day. bang, Toba abera, Bis. abugu; Čam ulå

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1 Compare my paper, Consonant changes and vowel harmony in Chamorro, pub. in Anthropos vol. v.
2 Essai de phonétique comparée du malais et des dialectes malgaches, Paris 1909, p. 106.
‘snake’, beside Mal. ular, Ibg. ulág, and Jav. ulâ, the Jav. showing the same loss and compensatory lengthening. Certain Phil. languages represent RGH by l (see below p. 73).

The Philippine Islands form the center of the speech territory in which the consonant of the RGH series appears as g. Hence it is customary to classify as belonging to the Philippine group, not only languages of that archipelago, but such other speech groups as show the g of that series. Among the non-Philippine languages of this category are the Duzon and Iramun of N. W. Borneo, the Singkan Formosan and the Favorlang of Formosa, the Ponosakan and Mongondou of North Celebes, and the Chamorro of the Marianas. The following examples will further illustrate the g languages in non-Philippine territory.


Duz. waig ‘water’, Iran. aig, beside Mgd. ig. OJav. er, Mal. ayer.

Duz. gamut ‘root’, beside Tag. gamut, Ilk. ramát, Tonson amut.

Duz. niog ‘coconut’, Chro. niyo(g), beside Tag. Bis. niug, Mal. niyer.

SForm. págig ‘ray fish’, beside Tag. Bis. págí, Mal. pari, Day. pahi, where SForm. pagig shows final parasitic g, as in wagig ‘storm’, beside Phil. bagyñu.

O Favor. tagga ‘blood’, Chro. haga, beside Ibg. dágā, Mal. and Čam darah, Bulu raha. The O Favor. tagga shows secondary gemination of g, as in oqqach (Tag. uqát), and t for d, as in O Favor. tarran (Phil. dalan) ‘way’. Chro. haga has h regularly for initial d.


For the geography of the Philippine languages and dialects see Scheerer’s sketch map in his work, The Batán dialect as a member of the Philippine group of languages, Div. of Eth. Pub. vol. v, part i, Manila 1908, p. 17.

See Conant, op. cit.

In the three great languages, Tagalog, Bisaya (with its many dialect variations), and Bikol, together constituting the speech of seventy per cent of the entire population of the Philippine Islands, the RGH consonant invariably appears as *g* in all positions, initial, medial, and final. The same is true of Ibanag (North Luzon), Magindanau (South Mindanao), Sulu, and several other speech groups of minor importance. There are, however, a number of Philippine languages in which the RGH consonant develops other sounds, particularly *r, l*, and *y*, as exemplified by the following table, showing the consonant in question in initial, medial, and final position.

<table>
<thead>
<tr>
<th>G languages</th>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tag.</td>
<td>gamót ‘root’</td>
<td>ugát ‘vein’</td>
<td>ikog ‘tail’</td>
</tr>
<tr>
<td>Bis.</td>
<td>gamút</td>
<td>ugát</td>
<td>ikog</td>
</tr>
<tr>
<td>Bkl.</td>
<td>gamót</td>
<td>ugát</td>
<td>ikog</td>
</tr>
<tr>
<td>Ibg.</td>
<td>gamút</td>
<td>ugát</td>
<td>(niáng ‘cocoa-</td>
</tr>
<tr>
<td>Mgd.</td>
<td>gamut</td>
<td>ugat</td>
<td>ikug</td>
</tr>
<tr>
<td>Sulu</td>
<td>gamut</td>
<td>ugat</td>
<td>ikog</td>
</tr>
<tr>
<td>Bgb.</td>
<td>ramot</td>
<td>ugat</td>
<td>ikog</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R languages</th>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ilk.</td>
<td>ramút</td>
<td>urát</td>
<td>(bibir ‘lip’)</td>
</tr>
<tr>
<td>Tir.</td>
<td>(rohok ‘rib’)</td>
<td>urat</td>
<td>igor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L languages</th>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pang.</td>
<td>lamót</td>
<td>ulát</td>
<td>ikól</td>
</tr>
<tr>
<td>Knk.</td>
<td>lamót</td>
<td>uwát</td>
<td>ikól</td>
</tr>
<tr>
<td>Inb.</td>
<td>damót</td>
<td>ulat</td>
<td></td>
</tr>
<tr>
<td>Bon.</td>
<td>lamót</td>
<td>óád, wád, uád</td>
<td>ikól</td>
</tr>
<tr>
<td>Klm.</td>
<td>lamot</td>
<td>(darala ‘girl’)</td>
<td>(bibil ‘lip’)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Y languages</th>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pamp.</td>
<td>yamút</td>
<td>uyát</td>
<td>iki</td>
</tr>
<tr>
<td>Batan</td>
<td>yamot</td>
<td>ýáat</td>
<td>(itió ‘egg’)</td>
</tr>
<tr>
<td>Sambal</td>
<td>(yábi ‘night’)</td>
<td>(búyas ‘rice’)</td>
<td>(toló ‘sleep’)</td>
</tr>
</tbody>
</table>

**Remarks on the above table.**—In the Ibanag examples *gamút* and *ugát* the final *t* has lost its original pronunciation, and, like the other surd stops *k* and *p*, has become a mere glottal stop (hamza) in Ibg. when final. I write the original surd
stop above the line, since it has its original value when supported by a suffix, e.g. gamulan.

The intervocalic rr written by Bennásar\(^1\) in his spelling of Tiruray words, e.g. urrat 'vein', urrar 'snake', is simplified to r in this paper, since it is not a case of gemination, but is a trilled r which would regularly be represented in the Spanish orthography by rr when intervocalic.

Tir. rohok, beside Mal. rusuk, Bis. Bgb. gusok, has h for IN k, as in Tir. liha 'mit', beside Tag. lisa.

Tir. igor 'tail' shows g for IN k, as in Tir. sigeu 'elbow', beside Phil. siku.

The Kankanaí uceat and Bontok ođđ, wâd, uđđ\(^2\) show secondary loss of intervocalic l, the former with compensatory labial glide w, while the latter shows a tendency to reduce the initial o(u) to a labial semivowel, as appears from the variant wâd.

The d of Inbaloi damót is also secondary for Inb. l, with which it interchanges. Cf. Inb. ulat and ikol, and see Scheerer, The Naholoi Dialect, p. 102.

Bagobo properly belongs to the g languages, as will appear below, ramot being one of the few anomalous examples of r representation of RGH to be found in that language.

Ibg. niug is cognate with Mal. niyur, Tag. niug; and Ilk. bibir, Kalamian bibi 'lip', with Mal. bibir, Ibg. bibig.

Klm. darala 'girl' is identical with Bis. dalaga, a reduplicated form of Mal. dara, Mgd. laga, raya.

For Btm. itoi, beside Tag. itiug, Mal. telur, see below (p. 81). With Sambal yabi compare Tag. gab'i and Ilk. rabri; and with Sbl. buyas and tolöi compare Bis. bugas, Mal. beras, and Bis. tulö, Mal. tolor, Jav. turu.

The r, l, and y languages in detail. Unlike the Tagalog, or pure g type, the r, l, and y languages show some irregular-

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\(^1\) Diccionario Tiruray-Español, Manila 1892, and Diccionario Español-Tiruray, Manila 1893. This rule of orthography is, however, not consistently adhered to by Bennásar, e.g. he writes biurrung 'a kind of tree' in his Observaciones Gramaticales sobre la lengua Tiruray, Manila 1892, p. 3, while the same word appears as biurrung in the Diccionario Tiruray-Español.

\(^2\) The Bontok examples throughout the paper are taken from Seidenadel, The language spoken by the Bontoc Igorot. Chicago 1900. Open Court Pub. Co.
ities, their characteristic consonant often interchanging with \( g \). They therefore require individual examination.

The \( r \) languages. These are the Ilokano, spoken on the N.W. coast of Luzon, and the Tiruray, spoken by a mountain tribe of South Mindanao. Bagobo, also spoken in South Mindanao, is very similar to Bisaya in many respects, and generally has \( g \) like that language. It is possible that the sporadic cases of the \( r \) representation in Bagobo may be due to the influence of some neighboring mountain dialects, or to Malay. The inconsistencies of its vocalism, doubtless due to the same influence, have been pointed out in my paper on the pepet law.¹ It will appear from the following comparative table that the interchange of \( r \) and \( g \) follows different norms in the two \( r \) languages, and that \( r \) is more persistent in Tir, than in Ilok. It will also appear that Bgb. is properly a \( g \) language, as above stated.

<table>
<thead>
<tr>
<th></th>
<th>Ilokano</th>
<th>Tiruray</th>
<th>Bagobo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mal. rebá ‘to fall’</td>
<td>rebáb</td>
<td>rebá and gebá gobbá</td>
<td>Tag. gibá</td>
</tr>
<tr>
<td>Mal. rauak ‘side’</td>
<td>róok</td>
<td>rohok</td>
<td>gosok</td>
</tr>
<tr>
<td>Mal. rakít ‘raft’</td>
<td>rúkit</td>
<td>gákít</td>
<td>raan</td>
</tr>
<tr>
<td>Pamp. ayán ‘light, quick’</td>
<td>abága</td>
<td>wará</td>
<td>gaan</td>
</tr>
<tr>
<td>Toba abará ‘shoulder’</td>
<td>abará</td>
<td>wará</td>
<td>gaan</td>
</tr>
<tr>
<td>Mal. dúri ‘thorn’</td>
<td>dúri</td>
<td>durá</td>
<td>dugí</td>
</tr>
<tr>
<td>Toba urás ‘to wash’</td>
<td>úgaa</td>
<td>urah(en)</td>
<td>horas</td>
</tr>
<tr>
<td>Mal. bará ‘hot coals’</td>
<td>bára</td>
<td>bará</td>
<td>baga</td>
</tr>
<tr>
<td>Mal. barát ‘west wind’</td>
<td>abágá</td>
<td>barát</td>
<td>habagát</td>
</tr>
<tr>
<td>Day. besok ‘satiated’</td>
<td>husóg</td>
<td>besor</td>
<td>bossóg</td>
</tr>
</tbody>
</table>

The vocalism of the first syllable of Ilok. rebáb, Tir. rebá, gebá, Bgb. gobbá, Tag. gibá, and that of Ilok. busóg, Tir. besor, Bgb. bossóg, Bkl. basóg, is according to the pepet law, and the consonantal doubling in the Ilok. and Bgb. examples, according to the law of gmination of a consonant following original pepet.² Tir. has both rebá and gebá with slightly different meanings, while Ilok. has only rebáb, and Tir. has \( g \) in gákít beside the Ilok. \( r \) of rúkit. But in three of the examples Tir.

¹ The Pepet Law in Philippine languages, to appear in an early number of Anthropos, to which journal it was sent for publication several months ago.

² Cf. Conant, Pepet Law, and Brandstetter, Wurzel und Wort in den Indonesischen Sprachen, Luzern 1910, p. 41, who has independently discovered the same law for Ilok.
has r where Ilk. has only g, namely warā; urah(en), and besor. The h of Tir. rohok and urah(en) has been treated above (p. 75).

An examination of the Iloko vocabulary reveals a large number of r:g variants. The following are selected from a long list:

Ilk. ribak ‘fragment of pottery’, beside the later, but less common gisak (Ibg. gibak); Ilk. baro ‘new’, beside bāga, in the sense of ‘newcomer’ (Mal. baru, Tag. bāgu); Ilk. darās ‘quick, prompt’, beside daqās (Toba doras, Day dūhes, Tag. dagās); Ilk. bakkōr ‘convex’, beside bakkōy ‘concave’; Ilk. bibir (obsolete) ‘lip’, beside the modern bibig (Mal. bibir, Ibg. bibig). Ilk. girās ‘notch’ shows this interchange by metathesis in the reduplicated rig-rigāyan ‘thing notched, leaf with notched edge’.

It appears from a study of all the material for Ilk. that the original representation of the RGH series in that language was r unless disturbed by secondary laws. This r has been preserved in a large number of the most common words, e.g. vīsok, rambūt, urāt, bāra, dūri, busōr, tīker. In other cases the r and g forms exist side by side, sometimes with different shades of meaning, as seen in the above examples, while in some cases the new g has entirely replaced the older r. Furthermore some g words have crept in from pure g languages, chiefly Ibg. and Tag.

The most striking difference between Ilk. and Tir. in the RGH representation is perhaps the treatment of the RGH consonant in final position. It is more commonly r in Tir., while g prevails in Ilk., e.g. Tir. besor; Ilk. bussūq of the above table; Tir. bëwâr ‘lip’, beside Modern Ilk. bibig; Tir. igor, beside Bis. ikug; Tir. swer ‘scatter’, beside Bis. sāwug; Tir. rōr ‘neck’, beside Bis. lōg, Tag. līg, Mal. lether; Tir. urar ‘snake’, Ilk. őleg.

But for the g of this last Ilk. example, see below p. 77.

As a general rule both languages have g when preceded by original pepet and followed by a non-pepet vowel; e.g. Tir. beqās ‘rice’, Ilk. beqās, Tag. bigās, Bis. bugās, Mal. beras, Toba beras, Day. behas; Tir. tagās ‘hard’, Ilk. sagāt (metathesis), Tag. tīgās, Bkl. tugās, Bis. tugās, Bgb. tujās, Mgd. tegās, Mal. teras, Toba tiras; Tir. begāt ‘weight’, Tag. bigāt, Bis. bugāt, Toba burat, Day. behat. Both languages have r between the two
pepet vowels in Tir. feres 'to press out', Ilk. perrēs, Sund. perēs, Day. pehes, Sang. pēhēs.

An examination of the vocabularies of these two languages during the preparation of the present paper has revealed the following special law for the liquids l and r: Hoklo and Tirurai, like Toba and Dayak, do not admit both l and r in the same Grundwort.¹

In Ilk. this is avoided by the g representation of RGH in words having an l; e.g. üleg 'snake', beside Mal. ular. In Tir. it is avoided either in the same way, e.g. Tir. and Ilk. lāyag 'sail', beside Mal. layar, or, and this is by far the more common, by an assimilation of liquids in which the r of the RGH series generally assimilates the neighboring l, e.g. Tir. urar (Mal. ular), as is regularly the case in Toba and Dayak, e.g. Toba, Day. rayar, beside Mal. Sund. layar, Tag. Bis. Ibg. lāyag. But exceptionally the RGH r is assimilated to the neighboring l, e.g. Tir. līlei 'post' (Tag. haligī, Mal. dīri), where the Tir. l of the RLD series prevails. The following tabulation will show at a glance how the law affects the two languages.

<table>
<thead>
<tr>
<th>Hoklo</th>
<th>Tirurai</th>
<th>Other languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>bulīg 'bunch of bananas'</td>
<td>bulik (?)</td>
<td>Mal. bulir, Toba burir, Bis. Bkl. bulīg</td>
</tr>
<tr>
<td>ribuk 'make, disturb, confuse'</td>
<td>rebur,</td>
<td>Mal. lebur, OJav. labū, Mak. laboro</td>
</tr>
<tr>
<td></td>
<td>ribur</td>
<td>Mgd. lebug, lebak, Bis. lubūg, Bgb. lohbo, Pamp. labūg</td>
</tr>
<tr>
<td>üleg 'snake'</td>
<td>urar</td>
<td>Mal. ular, OJav. Cam ūla, Mak. ulara, Toba uluk, Pang. üleg</td>
</tr>
<tr>
<td></td>
<td>ruēr 'neck'</td>
<td>Mal. leher, Sang. lehe, Kuyunun lēg, Bis. Bkl. Sula lēg</td>
</tr>
<tr>
<td></td>
<td>līlei</td>
<td>Ibg. Mgd. lig, Bgb. alig</td>
</tr>
<tr>
<td>srigi or adigi 'post'</td>
<td></td>
<td>Bulu arīhi, Tag. Bis. haligī, S.-Bis. Bkl. hariği, Mlg. adōri</td>
</tr>
</tbody>
</table>

¹ As the question whether IN roots are to be regarded as disyllabic or monosyllabic has not yet been settled, I employ the convenient term Grundwort following the terminology of Brandstetter, Wurzel und Wort, p. 3 et passim.
For further \( l \) assimilation in Tir., compare Tir. \( l u a l \) 'except', Mal. Sund. \( l u a r \) 'outside'. The \( r \) prevails in the Ilk. cognate \( r u a r \), in which it agrees with Toba, Day. \( r u a r \). Compare also Tir. \( l a l a h \) (en) 'prohibit', beside Mal. Sund. Mak. \( l a r a n \), Toba, Day. \( r a r a n \), Sulu \( l a a \) (for *\( l a l a h \)).

The \( g \) of Ilk. Tir. \( l a y a g \) may also be explained as a case of stereotyped Phil. \( g \) to be treated below (p. 83). The surd \( k \) replaces the sonant \( g \) in final position in Ilk. \( r i b u k \). This wavering between final surds and sonants is not uncommon, not only in this language, but elsewhere in the Philippines and in Chamorro.\(^1\) It is possible that Tir. \( b u l i k \) 'a kind of wild banana' is to be connected with Ilk. \( b u l i g \), in which case we should have, instead of the regular Tir. assimilation, an example of final RGH \( g \) becoming \( k \) just as in Tir. \( r i b u k \); cf. also Tir. \( t a n u k \) 'sound', beside Mgd. \( t a n u k \), Tag. \( t a n o g \), Pang. \( t a n o l \).

The \( l \) languages. In Kalamian (North Palawan), Pangasinan, and the related Igorot dialects Inilaloi, Kankanai, and Bontok, the RGH consonant appears regularly as \( l \), exceptionally as \( g \), which sometimes becomes the surd \( k \). The \( l \) of these languages is considerably more constant than the \( r \) of the \( r \) languages, as will appear from the following table and the additional examples given below.

<table>
<thead>
<tr>
<th>Kalamian</th>
<th>Pangasinan</th>
<th>Inilaloi</th>
<th>Kankanai</th>
<th>Bontok</th>
<th>G languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>lamot 'root'</td>
<td>lamot</td>
<td>damot</td>
<td>lamot</td>
<td>lamot</td>
<td>Bias. gamot</td>
</tr>
<tr>
<td>labuñ 'night'</td>
<td>labi</td>
<td>kalbian</td>
<td>lafi</td>
<td>lafi</td>
<td>Tag. gahi</td>
</tr>
<tr>
<td>kabala 'shoulder'</td>
<td>abala</td>
<td>awada</td>
<td>abala</td>
<td></td>
<td>Brg. abagå</td>
</tr>
<tr>
<td></td>
<td>ulat 'vein'</td>
<td>ulat</td>
<td></td>
<td></td>
<td>Brg. agat</td>
</tr>
<tr>
<td>bibil 'lip'</td>
<td>bibil</td>
<td></td>
<td></td>
<td></td>
<td>Bia. bibig</td>
</tr>
<tr>
<td>tenal 'voice'</td>
<td>tanol</td>
<td></td>
<td></td>
<td></td>
<td>Bkl. tanog</td>
</tr>
</tbody>
</table>

The Inh. secondary \( ã \) for \( l \) in \( damot \) and \( awada \), and the loss of intervocalic \( l \) in Bon. \( ã ã ã \) are explained above (p. 5).

Klm. \( kabala \) has an initial parasitic \( k \) as in \( k o l o \) 'head', beside IN \( ë ë ë \). This \( k \) may also appear medially, as in \( takon \)

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\(^1\) Cf. Conant, Consonant changes and vowel harmony in Chamorro.

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\(^2\) Corrected spelling for the Span. orthography \( l a n i \) of Father Jeróminus de la Virgen de Monserrate in his Vocabulario Castellano-Calamiano, pub. by Retana in the Archivo del Bibliofilo Filipino, vol. ii, Madrid 1896. On this spelling and the whole subject of Span. confusion of \( b, v \), and \( u \), see my \( F \) and \( V \) in Philippine languages, p. 2, note.
year', beside Tag. ta'ón, and finally, as in polok 'ten', beside Bis. puló, and generally, perhaps always, stands in the place of the glottal stop (hamza).

As the r languages avoid the concurrence of l and r in the same word, so the l languages do not allow two l's in the same word when such would be the result of the l representation of RGH. In such cases RGH generally appears as g, e.g. Pang. uléy 'snake', Hm. úleg, Kuk. eweg, Bon. úwúg, beside Mal. ular, Tir. wáv, the Kuk. and Bon. examples showing regular loss of intervocalic l (see above, p. 74); Klm. and Pang. ilog 'river', beside Tag. ilog, Mal. alur.

The correspondence of Klm. kilog 'egg' with its Pang. cognate iknól (Tag. Bis. Ilk. illug, Mal. telor) is interesting as showing the different evolution in the two languages of the RGH consonant in the same word with an original l. In Klm. kilog RGH appears as g and the original l remains unchanged, while the slightly pronounced t of Phil. illug degenerates to hamza, which shifts, as often in Klm., to the other side of the vowel i and there appears regularly as k (see above). In Pang. iknól, the RGH consonant persists as l, and by a dissimilation of liquids the original l becomes n, to which the t is then partially assimilated, becoming k. Precisely the same evolution as to liquids is seen in Pang. monóf 'bunch of bananas' (Bis. búlig, etc. See table p. 77). In this example, furthermore, the n produced by dissimilation acts in turn on the initial labial sonant stop b, changing it by partial assimilation to the labial nasal m. In Klm. the persistence of final l of the RGH series in a word beginning with an original l is shown by dikel 'neck', beside Tag. líwí, Bis. liug, Mal. leíher, Tir. réër. Here the repetition of l is avoided by changing the original initial l to its corresponding sonant stop d. The vocalism of the last syllable follows the pepet law, and the parasitic k takes the place of the hamza seen in the Tag. and Bis. cognates.

While the r languages generally have g for RGH when this is preceded by a pepet vowel and followed by any other vowel, Pang. shows l under the same circumstances, e.g. Pang. belás 'hulled rice', beside Tir. begás, Ilk. bagás, Pang. belát 'weight', beside Tir. begát.

The material at hand for the other l languages is not sufficient to permit of classification in this particular.
Pang. also shows i as the first element of a consonantal group following any vowel, e.g. Pang. uisá ‘deer’, beside Ilk. ugsa, Toba ursa, Mal. rusa; Pang. belwás ‘alzar o coger lo que está dentro del agua’, Tag. bigwás ‘tirar el anzuelo’; Pang. pelsá ‘boil, carbumele’, Tag. piga, Bis. Bgb. pugsá. The last two examples have pepet vocalism of the penult. The exceptional y of Pang. besá ‘paddle’, beside Pamp. baysá, Bis. Sulu baysá, Bgb. bupá, Chro. pogwá, is probably to be explained as a case of stereotyped g (see below, p. 82).

The y languages. As in Gayo and Lampong, the BGH consonant appears as y in the Phil. languages, Pampanga, Batan, and Sambal, where it also appears exceptionally as g, though most of the exceptions may here be referred to the stereotyped class. The regular representation for Pamp. and Btn. is shown by the following examples:  


B tn. itiói ‘egg’, Lamp. telui, [Mal. ći lor, Bgb. tolloj, Tag. idú.]  


When final, the y becomes i and coalesces with a preceding o in both Pamp. and Btn., as in Btn. bibi ‘lip’, Ilg. biby; Mal. bibir; Pamp. bibi ‘cluster of bananas’, Bis. bülig, Mal. bulir, Jav. wuli, Mlg. wuli, buli. With a preceding a it forms the diphthong ai in both languages, as it does in Lampong, e.g. Pamp. tikái ‘reed-mace, cattail’, Bis. Bkl. tikog, Ilk. tikor, Mal. tikat, Mlg. taihi, tihi, tihi (the examples showing regular pepet vocalism of the ultima); Btn. cudái, budái i ‘snake’, Lamp. ulai.

1 The Batan word may now be included under Brandstetter’s Variation 3 under Schlang, (Mata-Hari, p. 34), since the only difficulty it presents is the prefixed u or b, which can easily be explained as an initial parasitic labial glide before the labial vowel u. In fact it is pronounced much like the Span. b in bullar.
Ibg. ulág, Pang. ulóg, Mal. ular (pepet in ultima). With a preceding o (u) the i (iy) forms the diphthong oi (ui) in Btn. as in Lamp., e.g. Btn. iti os eg, Lamp. telui; Btn. busoi ‘enemy’. Ilk. búsor, Pang. busól. In Pamp. the final diphthong oi (ui) thus formed contracts to i, e.g. Pamp. Ikí ‘tail’ (but Lamp. Ikñí). Other examples for Pamp. are ápí ‘lime’, Tag. ápog; Pamp. atní ‘sound’, Tag. Bis. tunóg, Bkl. tunóg, Ibg. tannóg, Pang. tunöl (pepet in penult); Pamp. absí ‘sated’, Tag. Bis. busóg, Bkl. basóy, Ilk. bussóg, Bgb. bosog, Ibg. batiúg, Tir. besor, Day. besök (pepet in penult). The Pamp. examples atní and absí show a very common characteristic of Pamp. pointed out in a previous paper,1 namely, the metathesis of initial consonant + vowel.

In Pamp. RGH regularly appears as y when preceded by a pepet vowel, whatever be the character of the following vowel, e.g. Pamp. báyat ‘weight’, Pang. béát, Tir. beyät; Pamp. abyás ‘rice’, Pang. bélsás, Ilk. bagás, Tir. bagás; Pamp. asýad ‘sting (of insect)’, Tir. seyéd, Tag. sigyd, Bkl. Bis. sugyd (pepet in both syllables).

The material for Sambal is meager, but sufficient to enable us to classify that language here: Sbl. yábi ‘night’, Tag. gáñi, Pang. lábi, etc.; Sbl. bugás, buga ‘rice’, Tag. bugás, etc.; Sbl. ráyo, ráyo ‘run’, Bis. Bkl. lagú, etc.; Sbl. toló ‘sleep’, Tag. tológ, Mal. sitor, Day. tiró, Mg. turi, turú. It appears from the last example that final y is treated in Sbl. as in Btn. and Lamp.

In Pamp. RGH frequently appears as y, but more often in final position than initially or medially, e.g. Pamp. gátás ‘hundred thousand’, but Btn. gátás ‘hundred’, Mal. ratus; Pamp. abóyat ‘west wind’, Pang. abalátan, Bulu awahat; Pamp. sagúp ‘to skim’, Tag. sagúp, Toba surop, Mal. sarop, Day. sahep (pepet in ultima); Pamp. ilóg ‘river’, Tag. ilóg, Mal. alur; Pamp. amóg or amióg ‘dew of morning’, Tag. ionóg, Ilk. ámor, Pang. amól. The g of these examples is anomalous, and an explanation of its irregular appearance in place of the natural y is impossible at this stage of our investigation, as is the case with many y’s of the RGH series in the r and l languages. Pamp. gátás is probably to be explained as a borrowed word originally taken into the language with the meaning of an.

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1 Pelet Law.
indefinitely large number, just as in Tag., where the same word means million according to the dictionary of Noceda and Sanlúcar. 'Hundred' is dalan in Pamp. (liman dalan 'five hundred'), and the same word in Tag. daan, with secondary Tag. loss of intervocalic l. It is quite possible that Pamp. ilug and saqap are cases of stereotyped Phil. g, but abagat and amóy, together with a considerable number of other g examples of unmistakable RGH origin, remain to be explained.

On the other hand, the RGH g is doubtless rare in Btn. The available material for that language is not copious, and I have noted but one certain example in point, namely, Btn. agsa 'deer', beside Ilk. ugsá, Pang. utsá, Toba ursha, Mal. rusa. The g frequently seen in Rodriguez's Catecismo corresponding to IN l, e.g. Btn. agó 'head', beside IN ulu, is replaced by the modern h (Span. orthography f), and is the regular treatment of IN l in that language. Sambal has ilug 'river' (Mal. allur), but shows the regular y in tolóí 'sleep', where Pamp. (tulug) and the r and l languages show persistently g, which in the last two types may be due to the laws of liquids (see above, pp. 77, 79).

The three-fold origin of the Philippine g. The g's of the Phil. languages may be divided into three classes according to their origin, namely original g, the g of the RGH series, and that of the RLD series.

In a considerable number of words g persists uniformly in the languages of the archipelago unless affected by some secondary law. In order to determine whether the g in such cases is original or belongs to the RGH series, comparison must be made with material from other IN languages. Thus the word for 'rayfish' is pāgi in Tag. Bis. Bkl. Mgd. Ilg. Pamp. Pang. Ilk., and fōgi in Tir., where f is regular for IN p, and it is only by comparison with the non-Philippine cognates Mal. Sund. pari, Day. pahi, that the g of the Phil. words is shown to be of RGH origin. We have here what may be termed a stereotyped Phil. g of the RGH series.

On the other hand, the g of Tag. Mgd. Sulu, Pamp. Pang.


Some words show one stereotyped form running through one group of Phil. languages while a stereotyped variant appears in another. An example in point is the IN word for 'indigo', which shows a medial RGH consonant in Mal. Sund. Ĉam tarum (cf. Bahnar trum, Khmer tróm), Mak. tarum, Day. tahun, Jav. tom, while Toba has tayum where we should expect *tarum according to the RGH law. Now the Luzôn languages Tag. Pamp. Pang. Ilk. have tāyum following the Toba variant, while the languages of the southern Philippines, Bis. Bkl. Gbg. Mgd., have tāyum following the RGH type. Further investigation of such variants would doubtless throw additional light upon the history of Malayan migrations to the Philippines.

Pang. Ilk. and Ibg., like the non-Philippine languages Toba, Karo, and Mentawai, have also a g representing the consonant of the RLD series.¹ This correspondence is shown by the following comparative table.

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>L</th>
<th>D</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jav.</td>
<td>pari</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sund.</td>
<td>pärë</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mak.</td>
<td>pärë</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day.</td>
<td>parū</td>
<td>Tag.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tir.</td>
<td>fari</td>
<td>Pamp.</td>
<td>Sulu</td>
<td></td>
</tr>
<tr>
<td>Bkl.</td>
<td>pāro</td>
<td></td>
<td>pāi (k*palai)</td>
<td></td>
</tr>
<tr>
<td>S.-Bis.</td>
<td>pārā</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Btg.</td>
<td>parā</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ This g has been pointed out for Ibg. and the non-Phil. languages by Kern, Taalergelijkhende verhandeling over het Ameitjungsch, met een Aanhangsel over het blanketstel van het Formangua, Amsterdam, 1906, p. 11, et passim, and by Brandstetter, Prodomus zu einem vergleichenden Wörterbuch der malai-polynesischen Sprachen, Luzern 1906, p. 61; Mata-Hari, Luzern, 1908, pp. 22, 26.
<table>
<thead>
<tr>
<th>R</th>
<th>L</th>
<th>D</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jav.</td>
<td>pira</td>
<td>Bali pida</td>
<td>Mentw. pigu</td>
</tr>
<tr>
<td>Day.</td>
<td>pira</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mig.</td>
<td>ri</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tir.</td>
<td>iro</td>
<td>Tag. ila</td>
<td>Pang. pigu</td>
</tr>
<tr>
<td>Bgb.</td>
<td>pira</td>
<td>Pamp. pila</td>
<td></td>
</tr>
<tr>
<td>Bkl.</td>
<td>pir</td>
<td>Bis. pila</td>
<td></td>
</tr>
<tr>
<td>S.-Bis.</td>
<td>pira</td>
<td>Mgd. pila</td>
<td>Ibg. pigu</td>
</tr>
<tr>
<td>Kay.</td>
<td>pir</td>
<td>Sulu pila</td>
<td></td>
</tr>
</tbody>
</table>

### 'nose'

<table>
<thead>
<tr>
<th>R</th>
<th>L</th>
<th>D</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jav.</td>
<td>iruh</td>
<td>Mad. eio</td>
<td>Karo igun</td>
</tr>
<tr>
<td>Sund.</td>
<td>iruh</td>
<td>Mal. hiduñ</td>
<td>Toba igun</td>
</tr>
<tr>
<td>Day.</td>
<td>uruh</td>
<td>Cam. iduñ</td>
<td></td>
</tr>
<tr>
<td>Mig.</td>
<td>uruh, urum</td>
<td>Ach. hiduñ</td>
<td></td>
</tr>
<tr>
<td>Tamb.</td>
<td>uruñ</td>
<td>Mbk. (h)iduñ</td>
<td></td>
</tr>
<tr>
<td>Sumh.</td>
<td>uruh</td>
<td>Duz. iðuñ</td>
<td></td>
</tr>
<tr>
<td>Tir.</td>
<td>iroñ</td>
<td>Tag. idon</td>
<td>Bgb. idon</td>
</tr>
<tr>
<td>Mgd.</td>
<td>biruñ, iñun</td>
<td></td>
<td>Mgd. hiduñ</td>
</tr>
<tr>
<td>Kin.</td>
<td>aron</td>
<td>Bis. idon</td>
<td></td>
</tr>
<tr>
<td>Kay.</td>
<td>iron</td>
<td>Sulu idon</td>
<td></td>
</tr>
<tr>
<td>S.-Bis.</td>
<td>iron</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Further examples of this conspicuous *g* in Pang, Ibk. and Ibg. are the following:


In Pang, an interesting exception to this *g* representation of an intervocalic R.L.D consonant is to be noted. By a special law of Pang, and its related Igorot dialects, an intervocalic
consonant of the RLD series does not become y in a Grundwort whose initial or final consonant is the velar nasal n. In Pang, the RLD consonant becomes a liquid, l or r, in such words, while Ilk. and Ibg. show the regular g. This is illustrated by the following examples.

Pang. elōn ‘nose’, Knk. elōn, Bon. ielōn, Inb. idōn, but Ilk. agōn, Ibg. igūn, Karo and Tōba igūn, beside Jav. irun, Tag. ilōn, Cam iđun, etc. (see table p. 84).


The "Field of Abram" in the Geographical List of Shoshenq I.—By M. G. Kyle, Professor Biblical Archaeology, Xenia Theological Seminary.

The Palestinian list of Shoshenq I on the South wall of the Temple of Karnak is one of the best known of Egyptian inscriptions, having been published by Rosellini (Monumenti Storici, 148), Champollion (Notices Manuscrites, ii. 113), Lepsius (Denkmäler, iii. 252), and Brugsch (Geographische Inschriften, ii), though never completely by any of them. Prof. Maspéro has given (Recueil de Travaux, vii. 100) selections from the list designed to assist and correct an understanding of Champollion’s text, and Prof. W. Max Müller has rendered the same service to all the previous publications and added a few names never before published in his Egyptological Researches for the Carnegie Institute, pp. 51—54, plates 75—87.

Many names in the inscription are destroyed and so lost absolutely, unless a duplicate list be somewhere preserved for future discovery. All the names fully remaining are easily legible, but owing to the facts that some hieroglyphic signs have more than one phonetic value, that, of others, the phonetic value is uncertain, and that the exact equivalency between Semitic and Egyptian characters has never been completely made out, the transliteration of these names is difficult and in a large number of them yet uncertain, and even if transliterated correctly, the identification of the names either with classical or with biblical names and still more with modern names is very problematical; and the task is rendered complex, not only by reason of the phonetic problems, but by reason of the additional fact that the ancient scribe was considerably puzzled over some phonetic and linguistic problems of his own. Some of these problems arose from his ignorance of the Palestinian tongues, some from the list which he copied not being always in exact Geographical order and probably, as
Müller thinks, written in Phoenician script. There will be room for a long time to come for additional identifications and for the correcting of mistakes.

A recent identification of names 71 and 72 as "The Field of Abram" drawing 71 to 72 and making one name there-of, it is proposed in this paper briefly to examine, as probably one of the mistakes to be corrected. We will proceed by the simple method of bringing before us by the aid of the blackboard as clearly as possible, all the epigraphical evidence for the various renderings which have been given to the signs on these two shields, that we may be able to estimate correctly the value of this new identification, which is put out in recent times by Prof. Spiegelberg (Agyptologische Randglossen, 1904, p. 14) and in popular form by Prof. James Henry Breasted. Whether either of these scholars be indebted to the other or whether each worked independently, I do not know.

The text placed on the board is that of Prof. Müller. With this text in hand, I made a careful examination of the inscription at Karnak in 1908 and found it copied with that scholar's accustomed accuracy. The list here as published is absolutely correct, not even minute typographical errors, as so often in published texts, have crept in here.

Prof. Breasted, who now brings forward the identification "The Field of Abram," (A History of Egypt, 1905, p. 530, Ancient Records, 1906, pp. 352—353) does not give there-with his copy of the text, but only the transliteration and identification. It is thus impossible to say whether or not his text agreed with any of the other published copies of the text. If his text differed from Müller's, then he used an incorrect text, which in most cases would set aside the identification altogether. If his text agreed with Müller's, then this transliteration and identification is to be discussed.

The identification, "The Field of Abram," is a very interesting one and, if correct, will be welcomed by every one, but before critics and theologians shall build too many theories there-upon, it is well to understand the exceeding, not to say insuperable, difficulties which lie in the way of the identification.

(1) The inscription on shield number 71 needs but little discussion. Egyptologists differ somewhat about the correct transliteration. Müller prefers "Pa Hekla" which follows exactly the text, always a good way, while Breasted changes
the final vowel to "u," Semitic "1." But it is generally agreed that the whole expression is a Canaanite word with the definite article, the article being translated into Egyptian, and means "The field" here in a relation to what follows similar to the construct state.

(2) The relation between the inscription on shield 71 and that on shield 72 is of the utmost importance. In the identification, "The Field of Abram," 71 is carried over to 72 and made a part of the name. This is impossible; a proper name would not have the article, which the scribe here does not transliterate as though he supposed it could be a part of the name, but translates into the Egyptian definite article; besides, this same combination of "Field," or "Fields," with a following name occurs in the inscription of Shoshenq I, as it still remains, eight times (Nos. 68, 71, 77, 87, 94, 96, 101, 107), an examination of which makes very evident that this is the Egyptian way of representing the Palestinian expression found so often in the Bible, "The villages of," and that "Hekla" means "vicinity," "neighbourhood" or "community" and in the plural, as 107, "Environs" or "villages." Thus the name following "Pa Hekla," in this case identified as "Abram," stands alone. No such complex name as "the Field of Abram" was intended.

(3) But is the name on shield 72 Abram? This is the question of greatest moment. No special importance attaches to this shield at all except for this question. A detailed analysis of the name gives the following:

(a) The first sign "\[\text{\textdollar}\]\text{, the canal,}" as a syllable stands for "\textmer," This syllable "\textmer" occurs with great frequency in proper names, especially of Egyptian kings, where it is represented sometimes by "\[\text{\textdollar}\]\text{, the canal}" and sometimes by "\[\text{\textdollar}\]\text{, the hoe." That these two signs were always, in these names, interchangeable is not quite certain, but that in the New Empire, from which this inscription comes, they were interchangeable, is certain. "\textmer" is used in at least twenty seven of the royal names, as Mer-pa-ha, Mer-em-ptah, and various names compounded with the phrase "\textmeri-amon, loved of amon." In some sixteen of these twenty seven "\[\text{\textdollar}\]\text{, the canal}" is used, beginning with Ramses II and including Shoshenq I, for whom this inscription under discussion was made. So, if this sign on shield 72 be intended for "\textmer," it would be the perfectly
natural and proper and to-be-expected use of it, and the probability that it should be so transliterated is very great. Moreover, a Semitic name from Palestine beginning with the syllable “mer” is quite to be expected also, as there are twelve Bible names (aside from some Persian and other foreign names), beginning with “mer.” Brugsch (Geographische Inschriften, p. 68) reads this sign “mer,” so, also, Rosellini quoting Lepsius.

But the “ר, canal” is thought by some to be also an alphabetic character used in transliteration as an equivalent for the Semitic “n.” It is so used by Brugsch in this same list (Egypt under the Pharaohs, Broderick edition, p. 376), wherever the sign occurs at the beginning of a name, notwithstanding that he had read the sign “mer” in his Geographische Inschriften. Erman, also, according to Breasted (Ancient Records, p. 353), so reads the sign in this instance, though Erman in his Egyptian Grammar, translated by Breasted, makes it only probably equivalent not to “n,” but to “ם.” Müller also finds the “ר, canal” used sometimes as the equivalent of “נ.”

But it can not be shown that Shoshenq’s scribe always used this sign for an initial “נ” in the list which he was copying, for even if it could be shown that wherever the “ר, canal” occurs at the beginning of a word he used it for “נ,” it remains that in three, and probably four, instances (Names, 32, 66, 108 and 12 (?) he used another hieroglyph for initial “נ,” which may have been an “ן” in the Canaanite list which he was copying.

(b) The second sign, “ב, the crane,” is usually a syllabic for “ba” or “bi” and is certainly so used here, and the Egyptian scribe with this list of names before him, probably in Phoenician script, must have chosen this sign intentionally, as he has placed after it the character “!" a determinative of rather indefinite signification which sometimes in transliteration indicates for us the end of a syllable (Müller’s Researches for Carnegie Institute: list of Shoshenq I, names 13 and 38; list Thothmes III, name 84; list of Ramses 333, name 73), besides, had he wished an alphabetic character for “b,” he had it at hand in the much more usual “ד, the boot.” Brugsch, in the Geographische Inschriften, p. 68, strangely mistook this sign
for "כ, the goose" and transliterated it "s," but corrects
this in his *Egypt under the Pharaohs*.

(c) The third sign "ן, the mouth," either "ro" or "ra,"
is here also most probably a syllable, for though it is very
often used as an alphabetic character, it, also, is here followed
by the termination of a syllable. But the Egyptians did not
clearly distinguished between "r" and "l." This sign was used
for both these letters, as in the well-known instance in the
name "Israel" in Mer-em-pthah’s hymn of victory. Maspero in
the *Transactions of the Victorian Institute*, 27, 33, so trans-
literates it here.

(d) The fourth sign "ן, the half part" is a New Empire
sign for "m." It admits of no discussion, and, indeed, none,
I believe, has arisen concerning it. But as the preceding
syllable is closed, it begins a syllable here and can not, with-
out straining, be suffixed to the preceding syllable "r" to make
"ram" in the name "Abram." It should be followed by a
vowel and in this case the scribe has written the vowel.

(5) The fifth sign, "ף, the arm," according to Erman in
his *Egyptian Grammar*, translated by Breasted, is equivalent
to Semitic "y" and, in any case, whether one accepts the
equating of Egyptian and Semitic vowel letters or not, is the
strongest of the Egyptian vowel letters, but is entirely ignored
in the transliteration "Abram."

The examination of the reading "The Field of Abram" may
be summarized thus:

1. The inscription on Shield 71, "Pa hekla," is not a part
   of the name, but a Canaanite descriptive phrase like "The
   villages of," or "The environs of."
2. The first sign of shield 72, "the canal," may be an "a"
   but it may also be the syllable "mer," as it usually is.
3. The second sign, "the crane," is clearly intended by the
   scribe to be a syllable, a "b" followed by a vowel and not
   joined immediately to the "r" following.
4. The third sign, "the mouth," is probably an "r" but
   quite possibly an "l" and in either case, is also followed by a
   vowel making a complete syllable.
5. The fourth sign, "the half part," "m," can not naturally
   be joined to the "r" preceding, but should begin a syllable.
6. The last sign, "the arm," is a strong vowel letter which
ought not without special reasons to be ignored in the transliteration, and in fact is needed after the "m."

The most probable transliteration yielded by this analysis is "Merbiroma" or "Abiroma" or perhaps better still "Abiramu." The identification "Field of Abram," scarcely comes within the bounds of possibility, certainly has little probability, and any theological or critical discussion made to depend upon it is exceedingly precarious, not to say hopeless.
The K-Suffixes of Indo-Iranian. Part I: The K-Suffixes in the Veda and Avesta.—By FRANKLIN EDDERTON.

Chapter I.

Description of the Suffixes.

1. The ultimate aim of this paper is to give a complete and detailed account of the suffix -ka and related suffixes in Sanskrit and Avestan, covering all their occurrences throughout the entire history of the languages, so far as these are accessible. For both theoretical and practical reasons, however, it has seemed best to divide the Sanskrit field, and the first part of the work will deal exclusively with the Vedic period. In that term I mean to include Mantras, Brāhmaṇas, Aranyakas, Sūtras, and Upaniṣads, so far as their linguistic matter is available. I have gathered the materials for the investigation in the first place from Monier-Williams’s Lexicon, 2nd edition, supplemented and verified by constant reference to the larger and smaller Petersburg lexicons and to the original texts. The number of cases in which I discovered mistakes in the redaction of M.-W.’s lexicon was so small as to be entirely negligible; the small sprinkling of wrong references &c. which have come to my notice originated in nearly every instance in the Pet. Lex. itself. I feel therefore especially appreciative towards the work of the redactors of the Oxford lexicon, Profs. Leumann and Cappeller, whose careful scholarship has given us such a valuable aid to this sort of research.

2. There is, however, no Sanskrit lexicon in existence which even approaches the completeness which would be attained by good word-indices of the various works included. In the Veda, with which alone we are now concerned, this deficiency is especially felt in the Sūtra and Upaniṣad periods. These
seem to have been only scantily covered by the Petersburg lexicon; and the successors of Boehltlingk and Roth have done little to fill the gap. Fortunately we now have, in Col. Jacob’s excellent Concordance, a word-list of the principal Upanisads; and from this have been extracted scores of words in -ka which would otherwise have been unnoticed. As for the older Vedic works, the indices to the RV. and AV. by Grassmann and Whitney have been used with profit, and from Whitney at least several AV. words have been discovered which are not in any lexicon. These facts are mentioned as showing the crying need which exists for indices of the principal Vedic works. Until they are produced any such undertaking as the present one must rest for the most part on the more or less unstable ground of the dictionaries.

3. It is hardly necessary to defend the division of the subject into the Vedic and Post-Vedic periods. In the Veda we find the small beginnings of several of the commonest uses of the Classical suffix -ka. There is no Classical use of the suffix which is not foreshadowed in the Veda; but there are one or two Vedic uses which practically die out before Classical times. That is to say, we find here, as in most other linguistic points, that in general there is a line of cleavage between the Veda and the Sanskrit of later times, although as a matter of course the two periods shade into each other, and there is in reality no such sharp break as we are compelled to make for practical purposes. In fact, as far as the suffix -ka is concerned, the Upanisads show uses which agree much more closely with the language of the Mahābhārata than with that of the Brāhmaṇas, to say nothing of the Vedic mantras. Nevertheless, I have not ventured to disturb the traditional classification, which of course is on the whole justifiable, and have included the Upanisads in the Veda.

4. The suffix -ka in all its ramifications is one of the commonest suffixes of the Classical Sanskrit language; and although it is much less common in the Veda, it is by no means rare from the earliest times.

5. I shall not at present attempt to go extensively into the question of the prehistoric (I.E.) suffix or suffixes from which the Sanskrit ka is derived. According to the theory of gutturals now usually accepted, Skt. k may go back to I.E. k or g. And accordingly two independent suffixes, I.E. -kos and
-qos, are actually assumed by Brugmann as antecedents of Skt. ka,—certainly not without much show of probability (cf. Lat. -quus and -cus). Whether right or wrong, this division of the suffix is not only unnecessary but quite impossible within the Sanskrit language itself. It must be said that the suffix -ka on the whole presents itself to the feeling of the investigator as a single unified and coherent suffix, which in the early language at least is quite clearly and narrowly circumscribed in its use. The widely divergent meanings which forms of the suffix show in some later developments are all demonstrably secondary in point of time, and in most cases it is furthermore easy to trace their semantic evolution from one or another of the more primitive uses.—In Chapter VI we shall take up the use of the suffix in Avestan, and shall also add a few words on its appearance in Lithuanian (based on Leskien’s work). From these may then be deduced, in a very tentative and experimental way, an outline of the apparent uses of the suffix in the Ursprache in so far as they are indicated by these languages.

6. Forms of the ka-suffixes.—The Veda has a few adverbial forms (ydak &c.) where the suffix is simple -k. There is a small group of words of doubtful relationship in -ku, usually preceded by á; they are very few in number, and show no agreement as to signification, so that I have not thought it worth while to make an independent chapter of the suffix -ku or -āku, but have treated these words along with the ka suffix. The Classical Skt. has a few words which seem to show a suffix -ki, generally forming patronymsics; cf. sūurākī (M.S. 3. 1. 3) which may be a Vedic instance. Otherwise all the suffixes which we treat here end in -ka masc. or neut. and -kā or -ki fem.

7. The feminine -ikā.—In all cases of masc. and neut. words in the suffix ka preceded by a, whether the a is part of the base or of the suffix, it is possible (and in most cases usual) to form corresponding feminines in -ikā, rather than in a-kā or a-ki. This rule applies to all periods of the Skt. language from RV. onward (cf. iyattakā -iyattikā, a RV. instance). The fem. forms akī and akā are, however, not rare; and even ikī appears to be found from an ake masculine in one or two cases (see k. v. ātikā, General Index), though this is not certain.—Because of the regularity of the fem. in ikā it becomes unnecessary—and
in fact impossible—to set up a separate category for these words. Where a masculine word in *-aka* requires a feminine, the ending *ikā* is to be expected; and all statements in this thesis are to be understood with that in view. It should at the same time be borne in mind that *akī* and *akā* also occur, sometimes from the same words which also form the more regular fem. in *-ikā*. There seems to be no rule by which it can be determined antecedently what form of the feminine is to be expected.

This formation appears to be an inheritance from something of the same sort in the *Ursprache* (cf. the Lithuanian phenomena mentioned in § 117). It is doubtless connected with the fem. suffix *i* associated so commonly with masculines in *a*. The regular fem. of any adjective stem in *a* was formed with *i*: and it was an easy step, therefore, to form a fem. in *i-ka* (with *i* instead of *ī*, § 32b) to a masc. in *a-ka*, by taking the fem. of the original adjective as a base. This was then generalized into a “suffix *ikā*” applied as a fem. to any masc. in *-aka*, even when no fem. base in *i* could have existed. Other formations from feminine adjectival bases are *lohinīkā* (Āp. Čr. &c.) from the fem. of the adj. *lōhīta*; and even *kārīkaikā* (AV.) from a fem. *hārikī* (not preserved) to *hārita*, like *āsikā* to *āsīta*.

8. The Secondary Suffix *ka*.—The suffix *ka* is essentially a secondary suffix: i.e. it is affixed to nominal or pronominal stems. There are a few words in which it has the appearance, at least, of being added directly to roots or verbal bases; we shall deal with them later. Secondary *ka* may be divided into four subdivisions. For practical reasons, because I have been unable to invent any concise and appropriate names, I have had recourse to numbers in designating them. I realize that this arbitrary method of nomenclature is open to grave objections. But any truly descriptive names for these categories would be so cumbersome as to be quite incapable of practical use; and it has therefore seemed better to me to have recourse frankly to numerals as arbitrary symbols instead of applying incomplete or misleading epithets.

A. The Suffix *i-ka*. (Nouns or Adjectives of Similarity or Characteristic.)

9. The suffix *ka* is added to nominal stems to form other nouns or adjectives, with the meaning “partaking of the nature
of," "having the characteristics of," "similar to," "like;"—or, it is added to adjectives or adverbs to form nouns or other adjectives or adverbs with the meaning "characterized by," "having the quality of."

This is the most primitive use of the suffix, at least as a secondary suffix. All other secondary uses are developd out of it.

Ex.: nābnikā, navel-like cavity, <nābhi, navel.—manīka, lump, water-jar, <mani, pearl, lump &c.—nālakā, throat, <nālī, tube.—madhyamikā, middle finger, <madhyamā, middle.—pālīka, n. of a plant, <pālī, foul-smelling.

10. (The Diminutive ka.)—From the meaning "similar to," "like,"—the suffix ka often comes to mean "only similar to," i.e., "not equal to," and thus arise the well-known diminutive, deprecatory and contemptuous uses of the suffix, which probably existed once in all Indo-European languages, but which are more striking and prominent in Sanskrit than anywhere else. In Sanskrit the suffix may be added with some such force to nouns, adjectives, pronouns, adverbs, participles, and even (once) to a finite verb-form. A detailed classification will be undertaken in Chapter IV; for the present it will be enough to distinguish the following main heads.

I. True Diminutives (of size, importance, &c.): as kaninakā, little boy, <kanīna, boy.—muhukā, moment, <mūhu (or muhū).—arbhaṅkā, tiny, <ārbhaṅ, small.—baṅkrākā, brownish, <baṅkrā, brown.—abhinādyatākā, a little tipsy, <abhinādyatā, drunk.—hōtākā, secondary priest, <hōtī, priest.

II. Endearing Diminutives: as ambikā, dear little mother, <ambi, mother.—putrākā, sonny, <putrā, son.

III. Pitying Diminutives: as kṣullakā, poor (helpless) little, <kṣullā (<kṣullā, prakritized form).

IV. Diminutives of Inferiority with evil connotation, often called Pejoratives: including—

(1) Contemptuous Diminutives, where the idea of smallness carries with it that of weakness or wretchedness and contempt: as—ūṣrikā, worthless bullock, <ūṣrā, bull.—rājakā, wretched kinglet, <rājan, king.—bhinnaka, crushed and worthless, <bhinnā, broken.

(2) Pejoratives in the narrower sense, or Imprecatory Diminutives as I have ventured to call them, because the suffix is often equivalent to a curse or imprecation accompanying the
word to which it is applied: as—acvekà, cursed horse, <ácva, horse,—anantaka, cursed Ananta (a serpent-demon).—rìpaka, evil phantom, <rìpà, shadé,—krtaka, artificial, false, <krtà, made,—anya, other scoundrels, <ánya, other.

(3) Diminutives of Obscene Humor, in a certain range of popular composition which is offensive to modern sensibilities, and presumably for that reason little noticed as yet. For instance, in the lascivious ribaldry of some of the Kuntàpa hymns, and in parts of the Açvamedha ceremony, various slang terms of extreme vulgarity appear with this suffix: as—dhánikà, dhárakà, the vagina, <dháño, dhára, receptacle.—ckak̄śikà, adj. slippery, of the sexual organs in coition, <ckak̄śà, slippery.—mus̄kà, testicle, <mús, mouse.

Modern parallels will doubtless occur to everyone.1

V. Generic Diminutives, with nouns of masculinity and femininity—like Ger. München, Weibchen: as—vírakà and marya, male (München), <vírâ, márya, man; so dhénukà, makhukà, female. See § 87 ff.

VI. Diminutive as attribute of the female sex, and grammatical concomitant of feminine gender. See § 90 below. Not to be confused with the foregoing, which is of totally different nature and origin. Ex.: pradàtrakà, a female giver, <pradàtra, giver.—candrikà, the moon (as fem.) <candrá, moon (masc.).

B. The Suffix 2 ka. (Adjectives of Appurtenance or Relationship.)

11. Next, the suffix 2 ka forms secondary epitheta, mostly adjectives, from nouns or pronouns, with the meanings “connected with,” “having to do with,” “belonging to,” “of”; and these secondary words, in many if not most cases, take Vṛiddhi in the first syllable. Here are to be included the patronymics

1 These three categories, and especially the imprecatory and contemptuous ones, are closely connected. It is often hard, and sometimes next to impossible, to decide which idea predominates in a given word. For instance in the refrain nàbhàtàm anyakàtin jyatakà ádhi dhànusam—RV.10.133.1 ff.—there seems to be no doubt that an imprecation is hurled at certain enemies: “Let the damned bowstrings of the others, devil take them! be torn off from their bows!” But while this idea predominates, it would be rash to deny the presence also of a contemptuous note; for it is quite like a Vedic charm-maker to dwell with great insistence on the scorn he pretends to feel for enemies, however much he may really tremble before them. Indeed, this is a common trick of magic in every age and land.
which are occasionally formed with this suffix.—This heading is of course developt out of 1 ka.—Ex.: pāçuka, animal (adj.), of an animal, <pāç or paç, animal (n.),—ātmaka, of the ātmān.—cāturbhūtykā, of the cāturhotr (rite).—dēvaka, divine, <devā, god.—asmāka, ours, of us <asmā (pron. stem), we.—napāṭkā, pertaining to a grandson, <nāpāṭ, grandson.

Whitney, whose entire treatment of the suffix suffers from over-reliance on the native grammarians, does not recognize the use of the simple ka with Vriddhi, and calls bhāvatka (classical) <bhavat “anomalous.” Instead he follows the Hindus in setting up (1222, k, 1) two Vriddhi-taking secondary suffixes, aka and ika, of which he says that no instances of aka (unless māmakā) and few of ika have been noted in the Veda, meaning, doubtless, the Vedic Mantras. The facts are these:

In the second category of the suffix ka, the non-possessive secondary adjectives, the derived suffix ika (see § 14) makes a strong bid to drive out of the field its competitor ka. In the Veda, if we count i-stems like āgni &c. as having the suffix ika, there have been recorded 118 words in -ika, 50 in -ka (besides 3 in which ka follows an i-stem with no Vriddhi). Among the -ika words, Vriddhi overwhelmingly predominates; in the -ka words, it appears in more than half the cases. Exact figures cannot be given with safety, because in some cases the primary word had itself a Vridhied vowel, and in others its stem ended in -i. There are only 13 cases where ika in this sense certainly occurs without Vriddhi, out of 118. Out of the 50 clear cases of the suffix -ka (i.e. where the suffix cannot be confused with ika) 21 clearly have Vriddhi, 19 clearly do not have it, and 10 are doubtful. Of the 21 which have Vriddhi, 14 are formed from a-stems (or an-stems, weak grade in -a), but seven from stems in other finals, showing conclusively that the suffix must have been ka, not aka. The Classical language adds many other instances; this suffix is much commoner there than in the Veda. The supposed secondary Vriddhi-causing suffix aka is largely or wholly a grammatical fiction; in the Veda at least, it never existed at all. Instead

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1 But even so restricted the statement is inaccurate; e. g. cāturhotyikā <cāturhotr (M.S.) and kāverakā, patronymic from kāvera (AV.); also tārakā (RV.) analogous to māmakā, and others.

2 Which alone are concerned here, since Vriddhi occurs nowhere else.
we must recognize this secondary Vriddhi-causing use of the suffix -ka added both to a-stems and to others. This is never excessively common, it occurs earlier and more frequently than the grammars have so far given it credit for.

C. The Suffix 3ka. (Adjectives or Substantives of Possession.)

12. The third category of the secondary suffix ka is made up principally of secondary adjectives (as in the case of 2ka) with the meaning “having,” “possessing;” also “consisting of,” with numerals—a frequent use. Ex.: parutka, having joints; pārus, joint.—dvārakā, n. of a city, “City of Gates,” dvāra, -āndika, having bulbs, āndi, egg, bulb.—catuska, having or containing or consisting of four, catus; so daçaka &c.

This force of the suffix is not very common with uncompounded words. But because of the accidental appropriateness in semantics, it was added frequently to Bahuvrihi compounds, and gradually came to be felt as peculiarly appropriate to them. There are a few instances of this in the Vedic mantras. In the Brāhmaṇas it becomes not uncommon; its frequency constantly increases in the Sūtras and especially in the Upaniṣads, where it flourishes with as much luxuriance as in the later language. In the early parts of the Veda it is interesting to note that it is much commoner when the last part of the compound is not an a-stem, and is especially frequent with consonantal stems, showing a vigorous (even if unconscious) striving after uniformity of declension at that early time. By means of the harmless suffix ka any Bahuvrihi (as in later Skt. any noun whatever) not of the a-declension could be easily brought into line with the a-stems, which formed the great bulk of the noun declension.—See § 53ff., especially 54.

Examples are: acaksūka, having no eyes, a + caksus, eye.—trikādruka, having three kādrus, tri + kādrū, a sort of vessel.—saptadātukā, having (consisting of) seven elements, saptā + dhātu, element.

D. The Suffix 4 ka. (Active or Verbal words.)

13. In a few secondary formations—to wit: āntaka (“Ender,” Death, a-anta, end) citaka, hiḍḍaka, yācanaka and vimanyuka—the suffix ka has distinctly an active verbal force. These words may be more conveniently treated in connection with the derivative ka-suffixes which show the same value; see § 19. The origin of this usage lies perhaps partly in some of these derivative suffixes themselves, and certainly in part
in the "primary" ka words of corresponding meaning (see § 28).

14. The Suffix ika.—This is a secondary adjective-forming suffix whose range of meaning exactly coincides with 2 ka and 3 ka, but chiefly with 2 ka; in the possessive-adjective sense it is very rare. It must of course have originated, by clipping, from i-stems + suffix ka. The adjectives formed with it show meanings like "connected with," "belonging to," "of." It almost always (in these meanings, = 2 ka) causes Vriddhi of the first syllable; and if the primary word is a compound, it occasionally takes Vriddhi in the first syllable of both its parts. I have found only 13 cases in the Veda where Vriddhi does not occur. See § 11.—The Vriddhi-causing suffix ika is a market characteristic of the language of the Sutras, where it is very common. In the Brähmanas it is rare, in the Mantras almost unknown; in the Upanishads, while not uncommon, it is much less frequent than in the Sutras. Ex. (= 3 ka): tuṇḍika, having tuṇḍa's (tusks or teeth). (= 2 ka): jyotistoma of the jyotistoma (rite), ṣaṅgiṣṭomika, of the ṣaṅgiṣṭomā (rite), ānuyājika, of the after-sacrifice (ānuyājā), caturthika, of the 4th (day), caturthā, fourth.

15. The Suffix aka.—This appears (certainly in the Veda) only as a "primary" suffix, added to verbal rather than to nominal bases,—if we rule out the two words mādhvaka and pṛṣātaka, apparently formed from mādhau and pṛṣāt respectively.1 Perhaps a mādhva and a pṛṣāta are to be hypothetized. Three uses of "primary" aka occur. Of course they cannot be primitive; they must have arisen through suffixal adaptation from secondary noun formations in a-ka; but one of them at least becomes so widespread that it cannot be denied its independence. The other two stand on more uncertain foundations; but on the whole some limited range may best be allowed to them too.

16. (1) Most dubious, and showing least claim to independent rank, is this branch of the suffix aka. The RV. contains two words in which -aka seems to convey the force of a gerundive-adjective. They are sāyaka "to be cast," and as a noun "arrow."

1 Note that neither has Vriddhi; cf. § 11, where the supposed "secondary suffix aka" is dealt with. Cf. also pataṅtaka (Word List, s.v.)
and su-lābhikā (fem. to -"aka")1 "easily to be won," from the roots si and labh. It has been usual among grammarians to class sāyaka with 3. aka as a participial adjective, which does violence to its meaning (not "throwing," but "to be thrown")! No noun sāya exists with any meaning from which it could possibly be derived. As for su-lābhika, though by some mental contortions it might be derived from the noun labha, it is certainly much more simple and natural to regard it in the other light. The only objection is that there seems to be in su-lābhika as used in RV. 10, 86, 7 (the only occurrence) a suggestion of the obscene (erotic) Diminutive. It is an epithet addrest by Vṛṣakapi to Indrāni; the whole passage where it is found reeks with that licentious vulgarity which naturally suggests such a value in the suffix -ka. (See §§ 85, 86.) This, however, does not seem to me necessarily inconsistent with the derivation of the word put forward. Appearing in such a context any word in ka, however reputable in origin, was bound to take on the vulgar coloring which was a prominent characteristic both of the suffix in general, and of the verses in which the word appeared. Probably the original force of the word was gerundival, and the obscene suggestion is secondary.

17. (2) Secondly, in a small group of words the suffix aka seems to give the value of a noun of action, when added to a verbal root. As the primary suffix -a often has this meaning, it is easy to see how this force of aka originated, through the medium of -a + secondary -ka. There are not many of these words which occur without the occurrence of a parallel noun in -a; they number not more than seven or eight in the entire Veda. But a careful consideration of the words and the passages where they occur has convinced me of the genuineness of this use of the suffix. No certain instance appears before Brāhmaṇa times.—The root has the same form which is found in the next category of -aka.—The nouns are mostly neuter (e.g. ācaka in ān-ācaka, not-eating, a fast, <ac- eat);

1 It has been suggested to me that su-lābhika might be considered to have an active value; in other words, that the usual interpretation is wrong, and that the word means "well embracing, giving a good embrace." This is possible; but against it must be reckoned the fact that this active force of the suffix aka is practically not found in the earliest period of the language. In fact, the RV. has not a single instance.
but one certain fem. in -ikā occurs—abhimēthikā (QBr.) < abhi—Vmīth. See § 95.

18. (3) The only commonly recognized use of primary -aka is its use in forming nouns of agent or adjectives of participial value from verb-roots. It is a late development, by analogy from certain words in simple -ka. There is not one instance in the RV. for pāvakā (so explained by Sāyāṇa—"gobhaka"—"purifying") and sāyaka (see § 16) do not fit semantically. The earliest instances are all nouns of agent (1 or 2 in AV., 2 in VS., 2 in the Brāhmaṇas). Of six instances in the Sūtras, five are nouns. Only in the Upaniṣads does the suffix acquire any frequency, and only here does it develop into a regular verbal adjective, equivalent to a present participle, and sometimes taking participial constructions. The Upaniṣads have over 30 examples. They represent, in this respect as in others, approximately the condition of the later language. See §§ 96, 97. Ex.: abhikrōçaka, reviler, < abhi-kruc, revile.—samjīvaka, animating, < sam-jīv, animate.—yācaka, begging, a beggar, < yac, beg.

19. The origin of the suffix is not quite so simple as might appear at first sight. It is, indeed, not uncommon to find the primary suffix -a giving the force of a noun of agent, or even of a verbal adjective. But it so happens that there are very few demonstrable cases in the Veda where to such a noun or adjective was formed a secondary noun or adj. in -ka. The nouns vādhaka (AV.), cāraka (CB.), ghūtaka, varaka, prasarpaka (Sūtras) are among the few clear instances (from vadhā, cara &c.); and three out of these five do not comply with the custom of -aka words in regard to the form of the root (see § 20). Because of this fact, and because the words vadhā &c. occur, while the suffix aka was at that time scarcely felt to be in existence, it is better to regard these words as derived from the nouns vadhā &c. and containing secondary ka. But they represent a transition stage.—There are furthermore certain other -ka formations which assisted in the process. Primary ka seems to show this meaning; so pivah-sphākā (AV.)

1 pāvakā, not pācakā, is demanded by the meter throughout the RV. The word contains no active force, but is simply an adj. meaning "clear, bright." Its exact formation is not certain, though its connexion with V-πι is obvious; it is probably a primary derivative, but cannot be classed with 3 aka.
“dripping with fat” from śphā(i). See § 28.—And secondary
-ka forms four or five words with a similar force. The noun
āntaka (AV. &c.) has from its first appearance a quasi-active
value; it is translated “ender,” and is a frequent epithet of
death. Closely parallel to āntaka are the two words, čitaka
and hlādaka (in the fem. ikā) RV. 10. 16. 14 — AV. 18. 3. 60.
Though they cannot be anything but secondary derivatives
from the adjective čitā and the noun hlāda, they have markedly
active meanings: “cooling” and “refreshing,” or, as it were,
“refreshmenting.” Most translators recognize this; that it was
so felt by the Hindus from the earliest times is shown by the
extremely interesting parallel Tār. 6. 4. 1, where in the same
verse hlādukā appears for hlādikā. The suffix ukā, as we shall
see (§ 22), is the regular Brāhmaṇa formation for verbal ad-
djectives, like -aka of later times. It thus appears that the
Tār. compiler felt the words distinctly as verbal, and, perhaps
unconsciously, changed hlādikā to look like an -uka formation
from Vṛhū. That čitikā did not in like manner become
čitukā is due simply to the fact that no root čit existed,
from which such a form could be derived.1 The word viman-
yuka “freeing from anger, allaying wrath” is in like manner
an active derivative from vimanyu “free from anger;” cf. suffix
ukā, § 22.

20. The root-syllable must be metrically long before aka,
and unless it ends in two consonants or in one consonant
preceded by a long vowel, it is strengthened,—by Vṛiddhi of
a, by Guṇa of other short vowels. A final vowel, long or
short, always takes Vṛiddhi. These rules hold for the Veda
without exception,—except that if kṛttikā (see General Index)
is really a noun of instrument or agent from Vṛt with aka
(ikā), the root in this case doubles its final consonant by way
of strengthening, instead of gunating its vowel. There are
further exceptions and complications in the Classical language
which I shall not go into here. If dhvavaka (see § 96) is really
a Vedic occurrence, it also is exceptional.

21. The Suffix ukā.—(1) Secondary. There are four words
in the Veda which have the appearance of containing a second-

1 Yājñavalka, beggar, <yāvam, request, is another instance of secondary
-ka with active meaning, forming a sort of noun of agent. But as
this word does not occur until Upaniṣad times, it may be due to analogy
with the suffix -aka (cf. udbhāntaka, § 44 end, Note).
ary suffix -uṣka. But two of these are ṣrāvya- and ought perhaps to be emended: one is analogical, and the fourth is very doubtful. The adjectives dhārmuka and sāmnāhuka appear, each once, from dharma and sāmnāha; they correspond in meaning and in the Vṛddhi vowel to the ık-a-adjectives, and perhaps -ika should be the reading instead of -uṣka; compare, however, the Classical Skt. words kārmuka <karman, and nānduka n. pr. apparently <nanda.—On mahālukā “female,” mahātā “woman” see § 89; it has its -u-kā by analogy from dhenu-kā. The only other possible case of secondary -uṣka in the Veda is kānkā RV. 8. 77. 4; an epithet of soma-vessels which has never been satisfactorily explained. I suggest tentatively a derivation from kānī- “one-eyed.” Such a figure might easily be suggested by a jug with a small opening and a large bulging body. The vowel u is the most serious obstacle to the etymology.

22. (2) Primary. The chief use of uṣka is in the formation of the well-known verbal adjectives with participial meaning (and construction, in many cases). The chief sphere of these words is, as has been often observed, the Brāhmaṇa literature. There are very few occurrences in the Samhitās: and they are not numerous in the post-Brāhmaṇical literature. Even in the epic, however, the formation continues to show a few feeble signs of life. These may be artificial or learned reminiscences, Ex.:—nāyukā, running away, ści-ś, run away, ardhuṇa, prospering, rdḥ, prosper.—upadāsukā, failing, upa-daśa, fail.

In separating Samhitā from Brāhmaṇa occurrences, the Black Y.V. texts present difficulties, in that by intermingling the two they make it impossible to tell from lexical references whether a given passage is Samhitā or Brāhmaṇa; while some of the texts are unpublishable and hence inaccessible to the ordinary student. However, all the recorded instances of the suffix -uṣka in the publish texts of the Y.V., both White and Black, have been examined, and they have turned out to be all, without exception, in Brāhmaṇa passages. The Samhitās, apparently, do not have the suffix. This must be largely accidental, however, since there are several clear cases in the A.V.—The few cases in the Sūtras that are known to me are all but one repeated from the Brāhmaṇas. The Cha. Up. has one new instance, and as has been said there are a few in the later language. But the formation practically is born and dies with the Brāhmaṇa period. Of the 71 words, represent-
ing 57 different verbal roots, found in the Veda, 67 are found in the Brāhmaṇas (incl. Āranyakas), and most of them nowhere else.

23. That the usahaan-formation is somehow connected with the "present tense formatives" in a (i.e. with disyllabic bases in u) is probable antecedently, and is borne out by the fact that some of the earliest instances are formed from such verbs. The only RV. example is sāṇukā < Vsan, present sāṇōti. Here the suffix was probably in reality primary ka (q.v.) added to the present stem sānu-, and not uka at all; cf. pīvah -epha-ka &c. Another, the somewhat later appearing, case of the same thing is rādhunaka (Ācy. Grh.) beside ārādhuka (Br.) < Vṛdh; rādhunaka is from the present stem rāhnu, and has in reality the primary suffix ka, though for convenience it is classed with -uka. Compare further the secondary formations in which -ka adds an active (verbal) force. (§§ 13—19.) Of especial interest here is vimanyukā "allaying anger" from vimanyu "free from anger."—In some words in the early language it is hard to say whether the suffix is secondary -ka or primary -uka; e.g. pramāṇukā (AV. &c.) "perishing." <pra- Vmi, beside pramāṇu of identical meaning.—From a blend of these various formations arose the suffix uka.

24. The root has the same form here as with the suffix āka. A final vowel has Vṛddhi; a non-final long vowel is unchanged; a non-final short vowel is unchanged except before a single consonant, in which case it takes guṇa (but a takes vṛddhi). Irregular is the vṛddhi in nirmāṅguka (TS) < nir- Vmr; also the short vowel in -kasuka (vi-, sām-kasuka- AV.). It should be further remarked that the present stem may replace the root; cf. sāṅkā and rādhunaka above; also nāṅguka besides nāṅguka < Vnāg, pres. stem nāṅg; vibhinduka < vi- Vbhid.—The root hun forms phānuka as is to be expected (see Pan 7, 3, 22).

In one instance uka seems to show the gerundival use which we have noted in one or two āka words, and which also crops out in the suffix -ika. This is an-ālambhukā (KS; TBr.) < ā-Vlambḥ, "not to be touched," of a woman in menstruation. This case seems to be the only one with uka.—This turn of meaning, appearing sporadically in different forms of ka-suffixes, may have appurtenanted to the primary suffix ka, the signs of it are scanty (see § 28).

25. The Suffix ūka.—This is added to intensive verb-stems
forming verbal adjectives, like the ukā words from simple roots. The ā has the accent. The suffix seems to have arisen by a sort of proportional analogy to ukā, but makes its appearance curiously early, one instance being found in RV., and that too from a root which is not addicted to n-formations: jāgarīka “wakeful.” RV. 3. 54. 7. The only other Vedic examples are dandaćuka (VS.) and yāyajūka (CBfr.). The Classical Skt. has one or two more.—salalūka RV. 3. 30. 17 was explained by the Hindus as belonging here, as if from Vsr (“sararūka”); but it is most uncertain and probably of different character; see General Index s. v. It seems to be clearly a noun, probably a nomen actionis, and so quite different from this suffix.

26. The Suffix īka.—This is the most problematic of the derivative ka-suffixes. It may never have been felt very definitely as a productive suffix. Many cases included under it are doubtful or entirely uncertain in etymology, and some of them may contain not īka, but secondary ka added to a lost stem in ē. Cf. dīcarīka, vi-car-. from Vçār, in dissyllabic form çari.

In so far as we can analyze the suffix īka, it appears to be primary as a rule, and most often imparts the value of a verbal adjective or noun of agent, like uka and ukā. So -ṛjīka, dūṣīka &c. Of like meaning is dṛçūka “beholder,” Vdṛç.—the only instance of the “suffix īku” (see § 29d).—In two words, išāka and dṛṣīka “splendid (i. e. to be seen),” the suffix seems to have gerundival force (see § 24).—There are two abstract nouns, mrdūka “mercy, favor” < Vmṛd and dṛṣīka, -kā, appearance, < Vdṛç.—Three or four īka words have the aspect of secondary noun formations from ā-stems; the ā is dropt before the suffix. The most plausible example is kaçākā “weasel” < kāca. Whether these are really from lost feminines in ē cannot be determined.—In some īka words the ē represents a stem-final ā or ēn before suffix -ka; see §§ 31, 32, 36.

27. The Adverbial Suffix -k.—In half-a-dozen very ancient adverbs there appears a suffix -k, added to vocalic stems of nouns or adjectives, apparently merely as an adverb-forming suffix. It is probably a petrified form of the adjectival suffix -ka, in its first and original sense (ika).¹ I find no proof of

¹ It is, however, possible that this group of words really contains a form of the suffix anējac. The main objection to regarding them in this
the existence here of any developed meaning of ka, such as the diminutive. The words are: rdhak or rdhak “separately” < base *rđha, cf. urdhā; nīdv “secretly” < nīnga, cf. § 29 a; prthak: “in a scattered manner,” cf. prthō, prthā “palm of the hand,” prabhuk “on an even line” < prabāhū; visunāk: “in various directions” (with possibly a suggestion of imprecatory-diminutive value, see s. v. sānaka, Chp. IV, § 80); visunā; vythāk “lightly” &c. < base vytha, whence the (instrum.) adv. vythā (— vythak).—manāk probably does not contain this suffix, but a form of the root-suffix anā, like pratiḥka &c. Manānak, supposed by some to be from manāk, cannot possibly be so explained either formally or semantically (see Ludwig on RV. 10. 61. 6). Ludwig would derive it from manu in some way, but neither this nor any other explanation so far offered is satisfactory. The word looks as if it contained some form of the root anāc: nāc ( ejaculation). But it is still too dubious in etymology and meaning to permit any safe conjecture as to the suffix. Could manānā be connected?

28. The Primary Suffix ka.—The words which are thrown together under this head are so varied in meaning, and in many cases so problematic in etymology, that I despair of giving any intelligible or intelligent classification of them. There seems to be a group of them containing more or less suggestion of that verbal adjective idea which we have found in the suffixes aha, uka, and ika, as well as in secondary ka (4 ka, § 13). This is clearly present in pīvaḥ-sphākā < V sphāi and a few others; perhaps in stokā < V stu in ghrta-stivas (AV.); mūka < pā- &n; mū-tus; pāka < V pā (“suckling?”), jāhakā “hedgehog,” apparently < V āhā and others.—Whether in su-mēka < V mē “well-established” we have a gerundival use (see § 24) is not certain. Words like gūka and gūka (Av. huśka) are perfectly clear in their etymological belongings, but do not fit in very well as to semantics with other words of this class. Some of the words are hopelessly obscure and may not contain a suffixal ka.—I shall give the list (§ 103) in alphabetical order, not attempting to classify the words semantically.

Light is the short quantity of the vowel before k; the suffix -ac in combination with a vocalic stem regularly produces a long vowel + k.
Chapter II.

Samdhii.

The Samdhii of stem-finals before the ka-suffixes.


29. á. Before secondary ka the stem-final á regularly remains unchanged. But:

a) Final -ya of a stem appears to be reduced to -i before ka in a few cases. parśthika (Kāty. Gr., Lāty.) < parśthyā.-bhāśika (Kāty. Gr., Čākkh. Gr.) prob. < bhāṣya.—māṅgalā (A.V.), best derived < māṅgalya.—niṅik (adv.) (RV.) < niṅyā.

Note.—In urṣiṅka (RV.) < urṣā the i is due to analogy from urṣiṅya. It would be impossible to regard the suffix as -ika, since the word is obviously a contemptuous dimin., and ika is never used in that sense, at least in the Veda.—Similarly the Bāhuṣvihās -varṣika, -cālika, -cārīka, -saṃyūsika, all from stems in a, are influenced in their vocalism by the parallel and equivalent words in -varṣa &c.

b) In one instance final a seems to be dropped entirely: cālka < cālā. It is possible that cālka may be really a primary derivative from the (hypothetical) root of cāl-ā. In this connection it should, however, be mentioned that the lexicographers quote a word kiniṭa—not yet found in the literature—with the same meaning as kiniṭa—"plant-stalk"; and cf. further A.V. nomadha, from and = nomata.

c) In some cases á seems to be substituted for á before ka. The words are all more or less problematical, and some of them are entirely obscure. Those which seem most plain are: ekākin (ēka, ekākā); chattrāka (chattrā); tatāka (tāta); nabhāka n. pr. (nabhā?); pataṅkā cf. Vpaṭ (primary?); cālāka (cālā); pracalākā (pracala).—Very dubious are rksāka (rksā?), pin-yāka (?); pīṅāka (pīna, OSlav. pini); sāvṛāki (patron; from surāka?).

These words, or some of them, may be derived from lost stems in ā. Yet the appearance of ekākin is not encouraging to this theory; for although the fem. ēkā exists, there is nothing about ekākin to suggest a derivation from it. Furthermore we should expect the derivatives to be fem. on such a supposition, whereas these words are nearly all masc. or neut. Metrical considerations may have affected some of them. See also § 30 a.

Note.—gramuka has a justifiable á; see § 30 a, Note 1.

d) Here belong also one or two words in -āku: pṛdāku < pṛda- cf. rāpos (loanword); mṛdayāku < mṛdaya (metrical?).—
kyâku "mushroom" is of unknown etymology. (The pronominal word yuvâku is from the base yuvâ, and the n. pr. ikšvâku [or -kâ] seems to be derived from ikšû, though this cannot be regarded as certain. The only other Vedic word in ku is dhîkâ, see Chap. I, § 26.)

30. a. The stem-final â before ka either a) remains unchanged, b) is reduced to ā, or c) is changed to i in fem. words in accordance with the powerful tendency of i to usurp the place of all other vowels before fem. forms of the suffix ka (cf. § 7). Naturally, most of these ā-stems are fem.; and the ka-derivative generally follows the primitive word in gender.

a) ā remains ā before ka. — viñâkâ (ifc.) = viñâ; kanyâkâ < kanyâ; jyâkâ < jyâ; rasñâkâ < rasña; *vayâkâ (in vayâkîn) < vayâ(?); mânâkâ metronymic < ménâ; in Bahlurthi cpds., vapâka, -samkhyâka.— More problematic, but still probably belonging here, are balâkâ, rodâkâ, ropanâkâ, çâricâkâ, -prâkâ, from lost primitives.

Note 1.— gyâmâka (VS.) "millet" may be derived directly from the noun gyâmâ (only Clas. Skt.) "a kind of grain," or from gyâma used in a vaguer way as the fem. base of the adj. gyâmâ-â; this fem. base is frequently found in composition.

Note 2.— Pronominal words in âkâ (âku) are to be regarded as formed from bases in ā; only the ka (ka) is suffixal. See Wh. Gr. 494; Thumb 357; Brugmann Gr. II*, p. 830. The existence of these pronominal bases in long vowels is unquestionable; they appear frequently in derivatives and in composition as the "stems" of the pronouns. The exact meaning of the long vowel is problematic and need not concern us here. In the Veda we find mâtî, mâkinâ, usmâkâ, yusmâkâ, yuvâkâ from the bases mā, asmâ, ysvâ, yusvâ. On mâtî see General Index a, v.

b) ā > ā before ka. Especially in Bahlurthi; -ambâka < ambâ; -âkhyâka < âkhyâ; -sanâkhyâka < sanâkhyâ (cf. sanâkhyâka above); -sanâjyâka < sanâjyâ. — Also: târâka < târâ; cikitsâka < cikitsâ; mânasthâka (? perhaps from a cpd. of V sthâ); menâkâ—metron. < ménâ (cf. mainâkâ above); cîkâka n. pr., perhaps < cîlâ.

c) ā + ku > ikâ. I know of only three clear examples in the Veda: âksâmâlîkâ (Up.) < âksâmâlā; násîkâ (RV.) < nâsâ; mâksîkâ (RV.) < mâksâ. These RV. words show how early began the encroachment of ikâ on all other fem. forms of the suffix ka.— Most ikâ feminine words are formed directly from âka masculines.

Note.— mahâlâkâ < mahîlâ has its n-kâ by analogy from dhînâkâ; see Chap. IV, § 89.
31. i. Regularly remains unchanged before ka. In a few doubtful cases it seems to be lengthened to ī, but this is probably only apparent. So the crucial word kalmaktiin (RV.), <kalmāti; puṇḍārika cf. puṇḍarir-savā, but cf. also puṇḍarin (only. Lex.).—puṭika (once also -i-kā) apparently <puṭi (adj.). -valika probably <vali, not vali.

32. i. a) In Bahuvrhis ī remains before ka invariably. -tantrika, -patnīka, -samidhenīka, -svātīrika.

b) In other derivatives it either remains, or (more often) is reduced to ī. Especially when the ka derivative is fem, the ī is usually reduced, so that the word ends in -ikā; cf. § 7.

ī remains: āndika <āndī; tūṃnīka <tūṃnī; nādikā; lohinikā; valīka (see § 31); hīlīkā <hīlī = hrī; duṣhikā (also -ikā) <duśī; valīnikā cf. vamrī, Lat. formica; sūcīka.

ī > ī: kușīka prob. <kuçi; gavinikā <gavinī; gopikā; mahānāmnika; avagṣṭharikā; avacarantikā; karkarikā <karkarī; āhuṣaṇikā; duṣhikā (cf. duśikā); pratiṭīkā; nuḥkarikā <nuḥkari (?); vajrasūcīka; hārīkñikā.

NB.—āyunānika and evasāka are from -iā stems, q. v.

33. ā. Remains unchanged before ka regularly.

a) Here as with ā and ī there are a few cases in which ā seems to be lengthened. Word or sentence cadence may be the cause of this. Kambāka (AV.) “rice husk” <kambu “shell.” madhūka n.pr., apparently <madhu. —gālāka (AV.) a plant, cf. gālū (Class.) a fruit.—ābhāka “powerless” <ābhū “empty.”—ulūka “owl,” onomatopoetic, cf. ulūcūs, ulūla (see § 79, s. v. ulūka).—karkaṇdūkā (AV.) should be read karkaṇḍhūkā, as the parallel RV. Kh. stanza reads.

b) The word madhvaka (Adbh. Br.) “bee” is probably an instance of some sort of adaptation, whose nature cannot be decided. At first sight it looks like a suffixal -aka added to madhu; but this is most unlikely.

c) ikṣvāku n.pr. may be derived from ikṣu + āku; see under § 29 d.

34. ā. This would doubtless remain unchanged before ka, but I know of no clear instance in the Veda. The following words are doubtful as to etymology: ānuṣākā, ṛṣībākā, mandaṇka, vaṣākā, salāṇka.

35. r. Remains unchanged before ka. mātrka, hōtrka; in Bahuvrhis. -pitrka, -yantarika.

a) pradātrikā “giver” (fem.) <pradātī shows the fem. suffix
ikā (see §§ 7, 38), not to be confounded with the suffix -ika; before it r appears in its consonantal form.

36. Consonants. Consonantal stems before -ka appear in their weakest stem-form. The ordinary rules of internal combination are generally observed. But the sibilants ḍ and ḍ appear in the form found in composition, and some s-stems are irregular.

an-stems: tāmaka, udākā, -carmaka, -nāmaka &c.
in-stems: -sāksika (in Bahuvrthi cpd.) < sāksin and -hastika < hastin are the only Vedic instances found which shows the i we should expect, dynūnika < dynūnin and varṣika < varṣin have taken over i from the nom. sg. masc. of the in-declension. — On -varṣika, -gilika, -cārika, -sāmynāsika see § 29 a. Note; they probably come from stems in -a, but are influenced by in-stems.

nt-stems: -brhatka, -jatkā, -hatka &c.
t-stems: napāṭka, pratiṇāṭkā (noun) and pratiṇāṭkā (adj.) < pratiṇrutm; -parīṣārthīka (Bah.).
iyattakā (-tōkā) < iyat and mṛttikā = mṛd are peculiar. The insertion of the glidal vowel a (i) seems to have been merely euphonic. No significance is to be attached to it, and probably not to the doubling of the t either (this latter is only a matter of word cadence); iyattakā is a dim. from iyat, and it is scarcely conceivable that the suffix is anything else than plain ka, tho in a disguised form; cf. Av. daitika < dat (§ 108). Why the t of the nom. sg. should appear in mṛttikā instead of the d of the stem mṛd, I cannot say; but to set up a suffix -takā-tīkā goes too much against probabilities. It is hard to imagine an analogical process by which such a suffix could have arisen in these words, and the instances are too few to make such an assumption safe. Cf. kṛttikā < Vṛṣṇi under primary -aka.

d-stems: (Bahuvrthi) -upaniṇatka, -nivatka, -pārīṣatka, -sam-vatka. For mṛttikā < mṛd see under t-stems.

c-stems: -tvakka, -vākkā, uparudka.

r-stems: (see above) yatka < yōk (only known Vedic instance).

ś-stems: -dīkka < dīc (only known Vedic instance).

s-stems: appear regularly with s after a, s after i, u; aniyaska, -tapaskā, -tejaska, medaska, -rajaska, -retaska, -matiśka (? No *matiś occurs); catuṣka, dhonuṣka, caṇuṣka, -yauṣka.
a) -ācīrka (Balmurhīs) <ācīs is due to analogy with cpds, in which ś was followed by a sonant, as ācīrdō &c.

b) parutka <pārus is due to analogy with stems in ś, which take t before ka. The proportion is ś : s = t : t.—Cf. also pāruechpē.

37. Stereotyped Endings.—When ka is added to a word having a stereotyped ending, or an ending which does not vary according to a nominal declension, the word is always treated as if it were formed from a noun stem in -a, whether it is so or not: the ka is added to this (often imaginary) a-stem, and then the ending of the original word is attached to the ka-derivative, the -a of the suffix of course disappearing. This gives the word the appearance of being formed with an infix -ak-.

So in the case of adverbs like ārakāt <ārāt, ālakam <ālām, čanakāis <čanāis, in which the original base actually was āra-, čana-, ala-.

But also: asakāt <asāu, as if the stem were asa- and the ending -āu; and the extraordinary verb-form āmaki <āmā, as if āmī were a nominal form from a stem āma-.

B. Samādhi of the Secondary Suffixes ika, uka, īka, and the fem. ikā.

38. In the Veda these do not appear after ī-stems. A final stem vowel disappears before them without trace, except ī, which becomes consonantal ī. Consonantal stems before them appear in their weakest pre-vocalic stem form; e. g. čāpavika <čāpavant; paramavomnīka <-vyoman; āpārāmīka <-ahan, and so other compounds of ahan. Apparent exceptions like fem. tādāmikā come as a rule from masculines in ā-ka (suffix ka), or are derived from parallel bases in -a (as śādāhika <śulabhā, not -ahan). In the classical language, however, this rule no longer holds; particular ān-stems take the form in ā before -ika (the ā dropping). In the Veda sāman and its compounds follow this habit: sāmīka (Lāty.), jyāīsāsāmika <jyeṣṭāsāman &c.

39. The primary suffixes require no remarks under this heading: the treatment of verbal bases before them, in so far as it is capable of discussion, has been taken up under the respective suffixes.

1The grammarians allow asuka as well asakāt <asāu, but it has not been reported as occurring in the literature.
Chapter III.

The Secondary Suffix ka (excl. diminutives).


40. a) Forms nouns from nouns: meaning “like.”
   antakā, border (Q.B.), <ānta, end.
   kambūka (A.V.), husk of rice, <kambu, shell (see § 33).
   kila (U.), the middle part of a mantra, <kila, post.
   kumbhaka (U.), the holding of the breath after filling the passages with air—a religious exercise; the appearance of the performer suggested a pot, hence the name. <kumbhā pot. See § 95.
   kūśṭhīka (A.V.), dew-claw, <kūśṭha (cf. also § 90, 91).
   cūlaka (U.), the top of a column, <cūla, crest.
   chaṭṭrāka (B.), mushroom, <chaṭtra, shade, umbrella (see § 30).
   (Class. chaṭṭrāka = mushroom).
   naṭaka (S.), hollow of a bone, <naṭā, reed.
   nāṭikā (A.V.), throat, <nāṭī, tube.
   nābhab (B.), navel-like cavity, <nābhā, navel.
   bhāṣika (S.), general rule, <bhāṣya, speech, commentary (see § 29 a).
   maṇika (B.), hump, water-jar, <maṇi, pearl, lump &c.
   valīka (S.), thatch; reed, sedge, <vali, fold, or valī, edge of a roof.

41. b) The signification of the ka-derivative is often so like that of its primitive that it is hard or impossible to distinguish any difference between them, so that the ka seems to be meaningless. The Hindu grammarians recognize as a distinct category this “meaningless ka” (anortha). Sometimes, however, the exigencies of meter explain the addition of ka. So:
   āstaka (A.V.), home, = āsta.
   gavina (A.V.), groins, = gavini.
   (The same pada repeated in TS. has gavini.)
   īṣukā (A.V.), arrow, = īṣu.
   pisūṣaka (RVKh.), bietings, = pisūṣa.
   (The same pada in AV. has pisūṣa, but is deficient in meter.)

42. c) Sometimes, again, the suffix is used as a convenient means of bringing into the ordinary a-declamation words of less usual stem- formations (mostly consonantal stems). This may explain the following (and cf. I. 12):
āmicatkā (YV.), pressing, = āmicat (pres. part.). See Gen. Index; cf. vikṣinatkā, vicinvatkā.

udakā (RV.), water, = udān. The stem udakā was at first used, apparently, only in the nom. acc. sg. udakām to replace the form *uda < udān, which never occurs. The form udakām is found 8 times in RV. and 17 times in AV., while the oblique cases occur only once in RV. and 6 times in AV. The oblique cases of udān on the other hand occur 19 times in RV. and 4 times in AV.; its nom.-acc. is not found. As the oblique cases of udakā increase in frequency the stem udān becomes correspondingly rare.

pratīcṛūtkā (VS.), Echo, = pratīcṛut.

byhatka (B.), n. p., < byhāt, adj. (But cf. also § 46).

vikṣinatkā and (inferior) vikṣinakā (YV.), destroying, epithet of gods, = vikṣinant; see General Index.

vicinvatkā (YV.), sifting, discriminating, epithet of gods; see General Index, and cf. preceding and āmicatkā.

stūkā? (RV.), tuft of hair; prob. not "primary ka" (Whitney), but rather from the noun stū in pythu stū.

43. d) But in many cases there seems to be no evident reason for the appearance of ka.—It may be that one or another of the words which are grouped under this heading will seem to sharper senses than mine to show some differentiation between the primary word and the ka-derivative. It is morally certain that some of them would have presented differences to an ancient Hindu. It is possible that some of them are diminutives of some sort, tho I have sought in vain for some sign of this in the various passages. However that may be, of the general fact there can be no doubt; from very early times the suffix ka became in some cases so colorless that it might be added without change of meaning to nouns, and even to adjectives. This usage increases greatly in frequency in the later language. Even if, then, a few of the examples quoted prove to be wrong, the principle is undoubted right.—Note that the usage is rarest in the Mantras and commonest in the Upaniṣads.

44. Nouns:

avadhūtaka (U.) n. of an Upaniṣad = avadhūta
ātmabodhaka (U.) n. of an Upaniṣad = ātmabodha
urvārūkā (RV.) in a late and interpolated verse, a sort of gourd, = urvārū
kāntaka (AV.), thorn = kanta (only in cpds.)
karkatāka (U.), crab = karkata
karnavaḍṭaka (S.), earring = karnavaḍṭa
kinjalka (S.), plant-stalk = kinjala (only Lexx.) see § 29 b.
kramuka (B.), betel-nut tree = krama (only Lexx.) (also krumuka)
gavilhuka or gavē- (TS.), coix barbata = gavlihu (gavedhu) (not Vedic)
gopikā (U.), protectress = gopī
cakraka (U.), wheel = cakrā
jarāyuca (B.), after-birth = jarāyu
jīvika (S.U.), manner of life, cf. jīvā, life (Possibly primary -aka: cf. § 95)
tāraka (AV.), star = tārā
nikharvaka (B.), billion = nikharva
parisāka (S.), n. of a tree, and its fruit = parūsa
pracitaka (S.), n. of a meter = pracita
bharadvājaka (B.), skylark = bharadvājī (f. of -ja)
bhikṣuka (S.), mendicant = bhikṣu
manipūraka (U.), n. of a mystic circle on the navel, = manipūrā
mṛttikā (VS.), clay = mṛd (see § 36)
yasti (U.), club = yaṣṭi
rūpaka (B., U.), image, species = rūpā
lokapālaka (U.), earth-protector = lokapāla
varāhaka (U.), n. of an Upaniṣad = varāhā
tahyaka (S.), draft-animal = tahiṣṭhā
tārdhūṣika (S.), usurer = tārdhūṣi
vīkalpaka (U.), hesitation = vīkalpa
-cīnakā (S.), flute = cīnā
vyādhaka (S.), hunter = vyādha
çyāmāka (YV.), millet, = cyāmā (? cf. § 29 c, Note)
saṁtanika (B.), n. of a Saṁta, = saṁtani.

Note.—ajīvīka, neut. sg., "goats and sheep," is the equivalent of the (masc. plu.) dvandva ajīvī. The -ka seems to have a sort of collective force, not exactly paralleled elsewhere.

45. Adjectives:
āgantuka (S.), accidental, = āgantu
āvapantikā (AV.), pres. part., scattering, = āvacanti. (Note in Whitney’s edition seems to imply dim.—i.e. pejorative—force, like āvacantikā &c. But as it is applied to the
bride scattering grains in the marriage ceremony, this is hardly conceivable. In the AV. passage the -kā might be metrical, but not in the GrS., where it is also used [unless they depend directly on the AV. passage; note that some parallel passages, as MantrBr., read āapanti]. Might this be a case of the “feminine” Diminutive—§ 90?}

śrīdvaka (U.), raised. = śrīdvā

ktṣna (S.), all, = kṛṣnā
caturthaka (U.), fourth = caturthā
tūṣāha(m) (S.), silent(ly), = tūṣā(m). Doubtful and prob. corrupt.

myḍāya (RV.), or myḍ- merciful, = myḍaya, cf. § 29 d.

svaka (U.), own, = śvā

Note.—The word plākṣa (B., S.), rapidly growing up, < *pla = pra + agā, takes -ka because of its quasiparticipal meaning, being influenced by the suffix -aka. Similarly udhrāntaka (U.), roaming, = udhrānta, from the analogy of words in primary ako, several of which are found in close proximity to the word udhrāntaka in Ns. U. 7.

46. e) Often the suffix forms substantives, from adjectives or other words, with the meaning “characterized by” (such a quality or thing). When the primitive word is an adjective the derivative is frequently no more than a substantivized adjective. As such it is particularly adapted to the formation of proper names.

Substantive from adjective:

abhiniṣṭaka (S.), ? (acc. to Knauer) stale (of food); < p. pp. of abhi-niṣṭ.

invacā (SV., B.), n. pr. of a Sāman, < inva, pervading.

iṣṭakā (YV.), brick, < iṣṭā, burnt, IE. Vādū burn. Cf. Av. iṣṭya.

kunda (S.), n. of a man, < kuni, adj., having a withered arm.

ghātaka (S.), n. of a kind of wood, < ghāta, smitten.
cāraka (B.), wanderer, < cara, wandering.

jauvantaka (U.), n. of a man, < jauvant, victorious.
tatāka (B.), pool, < tata, declivity, bank.

dummikā, n. of a man, dummān, glorious.

nyästikā (AV.), epithet of a plant, < nyästā, thrown down. (§ 91)
pūṭika (TS.) or -ika, n. of a plant, < pūṭi, soul (see § 31).

pṛthuka (B.), flattened grain, < pṛthū, flat.

perukā (RV.), n. of a man, < perū, delivering.

pracalāka (S.), chameleon < pracala, moving &c.
prasarpaka (S.), assistant or spectator at sacrifice, <prasarpa, adj.
madhyamikā (U.), middle finger, <madhyamā (cf. § 90).
muniḍaka (U.), n. of an Upanishad, <muniḍa, shorn.
rohitaka (MS.), n. of a tree, <rōḥita, red (in Class., Skt. also
applied to the tree rohitaka).
vādha (AV.), n. of a wood, <vadhā, smiting &c.
varaka (S.), suitor, <varā, desiring (also n., suitor).
varśika (S.), n. of a meter, <varśin, raining.
vīcaka (RV.), n. of a man, <vīcā.
śamāhā (S.), n. of a plant, perhaps <cāma?
śnātaka (B.), one who has ceremonially bathed, a grhaṣṭha,
<śnātā.

Substantive from noun (which must have been felt adjecti-
vally):
cilaka (B.), n. of a man, perhaps <ceła.
dandaka (S., U.), n. of certain meters, <dandā.
vasarakā (RV.), n. p., "Antman", <vasrā, ant. Called dim. by
Nāigh., followed by BR, but this seems very unlikely. It
is rather a noun of characteristic.
vrṣaka (SV, B.), n. of certain sāmans, <vrṣan.
sampāṭika (S.), n. of certain demons, <sampātī.

Miscellaneous:
tirācikā (S.), a horizontal region, <tirāci, loc. sg. of tiryaṇe.
47. f) The suffix furthermore forms adjectives of character-
istic, mainly from adjectives, adverbs and numerals.
ādhikā (S., U.), additional <ādhi.
ānuka (B., subordinate <ānu.
antikā (RV.), near <ānti.
āvakā (AV.) (subst.) n. of a plant <āva.
ākāṅ (AV.), solitary, <ākā.
vīcaka (U.), all-pervading, <vīcā.
sām-samaka (AV.), united, <sāmā.

From numerals, forming adjectives with a sort of distribu-
tive force: ekalā, singly; āvakā, by twos; trikā, by threes—
all RV.

One adjective of material (others in Classical Skt.); sidhraka
(S.), made of sidhra-wood.

48, g) Presumably growing out of the usage described in
§ 46, we find a few rare and abortive appearances of the
suffix in formation of abstract nouns, with the force of the
English suffixes -ness or -hood. The few Vedic cases are:
madhūlaka (AV.), sweetness (or, honey) < madhūla, sweet.
māṭrka (U.), “das Mutterwesen” < māṭī.
lōhīnkā (B.), red-glow < lōhīni, fem. of lōhita.
sūtaka (S.), birth, childbirth < sūta.

Note.—Logically the treatment of the Diminutive ka should follow here, it being a phase of the suffix 1ka. But for practical reasons, because of its importance and the space it requires, it has seemed best to devote a separate chapter to it.

The Suffix 2 ka. §§ 49—52 incl. Meanings see § 11.

(53 words)

49. Here no additional remarks or semantic distinctions are necessary, and we need only give the words, practically all of which are adjectives, as they occur. The words which have Vridhdi are: (21 words)

āparātuka (S.) < āparātā
āmalaka (U.) < āmala
āranyaka (U.) < āranya
ārunakālaka (TĀr.) < ārūna +
ēlu
āidakā (B.) < ēda
kāverakā (AV.) < kāvera (patrironymic)
cāturhotrākā (MS.) < cāturhotr
tādātmaka, ikā (U.) < tād-ātman
tāvakā (RV.) < tāva, gen. sg.
of team

1pārṣṭhikā (S.) < pāṛṣṭhyā, cf.
§ 29 a.

50. Those which may or may not be considered as having
Vridhdi: (10 words)

ātmaka (U.) < ātman
ātareyaka (B.) < ātareya
tālaka (U.) < tāla
tāttiriyaka (U.) < tāttiriya
trāvidyaka (S.) < trāvīdyā
-dhāvanaka (S.) < dhāvana

1 Note.—This must be admitted to be not a certain case of the suffix ka, as against ika. Nevertheless it is hardly likely that the entire syllable -ya would disappear before -ika without any trace;—at least I know of no parallel for such a phonetic change, whereas § 29 shows parallels for the reduction of -ya to i before ka.
51. The words which fail to show Vṛddhi (19 words):

- agnihotraka (U.) < agnihotra.
- asmāka (RV.) < asmā- see § 30a

Note.

- gāṇaka (VS.) < gānā.
- cikitsakā (B.) < cikitsā.
- tritiyaka (AV.) < trītya (as noun).
- dēvaka (U.) < devā.
- nāpātka (RV.) < napāt.
- madhūka (S.) < mādhu.
- madhvaka (B.) < madhva? see § 33b.
- yontraka, ikā (U.) < yontrā.

Note.

- yuṣmāka (RV.) < yuṣmā- see § 30a
- sūṭikā (AV.) < sūṭi (cf. pra-sūṭikā, Cl. and -prāsūṭā, AV.)
- svasti (U.) < svasti.
- hotraka (B.) < hotrā.

52. A few un-vṛddhi or words from bases in ō, where it is impossible to say whether the suffix is ka or ika. The overwhelming preponderance of Vṛddhi with ika has led me to classify them here, while vṛddhi words from i-stems are for the same reason put under -ika. (3 words):

- kuṣikā (RV.) prob. < kuṣā.
- bāhika (AV.) < bāhi.
- mahānāmika (S.) < mahānāmi.

The Suffix 3 ka. §§ 53—55. Meaning see § 12.

53. This category consists mainly of adjectives (which, however, are frequently substantivized), like the foregoing. It is on the whole not frequent in the Veda, except in the develop and use with Bāhuvartha. Especially to be noted is the use of the suffix with numerals, in the sense "consisting of," "containing."

Parenthetically it may be noted that the suffix -ika has the value of 3 ka in two AV. words: tūndika, having a snout or trunk, < tūnda; and paryāyikā, having (i.e. composed in) strophes, < paryāya. This seems to be the extent of the usage.

The following words show ka in its third use (21 words):

(From numerals:)
- āḍṭaka (B.)
- ekatṛṅga (U.)
- catuṣṭka (S., U.)
- daṇḍaka (S.)

(8 words)
- paṇḍaka (S.)
- paṇḍavṛṅga (U.)
- catuṣṭka (S., U.)
- daṇḍva (S.)
- saḍvṛṅga (U.)
The K-Suffix of Indo-Iranian.

(From other words:) (13 words)

aristaka (S.), having the disease āriṣṭa
āṇḍika (AV.), having egg (-like bulbs) <āṇḍi
janaka (B.), n. of a king <jāna?
dāyaka (S.), heir, <dāyā, inheritance
dvārakā (U.), n. of a city, “City of Gates” <dvāra
nimustika (Ait.Ār.), of the size of the fist, <nimusti, a measure
of that size
parutka (S.), having joints <pārus (see § 37 fin.)
mādhu (B.), n. of a man (“rich in honey”) <mādhu
mukti (U.), n. of an Upan., “String of Pearls” <muktā
mukti (U.), n. of a prizefighter <musti, fist
vasnikā (B.), prize (“having value”) <vasnā, value
cālyaka (VS.) porcupine (“having darts”) <cālyā, dart
hlika (KS) possess of modesty <’hli = hri

54. Bahuvarhis.—Very scarce in the Mantras (2 in RV.; 5
in RV.—AV. together); they become not infrequent in
the Brāhmaṇas, but can hardly be called common until the Sūtra-
Upaniṣad time. There are 42 words found in the Mantras-
Brāhmaṇas together, and 54 which occur for the first time
in the Sūtras and Upaniṣads, making 96 for the entire Veda.
In the later language the cases are numerous.—That non-.a
stems predominate as primitives (cf. § 12) is shown by the
statistics; of 96 words, 37 are from consonantal stems, 37 from
stems in other vowels than ā, and only 22 from a-stems.

For Saṃdhi of stem-finals see Chap. II.—The most striking
facts are that ī always remains unchanged, while ā may do
so, but more often is shortened before ka.—Four stems in a
change a to ā before ka, through the influence of parallel -in
stems of like meaning. They are -cārika <cāra, cf. cārin;
-vargika <vargā, cf. varśi; -cālika <cāla, cf. cālin; -saṃnyāṣika
<saṃnyāsa, cf. saṃnyāsin.

a) The heteroclitic stems aski (alsan) and asthi (asthan) use
either form of the stem before -ka, as also (in the Veda)
before the pada case-endings (Wh. 431). The same verse in
different parts of the Vedic literature may vary in this regard.
Thus anakṣikāya svāhā TS. 7. 5. 12. 1, but anaksakāya svāhā
KSA. 5. 3.—anasthikāya (-akāya) svāhā TS. (KSA.). Cf.
asthībhyaḥ svāhā VS. 39. 10, TS.; but asthībhyaḥ sv. KSA. 3. 6.
Cf. also the Bahuvarhis anastha, anasthan, anasti, anasthimat
—all of which are found.
The corpus of variants revealed by the Vedic Concordance, which I have been able to examine through the kindness of Prof. Bloomfield, further reveals the fact that in a number of cases the same pada in different texts varies by adding ka to, or dropping it from, a Bahuvrīhi stem. Examples are anāṅgā; anāṅgaka, aprāṅa; aprānakaka, amanās; amanaskā; and avajihva nijhivika HG, 1, 15, 5* cf. avajihvaka nijhivaka ApM, 2, 21, 32*.

The second word in both places should probably be emended to nir-jihvaka. A form jihvika as a Bahuvrīhi-final is quite inexplicable.

The list gives the final parts of the compounds only, in alphabetical order; the stem-form of the original word is added where it is not obtainable by simply striking off the -ka.

55. List of Bahuvrīhi ka-words.

<table>
<thead>
<tr>
<th>word</th>
<th>occurs</th>
<th>stem final</th>
<th>word</th>
<th>occurs</th>
<th>stem final</th>
</tr>
</thead>
<tbody>
<tr>
<td>anāṅgaka</td>
<td>U. a</td>
<td>kanthaka</td>
<td>(sahā- k.)</td>
<td>AV. a</td>
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<tr>
<td>aṅgaka</td>
<td>KSA. (an)a</td>
<td>kadruka (tri-k.)</td>
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<tr>
<td>aṅgīkā</td>
<td>TS. i</td>
<td>(&lt;āṅgīkā)</td>
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<td>B. i</td>
<td>kārnākā</td>
<td>(&lt;kārnākā)</td>
<td>RV. u</td>
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<td>KSA. a</td>
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<td>U. u</td>
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<td>(tryā-)</td>
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<td>kalpaka</td>
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<td>U. a</td>
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<td>&lt;ācītika</td>
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<td>man</td>
<td>TS. (an)a</td>
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<td>U. āi</td>
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<tr>
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The K-Suffixes of Indo-Iranian.

The Suffix 4-ka. Meaning—see § 13.

56. The five words belonging here have been already quoted; they are (5 words):
ántaka (AV.), ender, death <ánta, end.
yācanaka (U.), beggar <yācana, request
vimanyuka (AV.), freeing from wrath, <vimanyu, free from wrath.
ĉitaka (RV.), cooling <ĉitá, cool.
ḥładaka (RV.), refreshing <ḥład, refreshment.

Unclassified (Secondary) ka.

57. All, or nearly all, the following words in suffixal ka have evidently a secondary suffix. But it is impracticable to separate them into the various categories, either on account of the uncertainty of their origin, or in a few cases because, though they are clear as to general derivation, it cannot be determined which branch of the suffix they belong to. For instance, sómaka, a proper name, might mean "Sóma-like" (1 ka), "of or belonging to Sóma" (2 ka), "having sóma" (3 ka, cf. māduka n. pr.), or it might be a diminutive.—In most of the following cases, however, the etymologies are unknown; and often even the meaning of the word is not clear. Whatever can be said about them will be said in the General Index (q. v.), under the individual words. They are recorded here merely for the sake of completeness.

58. List of Unclassifiables. (87 words.)

aṅjalikā (or nyāñj-) kāmikā
āmanika (or āmanaka) kīrikā (or gir-)
arātakā kucavartaka (?)
avacatnaka kuśitaka
udhaka kustaka
ānuśūkā kośitaka
ārcattā kyāku?
īkyvāku (or -kū) kītaka
udpātika ksitikā
uddālaka khāndika
upānasyaka golattikā
ulmuka ciccikā
rksāka chūbukā (cl. cibuka)
orimikā -jalāyukā in tyā-j.
kalātikā jānakā (or ni-j.)
kānaka jumbakā
kūpaka (or kālpaka) ėrīlā
kalānka ṣhārikā and ā-qh.
kaimalikān dūtaka
kāçōkā nabhāka
naraka and nāraka
pācvaka
patantaka (suffix -aka? Cf. § 15, footnote.)
patāka (primary?)
parisāraka (-aka suffix?)
(partikā, patikā- corrupt.)
pājaka
pāvakā
pīnyaka
pīnāka
jīppāka
punāraka
prīdāku
prastataka
prahastaka
prācūṭika
baṭaraka
bālāka
bṛbūka
maduṣīkā
mandaśika
mānāthaka?
mastaka
mastiṣka
mādānaka
rodāka
ropānāka
vārtikā
valūka
vasūkā (2 ka or 3 ka?)
vālūka
vihīrṇdhikā
visrūśikā
vṛṇāraka
çayāndaka
çayāntaka
çāriçākā
çāltaka
cipiviśṭāka (1 ka? cf. General Index s. v. and § 45)
čilaka
čṛukhāṅika (v. l. singh- &c.)
čāṅnaka
salalāka
sīka-
sōnaka
sārāki
(sphatika- primary?)
hātaka

Chapter IV.
(About 180 words.)

59. It is not always easy or possible to draw the line sharply in any given case between the various diminutive values of the suffix ka, as laid down in § 10—which see. The diminutive of pity is almost always associated with contempt; without that idea it is doubtful whether it is found at all in the Veda. There are very few words in the Veda which show a marked endearing force of the suffix; in so far as it occurs it is usually found along with simple diminutive force (smallness). Again, the imprecatory and contemptuous uses are often hard to distinguish; nevertheless they are essentially distinct. They may, and very often do, exist quite independently of each other.
60. In treating of adjectives and pronouns having this suffix, it is to be noted that the diminutive idea (of whatever variety) usually belongs not so much to the adjective or pronoun itself as to the noun with which they are connected,—or rather to the whole complex idea; the diminutive notion pervades, as it were, the atmosphere of the whole sentence. So e.g. AV. 20. 136. 14 kumārikā pingalikā—"wretched little yellow girl;" it is an open question whether pingalikā (from pingalā, tawny) has the suffix ka in the sense of our suffix -ish, so frequent with color words (pingalaka—"yellowish"), or whether the suffix has simply the contemptuous diminutive force, which is then, so to speak, transferred from the noun kumārikā to its modifying adjective. I incline to the latter view in this case; the occurrence is by no means rare in the Veda, and is so simple and natural that it is hardly necessary to dwell on it.

We shall now proceed to classify the ka diminutives by lists, according to the divisions laid down in § 10.

I. True Diminutives. (72 words.)

61. The suffix is applied—
a) to nouns—indicating an object of the same kind as the primitive, but smaller.
b) to adjectives of smallness—emphasizing and exaggerating that quality.
c) to adjectives of color,—indicating a color approaching or suggesting the original color (Eng. -ish, Ger. -isch).
d) rarely to other adjectives and adverbs—indicating qualities approaching but falling short of the original quality.
e) principally to nouns—indicating not physical smallness, but relatively secondary importance of the object denoted. Related to, but distinct from, the diminutives of pity and contempt; such notions are absent here.

62. a) Diminutives of Size—nouns. (51 words.)
alābukā, the fruit of the bottle-gourd (alābu) <alābu AV. 20. 132. 1, 2 = RVKh. 5. 15. 15 ād alābukam śakam alābukam nikhūtakam. "Just one little alābu, a little alābu cut into just a little."
avahatārikā, kind of lute, ĈaṅkhaČr. 17. 3. 12.—Prob. Dim., cf. ghṭatāri, lute.
avatáka, little spring, AV. 2. 3. 1. So Ppp., adopted by Bl. and Ludwig; Wh. keeps the Qāun. MSS. avathā, which is scarcely interpretable.

arikā, little sheep, ewe-lamb. RV. 1. 126. 7; AV. 20. 129. 17.
Prob. Dim.

(In an obscene passage; is the suffix perhaps due to that fact? See § 85.)

indragopaka, little fiery. Amṛt. Up. 36 ("Marienkäferchen,
Deuss.)

indragopa.

(1) upajihvikā RV. 8. 102. 21 &c. names of sorts of ants.
(2) upajikā AV. 2. 3. 4; 6. 100. 2 &c.
Whatever the true interpretation of these words may be, it is safe to say they are diminutives. Bl. (AJJP. 7. 482 ff.) derives (2) from (3), and then (1) from (2) by popular etymology. Is upadehiṅkā (Class.) in like manner a popular etymology <upadikā, and is dehiṅkā (Class.) further etymologized from that? Or are two quite different stems confused in this group, the bases deha and jīvā?

-kanikā, a minute particle of anything, in vata-k. Sārvop. 2.

kanaṅkā for kani-, pupil of the eye, only TS. 5. 7. 12. 1.
Corrupt for kani-, as shown by fact that the same pada in other places (VS. 25. 1. 2; MS. 3. 15. 1; KSA. 13. 2) reads kani-.

kanaṅkā (RV. 10. 49. 9, VS. 4. 3 &c.), -akā (RV. 4. 32. 23), kanaṅkā (QB. 14. 5. 2. 3), -ikā (AV. 4. 20. 3 &c.), pupil of the eye, from kanaṅ-, ā. Bloomfield (AJJP. 17. 400, Note 2) has shown conclusively that in all the known occurrences these words mean "pupil of the eye," and never "boy" or "girl,"

kanyākā, pupil of the eye, Ait.Ār. 3. 53. 5.

kṛkanṭhukā, tiny jujube-berry, AV. 20. 136. 3 (where MSS. and Edd. kārkanṭhukā) = RVKh. 3. 22. 3 (has correctly akā). See alpiṅkā under § 86. The obscene meaning pervades the passage so thoroughly that this word might also be classed there.

kṛkanṭhu

karkariṅkā, little lute, AV. 20. 132. 3.

karkariṅ, lute, RV. and Čāṇḍ.Čr.
kāṛnaka, tendril or handle ("earlet"), QB. 9. 2. 3. 40; Kāt.Čr. 18. 4. 6. 7.

kāṛna. Cf. § 86.
kundikā, little pot. Sam. Up. 4. 1. Of the pot of the Sanmūṣaṁ, in a description of his modest belongings. Dim. kunda.
kunārakā, ikā, boy, girl, RV. 8. 69. 15 &c. &c.  
kaumārā, ā, 
ksurikā, "little dagger or razor," n. of an Up.Ksur.Up.1 <kṣurā, 
<khanāta. 
NBD. makes it an adj. "dug up;" but it is clearly a noun, 
being connected with samūhaka (q. v.) by vā. Neither it nor 
its primitive khanāta occurs elsewhere, but prob. Dim. 
golaka, little ball, Čānkh.Gr. 4. 19; Gobh.Gr. 4. 4. 20.  
gola, 
cīndatika, a short petticoat, ČBr. 5. 2. 1. 8 &c. &c.  
Derivation unknown; Prob. Dim. 
jātaka, a new-born child, Kāng. 11.  
jāta,  
jālaka, little net, web, BṛhĀrUp. 4. 2. 3. Prob. Dim.  
jāta, web. 
tarimaka, a young sprout, AV. 10. 4. 2. The verse is hopelessly 
obscure in its application, but some sort of dim. use may be 
assumed. 
<taurā, 
nāskā, nostril, RV. 10. 163. 1; AV. 10. 2. 6 &c.  
<nāsā, nose. 
pūdahaka, slipper, ĀcraṃUp. 4.  
<padah, foot. 
pīpilaka, (ika?) and (most often) ikā, ant; AV. 7. 56. 7 &c. &c.  
<pipilā. See Word-List s. v. 
<putrā. 
prayaka in harina-p., the (fem.) young of any animal. No 
praya occurs, but it is clearly a dim. Cf. Class. Skt, pr-thu-ka, 
Lit. pario, zōrs &c. 
propāthakā, little section, subdivision of cert. works 
<propātha "lecture." 
prīyāgukā, little panic-seed, Śāmavīdh.Br. 2. 6. 10.  
<prīyāṅgu, 
māksikā, fly, RV. 1. 119. 9 &c.  
Dim. <māksā, fly. 
mājakā, gnat, AV. 4. 36. 9 &c.—The cognate Lith. maszalai 
with suffix IE. -os points to a Dim. -ka. 
mukhariṅka, the bit of a bridle, Kātyār. 16. 2. 5 (BR. wrongly 4) 
according to Sch. <mukhari (not otherwise found). The word 
is in any case ultimately <mukha and is prob. Dim. <mukhari. 
mukhā, mouth, RV. 4. 16. 17; 4. 17. 12. 
<muhu (or mūhū) adv. acc. 
mahākā, little basket, ČBr. 2. 6. 2. 17.  
māta, 
mīsaka, rat or mouse, Gārūd.Up. 2  
-ikā, rat or mouse, VS. 24. 36. 
rāsnākā, little girdle, Kāth. 25. 9.  
rāsnā. 
evajrasūcikā, "little sharp needle," n. of an Up., also called 
evajrasuci. 
evajāka (in vayākin), prob. "little tendrils," RV. 5. 44. 5.  
vayā.
So Sāyana and Luḍh.; somewhat dub.; epithet of the soma-plant.
valmika, ant-hill, VS. 25. 8 &c. cf. vamrā, (-i), ant.
Doubtful. The -ka is prehistoric, but certainly suffixal, and probably dim.; cf. formica, ṛōmpā. If valmika meant originally "little ant," its semantics have wandered peculiarly, vāmanaka, dwarf, Garbh.Up. 3. Dim. <vāmanā, dwarf.
vibhidaka, the vibhida(ka) nut used as a die. RV. 7. 86. 6; 10. 34. 1. <vibhīda.

Although the form vibhīda(-ta) does not occur until later, the -ka was clearly felt as dim.—Cf. vibhīdaka Imprec. in § 79.
viṣānaka, n. of a plant, AV. 6. 44. 3. —Prob. "little horn," referring to horn-shaped leaves or flowers. Kāuḍ even takes it as a real "little horn," not as a plant at all, and this may be right.—The other alternative is to regard the suffix as possessive (3 ka); viṣānaka, "horned." This is on the whole less likely, though possible. Cf. cāphaka. <viṣāna.
cāphaka, n. of a plant, AV. 4. 34. 5 &c. Comm. says "a hoof-shaped plant;" prob. therefore "little hoof!" rather than "hoofed;" cf. viṣānaka, to which the same questions apply. <capha.

gulākā (once āka, Kāth. 26. 1), little stake or twig, TS. 6. 3. 1. 2 &c. <gālā; cf. 29 c.)
cūlaka, splinter, TBr. 1. 1. 9. 9 &c. Cf. § 29 b. prob. <gūlā.
caṣaka, (little) hare?, Adbh.B. in I. St. 1. 40.
<caṣā; no very clear dim. force.
samūhaka, little sweeper, Āp.Cr. 17.26. (NBD., "haap"). See khunātaka.—The word samūha only occurs as a n. of action, not as a noun of instrument; doubtless it must have been used in the other sense too, as this word shows,—for samūhaka clearly has that meaning. The whole sense of the passage suggests also diminutive value. Otherwise it would be possible to call samūhaka a noun from sam + Vūh with primary aka. <samūha (?).
sucika, "little needle," epithet of a stinging insect, RV. 1. 191. 7. <suci.

I do not think any imprecatory or other pejorative force is present here.

63. b) Diminutives of Size—adjectives. (8 words.)
aniyāskā, more tiny, AV. 10. 8. 25. bālād īkam aniýāskām, "one is more tiny than a child." <aniyās, comparative-
arbhakā, tiny, RV. 1. 114. 7 &c. (see also § 72) <árba.
alpakā, tiny, AV. 20. 136. 3 (see Obsc., Dim., § 86); ÇBr. 1. 7. 3. 25 &c.
kanisṭhakā, smallest, AV. 1. 17. 2 <kanisṭhā (or)
(kanisṭhikā, little finger, ÇBr. 3. 1. 2. 4 &c.). <kān- 
sullakā, tiny, TS. 2. 3. 8. 3. But see § 68.
<kśulla <kṣudrā, prakritized form.
daharakā, short, KāṇḍBr. 19. 3. <dahara.
bālaka, young; a child, KṛṣUp. 19; MuktUp. 2. 7. <bāla.
chulakā, young (animal), AV. 6. 14. 3. <chūn.
64. e) Diminutives of Degree—adjectives of color. (6 words.)
kālakā, „blackish;“ n. of an unidentified bird, VS. 24. 35. <kāla.
kṛṣṇaka, prob. „blackish;“ n. of a plant, Kāṇḍ. 80. <kṛṣṇā.
pingalakā, ikā, tawny(ish?), AV. 20. 136. 14.—But see § 69.
<pingalā.
babhrukā, brownish, ÇBr. 1. 6. 3. 3; (bā- ) an ichneumon VS. 24. 26. <babhru.
lohitaka, reddish, red. Āp. (NBD.; no reference quoted.) <lōhita.
sūryavaka, “brownish,” n. of a man, RV. 8. 3. 12; 8. 4. 2. <cāyavo.
Examples are more plentiful in Classical Skt.
65. d) Diminutives of Degree—other adjectives (and adverbs).
(3 words.)
abhimādyatkā, somewhat drunk, ÇBr. 1. 6. 3. 4: 5. 5. 4. 5.
<abhimādyant, pres. p. abhi- Vmac.
nikhātaka, cut into a little, AV. 20. 132. 2—see alābuka § 62.
<nikhāta.
caṇakās, adv. quite gently, softly, RV. 8. 80. 5 &c.
<caṇāis (cān-).
The German word saucchen exactly renders caṇakās.
66. e) Diminutives of Importance (without contempt). (4 words.)
upapātaka, a minor sin, Nār.Up. 5; Kālāg.Up. 2. <pāta, sin
pātaka is also found, but dim. force is hard to find in it; it has rather the aspect of a nomen agentis. The prefix upa-
adds dim. force, and there is no doubt that in upapātaka at least the suffix -ka suggested diminution to the consciousness of the hearer.
ēkaka, „just one (little, valueless),” AV. 20. 132. 1—see alābuka,
§ 62.
<ēka.
dēvika, an inferior class of goddesses, ĀitBr. 3. 47, 48; ÇBr.
9. 5. 4. 24 &c. <devi.
kāṭika, assistant-priest, secondary Hotr, ÇBr. 13. 5. 4. 24 &c. <kāṭr.
II. Diminutives of Endearment. (7—8 words.)

67. The paucity of Vedic material under this head is partly due to the character of the literature, whose atmosphere is to a large extent unfavorable to “Kosenamen.” But after taking this into consideration, it is surprising that the number should be so small. Following are the only cases which seem to me clear enough to warrant classifying them here.

*ambikā, dear little mother, Mütterchen. VS. 23. 18 &c.

<ambi or ambí.

*ambālikā, dear little mother, Mütterchen. VS. 23. 18, CB. 12.

2. 8. 3 &c.

<ambāla or -li.

*ambē (MS. amby) ambike ambālike VS. CB; MS. ambe

ambāly ambike TS. &c., see Ved. Conc.

(The suffix -lá is also diminutive.)

ulākhalaka, dear little mortar (Mörserchen, Gr.), RV. 1. 28. 5.

<ulākhala.

*yāc ēid ēhi tvāṁ grhyagha ulākhalaka yuyāse ēha dyumāt-

tanam vada jāyatām ēva dundubhiḥ.

“However thou mayst be used in every house, O dear mortar, yet sound most clearly here!”

jīvikā, in jīvikā nāma sťha tō imām jīvayata. MS. 4. 8. 7,

115. 5; AyGr. 6. 9. 1; ĀpGr. 14. 20. 8. Addressed to the

waters, in a magic formula or charm; “ye are jīvikā,—do ye then make this man live (jivā)?” The same formula with jivā in place of jīvikā occurs in the same places quoted and

in others (see Ved. Conc.). Cf. also AV. 19. 69. 1 ff., especially 4.

Verse 1 reads jivā sťha jīvyāsam,—”ye are alive (jivā); may I live!” Vs. 4 reads jivālā sťha jīvyāsam—*. Whitney

renders jivālā “lively.” But note the diminutive suffix -lá,

and cf. jīvikā. The occurrence of both these words with

diminutive suffixes in practically the same connection shows that neither of them is accidental. They were both evidently felt as carrying the same quasi-endearing, coaxing idea which

is found in ulākhalaka and maṅgalikā. Although this meaning seems clear enough here, to render it in English is a different proposition, and one which I do not feel equal to attempting at present.

pādakā, little foot (Füschchen, Gr.), RV. 8. 33. 19. <pāda.

santāloṁ pādakāhara—“keep your little footies together,”

spoken in a playfully affectionate way.
putrakā, little sonny, RV. 8. 69. 8. <putrā.

Dim. of size, with addition of some endearing force.
mangalikā, (adj.) of good omen, AV. 19. 23. 28. <mangalya (see § 29 a).

The word clearly refers to the hymns of AV. 18, which are funeral hymns. Lassen is right in remarking (note to Whitney's translation) that it is a euphemism for this particularly ill-oemened class of hymns. The suffix ka perhaps adds something to this euphemistic touch by giving it a turn akin to the endearing diminutive (cf. ulākhala and jīvīkā). It would be futile to try to bring this out in translation.

(sībhādrā), courteous, VS. 23. 18. <sībhādra; cf. "Freudenmädchen."

This word may have been, and probably was, originally a playfully endearing dim., but in this passage, where alone it seems to be found, the suffix is rather imprecatory; see § 79.

III. Diminutive of Pity. (3 words.)

68. In the Veda this almost always carries with it the additional idea of contempt. It is almost doubtful whether the Veda knows the suffix -ka with the connotation of simple pity in a good sense at all. All the following instances are capable of being treated as terms of contempt.

 unmantaka, insane, only Āgīram.Up. 3. The exact formation of this word is uncertain, though its general etymology (ud + Vman) is clear enough. No *manta or *unmanta occurs. If the ka is diminutive, as seems likely, it belongs under this head.

ksullakā, tiny, cf. § 63, 72. This word, <ksula = kṣudrā, regularly carries with it (at least in the Veda) the idea of weakness, as well as smallness. So CBr. 1. 8. 1. 3—yā vad vāi ksullakā bhāvāmō bahvi vāi nas tāvaṇ nāḍrā bhavati—

"As long as we are poor (helpless) little shavers, we are in great danger." In this case we seem to have a true Dim. of Pity.—More often the word takes on contemptuous force; see § 72.

pradrāṇaka, very poor, Chā.Up. 1. 10. 1. <pra, intens. + drāṇa, poor.

Probably pitying dim. No idea of contempt seems to be prominent.

IV. Diminutives of Inferiority with evil connotation, often called Pejoratives. (94 words.)
69. They arise from the above-mentioned diminutives of pity and inferiority (§§ 66, 68) and may be conveniently divided into three classes (§ 10): 1. Contemptuous—§ 70—76; 2. Imprecatory—§ 77—84; 3. Obscene—§ 85—86.

1. Contemptuous Diminutives. (29 words.)

70. In these the idea of smallness carries with it that of weakness or wretchedness and contempt. Applied to nouns, adjectives, participles, pronouns, and adverbs. Common from the earliest times. As has been said, this category is often difficult, of not impossible, to separate from the imprecatory diminutive, with which it is closely connected. In many of the words quoted under each head something of the other idea is also present.

Following are the words which show more or less clearly a contemptuous use of ka, arranged according to the parts of speech.

71. a) Nouns.

abhālikā, “prattler”. Brhār Up. 3. 9. 25. A term of reproach whose mg. and etymology are not certain, but prob. containing some pejorative notion.

usrīkā, miserable bullock, RV. 1. 190. 5 (see § 29 a. N.). <uerā.


kumārakā, RV. 8. 30. 1—see § 72 s. v. arbhakā.


<humārād.

AV. 10. 4. 14—kārātikā kumārikā sakā khanatī bheṣajām—“Even the wretched little kārā-ta-girl, even she—a worthless creature (sakā)—digs up a remedy (which is sufficient to destroy the serpents).” In a charm against snakes. The idea is that a worthless person of very little power or influence can destroy the hostile serpents. The kārātas were a despised mountain tribe. See § 72 s. v. kārātikā.

This verbal minimizing of the power of adversaries is a common characteristic of all magic, and we shall have occasion to note it more than once in dealing with our suffix, which is peculiarly adapted to this purpose. Cf. RV. 1. 191. 11—16; and see s. v. kusumbhakā, čakuntikā.

1 Either accent.
For AV. 20, 136. 14, where kumārikā also occurs, see § 72 s. v. pingalakā.

kusumbhakā, venom-bag of an insect, RV. 1. 191. 15, 16.

< kusūmbha, id.

vs. 15—iyattakāḥ kusumbhakās takām bhinadam ućmanā tāto viśāṃ prā vāyute pārācīr-īnu saṁvātah
16—kusumbhakās tād abhāvid girēh pravartamānakāh
vṛścikasyārasām viśāṃ arāsām vṛścika te viśāṃ.

15. "A wretched, feeble thing is that miserable little poison-bag! I smite it with a stone; then the poison has departed into remote places."

16. "Thus spake the accursed little poison-bag, slinking down from the mountain: 'The poison of the accursed stinger is powerless.' Thy poison, accursed little stinger, is powerless."

The power of the poison is belittled; the speaker declares with all possible vehemence that he despises it, and that it cannot do him any harm. See s. v. kumārikā and cakuntikā. Of course imprecatory, as well as contemptuous, force pervades the ka suffixes which bristle in this passage; I have tried to bring out both ideas in the translation.

The word kusumbhakā is often translated "venomous insect," as if it contained the suffix 3 ka and meant "possessing a kusūmbha." It seems clear, however, that it has just the same meaning as kusumbha (e. g. AV. 2. 32. 6), plus a pejorative value. Our modern preconceived ideas, based on modern prejudices, of what such stanzas ought to say in order to give "good sense," are of practically no weight whatever with verses of this kind, which may even be intentional nonsense. The meaning "poison-bag," incidentally, fits in vs. 15, at least, quite as well as the other meaning. And as for vs. 16, we can only say that the poet speaks of the poison-bag as crawling down from the mountain, and there is an end of it. If anyone demands that logical sense be extracted from this abracadabra, I respectfully request that he identify the mountain (giri) alluded to, and explain why the kusumbhakā (whatever its meaning) should be crawling down from it.—A parallel stanza to vs. 16 is AV. 5. 13. 9; see § 73 s. v. avacarantikā.

vṛścika, "stinger," scorpion, from Vīraśc. The ka may be in origin primary and not diminutive; but that it is felt as
diminutive in this passage is evident. The imprecatory force of the suffix is strong in this word.—stronger than the contemptuous, perhaps.

dēvaka, (wretched, worthless) god. RV. 7. 18. 20.  
<dēvā.:>

dēvakāṁ cin māṇyanānāṁ jaghanta.

"The wretched fellow who thought himself a godling, forsooth! (cā) him didst thou (Indra) slay."

dhānuska, small, poor bow. Lāty 8. 6. 8.  
<dhanus.>

pāndaka, eunuch, weakling. Kāth. 28. 8; 13. 7.  
<pānda, id.>

nāpuṇāsaka, eunuch, hermaphrodite, C'Br. 5. 5. 4. 35 &c.

<nā-puṇāsa.>

pūlkaka or pūklaka, n. of a despised tribe. MS. 1. 6. 11.  
<pulika or pulkaka, n. of a despised tribe. MS. 1. 6. 11.>

In Classical Skt. they are called pūlaka; the dim. suffix -ka is prob. present in the word.

rājakā, worthless kinglet, RV. 8. 21. 18.  
<rājan.>

citra i.e. rājajā i.e. anyakā yakē sarasvatim ānu &c.

"Citra is a real king; worthless kinglets truly are the other wretches (anyakē) who (yakē) live about the Sarasvatī" &c.

visadhanakā—see under § 79.

visphulinakā, (miserable) little spark?, RV. 1. 191. 12.  
<visp(h)ulina.>

trīḥ saptā visphulina visāya pāṣyam aksan. The exact meaning of the word is not entirely clear, but it must be a contemptuous formation <visphulina, like cakuntikā (q. v.) in the preceding verse, and with a similar application, viz. used in minimizing verbally the power of the poison. See also kuṣumbhakā, and cf. kumārikā. The visphulinaḥ must be some weak and worthless creatures, at all events.

vīceka, scorpion, RV. 1. 191. 16 &c. &c. See on kuṣumbhakā, and, also § 79.

vīchāntaka, ika, (wretched, accursed) little bird.  
<cakānta.>

RV. 1. 191. 11 iyattikā cakuntikā sakā jaghāsa te visām so cin na na marāti no vayām māramārē asya yojanam hariṣṭhā madhu teśa madhulā cakāra.

"A miserable little creature is that little bird!—she has swallowed the poison; yet she shall not die; we too shall not die! Far off is thy course; the sun-god has turned thee into honeyed-honey."

Another case where the power of a hostile object (poison) is belittled in words, the idea being that the very words by their magical power accomplish the things stated to be al-
ready accomplished. “Even a wretched little bird has eaten the poison without injury; what harm can it do us?”

AV. Ppp. folio 115 b, line 1—cakuntikā dhayantikā, see § 73.
VS. 23. 22, 23 and parallel passages, contain this word. They occur in the obscene parts of the Aṣvamedha ceremony: the use of the suffix belongs to the Dim. of Obscenity, and will be mentioned there—see § 85.

cañākakā, wretched little splinter, AV. 20. 130. 20. <cañākā.
See s. v. yākā, § 75.

72. b) Adjectives.

arbhakā, small, weak, wretched. RV. 7. 33. 6 (see also § 69).

<ārbbhā.

danda vied gojanīsa āsan pārichinnā bharatā arbhakāsāh.
“Like ox-driving staves, the miserable Bharatas were crushed to pieces.”

RV. 8. 30. 1—naḥī va ṛṣī arbhakā dēvāso nā kumārakah—
“Not one of you is a little wretch, o gods! nor a weak boy!”

AV. 1. 27. 3. in a charm against serpents, nārbhakā abhi
dadhṛṣṭaḥ (cf. kuṣumbhakā, § 71, and comment.).—Similarly
AV. 7. 56. 6,

ābhūkā, powerless, weak, AV. 6. 29. 3.

<ābhū, which means simply “empty.”
kāirūkakā, ikā, of the kirūtas (contemptuous), AV. 10. 4. 14.

<kāirūta, id.

See kumārikā, § 71.—They were a despised tribe. This word is a contemptuous formation from the adjective kāirūta.

keullakā, tiny and wretched. See § 68, 63. <kṣuddrā (*kṣullā).

AV. 2. 32. 5 shows the word in a clearly contemptuous sense (with some imprecatory force added);

ātho yē keullakā iva sāve te kriyayā hatāḥ—“The tiny little wretches—all the worms are slain.” In a vermin-charm.


<piṅgalā.

kumārikā piṅgalikā, “the wretched little yellow-girl.”

This color-adjective may or may not partake of the force of the Dim. of degree otherwise common with such adjectives. See §§ 60, 64.

bhinnaka, broken and worthless, MantraBr. 2. 7. 3. <bhinnā.

athū ādām bhinnakah kumbho ya ādām visadhānakah.
“So their bag is crushed and powerless,—their cursed poison-
receptacle.” In a charm against poisonous insects.
In the word visudhānaka the idea of imprecation seems to outweigh that of contempt.

73. c) Participles.

avacaranti, slinking down, AV. 5. 13. 9. < avacaranti.

Karṇa gyāvēt tād abravi dīvr avacarantī
yāh kāzęmōh khanitrīmās tāsām avasātamaṃ viṣāṃ.

"The eared hedge-hog said, as she slunk down from the mountain," &c.—The whole stanza is suggestive of RV. 1. 191. 16, and pada b is pada b of the RV. verse with the substitution of avacarantī for pravaratamānakāh, q.v. The sense of the hā is doubtless contemptuous. This stanza has less appearance of freshness and originality than the RV. stanza; it looks like a secondary and epigonal reminiscence of the latter. See § 71 s. v. kuśumbhākā.

pravaratamānakā, slinking down, RV. 1. 191. 16. < pravaratamāna.

See kuśumbhākā, § 71, and cf. avacarantī above.

āhantī, sucking, AV. Ppp. folio 115 b, line 1. <āhantarī.

čakuntī (MS. -ka) me bravi visupuṣpam dhayantī.

(For MS. visapuspam probably -pūṣam is to be read; cf. RV. 1. 191. 12, and see § 71 s. v. visupulatingā.)

"A miserable little bird said to me, as she sucked up the essence of the poison:" (The following words in the MS. are not entirely clear to me; they are probably corrupt, and are in any case unimportant for the present purpose.) That the suffix ka here has contemptuous force is made clear by a comparison of RV. 1. 191. 11—16, of which this verse is a reminiscence. See čakuntīka in § 71, also kuśumbhākā.

74. d) Pronominal adjectives.

anya, other (contemptuous), RV. 6. 21. 18.—See rājā, § 71. <ānya.

See also § 82, Imprecatory Diminutives.

iyattā, ikā, so tiny and wretched, RV. 1. 191. 11, 15.

<i>iyat- "of such a size."

See čakuntākā, kuśumbhākā, § 71.—In AV. 20. 130, 20 the MSS. have nyām yakām gaḷokākā, for which R.-Wh. read iyattākā gaḷā; but the correct reading is probably nyām yakā gaḷokākā, as shown by RV.Kh. 5. 15. 10.

75. e) Pronouns.

sa, sakā, lakād &c., that (wretched or miserable little).

RV. 1. 191. 11, see čakuntākā § 71.
AV. 10. 4. 14—see kumārikā § 71.
RV. 1. 191. 15—see kuśumbhakā § 71.

Kātyā. Cr. 13. 3. 21 takā vayama pāvacā. Parallel texts read ime or etā for takā. There is no apparent reason for the dim. or pejorative suffix. The verse is difficult and uncertain; see Garbe on Vāit. S. 34. 9.

RV. 1. 133. 4 yāsāṁ tīrthā padačāto bhiṅgaṅgār apāvanah tat sū te manāyati takāt sū te manāyati

(Addressed to Indra.) "Of them (witches) thrice fifty didst thou lay low with blows (?ahhiṅgaṅgār); that deed of thine (te gen.) is highly praised, yea, even that slight task of thine!" He means that this great performance (which is itself worthy of laudation) was nothing to what the power of Indra could do—nor that the performance was in itself slight. Grassmann's translation misses the point.

yakā, which (miserable person).

RV. 6. 21. 8—see rajulā, § 71.

AV. 20. 160. 20 = RVKh. 3. 15. 10 iyāṁ yakā ṣalākā (see on iyattākā § 74) "that wretched little splinter." Whether an obscene meaning is hidden in the phrase (which is quite likely) or not, the contemptuous idea is plain. See further § 85, Dim. of Obscenity, 76. f) Adverb.

āḷakam, in vain (contemptuous and imprecatory)

RV. 10. 71. 6; 10. 108. 7.—Applied to actions which fail, and which are not desired to succeed. In 10. 108. 7 the Panis tell Saramā contemptuously that her long journey has been useless (āḷakam), since she has no power to get the desired cows away from them.

(IV. Pejoratives:) 2. Imprecatory Diminutives. (59 words.)

77. These are sometimes called simply Pejoratives, in a narrower sense. But this expression, if used at all, is better applied to this entire category, including the contemptuous and obscene words. I have applied the term imprecatory to this subdivision, because these words in īa often have just the value of the primitive words accompanied by a curse. This cannot be brought out in translation oftentimes, without over- translating the idea. And of course it cannot be pressed too closely in the case of every individual word. Sometimes the idea is more deprecatory than imprecatory. But it always conveys the
impression of something bad,—something that is more or less emphatically disapproved of. And it differs from the foregoing subdivision in that the idea of contempt, if present at all, is at least not prominent, or not as prominent as the idea of hostility or vigorous disapprobation. As we have said, it is sometimes hard to say in given cases whether imprecation or contempt is more strongly felt. Proper names are peculiarly susceptible to the imprecatory *ka, which casts a slur of some sort or other on the personage so denominated. It is especially common with names of hostile demons. Besides the other parts of speech represented in the contemptuous *ka words, we find here one remarkable verb-form containing the suffix. Following are the words which occur.

78. a) Proper names.
anantaka, n. of Çeša, a snake-god, Gārūḍ. Up. 2; see elāpatraka.
He was regularly called ananta.
elāpatraka, n. of a Nāga or serpent-demon, Gārūḍ. Up. 2.

<elāpatra, id.

(mahāelāpatraka [mahā-el-] is another Nāga in the same section.) elāpatra is the name of a Nāga, found in the Classical Skt.—This chapter is a charm against serpents, personified as demons. A number of them are listed and exorcized by name. Names in -ka predominate (only one out of the 12 names lacks the suffix), and in many cases (as in this one) the same names appear elsewhere without *ka. It is plain that an imprecatory force is felt in the suffix with all of them.
karkotaka, n. of a Nāga, Gārūḍ. Up. 2. See elāpatraka.

<karkoṭa, id.

kālika, n. of a Nāga, Gārūḍ. Up. 2. See elāpatraka. No *kāli occurs.
kūlika, n. of a Nāga, Gārūḍ. Up. 2. See elāpatraka. No *kuli occurs.
chāyaka, n. of a demon, AV. 8. 6. 21; prob. imprec.

<chāyā (only occurs as common n.)
jambhaka, “crusher”, n. of a demon, VS. 30. 16.

<jambhā n. of a demon, AV.
takṣa, n. of a Nāga, Gārūḍ. Up. 2, AV. 8. 10. 29, &c.

<takṣa, id. (Kauê.)
padmaka, n. of a Nāga, Gārud. Up. 2. See elāpatraka.
(and mahāpadmaka—same section.)<padma, id.
palejaka, n. of a demon attacking women. AV. 8. 6. 2. The proposed etymologies are all merest guesswork; but the ka is probably imprecatory.
vasuki, n. of a serpent-king. Gārud. Up. 2; brother of Čeṣa, who is referred to in the section as anantaka. Vāsuki, by its ending i and Vriddhi, suggests a patronymic formation <vasuka; but still the -ki may have been felt as imprecatory, in the connection where this passage occurs.
caṅkhapuli, n. of a Nāga, Gārud. Up. 2. See elāpatraka. No *caṅkhapuli occurs.
caṇabha (voc.), n. of a kimidin or hostile demon, AV. 2. 24. 1.
<caṇabha,
which is joined with it in the same stanza. The opening of the exorcism is caṇabhaka caṇabhaka! (vocatives). Some sort of a serpent or dragon is doubtless referred to. The suffix -bha indicates that it is some animal; and the radical part of the word is probably connected with īra—serpent (Pāṇe.). In any case the suffix, in this word as in caṇabhaka, is plainly imprecatory.
caṇabhaka, n. of a kimidin, AV. 2. 24. 2. <caṇabhaka.

Occurs in the stanza following the one which contains caṇabhaka; this stanza opens in the same way with a corresponding address—caṇabhaka caṇabhaka!—The words are puzzling in this connection, because caṇabhaka is otherwise an adjective of good signification, meaning “favoring, kindly.” It seems likely that the vague assonance of the words with caṇabhaka(ka) suggested their use in this place; although it would be rather bold to suppose that the charm-maker forgot, or did not know, the regular meaning of caṇabhaka (which was, nevertheless, a rare word). In any case the ka is imprecatory.

79. b) Nouns (not Proper Names).

arnakā, heap of ruins, RV. 1. 133. 3. <ārma, id.

āvisām maghavāni jāḥi caḥho yātāmātinām vāilasīhānakā arnakā mahāvāilasthā arnakā. On account of the fact that ārma is only found as a noun, and that the ka is plainly pejorative, I prefer to regard arnakā (as well as vāilasīhānakā q.v.) as a noun (ārma + imprecatory idea), rather than as an adjective, which some commentators prefer. Translate:
"Smite down, O Maghavan, the crowd of these witches into the fearful pit, the heap of ruins;—even into the great pit, the heap of ruins." It is indeed somewhat awkward to construe these four successive words as nouns in apposition to one another. But the pejorative notion seems so marked in the verse that I am unable to believe that ka is the mere adjective-forming suffix.

*ācvakā*, accursed horse, VS. 23. 18 (repeated TS. 7. 4. 19. 1, 2 &c.).

<ācaya.

In part of the Ācavamedhi- ceremony, The Mahiṣṭ speaks: *śāsasty ācvakāḥ sūbhadrikām kāmpilacāsinīṁ.—"If I do not perform the revolting ceremony required of me) this damned horse will sleep with (impregnate) the accursed whore (sūbhadrikā) who lives in Kāmpila." She does not want to do what she is compelled to do, but knows that if she does not, the benefits she desires from the horse will go to other women. The imprecatory idea is beautifully clear. Not "little" or "contemptible" horse (which would certainly not be said of the sacrificial beast at this solemn occasion), but "this horse, confound it!"—The sūbhadrikā (q. v.) is supposed to personate vaguely any hostile or rival woman.

*ūlāka* (once *urūka*, Ait Br. 2. 7. 10), owl, RV. 10. 165. 4 &c.

Onomatopoetic base + *ka*; the owl was a bird of evil omen from the earliest times. Lat. *ulcus* as well as *ulula* point to a prehistoric pejorative.

*ādakā*, Q Br. 12. 4. 1. 4. Eggeling "a vicious ram," <ēda.

on the ground of the suffix, the associations in the passage, and a similar meaning which the word has in Maṇḍī. Otherwise *ādakā* only occurs as an adj. <ēda, with 2 *ka*, meaning "of the sheep-ēda." I think E. is right in his interpretation: ill-omened animals are dealt with in the passage. But as *āda* does not occur as a noun, and as the vṛddhi-vowel is therefore inexplicable, I should emend to *ēdaka*.

*kanāknaka*, a sort of poison, AV. 10. 4. 22. Etymology unknown. Very possibly contains imprecatory *ka*.

*kāṣikā*, cough (as a disease), AV. 5. 22. 12: 11. 2. 22.

< *kāś* or *kāṣā*.

In 5. 22. 12 kāṣikā follows directly upon *kāś* and *kāṣā* in preceding verses, and the suffix is undoubtedly felt as imprecatory (or pejorative).
kuhaka, rogue, cheat, Māitr. Up. 7. 8. 〈kuha, id.
kuśumbhakā, poison-bag, RV. 1. 191. 15. 16. See § 71.
〈kusumbha.

The word may contain imprecatory as well as contemptuous force.

jyākā, accursed bowstring, RV. 10. 133. 1 ff. (repeated as refrain). 〈jyā.

nābhautiḥ anyākṛśāṁ jyākā ādi dhāṇvasu. “Let the damned bowstrings of the others, the scoundrels (our enemies), be smashed upon their bows!” Strongly imprecatory, tho a contemptuously belittling idea is also present to some extent.

In AV. 1. 2. 2 jyākā may be used for jyā for metrical reasons. Certainly no reason for a dim. use of any sort is discernible.

tīlaka, a certain plant, Č. Br. 13/8. 1. 16; Ācy. &c. 〈tilva, id. only Lexx.; but cf. tīlvīla (RV.), “fertile.”—In the Č. Br. passage it is found in a list of ill-omened trees, and the ka was probably felt as pejorative, whether it was so originally or not.

dāsikā, impurity from the eyes, VS. 25. 9 &c. 〈dāsī, id.
(dāsikā, Māitr. Up. 1. 3.)

Perhaps originally pejorative, though this force is not prominent in any of the passages where it occurs.

baddhaka, captive, AV. 6. 121. 3. 4. 〈baddhā, id.

Used of one bound by sin or by hostile magic. Contains some sort of pejorative notion.

mālaka, a kind of evil demon, AV. 8. 6. 12. Perhaps cf. makara, a sea-monster. The suffix is doubtless imprecatory.

manaskā, accursed mind, AV. 6. 18. 3. 〈mānas.

adā yāt te hṛdi śṛtāṁ manaskāṁ patayīṣmakāṁ tātas te irṣyōṁ muñcāmi nir āśmānam miter iva. In a charm against jealousy.—“That accursed restless mind that is located in thy heart,—from it do I let loose thy jealousy, as vapor from a skin.” A brilliant example of the strongly imprecatory ka. A translation as a simple dim., “little mind” or the like, misses the point entirely; nor is the word contemptuous. It connotes strong disapproval. tātas = mānasas (manaskat te.)

rūpakā, AV. 11. 9. 15, evil phantom. 〈rūpā, shade, shape.

Appears in a group of hostile spirits invoked to torment enemies. Although none of the commentators appear to have
struck this note, it seems to me clear that we have a pejorative (imprecatory) formation to rūpā, which has the meaning “specter” in VS. 2. 30, and “visionary appearance” in Č. Br. 14. 7. 1. 14. The fem. gender is due to the influence of the other names of demons in the ġoka, all of which chance to be fem. The translation “female jackal” has no basis except the fanciful identification with Av. urupi, which is Lt. vulpes and should not be connected with riṣpaka.

viṣbhitaka, a certain tree, Č. Br. 13. 8. 1. 16, among a list of trees declared to have evil names. The same word is also used of the nuts of this tree used as dice, and is in that case a simple dim. (see § 62).

<viṣbhita, id.

viṣadhānaka, cursed poison-receptacle, Mantra Br. 2. 7. 3.

<viṣadhāna.

The same pada in AV. 2. 32. 6 reads viṣadhāna.—See bhinnaka § 72, where the passage is given and translated.—I have hastened long before separating the words bhinnaka and viṣadhānaka, which occur in the same line,—classifying one as contemp. and the other as imprec., but the predominance of ideas in either case seems to demand it. Both notions are present in both words, to a certain extent.

viṣātakī, n. or epithet of a poisonous plant, AV. 7. 113. 2.

ṭṛṭāṣa ṭṛṭiṅka (-asi Ppp.) viṣā viṣātakyāśi pārīvṛktā yāthā- sasya ṭṛḥāṣya vajēva. “Rough one, thou art an accursed rough one; viṣā, thou art viṣātakī; that thou mayest be avoided (be a pārīvṛktā wife), as a barren cow (?vaṣā) of a bull.” Pārīvṛktā is a terminus technicalus for a disliked and neglected wife; TS. 1. 8. 9. 1 &c.

The imprecatory character of the word viṣātakī is fairly clear, but otherwise it is problematic.—viṣā occurs as the name of a plant in Sūc., and is probably here used as such, with intention to pun on viṣā, poison.—viṣātakī is either 1) the name of a poisonous plant, containing or punned upon as if containing the stem viṣā, or 2) an epithet of such a plant, or an epithet applied to the woman against whom the charm is directed, or loosely to both, and containing the base viṣā or viṣā extended by an element of uncertain value plus the imprecatory suffix ki (fem. of ka). Can the meter have anything to do with the extra syllable -ta-? The Ppp. reading gives perfect meter to the whole
line; but it must be admitted that the additional -asi inserted in Ppp. has the appearance of a later attempt to improve the meter, which as a matter of fact far from improves the sense.

A striking parallel to visā: visātakā is the Classical Skt. equation bhanditaki = bhandi, also n. of a plant. No *bhandita occurs, any more than *visāta. As to the nature of the suffixal element or elements, I cannot pretend to have any opinion further than that the -ki is imprecatory.

visākā, a disease, a form of cholera. VS. 19, 10; TBr. 2, 6, 1, 5. < and = visūci.

visālpa (Wh.) or visālyaka (MSS.), a certain disease, AV. < and = visalpā-(lyā).

E.g. AV. 9, 8, 5 (visalpā or -yā occurring in the same hymn.) The suffix is doubtless imprecatory.—Wh., emending to visālpataka, derives from vi-śrīp. In support of this it may be noted that Sūtr, uses visaripaka of “a spreading eruption,” like crysipelas; and that the root vi-śrīp is found in VS. with the meaning “to be spread or diffused over.”

visēka, scorpion, RV. 1, 191, 16 &c. See § 71 s. v. kuṣummbhakā.

The word may be a primary derivative; if its suffix is dim. at all, it is probably rather imprecatory than contemptuous.

vāilasthamaka, a horrible pit, RV. 1, 133, 8. See armakā.

< vāilasthānā.

Some commentators consider this word an adj., for which there seems to me still less ground than for holding armakā, q. v., to be one.

çipāvināka, a kind of vermin, AV. 5, 23, 7. Probably imprecatory; cf. ejāka (§ 81) in same verse. Derivation unknown.

sarabhaka, a kind of grain-devouring insect, Adbh. Br. (in I. St.) 1, 40, 5, 6. Probably imprec. < sarabhā (with the animal suffix -bhā). The word sarabhā is only found as the name of a monkey (Rāmatup. Up.).


See s. v. açrakā; see also § 67. The suffix in this passage is plainly imprecatory (perhaps also contemptuous), tho it may have been originally endearing. The Mahāt uses this epithet as an invective against a (not necessarily definite) hostile or rival woman, whom he fears the horse will favor if she does not perform her disgusting share in the rite.

80. c) Adjectives.

ānaka, defective, lacking. Čānkh. Cr. 7. 27. 27. <ānā, id.
kaṭuka, sharp, bad. RV. 10. 85. 34 = AV. 14. 1. 29.

<kaṭu, id.

kṛtaka, artificial, unreal, false. Gaudap. 3. 22. <kṛtā, made.

khārvikā, mutilated, AV. 11. 9. 16. Imprec. <khare, id.

khārvikāṁ kharāvāśinīṁ, of a female demon.

tryākā, rough (imprec.) AV. 7. 113. 1, 2 — see s. v. viśātakā <tryākā, id.

dārakā, far off. RV. passim; AV. 10. 4. 9. <dārā, id.

Seems to be generally used in imprecatory sense; either 1) applied to dangers and enemies, which are desired to be “at a distance,” implying an imprecation (as RV. 9. 67. 21; 9. 78. 5; AV. 10. 4. 9 of hostile serpents); or 2) if used of other things, usually with a deprecatory idea, as RV. 10. 58. 1 — “Thy spirit which hath departed to a distance (as it should not have done), to Yama son of Vivasvant, that we make to return bither” — yāt te... māno jāgāme dārakām (of the soul of a dying man).

nāgakā, īkā, naked, AV. 8. 6. 21 — applied to demons.

<nagnā.

Also used of wanton women. Imprecatory.

nirmitaka, conjured up, illusory. Gaudap. 4. 70. <nirmita.

“Fixed, arranged,” ppp. of nis—Vmi. — Of the illusions and tricks performed by magicians.

patayaṇīkā, fluttering, unstable (imprec.) AV. 6. 18. 3.

See manaskā § 79. <patayaṇīkā.

pāpākā, bad, evil. Cro. Br. 13. 5. 4. 3 &c, <pāpā (either acc.), praṭiṣkā, AV. 19. 20. 4 — of uncertain mg.; probably imprec.

<pratiṣcī, fem. of pratyaṇīc. Perhaps a noun — “offense”? sanakā, old (imprec.) RV. 1. 33. 4 &c; in this passage at least strongly imprecatory.

<sāna, cf. senex.

dhānor ādihi visunāk te vyāyanāṁ vyājvānāḥ sanakāḥ prātim iyub.

“From the dhanu they fled away pellmell (visunāk — in all directions), the old rascals who give no offering.”¹

¹ Whether the k of visunāk is also felt as having some sort of pejorative force is doubtful. The adverbs in -k (see § 27) do not otherwise show any signs of such value.
81. d) Participles.

ejājñā, (subst.) kind of hostile insect, AV. 5. 23. 7.

<ejant, trembling.

Prob. imprec.; cf. jīpavitaś (§ 79) in same verse.

jyotāyāmānākā. AV. 4. 37. 10 (edd.: MSS. -maka).

<jyotāya-māna pr. p. med.

epithet of demons; imprecatory dim.; "damned little twinklers."

82. e) Pronominal adjectives.

anyakā, other (imprec.).

RV, 10. 133. 1—see jyākā, § 79.

RV. 8. 39. 1 fin.—nabhantām anyakā samē (of enemies): "Let the others, curse them! be crushed, all together!" See also § 74: contemptuous dim.

sarvakā, all (imprec.), AV. 1. 3. 6—9.

<śarva.

eva te mitram māyantaḥ bāhir bāl iṭi sarvakām

"So let thy urine be released, out of thee, splash! the whole horrid mess."—In a charm against strangury and retention of feces.

83. f) Adverb.

āraṅkā, from a distance, Č. Br. 3. 2. 1. 19 &c.

<ārāt.

In the passage named there seems to be at least a deprecatory force discernible; it is said of a woman: "she hath disdained me from a distance (āraṅkā)," i.e. rejected my advances with haughty scorn.

84. g) Verb form.

yāmāki. Čānkh. Br. 27. 1, "I go basely, disgracefully."

<yāmi "I go."

no te evānyatra yāmāki puṇḍalyā ayaṇam me aṣṭiti.

"Nor will I basely go over to another (meter than the anustubb; otherwise one would say) I am like a common prostitute."

Brilliantly explained by Aufrecht—Z. d. d. mgl. Ges. 34 p. 175—6, and since then almost universally accepted.1—Some Hindu grammarians prescribe the use of the suffix with any finite verb form, and especially with the imperative. I cannot here go into the very interesting, but more than problematic, questions raised by Aufrecht as to further parallels for this use of the suffix with verbs.

1 Boehltingk: accepted it at first, but later in the Abb. d. kgl. sācha. Ges. d. Wiss. (23 apr. 1897) attacked it—without sufficient reason, in my opinion.
(IV. Pejoratives:) 3. Obscene Diminutives. 13 words.

85. These belong to a certain style of popular humorous composition which crops out in one or two places in the Veda. They are related by their erotic character to the affectionate diminutives on the one hand, and by their debased vulgarity to the pejoratives on the other. Some of the examples also show a sort of playfully contemptuous force. Many of the passages are so filthy that they are scarcely translatable; and indeed most commentators either omit their translation or delicately veil them under decent Latin disguises. The use of a diminutive suffix with such words and in such passages is common to all languages, and easily comprehensible. Adjectives and pronouns take the same suffix by attraction, being colored by the nouns they are connected with (cf. § 60).

The passages of this nature found in the Veda are few but striking. Following are the words which occur.

86. Word list of Diminutives of Obscenity.

ulpakā, ika, tiny, RVKh. 5. 22. 3. = (except pada d) AV. 29. 136. 3.

yād ultrā svalīkā karkandhukēva pācyate
vāsantikam īna tējanam yābhyanānā vi nāmyate.

An obscene verse; the adjectives ultrā and svalīkā go not with karkandhukē (q.v. § 62), but with the understood subject of the verbs (viz. the female organ).

asakāu, that (obs.), VS. 23. 22. 23 (the verses also repeated with minor variants in other texts, see Vedic Concordance).

VS. 23. 22—yakāsakāu ṣakuntikāhūlag iti vānceati āhanī
gabhē pāsō nigulgalīti dhārakā.

23.—yakō' sakāu ṣakuntakā āhūlag iti vānceati vivakṣata
da te mukham ādvavryo mā nas tvām abhibhāsathāḥ.

Translation of 22—"That little birdie (obs.) which bustles about with the sound āhūlag—thrusts the phallices into the cleft; the female organ (see dhārakā) oozes (or, trembles)."

The verses are both filthy and not entirely clear in syntax. The Ādvavryu addresses the verse just translated to the women, at a certain stage of the Aṣvamedha ceremony.

The women reply with vs. 23, which is equally ribald and still more confused as to sense; it evidently includes a scoff at the Ādvavryu.
These verses are repeated, in whole or in part, and with minor variants. TS. 7, 4, 19, 3 (dhānikā for dhārakā); MS. 3, 13, 1; Q. Br. 13, 2, 9, 6; 13, 5, 2, 4 &c. (see Vedic Concordance).

kārnaka, AV. 20, 133, 3, an obscene slangy expression applied to the position of the two legs spread apart. <kārṇa.
dhānikā—the female pudendum—TS. 7, 4, 19, 3 (see asakāu, end), AV. 20, 136, 10, for dhānikā—RVKh. 5, 22, 8; cf. further dhāna.
<dhāna “receptacle.”
manḍūra-dhānikā (voc.), RV. 10, 155, 4, supposed to be a Bahavrthi epd. meaning “having an impure pudendum.”
dhārakā, the female pudendum (slangy-humorous).
<dhāra “holder.”

VS. 23, 22 (see asakāu); Q. Br. 11, 6, 2, 10.
yakā, which (obs.), VS. 23, 22, 23 &c.—see asakāu <yā.

See also § 75.
ζakuntalā, iku, birdie (obs.). VS. 23, 22, 23—see asakāu.
See also § 71.
<braksēla, slippery, AV. 20, 133, 5.

Of the sexual organs in coition; obscene slangy expression.
sulābhikā (voc.), easily won, RV. 10, 86, 7.
<su-Vlabh cf. lābha.

Addressed by Vṛṣakapi to Indrāni in a very obscene passage. See § 16. Whatever the original force of the suffix in this word, it seems probable that it was felt in this passage as having dim. (obscene) value.

(w)ulpā, very tiny (of the female organ), AV. 20, 136, 3—see alpakā.
hārikākā, bay mare (dim., of obscenity?), AV. 20, 129, 3—4.
<hārikā, f. of hārita.

(= RV.Kh. 5, 15, 1.)—The whole passage is riddlesome; it is very likely of obscene application.

AV. 20, 130, 11.—RWH. read ēnu hārikākā hārīh for the unintelligible MSS. reading. The same verse in RVKh. 3, 15, 8 has an equally senseless MS. reading. Even the emendation is obscure enough as to its real application—which may indeed be said of the entire hymn.
V. The Generic Diminutive. (4 words.)
87. By this I mean the suffix ka applied to words denoting masculinity and femininity to form derivatives with meanings "male" and "female" respectively. The striking German parallels "Männchen" and "Weibchen" suggest that the suffix was probably diminutive in origin. It may have begun to be used with pet domestic animals, or in a similar way; at any rate the fact is, that "little man" came in Skt. as in modern Germ. to mean "male."

88. Prof. von Schroeder, in his article on the Apālā-hymn (RV. 8. 80), points out that vīrakā (vs. 2) must be used in this sense, since it is applied to Indra. Indra was the very emblem of virile power. It was natural enough, therefore, to call him vīrakā, "male" *par excellence*, while it would be absurd to suppose that he was addressed directly (the word is voc.) as "O little man!" or "Thou wretched manikin!"

māryukā, RV. 5. 2. 5, likewise means "male," being obviously contrasted with female animals (see the passage); it could not mean "Sterile," as Grassmann renders it.

89. The feminine counterpart, which neither v. Schroeder nor anyone else seems to have noted, is dhēnukā, "Weibchen," "female" of any animal or of the human species,—not "milch-cow." This becomes clear upon an examination of the passages where the word occurs.

So Pañcav Br. 25. 10. 23 aṣvāṁ ca puruṣāṁ ca dhenuke dattvā—"giving two females, to wit, a mare and a woman."

Kātyā Cr. 24. 6. 8: tasyāṁ aṣvāṁ puruṣāṁ dhenuke dadyah—"in it they offer a female horse-and-human-being" (note aṣva- is not the fem. stem, but common gender. As in German, when "Weibchen" limits a noun, the noun stem keeps its masculine (i. e. common) form: Froschweibchen &c.)

Similarly Aṣv. Cr. 12. 6. 30.

AV. 3. 23. 4—in a charm for fecundity in a woman:
śa prasāṁ dhēnukā bhaun—"Be thou a fruitful female!" (not "milch-cow").

The word mahilukā, AV. 10. 10. 6, used as an epithet of the cow, probably means nothing more than "female," "Weibchen," being derived from mahilā "woman."

The vowel -u- in mahilukā, instead of -ikā which we should expect, is apparently due to the analogy of dhēnukā.—The lengthening of the i in the second syllable is an instance of that widespread tendency to iambic cadence which is especially
marked in the language of the Veda. There are a number
of parallels which might have been pointed out within this
very treatise; but they are mostly self-evident.

VI. Diminutive of Femininity.

90. From the diminutive and endearing uses of the suffix
was developed a tendency of the derivative kā (iıkā) to be used
merely as a mark of the feminine gender, when the primary
word either had common gender, or its feminine character was
not marked by its ending; or, when the primary word was
grammatically masc. or neut. and the writer desired to treat
it as a fem. Sometimes there is to our minds no very clear
reason for putting the word in the fem. gender; but that does
not alter the facts, nor greatly weaken our position. It is
sufficient that we frequently find a fem. noun in kā (iıkā) from
a masc., neut. or common noun without ka, and without any
other noticeable difference between the two.—The association
of the diminutive idea with femininity is not rare in all
languages and periods, and is easily comprehensible.—There
are few examples in the Veda,—as is true also of the endear-
ing dim., to which this is closely related. In the later language
it is commoner, though never very common.

91. The examples here given are not exhaustive, even for
the Veda, but they are some of those which show most reason
for the use of the fem. diminutive.—Whether dhēnukā and
mahīlukā (see § 89) have any right to be counted here is very
questionable. Certainly this force of the suffix ka is quite
distinct from the Generic Dim., to which those two words
belong. (8 words.)

pradātrikā, giver (fem.), MS. 2. 5. 7. <pradātrī, giver.
candrika, moon (as fem.), Rāma. Up. 24. <candra (masc.).
kāṣṭhikā, dew-claw, spur? AV. 10. 9. 23 &c. <kāṣṭha, entails.
pravallikā, an enigma,—challenge; ĀitBr. 6. 33 &c. <pravallha.
nyastikā, n. or epithet of a plant, AV. 6. 139. 1. <nyastā.

The plants (rushes) were “thrown down” (nyastā <ni-V as)
as a seat for the bride in the marriage ceremony. Cf. AV.
14. 2. 22 where ni-V as is used in connection with the same
performance; and see my paper on the subject.—I. F. 24. 291.
kutārikā (in pāda-k, a position of the feet, ČGr. 4. 8),
<kutāra; “ax,” or “little ax.” No particular sign of dim. use.
bhumipāca, a plant, = -ṣa (masc.).—Sāmav. B. 2. 6. 10.

(Continued in the next number.)
Notes on Village Government in Japan After 1600, II.—
By K. Asakawa, Ph. D., Yale University, New Haven, Conn.

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Abbreviations.

Jah 103. Ishida Mitsumari.
KSK 103. KAGA SHO-UN KÔ.
Rch 106. Reki-shi chi-ri.
Sho 104. SHÔ-UN KÔ SHÔ-DEN.

Notes.

(1) Dependence of power on peace. It is generally held that, shortly before his death, Tokugawa Ieyasu solemnly enjoined the great barons who had lately become his vassals, that the best among them should supersede his successor, should the latter fail in maintaining justice and peace in his government of Japan. For, said he, [quoting an old saying], the world was the world’s world, and not one man’s. To, IX, 886.

It matters little if this story is historically untrue, so long as the whole life of Ieyasu as a ruler and the whole structure of his system of administration substantiate, as they must be said to do, the sentiment implied in the alleged remark.

The same sentiment also animated many an able baron in the government of his sô, Uesugi Harunori (1751–1829), lord of Yonezawa, on yielding his position to his son Haruhiko, in 1788, instructed the latter
in the following terms: "The State [i. e., fief] has been transmitted by our forefathers, and should not be exploited for selfish purposes. The people belong to the State, and should not be exploited for selfish purposes. The lord exists for the State and the people, and not the State and the people for the lord." YZS, 353. Matsumura Tsunomasa (1644—1724), lord of Kamazawa, continually reminded his vassals that his fief had been entrusted to his house by the suzerain (the Tokugawa) and hence was not its private property, and that therefore the suzerain’s laws should be observed, and the fief should be governed with great care and with justice. To, XIV, 300. Both these lords were regarded models of good administrators.

It would perhaps be truer to observe that Ieyasu and the two lords above mentioned, as well as other successful suzerains and barons, were all deeply influenced by the well-known political philosophy of China that Heaven appointed the prince for the good of the people, than to say that Ieyasu was the sole example that the others followed. (Of, the author’s Early institutional life of Japan, 1903, pp. 153—184.) To the latter, however, the Chinese ideal must have seemed the more commanding for the former’s practical demonstration of its value. Reinforced by these worthy examples, it was seldom forgotten during the two and a half centuries of the Tokugawa régime that the lord’s power should depend upon peace of his people. As for the deeper significance in this régime of the persistent idea of peace, we shall seek to find it in some of the following notes.

(2) Political wisdom of Japan and China. It is beyond the scope of this paper to note with what zeal Ieyasu collected classical and historical works of China and Japan, encouraged their publication and study, and himself derived from some of them a vast deal of practical wisdom. (E. g., DSE, XII, xiii, 577, 935—936.) After him, encouragement of learning became a traditional policy of his house, as is amply illustrated in Kondo Morishige’s Yi-han ko-shi, 1817. (Kou-do Sei-sai zen-sha, ed. Tokyo, 1906, II, pp. 99—348.) The example of the suzerain was eagerly followed by the barons throughout the country. See the Ni-hou kyō-iku shi-ryō, edited by the Department of Education, Tokyo, 2d ed., 1903—1904, 9 vols. and suppl. Satō Sei-chisai, Ni-hou kyō-iku shi, Tokyo, 1905, pp. 257—480; articles by Nakamura Katsuaro in Shō, XVIII, Nos. 6, 8, 11; XIX, Nos. 3, 5, 6; (1907—1908).

Ambitious barons vied with one another in the encouragement and stimulus they gave to the study of the political-ethical teachings of China among their vassals. Schools were established, scholars famous throughout Japan for their learning were appointed as teachers, and the barons often personally supervised the work or even took part in the intellectual contest. It would be a mistake to suppose that these were merely literary pastimes with little relation to actual government. What was now studied was hardly the purely literary part of Chinese learning, such as was once in vogue among court nobles of Japan before the tenth century, but rather that remarkable combination of philosophical, ethical, social, and economical wisdom in the most condensed form which characterizes the purer teachings of Confucianism. Some of the simpler lessons of
the tenet were so intensely practical and so salutary in their effects on rural administration, that their learning sometimes exerted the most direct and profound influence on the welfare of the people. It was precisely for this reason that scholars of the right kind became powerful forces in the feudal society, and their teaching was sought by great barons with humble eagerness and had a large formative influence upon their careers as rulers. It is safe to assert that there were some scholar councillors of this description behind every lord noted for wise government during this period. The cases of Kumanawa Bau-san, Arai Haku-seki, Muro Kyū-sā, Hosoi Toku-min, and others, will readily be remembered.

It is highly significant that political and social ideas and practices of China, especially under the Ch'ou dynasty, as were embodied in classical literature, exercised such a profound influence upon the feudal rulers of Japan after 1600. Their conception of good administration and of the rights and duties of the prince and subjects, and of the moral and economic principles of society, was, in its important features, thoroughly Chinese. The older and purer Confucian ideas, introduced into Japan from ten centuries before, now seemed not only to have become the subject of an absorbing study, but also to have given a model of social order and government. It is only after these ideas are mastered, and not before, that one may understand the sources and the force of most of the policies which guided such good suzerains as Ieyasu (1543–1616), Iemitsu (1604–1651), and Yoshimune (1684–1731), and such exemplary barons as Tsugaru Nobumasa (1640–1710), Hosokawa Shigekata (1718–1785), Mito Harumori (1731–1805), Uesugi Harumori (1751–1822), and Matsudaira Sadanobu (1738–1829). Cf., e.g., To, XIV, 191–387; Tak, 23 ff., 43 ff., 64; G, I, 10–11, 13–15, 30; II, 5; III, 1; Z, I, 1000; Y, 13–14, 261, 867–868; Skr; articles by Prof. Mikami Sushi in Skr, XVII, 1885–1125 (1906); XIX, 1–30 (1908). For this condition, neither the example set by the suzerain nor the intellectual zeal and receptivity of the baron would afford a satisfactory explanation. The reason was probably much deeper. It may be possible to demonstrate that many conditions in ancient China and modern Japan being singularly similar to each other, ideas and institutions born in the former appealed to the latter with peculiar force. It is an astounding fact in history that an old society should, after the lapse of thousands of years, find in another land or a miniature of its federal government sustained by agriculture and ruled by military forces, and teach it lessons of its own experience by means of the most concise and lucid of human speech.

(3) Adaptation. A careful examination of the Tokugawa régime is apt to reveal very little originality in its details. They were based either on conditions then in existence, on models found in Chinese literature or in the earlier history of Japan, or on modifications or combinations of these conditions and examples. The merit of the general system must be sought rather in its mastery of details, solidarity, and delicate balance, than in its originality.

(4) Rulers and ruled. Mencius quotes an old saying: "Some exercise the mind, others exercise physical strength, [some scholars say that this is the extent of the old saying and the following is Mencius's comment,
but the general opinion is otherwise]. Those who exercise the mind rule over 
others, and those who exercise physical strength are ruled over by others. 
Those who are ruled support others, and those who rule are supported 
by others." He then adds: "This is the common principle of the 
world." (故曰：或勞心或勞力，勞心者治人，勞力者治於人。治於人者食人，治人者食於人，天下之通義也。) 
孟子，盡心上，第 1、第 4。
(5) Warriors. This English term is applied in this essay to the 
bu-ke (武) class in the broadest sense of the word, that is, 
including the lords and vassals of all degrees, from the emperor down to the 
lowest foot-soldier.

Saimei or is expansive, and though it may be conceived as identical 
with bu-shi, it is even more susceptible than the latter of a narrower 
construction. The term bu-ke (武家) is used rather in contrast to kuge (公家), civil nobility, and may perhaps be rendered as military 
nobility.

(6) Distinction between warriors and peasants. The wearing of 
two swords, one longer than the other, and the bearing of a family name in 
addition to his personal name, were privileges denied to the commoner, 
but granted to the warrior as badges of his noble birth. There were, 
however, other and more significant marks of distinction. The peasant 
owed taxes both regular and irregular in nature; the warrior as such, 
namely, when circumstances had not reduced him to the position of a 
half-peasant, paid, if any, fewer and lower taxes, and, when his position 
was high, owed nothing but feudal aids and charges which never entirely 
lost the appearance of being voluntary contributions. The warrior’s 
proper service was in government and warfare, and was considered noble, 
while that of the peasant was menial; and was rendered in terms of 
rice, money, and labor. That the laws governing the conduct of the two 
classes were largely apart from one another is well-known, the difference 
not being the least conspicuous in the forms of punishment inflicted on 
culprits of the classes. The peasant criminal was, for example, seldom 
allowed to disembowel himself for a capital offence, as was the warrior, 
but his death penalty consisted in decapitation with or without exposure 
of the head, in burning, or in crucifixion, according to the gravity of 
his offence. Cf. Th, IX, 16; KsJ, 947; KRE, II, No. 25. The education of 
the warrior emphasized the importance of martial arts, of honor, courage 
and endurance, and of learning in Confucian literature; that of the 
peasant inculcated passive obedience. He was not encouraged to study 
Chinese classics, as they contained political discussions and threw light 
on history. Even his practice in fencing was often disreputable in 
later years of the Tokugawa period. The very views of life, and even 
the aesthetic taste, were often radically different in the two classes.

The division was sharp, but the barrier was not insurmountable. 
Many a peasant, as well as merchant, was, either for his distinguished 
birth or service or for his exceptional virtues, honored with the special 
privilege to carry one or two swords for life, or to assume a family 
name for all time. To, XIII, 661; Zo, I, 620; KRE, 265–6; Jh, VII, 
59–67. This distinction, however, hardly extended beyond the mere
external sign, which symbolized a quasi-warrior, but not a real warrior. Was it impossible to become the latter? Although it was often decreed that the warrior should not adopt a peasant’s son as his heir (e.g. DSR, XII, ix. 223), cases of such adoption were not absent. The social mingling of the two classes took place in many a fief, notably in Satsuma, Tosa, and Yonezawa, where warriors continued or were encouraged to have their landed estates, despite the fact that the mutual contact was sometimes lamented as detrimental to both classes. E.g., YZS, 533, 571–572, 583–584, 748–759, 821. Peasants, however, never entered into the warrior class to the extent that the merchants did at Edo.

(7) Population. The official figures of the population of Japan, exclusive of the warrior classes, between 1796 and 1847, range between 35 and 37 millions. SCR, V, 7–8; Nfz, III, 15. Of these numbers, a preponderant majority consisted of peasants, as may be inferred from the following instances. In the fief of Mito, of the population of 229,289, in 1797, 221,900 were peasants, and 7,389 merchants. Ke, I, 1, 3–4. In Yonezawa, in 1776: 24,061 warriors, 80,488 peasants, 16,069 merchants, and 1,354 priests and others; total, 122,102. YZS, 228. Here the proportion of the warrior and merchant classes is unusually large. About 1830, in a fief in Kyūshū: 88,036 peasants, 18,921 merchants, 738 priests and others; total 107,695, exclusive of warriors. Km, VIII, 29. The warriors in the whole of Japan could not at any time have much exceeded 350,000, or about 2,000,000 with their families and servants. (Cf. SCR, V, 17.) Also see Notes 135–137, below.

(8) Suzerain. This term is used throughout this study to indicate the Shō-gun, which is an abbreviation of Sei-i tai shō-gun (征夷大将軍): Great general for subduing alien races on the frontiers). English writers about the time of the fall of the Japanese feudal government were wont to employ the word Taiccon (Tai-kan, 大君, great lord) for the same personnage, Tai-kan being one of the several honorific titles by which the Shō-gun was popularly designated. A fuller discussion of this and other high offices of the Tokugawa government must be reserved for a later study of the feudal classes.

(9) Intendants of the Suzerain. Those were generally called Dai-kan (代官, deputy-officials), only a few of the more important incumbents being especially termed Gus-dai (郡代, district-deputies). In early years of Japanese feudalism, the dai-kan was not a regularly constituted official, but was exactly what his provisional title indicated, namely, a deputy or agent of any official whatsoever, not excepting the suzerain’s Regents (Shikken, 總理). The Suzerain himself was sometimes popularly called Kwan-tō no Dai-kan. Deputy in Kwan-tō (i.e., provinces about Edo), he being considered the deputy-general of the Emperor. In the sixteenth century, agents of the provincial governor-general (shu-go) and of the local comptroller (ji-tō) were often called, respectively, shu-go-dai (守護代) and ji-tō-dai (地頭代). The former of these two classes of agents were, in distinction for their greater importance than the latter, sometimes designated Great dai-kan (大代官), Kōri dai-kan (郡代官), or Kōri bu-kyō (郡奉行). Kōri (gun) here meaning, not the definite territorial unit of that name, but
district in a loose sense. The term dai-baek found the general name for all local agents, but also assumed a specific meaning as ji-tsai. The Tokugawa rulers, as was customary with them, accepted the current terms dai-baek and gun-dai (abbreviated from kori dai-baek), but clearly defined their office, so far as the sphere of the Suzerain’s direct rule was concerned, as his Intendants appointed from among his hereditary vassals to take charge of financial and judicial affairs of most of his Domain-lands. Bu-ke myo-moku sho, encyclopedia of feudalism, compiled by Hanawa Hoki-ichi, 璧保己（1746—1821), and others, (in 441 chapters), ed. Tokyo, 1903–1905, chap. liii–lv, 613—
680; Dok, Introduction, 75, 82, 83–84; Kud, 840,1612; Ida, 108, 106—107, etc.

The gun-dai were merely the most important dai-baek. Their number was originally four (in Kwantō, Hida, Mino, and Kyushu), but in 1792 the first was split into five dai-baek, and later reorganized into three gun-dai. The official duties of the gun-dai were identical with those of the dai-baek. Th, I, 6—9; Reh, XIII, 419.

These duties were most multifarious. The dai-baek received from the villages and transmitted to the Suzerain’s government report on the census and the religion of the inhabitants, saw to the detail of assessing, collecting, and forwarding taxes, and supervised public works, the care of the forests, the tilling of new land, and the restoration of damaged land. His judicial powers were limited; he could on his own responsibility inflict only the penalty of beating, but should report on all graver offenses to the central feudal government of Edo. It was morally binding on him to oversee the behavior of the peasants, and admonish them against extravagance and misdemeanor. He had extraordinary duties to perform on special occasions which concerned the person of the Suzerain, and in case of a riot or warfare. Th, II, 27–31; IX, 17; Saur, 52–58.

His military powers as well as duties were, however, practically nil, for he was primarily a local administrator in control of peasants’ affairs, and not a baron. He, as an Intendant, owed no knights’ service, nor was the district to which he was appointed his fief. Not even hereditary was his post; in a given district, only five out of the more than forty Intendants remaining in the same localities for generations. All Intendants received salaries which were paid out of the central treasury of Edo, and which were graded according to the relative importance of their districts. They were, with half a dozen exceptions, responsible to the financial department of the Suzerain’s government, for, indeed, their functions, as well as their previous training, were first and foremost fiscal; they collected taxes from the people and delivered them to Edo; and observed other details of local government largely in order to secure the successful transaction of this essential business. Th, I, 6, 9—11, 20, II, 3; To, XIII, 890; S2, XV.

This is a point of the greatest importance in the whole range of the Tokugawa system. It may be seen that Japan’s régime after 1600, when her feudal institutions were brought to their highest perfection, was really in part un-feudal; that is to say, in so far as the Suzerain’s own domains were concerned, their administration was put in the hands of
his-paid servants removable at will. It will be seen later that in many
a baron's fief, also, similar conditions prevailed.

To return to the Intendants. In assuming the capacity already de-
scribed, he took an oath that he would faithfully fulfill his official duties,
and at the annual meeting in Edo of all his colleagues he listened to
the reading of special instructions to the dai-keusa. To XIII, 315—319;
846—847, 859, 1052, 1089; XV, 780; JG, III, No. 1; I, No. 1; Jh, I, 9—12; TKR, I, iv, 198—248. The following are instructions dated 1689:

"The people are the foundation of the country; the Intendant shall
always study their hardships, and see that they do not suffer from
hunger and cold. When the country is prosperous, the people are apt
to be extravagant, and when extravagant, they are apt to neglect their
calling; see, therefore, that they are not extravagant in food, clothing,
and dwelling. The people are suspicious of officials distant from them,
and then the officials suspect the people; see that neither of them enter-
tain suspicion of the other. The Intendant should always be frugal,
know details of agriculture, and carefully observe that the taxes are
justly levied. It is essential that the Intendant should not leave his
affairs to his subordinates, but undertake all things in person, and then
all his subordinates will be dutiful. The Intendant and his subordinates
should under no circumstances employ people of their district for private
ends, or borrow from them or lend them money or rice. Always note
the condition of rivers, roads and bridges, and repair them while the
damage is still small; if there is a quarrel among the people, investi-
gate it before it becomes serious, and, if it may be adjusted privately
among the disputants, see that it is settled without partiality or trouble
to any party. Always observe that all affairs are diligently settled, and
especially that there are no arrears in the public accounts, so as to be
ready for the possible transfer of the Intendant to another district or
giving over of his district to a baron." Tk, II, 26—27.

It was customary with the Intendant of a distant post to stay in Edo
and only periodically visit his district. In that case, one or more of
his subordinates presided at the local office. These and other subordi-
nate officials (te-teunke 手附, te-dai 手代, sho-yaku 書役, etc.), many of
them hereditary, were remarkably few in number, and served long years
of hard work. They performed the most frugal and monotonous life,
and in fact, whatever their illicit incomes, their regular salaries were
mere pittance, the lowest clerks receiving nothing. Tk, I, 14—41; II, 3—4,
11—13, 25. The Intendant received a special small allowance, besides his
regular salary, for the maintenance of his assistants and local offices. To,
XIII, 846—847, 1089; XIV, 751; XV, 789; Tk, II, 13—25; Jh, II, i, 25—32;
Jo, VI, 4—8; Jh, V, 6—11; TKR, I, iv, 249—271. From the financial
stringency of the Suzein's government, it was urgent that his Domains
should yield the maximum revenue with the minimum expenditures.

The following is a table of all the Intendants in 1887, with the rela-
tive importance of their districts in 1888 as shown in their assessed pro-
ductivity, in terms of rice. The gun-dai have G, and, hereditary dai-keusa,
& after their family names. 1 koku is nearly equal to 6 bushels. From

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<table>
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<tr>
<th>Family names</th>
<th>Main office at</th>
<th>Number of paid assistant</th>
<th>Assessed productivity of the district in 1888</th>
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894

3,281,578
(10) The Suyerain’s domain-lands and the barons’ fiefs. During the
Tokugawa period, the importance of any territory was measured, not by
its total extent, but sometimes by its area under cultivation, and much
more often by the officially determined productive capacity of this area stated
in terms of koku (4,386 bushels) of rice. The total cultivated area of
Japan, which had gradually increased, was officially stated at the end of
the feudal rule, as 3,280,000 chô, or nearly 8,000,000 acres, although
the actual area seems to have been nearer 12 than 8 million acres.
Cf., 100–101. The total productive capacity of Japan, as officially
accepted, increased from 18.5 million koku about 1800 to 25.8 about 1700,
to 30.4 about 1830, and to 32.0 about 1868. Koku-daka 45, in Dec; SCR,
V, 23, 38-49; Deb. Introd., 89, 94. When the total was about 26.4 million
koku, it was apportioned, or, to be a little more precise, the lands
which were estimated to produce the various amounts or their equivalents
were distributed, approximately as follows—

1. The Suyerain’s Domain-lands under the Intendants 3.28 million koku
2. The Suyerain’s Domain-lands in the larger cities and
other special places, which were under his special
agents or temporarily entrusted to neighboring
Barons

3. The three Tokugawa branches of Tayasu, Hijotsu-
bashi, and Shimizu

4. The Suyerain’s smaller immediate vassals, all below
10,000 koku

5. The Barons’ fiefs

6. The Imperial House

7. The civil nobles

8. Religious houses and persons

Of these, the Suyerain’s Domain-lands (Nos. 1 and 2 in the table) were
known as kô-ryô (公領 or 公科, public domains or possessions,—the
word ‘public’ applying, in the range of the period, to all things pertaining
to the government of the Suyerain, as distinguished from the barons’); and
the barons’ fiefs (No. 5) were called shi-ryô (私領 or 私科, private domains).
The former were sometimes designated gu-ryô (公領, in the impersonal
sense), and were popularly styled even as ten-ryô (天領, literally, heavenly
domains), so exalted was the Suyerain in the eyes of the common people.

The individual baron’s Fief was popularly designated, if it covered an
entire province (or kuni, 國), by the name of the province, but more
frequently, even in that case, and of course when the fief was a part of
a province or extended over several provinces, by the name of the
central castle-town. Occasionally, the family name of the baron was
used in denoting the fief. In all these instances, the name was followed
by the word han (藩, original meaning: frontier defense, march); as
Nihommatsu han. The same word was used also as an adjective; as, e.g.,
han-shi (藩士, warriors of the fief) and han-shi (藩士, lord of the
fief). To all intents and purposes, han may be translated as ‘fief’. A
previous usage has grown up among native and foreign writers in English
to render the word with the most inappropriate and misleading term,
clan, a practice which every lover of truth should strongly combat. The han was a territorial division, which retained its name independently of any change in its population, so long as it existed as an undivided fief. If such word as za-chō (家中, in the family) was used to designate the immediate vassals of the baron of the han, its meaning was figurative, denoting that the vassals, who formed a minority of the population of the han, and who were never all of one clan, had sworn fealty to the successive lords of the baron’s house, which itself was seldom permanent. There is not one leading feature of the han justifying the use of the word clan.

(11) Barons. These include all the immediate vassals of the Tokugawa house owing military service and receiving in fief pieces of land valued above 10,000 koku for each man. There were 194 Barons in 1614, 219 in 1700, and 296 in 1865. At the last-mentioned date, the largest fief (Kumanawa) was officially registered as productive of 1,022,700 koku, and the average of the fiefs, about 70,000 koku. The class titles of the Barons in official documents were sho-kō (諸侯 princes) and mun-gōka じ-ぞ (萬石以上, those above ten thousand koku). The familiar title dai-myō (大名, originally, holder of a great myō-don, land bearing the name—myō—of the owner, original cultivator, or some other person or thing) was only half official as a general name for the Barons. Sometimes, however, a distinction was made in public documents between dai-myō and sho-myō barons (holders of greater and lesser fiefs), but the line of demarcation is obscure and was probably never officially defined. Kd., 1637 ff., 2244.

(12) Baron’s Bailiffs and land-holding vassals. Despite the great diversity of detail in the village administration of the various Fiefs, the general outlines were drawn after the model of the Suzein’s Domain lands. In the ordinary Fief, there were districts given in fief to vassals besides those reserved for the Baron. These were often called, respectively, kyū-nin mac (給人前) and o-kura-i (御蔵人). (Ih., 108; SDS, 1, 16.)

The management of the vassals’ fiefs rested sometimes with the vassals themselves, (as was the case with the kō-kō-nin mac, 奉公人前, at Sendai; Ibid., 18), but oftener with village-heads with or without special agents placed above them. The ancient term ji-tō (地頭) was applied very loosely to indicate either the holding vassals or their agents. The vassals, so far as their rural affairs were concerned, or, at least, their agents and village-heads, were usually under the supervision of the Baron’s Bailiffs, who in these instances had general control over all local affairs. SDS, 1, 9, 10; II, 86, 104; DSR. XII. xi, 361, 363; vi, 386; Ge, 1, 3; BK, 1, 4—5.

These Bailiffs’ business, however, concerned primarily the districts reserved for the Baron himself. They were nearly always of the warrior class, but, like the Suzein’s Intendants, did not hold their respective districts in fief, for they were paid servants usually removable at will. YZS, 107—108; NTK, 404. In many Fiefs, there were some Bailiffs who held their spheres, or at least regarded them, as in fief (cf., e.g., YZS, 565), but the tendency was toward making these cases exceptional.

The Baron’s Bailiffs were generally of two grades, the names of which varied considerably in the different Fiefs. Perhaps the commonest grades
Notes on Village Government in Japan.

were оборu. 郡奉行, (other names being yun-dai, 郡代, yun-tō, 郡頭, gun-shi, 郡司) and dai-kean, 代官, (also yun-dai, оборu маку
dai, 郡目代), the first higher than the second. Some of the larger
fields, however, had three or more grades, while the smaller had only one.
Ko, II, 3; Ze, I, 1039; G., II, 254–255; Mbr, throughout.

Instructions to the Bailiffs were necessarily of the same nature as
those given to the Suzerain's Intendants.

In the same manner that the Suzerain's government occasionally
deployed special inspectors to observe conditions of rural administration
(To, X, 460–462; 461–462; XI, 495, 509, 599–599, 826; XII, 47–48, 64;
XIII, 60, 67–68, 174, 237–238, 489, 444, 481–483; XIV, 410–414; XV,
11–14; ZO, I, 483; III, 1874; IV, 103), so also many a Baron sent about
officials with similar missions (e.g. YZS, 98, 104–107, 385–386, 325–326).
The practical value of these inspectors, as likewise of the general in-
structions to the Bailiffs, was often problematic. Mi, I, vi. No. 41.
See Note 111, below.

(15) Village. The villages, or мута (村), were the smallest territoria
units, and as such had a long and important evolution in Japanese
history. Under the Tokugawa, they differed greatly in size and impor-
tance. The average втура was a historic entity composed almost exclu-
sively of peasant families. The number and fiscal values of these
families seldom underwent abrupt changes, and, as we shall see later,
the productive capacity of each village was officially estimated and
registered at an early date of this period, and was not revised except
under an urgent necessity. Its agricultural character, its historic origin,
and its comparative unity as a fiscal corporation, are the three dominant
characteristics of the normal втура of the Tokugawa epoch.
The total number of мута in Japan was, in 1884, 63,493. Arai Aki-
nich, Nichom kokugun en-kaku go, 1899 (SCE, III, 9).

It is interesting to note that, all through the Tokugawa period, the
extent of many мута in sparsely inhabited parts or on provincial borders
remained more or less indefinite. Dch, introd., 93. These villages were
in the historic process of finding themselves, which others had already
gone through. They also emphasize the truth that a втура was often an
aggregate of peasant families, or, more exactly, of peasant holdings and
their fiscal values, rather than a mere area of territory. When the popula-
tion grew dense in proportion to the land of the village, the latter's
limits would be determined. There also appears to have existed some
resisting power of the втура against arbitrary division or combination,
so strong was its historic character. Where втура were altered, their
old names persisted as the names of hamlets or homesteads (асна-шам 
мут, sune-mа 下名), for historic names were too dear to be forgotten.
(Cf. Tak, 206.) When extensive areas were tilled and inhabited, they
formed either distinct and seldom totally assimilated parts of the mother
villages, or independant villages. Dch, Intro. 92.

Many villages preferred to мут other unit-titles which they had
borne, or titles expressive of their geographical positions or genetic rela-
tions. Би (里), го (郷), shi (庄), and makiri (間切-in Ryu-Kyu), are
illustrations of the former, and tso or minato (津, 漁-harbor), хана
It would be extremely interesting to study, from old maps and from all the actual examples, the various types of settlement and of the arrangement of houses in the historic villages of Japan, to note the geographical distribution of these types, and to infer from these data the probable historic and economic reasons of the variation. It is, of course, to be expected that, even aside from the changes that have taken place since the end of the feudal régime, some villages are too old and too much altered from their original forms to be reduced to types or to lead one to safe conclusions as to their evolution. However, it is easy to see that there must be a great number of other villages in which may be traced with more or less clearness their original types or their subsequent alterations. Scarcely any extended study has yet been made in this fruitful field of research. One geographer has barely enumerated eight different types in existence, as follows:—1. a single row of houses on one or either side of a road or a river or on the sea-shore; 2. parallel rows of houses in similar positions; sometimes, on ascending or descending terraces; 3. two such single or parallel rows intersecting each other at an angle; 4. a more or less circular or circumscribed distribution of houses around a fortress, a temple, a great estate, or a small harbor; 5. a linear distribution with its one end closed against further extension, for instance, by an important temple, which is usually situated before a thickly wooded spot; 6. villages in which single houses are scattered with no system of arrangement; 7. those in which houses are found in small groups on advantageous spots; and 8. those in which houses are arranged and roads built in accordance with some preconceived regular geometrical plans. (Makiguchi Tsunenobu, Shinsei chi-yi gaku, 3rd ed., 1903, pp. 904—907.)

Also see Notes 15 and 22, below. The striking case of the Iga-yama villages of ippo deserves a special mention.

(14) The Iga-yama villages in the province of Iyo (伊賀祖谷山). About 180 square miles in extent, and situated on the sinuous course of the river Matuno, the Iga-yama villages were completely protected from the outside world by high mountains and deep ravines. The latter were crossed only by means of ropes made of twisted vines, for it was impossible to span the wide gorges with bridges. In the fourteenth century, this place was found to be occupied by a few hardy warriors with their retainers, who resisted encroachments, and stood against a powerful baron when all the rest of Shikoku had succumbed to him. In 1595, Iyo was given in fief to Hachisuka, but it was not till 1590 that he extended his authority to this part of the province. The chiefs either fled or were killed rather than surrender, and the region was well-nigh deserted. Afterwards old inhabitants were slowly induced to return, and surviving chiefs were permitted to re-instate themselves in their former positions. In 1612, the productive capacity of the land under cultivation was estimated as about 1200 boku. The chiefs, at that time
less than twenty, were granted hereditary rights as village-heads, as well as whatever land they might own beyond the cultivated area then registered.

Throughout the Tokugawa period, these privileges of the chiefs remained undisturbed. They owed a nominal military service in case of an emergency, which seldom occurred. The population gradually increased, as also the area tilled after 1612, which all belonged to the hereditary chiefs. At the fall of the feudal government in 1868, Iga-gyōma was found to contain nearly ten thousand souls, living in 36 villages styled as miko, (the reader will remember the word miko-ten mentioned in Note 11, above), under the control of 21 chief's (miko-shu, 郷长, heads of the miko) belonging to seven old warrior-families. Peasants who cultivated the land that was examined and registered in 1612 were free, but those who lived on other land, which was in the chiefs' possession, were the latter's tenants, and stood in a servile tenure. DSJ, XII, v, 321; x, 494—496; Mbr, 198, 216—217; Dch, 1290—1331.

These facts about Iga-gyōma are extraordinary and instructive, at least in the following respects: 1. they retained the old name miko for the village,—a point of interest at this stage of our discussion,—and miko-shu for the village-head; 2. the chiefs were warriors, and owed a knight's service; 3. they held their post by heredity; and 4. they held their tenants as serfs. For these reasons, we shall often recur to these isolated villages in the course of this essay.

It would be interesting to visit this region to-day and study its present conditions. A citizen of Iga who has recently traveled across Iga-gyōma observes that it was still largely inaccessible, that the families of the chiefs were still greatly respected by the peasants, and that many of the latter were still notably intractable and defiant.

(15) Classes of peasants. The ordinary peasants, technically called hyaka-shu (百姓), constituted the bulk of the peasant population. Their status may be explained in connection with their landed holdings. The latter had each an officially fixed and registered productive value, and by this value the importance of the holding peasant was measured. (E. g., Y28, 506.) From the fiscal point of view, the holding was as important as the holder. A piece of land might be divided or transferred within certain limits, but its name (asa, 田) would probably remain the same (cf. Mbr, 332), and the new holder or holders would be responsible for the same amount of dues as had always been levied on the piece. Individual holdings were thus regarded as a sort of permanent entities, and in fact often proved more enduring than the peasant families who held them, for the latter might and did change.

Where these families remained unchanged, their heirs frequently transmitted through generations the same personal names, the peasant being forbidden to bear a family name; if the same families held the same pieces of land during successive generations, the names of the families and of the holdings became intimately associated with one another. Thus, a piece of land called Mikubo might for a century be held by Zenkichi succeeding from father to son. The latter would very reluctantly part with the former.

Such conditions were, however, far from being universal. Division
and transfer of land frequently took place, as we shall see later, both in accordance with and in violation of law. Peasant families came and went, and rose and fell, and the dull land also changed names or even aspects through natural calamities or human fortune. (cf. GGI, III, 1, 15, 16.) Often families altered more rapidly than land.

In a village where there were families much older than others, the former, especially if they were proportionately rich, were often called sen byaku-shō (先百姓, advance peasants), and enjoyed a degree of prestige. If they were original settlers of the village, they would be distinguished as kusa-seki (草分, grass-dividers). In some places, older families were ben byaku-shō (本百姓, main peasants), and later ones seki byaku-shō (隠百姓, side peasants). DSR, XII, v, 335–336; GGI, II, 17; III, 20. Often the land-holding peasants in a village were collectively called ai byaku-shō (居百姓, all peasants).

Few villages were regularly laid off like the townships in the newer American States. Japanese peasants were by nature gregarious and mutually dependent. Groups of houses would first spring up freely over widely separated spots, and as each spot became filled, virgin soil between the first spots would be settled upon and tilled, until an increased population should have turned with plough and spade all the available surface of the village. Peasants holding many pieces of land would find them scattered over too wide an extent for him alone to manage them. Also, as the village was well filled with small peasants, probably some of them would be impoverished by their mismanagement and by excessive taxes, mortgage and lose their patches of land, or perhaps abscond. Thereby the greater peasants would have their holdings added to, sometimes to their delight, but oftener against their will, when the taxes were heavy and the margin of profit small. From these and many other circumstances, all large peasants employed hired men as farm hands. This practice was common from the beginning of the Tokugawa period (cf., e.g., DSR, XII, iv, 190). About 1729, a well-informed writer affirmed that few landholders of 20 to 100 košu of recorded productivity could cultivate with their own hands more than a tenth of their holdings. (Mi, II, No. 15."

The hired men were not all of a uniform status. Some were younger sons of other peasants, but these became fewer, for economic reasons that we shall examine later. Some others were hereditary servants (fu-dai, 諸第); these also decreased in number toward the end of the period, though they increased temporarily in hard years (To, XII, 621) and never disappeared throughout this period. There were many men all over Japan who had few or no holdings of their own, and would be willing to be hired for short periods as farm hands. These usually had no voice in the councils of the villages where they had their temporary domicile. If they became settled, or, perhaps, if they continued to live in their own villages, and worked as tenants, they were called na-ko (名子, sons of the myô-den; cf. Notes 11 and 14, above), midzu-nomi (水呑, water-drinkers), mae-chi (前地, front-land), and the like. In the Kanazawa fief, a kashira-buri (頭振) owned his own dwelling-house; he had greater freedom of movement than the ordinary peasants. In Busen,
some tenants lived rent-free in houses built by the landlord. In most places, the tenants were incorporated into five-man groups, which will be described below, but seldom had any voice in village administration. (GGI, II, 17; 09, 136; Th, VII, 67—68; Th, VII, 17—20; Mkr, 233, 235, 236, 237, 239, 239; YZS, XI, 628; Susa, 82—84.) See Note 37, below.

It would be difficult to determine the average proportion of the various classes of peasants. In a village in Murayama Gōri, Dewa, there were, in 1772, out of the total number of 96 houses, 41 kyoku-shō, 23 na-go, 28 mura-nomi, and 1 Buddhist priest. Th, VII, 18. It was one of the most important characteristics of the Japanese peasants of this period that a large majority of them were small landholders. This paper aims to show some of the reasons for this remarkable condition. Cf. Notes 36, 37, 45, 64, 126, 141—145, below.

None of these peasant classes were serfs. The nearest to the latter were the hereditary servants of large peasants, but these were a decreasing minority of servants, and their relation to the masters was more personal than real, for they were attached to the latter's families rather than to the soil. The others were either temporarily employed laborers or tenant-farmers. The former married, and frequently established themselves as petty peasants, with the assistance of their benevolent masters, with whom they thus "divided kitchen", as the act was locally called (Mkr, 372—375). In fact, no law impeded the servants or tenants from acquiring land holdings and setting themselves up as full kyoku-shō. The kasahira-bori had, as has been seen, even a larger freedom of movement than proprietors. This important point will be more fully discussed later.

A singular exception is seen in the case of the ge-nin of Iya-yama, (see Note 14, above), who were peasants living on lands belonging to the hereditary chiefs, or myō-sha. Peasants cultivating land registered in 1612 were, on the other hand, called na-go, and were ordinary kyoku-shō, owing thirty men's annual convée per family. The ge-nin's corresponding convée was five men. It is briefly stated that the latter were much like serfs, held down to the soil of the myō. Mkr, 216—217. If so, it must have been owing to the fact that the hereditary chiefs were warriors personally overseeing the tilling of their landed estates. The ge-nin, therefore, must have stood in a much different position in relation to their lords from that of the tenants or servants in peasant families in other villages.

(16) Village-officials. Village-officials in the Soverain's Domain-lands, and also in most of the Baron's Fiefs, consisted of three classes of personages of divers titles, whom we may call, respectively, Village-heads, Chiefs, and Elders. Th, II, 33—34; etc.

The Village-head was variously designated as na-nushi, shō-go, kimo-iri, and ken-den, the first two titles being most common throughout Japan, while the last two were practically limited to the northern provinces of Mutsu and Dewa. The various titles were used with little system, the same village, or even the same document, sometimes using two or three titles to denote the village-head. (Tak; GGI, I, 15, 16, II, 90; DSR, XII, 5, 536—537; Mkr.) It is only in a general way that it
can be said that villages east of the Hakone Pass used the title no-mushi, and those west, the title shō-ya.

Kimo-iri (肝煎, roasting the liver, or 肝入, putting in the liver), is a title appearing from the end of the sixteenth century, and merely meaning utmost diligence [in the care of village affairs], as witness the familiar Chinese expression 'to break one's liver and bile' (摧肝膽), and such English phrases as 'putting one's heart into his work' and 'racking one's brains'. (Cl. No. 1, 15; DSR, XII, v, 316. Same, 101 note, is improbable). The term was not limited to the village-headship, but was applied to many other kinds of chiefs. As for ken-dan (検断, examining and deciding), its use seems to have dated earlier than kimo-iri. During the later years of the Tokugawa period, it was usually confined to town officials in the north, especially in the Sendai and Yonezawa sets. (No. 1, 15–16; Mor; YZS, SDS)

The title Na-mushi (判主) was derived from no-shi, written in the same characters, and meaning: head of the no (名字, name),—no being an abbreviation of no-don (名字, name-hold), land bearing the name of the owner or original cultivator. The no-shi of the Kamakura and Momotaro periods (from the late twelfth to the late sixteenth century) was, however, radically different from the na-mushi of the Tokugawa epoch, for the former was a little seigneur or at least a man of the warrior class, while the latter was essentially non-feudal, though sometimes vested with the right to wear swords and bear family-names. (Doh. Introd., 71, 84; No. 1, 14; DSR, VII, 23. Ksd, 2243.) The transition of the title from the one to the other is not yet clearly traced, and falls beyond the scope of this paper.

Shō-ya (庄主) was originally cognate with na-mushi. Literally, it meant a house (house-master) in the shō-se, large private estate which paved the way toward feudalism in Japan, and which in many instances remained for a long time as a territorial unit. (Cl. Same, 100–101, note.) The owner of a distant shō would leave its management in the hands of his agents, who, being private men, were called by different ill-defined titles. Of these, shō-ya was one. In its exact form, it is not found in documents as early as is no-shi, and it is difficult to say whether all the shō-ya were also originally warriors, as they generally were not under the Tokugawa. (No. 1, 15; DSR, XII, i, 793 ff.)

It is interesting to note that, in the early years of the Tokugawa régime, there lingered exceptional cases of warrior village-heads at places where warriors did not live in castle-towns, but were settled in villages as petty seigneurs. These being influential among peasants, some of them became village-heads. There occurred, in 1698, a serious insurrection of one of these shō-ya in Tosa, where, at the coming of the barn Yamanouchi, some two thousand vassals of the old lord Chōsokabe had settled as farmer-warriors in different parts of the province. (DSR, XII, 1, 734–749.) Many of their descendants retained their rôle of go-shi (郷士, country-warriors) throughout the Tokugawa period. There were go-shi in a few other sets, and many of them must have served as village-heads. A conspicuous example is that of Iya-yama, where, as will be remembered, several old seigneurs remained as hereditary village-
heads for more than two hundred and fifty years. They even reverted to the old title suga-ku in 1816, after having for a brief period been called sa-moto (名本). See Note 14, above.

As for the appointment of the village-head, it has been said that generally in western Japan, the headship was handed down from father to son in old, but not always the wealthiest, families; that in eastern provinces either a general election or an informal selection for life or rotation for an annual term prevailed; and that, as a consequence, the office possessed more dignity and worked with greater ease in the west than in the east. (Jh, VII, 28–31.) If this was true in a very general way, there were numerous exceptions to this contrast. Even in Edo and Domain-lands near Edo, an official appointment of the head without popular election or choice was not infrequent. (E.g. Nt, I, 15; Mi, I, iv, 32.) Even in cases of election, the authorities sometimes exercised a veto-power or ordered reconsideration. (Jh, VII, 31.) It would seem, on the whole, that election or rotation was much less common than appointment, and tended to lapse into the latter. (Sme, 103–107.)

The duties of the village-head were, like those of the Intendant or Bailiff, varied and extensive. He acted as the medium between higher authorities and the village, both the former’s orders and the latter’s reports always passing through his hands. Deeds of sale and mortgage, as well as petitions and appeals from villagers, required his seal affixed to the documents. He assisted in the examination of the productive power of cultivated land. He divided among the people taxes due from the village, and collected and delivered them. He was responsible for the accuracy of the accounts of the village finances, and also for the correctness of all the regular records and reports. Public works and repairs, distribution of official loans and alms, examination of the census and the religion of the village, and the like, also devolved on him. Not the least important and delicate point of his duties was to guide the morals of the peasants, and prevent their extravagance and misconduct, by persuasion and personal example. Everywhere the importance of his moral qualities was strongly emphasized. (GGI; YzS, 509; Sme, 102–103.)

The village-head had, of course, no military or judicial power. He exercised police functions with the aid of villagers, and, in disputes among people, he offered his good offices to advise private reconciliation of the parties, in accordance with the policy of the feudal authorities to discourage judicial contest as far as was compatible with justice. (GGI, II, 7, 12, 36–37; III, 1.)

In return for these varied services, the village-head received a renumeration, which, in Domain-lands, seldom exceeded a half of one per cent. of the recorded annual productivity of the village. He was, also, remitted a part or the whole of the village dues, and in some instances given free labor on his farm of two or three days of all the peasants. He also received presents from villagers, and those must have been considerable when the head was virtuous and beloved by the people. (Jh, II, 46; Jh, VII, 32–33; Tk, VII, 15; Hra, 1296; Sme, 107.) Between his heavy duties and small emolument, many village-heads in Domain-
lands became impoverished (Mi, I, iv, 32). In the Barons’ Fiefs, great diversity of practice seems to have prevailed respecting the question of remuneration. In some places, the reward was much more liberal than in the Domain-lands. (e. g., SDS, II, 43, 46; DSR, XII, vii, 1158). The degree of the ‘heads’ usefulness and moral influence widely differed in different Fiefs, according to the general condition prevailing in their rural administration.

One head for each village was a rule usually followed, but sometimes two small villages were under one head, and one large village had two heads. In every village, the head was assisted by some half-a-dozen Chiefs—ordinarily called Kumi-gashira (組頭, group-heads), but also known as Toshi-yori (年寄, elders), Obon hyaku-shō (長百姓, leading peasants), Obon hyaku-shō (老百姓, older peasants), in a document of Ugo dated 1607 occurs the title Omotachi monotomo, obedient fellowmen), Osu-bito (長人, leading men), and the like. In Yonezawa, the title Kan-dai (欠代) was used after 1601. Suew had kuro-gashira (黒頭). The first name, kumi-gashira, suggests that, in some cases, the office originated with the heads of five-man groups, which are considered in Note 33, below. (Tk, II, 33–34; Jk, VII, 33; DSR, XII, v, 530–537; MKR: Hira, 1290; Wg, i, 47.) This title was, however, evidently not universal. The other titles would seem to indicate that the Chief had merely been leading peasants of the village. Osu hyaku-shō, for example, was the title applied in some parts till a late period to peasants who held no official position, but whose forefathers were large landlords. (Cf., e. g., DSR, XII, v, 316, 530; with Ne, I, 16; Jk, VII, 34.)

The Chiefs were usually chosen by the village from among the chief families, for a term of one or more years, and the choice was reported to the authorities. (Tk, II, 33–34.) This, however, did not prevent the office from becoming confined to a limited number of persons in a given village. (YK, 553; NTK, IV, 419–420). The duties of the Chief were much the same as those of the head, whom they assisted. They sometimes received a slight remittance, and, in addition to it, or instead of it, a remittance of village dues. (Jk, VII, 32; Tk, VII, 15.)

Besides the Head and the Chiefs, the average village had one or more Elders, whose function was to keep an eye on the conduct of the village-officials, to give counsel and admonition, and generally guard and promote the best interest of the village. They were chosen from among the most highly respected of the peasants, and usually served with little or no remuneration. They often enjoyed greater moral influence than the Head, but in public documents his signature and seal followed those of the Head and the Chiefs. (Jk, VII, 33; NTK, IV, 419; etc.) Their title was byaku-shō dai (百姓代, representatives of peasants), sō-dai (衆代, representatives), sō byaku-shō (衆百姓, representative peasants), or muru-bito gashira (村人頭, heads of villagers). Where the Chiefs were called kumi-gashira, the Elders might be known as Osu byaku-shō, a title which was applied to the Chiefs in other places. (Tk; SDS; Mi.) This confusing identity of titles for the two different posts would seem to point to their common origin and later differentiation.

(17) District-heads and groups of villages. In larger Fiefs and Domain-
lands, as, for example, Yonesawa, Sendai, Kanazawa, Okaya, Hiroshima, Yamaguchi, Kurume, Kumanoto, and others, neighboring villages were grouped together for administrative purposes. The commonest name for the groups was the plain Kumi-ai mura (組合村, associated villages), but the old names goto (鄉), ko (保), ryō (里), and others persisted in some places, as also the peculiar tōri (通), suji (筋), te-naga (手永), and the like. (Doh. Intro., 93; YZS; Mkr.)

The to-mura (十村, ten villages) groups were probably found only in the Kanazawa fief comprising for the most part the provinces of Kaga, Noto, and Echū. These groups are said to have dated as early as 1604, and were originally composed of ten or twelve villages situated near together, but they grew larger and fewer, as time went on. At the end of the feudal régime, many a to-mura was found to comprise 39 or 40 mura. (Mkr., 475.) According to the normal scheme, however, which probably continued to be in practice in several districts of this fief, villages were to be organized as follows: five neighboring villages were under the supervision of an ō kimo-iri (great village-head), who was one of the kime-iri, or heads, of the villages, and took the post of the general head annually by rotation; two such groups of villages, that is, ten villages, formed a larger division, and its head, called to-mura kimo-iri (ten-village-head), was one of the two ō kimo-iri of the five-village groups, and served for life, but not by heredity, and five of the five-village divisions were likewise banded together under the control of an ō to-mura (great ten-village [head]) selected from among the five ō kimo-iri. (Ssh, 142.) “To-mura” seemed later to have become the popular general name for this elaborate organization.

The heads of the to-mura were called to-mura kimo-iri, or simply, to-mura; sometimes, osh byakushō. The great majority of them were of the peasant class, though, like some village-heads, many of them were favored with the privilege of wearing swords and bearing family-names. A few were real warriors. None of them, however, seem to have held their districts in fief. They were directly responsible to the Baron’s government, and not to his Bailiffs and land-holding vassals. (DSR, XII, ii, 854-859; Mkr.) The importance of such an institution in extending the Baron’s authority throughout the Fief and in securing uniformity of rural government may well be inferred. The to-mura arrangement is said to have excited the Suzerain Yoshimune’s admiration for its efficiency. (To XIV, 300-301.)

More common for district-heads than to-mura were the titles ō shōga (大庄主, great shōga), ō kimo-iri (大辛入), sō shōga (物庄主, shōga—general), muri-moto (割元, dispenser), ō yaka-me (大横目, great supervisor), sō dai (大代, great representative), ken-dan (検断, examiner and judge), ō doshi-yori and chu doshi-yori (大和中年寄, great and middle elders), and the like. (See Mkr; YZS; Ger.) They were generally great peasants, and, as heads of extensive regions, some of them wielded as large an influence as petty barons and bailiffs. Their service, which was similar to that of the village-head but magnified, was remunerated with a special slight levy imposed upon the districts. For the maintenance of the to-mura, for example, all the male
peasants between 15 and 60 years of age gave about 1/5 of the rice
(Mr., 259). This circumstance and the great power of the district-heads
had led to so many corrupt practices, that in 1713, the Suezain's govern-
ment decreed that this office should henceforth be discontinued but in
exceptional regions throughout the Domain-lands. (To XIII, 318, 320;
Note 59, [XXVII, 6], belaw.) This law did not affect the Fiets.

(18) Delegation and responsibility in China. See the author's Early
institutional life of Japan, chap. 3.

(19) Inviolability of the officials. Each official represented in his proper
sphere the power delegated to him in successive steps from the very
highest authorities. He was a dignitary of the Suezain or the Baron
(公儀 or 君公の御役人), the honorific go (御) commanding respect
from all persons below him (者共, 跪, 下下). He, on his part, for
the same reason, showed extreme deference in addressing himself to his
superiors. The latter were approached with reverence (乍恐), and were
listened to with abject fear (奉畏). It was a capital offence to use
privately the Suezain's family emblem or to pretend that a private
undertaking was official (御用). (KR, I, No. 35, GGL, II, 19, 20.)

(20) Sacredness of the laws. We cannot hurry to go into the fruitful
discussion as to the source and meaning of 'law' during the Tokugawa
period. It may be stated, in short, that, whatever the origin of the
ideas contained in the law, the latter became such only as it emanated
from the higher authorities. Each law took the form of an official
command, and was regarded as embodying the will of the ruler. It
might gradually and naturally fall into disuse or be modified by custom,
or even might at once be found to be unworkable, but it should not be
wilfully altered or abrogated by the people without official sanction.
The law was sacred, for it was the voice of the powers that ruled. Even
a sign-board bearing an official proclamation was treated with reverence;
it was surrounded with a fence, was guarded from fire, and was re-made
when it wore out by exposure. (GGL, I, 12; II, 23.)

It is interesting to note that frequently the authorities sought to add
to the majesty of a law by stating that its infraction would incur punishment
from heaven (天道).

(21) Punishment of feudal nobles. This subject should be discussed in
a separate paper on the feudal classes of this period.

(22) Joint responsibility of corporate bodies. Of the various kinds of
corporate bodies mentioned, the cities and guilds form the subject for an
independant discussion. As for the village communities, their joint re-
ponsibility will be more fully treated when we discuss the five-man group.
In short, the whole or a part of the village, or its officials, were held re-
ponsible for the receipt and transfer of the official circulants, for the pay-
ment and delivery of the taxes, for the good behavior of all the members,
for the arrest and surrender of robbers and stragglers, for the main-
tenance of taxable estates, despite the running away of their present
holders, and for a hundred other affairs. (E.g., see GGL, I, 6, 7, 14,
34; IV, 3, 8, 11, 12, 13, 15; Ggg, 5, 7—8, 184—185; KR, II, No. 44.)
Cf. also, Note 144 b, below.

(23) Framing laws with discretion. An examination of a large body
of Tokugawa laws will strike one by the persistent recurrence, after important provisions, of the clause that cases requiring arrangements contrary thereto should be reported to the central government.

What might be termed discretionary laws, also, were abundant. Sometimes special laws supplied or modified general orders previously issued in the form of public moral exhortations or as informal measures, or vice versa; for example: an increase of population was generally encouraged, but an excessive increase in an old village was checked by prohibiting indefinite divisions of land-holdings; the peasants were continually taught to settle disputes by private adjustment, and yet the evil of suppressing litigation was provided against by law. (To, XIII, 315—316.) Cf. Notes 36, 45, 49, below.

(24) Operating laws with discretion. Judgments passed by the courts afforded numerous examples of the use of equity. This and the speed of rendering justice struck Kaempfier, who thought them exceptional. (Engelbert Kaempfier, History of Japan, Engl. transl., new edition, Glasgow, 1908, III, 319—320) but who, it is to be feared, was acquainted only with favourable instances. (Kaempfier was in Japan in 1690—1692.) Good rulers emphasized the importance of equity and discretion. Ieyasu remarked: "Rules of conduct are generally fixed according to men's rank, but beware that time and place alter the modes. (様子, yō-shi.) (Ien-boysa yō-shi, in DSR, XII, 115—116.) Ienitsu criticized his chief justices, as they, prompted by a desire for an exhaustive inquiry, put to the witnesses questions beyond their intelligence, which bewildered them without enlightening the issues. He also taught the distinction between what he termed the commissioner's decision (奉行の裁判) and the superintend's decision (天下の裁判). In a dispute over a boundary, for example, the former would determine the truth, but the latter would add that a part of the land of the winning side be ceded to the other; if the correct division was certain to deprive many men of the losing party of their very means of sustenance. He did not praise a man who made a useful compilation of court decisions, for, thought he, no two cases would be exactly alike, and precedents were not always safe guides. (To, X, 1088—1089.) Tsunayoshi ordered that decisions should not be based on the consideration of immediate justice alone, but also on their probable effects on popular morals and customs. (Ibid., XII, 107.) Uesugi Harumori was a living example of discretionary justice, and so were Hosokawa Shigekata and other barons noted for political wisdom. (E. g., YZS, 81—88, 262, 807; GT, 1, 2; etc.) Equity and judicial usages combined in the highest state of efficiency in the person of O-oka Tadasuke (1676—1752). (To, XIV, 263—264.) Cf. Wg., i, 71—73; Prof. Mikami Sanzō's articles in Hs, 1088—1115.

(25) Rendering laws for equity. Kuroda Yoshitaka (黒田孝高, 1546—1601), like many other Barons, had made gambling in his bēf a capital offence. His vassal Katsura won a large stake one evening, and on his way home, with all the booty on his shoulders, unexpectedly met his lord, and, in bewilderment, improvidently exclaimed: "I have not been out gambling." His comrades gave him up as lost. The next morning he was summoned to Yoshitaka's presence. The latter asked
him how much he won the preceding evening, to which Katsura replied in exaggerated terms. "Bravo!" said the lord, "but it was a risky business to evade my law. Your foolish exclamation shows your fear of the law. If you fear it to that extent, rather observe all laws. Beware, too, that after too good a fortune usually comes ill luck. If I hear you have squandered your money, I shall punish you. Do not gamble. Do not buy luxuries, and be careful not to become bankrupt." During his rule, few of his vassals were punished capitally or banished. Kazoku fo-kyo mono-gatari in DSR, XII, ii. 72ff.

The evading of a barrier was punishable with death, but a peasant committing this offence on his way to Edo to lay before the central authorities an appeal over the head of an unjust local official, from whom he could of course secure no passport, was not punished therefor. He was allowed to testify that, as he came to a town just this side of the barrier, he lost his way and strayed into a forest, where he met a man who gave him a wrong direction; this brought him to a town just beyond the barrier. Slight falsehoods regarding the ages of the culprits who have just outgrown their minority, or time, distance, the length of weapons, and other circumstances, were frequently imposed upon the offenders by the magistrate himself, in order to extenuate their penalties when their cases called for equity. (The popular story of Yoo-ya O-chichi, a maiden who set a building on fire with a hope to see her lover, and who honestly and innocently refused to testify that she was still in her minority, as the magistrate would have her do, is a pathetic illustration. She was a year too old to be a minor, and was, much against the wishes of the authorities and the people, punished capitally for incendiaryism.) Perhaps for this need of considerate justice, it was customary not to allow the affidavit of the defendant to be shown him in writing, though he might listen to its reading. Tk, IX, 5-6, 13.

(96) The peasant as the foundation of the State. The constantly quoted maxim (derived from the Shu-king, hia-shun, iii. 2) is, 春人國之本なり, meaning precisely the caption of this Note. According to the economic conception of most rulers of this period, the peasantry was the only productive class of people, and furnished the wherewithal of maintaining government and all phases of national life. Agriculture is the basis of all things and the treasure of the world. It is the peasants' honor to be engaged in it. Even if a peasant should be enabled to pay more taxes by becoming a merchant, "nothing was precious that had not been yielded by the soil." YKS, 99. 105. "Of the four classes of people, [i.e., gentlemen, peasants, artisans, and merchants], the peasants are the foundation of the State. From the Emperor down to the common people, men's lives depend upon food and clothing. That food and clothes are fruits of the peasant's labor is self-evident." Om, ii, 44.

It will be remembered that the peasants formed nearly ninety per cent. of the entire population of Japan under the Tokugawa. See Note 7, above.

(37) Peasants and warriors as against burghers. The warriors and peasants, to a large extent, prospered and suffered together under varying conditions of the rice crop and its market value, whereas merchants
often profited when the others lost. The warrior's income was fixed, and the toiling peasant's was little more elastic, but the burgher seemed frequently to make fabulous fortunes with little labour. It will be well understood that, according to the current economic theories of the period, the merchant did not produce or increase the wealth of the nation, and gained where others lost. His apparently easy profits, therefore, made him an object of suspicion and hatred. Moreover, under the prevailing arrangement of the period, the warrior's income in rice was converted into money through the medium of merchants, who not seldom speculated on the rice at the warrior's expense. If the latter was improvident enough to spend more than his income, the merchants would willingly finance him with his future years' incomes as security, and thereby hold him in perpetual obligation. (Bus, 39-41.) Spiritually, too, there was much in common between the peasant and the warrior, beside much in antagonism between them both and the burgher. The former too prized physical vigor, simplicity and loyalty; the latter's venturesome and ostentatious habits, accompanied by a utilitarian and impersonal point of view, were disliked and feared as tending to debase and undermine the moral life of the feudal society. (Ngh, 228.)

The feudal legislation was largely influenced by these ideas and sentiments. To take a few illustrations, the suzerain's government once forbade merchants to undertake the opening of new land. (To, XII, 269.), and always looked askance at, and often interdicted, their acquiring titles over cultivated land. (Mír, 334, 335; MI, II, vii, No. 27.) Peasants noted for filial and other great virtues were rewarded with the privileges of bearing family-names and of wearing swords, but the latter privilege was sometimes denied to merchants equally virtuous (To, XIII, 661.) On the face of law, at least, farmers and merchants might not adopt each other's occupation (GGT, III, 12; KKK, 345-346; YZS, 105-106; TMC, I, 39; Mír, 246, 252-254) or enter into marriage relation, and the younger sons of the peasants might not serve in merchants' families (Mír, 51-52; YZS, 527, 631). "As the minor occupation [未業, i.e., commerce, as distinguished from the major or chief occupation, 本業, namely, agriculture] seems to return much profit for little labor and therefore excites the peasant's envy and interferes with agriculture, it has been a custom in all ages both in Japan and in China to forbid him to marry a merchant's daughter." (Ibid., 747.)

The rising influence of the burgher class was, however, so irresistible, and had so audaciously stolen over a large section of the warrior class, that, especially at Edo after the end of the seventeenth century, the mercantile mode of life and thought began deeply to affect the warriors (Se, I, 59-66; V, 27-31; Bus, 25-26, 50-51). The same mode in its worst aspects, it was continually deplored, was corrupting the innocent peasants also (MI, I, iv, No. 29). This important tendency falls beyond the limits of our essay.

(29) Separation of arms from land. Further, see this Journal, vol. XXX, pt. III, pp. 270-271, (the 12th to 13th page of the Introduction to these Notes), and Note 60, below.

(29) Tenants and farm laborers. See Notes 15, above, and 37, below.
(90) Ownership virtual and theoretical. It is hazardous to make a general statement on the question of ownership of land. Law and customs varied in different places and at different times.

Just prior to 1600, when a general cadastral survey of Japan was made under Hideyoshi's command, each piece of land whose name and average productive capacity were registered was entered under the name of the actual possessor, regardless of the history of his possession. He was allowed to hold the piece even against the lord of the fief in which he lived. "It is strictly forbidden," says an order of a chief commissioner, "to give to the lord any of the cultivated lands recorded in the register."

Was it ownership that was here recognized? It was, as is evident from an order of another commissioner, the right of cultivation (作職, sakushirō), rather than ownership. "The right of cultivation over a wet or upland piece," says the order, "belongs to him under whose name it was registered during the recent survey. It is forbidden to allow the land to be taken by another person, or to take another person's land under the pretext that one has once had the right of its cultivation." (Deh, introd., 94–95.) These are illuminating orders, as coming from the commissioners of Hideyoshi, the autocratic suzerain bent upon enforcing a uniform land law throughout Japan. They may perhaps be said to reflect his policy of curbing the powers of the barons by directly protecting the rights of the peasants under them. Nevertheless, it is probable, too, that the right of prescription and the right of cultivation which he recognized in the actual holder were based upon a prevalent practice of the period.

Whatever the effects of these orders before 1600, it is hard to assume that the same principles ruled under the Tokugawa. During the early years of their suzerainty, one occasionally meets with deeds of sale in which it is apparent that what was transferred thereby was the right of cultivation rather than ownership. (Cf., e.g., DSR, XII, 1v, 575–577.) It makes little difference if the right had been enjoyed through generations and was now transferred permanently. (Cf., e.g., ibid., XII, x, 504ff.) The same idea lingered in some Fiefs till long afterward. In Akita, for example, the peasants tilled the land which the Baron owned, the former owning not even sites for their houses, which were erected on cultivated land. (Ibid., XII, xi, 169–170, from 秋田沿革史大成.) In Kanazawa, the same theory was held; land was the Baron's (on haka, 御高), and if a peasant was too poor to meet his obligations, he was allowed only to sell the use, not the ownership, of his land. The process was called kiri-taka (切高, dividing the assessed productivity, that is, not the acreage), and the price was euphemized as return-favor (rei, 禮).

(Mkr, 338, 473–475.)

In several other places where, as in the greater part of Japan, people no longer remembered the distinction between the right of ownership and of cultivation, or, perhaps, the latter had long been assimilated with the former, the idea of transferring the mere use of land still adhered to tenant-farming. Tenant-farmers sold their right of tenancy to others, and pieces of land under long terms of lease changed hands with more or less freedom. The practice was especially prevalent in parts of Echigo,
Ritchie, and Tosa. (Ibid., 476, 527, 530—531, 539—544.) This last usage seems highly significant.

Even where the holding peasant was to all intents and purposes regarded the owner of his land, the persistent fiction that he merely had the right of use lingered almost universally, and, in many places, unconsciously. This will be clearly seen in the following Notes 31—40.

The legal proof of a holding consisted of either an entry in the official register, a title deed, a deed of sale, or a receipt of the land dues. (Mfr., 331—332, 336—340; Wig. v. 1—20.)

(31) Cultivated and uncultivated land. As might be expected, the peasant's virtual ownership extended over cultivated land, but seldom over uncultivated or non-arable land adjacent thereto. The tenure of the latter was neither uniform nor always definite within the same Fief or Domain-land. Feifs often presenting a great variety of tenures in juxtaposition. In Sendai, Tosa, and Higo, for instance, different kinds of fief land, village land, religious land, and private land, existed side by side, many of them in ill-defined tenures (Mfr., 441—443, 445, 451).

Generally speaking, some of the following belonged to the Domain or the Fief, (it would be truer to the popular conception of the question to say the Domain or the Fief) than to say the Suzerain or the Baron, for, thanks to the presence of intendants and bailiffs, the peasant's point of view in regard to landed property was rather impersonal: 1. grass-land next to rivers, lakes, and the larger ponds; 2. grass-land and wood-land on the borders of villages and districts; and 3. forests specially reserved for public purposes. The privilege of cutting grass and smaller trees on these lands for fodder and fuel was often granted to villages or individual peasants, on payment of small dues or under other conditions, and the felling of larger trees for more permanent ends was allowed under varying terms. The border-land often played an important part in the economy of villages which had insufficient areas of cultivated land, and gave rise to many a serious dispute between them. (TMK, f. II. 1—106, pts. 人會山 and 栃塚; III, 149—181, 204—308, pts. 村塚 and 山林塚; Mfr., 340, 431—434, 440, 442, 445—446.)

Some other land along rivers and ponds, and grass and wood land, were considered as common property of a village in which or the villages between which they were situated. In these cases, dues, if any, in return for the use of grass and trees were paid to the village, which made the necessary regulations. Larger lots were guarded by wardens. These men originally were, in many places, said to have been owners of these tracts, which they, under the pressure of the taxes levied on them, voluntarily turned them over to the village, and became their keepers. (Mfr., 381, 420—424, 430—432, 435—440, 449.)

Some uncultivated and non-arable land was already in private ownership. Customs, of course, varied greatly in this matter. The narrow marginal patches about rice-fields, for example, were considered in some places as belonging to the owner of the fields, but, in some others, he owned the soil of these margins, but not the grass growing thereon, which was common property of the village. In Yonezawa, the holder of a piece of tilled land had a free title over the uncultivated land
bordering upon it. Most of the wood-land originally granted by the
Fief to the village gradually passed, in Sendai, into the hands of large
land-holders. The owner of uncultivated and waste land either did or
did not pay taxes for its free use, according to the localities and to
the origin of the lots. In most places, land of this description could be
alienated with greater freedom than cultivated land. The authorities,
however, actively interfered with an indiscriminate cutting of large trees,
it being a traditional policy of all Japan in this period to preserve and
increase forests so far as it did not interfere with the life of the peasants.
*(TMK, f. II, 91; pt. 栃場, No. 1; Mkr, 333, 438, 441, 455.) See also
Notes 36 and 66, below.*

(32) Right of seizure. In Sendai, the government of the Fief might
demand a piece of private land for official purposes, and recompense
the holder with another piece of equal value. If such a piece could not
conveniently be found, he might claim no pecuniary consideration for
the land he surrendered. This latter outcome was called ひ-もく (取 し
目), overthrowing the title. *Mkr, 334.* This is a solitary instance of the
lord's lingering right of seizure. Even in Sendai, this practice was
evidently rare, and it is difficult to find similar rights exercised elsewhere.
Cf. Note 144 b, below.

In some parts of Tosa, the system of making allotments and periodical
redistribution of land, which was copied in Japan from China in the
seventh century, (cf. the author's *Early inst. life of Japan*), had been
resuscitated and in force for a considerable period, when the feudal
administration was abolished. This subject is still obscure, but it seems
unlikely that the system was extensively applied to peasants' holdings
even in Tosa. Nor does it seem to have been in practice in any other
part of Japan, save portions of the distant Ryū-kyū (Looschoo)
Islands.

(33) Right of escheat or mortmain. In the Sæzorin's Domain-lands,
landed property was confiscated (1) for grave offences, (2) for illegal
mortgages and other fraudulent or unlawful transactions in land, (3) for
an intestate succession in which the deceased's relatives were engaged
in hopeless disputes. Technically, the first class of forfeiture seems
to have been called けさし (鈍 所), and the others とり-right (取 上).
Throughout the period, a gradual trend toward leniency in all these
cases is discernible, the moveable property of the culprits, the belongings
of members of their families, and the claims and interests of their
creditors and debtors, receiving greater and greater consideration. The
most remarkable is the matter of the holdings of runaways who were
only impeccuous, not criminal. Once these holdings were probably con-
fiscated, but the universal tendency was to forfeit them only when no
relatives and no friends of the runaways were forthcoming to succeed
to their estates. Even then, the forfeiture was reluctantly accepted by
the authorities, and the estates were gladly restored to the original
holders, if they returned, or to their kin.

As will be seen in the next Note, escheat in default of heirs was as
infrequent as that for desertion.

Theoretically, land was to be forfeited for a repeated failure to yield
its taxes, but in this instance, also, the authorities were far from being
eager to seize the land. When friendship or neighborly spirit did not
come to the rescue, a village-official would offer his good offices, and
the Intendant or Bailiff was not to show his hand until all resources
were exhausted to save the land from confiscation.

It is apparent that all this leniency was not entirely due to official
benevolence, but was largely influenced by the consideration that, owing
to peculiar economic conditions, it was growing more and more difficult
to find men willing to undertake the cultivation of confiscated or deserted
land. (See Note 183, below.)

Land, confiscated for whatever reason was either entrusted to the
charge of relatives, village officials, or the village as a whole, or let out
to tenants, the actual holders being held responsible for the regular dues
from the land. It is also probable that pieces of land sometimes granted
permanently to persons of exemplary virtues (cf. in Okayama in 1654;
Somei-ya, 貴而者草, by Shibui Noriakira, 講井徳章. IV. xii. 34)
were parcelled out of confiscated cultivated land.

If the original holders had arrears either of taxes or of debts, all or
part of the land they forfeited was sold in order to satisfy the claims,
or else the present holders were obliged to meet them in instalments
out of the income from the land, in addition, of course, to the payment
of the regular taxes.

(138) Succession testate and intestate. Customs concerning succession
showed great diversity. In some places, primogeniture, even representative
primogeniture, was the rule; in others, simply agnatic succession. In
these respective districts, the principles prevailed over other considerations,
and when they conflicted with testaments, a compromise was effected by
dividing the property and giving its major part to the oldest male son. When
the heir was still a minor,—the minority ending between 14 and 20 years of
age, according to localities,—a guardian or two were chosen from among
the relatives and village officials, or else the boy was adopted as heir
to his uncle or aunt or the second husband of his mother. The rigor
of primogeniture or agnatic succession was further softened by a free
law of adoption, which prevailed in all Japan.

In other places, the will was a common requisite for succession, and
was binding even when the testator ran away, provided it was drawn up
in due form. It either was accompanied with the seals of village officials
and relatives, or was made alone by the testator and was kept strictly
secret till it was opened after his death in the presence of relatives.
The testator could nominate as heir one of his nearest kin other than
his eldest son, if the latter was incapable or physically invalid, or even
a woman. If a man died intestate, or if the will was not in correct form,
it was incumbent upon his relatives and village officials to deliberate
and decide upon a proper heir from among the former.

In some districts, none of the three agents, that is, primogeniture, the
testament, and the council of relatives, were alone strong enough to decide
a succession, but the first two were weighed carefully in the last. In such
instances, the relatives naturally were an important factor in the problem.
In all these various cases, however, the universal and predominant
principle was that the name of a family should be preserved against all
obstacles that could possibly be overcome. This idea prevailed through-
out Japan, and exerted a tremendous influence on social order. It is a
subject worthy of a full discussion. It is enough here to allude to it
and say that the feudal authorities were obliged to respect this strong
popular demand. Indeed, the principle was as strong among the warrior
class as among the peasants, for neither probably had any other point
of view regarding matters of the family. Escheat in default of a male
heir in a peasant family would be unlikely to be in practice in such a
society, for the independent peasant family was usually closely identified
with hereditary holdings of land which had acquired names (naka-za
名字), and always subsisted on some landed estate, however small.
The family should not die, and, if it would live, it needed land. An
estate left heirless, therefore, was not confiscated until it was evident
that there existed no worthy relative of any degree whatever of the
deceased to succeed it or no person to be adopted.

Formal official sanctions were necessary in some places for adoption,
guardianship, and succession. In others, the authorities were not even
notified of these events, and the census was revised only once in the
year. Even in the former cases, too, there was little official interference.

(GGL, I, 8; II, 16, 18, 27—28; III, 8, 15, 16; TMK, c. I, 126—127;
pt. 家督相続, No. 4; Mkr, 175—176, 237—300, 305, 347—374; Wig,
v, 88—95; Sone, 90—91.)

(35) Land, captitation, and house taxes. The subject of taxation will
receive special attention later in this essay. (See pp. 277—283 of this
Journal, vol. XXX, pt. III, namely, the 19th—25th pages of the Intro-
duction to these Notes, and Notes 90—113, below.) There it will be seen
that the principle tax, that is, the land-tax, was assessed according to
the officially determined annual productivity of each piece of cultivated
land, which was considered an entity; that several other taxes were
assessed likewise; and that each household or each male peasant as basis
for assessment occurred only in some instances of village ducum, as distin-
guished from the taxation of the Fief or Domain-land. Even the village
taxes were levied in few places exclusively on houses or men. (Mkr, 257
—260, 263, 413—415, 418—419, 429, 434.)

(36) Alienation and division of land, also, will be discussed more fully
later. At the beginning of the feudal ages, when the warrior was an
actual holder of land, it was he who was forbidden to alienate his land
at will. Since the separation of arms from land, the burden of the pro-
hibition naturally shifted from the warrior to the peasant. (Prof. Miura
Shūkō, Kasumura shi-daishii, 三浦周行, 鎌倉時代史, Tokyo,
1907, pp. 330—331; Naka, 95.) In the Suyeruzan's Domain-lands, at least,
a permanent sale of land was illegal since the second quarter of the
seventeenth century, and the principle soon prevailed over most Fiefs.
It was, however, not only impossible, but also often injurious to peasants,
to suppress transactions in land. Consequently, penalties for sales became
less severe in the Domain-lands from the eighteenth century, and everywhere sprang up interesting practices, both legal and illegal, whereby either the title or the use of land changed lands, though with varying degrees of freedom in different parts of Japan. Newly opened lands could be more freely transferred than old lands, house-land than tilled land, and unencultivated land than either, while in several Fiefs any land whatsoever could in one way or another be disposed of. The fictitious devices employed to preserve the semblance of observing the law forbidding the sale of land included practices analogous to usufruct and superficies, as well as sales for terms of years and mortgages with the original intention to foreclose. In spite of all this, however, the law against permanent sale persisted, and its principle was a legal tradition respected throughout the Tokugawa period. On the subject of alienation, see Note 127, below.

As for the division of land among children or other persons, which will again be taken up in Note 45, below, a similar tendency was marked. While the peasant might not divide his holdings indefinitely, he was at liberty to do so up to a prescribed limit. This limit, also, was in no place absolutely insurmountable, for the law was always accompanied with a proviso for cases of urgent need, and the latter was taken full advantage of in many a locality. The prohibition of indefinite division, however, and that of permanent transfer, formed two legal maxims that were never completely forgotten.

That the maxims were at the same time respected and evaded is highly significant, for it would seem to indicate the transitional state of the peasant’s proprietary right over cultivated land. It was impossible positively to forbid him from disposing as he wished of his land, which he had long been accustomed to regard at least as much his own as the lord’s; nevertheless, the feudal authorities shrank from admitting that the title over the land had passed to its cultivator. Nor could they even entertain such a thought, so long as their point of view was at all feudal, that is, so long as the means of maintaining their military functions were supplied by the agricultural land over which they could not imagine they had lost a right of superiority. Hence they avowed that they would be failing in their duties as benevolent rulers if they tolerated unlimited freedom in dividing and alienating land, which would result in making rich peasants richer and the poor poorer. It would, however, appear that it was not their paternalism alone, but also the controlling motive that transactions in landed properties should not be allowed to affect the revenue of the feudal State, that impelled the authorities to continue to interfere with them. This motive more than any other would seem to have determined the degree of latitude granted for the division and alienation of peasants’ holdings. One would almost say that the Japanese peasant would have been the full owner of his land, but for the nature of his taxes.

(97) Tenant farming. The reflections of the last Note receive further confirmation from the conditions of tenant-farming. The limited right of alienation did not prevent the rise of comparatively large land-holders who employed tenants and laborers on their farms.
In some instances, single holders held entire villages, (e. g., see TMK, t. III, pt. Ⅲ, No. 4). The tenures of the tenant-farmers showed a great diversity, and their conditions duplicated certain features of the general destiny of landed property described in the preceding Notes. Land—if we confine ourselves to rice-land—was let for a term ranging between one and twenty or more years, often accompanied by no written statement, and the owner himself paying the taxes. The land might be revoked on due notice, if its cultivation was neglected and rent unpaid, but leases over twenty years were usually considered permanent, and could not be revoked but for exceptional reasons. Even an annual lease tended, notably in Echigo, to become permanent, and there were, as in Sendai, leases that were from the outset considered permanent, and could not be terminated even if the tenants would. The longer and permanent leases were sublet or transferred with ease in Echigo and Tosa, the tenants paying all the taxes due from the land, and considering themselves as good as proprietors. In Tosa and other western provinces, the real proprietor was called the 'holder of under soil' (sakoci mochi), or shita-tsuchi mochi, 下土持, and the tenant the 'holder of upper land' (meca-chi mochi or mec-tsuchi mochi, 上地持), or, as one would say, of superfluities. (Ish, 72; To, XII, 621; TMK, t. I, pt. 借地, No. 1; Mbr. 517—545.)

It is impossible to estimate the relative extent of tenant-farming in the whole of Japan in this period, but it may be inferred to have been small, though probably increasing. Cf. Mi, I, ii, No. 15. During the present reign, when the old restraints of division and alienation have largely been removed, and the tenants have relatively increased, about a third of the cultivated land in Japan Proper is estimated to be under tenant-farming, and probably as much as a fifth of the peasantry consists of tenants, part owners and part lessees constituting more than a half. (Cf. Japan in the beginning of the twentieth century, compiled by the Department of Agriculture and Commerce, Tokyo, 1908, p. 90; Ngh, 131.) Also see Note 15, above. Under the Tokugawa, the proportion of landholders to tenants must have been higher. This remarkably large percentage of landholders in the entire peasant population, together with as remarkably a small percentage of large landlords, constitutes a great fact that lies at the bottom of our whole subject. It is hoped that, before the paper is gone over, both the importance of this condition and the reasons therefore may be patent to the reader.

(35) Change of residence. The passing of a land-holding peasant from one Fief to another was not allowed, except under the not always practicable suberfuge that he was to become a member of a religious house in the latter. There was, however, less difficulty for a landless peasant to move, for his absence would not affect the Fief's revenue.

A man might, without relinquishing his present holding, succeed to a holding in another village within the same Fief, provided that the first holding was taken care of by his relatives and they paid the usual taxes. The census of the first village generally remained unchanged, despite the moving of one of its members, if his family stayed and if the title over his holding continued the same. It was on the holdings
that the taxes were levied, and it mattered little whether the holders lived in the village. In the second village, the new resident either was registered as a full citizen, or merely had his domicile, and paid the village dues, not the public taxes, except for the new holding to which he had succeeded. Sometimes a removal was authorized of a peasant without any holding in the village in which he wished to live, and then his financial obligation in the original village was of course cancelled. No change of abode could in any event occur without an explicit sanction by village officials or Bailiffs.

In some localities, old residents of a village exercised a strong moral control over the new comers, whose continued presence they refused to tolerate, if they proved unworthy during a term of probation. Likewise, the villagers whom a man left behind sometimes demanded what was called farewell-money.

*(TME. 2. II. pt. 九籍, Nos. 3 and 4; Mkr. 281—287.*) Also see Notes 74 and 144b, below.

(39) Marriage. The passing from one village into another of a woman in marriage affected little the fiscal issue of either, and hence met no official interference. A marriage between persons of different Fiefs was, however, difficult, though not impossible if the woman was first adopted as daughter of a peasant in the man's village. Marriages between villages of the same Fief were contracted with merely formal sanctions of officials, while within the same village marriage or divorce involved little official formality, the act often preceding its registry by months or years. (Mkr, 45—65, 70, 105—116.)

It should be noted, that while official interference was absent, there was not wanting a vigorous moral sanction of the kin and of the village over all matters of marriage and divorce.

Nor should it be forgotten that when an increased population was desirable for the Fief or the village, marriages were encouraged by the authorities with paternal care, (e.g. in Yonezawa under Uesugi Harunori; *YZS. 530—531, 746*.) See Note 140, below.

(40) Right of pursuit. It has been seen (in Note 33, above) that the land deserted by the runaway was not always confiscated. Nor was it necessary for the authorities to pursue him, if he owed no debts and no taxes in arrear, for the village was responsible for the taxes to be levied on all the taxable holdings within its limits, no matter if some of its members were absent. Either the runaway's relative or friend, or any other willing person, or the entire village, would be compelled to keep the deserted land under cultivation. Sometimes, when such adjustment was readily made, the disappearance of the person was not even reported to the Intendant or Bailiff, or, if properly reported, his name was not cancelled from the village census, until it was certain or probable that he was no longer living. A search was often ordered to relatives and villagers, but the degree of eagerness with which the search was conducted depended on the interest these men personally had in the matter.

If the runaway was in heavy debts or had repeatedly failed to return taxes, those persons who were liable to be held responsible for satisfying
the claims were ordered, very often on their own request, to institute a search lasting for a definite period, usually six months. Passports were supplied to pursuers for travelling in other Fiels. During this time, periodical reports were made of the progress of the search, which there-
after was definitely prolonged (永続). Lack of zeal in pursuit, if it was brought to official notice, and if it was accompanied with a possible failure to meet the claims, was punished with a reprimand, sometimes accompanied by a fine. The property of the deserter would be forfeited, in default of a relative or friend to maintain it and pay the arrears.

Thus, one never meets an instance of a rigorous pursuit conducted by the authorities themselves. From their fiscal point of view, land was more valuable than personal service, and the dues from the land, than the land itself. These dues and the village responsible for their payment were two things which had made the lord's right of pursuit lose much of its reality.

At Saga, a relative of a criminal runaway was imprisoned for fifty days, and, if the latter returned, he was either banished or killed, but it is evident that this severity was intended as exemplary punishment for such-like misdemeanors. It did not accompany a real right of pursuit. Elsewhere returning runaway does not seem to have been so harshly treated; in some fiels which were particularly lenient, he was welcomed, and was restored to his original estate, even when the latter had been taken up by a relative.

(TMK., z. II, pts. 失踪, Nos. 5, 7, 9, 10, 13, 26, and 隘籍, Nos. 2, 9, 12; MAR, 189-230; Th, VIII, 20-21; Jh, VII, 70-86.) See also, Notes 183 and 144 b, below.

In the first years of the régime, however, when the warrior's direct power over the peasant was presumably greater than in later years, and when the idea of village-responsibility had not been elaborated, the pursuit of the non-criminal runaway was somewhat more strict, though generally not rigorous. At Iya-yamas (cf. Note 14, above), it was an offence to retain a person in any part of the whole district who had run away from any other part. (A.D. 1607-DSR, XII, v. 351.) At Iga and Ise, Bailiffs were responsible for the restoration of deserters, which probably meant, in practice, the collection of the taxes the latter owed for their estates, (A.D. 1609—ibid., XII, vi. 586); at Okazaki, the wives and children of the remaining peasants in the village were imprisoned until the runaway was found, (A.D. 1611—ibid., XII, vii. 1184-1185). The latter case was exceptional, for the Fief then needed labor for unusual public works. In some places the runaway was not molested if he remained within the same Fief, (A.D. 1611—ibid., XII, vii. 1163). One fails to discover any instance of a concert of Fiels for the pursuit or search of one another's deserters, (cf. A.D. 1611—ibid., XII, ix. 230). The nearest approach to this was the law, by no means universal, that a runaway should be delivered if claimed from his original Fief or district, (A.D. 1609—ibid., XII, vi. 772). Even if so claimed, however, he needed not always be restored, according to an order of the Suzerain's government, if his desertion was due to the bad government of an Intendant or a Bailiff (A.D. 1603—ibid., XII, i. 206). In all these instances, two things will be
found to be common: first, the duty of search, wherever it existed, devolved primarily upon peasants; second, the reason for the search was fiscal, and not personal. Already the cumbersome and ineffective method of pursuit was giving place to the later system of the joint financial responsibility of the village as described above (A. D. 1608—_ibid._ XII, v. 832).

(41) A good lord. Uesugi Harumori, pseudonym Yōzan, (1751—1822), is always cited as an exemplary lord, and his life largely influenced contemporary and subsequent administrators. From his boyhood he never ceased to study Chinese classics, as was customary with every well-bred feudal noble, and deeply imbibed the words of wisdom they contained on the care of the people. When he succeeded to the barony of Yonezawa at the age of sixteen, he took a secret oath to a deity that he would strive to be the true "father of the people". All his subsequent years were spent in an ever-increasing solicitude for the welfare of the peasants. With his continual struggle against obstacles, and his constant practical sense, benevolence, and unremitting industry, he achieved an incredible degree of success in building up new industries, improving agricultural conditions, reforming rural customs and morals, and making contented and loyal subjects of the once impoverished, dissatisfied peasants of the fief. His unbounded love of them found response in their beautiful affection and veneration for him. His death, which occurred in 1822, was lamented by all the Fief and all lovers of good government throughout the country. (YYS; NTK; Upz; Om, vi, sup. 151 ff.)

Almost as illustrous for good rural administration are the examples of Tengaru Nobumasa (1646—1710), lord of Hiroasaki; Maeda Tsunatoshi (1644—1734), lord of Kamanawa; Hosokawa Shigekata (1718—1785), lord of Kumamoto; and Matsudaira Sadao (1709—1829), once lord of Shirokawa. (Tak; KSK; Sho; Gi; Skz, XVII, 1063—1125; XIX, 1—30, 525—542, 880—893.)

(42) Study of rural conditions. An earnest study of the life of the silent peasant was another tradition in the political lore of China and Japan. A lord who was brought up amid court ladies in ignorance of the use of the sickle or of "the tree on which rice grew", was unfortunately not an altogether fabulous figure during the later years of this period, and his appearance was a curse to his fief. If his councillors had as low a sense of duty as he, his rule was certain to bring a disaster upon his house and his people.

All good lords had recourse to several well-known measures of obtaining intimate information of popular conditions. One of them was to raise efficient men of good birth of the peasant class to responsible posts in the rural administration. Land-survey, irrigation, and other important work were entrusted to their care, often with great success. (Cf. e.g., Gi, I, 22, 30—31; the case of Horie Arakiro employed by the suzerain, _Tof_, 793—794.) Another measure was to establish a close connection between village-officials and bailiffs. (e.g., see YYS, 98, 104, 106—106; 804—806, Zo, 1, 1030). Still another and always commended mode of approach was the Barou's frequent tours of the Fief under pretexts. (_DOE_ XII, v, 156; Tak, 119; _Gbr_, 158; etc.). These often took the form of hawking, which, save a brief space of time at the end of the
seventeenth century, was a universal pastime of Sassenachs and Barons throughout the period. Besides affording the much needed diversion and free exercise, the sport had the great value of bringing the lord out from the encraving influences of the inner chamber and into the heart of rustic life. It may be readily imagined that a sympathetic and observant lord could learn peasant conditions in a day of the game more than he could in years of study from treatises on rural administration. Teyseu (e.g. DSR. XII, xiii, 70) and Yoshimune, and many good lords, made capital use of this sport, visiting the poor, rewarding the virtuous, hearing complaints, discovering hidden talents, and not seldom, testing the character of vassals and peasants.

Like many other well-conceived measures of the period, however, falconry was prone to abuses in the hands of an inconsiderate lord or his ignorant retainers. Places reserved for the bowing and for the breeding of falcons were often too extensive, and were protected against trespassing with too great severity. Hawks were sent up to Edo or distant castles, and then brought out into the field, with too much pomp, by officials who would dispense themselves luxuriously at the expense of the villagers. When the lord himself came a-hunting, the nuisance was sometimes extreme, all the village being forced to run and wait upon the fowlers, who would perhaps heed neither the time nor the field of the peasant. Even under the most scrupulous lord, and with the strictest laws, some of these evils were unavoidable. (For falconry, DSR. XII, ii, 86—87, 891 ff., 347, 584, 789—790, iii, 604—605, 631, iv, 464, 558, v, 116, 158, 590, 965, viii, 83, 952—953, xiii, i, 26, 30, 79, 213, 383, 499, etc.; To. IX, 614—615, X, 145; XIII, 530 ff., 555—556, 704, XIV, 320—326, 360—361; Zo. II, 931—933; Gb. I, 35—36, IV, 2—3; Tts. 134—135, 199; KB. ii; Jy. II, 1, 22; Jo. X, 10—11; Ja. X, 35—36; Mi. II, 4v, No. 26; TKR. I, iv, 45—55; St. ii, 52—54; Nas. 17, 79—80; etc.) (The art of falconry began early in Japanese history. It was so universally practised and so highly developed, that Yashiro Hirokata devotes to it twenty-seven chapters, Bks. 179—188, 473—490, of his encyclopedic work Ko-kan yō-ron kō, 古今要覽稿, 584 chapters, 1821—1840.)

(43) Ideas of paternalism. "The lowly peasants in case today forget to think of the troubles of tomorrow. They would not appreciate the best law of the government if it causes them immediate inconvenience." The Bailiffs should frequently travel in the villages and study their conditions. "They should sometimes explain to leading peasants how beneficent the laws and orders are . . . . . . . If there be disorderly villagers, they should be speedily punished. Then the people would respect and love the authorities. When their respect and love are assured, there would be no just order that could not be executed." (From an order to Bailiffs at Yonezawa in A.D. 1804. YZS, 801—806.) "Good government of the peasants consists in guiding them in such a manner that they would be industrious even unconsciously . . . . They are innocent and thoughtless: they should be led with both mercy and severity." "By mercy is meant winning through humanity; by severity, strict and swift punishment of wrongs. Mercy alone would tend to laxity; severity alone, to harshness. Both should be used according to circumstances."
(From similar orders, A.D. 1770. *Ibid.*, 89—88.) "It was said of old that peasants were easy to employ but difficult to govern. If they were well cared for by the officials, they would likewise care for the latter." (*Ibid.*) "If you go to them with your minds filled with the desire to improve their welfare, your countenance and tone of speech will unmistakably reflect it. They will never turn angry faces at you, if you yourselves do not show them false dignity." (From another order in A.D. 1777. *Ibid.*, 262.) "Nothing can be enforced against the peasant nature. The peasant nature is the genuine human nature. . . . If you ran counter to it, the peasants would not submit, and all the forces in the world would be unable to bend them. Having little sense of duty [such as inspires the warrior], the peasants are unable to control their feelings, but think only of their convenience. Hence it is said that no order contrary to this simple nature could be executed. Although they have a fear of punishment, they are nevertheless apt to violate a law which causes them present inconvenience. No government has ever cultured against the peasant nature. It is, therefore, essential that the officials should learn to like what the people like, dislike what they dislike, and care for them with the same tenderness and wisdom as the parents bestow on their children." (A.D. 1776. *Ibid.*, 88—89.)

The following remark is attributed to Ieyasu himself:—"The amount of the taxes to be levied on the peasant is like the quantity of bait for the hawk; too much and too little are equally bad." *Tsuk., II*, 48.

"It is a great mistake to suppose that the common people would do as the officials please," said a memorialist: "They would be patient in small things, . . . but never obey and flatter the authorities, as does the warrior of to-day, when they are unjust . . . . It is the beginning of a trouble to suppress the peasants with mere official dignity." *Ibid.*, 86.

(44) *Following and knowing.* 民可使由之, 不可使知之. *Lun-yu*, VIII. 9. There is a different construction of this famous saying, according to which a free translation might be given as follows: "The people may be guided by injunctions, but may not possibly be enlightened as to their reasons." It is implied that the people are at liberty to learn the reasons in accordance with their individual intelligence, but it is physically impossible to make every one understand them. (See Chu-hi's commentary and K'uang-hi's Imperial edition. Némoto Tsurumi, also, gives a similar interpretation in his *Hon-ko ki*—*ki*, 根本通明, 論語講義, Tokyo, 1906, pp. 297—298). Whether correct or not, it is unlikely that this was the sense in which the saying was commonly understood in feudal Japan. The difference of interpretation depends largely on which phase of the complex meaning of the auxiliary 可 is emphasized.

(45) *Size of peasant's estates.* The author of this remark was a man of the Sendai sect (*SDS*, V. 9), where the maximum limit of the peasant's estate was fixed in 1728 at 5 kwan of productive value, equivalent at least to 50 koku. This limit applied, however, only to the old land registered in the official record, and not to land newly opened or acquired. Later, it seems, land acquired since 1787, also, was submitted to this limitation. It was roughly calculated that an estate of one kwan
in productive value could be managed by three men with a horse and support a family of five persons. (SDS. I. 9; V. 9; Mkr. 382.)

It is rather rare to see, as in Sendai, the maximum limit of an estate defined by law, although it was very common to prevent aggrandisement by a small number of peasants by limiting the freedom of alienating land by sale.

As for the minimum limit for the peasant's estate, which became almost universal under the Tokugawa, it appears that it did not begin to be defined with much rigor till the division of land, which was comparatively free during the first years of the period, was found to be going too far (cf. Bus. 11—15). In the first half of the seventeenth century, there were near Edo many peasants each holding as little as 6 or 7 koku and unable to keep a horse (To, XII, 96). Probably an earnest effort to restrict the division of land dated from the middle of the century (e.g., in 1656 at Okayama, BK, III, 7—8). Very soon it is found that the maximum extent was fixed, in the Suzerain's Domainland, as 10 koku (49.6 bushels) of milled rice in productivity or 1 chō (2.45 acres) in extent. (To, XLIII. 315, 319; GGI, I, 2, 18; II, 5; III; I, 2, 7, 16; TMK. 3. 260—261, pt. 分 地, No. 1.) Similar provisions prevailed in most Fiefs; sometimes ten koku was the limit for the ordinary peasant and 20 for the village-head (as in Shimano). In Kanazawa, 50 koku seems to have been the legal limit for all. In practice, however, divisions beyond these points were tolerated under certain conditions, and servants were set up as peasants with much smaller estates. (Mkr, 241, 334, 369—374; SDS, I. 27—29; Wig. v. 95—112.) See also Note 64 below.

That the laws limiting the size of an estate by restricting the alienation and division of land were never literally enforceable has already been suggested (cf. Note 96, above). That they, however, despite many transgressions, achieved their aim to a remarkable degree, may be established from the fact that, at the general land survey made in the early years of the present reign, a large majority of the peasants were found to be holders of small estates the average extent of which approximated the minimum limit established by the Tokugawa government. There were a little more than 6 million landholders, and more than 85 million entries of cultivated land. Each entry averaged 12.7% of an acre, and each landholder's estate, 14.2 entries, or, about 2 acres. (Chō, 171.) To this day, Japan remains a country of extremely small lots and small farming (Japan in the beginning 20th century, 88—90, 115), and the fact constitutes for the nation a most important economic condition. While this phenomenon has been largely due to the hilly nature of the country, it is apparent that the persistent policy of Tokugawa authorities to limit the size of the peasant estate has contributed to this result. It will be seen later that there were two other important reasons: namely, first, that the principal form of agricultural labour being manual, the working capacity of a peasant family was very limited; and, second, that the relatively high level of the taxes in comparison with rents, together with the difficulty of buying land, prevented the appearance of many large landlords.
(46) Financial publicity. There is a little confusion in the general understanding of this subject. Some think that every detail of public finance was open to the people, while others say that strict secrecy was observed. The truth is that some things were open and others concealed. What was not always withheld, and was in the Domain-lands ordered to be carefully inspected by the peasants, was the registered productivity of each piece of cultivated land, and the annual apportionment of the public taxes to each landholder, as well as the receipts and expenditures of the village finances. (Note 58, [IX, 3], [XI, 11, 12], [XXVII, 3]). Even this limited publicity was not granted in all the Fiefs. As for the manner of determining the productive capacity of a piece of land, which was in some localities bewilderingly intricate, and also the annual accounts of the Fief or the Domain-land as a whole, these were, even if the peasants were capable of comprehending them, never published among them, though some of them might learn a little by hearsay. Cf. DSR, XII, xi, 168; SDS, H. 20—21, 28; V, 9ff; Ugy, 137—138; To, X, 734; XI, 568—569; XII, 268; XIV, 54. See also Note 110, below.

(47) Publicity of the penal law. For more than a hundred years after its foundation, the Tokugawa government made no attempt at an authoritative compilation of penal laws. The third Suserain, Iemitsu (in office, 1623—1631), was not overjoyed when a private compilation of court decisions was made, for he thought that, no two cases of human disputes being precisely alike, precedents might hinder true justice (To, X, 1009—1092), so strong was the principle of equity and discretion. (Cf. Notes 28—25, above.) The need of authoritative compilations, however, must have long been felt. When the eighth Suserain, Yoshinune (in office, 1716—1745), authorized a collection of edicts and orders of his predecessors, and himself assisted in compiling notes and orders concerning mainly judicial procedure and penal law. The latter (known as Ku-chi-kata o sadame-gaki, 公事方御定書), was completed in 1742, and was augmented twenty-five years later with later laws as well as old pertinent materials, (which new edition is substantially our TKR, II). To, XIV, 214; XV, 249. About 1790 was made a brief edition (O-sadame-gaki hyakka jō, 御定書百箋, or, Kwan-sei ku-chi seiten, 宽政更張政典). The substance of these works has been done into German by Otto Rudorff in the Mitteilungen der deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens, Band V, Supplement-Heft, Yokohama, 1889, S. 82—123.

These works were intended as a guide to the judiciary, and it was explicitly stated that they could not be expected to anticipate all future cases, to some of which it might be incongruous to apply principles contained in the compilations. (See Preface to the last work mentioned, the Kyu-ka-fu o sadame-gaki, 藪幕府御定書, in the Kyu-ka-man tō series, 百万塔.)

These penal works were followed by very many private memoranda, more or less of the same nature, and some worthy compilations of general laws. (Cf. KK, IV, iv—vi.)

They nearly all related to laws for the peasant and merchant classes.
Any sly attempt at publishing laws and customs of the warrior class was met with severe repression. Nor should it be forgotten that most of the compilations contained laws which were intended primarily for the Soverain's Domain-lands. Similar works in Fiefs (such as our BK and BR) were fewer and less extensive.

No penal compilation was allowed publicity. Some of the works of the seventeenth century that have been mentioned bear the post-scripts that they should be shown to none but the three councillors of the Soverain, who had the right to sit at the high court of justice (Hyo-jo sho, 評定所). It was but true to human nature, however, to wish to see a hidden treasure because it was hidden. The authoritative penal compilations, therefore, found their way, in more or less imperfect copies in manuscript, into the libraries of many officials and commoners, where they were carefully concealed from the authorities. These copies have, since the fall of feudalism, been coming to light through second-hand book-dealers, some of them bearing titles indicating anything but the nature of the work. A copy on hand contains a curious preface, dated 1812, as follows:—"There is an old chest in my warehouse. One day, as I examined its contents, which were all worm-eaten manuscripts, I discovered these five volumes. They bore no title, but I found that they contained what might be called laws of the government. How my house came in possession of these books I had no means of telling, as they were very old. Since they should belong to the authorities, and should not be here, I had a mind to put them in fire or sink them under water. However, I did not like to destroy them. I have repaired the worm-eaten parts, rebound the work in four volumes, and now write this preface, and conceal the work in my warehouse. No one should see it. My descendants should keep it in secrecy, as if they did not know whether it existed or not, and as if they did not remember whether they had read it or not. Learn from it laws of the authorities only for your own enlightenment, and be careful not to tell others about them. In order that my intention may be evident, I give this work the title Fusa-yu so 畿, [?] a true by an humble hut], and conceal it in the warehouse. Tute Anshu, at Yashima, [Edo]."

The statement that the penal law was never officially published requires some qualification. Although the peasant was usually told what to do and what not to do, but not how he would be punished for doing what he should not do, it was of course impossible to conceal the penalty for a very common offence, as, for instance, excessive charges for the post-house service. It was also desirable to let the people know the extreme severity of punishment for an act held to be particularly odious, such as gambling. (See KR, I, Nos. 18, 19, etc.)

(48) Law and morals. How largely these coincided with each other, not only in form, but also in matter, will be seen in Notes 55 and 59, below. From remarks given in Note 43, above, it will not be difficult to see that the very point of view of the rural administrator could not help being largely moral. Law and morals were undifferentiated rather than combined. When toward the end of the eighteenth century unusually large numbers of peasants were punished for unlawfully banding
together and rioting, the suzerain's government ascribed the increase of the cases, not to the evil-mindedness of the criminals, but to their ignorance and to the want of zeal on the part of village-officials to admonish them. (To, XV, 599, 637).

(40) Right of appeal. That a chain of delegation and responsibility, however carefully forged and tightly drawn, would be unable to hold a State in perpetual peace, and that the best conceivable equilibrium between law and equity would fail to prevent all injustice, was frankly admitted by practical administrators of ancient Chinn and feudal Japan. They provided for certain rights of the people to appeal and petition even to the highest authority. "To stop the mouths of the people is more injurious than stopping the course of a river," Confucius is said to have remarked; "The river would overflow and destroy many men. The people would act likewise. Therefore, engineers dredge rivers and direct their courses, and rulers permit the people to express themselves." "If the people were not allowed to give vent to their thoughts," says an official instruction in Yonesawa, dated 1778, "their resentment would be pent up, and burst forth at a misfortune. When the people are silent under bad government, they are none the less lamenting it; if they were allowed to express themselves, the authorities might discover good points in their words, and at once correct the wrongs." (YZS, 261.)

In Japan the possible sources of wrongs for the peasants were: 1. a bad Suserain or Baron or his councillors; 2. a bad Intendant or Bailiff and his subordinates; 3. bad village-officials; and 4. bad commissioners especially appointed by the authorities to take charge of particular affairs of rural government. Of these, the last three, being in immediate contact with the people, were the most frequent origin of grievances. Every effort was made by the higher authorities to protect the people from the possible arrogance or greed of these officials, who received minute instructions regarding their conduct toward the villagers. The latter, also, were continually reminded that the officials had been forbidden to receive presents, to be entertained, to enter into pecuniary transactions with the people, or to do ought to involve them in needless expense or hardship. The annals of the period abound with instructions and orders of this nature. (Cf. e. g. DSR, XII, v, 761; vi, 349; vii, 725; ix, 255; To, X, 606, 734; XI, 662; XII, 16—17, 269; XIII, 315—320; etc., etc.) Such was, however, the force of the theory of delegation that no law could completely prevent the meek peasants from being imposed upon by irresponsible officials. It was largely against abuses from these quarters that the right of appeal had to be granted and gradually though imperceptibly increased. (For the earlier form of this right, see Note 59, [II] and [III], below. Compare this with the later form as described below in this Note.)

There was another feature of this subject which should not be forgotten. If we turn to the first of the sources of wrongs enumerated above, we shall observe therein two forces one of which operated against the other. It was the traditional policy of the Suserain's government at once to give to the Barons a large degree of autonomy, and to weaken them under every justifiable pretext. The first half of the policy served
to multiply opportunities for the second, and this result was not the least frequent in judicial affairs. A Baron, or, to be more exact, his council, having the power of life and death over the peasants of his Fief, and, in judicial and fiscal matters, being curbed by nothing but customs and conscience, might be betrayed into repeated acts of oppression, until the patient peasantry would at length rise in furious mobs or resort to a direct appeal to the government of the Suzerain. The riots would be severely repressed, and the appellants, as we shall see below, delivered up to the Baron as disloyal subjects. For, nominally, there was no appeal from the Baron, especially from the eighteen principal Barons, to the Suzerain. However, in case such a riot or appeal took place, the Suzerain might, provided the grievances were real, degrade or replace the Baron and have the wrongs rectified as far as possible. An appeal, therefore, over a Baron to the Suzerain, was explicitly forbidden—but tacitly permitted to those brave peasants who staked their lives therefore. Cf. Wig. i, 84—85.

Let us now describe the normal process of appeal and petition. The peasant could address the authorities only through village-officials, whose certificate or presence was necessary if he would bring the matter to the Intendant or Bailiff. Without this formality, no ordinary petition or complaint would be entertained. (See GGI, II, 21, 23—24, 37; Note 59, [XX], below.) A complaint, however, against the village-head or subordinate of the Intendant or Bailiff, might be lodged directly at the latter's office, but this had to be done without disorder and with due notice to the village-officials, (ibid., II, 24, 31, 37; DSB, XII, v. 331; NTK, 344—346).

An appeal could still be made from the Bailiff to the Baron's council or the Baron himself, again after notifying the Bailiff of the appellant's intention. This right was exercised from the beginning of the period (see DSB, XII, ii, 384, 386; iv, 196; v, 319), and probably dated earlier. This was the law, but its practical merit must have varied much in different Fiefs and at different times, according to the character of the Baron and his advisers.

A corresponding appeal over the intendant was carried to the Suzerain's high court of justice at Edo. The Hyō-jō sho (評定所, place of determination), as the court was called, was begun in 1631, and, as it was finally constituted, heard, besides appeals, disputes involving the jurisdictions of two or all of the three high commissioners of the Suzerain (i.e., Ōhi-ša bu-gyō, 寺社奉行, commissioner of religious institutions, Mochi bu-gyō, 順奉行, of the municipality of Edo, and Kin-jo bu-gyō, 勘定奉行, of finance) or unusually important cases in each commissioner's jurisdiction, and complaints and petitions from Barons and the Suzerain's lower vassals. (See KR, I, Nos. 1—12, II, Nos. 1—8; TK, II, i, 23—143, 409—502). Although it was forbidden to local officials to suppress peasants' appeals (To, XIII, 316, 1069), it nevertheless became desirable, when the business of this court multiplied, to relegate it as far as it was practicable to the commissioners (bu-gyō, 奉行) at Kyoto and Osaka, and to order the peasants to settle their affairs wherever possible at local courts (KR, I, No. 15, II, No. 1; TK,
II. i. 192, 403 ff.; To, XIII. 1178. Besides, when they appealed to Edo, they were to notify the local officials, and bear the expenses. (Kr. 1, Nos. 3, 6. II. No. 24; Tk. II. i. 71 ff., 92 ff., 93 ff.; To, X. 298, 301; Ggl. I. 39.) Cf. Wig. i. 87—94.

From 1732, the Suzerain Yoshinune ordered a box (me-yasa bako, 目安箱) to be hung before the court at Edo, and, from 1726, in Kyoto and Osaka also, for the purpose of receiving appeals and petitions from common people and outlaws (To, XIII. 1178, XIV. 214—216). He himself examined their contents. That this would encourage appeals and bring about good results, as it did, in the hands of a good Suzerain might be imagined, but later it happened not seldom that corrupt commissioners intercepted appeals (e. g., Eta, 19). Sporadic efforts were made to restore this institution to real service (e. g., To, I. 112), but there is little reason to believe that they were followed by continued successes. Like so many other discretionary measures of this bureaucratic government, the use of this device, as has been the fate of similar practices in China, depended entirely upon the frail human nature of the officials.

When the wrongs of an Intendant were real, and when they were brought to the commissioners’ notice in such a way as it was impossible to deny them, a summary justice could be expected by the appealing peasants (e. g., Dsr. XII. i. 356). If the court failed to satisfy them, there was yet another way open to them, namely a direct appeal to the Suzerain in person while on a visit or in hunting. This was done in an appeal, not only from an Intendant, but also from a Baron. This irregularity was punished with imprisonment or death, and if the appeal was against a Baron, the appellant was guilty of the double offence of transgressing on the dignity of the Suzerain and of violating the rule that there was no appeal from a Baron. However, if the Suzerain happened to be eager for justice or for extending his power at the expense of the Barons, the complaint would be examined and satisfied, and the unjust Intendant or Baron degraded (e. g., To, IX. 614—615, XI, 929, XIV, 280). The following are two well-known instances of appeals to Edo.

In 1651 the young Hotta Masamobu succeeded to the lordship of Sakura, Shime-osa, and was appointed a councillor to the Suzerain. Taking advantage of his youth and his absence in Edo, his councillors suddenly increased the land-tax to an enormous extent, and, rejected petitions from all the village heads of the Fief to reduce it to its former level. Large numbers of peasants sold their holdings, and, dividing their families, wandered out. In 1654, more than three hundred representatives repaired to Edo and complained at the residence of Masamobu, but were not listened to. Then a petition was made to one of his fellow-councillors, which also was returned. Kiuchi (better known as Sakura) Sōgorō, one of the six representatives who had remained in Edo, boldly presented a petition to the Suzerain Ietsuna, as he was on his way to the temple at Ueno. The latter delivered the petition and the six men to Masamobu. He still believed his councillors, and allowed Sōgorō and his wife to be crucified, his four children to be beheaded, and the other five leaders to be banished. Later, however, the tax was restored to

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the original rate, and the councillors punished. In 1690, Masanobu forfeited his Fief for another offence. Sogorō has been deified by the peasants, and his story has been dramatized into a thrilling play. (See the Tei-koku shin-mei shi-ten, ed. 1904, 1428—1429; the Hau-kan-pu, VI, pt. Hotta.)

The district Yashiro, in Uesen, was severed from the Yonezawa fief and restored to the Suezara in 1664, but its government was still put under charge of the same Fief. In 1863, the peasants of the thirty-five villages of this district complained unsuccessfully, even in Edo, against an unjust treatment from the authorities of Yonezawa. Finally, the petition was put in a beautiful lacquered box bearing the emblem of the Suezara’s house, and was purposely left in a restaurant, whence it was at once taken to the Suezara. The district was definitively confiscated from the Fief, but the chief appellant was delivered to the lord of the Fief, who crucified him. (Dekk., 4373; Dai Ni-hon shin-mei shi-sho, 2nd. edition, 1891, III, 36—37.)

(50) The Chinese house-groups. This institution is considered as old as the Chou dynasty, and has, as will be seen in the following sketch, persisted throughout the long history of China. According to the Chou li (周禮) and its commentaries, each of the six kiang (疆) and six sui (遂), into which the Inner Country of China was divided, was organized as follows: in the kiang, five houses formed a pi (比) and were mutually responsible (保, pao), five pi made a fii (面), four fii a tsu (區), five tsu a tang (腸), five tang a chou (州), and five chou the kiang; in the sui, five houses formed a lin (鄰), five lin a li (里), four li a pi’wan (庇), five pi’wan a pi (比), five pi a hien (隣), and five hien the sui. The five-house group was responsible for the mutual help and admonition of its members. This is the generally accepted view of the organization under the Chou dynasty, although it would not be easy to prove either that the system in this advanced form was so old as the dynasty, or that, if so, it was put into universal practice. The general idea of the system, namely, that neighboring houses should with responsibility watch and help one another, and that the larger administrative divisions of territory should as far as possible be based upon this group as a unit and held together by a chain of responsibility, date apparently several centuries before the Christian era. They are found in practice in several different forms among the contending States into which the kingdom of Chou became divided, and in Ts’in. The latter made five houses a group and two adjoining groups, consisting of ten houses, a unit with joint responsibility for the crimes of its members.

After the Christian era, the general idea, having come through the hands of various dynasties, was made under the great T’ang dynasty into a system which became the model for Japan to copy since 845. In this system, four houses made a lin and five houses a pao—this distinction is not clear, (some say, five houses made a lin and five lin a pao); a hundred houses formed a li, and five li a kiang. Under the Sung dynasty, the idea was elaborated by several administrators for use in their particular spheres, the general conception, however, being always the same.

It is not until one reaches the Ming dynasty that he finds the system
really extensively applied, as well as fully described. Barring local variations, generally ten houses formed a kia (甲, which was an old term), with an additional house of the group-chief (甲首, kia-shou); ten kia formed a li (里, otherwise called pao, 保), with ten additional houses of heads (li-ch’ang, 里長), who each held the office in turn for a year. This personage, like the Japanese village-head, was assisted by several chiefs. Besides these, there was an elder (li-lao, 里老) in each li, who at first exercised a considerable moral influence, but who in later years of the dynasty was treated by officials as a mere publican, and in many a li declined to serve any longer.

An important part of the business of the kia was periodically to take the census of its members, in order to ascertain that none were suspicious characters and none adhered to evil religious sects.

Once in every month, the people in every li assembled at the public hall of the village (鄉約亭), where amid solemn music the li-ch’ang read and explained the Imperial instructions to the people. These instructions, which were always posted at the hall for exhibition, were intended to inculcate the spirit of concord and mutual service among peasant members. The instructions were arranged under six heads: 1. obedience to the parents; 2. respect of authority and age; 3. concord in the village, including mutual cordiality, and assistance for the sick, the poor, and orphans, and at funerals; 4. education of children, including reverence for the teachers, and rites of majority and marriage; 5. industry; and 6. abstention from evil deeds, the latter including the harboring of thieves and robbers, disseminating false stories, arrogance, extravagance, heresy, theft, quarrel, murder, disputes about water and forests, needless killing of cattle, and other offences.

The village-elder exercised certain judicial power over minor cases, though this feature of the village administration disappeared later with the elder’s loss of influence.

The li had also a temple for the deity of the earth (里社稷) where, besides other minor rites, sacrifices were offered in spring and in autumn, followed by a feast for the peasants. On this occasion, a spokesman solemnly swore: “The people of our li should observe rules of proper conduct, and the strong shall not oppress the weak. Those who act contrariwise would be examined and reported to the authorities. The family of poor and forlorn persons shall be supported by the village for three years; the people shall assist each other in marriage and at funeral. Those who defy others or commit theft, fraud, or any other offence whatsoever, shall not be admitted into our company.” Then the villagers sat down in the order of seniority, and passed the day in a happy feast.

There was, in accordance with a time-honored custom, another periodical occasion for conviviality of the village, (鄉飲酒禮), at which venerated seniors, ex-officials, and scholars, were given places of distinction, and the other villagers sat in the strict order of their ages, regardless of wealth.

The li also had its special granary (社倉), to which all the families contributed according to their means, and which was opened in case of a famine. This, too, was an old institution.
The village supported a primary school (社学), where the Imperial instructions already referred to and elementary laws were taught to such pupils as wished to enroll. It was the policy of the government to encourage the establishment of village-schools, but not to interfere with their affairs.

The laws of the present dynasty recognize the existence of kia-shiu and li-ch'ang organized in the same manner as that of Ming. They hold their office by rotation, and take charge of the affairs, including the financial, of the village. In some places, it seems, ten houses make a p'ai (牌), ten p'ai a kia, and ten kia a pao, each with its elected head. The Japanese authorities of the leased land at Kwantung in southern Manchuria are making use of the system of the joint responsibility of groups with considerable success in maintaining the peace of the villages against bandits and in arresting the latter.

See Prof. Tomizawa Hiroto, Shū-dai go-ka no kumi-ai (戸水寬人, 周代五家の組合, No. 5 of the Hōsei ron-sō 法理論叢 series); No. I, 11; T'ang lu-tien (唐六典, ed. 1885), III, 9; Gok, 2–10; Asakawa, Early inst. life, 214–215; Asai Tororo, Shi-nu hō-sei shi (浅井虎夫, 支那法制史, Tokyo, 1904), pp. 28–29, 43, 50, 185; 276, 332–336; the same author's article in the Kokka Gakken shusshi (國家學會雑誌) for April, 1906, pp. 63–84; Ta-T'ing lu (大清律, pt. 户役, art. 護主保里長; the Ts-A Dō-bun Ketsu-bō-ko (東亞同文會報告), No. 115, p. 99; current numbers of the Main-shū nichichi shin-bun (滿洲日日新聞).

(51) The group idea copied in Japan. Beginning with the year 645, Japan entered upon the great work of reorganizing her state-system largely on the basis of the Chinese institutions of the early T'ang period. (Cf. Asakawa, Early inst. life, J. Murdoch, History of Japan, vol. 1, Tokyo, 1919, chap. 5.) The Decree of the Reform of 649 contains the following: "For the first time, make a census of the families (戸籍), a record of financial accounts, and an equal allotment of land. Fifty families (戸) shall form a sato (里, Chinese pronunciation, lo), and every sato shall have a chief (長). Chin. ch'ang), whose duty shall be to examine the families (戸) and their members (口), to promote agriculture and sericulture, to forbid and examine misdeeds, and to collect the taxes and enforce forced labor." (Ni-bun sho-ki, 日本書紀, XXV. Tai-kwa year 2 month 1). In 652, the order was repeated: Make a census of the families. Fifty families shall form a sato, and every sato shall have a chief. The head of the family (戸主) shall be the chief member of a house (家長). As regards the families (戸), five houses (家) shall be mutually responsible [shall mutually protect: 保, chin, pao], shall make one man the chief (長), and shall mutually examine [the conduct of the members]." (Ibid., Haku-chi, y. 3 in. 4. The older translations of these passages that occur in Asakawa, op. cit., p. 255, and Aston, Nihonji, II, 108 & 242, cannot be accepted.)

In the Ryo no gi-ge (令義解, commentary, officially compiled in 826–833, on the Code of law which was edited in 700–701 and revised slightly in 718, 791 and 797) occur the following passages, (large letters probably indicating portions in the text of 700–701, and words of the
commentary—being here put in parentheses)—"AS REGARDS FAMILIES, FIFTY FAMILIES SHALL FORM A SATO. (If there be sixty families [in the same neighborhood], ten of them shall be separated as a sato and have a chief. If there be less than ten families [in the same neighborhood], they shall be included in a larger village, and not be separated.) EACH SATO SHALL HAVE A CHIEF, whose duty shall be to examine the families and their members, to promote agriculture and sericulture, to forbid and examine misdeeds, and to collect dues and enforce forced labor. WHERE MOUNTAINOUS OR REMOTE AND SPARSELY POPULATED (, , ), [SATO] SHALL BE MARKED OFF ACCORDING TO CONVENIENCE (, , ). If [the neighborhood] does not contain ten families, it shall be made into mutually protecting groups of five houses, and included in a large village.), , THE HEAD OF THE FAMILY SHALL BE THE CHIEF MEMBER OF A HOUSE. (The eldest son of the main line, , , ) , AS REGARDS THE FAMILIES, FIVE HOUSES SHALL BE MUTUALLY RESPONSIBLE [, ], SHALL MAKE ONE MAN THE CHIEF, AND SHALL EXAMINE AND PREVENT MISDEEDS. IF A TRAVELLER PASSING THROUGH THE VILLAGE STOPS OVER NIGHT, OR IF A MEMBER OF A GROUP [保, Chin. pao, Jap. ka] GOES AWAY, THE GROUP SHALL BE NOTIFIED THEREOF. IF A FAMILY MEMBER RUNS AWAY, LET THE FIVE-HOUSE GROUP PURSUE HIM. . . ." (VIII, arts. 1, 3, 9, 10.) (For bibliographical comments of the two sources from which the above passages have been cited, see Asakawa, op. cit., 7–17.)

In these passages, it is evident that the Japanese five-house group was a copy of the Chinese prototype, the idea and language of both being largely identical. One point, however, of great importance in the copy is not found in the model, namely, the 寶 (Chin. ka; Jap. pron. ko; corresponding native word, か), which I have purposely translated with the loose term ‘family’. It did not exclude the idea of a ‘house’, but often it consisted of persons living in near-by houses and mostly related to one another by blood-tie. Thus, sometimes scores of men and women formed one か and had one か-head. The fragments of census of the eighth century which still exist (DKM, I) confirm the supposition to which some of the clauses quoted above point, that often neighboring houses were related to one another in blood. Indeed, an old record quoted in the 郡部の五家集. 集解. commentary on the 郡部 compiled in the latter half of the ninth century, says: [In organizing five-house groups], ‘Even if one family (か) contained ten houses (家), the family shall form its own limit [i.e., form a group by itself], regardless of the number of the houses composing it’ (Gg, 12.) Add to these considerations the fact that in the language of China in this general period, 寶 and 家 did not differ much from each other in the average number of persons they contained, if indeed the two were not often identical, as they later came to be in Japan also. They could be confused, but not so in the Japan of the Reform period. (Of the excellent articles by Mr. Y. Shimm on the Japanese family in the eighth century, in Sia, XX, Nos. 3–4, March-May, 1909.) Here the village (sato) was
built upon *families*, and the *group was composed of neighbouring houses not infrequently related to one another. The inference is then irresistible that, as a whole, the Japanese copy of the house-group system must have been less purely administrative and more consanguinous in nature than the Chinese model.

This comparatively natural character of the Japanese institution is also notable in the group and village of the Tokugawa period. Here, however, the qualifying principle was often historic associations than ties of blood.

(52) The *group system reappeared after 1600.* That the general idea of responsible groups of houses was not entirely forgotten during the long and eventful ages which intervened between the Reform and the battle of Sekigahara, is a point which falls beyond the limits of this paper. (See *Ggk*, 31—76; *Gga*, 4—5; *Nt*, I, 6; *Dek*, introd., 74.)

As one reaches the years just before and after 1600, he finds that warriors, of the lower grades at least, were not seldom organized in groups of five or ten men responsible for their good behavior. (Under Hideyoshi, *Ggk*, 68—70; *Isb*, 73—79; *DRS*, XII, i, 773; in Yonezawa, *ibid.*, i, 836, 773, x, 3; in Saga, *ibid.*, i, 793; in Kochi, *ibid.*, i, 736; at Uwajima, *ibid.*, v, 402—403; in Iga, *ibid.*, v, 762; under the Mori, *ibid.*, v, 551—554; in Edo, *ibid.*, ix, 559; &c.) Among peasants and burghers, it is probable that, though less frequently than among warriors, similar customs existed here and there. It also, appears to have been Hideyoshi's intention to extend the system among the non-feudal, as well as feudal, classes all over the country. (*Ggk*, 72 ff.) The occasional mentions of groups found in documents of this age relating to different parts of Japan may, in some cases, refer to results of Hideyoshi's probable policy just outlined. Some other cases may be survivals of older institutions. In Mimasaka, for example, we find in deeds of sale dated 1603 and 1607 men styled 保 among witnesses. (*ibid.*, i, 855; v, 335). The ten-man groups (拾人 五) in Iga and five-man groups (五人 組) in Yonezawa in 1606, and the groups (組) in Omi in 1611, do not seem to have been new creations. (*ibid.*, v, 782, 831, ix, 224). Even if they had been recently organized, it is more probable that they were patterned after sporadic local survivals than that they were all created anew in accordance with an order of the Soskeimai. The occasional kami-gashira (ibid., ix, 219, 224, &c.) may be heads of groups from whom evolved the later village-chiefs of the same title, (see Note 16, above). However that may be, it is certain that the groups, whether old or recent, were built upon the fundamental idea of the joint responsibility of their members. (see the above references to *DSR*).

That some places had entirely forgotten the system and had now to adjust themselves to it with difficulty may be inferred from the following example of Kyoto. "This year [1609]", says the Tasa-dayki (当代記 annals 1565—1615), "it happened that the burghers of Kyoto were organized in groups of ten men. This was by the Soskeimai's order. All men of the city, high and low, were embarrassed, for if one man out of ten committed an offence, all the other nine would be punished therefor. This arrangement had been ordered because there prevailed robbery in Kyoto,
Fushimi, and their neighborhood. But the rich folks, being reluctant to be grouped with the poor, carried their treasures out of the city. This measure was said to have been unprecedented in the history of Kyōto. (DSR, XII, i, 773.) The writer is, of course, incorrect in his statement that the measure was unprecedented in Kyōto.

It is clear that from the first quarter of the seventeenth century, the Suzerain's government zealously extended the system to those places in his Domain-lands where it had died out. However, such an exhaustive institution could not be resuscitated in one day. It is found in operation about Edo already in 1628, (To, X, 64—65, 901), and, eleven years later, a comprehensive body of instructions was, through five-man groups, disseminated in the eighth Kwantō provinces and Kai, Shinano, and Iida, (ibid., 463—484; Note 59, [VII], below). Henceforth the system was continually used as the medium of securing peace and concord, and enforcing orders against Catholicism, the harboring of outlaws, the use of arms by the common people, and the like, at least in the provinces just named or in Domain-lands, (ibid., X, 685—672, 734—965, 1052; XI, 204, 290; XII, 99, 496; XIII, 182, 770). It may be presumed that the system was fairly well installed in all the Domain-lands in the course of the seventeenth century. The search for Catholic converts and dangerous outlaws, the latter of whom, owing to peculiar conditions of the feudal organization, were gradually increasing, (cf. Toh, 221—223), appears to have formed a special motive for the eager extension of the group system. A constant need for it must also have been felt in affording order and contentment to the people and in securing their sure support. The system made it possible to serve their ends at once with comparatively small cost and care to the Suzerain and with the satisfaction on the part of the people of exercising a large degree of self-government.

In the meantime, the merit of the system had commended itself to the Barons as well, who were prompted to adopt it by the surviving examples with which some of them must have been acquainted, as well as by the example and encouragement shown by the Suzerain's government. The latter advised the Barons, in 1661, to facilitate the search for Catholics by organizing groups of five men, (To, XI, 390—Note 59, [XVI], below). As was usual with the Fiefs, however, there was a wide difference among them, both of the times in which the system was established, and of the forms it took. Some Fiefs had it, if indeed they had not inherited it from earlier times, in the first quarter (DSR, XII, v, 762, 831; IX, 219, 224) and even in the first decade after 1600 (ibid., i, 855; v, 385). The system was in good order in Okayama in 1642 (BE, 1, 4—12), and in Sendai in 1718 (SDS, I, 19), to take only cases of positive certainty. It is possible, however, that in some instances groups were not adequately organized till after 1800, (e.g., Shōnai in 1819, Ggs, 196).

(58) The normal group. All the known groups in villages were based on the same general principles and designed for the same general purposes with which the reader is now familiar. There was, however, a considerable difference in their names and forms, particularly in the Fiefs. The groups in the Domain-lands were probably all called, as in
many. Fiefe, go-nin-gumi (五人組, five-man group), consisting usually of five—more or less—land-holding house-fathers, one of whom served as group-chief, by either election or rotation. The latter, called fude-gashi or hitori (筆頭, first writer), han-gashira (判頭, first seal), or the like, was seldom a very important personage in the government of the entire village. Neighbors would normally be in the same groups, (GGI, I, 13, 21; II, 8), but historic or social conditions largely interfered with this arrangement even in Domain-lands, (Ggk, 14—19). Cases were not wanting in which a group and neighboring houses were held responsible for offences, (GGI, II, 8—9; KH, I, No. 10; Ggk, 66; YZS, 44). Cf. Sbar, 93—97.

To take a few variants found in Fiefe, Yonezawa changed its system several times during the period; it had five-man groups (go-nin-gumi) already in 1602 (JRsR, XII, v. 831); in 1769, some of them seemed to be composed of relatives, and others of neighbors (一類五人組 and 家並五人組, YZS, 4, 366); in 1801, there had been groups for religious examination and for the collection of taxes (宗門組 and 所納組), which were now all incorporated into five-man and ten-man groups (ibid., 748 ff.), and at the end of the feudal period, about fifteen men formed a larger group, which was divided into three smaller groups (kamiros). (Mtr, 114). At Iya-uma (cf. Note 14, above), every fifteen to twenty-five houses composed a group (fu-shin-gumi, 植請組, building group), which furnished thatch and rope when one of its members built or repaired his house, and supplied free labor till the work was completed. The houses, therefore, could not be disposed of without the consent of the group. (Ibid., 217, 439). In Suwö, the head of the five-man group was called kuro-boshi (黒星, literally, black star, ibid., 187), the village-chief being designated kuro-gashira (黒頭, the characters meaning, respectively, 'marginal land between rice-fields and head').

These and other variations from the normal type were no doubt in some instances owing to peculiar social conditions of different regions, and in others, to the persistence of older institutions of similar nature. Among these cases of historic survivals, Professor S. Miura mentions some instances of ten-man groups and of irregular small groups of adjoining and opposite houses (Ggk, 66, 76). It is evident that, in many examples, abnormal types were only slowly, if at all, assimilated to the normal.

(54) No person without group. It was the fixed rule that every inhabitant in the village should belong to some group. (GGI, I, 12, 19; II, 1, 17; III, I, 15, 16, etc.). In many examples, however, only landholders were full members of the groups, and their tenants and servants, priests attached to no temples, and the like, were included under the names of the owners of the land which they tilled or of the houses in which they lived (ibid., Mtr, 27—29; SDS, I, 19).

(55) Edicts, sight-orders, and oral commands. Occasional written orders were on kaki-take (御書付) and on fore-gaki (御箋書). (E.g., KR, I, Nos. 8—6, 10—12, 19—40, etc.; GGI, I, I, II, 38, etc.). Some orders came to the Intendants or Bailiffs, who transmitted them orally to the village officials or the villagers themselves. (E.g., To, X, 463, 665, 734, 1082, XI, 390, XIII, 318, etc.)
Public sign-boards (known as kō-satsu or taka-fuda, 高札, and sei-satsu, 制札, the latter term being sometimes technically applied to written prohibitory orders of the more special or less extensive applications) posted up in conspicuous places on streets, roads, or the coast, had for a long time been a common device of official proclamation, and were kept up throughout the period. (DSR, XII, iv, 196–197; v, 973–974; vi, 189; ix, 220; Th, X, 298, 537, 663, 669; etc.; Ksd, 1513–1516.) They were revised throughout the Domain-lands in the first half of the eighteenth century and were thenceforth renewed at the change of the year-period (正月) or the succession of the Suzein, and when worn out by exposure. The nature of their contents may be gathered from the following specimens, which were seen most frequently in Domain-lands till the end of the period. (Th, VIII, 10–20; Jg, II, i, 13–15; cf. KR, I, Nos. 13–18.)

[1] (About 2 feet high and 7 feet long.)
"Parent and child, brothers, husband and wife, and all relatives, shall be harmonious; mercy shall be shown even unto the lowest servants. Servitors shall be faithful to their masters.
"[Every one] shall be diligent in his pursuit; shall not be idle, and in every thing shall not exceed the bounds of his position and means.
"Fraudulent deeds, unreasonable speech, and whatever else that might do harm unto others, are forbidden.
"All kinds of gambling are strictly forbidden.
"One shall refrain from making a quarrel or dispute, and should one occur, shall not unnecessarily meddle with it. Nor shall he conceal a wounded person.
"Needless use of fire-arms is forbidden. Any one found violating this rule shall be reported. If one connives at the offence, and if it is discovered from another source, he will be adjudged guilty of a heavy offence.
"If there be thieves, robbers, or evil persons, their presence shall be reported. The person reporting will receive a sure reward.
"Do not congregate at an execution.
"The sale and purchase of persons is strictly forbidden. A man or woman servant may, however, serve for life or by heredity, if that is the voluntary agreement of the parties. If a hereditary servant or an old resident has gone elsewhere and settled down there with his family, he shall not be recalled, unless he is an offender.
"The above articles shall be observed. Any person violating them will be punished accordingly.
"Shi-toku 1st year 5th month—day, [1771].

[2] (About 1.3 by 2.1 ft.)
"Commissioner."

[3] (About 1.5 by 3.6 ft.)
"Christianity [Catholicism] has for years been under prohibition. Any suspicious person shall be reported. Rewards will be given as follows:—
500 pieces of silver to a person reporting a Padre,
300 pieces of silver to a person reporting a Friar,
The same amount to a person reporting a re-convert, and
100 pieces of silver to a person reporting individuals living in the
same house with Christians or reporting converts.
The reporter, even if he be a follower of the sect, [i.e., if he has re-
counted and reported against other Catholics], may be given 500 pieces
of silver, according to the importance of the case he reports. If any one
harbors a Christian, and if the latter is discovered from other sources,
the village-head and the five-man group of the place will be punished
together with the offenders.
Shō-tokun 1st year 5th month—day, [1711].

[4] (About 1.4 by 1.3 ft.)
The assembling of many peasants for any kind of evil purpose is
called to-bō (徒 黨), and the forcing of a petition by a to-bō is gō-so
（強 訴）and the desertion of the village by them in concert is chō-ten
（退 轉, 喚-ten). All these offences have a long time since been for-
bidden. If any such case is discovered in one’s own or neighbouring
village, it shall at once be reported. Reward will be given as follows:—
100 pieces of silver to a person reporting a to-bō,
The same amount to a person reporting a gō-so, and
The same amount to a person reporting a chō-ten.
According to the case, the privilege of wearing a sword and bearing
a family-name may be granted to the person reporting. Even if he
was one of the offending party, he would receive pardon and reward if
he reported the name of the leader.
When, owing to the absence of any one reporting, villages became
restless, if in that case there be any village that arrested offenders and
allowed none of its inhabitants to take part in the concert, the principal
men so doing, whether village-officials or peasants, would be rewarded
with pieces of silver and the privilege of wearing swords and using
family-names. If there were any other persons who assisted in pacify-
ing the village, they also would be rewarded accordingly.
Mei-wa 7th year 4th month, [1770].

"Commissioner."

Oral instructions. Besides the regular oral commands delivered through
official channels, some Barons followed the historic customs of China of
giving the people of the village moral exhortations through teachers.
These were usually Confucian scholars. Sometimes they were sent in
circuit through the ōeki, villagers assembling to receive them and listen
to their lectures. In the following quotation will be seen the character
of the instruction. In 1688, some dozen representative peasants of the
Nagoya ōeki, regretting that the custom once in vogue had been dis-
continued, petitioned that it be revived, and said:—“... If in plain
language and with persistence it were taught year after year how high
was the virtue of the founder of the régime [i.e., Ieyasu], how great
was the benefit of the State and its merciful government, and, as regards
our daily conduct, how important it was to be frugal, to practise filial
piety towards parents and fraternal respect for elder brothers, and to be diligent in agriculture and not to fall into other occupations, it is certain that, by the grace of benevolent rule, evil customs would be changed, and all the peasants would adopt simple and sincere manners. The government, also, would be much relieved of trouble . . . ." (Quoted by Mr. K. Nakamura, Sh., XIX, v, 12-13.)

(56) Repetition of orders. Cf., e.g., Uesugi Kagetsu's orders in 1603, 1607, and 1608, repeating substantially the same ideas, in DSR, XII, i, 637; v, 110, 881. Group-records often refer to instructions that had frequently been reiterated, (GGI, I, 1, 6). The Suyerin's government was extremely persistent, dwelling continually on identical points in language slightly altered from time to time, (To, X, 463-464, 665-666, 672, 734-735; XI, 41, 204, 585, 766; XII, 99ff.; XIII, 162ff., 319-320, 485, 697, 701, etc.; KRE, 産業部, I, 195ff., etc.) See Note 59, below.

(57) Group-records. I venture the suggestion that the custom which was rather common among the warrior class for men charged with a mission to repeat almost verbatim the instructions given them, with an oath that they would be followed, (e.g., see DSR, XII, v, 319ff., xi, 360ff., xii, 657-688; To, IX, 671ff., etc.; also see Notes 9 and 16, above), was extended to the peasant groups, and became the origin of their records. These in substance re-stated all the important instructions that had been repeatedly given to the village and enforced through the instrumentality of the group, and was accompanied by the pledge of the peasants to observe them.

The group-records came into existence only by degrees. Professor Hoshimi quoted Mr. Oda as saying that they were first made in 1664, and adds that whereby the group system was almost perfected (Ggs, 8, 49), but I fail to trace the first part of this statement to its source, and entertain doubts about the second. The group system itself must have been far from being either universal or perfect in 1664, (see Note 52, above). As for the group-record, in Buzen it seems to have existed in a fairly complete form in 1657, and thirty years later was probably already so complete that between that date and 1836 there was little change in the substance of the articles the record contained. (GGI, IV, 22, and inferences from citations throughout the work.) As we note that the model articles for the group-record compiled by the Suyerin's government in 1725 (Ggs, sup. i-19) are much the same as those of Buzen in 1657 and 1857, we infer that their substance must have actually appeared in the group-records in several places about the latter dates. At least, the practice of keeping the records appears to have pretty generally prevailed in the Domain-lands in 1722. (Cf. edict To, XIII, 749-750.) In the Fiets, however, the group-record was still unknown in 1757 in some places even in provinces nearest Edo, (ibid., 1203-1204; KR, I, No. 57). It was in the making in Yonezawa so late as 1769 or 1770, (YZZ, 89, 91). In 1786, there were some regions which had not yet returned the religious census of their villages (To, XV, 783); if the performance of this duty, which was one of the first raisons d'être of the group system, was still so remiss, one is forced to suppose that the very
system, still less the group-record, may have been but insecurely established in those places at that late date.

(58) The reading and revising of the group-record. Seals. For difference in the frequency of reading, see GGI, III, 6, IV, 20–21, 22; Ggs, 44–48, and for the frequency of revision, which was either annual, septennial, or indefinite, see GGI, IV, 22; Ggs, 136. The suzerain's government ordered, in 1722, that the articles of the group-records should be given to pupils in village-schools for their lessons in handwriting. (To, XIII, 749.)

Seals. Each person had an officially registered seal of his own, which alone had to be used by him on all occasions. Every change of a seal was to be immediately reported to the village-head. A person's name on a document was not always signed by him, but under it he affixed his seal with his own hand. Though repeatedly warned, however, peasants were often inclined to leave their seals with village-officials and authorize them to use them when necessary. Counterfeiting another person's seal and drawing with it a false document was punishable with degradation with exposure of the person before execution and of the head afterward. (GGI, I, II, 22; II, 13–14, 28; KK, II, No. 62; TK, II, iii, 485–500.)

(59) Laws for the peasants. An attempt is made in the following summary to state, not topically, but chronologically, such orders and instructions as were given by the Suezrain's government to the peasants of the Domain-lands. It is hoped that this summary given in this form may be found useful to the student whose interest is more than merely institutional. (For specimens of group-records, the reader is referred to Sau, 177–210. For modern survivals, GS, MK, MO, OG.)

(I) 1651. An edict to the villages. (TKK, I, 1, 226.)

[1] Peasants who have run away dissatisfied with the government of an official shall not be restored.


[3] Peasants shall not be killed. If one has committed an offence, he shall be arrested and examined at the Intendant's office.

(II) 1668. An edict to the villages. (Ibid., 227.)

[1] Peasants running away dissatisfied with the government of an official may pay dues and live in any place in a neighboring district.

[2] If an unjust official holds a personal hostage from a peasant, the latter may appeal directly to Edo. Otherwise direct appeals are forbidden.

[3] How could the Edo government know details of local taxation? Appeals about taxation are forbidden.

[4] An appeal against an official may be made only with full preparation to leave his district.

[5] An appeal shall not be presented to Edo before the Intendant has been petitioned two or three times. A direct appeal may be made, however, if it contains complaint against the Intendant.

(III) 1698. An edict to the villages. (Ibid., 228.)

[1] (The same as [I, 1].)
[2] (The same as [I, 2].)

[3] (The same as [II, 4].)

[4] (Similar to [II, 3].)

[5] (The same as [II, 2] and the first half of [5].)

[6] (The same as the last half of [II, 5].)

[7] (The same as [I, 3].)

(V) 1616. (Ibid., 229.)

1. Henceforth, when commuting the land-tax in money, the rate shall be on the basis of 3 to 7 shō (about 1.8 bushels) to a straw-bag of rice.


[3] If commuted, the kuchi-so (口 介) shall be 3 per cent.

(V) 1620. An edict. (To, X, 64—65.)

1. A person finding hawks in nest [in a place reserved for hawks] will be rewarded, and his five-man group will be excused from keeping watch over the place. A person finding a new nest will receive a double reward.

2. Any one stealing young hawks from a nest [in a reserved place] will, with his relatives, be beheaded, and his five-man group will be imprisoned. A person arresting and reporting him will, even if he was in collusion with him, be pardoned and rewarded with fifty pieces of gold.

(VI) 1628. An edict. (Ibid., 425; TKR, I, v, 260.)

The peasant shall use only grass clothes and cotton clothes for their clothes, but their wives and daughters and village-heads may use pongee, but nothing of better qualities.

(VII) 1637. An edict to the Intendants and Bailiffs in the eight Kwantō provinces, Kai, Shinano, and Ibu. (To, X, 463—484; TKR, I, v, 231.)

1. Examine the five-man groups with ever increasing zeal.

2. Examine each district separately, so that there may be no bad man. If a wicked man is discovered, not only his five-man group, but all the district, may be punished, according to the nature of the case.

3. Do not lodge a suspicious stranger. If after lodging a stranger he is found suspicious, the case shall be reported to the five-man group and village-officials.

4. If there be persons wishing to settle in the district or in a newly opened place, their character and origin shall be investigated, and permission be given only to trustworthy persons.

5. If a peasant wishes to go elsewhere as servant or for a commercial transaction, he shall report his destination to the five-man group and village-officials.

6. If there be a robber or any other wicked man, his presence shall at once be reported. Even an accomplice will be pardoned if he so reports. If the offender is concealed and is discovered through other sources of information, the five-man group and even village-officials may be punished after examination. If a revenge from an accomplice or relative is feared, the report shall be made secretly; the authorities will reward the person reporting, and strictly command the offender not to avenge himself on him,
[7] If a suspicious character is found in hiding in a temple or wood, the village-officials and peasants shall arrest and deliver him to the Intendant or Bailiff, or, if that is impossible, pursue and arrest him where he stops. It is an offence to allow him to make his escape.

[8] When a wicked man is found in a village, an alarm shall be struck, and peasants from neighboring villages shall come together and arrest him. A peasant not coming to take part in the arrest will be punished after examination. If the Intendant or Bailiff is absent, the arrested offender shall be taken to Edo. The expenses therefor will be paid by the government.

(VIII) 1642. An edict to villages. (To, X, 665; TKR, I, v, 233.)
[1] (The same as [VII.] ) Materials of better qualities shall not be used even for collars and sashes.
[2] Festivals and Buddhist rituals shall be simple.
[3] Palanquins shall not be used in wedding.
[5] A house unsuitable to one’s position shall not be built.

[7] Every village shall plant trees and build up forests.

(IX) 1642. An edict to the Intendants. (Ibid.)
[1] All the previous laws issued for the peasants shall be strictly enforced.

[2] From this year, the villages shall not brew sake. Those who are licensed to sell sake on the high roads may sell it to travellers, but not to peasants.

[3] Instruct the peasants to mix other cereals with rice for their meals, and to save as much rice as possible.

[4] Rice for the taxes shall not be broken or poor rice.

[5] Accounts of the expenditures of the villages shall be made by them, with the seals of the village-heads and chiefs affixed thereto. They shall be examined and returned to the villages with the seals of the Intendants’ assistants affixed.

[6] Fish-mongers and collectors of contributions to temples shall not be allowed to enter the villages.

(X) 1642. An edict to villages. (To, X, 672.)
[1] Let no weed grow in the fields.

[2] If there is a sick orphan or solitary person, or a family with too few members to cultivate its land, the whole village shall offer help.

[3] Irrigation shall be constantly taken care of.

(XI) 1644. An edict to the Intendants. (Ibid., 734.)
[1] (The same as [IX, I.]
[2] (The same as [VIII, 7.]) Plant bamboos also.

[3] Help peasants, and encourage diligence, honesty, and frugality. See that they are not remiss in their public obligations and do not incur debts.


[5] Secret debts and sales are forbidden.
Secret cultivation is forbidden. A place intended for new cultivation shall be reported.

7. Tax-rice shall not be sold in the districts without an official order.

8. In the Kwantō provinces, each straw-bag of tax-rice shall contain 3 to 7 石 (about 1.8 bushels), including 1 石 of kuchi-mai; when the tax is commuted in money, the kuchi-zaa shall be 3 per cent. In the Kwansei provinces, a 無作 (4.963 bushels) of tax-rice shall include 3 石 (i.e., 3/4) of the kuchi-mai. There shall be no further dues.

9. In order that the laws will be observed, an annual instruction shall be given regarding the five-man group. A special care shall be taken, as heretofore, of the exclusion of Catholics. Examine every suspicious inhabitant, not excepting ascetics and beggars.

10. When taxes are transported in boats, the captains shall be carefully instructed not to be dishonest.

11. The assessment of the rice-tax shall be shown annually to the peasants, and receive their seals. The record of the returns of the tax shall be certified by village-officials, and the latter shall give receipts to the tax-paying peasants. The record shall be certified by the Intendant's clerk.

12. (The same as [IX, 9].)

XII. 1644. An oral order to the Intendants. (Ibid., 735.)

That the luxury of peasants in dwelling and clothing should be stopped; that cultivated land should not be laid waste; etc.

XIII. 1649. An edict to villages. (To, X. 365 ff.; TKR, I. v, 242 ff.)

1. Peasants shall obey the laws, respect the Bailiff or Intendant, and be toward the village-officials as toward the parents.

2. The village-officials shall respect the Bailiff or Intendant, shall not delay the collection of the taxes, shall not break laws, and shall instruct small peasants to be good. As the peasants would not do service to the government, if the order were given them by bad village-officials, the officials shall always be upright, impartial, and considerate.

3. Weed and hoe the fields. Plant beans and peas between wet or upland fields. Rise early, work in the field during the day, and make rope and straw-bags in the evening. Do not be slack in whatever one does. Do not buy and drink sake and tea. Plant bamboo and trees near the house, and use lower branches as fuel. Select good seeds in early autumn. Mend or change sickles and spades every year before the 11th day of the first month. Make manure of horses and human refuse, ashes, and hay.

4. Peasants are too imprudent to think of the future, and recklessly eat up rice and other grains in autumn. Always save food as in the first three months of the year; raise barley, millet, lettuce, daikon, and other crops, and save rice. If one remembers a famine, he shall not waste an edible leaf or stem. Every one in the house shall eat as simply as possible at usual times, but shall have plenty to eat at the seasons of hard work.

5. Make every effort to get good oxen and horses, for the better these animals, the more hay they tread for manure.

6. The wife shall weave diligently, and assist the husband till night.
A wife shall be divorced who, though beautiful, neglects her husband and spends time in eating, drinking, and seeking pleasures; but if she has many children, or has done special service to the husband, she may not be divorced. An ugly wife who is economical shall not be divorced.

[7] An outlawed warrior of uncertain origin shall not be allowed to live in the village. Do not harbor robbers' accomplices or other lawless men, for their discovery would involve the village in trouble and expense.

[8] In order to be thought well of by village officials, rich peasants, and all other people in the village, one shall be honest in every thing, and shall not entertain evil thoughts.

[9] (The same as [VI].)

[10] In household economy one shall have a little idea of the merchant, so that he would not be imposed upon when buying or selling grains for taxes.

[11] If a poor peasant has many children, some of them shall be given or be hired out.

[12] The courtyard before the peasant house shall be open toward the south and be well swept over, in order that sand would not be mixed into the grains when they are thrashed and dressed here.

[13] Consult experienced men, and raise only what is suitable to the soil.

[14] It would greatly benefit the people if barley was planted wherever possible. If one district planted barley, neighboring districts would follow the example.


[16] Do not use tobacco, for it is injurious to health, wasteful of time and money, and liable to cause fires.

[17] As soon as a notice of the tax for the year is received, the peasant shall devote his energy to cultivation, so that the crop might exceed the tax. If it is evident that the crop would be insufficient, he should borrow the balance before the rate of interest rises at the end of the tax-paying season. It would be wasteful to wait borrowing a little rice till the village has used much of the harvest in taxes, and to be obliged to sell clothes and implements at unreasonably low prices or to borrow at a high rate of interest. It is wise to deliver tax-rice promptly, for it might be diminished by mice, robbery or fire, while in hoarding.

[18] Rice shall be well dried before it is hulled, or it would crack and decrease in quantity.

[19] Consider the great importance of industrious and saving habits. For example, if an idle man borrowed only two straw-bags of rice for his tax, the principal and interest would in five years be fifteen straw-bags, when he would be obliged to sell his land, his family and himself, and involve his children in misery; whereas, if he saved two rice-bags each year, the principle and interest would in ten years be 117 bags.

[20] (The same as [X, 2].)

[21] Though a poor peasant may be looked down upon by his neighbors, village officials and every one else would alter their treatment of him,
if he improved his condition by industry, and he would be raised to a higher seat. On the contrary, one would be despised if he became poor, however rich he may have been. Therefore, be industrious and well-behaving.

[22] If there is one man who has become rich through honest industry, the village, and even the whole district and neighboring districts, would be influenced by his example. Bailiffs change, but peasants find a greater advantage in not changing their homes. How great a benefit it would then be to improve one's own estate!

If there were only one lawless man in a village, the whole village might become restless and quarrelsome. It would cause annoyance and expense to the village to arrest offenders and take them to the authorities. Therefore, care should be taken to prevent such misfortune. That depends on the Village-Head, who shall always instruct the small peasants in the right path.

[23] Be in harmony with neighboring villages, and do not quarrel or dispute with other fiefs.

[24] Have a deep filial regard for the parents. If, as the first principle of filial piety, one kept himself in good health, abstained from drinking or quarreling, behaved himself properly, and respected elder brothers, pitied the younger, and all brothers lived in concord, the parents would be especially glad. Such a person would be protected by Shintō and Buddhist deities, and his harvest would be plentiful. However anxious to show filial regard to the parents, one would find it difficult, if he were poor. If poor and consequently ill, he might become ill-natured, steal, break law, and be imprisoned, and then how the parents would grieve! His family and relatives would also be thrown into grief and shame. Hence, it is wise to be thoroughly honest and industrious.

[25] When money and rice and other cereals are saved, dwelling, food, and clothes would be procured as one wishes. In this peaceful age, there is no danger that savings might be taken away by an avaricious Intendant or Bailiff, but, on the contrary, they would insure the family of their owner against famines and other emergencies, and secure the wealth of his descendants.

[26] No class of people is so secure and peaceful as the peasants, so long as they render their taxes. They shall thoroughly understand this truth, and instruct it to their children, and zealously pursue their calling.

(XIV) 1660. An edict to Intendants and Bailiffs of the eight Kwantō provinces. (To, X, 1052.)

No peasant shall own a fire-arm. No fire-arms shall be used, except by licensed hunters, even in the woods where firing has been permitted. A person reporting an offender against this law will be rewarded, even if he was an accomplice. Concealment will involve the five-man group and village-officials in punishment, according to the nature of the case.

(XV) 1657. An edict to the Kwantō provinces. (There had been many robbers roaming about Katsuza. To, XI, 204—206, TKR, I, v, 249.)

[1] (The same as [VII, 1].)

[2] (Similar to [VII, 6].)

[3] (The same as [VII, 5], when staying out even over one night.)
As priests, ascetics, mendicant priests, beggars, and outcasts, may lodge robbers or be their accomplices, they shall not be allowed to remain, if they are not of certain origin or if they have no acquaintances in the village.

There shall be watch-houses at suitable places in villages, to keep night watch for robbers. On the appearance of one, an alarm shall be struck. (The rest the same as [VII, 8].)

The stealing of horses is said to be frequent. An unknown character passing through the village with a horse shall be requested to tell his destination. If he appears suspicious, his passing shall be notified by the village to the next, and so on. Do not buy a horse without certain recommendations.

An edict to all the Barons. (To XI, 590.)

On this occasion of the change of the year-period, public sign-boards prohibiting Christianity shall be renewed. Judging from the occasional arrests of Christians still taking place in many places, it is surmised that any region might yet contain Christians. Continue a diligent search throughout the fields. For this purpose, peasants and merchants shall be organized into five-man groups. If a Christian is discovered in a village or town from another source of information, its officials may be punished after examination.

Instructions to all the villages [in the Domain-lands?]. (To XI, 595 ff.; TKR, I, v, 251 ff.)

All sales of persons are forbidden. Personal service may be hired for periods less than ten years.

Places reserved for hawking shall be strictly guarded, and roads and bridges in them repaired.

Returns of taxes should be forwarded from point to point with promptness.

If a villager is accidentally wounded, it shall at once be reported. If a traveller quarrelled with another, or ran away after killing him, his passing into a next village shall be reported to the latter's officials, and their certificate of the report be asked for. It is an offence to kill the murderer privately.

A permanent sale of cultivated land is forbidden. The village-officials and five-man groups shall put their seals on every deed of mortgage. Any of them refusing to affix his seal will be punished. A mortgage effected without these seals is illegal, and even the village-head and five-man group will be punished therefor.

It is forbidden to evict peasants and seize their lands. If there is no son to succeed to a deceased peasant's estate, the case shall be reported, and a relative, whether man or woman, shall be, with official sanction, set up as successor. It is an offence to destroy the house, absorb the land, and obliterate the estate.
[10] (The same as [X, 2].)
[11] (The same as [VIII, 1, 5].) The purple and scarlet colors on clothes are forbidden, but other colors may be used at will.
[12] (The same as [VIII, 3].)
[13] (The same as [IX, 3].)
[14] (The same as [VIII, 2].)
[15] Not a horse and not a man shall be furnished to a man provided with no ticket issued by due authorities.
[16] Disputes about water and boundaries shall be referred to the authorities, and shall not be agitated privately.
[17] Do not secretly make new coins, or use illegal coins.
[18] All kinds of gambling are forbidden.
[19] Persons who are inharmonious with their families and cause dissension in the villages shall be reported.
[20] No money, rice, or other article shall be handed to any official or person whatsoever who is unable to show a proper certificate.
[21] Any Bailiff, Intendant, or village-official doing the slightest injustice to peasants shall at once be reported.
[22] Do not conceal land, old or new, [from assessment for taxation].
[23] Land that has long lain waste or virgin soil shall, with official sanction, be cultivated.
[24] (The same as [VIII, 6].)
[25] Do not cut down trees and bamboos even for urgent need without official permission.
[26] It is forbidden to sell a house recently built and build another.
[27] When an official visits a village, he shall not be entertained with anything specially bought, shall pay for everything he needs and get a receipt therefor, and shall receive no presents from the village-head or a peasant. If he annoys peasants, the case shall be reported.
[28] Fires shall be carefully prevented, and, if one takes place, it shall be speedily extinguished. Any man tardy in coming out will be examined and punished.
[29] Storehouses in charge of villages shall be protected from fires and robbery.
[30] Dikes and water-gates shall not be opened without order. If they break from neglect and cause damages, the entire village will be punished.
[31] If a peasant owing taxes runs away, his five-man group or the entire village shall pay the taxes and search for him.
[32] An article offered at a price lower than the current price shall not be bought without a guarantee. No suspicious goods shall be bought.
[33] (Similar to [IX, 2].)
(XVIII) 1608. An edict. (To, XI, 639.)
[1] (The same as [VIII, 6].) Hotels on high roads are exceptions to this rule.
[2] (The same as [VIII, 1].) Use plain colors other than purple and scarlet, without patterns.
[3] (The same as [IX, 3].)

[4] Neither the village-head nor the peasant shall ride in a palanquin.

[5] Wrestling, no dance, puppet show, and other public amusements, are strictly forbidden.

[6] (The same as [VIII, 3].) Extravagance shall be avoided at wedding or other joyous occasions.

(XIX) 1670. An order. (To, XI, 705.)

[1] (The same as [VIII, 3].)

[2] (The same as [XVIII, 2].)

[3] Do not sell in the village vermicelli, buckwheat cakes, manja, tofu, and other things the making of which wastes cereals.

[4] (The same as [IX, 2].)


[6] (The same as [X, 2].)

[7] There shall be no delay in paying taxes.

[8] (The same as [XVIII, 4].)

[9] No strangers who do not cultivate shall be allowed to stay in the village. If any one conceals such a person, he will be examined and punished.

[10] Nor shall a peasant who has run away from a judicial contest be concealed. The person harboring him shall be examined and punished.

[11] (The same as [XVIII, 6].)

(XX) 1670. An order. (To, XVI, 705-707.)

A peasant's petition shall be presented to the Intendant or Bailiff; if the Intendant fails to give justice, the peasant may bring his petition to Edo, after notifying the Intendant of his intention. If the petitioner failed to give this notice, his case, however just, would not be entertained. In the [eighteen] principal vills, the Baron's decisions shall be final.

(XXI) 1682. Public sign-boards. (To, XII, 90-100.)

(The same as Note 55, [1], above, except the part of the last article which deals with the period of personal service.) Men-servants and maid-servants shall not be hired for longer periods than ten years.

(XXII) 1682. Public sign-boards. (Ibid, 100.)

(The same as Note 55, [3], above.)

(XXIII) 1682. Public sign-boards. (Ibid, 100.)

[1] The sale and purchase of poisons and counterfeit drugs are forbidden under penalty. A person reporting an offense against this law, even if he was an accomplice, will be rewarded.

[2] Transactions in false coins are forbidden.


[4] It is forbidden to corner a commodity, to force up its price by concert, and to raise wages likewise.

[5] All kinds of the assembling of peasants under oath will be severely punished.

(XXIV) 1711. Public sign-boards. (To, XIII, 162.)

(Identical with Note 55, [1], above.)

(XXV) 1711. Public sign-boards. (Ibid, 162-163.)

(The same as [XXIII].)
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(XXVI) 1711. Public sign-boards. (Ibid., 163.)
(The same as Note 55, [3], above.)

(XXVII) 1713. Instructions to the peasants in the Domain-lands.
(Ibid., 319—321; TEK, I, v. 258 ff.; GR, No. 13.)

[1] Despite the minute instructions already given, villages have recently become more or less lawless and disorderly, peasants neglecting their work and indulging in luxuries. They are extravagant in dwelling, clothing and food, raise useless plants in places where grain should be raised, and, contrary to law, divide estates smaller than ten koku of productive power. Henceforth, the Village-Head and all the peasants shall observe all the laws previously issued, avoid all luxury, and devote all energy to agriculture.

[2] Recently, at the examination of land by the Intendant, villagers bribe his assistants, in order to secure low values attached to the land, and consequently tax-returns have decreased year by year, until in some places they are less than a half of their former amount. Nevertheless, those places do not seem to become richer, for the result is said to be due to continual corrupt practices of the lower officials. For the people in the Suzerain’s Domains who till the Suzerain’s land and thereby support their families and dependents in security, not to render taxes according to their means, but to squander wealth for private affairs, is very foolish conduct. The Intendants will henceforth supervise all financial matters, and their assistants have been instructed not to receive bribes, under a severe penalty. The peasants shall, therefore, devote their energies to cultivation, shall not be remiss in returning taxes, and shall report an unjust assistant to the Intendant. Village-Heads are also reported to be partial and corrupt. Henceforth, both the giver and the receiver of a bribe will be punished alike.

[3] (The same as [IX, 5], [XI, 11], with a reminder of recent laxity.)

[4] (The same as [XVII, 25], with a reminder of recent abuses.)

[5] (The same as [XI, 4], with a reminder of recent instances of farming out the work to unscrupulous contractors.)

[6] Some District-Heads have become avaricious and arrogant. Their office shall henceforth be abolished, and all village affairs shall be in charge of the Head and five-man groups of each village. Places that cannot dispense with District-Heads shall consult the Intendant.

[7] Village-officials are expected to advise peasants to adjust their differences as far as possible by mutual conciliation, but shall not suppress petitions which must be heard by the authorities.

[8] It is reported that lower officials of the storehouses of Edo detain peasants unnecessarily long when the latter come to deliver tax-rice, and that, when peasants come to Edo for presenting petitions, an Intendant’s assistant compells them to stay at the house of his acquaintance at an unreasonable cost. All these cases, of whatever nature, shall be reported to the Intendant.

[9] Peasants frequently bribe officials for various purposes, as, for instance, when they fear that their village might be incorporated into a neighboring Fief, but as the affairs of the government cannot be ex-
pected to be changed by bribery, peasants should not listen to the argument of any person whatsoever seeking bribes.

[19] If the peasants concealed wrongs committed by an unjust Village-Head or assistant of the Intendant, and thereby caused their own difficulties to multiply, the persons concealing would be punished together with the offender.

(XXVIII) 1716. An edict. (To, XIII, 485.)
[1] The same as [XIII, 9]. Cf. [XXI].
[2] The same as [VII, 3], [XIII, 7], [XV, 4].
[3] The same as [XVII, 3]. It has been forbidden for the mortgagee, instead of the mortgagee, to pay the dues levied on the land on mortgage.

(XXIX) 1721. An edict to the Intendants. (Ibid., XIII, 701.)
[1] The land that has been laid waste shall be again cultivated by the owner. If he is unable to do so, the entire village shall assist him; if the work is too difficult for the village, the Intendant shall supply the balance of the expense; and if that is still inadequate, the case shall be reported to Edo. Newly opened land shall be exempt from taxation from two to five years, after which its productive power shall be examined and the rate of the tax determined. A careful investigation shall be made as to whether there is not still some waste land capable of recultivation.

[2] Peasants who have served under warriors in Edo are often reported to wear swords after returning to the village. This shall be stopped, on the Village-Head's responsibility.

[3] It is forbidden to start a new trade, excepting that of the fishermen and hunters who sell their fish and game for livelihood.

[4] The building of a new Shinto temple and the making of a new Buddhist image, as well as gambling, habitual indulgence in amusement, unsuitable customs, and idleness in agriculture, are forbidden, as before.

(XXX) 1721. (GK, No. 15; TKR, I, v, 286.)
No estate shall be divided which is smaller than 10 koku in assessed productivity or 1 cho (2.45 acres) in extent. As the remainder after a division also shall not be smaller than this limit, it follows that a peasant holding an estate smaller than 20 koku or 2 chō may not divide it among children or relatives. Dependents shall be hired out in the village or take a suitable service elsewhere.

(XXXI) 1722. An edict to Intendants. (To, XIII, 750.)
Peasants cannot remember all the instructions which they have heard but once, and innocently commit wrongs. As there must be teachers of writing even in remote villages, these, whether priests or laymen, shall carefully instruct the people, and shall at leisure write down, for the pupils to copy or recite, the more important laws, articles of the five-man group record, and any other instructive matter.

(XXXII) 1725. Articles for the five-man group record selected by the suzerain's government. (Gg, sup. 1—20; DNR, iv, 103ff.) (In this document, the articles are put in the form of a pledge from the people, not of a command from the officials.)
The group, its examination, and its complaints. (The same as [VII, 1, 2, 6], [XVII, 26].) If one single inhabitant is left out of the group system, the village-officials will be punished.

[2] Unjust officials. (The same as [XVII, 21], [XXVII, 10].)

[3] Accounts. (The same as [IX, 3], [XI, 11, 12], [XXVII, 3].)

[4] Each one to have his seal registered.


[6] Tax-rice. (The same as [XI, 7], [IX, 4].)

[7] The village shall be responsible for a safe delivery of the tax-rice done in full straw-bags of 3 to and 7 shé each. (Cf. [IV, 1], [XI, 8].)

[8] Annual taxes to be assessed by the Village-Head in the presence of representative peasants.

[9] Annual taxes to be demanded and receipted by the Village-Head exactly as they were assessed.

[10] Village store-houses to be guarded by the village against all accidents, and to be opened by all the village together even under an urgent order from the authorities.

[11] No bribes to officials. Peasants to enter a complaint against an unjust official at once to the Intendant.

[12] Officials visiting the village. (The same as [XVII, 27].)

[13] Wicked men. (The same as [VII, 6, 7, 8], [XV, 2, 6].)

[14] To report on loss by robbery, on robbers, and on discovery of articles once stolen.

[15] Strangers. (The same as [VII, 3], [XV, 4], [XIX, 10].)

[16] To report on a wounded traveller and the death of a traveller.

A sick traveller to be taken care of, and reported to his home.

[17] Murderers. (The same as [XVII, 7].)

[18] Not to neglect cultivation, on pain of punishment, in addition to the ordinary taxes. A really helpless peasant shall be helped in cultivation by the village.


[20] Deeds of mortgage to bear the seals of the Village-Head and the five-man group, and the terms not to exceed ten years.

[21] Succession to heirless estates. (The same as [XVII, 9].)

[22] Planting of tobacco. (The same as [VIII, 6], [XVII, 24].)

[23] The post-horse service to be prompt and honest, (and same as [XVII, 15].)

[24] Official circulars to be promptly delivered to the next village.

[25] Trees of the forests not to be cut.

[26] Trees. (The same as [XVII, 25].)

[27] The roads and bridges charged to the village to be repaired and cared for, on penalty, without waiting for an order.

[28] [29] Reservoirs. (The same as [XVII, 30].)

[30] Cultivated land not to be extended over roads and other public works, or penalty to be inflicted on the Village-Head and the five-man group.

[31] Gambling forbidden, on penalty on all parties and the Village-Head and five-man group.

[32] Fires. (The same as [XVII, 28].)
[33] Tenants to have guarantors, and the landlord and his five-man group to be responsible for their good behavior.

[34] Not to be guarantors to servants without sub-guarantors of their own relatives.

[35] Outlaws. (The same as [XIII, 7].)

[36] Secret hawkers. (The same as [XVII, 3].)

[37] Not to allow a courtezan to be in the village, on penalty on the woman, the landlord, and his five-man group.

[38] In weaving silk and pongee, to conform to the standard width and length for each piece.

[39] Christians. (The same as [XVI].)

[40] Disorderly men. (The same as [VII, 3, 6].)

[41] Guard-houses. (The same as [XV, 5].)

[42] Fire-arms. (The same as [XIV].)

[43] Horse-stealing. (The same as [XV, 8].)

[44] Not to divide an estate smaller than 29 koku, if of the Village-Head, or 10 koku, if of the ordinary peasant.

[45] Not to mortgage land or building belonging to a temple and guaranteed by the Suzerain's vermilion seal.

[46] All men and women to be industrious in farming and to engage in suitable subsidiary occupations, on penalty of the village-officials and the five-man group.

[47] Shintō and Buddhist services to be simple.

[48] Even salaried burghers not to wear swords at a dancing show.

[49] Peasants and burghers to wear plain silk, pongee, cotton or hempen clothes, according to their means, and not to use better materials.

The servants to use cotton and hempen clothes for clothes and sashes.

[50] and [51] (do not concern peasants.)

[52] Mortgage. (The same as [XXVIII, 3].)

[53] Wearing swords. (The same as [XXIX, 2].)

[54] Shintō temples and Buddhist images. (The same as [XXIX, 4].)

[55] To instruct children not to be lazy and extravagant.

[56] Ferry-boats in Kwantō to bear the official brand.

[57] Sales of persons are forbidden.

[58] To report on men falsely calling themselves officials.

[59] Not to buy or take in mortgage stolen or uncertain goods, on penalty on the five-man group and the village-officials.

[60] Gambling strictly forbidden.

[61] Cultivation of wasted land. (The same as [XXV, 1].)

[62] No new Shintō or Buddhist service to be introduced. No public show without permission, on pain of penalty.

[63] Good care of water-works and equitable distribution of water.

[64] Not to present complaints too old or with insufficient proofs.

[65] Not to force persons in wedding to give drink or to throw stones at them.

[66] To report on a foundling, and not to give it to an uncertain person and without official permission.

[67] As before, the peasant shall not mortgage land without the seal of the Village-Head, nor the latter without the seal of another village-
official. As before, a mortgage is illegal in which the mortgager, and not the mortgagee, pays the taxes on the land in question.

[68] No mortgage whose term expired before 1716 shall be considered at court after ten years after the expiration of the term. Nor shall a mortgage after ten years after the date of the contract which states that the land would be restored at any time the debt is repaid.

(XXXIII) 1737. An edict. (To, XIII, 1203.)

[1] A deed of mortgage which does not bear the seal of the Village-Head, a deed of mortgage by a Village-Head which does not bear the seal of another village-official, a deed of mortgage which exempts the mortgagee from the payment of taxes on the mortgaged land and charges the mortgager to pay them, these three have been declared illegal long since, and must be so stated in the five-man group record. However, there still are people who present petitions on the strength of illegal deeds. Henceforth, village-officials shall frequently read the group record to the people. Mortgages whose terms have expired since 1716 would not be considered, were disputes concerning them brought to the court. Nor would a deed of mortgage stating that the land would be restored to the owner at any time the debt was paid be entertained, if the term of the mortgage has expired. This order shall be promulgated through the Kwanto provinces, the Fiefs receiving notice thereof from the nearest Intendant.

[2] It is reported that there are still some places in the Fiefs that have not made their five-man group records. These shall be made. The order therefor shall also be transmitted to the lords from their nearest Intendants.

(XXXIV) Articles of five-man group records (of Domain-lands) not included in the summaries already given. (GGL) (It should not be presumed that each article appeared for the first time in the year here given. Many articles were based on old laws still in force. Few articles in the later group-records were not repetitions.)

[1] Shimotsuke, 1743. The estate of an orphan shall be taken care of by the relatives and the village, who shall make a written agreement in order to prevent misunderstanding, and shall render the taxes on the land. The orphan on reaching the majority, shall take back the estate, and be set up as a peasant (kenka-shō).

[2] Shimotsuke, 1743. An especial care to be taken of rivers and embankments when there is a long rain and danger of overflow.


[5] Mino, 1759. If any unusual and impertinent thing takes place in the village, or in a neighboring village, or even in a Fief near by, it shall be reported.


[7] Mino, 1831. Any person especially noted for filial piety to his parents, faithfulness to his master, benevolence to the destitute, or other virtues, shall be reported.

[8] Buzen, 1836. A village-official especially faithful in doing his
duties, considerate of the interests of small peasants, and consequently regarded by them with great respect, shall be reported by peasants.

[9] Buzen, 1886. Large bells, torii, and stone lanterns for temples shall not be made. No Shinto or Buddhist images, whether of bronze, stone or wood, larger than three shaku (3 feet) in height shall be made. A permission is necessary for making more than ten images at a time, even though they are of wood and do not exceed three shaku.

[10] Buzen, 1886. No Buddhist temple building larger than three ken (6 yards) in front and no shrine or pedestal larger than one and a half ken (3 yards) in front, shall be erected. Elaborate beam constructions with ki jiki brackets shall be avoided.

[11] Yamashiro, 1848. Any matter that would be good for the government, and any measure, however old, which troubles people, shall be reported.

[12] Kotanke, 1883. The peasant shall not be disrespectful to officials even in another district, and shall not be discourteous to travellers.

(Note: The Notes 60—148 will appear in a subsequent number of the Journal.)
Vocalic \( r, l, m, n \) in Semitic.—By Frank R. Blake, Ph. D., Johns Hopkins University.

In Indo-European philology vocalic \( r, l, m, n \) are equally as important as those sounds which are usually designated as the vowels \textit{par excellence}. They seem to have been among the sounds possessed by the original common Indo-European speech, and many phenomena can be explained only by referring to them. For example the varying forms of the word for “wolf,” Sanskrit \textit{vrk}as, Greek \textit{λύκος}, Gothic \textit{wulf}s, Lithuanian \textit{vilkas}, Old Bulgarian \textit{vlăkă}, or again of the word for “hundred,” Sanskrit \textit{ca}dān, Greek \textit{ἐκατόν}, Latin \textit{centum}, Gothic \textit{hund}, Lithuanian \textit{srūtās}, are best explained by assuming that the original vowel of the first syllable was in the first case vocalic \( l \), in the second, vocalic \( n \).

In the Semitic languages apparently no such important role is played by these sounds. It is usually supposed that they did not form a part of the sound material of the parent Semitic speech, but there seems to be one form at least in which the positing of a vocalic liquid is possible.

In Hebrew, Biblical Aramaic, and Assyrian we find two negative adverbs whose chief component is the consonant \( l \), viz., Hebrew \( š' ś\); Biblical Aramaic \( š' š\); Assyrian \( la, il \). In the first two languages the form \( š' š\) is employed as the usual negative of declarative statements, and is regularly authotonic, while \( š\) is the negative of optative and subjunctive statements and is proclitic, as is indicated by the Maqeph which joins it to the following word. In Assyrian \( š \)-is certainly the usual accented negative, while \( il \) seems to be used, at least in many cases, in sentences in which some other element bears the chief stress, e.g., \textit{edu šl śzib}, “not one escaped,” \textit{nūru šl īmmarā, “light they see not;” šl šikaru šunu, šl šinnisāti


2 Cf. Haupt, \textit{Über die beiden Halb vocale \( r \) und \( l \)}, BA. 1., p. 294.
they are neither male nor female.' In Ethiopic, the only other language in which 'al occurs, we find it only in the quasi-verb ḥw: 'alībō 'there is not, has not,' and in the negative μb: 'akkā, in both cases without accent. It seems therefore that these two series of forms may be ultimately of the same origin, lā, lō being the representatives of the negative when accented, 'al, 'al being the representatives, when proclitic. The latter forms may have been developed from the authotonic lā as follows. With loss of accent the vowel ḥ was shortened and finally disappeared, leaving only فتحة, probably pronounced as ḥ; this vocalic ʻ desarrolled a prothetic vowel which was pronounced with initial glottal catch; the ʻ vowel of Hebrew, Aramaic, and Ethiopic ʻal is due to the influence of this catch; in Assyrian the Aleph was probably lost, and then the form was written with ʻ, the vowel that seemed to render the sound best.1

Altho liquid and nasal vowels play so unimportant a part in the parent Semitic speech, there are a number of cases in which they appear to have been developed in the individual languages. In many cases, however, in the forms in question the liquid and nasal vowels themselves do not appear, but must be assumed in the transition forms from which they are derived, e. g., Nestorian Syriac ʻdēlēthā is developed from the original ʻdīlātā through the intermediate stages ʻdīlēthā, ʻdīlēthā.

In classical Arabic, Ethiopic, and Assyrian examples of these vowels are rare. The perfect of the VII form in Arabic seems to be a case in point, إنقتلة ʻinqātalā being derived from ṣqūtalā, a form developed on the basis of the imperfect by dropping the performative ʻal, but the treatment of ʻal + consonant does not differ from that of any combination of two consonants at the beginning of a word, as for example in VIII form إنقتلة ʻinqūtalā. The varying forms of the word for 'man' إمره ʻarmūr, ʻirmār, ʻirmūr, ʻirmārūr may point to the presence of an ʻ, the form being originally ʻmūrūr.

In Ethiopic the prepositional forms ḥw: ḥw: ʻemna, ʻem are to be derived from the original ʻmin (cf. Arap. ʻmn) before the article) through an intermediate stage ʻmna; ʻem is derived

1 Cf. ulā below p. 219.
from "ema" by dropping of the final syllable after the accent had shifted to the first.

In Assyrian the writing "er in forms like unammer "make shine," unuer "send," instead of the regular "ir may represent the "r vowel in the unaccented syllable. It is not impossible also that the preposition "ultu "from" is derived from an originally unaccented or proclitic form of "isti or "ilu, through the intermediate stage "ltu. Notice that the vowel developed out of "l is "n in this case as in the negative "ul above.

In Syriac the forms of this character are more numerous. In the Eastern dialect words in which "r, l, m, n followed by Shewa immediately precede the final syllable e.g., "dehlètha "fear", syncopate the Shewa and develop a vowel before the consonant, e.g., "dehelethu. Between forms like "dehlètha and "dehelethu there must have been a series of intermediate forms like "dehelthu with liquid or nasal vowel.

Words which begin with "r followed by Shewa, e.g., "dha: "reqid "firmament," often lose the Shewa and take a prothetic vowel instead written with "aleph, e.g., "dhati, "arqid; an intermediate stage "reqid must also be assumed here.

After a word ending in a consonant the initial syllables le, be, de are often changed in poetry to el, ev, ed, e.g., "de "elhón. In the case of l an intermediate stage "l is to be assumed e.g., "ith "fhon; in the other cases the change is probably analogical.

In Hebrew, liquid and nasal vowels appear to occur in unaccented final syllables. These are found chiefly in the following classes of forms: viz.,

a) Segholate nouns, e.g., "bik, "bik, "boot, "bor, "bread, "fet, "fat;
b) in Segholate verbal forms, e.g., "bik, "bik, jussive Qal and Hiphil respectively of "bik "reveal;
c) in forms of the imperfect with ° conversive which have recessive accent, e.g., "bik, "and he fought."

In the first two classes of forms the fact that the last syllable contains a liquid or nasal vowel and not short "t followed by a consonant is indicated in the first place by the fact that such vowels are found in similar forms in other

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languages, e.g., Eng. taper, eagle, bosom, leaven, the last syllables of which all contain liquid or nasal vowels in spite of the spelling; secondly by the fact that similar Hebrew forms ending in ẓ or ẓ, change these consonants to the vowels ə or ʌ, e.g., יָד 'chaos' from בּדָע or יִדָּה 'sickness' (pausal form) from חָלָה; so יָם (i.e. בּוֹם) 'thumb' from בּוֹמַה. The fact that all other Segholate forms with the exception of those containing second or third guttural radicals are likewise spelt with Seghol in the last syllable does not militate against the assumption of liquid and nasal vowels in words ending in liquids or nasals. The Massorites, of course, knew nothing of such vowels and so spelt them, with the sign for an unaccented short vowel in a closed syllable + consonant, just as we do for example in English.

In the forms of the imperfect with ɣ conversive like יָבָה 'and he fought,' we find of course plenty of forms that do not end in liquids or nasals also written with Seghol + consonant, e.g., יָבָה, and the Seghol might in most of these cases be regarded simply as a modification of accented Qere in forms like יָבָה, יָבָה. The correspondence, however, of יָבָה with unaccented Seghol + ɣ to יָבָה with accented Pathah + ɣ, where Seghol + ɣ evidently indicate the ɣ vowel, since Seghol is not the representative of unaccented Pathah, seems to indicate that we have liquid or nasal vowels also in the forms with original ɣ in the final syllable.

In all these forms, then, the spelling Seghol + liquid or nasal seems to be used to indicate vocalic ɣ, Ɂ, ﳘ,  noreferrer. Whenever, therefore we find these combinations in an unaccented position, we are confronted with the possibility of liquid or nasal vowels. There are several series of forms besides those just discussed in which these vowels seem to be present.

In a number of nouns with prefixed י made from stems with initial ɣ, Ɂ, ﳘ we find the vowel of the prefix written Seghol, e.g.,

- יָבָה 'chariot'
- יָבָה 'wide space'
- יָבָה 'distance'
- יָבָה 'aromatic plants'
- יָבָה 'salve'
- יָבָה 'pinchers'
- יָבָה 'wardrobe'
- יָבָה 'ruling.'
Here the Seghol before \( \gamma \) might be explained as a partial assimilation of \( \iota \) to \( r \), \( r \) being sometimes a guttural. But \( \gamma \) when it acts as a guttural regularly causes complete assimilation of the preceding vowel to \( a \) and not partial assimilation to Seghol; besides the forms with \( l \) and \( m \) remain unexplained. It is not improbable that in all these forms we have a vocalic liquid or nasal after the prefix \( b \) indicated as we should expect by Seghol + consonant; thus, \( n\text{ykhb\dot{\iota}h} \), \( n\text{iq\dot{\iota}\dot{\iota}h\dot{a}m} \), \( n\text{ms\dot{\iota}\dot{\iota}l\dot{\iota}h} \), &c. The form \( n\text{\dot{\iota}\dot{\iota}d} \) 'thy rebelliousness,' from \( n\dot{\iota} \) is probably to be explained in the same way.

The possessive suffixes of the second and third person plural \( \text{n\dot{\iota}}, \text{p\dot{\iota}}, \text{m\dot{\iota}}, \text{n\dot{\iota}} \) as well as the independent pronouns of the second person plural \( \text{m\dot{\iota}s}, \text{p\dot{\iota}s} \), all have Seghol in the last syllable followed by \( m \) or \( n \). This Seghol is said to be derived from an \( i \) which belonged originally only in the feminine, e.g., Assyr. \( \text{\dot{i}n\dot{\iota}} \) 'they,' but which has been extended by analogy to the masculine forms which originally had \( u \), e.g., Assyr. \( \text{\dot{u}n\dot{\iota}n} \) Arab. \( \text{\dot{u}m} \) 'they.' Assyr. \( \text{\dot{a}tt\dot{\iota}\dot{\iota}n\dot{\iota}n} \), Arab. \( \text{\dot{a}nt\dot{\iota}m} \) 'ye.' The presence of Seghol in these syllables instead of the regular Çere is explained by Brockelmann as due to the fact that they were originally unaccented, and that the original vocalization is preserved even after the shift of the accent to the last syllable. Such a levelling of the \( i \) vowel of the feminine has certainly taken place in the independent pronoun of the third person masculine \( \text{\dot{u}n\dot{\iota}}, \text{\dot{u}p\dot{\iota}} \) 'they,' and it may have taken place in all the masculine forms above mentioned, but it is unnecessary to assume such a process. If, as we have supposed, the final syllable was originally unaccented, we may have here simply nasal vowels, in the masculine representing a reduced form of \( um \), in the feminine, of \( in \).

This conception of these endings also offers a better explanation of the third person plural suffixes \( \text{\dot{a}m}, \text{\dot{a}n} \) as in \( \text{\dot{a}mp\dot{\iota}}, \text{\dot{a}np\dot{\iota}} \) 'their horses.' It is difficult to see how they could be contracted from \( \text{\dot{a}h\dot{\iota}m} \) or \( \text{\dot{a}h\dot{\iota}m} \) and \( \text{\dot{a}h\dot{\iota}n} \). These would naturally yield the diphthongal forms \( \text{\dot{a}im}, \text{\dot{a}um}, \text{\dot{a}in} \) or contracted \( \text{\dot{\iota}m}, \text{\dot{\iota}m}, \text{\dot{\iota}n} \). If, however, we suppose \( \text{\dot{a}h\dot{\iota}m} \) or \( \text{\dot{a}h\dot{\iota}m} \) and \( \text{\dot{a}h\dot{\iota}n} \) to have been first reduced to \( \text{\dot{a}h\dot{\iota}m} \) and \( \dot{a}h\dot{\iota}y \), which

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with loss of intervocalic \( h \) become \( aq\, ay \) or \( am\, an \), and under the influence of the accent \( ãm\), \( ãn \), the difficulty vanishes.

In the active participle of stems tertiae \( \gamma \) + suffix of the second person masculine singular, such as for example \( ðn\) ‘thy creator,’ the Seghol before the \( \gamma \) is explained as partial assimilation of \( \gamma \), which we find in such forms as \( ðn\) ‘thy enemy,’ to the guttural \( \gamma \). We find the same phenomenon, however, in \( ðn\) ‘thy father-in-law’ (Ex. 18, 6) and in \( ðn\) ‘giving thee’ (Jer. 20, 4). Both the forms with \( \gamma \) and those with \( ÿ \) are best explained as containing liquid and nasal vowels, viz., \( ðn\), \( ðn\), \( ðn\).

In Exodus 33, 3 occurs the unusual form \( ðn\) ‘I will consume thee’ which stands for \( ðn\), first person imperfect Piel of \( ðn\) ‘be completed,’ with suffix of second person singular masculine. In the form in the text we evidently have an \( iy \) vowel. The development from the normal form is to be conceived of as follows: \( ðn\) > \( ðn\) > \( ðn\) > \( ðn\).

From what has been said it will appear that the part played by the liquid and nasal vowels in the Semitic languages is not entirely without significance. In the parent speech, it is true, they are apparently all but non-existent, but in some of its descendants, especially in Aramaic and Hebrew we find them developed in a number of cases. These cases serve to show that while these vowels in Semitic cannot compare in importance to the corresponding sounds in the Indo-European family, the possibility of their occurrence should be borne in mind in any study of exceptional forms.

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1 This form of the active participle is rare, the cases given being all those that occur with stems tertiae \( \tau \) or \( \zeta \); no forms occur from stems tertiae \( \kappa \); from stems tertiae \( \lambda \) we have only \( ðn\) ‘thy redeemer,’ where \( \gamma \) has become \( \lambda \) under the influence of the guttural \( \lambda \); in the forms \( ðn\) ‘thy trader’ (Ex. 27, 29; 28) and \( ðn\) ‘it shall devour you’ (Is. 30, 11) in which the conditions are similar to the above, the \( a \) may be explained as due to the influence of the \( ÿ \) which acts as a guttural; in \( ðn\), it may be simply analogy with the other forms of the imperfect.
The Interrelation of the Dialects of the Fourteen-Edicts
of Asoka. 2: The dialect of the Girnār redaction.—
By Truman Michelson, Smithsonian Institution,
Washington.

Before at once proceeding to give a summary of the special
features of this dialect there are a few points which require
our consideration.

First of all I would remind the reader that the Girnār
redaction of the Fourteen-Edicts of Asoka is a translation from
a Māgadhan original, and that the dialect of this Māgadhan
original has left traces in text of the Girnār recension. This
is a universally acknowledged fact.¹

Secondly, I wish to investigate Senart's theory of learned
and historical spelling as applied to the Girnār redaction.
Against his assumption regarding the Shābhāzgarhi and Man-
schra recensions see the excellent arguments of Johansson,
Shb. ii, § 77 (but on the history of s, s, s, rth, rdh, rt see
Michelson, AJP. 30, pp. 287ff, 294ff, 416ff).

It will be noticed that in the Girnār version, r is retained
after preceding stops and sibilants; but is assimilated to follow-
ing stops, sibilants, and nasals; it is kept before a following
υ (see Michelson, AJP. 30, p. 290; cf. also JAOS. 30, p. 88).
To Senart the forms with r retained are simply learned
historical spellings. Franke seems to have been painfully un-
decked as to whether r in combinations with consonants in
Shb, Mans., and G. was actually pronounced or was graphical
only; and if pronounced as to whether it was or was not due
to the influence of secondary Sanskrit: see pages 50, 54, 55, 56,
71, 72, 115, 117. And at the bottom of page 72 he gave his
case away to Senart.

Whatever may be the merits of Franke's theory of second-
ary Sanskrit, I am convinced that no influence of it is to be
seen in the inscriptions of Asoka.

¹ This seems to be a suitable place to remind the reader of the works
of Konow and Senart, cited in part 1, on this dialect.

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There is no fluctuation in the non-writing of $r$ in the Gîrnâr text before immediately following nasals, sibilants, or stops. Why then do we find fluctuation in the case of stops and sibilants immediately followed by $r$, and $r$ when immediately followed by $v$? If the $r$ in these cases is only a learned and historical spelling, why is it that we never find a learned and historical spelling with $r$ in the first cases? It should be noticed that in the ‘Mâgadhan’ dialects $r$ is assimilated to all adjacent consonants. We are therefore justified in making the deduction that $pr$, $sr$, $rv$, &c. represent the actual pronunciation in the Gîrnâr dialect; and that where we have $p$ ($pp$ medially, written $p$), $s$ ($medially ss$, written $s$), $vv$ (written $v$) etc. for these respective combinations, they are ‘Mâgadhismas’; and that the assimilation of $r$ to immediately following stops, sibilants and nasals was native to the Gîrnâr dialect. Senart himself admitted the principle of ‘Mâgadhismas’ (see Indian Antiquary 21, p. 174); why he never thought of applying it to these cases is unclear to me. Against his theory of learned and historical orthography may be urged the fact on the ‘Mâgadhan’ inscriptions we never have $r$ (which would become $l$) written in conjoint consonants; but why do never find a learned or historical spelling with $r$ ($l$) in them? Surely we should look for historical or learned spelling in a document written in the imperial official language, if anywhere. Again corresponding to Indic $pr$ in the Gîrnâr text we have $pr$ 60 times, $p$ 32 times. That is by actual figures $pr$ is a trifle less than twice as common as $p$. But it should be noticed that $paṭi$ (from $paṭi$) once is found eleven times: and $paṭi$ is a most undoubted ‘Mâgadhism’; see Michelson, IF 23, p. 240. And $piṛa$ is found once: this too may be classed as an obvious ‘Mâgadhism’; cf. $piṛa$ in the ‘Mâgadhan’ versions of the Fourteen-Edicts as well as in the various redactions of the Pillar-Edicts. Even Senart admits that the final $e$ of the Gîrnâr word is a ‘Mâgadhism’; why then should he not admit that the initial $p$ for $pr$ is also one? Subtracting these 12 cases of obvious ‘Mâgadhismas’ we have 20 cases of $p$ for Indic $pr$ and 60 cases where $pr$ is retained. That is to say that $pr$ is found three times as often as $p$ for Indic $pr$. Moreover it is only after the 4th edict that $p$ for $pr$ is frequent: in edicts 1—4 $pr$ is retained 35 times, $p$ for $pr$ occurring but 3 times. The very obvious ‘Mâgadhism’ $paṭi$ occurs twice; the sole
remaining form with \( p \) for \( pr \) is \( ñjadasi \), and the most sceptical would scarce consider this as true to the native dialect. Now if there is anything in the whole theory of ‘Māgadhisms’—and this theory has been held as far as I know by all who have investigated the dialects of the Asokan inscriptions—it is clear that all cases in which \( p \) for Indic \( pr \) is apparently found in the Girnār redaction of the Fourteen-Edicts are ‘Māgadhisms’. Now if \( p \) for \( pr \) is a ‘Māgadhism’ so are \( k \) for \( kr \), \( t \) for \( tr \), &c. In these, however, the ‘Māgadhisms’ are as frequent as are the true native sounds; and in some cases more frequent. Girnār \( itihāshakhamahāmātā \) is an exception only good example to show that \( t \) for \( tr \) is a ‘Māgadhism’; the \( th \) for \( str \) is one as is also the \( kh \) for \( ch \) (really \( kkh \) and \( cch \)); see Johansson, \( Shb. \) 2, p. 23, and Michelson, \( JAOS. \) 30, p. 88. In short the true native word should be \( *itihāshakhamahāmātā \), cf. Mansehra \( *itriṃḍhāchamahamātra \) as contrasted with Kāśi \( itihāshakhamahāmātā \). The fact that Śāhāzgarhi \( *itriṇḍhāchamahamātra \) also shows ‘Māgadhian’ influence points distinctly in the same direction; for the principle involved see Franke, Pāli and Sanskrit, p. 109, footnote 2, and compare Michelson, \( AJP. \) 30, p. 427; 31, p. 57. (Note the true native Girnār \( mahāmātṛa \); the ‘Māgadhism’ \( dhammamahāmātā \) occurs 3 times: cf. Dhauli, Kāśi, Delhi-Sivalik \( dhāmmamahāmātā, \) Jaungāḍa \( mahāmāṭchi \).) The fact that Mansehra \( Amādha- \) is a ‘Māgadhism’ (see \( IF. \) 24, p. 55) is good evidence that Girnār \( adha, \) i.e. \( Amādha- \), is also one. This at once lays G. \( dhutu \) open to the same suspicion, cf. Kāśi \( dhuve, \) Jaungāḍa \( dhuvam \). In the remaining cases of stops + \( r \) ‘Māgadhisms’ are in full possession except in the combination \( br \), and here the ‘Māgadhism’ \( b \) is twice as frequent as native \( br \). But the forms are too few and too isolated to be any criterion. Observe that ‘Māgadhian’ \( pati (pati) \) outnumbers native Girnār \( prati \) (\( prati \)) more than to one; while it has completely wiped out native \( prati \) in the Mansehra redaction, occurring over a dozen times; similarly ‘Māgadhian’ \( aṭha- \) has nearly everywhere usurped the place of native \( aṭha- \) in the Śāhāzgarhi recension (see \( IF. \) 23, pp. 240, 241; \( AJP. \) 30, p. 294ff.). So that mere numbers are not necessarily a deciding factor in every given case.

As an explanation of the fact that in the Girnār redaction ‘Māgadhisms’ for \( pr \), \&c. are so prevalent, it may be said that the dialect of Girnār agreed with the ‘Māgadhian’ dialect in
assimilating $r$ to immediately following stops, thus causing certain forms to be identical in both dialects; for this reason it was difficult for the scribe to abstain from substituting $p$ for $pr$, etc. Now in the dialect of the Shāhbazgarhi and Mansehra recensions ‘Māgadhisms’ are comparatively rare (outside of puti for prati) in the case of stops + $r$; the reason for this is that in this dialect $r$ was not assimilated to any adjacent consonants except in the combination $avrs(y)$ and perhaps in the combination $rn$ (see AJP. 30, p. 289; JAOS. 30, p. 89; and my essay on the etymology of Sanskrit pūnya—which is in TAPA: 40). As long as $r$ was not assimilated to immediately following stops as in the case of the ‘Māgadhian’ dialect, there was comparatively little danger of a ‘Māgadhism’ occurring for a stop + $r$. Such ‘Māgadhisms’ as are found are readily to be recognized by the non-agreement of Shh. and Mans. Of course there are other means of detection; e.g. Mans. $tini$ has a ‘Māgadhian’ -ni; cf. Kālī $tini$; hence the initial $ti$- of Mansehra $tini$ is open to the same suspicion, and as a matter of fact there is other evidence to show conclusively that it is a ‘Māgadhism’; compare the Shāhbazgarhi correspondent.

Let us now turn to the treatment of the Indic sibilants + an immediately following $r$. For Indic $sr$ we have $sr$ 5 times and no other correspondent. It is therefore certain that $sr$ is the true native Gīrār combination of sounds. It is as absurd to consider the $sr$ as a purely historical and learned spelling as it is to regard the spelling $asti$ (found repeatedly) for $atthi$ (which would be written $atthi$: it never is found in the Gīrār redaction). If $sr$ was a purely historical and learned spelling, we certainly would find $s$ written at least once which is not the case.

The history of Indic $sr$ goes a long way in assuring us regarding the history of Indic $śr$. Corresponding to Indic $sr$ we have $sr$ 11 times, $s$ (really $ss$ medially) 10 times. But $s$ (medially really $ss$) is the sole ‘Māgadhian’ correspondent to Indic $śr$. What is simpler than to explain the $s$ of the Gīrār text as a ‘Māgadhism’? And it should be noticed of $sumana$—(which occurs 6 times, either in the nom. or gen. pl., and always in compounds) there is no reason why we should not regard the lingual $n$ as the sole trace of the native word precisely as in the case of Mansehra $kavaṇa$—(for kalanā—; the
credit of discovering this belongs to Franke), and *pamāṭika* (on which see Michelson, *AJP*, 31, pp. 58, 59). Per contra note *brāhmānasrāmanāṇam* at G. iv. 2 with true native *br* and *sr*. And Gīnār *guru-susūsā* betrays 'Māgadhan' influence in the vocalism: see Michelson, *AJP*, 30, p. 287; in fact the form coincides exactly with the 'Māgadhan' word *susūsā*, and for this reason it is not reliable evidence for the history of *sr* in the Gīnār dialect. It is then not at all venturesome to include the 3 other cases of *s* for *sr* (Indic *śr*) among 'Māgadhis'. And it should be particularly noticed that *saṃse* at G. iv. 10 has a 'Māgadhan' final *s* for native *am* as even Senart would admit: cf. Kalā *ṣeṭhe*, Dhanli *seṭhe*; for this reason we may doubly suspect the initial *s* of being a 'Māgadhis'; see also *AJP*, 30, p. 293.

We have now to consider the correspondents to Indic *rv*. In the case of the correspondents to Sanskrit *saraṇa*- and its adverbial derivatives we have *rv* 15 times, *v* 18 times. But *sava*- (i.e. *savaṇa*) and *savata* (i.e. *savatā*) are the sole correspondents to Sanskrit *saraṇa*- and *saraṇtra* respectively in the 'Māgadhan' redactions. It is therefore highly probable that the forms with *v* in the Gīnār version are 'Māgadhis'.

A decisive proof that this is the case is the following: Corresponding to Sanskrit *saraṇa*, *saraṇtra* in the Shāhbażgarhi recension we have forms with *vr* (i.e. *rv*) as well as *v* (i.e. *ve*), but these latter are in a distinct minority; but in the Mansehra redaction we find forms with *vr* (i.e. *rv*) only. It therefore follows that the forms with *v* (i.e. *ve*) in the Shāhbażgarhi are 'Māgadhis'; see Johansson, *Shb*. ii. § 65; Michelson, *AJP*, 30, p. 285; the statement in *JAOS*, 30, p. 82 is an error. Now if Shb. *sava*- &c. be a 'Māgadhis' it is impossible to escape the conviction that Gīnār *sava*- &c. is also a 'Māgadhis'. It will be recalled that the Gīnār dialect is most intimately related with the dialect of the Shāhbażgarhi and Mansehra redactions: see Senart, *Indian Antiquary*, 21, p. 172; Michelson, *AJP*, 30, p. 291, *JAOS*, 30, pp. 87—89, *TAPA*, 40, p. 28. Below I have tried to show that the falling together of Indic *s*, *ś*, *ṣ* into *s* is a relatively late development in the Gīnār dialect; and in my judgement the assimilation of *r* to following stops, sibilants, and nasals is likewise of recent origin, say shortly before the historical transmission. (This last does not apply to the assimilation of *r* in the combinations *āṛṣ[y]*.)
Then the dialects of the Shāhbāzgarhi, Mansehra, and Gīrnār recensions of Asoka’s Fourteen Edicts would be very much more intimately related than hitherto suspected.

The Gīrnār correspondents to Sanskrit pūrva- offer consider able difficulty. At v. 4 we have bhūtapuruṣa, obviously the first r should be eliminated. At iv. 5 we have bhūtapura. This is wholly nonsensical. The final ‘Māgadhan’ o should be noticed. In this we have the key to the situation: ‘Māgadhan’ puluva- has completely distorted the native word. At vi. 2 the text has bhūtapuruva (m. is graphically omitted). But the true reading is -pruva. Here too we have u preceding the v in imitation of the ‘Māgadhan’ form; but the scribe was dimly conscious that in the Gīrnār word there ought to be an r somewhere, and so inserted one, albeit in the wrong place. (Some may seize upon Gīrnār -pruva as a proof that Shb. Mans. pruva- is not merely graphical for purva- but represents the true pronunciation. But see Michelson, AJP. 30, pp. 289, 290, 426; 31, pp. 55–57.)

It is barely possible that Gīrnār bhātrā is for *bhātrā by dissimilation, but it is far more likely that the initial bh is simply a ‘Māgadhis’ for bhr as is shown by Manshra bhatuna for bhratuna (so the Shb. redaction) altered by ‘Māgadhan’ bhātāna.

I think pitra (not pita) should be read at xi. 3. The words pita and bhatā (at ix. 5 and xi. 3 respectively) are hyper-Māgadhisms exactly as Shb. aṣṭi, on which see Michelson, IEF. 24, p. 55; and JAOS. 30, p. 85.

The statistics given above are made on the basis of the Gīrnār text in IEF. 2, and the fragments in WZKM. 8 and JRAS. 1900. They are wholly independent from the figures published long ago by Senart.

Shāhbāzgarhi and Manserah pravrajitāni makes it highly probable that the v of Gīrnār pavrajitāni is a ‘Māgadhism’ as is the initial p for prv; if indeed this latter is not the true reading. Similarly with respect to tīvo. Now if the mb of Tumbapamai be a ‘Māgadhism’—the Shāhbāzgarhi and Man-

1 I have not included saceu of Senart’s smaller fragment, because I suspect that this fragment is identical with the fragment published by Bühlert. The grounds for this belief I hope to publish at any early date.
sehra redactions support this view; see Johansson, _Shh._ ii, p. 1, Michelson, _IF._ 24, p. 55—as is the _am_ for _ām_ (see below), then the rule should be given: _R_ is not assimilated in the Gîrnâr dialect to preceding adjacent consonants but is assimilated to adjacent following consonants except _v._

The lengths to which Senart is carried by his theory of learned and historical orthography, is well illustrated by his discussion of Gîrnâr _n_ and _n_ ( _Indian Antiquary,_ 21, p. 171— _Les Inscriptions._ 2, p. 430). He acutely observes that though Gîrnâr possess _n_ and _n_ in the interior of words where etymologically required, yet in case-endings we have _n_ where Sanskrit shows us that _n_ was to be expected. He further notes that the ‘Magadhan’ dialect possesses only _n_ as the correspondent to Sanskrit _n_ and _n_ alike. He therefore argues that Gîrnâr _n_ does not represent the actual pronunciation and is only a learned and historical spelling. Now Senart can be excused from not noting the same apparent substitution of _n_ for _n_ in case-endings in the dialect of the Shâhîbâzgarhi and Manschra redactions (Johansson, _Shh._ i, p. 166, 52 of the reprint; Michelson, _JAOS._ 30, p. 87, _AJP._ 30, p. 422) for two excellent reasons, to wit, Bühler had not published his edition of the _Shh._ text nor the Manschra version when Senart first wrote his arguments. But since the charge of a promiscuous use of _n_ and _n_ in the Gîrnâr dialect as correspondents to Indic _n_ cannot be maintained (see Michelson, _IF._ 24, pp. 53, 54), he certainly should have ascribed the use of _n_ for _n_ in the case-endings of _G._ to the influence of analogy. Considering the fact that in Pâli this same analogical use of _n_ for _n_ obtains almost exclusively, and is frequent in suffixes (see _AJP._ 31, p. 64 and my article on the etymology of Sanskrit _pūrṇa_—which is in _TAPA._ 40)—there existed ample material in the texts published at the time for him to have made this observation—his failure to do this is regrettable. In justice, however, it should be said that Senart admitted that he could not prove his case in this particular instance.

Special features of the dialect of the Gîrnâr redaction of the Fourteen-Edicts.

Special features of the dialect of the Gîrnâr redaction of the Fourteen-Edicts as compared with the dialects of the other redactions are:
1. A is retained before m in majhamena.
   Strictly speaking, we can only contrast this retention with the change to i in the 'Māgadhian' dialect as the Shb. version differs in the wording where we otherwise would find a correspondent, and in the Mans. text there is a lacuna in the corresponding passage.

2. A is retained after v in ucāvaca- (see the reading of J. in ASSI).

3. A for o of the other versions in the foreign name Antiyako.

4. The combination ary becomes er (samacerūṃ).

5. The combination ava is retained in bhavati.
   See Michelson, AJP. 30, p. 297; IAQS. 30, pp. 78, 88.

   Shb., Mans., K. vacer- is a transfer from racus to the a-declension. The point of departure for the transfer of a-stems to o-stems in Middle Indic languages was (as has been long known) the nom. sing. which coincided with the nom. sing. masc. of a-stems. The voc of vaciguti is identical with voc in Sanskrit vacibhādat. In vaci I see a fossilized locative singular. Though in Sanskrit we have the inflection vāc, vācasa, vācë, vācas, vacë, &c., it is clear that originally there was gradation exactly as in the case of pāt. This is shown by Avestan vāzī, vacim, vacu, vacē, vacas-co, vacum. The levelling of the gradation Skt. vāc, Latin rōz, Greek ῥαζ is secondary; see Brugmann, Grundriss, 2. 1, p. 151.

7. The first i in Pulpindesu.
   We cannot be absolutely positive that this is a peculiarity of G. as Shāhbaghāri Putildegu, i.e. Pulimdeu is a 'Māgadhian', as is shown by the l. It is unfortunate that the Kāśi correspondent is so damaged that it is impossible to tell what the vowels of the first two syllables were with certainty. The first may have contained u, but the second apparently has no vowel-indicator, so that we must read a, a palpable blunder for i. To sum up, Pul[al]degu should be read Putildegu, i.e. Pulimdeu. I have previously pointed out the fact that 'Māgadhism' are especially frequent in the names of peoples, countries, &c. See AJP. 30, p. 498; IE. 24, p. 54, 55. On Girnār Tumbapamāi, see my observations above in my discussion of learned and historical orthography, and below in my discussion of the history of a when followed by m + a consonant. To these may be added Satiyaputo, G. ii. 2, Satīyaputru, Shb. ii. 4, Satiyaputru, Mans. ii. 6; cf. Jaugada Satīyapu, Kāśi Sātīyaputo. For this reason Girnār Sātīyaputo has no bearing on the origin of the word. Bühler overlooked this fact. (Note also the Māgadhian t for tr in -puto.)
8. The second ū of susrusā (in compounds only) and sus-
rasatāṃ.

See AJP. 30, p. 287. Delhi Sivalik sususāyā must be kept
apart from Girnār susrusā because DS. bhutānami corresponds
to Girnār bhutānam. Thus it is patent that DS. sususāyā is a
secondary shortening from sususā-. Formerly I explained the
Girnār ū as being more primitive than the Skt. ū of susrusā,
comparing Avestan susrusunā (JAOS. 30, p. 79). If I could
formulate any phonetic law that would account satisfactorily
for the ū of G. susrusā as being of late origin, I should great-
ly prefer it. It is undeniable that in a few cases the Middle
Indic languages are more, or equally as, primitive as Sanskrit.
But as a whole I feel that this has been rather overdone. See
below in my discussion of ū when followed by m + a con-
sonant.

9. Vocalic r becomes a for the most part, but dental stops
are not thereby converted to linguals, e.g., kata.

See AJP. 30, p. 421. There is not the slightest evidence that
r ever becomes i in our dialect. See Classical Philology, 3,
pp. 219, 220.

10. Vocalic r becomes a in maho (Shb. mṛugo. K., J., Dh.
mīge).

On Manu. mṛugo and mīge, see AJP. 30, p. 434.

11. Long vocalic r becomes a in duḍha.

The 'Māgadhan' correspondent is dīğa-. On Manu. dṛihra-
see AJP. 31, pp. 55, 56, Shb. dīha- is a 'Māgadhisn.'

12. The e of lekhaṇātā.

13. Long a is not shortened before medial ṃ, e.g., apabhāṃdatā.

The ṃ is graphically omitted in mṛūṭa; this is a third per-
son plural as is shown by Kālaśa nikhamantu, Dhauli and Jaugāda
nikhamāsavā. The correspondents of the Shāhīkṣgarhi and Man-
sehra redactions are not decisive. The ṃ is likewise omitted in
Pūḍā (Shb. Pumā at xiii. 9) and aparātā (Shb. aparānta,
K. apalantā) exactly as in dhāmmanāsādāho (Shb. [dhra]ma-
sambandho), i at ix. 9 and xii. 2 for kim elsewhere in this
version; karotā (for karontā); and possibly in karotā at ix. 3
if not purely an error induced by karotē at ix. 1 and 2 where
a singular is in place. At v. 5 Bühler reads Kambo, i.e.,
Kambōja-. As a matter of fact the correct reading is Kambō-
[Kambō in Bühler's fragment of the thirteenth edit (on
Smart's smaller fragment, see above) is a 'Māgadhisn', if the
correct reading.] At v. 5 Bühler reads Gāndhārānam. Yet it
is not impossible that the correct reading is Gūm as there is
a large crack in the stone at this point which prevents us
from being positive as to which reading is correct. If the true-reading be Gam-, then it is a ‘Māgarhism’ as is the case with Tumbaparnai (Kālei Tumbaparnai; see my discussion of learned and historic orthography above). As I pointed out above in my discussion of Pāṭhrimdu, ‘Māgarhism’ are common in names of countries, peoples, &c. That niśatā is Sanskrit niśa is clear from Kṛṇāth niśa. According to the St. Petersburg lexicons Sanskrit Paṇḍa- is merely an error for Paṇḍya-. If so it must be a very old one as evinced by the Asokan inscriptions. It is not possible that in some dialects postconsonantal āy became ā phonetically? Then Manucra Puṇāsla, Shh., Manu. Puṇda- would be ‘Māgarhism’, and Skt. Paṇḍa- a borrowing from some Middle Indic vernacular. Formerly (J.A.O.S. 30, p. 79) I held that as ā, and this only, corresponds to Skt. ān = original ę (ātikātā, iv. 1, v. 3, viii. 1, atikātā, v. 1 = Skt. aṭikātā; tātā, xiii. 11 = Skt. āsanta-), the Gīrār ā was more primitive in this respect than Sanskrit as it is admitted that the a of Skt. krama-, danta-, &c. is analogical in origin. I thought that as in Gīrār ān never occurs in these cases, it was impossible to regard the omission of ę as merely graphical. Prof. Bloomfield at the meeting of the J.A.O.S. adversely criticised this point, and after a subsequent discussion with Dr. Sturtevant, I am ready to admit that the forms cited are too few to form a sound basis for the proposed theory inasmuch as ę is often graphically omitted in other cases. At the same time it is well to mention the theory in the hopes that new evidence will turn up to either establish or completely disprove it. Shh. and Mans. atikātā and krama- are merely graphicals for aṭikātā (which occurs in both).—I likewise stated in J.A.O.S., 1 c., that this theory proved that G. was not a linear descendent from Sanskrit. If this theory is wrong, that would not invalidate that claim. For the fact all the Asokan dialects point to a loc. sing. *eṣi (G. aṃsā; &c.) not *eṣa (Skt. asa) shows that not a single Asokan dialect is such a descendent. A further proof of this as applied to the Gīrār dialect is idha (Skt. īhā).

14. Long vowels are not shortened before two consonants

(nāsti, brāhmaṇa-, mahāmātreṣu, Rāśika-, pārākramāmi, pārākramaṇa [not pārākramaṇa as Bühler reads] atpa-, Skt. atma-], bhrātra.

It is clear that bhakṣaṇa- at ix. 5 is merely a blunder for bhāmaṇa- which is found in this version; note the blunders dānaṇi, stāriṣṇa, aṭikēna in the same edict. Similarly brāhmaṇa- [not brahmaṇa- as Bühler transcribes] in the fourth edict is merely a blunder. See IE. 34, pp. 53, 54; AJP. 30, p. 296. It should be noted that rāṣṭra, rāṣṭre can be in themselves
either raología, raología or raología, respectively. Pāli and Pāṣcrit show that they are to be read raología, raología. It will be remembered that in inscriptions it can stand for ə-solidum exactly as in ś. Compare Bühler, Epigraphia Indica, ii, p. 34. Suśapattyāya at l. 9 is graphical for suparśāya. This is shown by Dhauli suupathyāya. Kālīśuśapathyāya, Jaupada suśapathyāya. As a long vowel is regularly shortened in these reductions before two consonants these forms are merely graphical for suparśāya. Hence Girnār suśapathyāya is for suparśāya (Skt. suparśāya). Just so with mahāthārāha at 1.1 cf. Kālīśuśapathyāya (read mahāthārāha). Pāli is likewise confirmatory for these two cases. Similarly asamāta (Skt. aasaṁāta; Kālīśu Dhauli asamāta). Parākamate is a Mādhuism for *parākamate. Similarly parākamena at 4.4,if this is the correct reading which at least is not certain. If tadāpya stands for taddāpya we have another example. If it is a blunder for taddāpya, we still have a case. It should be mentioned that anāpayanti, anāpitam do not belong here: they come from the simplex ə-solidum. This is shown by Pāli and Māgadhan versions of the Fourteen-Kliṣtas. There remain some unexplained apparent exceptions. Note that we have kiti at 1.1 but at 1.2 kiti. It is quite likely that the vocalism of the Māgadhan version is a translation, is responsible for this: cf. Jaupada kitī, Dhauli (kiti and (k)iti, i.e., kiti (local peculiarity for *kiti), Skt. kirti). For Māgadhan influence in the vocalism of words in the Girnār reduction, see Michelson, AJP. 30 p. 287, JAOS. 30, p. 60. A case in point is dasagapā for *dasepti (cf. Skt. drasakauśita, drasakauśita (for native and Mans. draserti). Māgadhan dasagapti has been the disturbing factor in both cases: see AJP. 31, p. 60. At 1.9 we have seṣagāradhī. This certainly corresponds to Skt. seṣagāradhī, cf. the preceding seṣgam umārākhyata (Skt. seṣgam umārākhyata), seṣgam umārāyantu (m. 12, and the correspondents of the other versions. But it should be noted that the ninth edict has many blunders of ə-for ə (see above). So seṣagāradhī might be one for *seṣagāradhī (i.e., seṣagāradhī). But we have umārākhyata at 1.4. Here we can ascribe the ə with confidence to Māgadhan influence (Kālīśuśapathyāya, for the following khoti is a Māgadhanism: see AJP. 30, p. 287, JAOS. 30, p. 78, and above. Hence it would be plausible to attribute seṣagāradhī to such influence. But the reading of the Dhauli text (which alone has a correspondent) is uncertain. In either case, it is not against the law proposed. The correspondents to Skt. pāḍer cannot be taken into consideration, for bhātapuruśa and bhātapuruśa have both Māgadhan a: see my discussion of learned and historical orthography. Bhātapuruśam has at least one blunder as it is; so, a for ə might be another. See Bühler, EI. 2, p. 453; and above. Digkāya at 1.1 is very difficult.
The Sanskrit correspondent is *dirghāya. The 'Māgadhā' versions have a different word in the corresponding passage, and both the Śāhābāsārthi and Maṇḍūkya versions have 'Māgadhism' in the corresponding passages. Of course the fact that the 'Māgadhā' versions have a different word does not preclude the possibility of the particular 'Māgadhā' text of which G. is a translation from having had a form precisely the same or very similar to the Gīrār form. It will be remembered that frequently the versions do not agree in the wording. In this way *dirghāya might be due to 'Māgadhā' influence. It may be mentioned that once *dirghāya was read *dīghāya, but I am convinced from the plate in E1 that this is not the true reading.—The most obstinate of all to explain is *anuṣasti (this or other cases of the same word occurs 4 times, including the occurrence in a fragment of the thirteenth edict, and always in the compound *dhananuṣasti). Nāsti (Skt. nāsti) occurs half a dozen times, there being no other correspondent to Skt. nāsti. It would therefore seem impossible that anuṣasti can phonetically stand for Skt. anuṣasti. At the same time I hardly dare ascribe the a to 'Māgadhā' influence because of the frequency of the word. Perhaps this timidity is wrong as pāti is frequent in G. and outnumbers native pāti two to one. Also *thairā-(or other forms of this) occurs three times, and the initial th looks like a 'Māgadhism', though another explanation (see below) is possible. Finally it should perhaps be queried if G. anuṣasti is not Skt. anuṣasti; not anuṣasti.

15. The diphthong as in *thairā- and *traiḍasā.

The origin of this diphthong is not wholly clear. Without question the e of Dhauli *teṣas, Kāśī *teṣas, Prākrit teresa, teraḥa is to be associated with the as of *traiḍasā. According to Pischel, Grammatik, § 119, the prototype was *treyḍudāka, the e then being a result of contraction. The trouble with this explanation is that -owy- in G., Dh., and J. otherwise is uncontracted (cf. JAOS 30, p. 91). Franke, Puskrt., p. 104 rejects Pischel's explanation, and says the e is for l. This leaves Gīrār *traiḍasā hanging in the air. Johansson, Skh. i, p. 136 (22 of the reprint) suggests that the Middle Indic dialects in this case are very archaic and that Skt. *treyḍudāka is analogical. This last no doubt is the case, but I hardly like to start from this point of view. Phonetically there is nothing for or against his proposition as -owy- is unique as present as far as the phonetics are concerned. (J's prototype is *treyḍudāka which would become *traiḍudāka.) Similarly regarding *thairā-. Pāli and Prākrit there- postulate some such intermediary form as the Gīrār word. (Pischel, l. c., § 166). But here again, the loss of e between a and l, and the subsequent contraction of these vowels is unique.—A further note on *thairā-. The word apparently contradicts the law that stḥ becomes st in our
dialect (gḥarastāni). The ‘Māgadhān’ versions have an entirely different word as correspondents. Still that does not preclude the possibility of a ‘Māgadhān’ *theta- having distorted an original *staīra-. Cf. my remarks on dīghāgīya above. It is very bold to assume descent from a prototype that bore the same relation to Skt. sthāvīra- as Gr. ὑω to ὑδω, though I still believe in spite of Pischel that Pkt. chepa- is similar a case as compared with Skt. kepa- (IE. sk- and k-). It might be a late product. Cases like –as sth- phonetically became –asth-, and this was wrongly divided –as tk-. Hence a form *stāvīra- beside sthāvīra-. But this is purely speculative.

16. The combinations viy and vy fall together in vy (kept apart as such in the Kāśī dialect): vyasaṇam, vyasaṇaṭo, gerundives in -tavya-, divyāni.

Bühler wholly inconsistently transcribes the same symbol initially by vy but medially by y. Why he made any distinction is not clear to me. If we transcribe diyāni, we must transcribe tyeṣanam, ṣeṣapāṭa, &c. But such a combination would be unpronounceable. His appeal to Pāli yha from ṣha is wholly irrelevant as we do not have yh from vy in Pāli. As I am ignorant of the modern Indo-Aryan vernaculars, I cannot criticise his argument from this source.

17. The combination duv becomes dv (dva, Vedic duvāu).

18. The combination dv becomes dh (dbāḍasa).

19. The combinations av, sv (kept apart as such in the ‘Māgadhān’ dialects) fall together in sā (seṣamikena, svayam).

20. The combinations tv and tm become tp; catpāro, gerunds in -tpā, ṭtpa- (Skt. ṛtma-).

There is considerable dispute as to the exact value of the ligature which Bühler transcribes by tp. There is no question but that the true order of the letters is pt, and some (Pischel and Franks) maintain that this represents the actual pronunciation. But it is universally admitted that the actual spelling is no criterion; and some (Burnouf, Ascoli, Bühler [El. 2, p. 210], Johansson) have tried to show that the real pronunciation was ṭp. The linguistic arguments that have thus far been adduced, in my opinion, have a negative value, some tending to show that the pronunciation was pt, some ṭp. And it should be especially noted that no arguments from the dialect itself have been brought forward but only from allied languages. The following linguistic argument, especially when taken in conjunction with Bühler’s palaeographical one, seems to me conclusive proof that ṭp was the pronunciation: Dvāḍasa corresponds to Sanskrit dvāḍasa; and there is no question but
that \( db \) represents the correct order of the letters. Now if Indic \( dv \) becomes \( db \), then Indic \( tv \) surely should become \( tp \). Hence gerunds in \( -tpi \) (Skt. \( -tei \)) are to be read as such. This settles the reading \( atpa- \) (Skt. \( atma- \)) without further arguments. The fact the Singhalese gerunds in \( -pata \) point to \( -ptp \) (Skt. \( -tei \)), does not show that the Girnar gerunds in \( -tpi \) are really \( -pti \). For a stage \( -tpi \) is presupposed between \( -pti \) and \( -tei \); and the metathesis of \( ti \) to \( pt \) can be specifically Singhalese. Certes recently (Lectures, pp. 221, 222) has tried to defend the view that we really have \( pt \) and not \( tp \), admitting a stage \( tp \) between \( pt \) and \( ty \), but saying that \( pt \) was substituted for the unusual combination \( tp \) because \( pt \) was a frequent combination. Inasmuch as the \( p \) in the combination of original \( pt \) was assimilated in this (e.g. \( asamah\), Skt. \( asamapt\) as well as other Asokan dialects and in Pali and Prakrit, I confess that I am not convinced by this line of reasoning. Smart, admitting that the ligature should be transcribed \( tp \), in accordance with his theory of learned and historical spelling on the inscriptions of Asoka—which seems to me to be quite untenable—contends that the actual pronunciation was \( pp \).

21. The combination \( sm \) becomes \( mh \): tamhi, \( *tasmi \), cf. Skt. tasmin.

22. The combination \( hm \) becomes \( uh \): bravhaya- (for the other variants of this word see above).

23. \( R \) is assimilated to all adjacent following consonants except \( v \); it is retained after preceding adjacent consonants, and before \( v \) when that follows immediately: \( athaya, dhamma-, priyadasi, priyo, sramana-, sarvatra. \)

The apparent exceptions are ‘Magadhisma’. See my discussion of learned and historical orthography above.

24. The combination \( -ary- \) and \( -arg- \) become \( -as- \): vas\( a- \), Skt. var\( sa- \), kasanti, \( *karizanti \), cf. Skt. karisanti.

See Michelson, TF. 24, pp. 53, 54; AJP. 30, p. 289; JAOS. 30, p. 89. I give this as a characteristic of G. because the final product is such, whether or not the phenomenon is to be associated with a similar one in Shb. and Maha. (as I think likely). The chronology I formerly assumed is a trifle inexact; we need only assume that in Girnar the \( r \) was assimilated and the gemination simplified with compensatory lengthening before \( rs \) reached a stage \( rg \); we cannot know whether in G. theibilant in the first case had already become a dental. Note ‘Magadhan’ \( vas- \), i.e. \( vasa- \) = Girnar \( vasa- \), Skt. var\( sa- \).
25. Original rś converts a following intervocalic dental ṇ to a lingual ṇ: vimāna-dasanā.
   See Michelson, IF. 24, p. 53.

26. Aryan ṛś (Skt. ṛ, Av. ī) and Aryan śṛ (Skt. śṛ, Av. ī) fall together in ṛś: tisteya, seste (a 'Magadhist' for srestapi).
   See Michelson, AJP. 30, p. 291; JAOS. 30, p. 89. It is likely that this is to be brought into rapport with the change of Aryan ṣṛ and śṛ to śṛ in the dialect of Shāhābargari and Manshāha. I list the phenomenon here because the final result is different in the two dialects.

27. An original palatal-sibilant converts ṣṛ beginning the next syllable to śṛ (dhammanusasiś).  
   See the references cited under 26. I have much less hesitation than formerly in connecting this process with the law in Shb, and Mans, that original ś converts a following intervocalic ṇ to ṇ. For convenience I repeat the law I gave in AJP.: A palatal sibilant converts a following dental sibilant to a palatal one in the dialects of G., Shb., and Mans., the combination ṣṛ subsequently becoming śṛ exactly as pre-Aryan śṛ became Aryan śṛ. Then this secondary śṛ had the same history in the separate dialects as Aryan śṛ(ḥ), i.e., G. ṛś, Shb., Mans. śṛ. Secondary intervocalic ṣḥ had the same history as original intervocalic ṣ, namely, G. ṣḥ, Shb., Mans. śṛ. In support of this combination I would urge that the special points of contact between these dialects are extremely numerous. See below, and JAOS. 30, pp. 87–89.

29. The combination ḫv becomes ḫ and the preceding vowel is lengthened; prajūhītayam.
   The gerundive is based on the present stem as is common in Middle Indic languages. The stem juk- was abstracted from jukati, whence juk- If the long vowel ṛ could be otherwise accounted for, I should prefer to take juk- as being the abstraction from the present stem. [For the phonology, see Pischel, §§ 65, 332; Kanow in Ab. Afh. tit S. Bugge.]

30. The combination -niy-, -ny- become -m- (written -mn-): ānāmam (Skt. aranyam), hirāma- (Skt. hiranya-).

31. The retention of ḥ in idha in idhā (Skt. iha).

32. The t of Ketala- in Ketalaputo.

33. The g of Magā (Kalst Maka, Shb. Maka, Mans. [Maka]).

34. The sandhi of ī, namely, the first ī is not lost after immediately preceding vowels or nasals except in the com-
35. *Etayam* for *eta ayanam*.

According to Bühler this is for *eta iyanam*. As *iyanam* in this text is a 'Māyadevism', I prefer the above.

36. The double treatment of final ām becoming āṃ and *āṃ*. The law governing this double correspondence is not clear. I give two explanations for what they are worth without definitely committing myself to either. To judge from the accusative singulars vihārayātiṃ, and samaccerīṇ as compared with the genitive plurals derūnam (found repeatedly), mitasaṃkūtāṇānum, bhamkaśāsamānam, (three times), pravānum (twice), brāhmaṇasramāṇānum, krāhmaṇasāmanānum, dhāmanyānum, gurūnum, thairīnum, mitābāstūṭattākāṇānum, maṇumānum, pāśu-mānumānum, bhūtānum, the law would seem to be: final āṃ with acute syllabic accent becomes āṃ; final āṃ with circumflex syllabic accent becomes *āṃ*. The final ā in *kāyā* is graphically omitted in *pāyā*, xii. 8, xii. 2; dhānmasuraṇā, x. 2 as in *sadhī*, iv. 11, phalu, xii. 9, ārādhetu, ix. 9, kiti, x. 1, kiti, x. 2, kāntāprava (so!) vi. 2, kāna, vi. 2, ki ti (= *kīṃ ti*), xii. 2, suṣrā, xii. 7. It is also probable that mahātācāraḥ at x. 1 is for *mahātām* as is shown by Maṇeṣura mahātākramanam, Dhauli -(haṃ); yet this is not certain as it might be a nom. pl. neuter like viśvaṃśadānapāṇā, hostiśadānaḥ.—We then should infer that the middle ending -āṃ had the acute syllabic accent (suṣrātan, x. 2; anurūdhīyānum, x. 2) and that the locative sing. of a-stem, ājānam, *ājānam* had the circumflex syllabic accent on the ultima (ganānagam, iii. 6; parisūryam, vi. 7). The objection to this explanation is that it is highly speculative, even if we have Vedic genitives in *-nam* to back it up. On another occasion I had a chance to point how groundless a 'law' was in the Middle Indie dialects which was based on a differentiation by acute and circumflex syllabic accent (AJP. 30, 296). And I have shown in my *Notes on the Pillar-Edicts of Asoka* (JF. 23) that corresponding to Skt. -īyā- and -īyā- alike we have Pāli -ī-5-, Prākrit -i-. In AJP. 30, p. 292 I have disproved Johansson's explanation of Shb. ētāṃ by accentual conditions. And I have shown in JAOS. 30, p. 85 how very improbable is his theory that the position of the accent determines the treatment of final -āṃ in Shb. So that on general principles I am averse to any explanation involving the accent. Yet I may add that the law that in the dialects of the Radhia, Mathia, Rānpūrvā redactions of the *Pillar-Edicts* final ā (whether original
or secondary) is shortened to á, except in the case of accented monosyllables, and before postpositives and enclitics, is due to accen
tual conditions: dagá necessarily presupposes the accentua
tion dagá as opposed to Skt. dayá, similarly hañá the accentua
tion káñá as opposed to Skt. káña. So there might be something in this theory; but, I repeat, I am very dubious on the
point. The alternative explanation I give, and the one in
which I have greater confidence is this: final -am when pre
ceded by a syllable that contains a long vowel, becomes am; otherwise it becomes a. This would account nicely for the difference between devanam, &c. and bhūmasurasá (i.e., am). But this would not answer at all for rihárayánta, samá
cerúm, and pújá (i.e., pájá). We would have to assume extensive levelling, and rather more than our evidence warrants.
Moreover with this explanation we presuppose the accentua
tion devanam. So we are again involved in an accessional condition, and I should very much prefer to assume that the accent was that of Classical Sanskrit rather than a relic of Vedic accentua
tion, if for no other reason than that in certain Asokan
dialects (see above) the accessional system was identical with or similar to the former. To sum up, the evidence at hand will not permit us to formulate a law governing the correspondence.
—Senart at first held that -am and -á were interchangeable;
later, without giving up the possibility of this, considered that final -á had been lost after -á. Konow in his treatise on the
dialect of the Girñá redaction eulogiously to the theory that -á and -am were interchangeable. He said that pújá was for pájá, but accepted rihárayánta; but nowhere is any ex
planation given to account for the double form of the accusa
tive in the same dialect. His appeal to the Pkt. grammarian Cánçá is no explanation. I hope now to definitely disprove the mistaken notion that -am and -á are interchangeable in the Gírná dialect. I have shown AJP, 30, p. 183 ff., that smápatyá, a supposed noun, pl. mas., of an a-stem is in reality a nom.
sing. neuter of an a-stem. In the same paper I have made it clear that if the reading bhútpurumā be retained, or rather amended to bhútpurum, so far from being a noun, pl. at all, it is the equivalent of Páli bhútpattham, an adverb. Senart once held that átilkáta was for átilkámata, later gave this up. The fact that átilkámata is never written is a guarantee that this was not intended by the spelling átilkátam (see my discussion on the history of long á before medial á). Similarly vátilgá is not for vátilgámas. Long ago Bühler made it clear that níci does not correspond to Skt. nítápa. The long á and the e of Dhanú and Jaugáda nice and the e of Káñá nice (i.e., nice) show this. Vincent Smith's reversion to the older view is regrettable. Phonetically we would have K., Dh., J. átilkámata corresponding to Skt. nítápa. I admit that the short i of G.
áci, is hard to explain. Probably the last word has not yet

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been said on the group of words. But if the Girmār word were the equivalent of Skt. _aitgam_ it would be the sole case in which -ā and -āṃ apparently interchangeable. For some positive arguments against this interchange we have the following: the acc. sing. masc. of _a-stems_ is always -āṃ, never -ā; the nom. acc. neutre of _a-stems_ is always -āṃ (barring ‘Māyādharma’), never -ā; the nom. pl. of _a-stems_ is -ā, never -āṃ; the genitive pl. always ends in -āṃ, never -ā. Now if -ā and -āṃ were interchangeable we surely would have some confusion in these categories. And such is not the case.

37. The final vowels of prefixes are occasionally lengthened in compounds: _asampratipati, abhiramakini_.

38. The dat. sing. of _a-stems_ ends in -āya: _athāya, paribhogaṇāya_, _kamāya, tāya, etāya, imāya_.

39. The dative sing. _athā_.

According to Śenart, Konow, and Pischel this is merely a blunder for _athāya_. I see no reason why it may not be a case of haplography as the word occurs in the expression _etāya athā_. Bühl, Johansson, and Franke have defended the word on other grounds. See Bühl, _ZDMG._ 46, p. 62; 48, p. 56; Johansson, _Sbh._ ii, p. 53, footnote 1, _BB._ 29, p. 85 ff. (especially p. 99), Franke, _Pali and Sanskrit_, pp. 122, 152; Pischel, _VS._ i, 44, 61; Bartholomae, _BB._ 15, p. 221 ff., _GrIrPhil._ i, p. 122; Aufrecht, _Festgruss an Böhtlingk_, p. 1 ff.; Brugmann, _Grundriss_ 2. 2. 1 § 159 Anm., and the literature cited in these references.

40. The ‘oblique’ cases of the _ā-stems_ ends in -āya: _vividhāya_, _puṣṭiya_, _mādhuratāya_, xiv. 1; _mādhuratāya_, xiv. 4 (inst.); _āthasamātivāniya_, vi. 7 (loc.).

This _āya_ is identical with Pāli _āy_. The explanation of the form is as follows: _āya_ as a dative sing. was taken over analogically from the _ā-stems_ just as in certain other Middle Indian dialects the _ā-stems_ have analogically taken over _āpe_ from _ā-stems_ (see _JAOS._ 30, p. 92). After the syncretism of the dative and genitive sing., _āya_ was used in place of older *-_āyā_ from *-_āyā_. Then _āya_ levelled the inst. sing., and eventually came to be used as a locative exactly as in certain Middle Indian dialects _āyā_, properly a dat., came to be used as an inst. and loc. sing. The inst. sing. and gen. sing. of _ā-stems_, *-_āya_ and *-_āyā_ respectively, phonetically fell together in _āya_, and this no doubt accounts for the levelling in the case of the inst. sing. Moreover _āya_ was used as a loc. sing.; so the spread of _āya_ to the locative is also readily accounted for. It would be possible to account for the loc. sing. otherwise, and consider it an archaism as opposed to Skt. _āyā_, which is obscure in termination. For _āya_ could phonetically
be combined with Gāthā-Avesta -aunā, Young-Avesta -aun, Old Persian -aunī from Aryan *-aunā. It will be remembered that neither the Avestan nor Old Persian are to be considered in determining the vowel-quantity of the final syllable. For original -ā and -āū graphically appear the same, namely, GAy. -ā, YAY. -ā, OP. -ā. It may be added that it is universally admitted that the vocalism of the first syllable in Avestan has been affected by the vocalism of the inst. sing. The fact that Girnar, Pāli tamah, &c. point distinctly to a prototype *tasmī, not *tasmīna (see Johansson, Skb. ii, § 88) can be used as an argument in favor of this explanation. For the ending *-aunī is to be found in Avestan nētahmī, ahmī, kahmī (per contra Skt. tasmīna, asmīna, kasmin). See Brugmann, Grundriß, 2. 2. 1, § 390. Attractive as this is, I think it can scarcely be maintained in view of the comparatively simple explanation offered above.—There is no necessity of assuming with Johansson and Torp a law that final -ā is shortened if the preceding syllable contains a long vowel to account for -aunā as a gen. sing. Moreover as the preceding syllable in the case of tamah (Skt. tasmīt), paccha (Skt. pascat) contains a vowel long by position, we would expect the final -ā to be shortened. Only assuming the most complicated chronology can the law be maintained, and allowance made for tremendous levelling. And there is no trouble in the explanation I have given to explain -aunā as a genitive. Pāli asa, Girnar asā i.e. asa is no support for the proposed law of shortening. It does not correspond to Vedic asati (subj.) as Kern suggested. But it would be possible to consider it as coming from *asyat, a cross between asat and asāt. A good parallel is Dhauli and Jangadā nihamārā (see Johansson, Skb. ii, p. 89, footnote 3). Or it might be due to such forms as G. tiṣṭeyu ( *tiṣṭheyat, created by analogy; tiṣṭheyam is to *tiṣṭheyat as atiṣṭham is to atiṣṭhat). Henry’s explanation of -aunā (see his Précis) is improbable.—Formerly I thought that -aunā on the Pillar-Edicts of Asoka was to be connected with Pāli and Girnar -aunā. This is wrong as is shown by the fact that in those dialects the dat. sing. of a-stems ends in -aunā while Pāli and Girnar have -aunā. The ending -aunā in Radhia, Mathia, and Rāmpūrā is from *-aunā in accordance with the law that I have established for these dialects, IF. 23, p. 228 ff. Delli Sivalik -aunā beside -aunā is due to analogy; as in the a-stems there existed the doublets -ena, -ena in the inst. sing. so -aunā was made to match -aunā in the inst. sing. of a-stems. Allahabad -aunā is due to the same cause. It obtains exclusively exactly as does -ena._Finally it should be mentioned that the genitive sing. -aunā on the dedicatory inscriptions of Barhut, &c. have to be kept absolutely apart in deciding the origin of -aunā on other inscriptions and in Pāli. For it is notorious that the dedicatory inscriptions are inaccurate in orthography; and -aunā and -aunā
are found as well as -āya. So that it would appear that the true orthography should be -āya, not -āya, -āyā. If -āya was admitted as genuine, -āyā would also have to be admitted, and I fancy few would venture to parallel the ə with the Avestan.

41. The locative sing. of ə-stems ends in -āyam: parisāyam, ganaṇāyam.

42. The nominative plural of ə-stems ends in -āyo: mahādiyay. The ending is taken analogically from the ə-stems. For the literature, see Johansson, Shb. ii. p. 55.

43. The nominative singular of feminine ə-stems nearly always ends in -i: dhammalipi, asampratipati, ahash, sampati, samyapratipati, dhammanusasti.

It should be mentioned that in the Dhasuli redaction, this termination is also frequent, though not to the same extent as in the Ghurār version. Hence I list it as characteristic of ə. The dialects of the various recensions of the Pillar-Edicts show that the ‘Magadhan’ dialect did not possess this ending. It is therefore likely that the termination ə in the Dhasuli redaction is a trace of the local dialect (cf. JAOS 30, p. 77). The Kāski, Shāhīzgarhi, and Mansch greeting redactions can give no testimony owing to their deficient alphabets.

44. The nom. pl. of ə-stems ends in -āyo: atavīyo (Shb. and Mans. atavī).

45. Original ə-stems kept as such: pitari, matari, bhātṝā.

46. The nom. sing. of ə-stems ends in -i: Priyadasi (Dh., J. Priyadasi).

The Shb., Mans., and K. redactions again can shed no light on this point. The Allahabad redaction of the Pillar-Edicts agrees with Dh. and J.; the Delhi Sivalik, Delhi Mirāt, Radhia, Mathia, and Rāmpūrvā redactions agree with G.

47. The dual deo (Vedic duvōu).

48. The phonetic equivalent of Indic *catvrīs (Skt. catvāra) is retained: catprōro.

49. The nom. pl. of tri- is trī.

Tri is a nom. pl. masc., as is shown by the phrase ete pi trī prāṇa, i. 12. Johansson, Shb. ii., pp. 39, 65 wrong. T for tr in tr at i. 10 is due the influence of ‘Magadhan’ tīṃa.

50. The phonetic equivalent of Indic *ta, ta, is maintained.

51. The new-formation ya (*yad).

52. Ayam as a nom. sing. neutre: ayam phala, xii. 9.
53. The nom. sing. neutre *idam.
   It is true that *idam is found once in Shb., but it is so common in G. that it must be classed as characteristic of that dialect.

54. The pronouns *tārisa-, *yārisa-, *etārisa- (see Michelson, Classical Philology, 5, pp. 219, 220).

55. The pronoun ne, nāni.

56. The instrumental singular *iminā.
   In IF. 23, p. 237 I wrongly assumed that Pāli ominā was a contamination of ominā and amūnā. I now hold that ominā is an unst. sing. to such forms as amū, amuddha, and that ominā is a compromise between amūna and ominā. The fact that amūna became reduced to a mere particle in Pāli points to its originality in formation.

57. Middle termination in verbs: parākamate, karote (twice: once possibly a third pl., unless a mere error), maniyate, susruvatām, anuvādhiyatām.
   In Shb. there are two cases, namely: karote, i.e., karote; dipista; in Dh. also one, mom[n]at(e); note too Kāśi nikham[tiḥā].

57. The termination -tha in the optative patipajetha.

59. Personal endings in r: arabhare, arabhīsare, sususera, anuvataram, anuvatīsare, suṇāra.
   According to Bühler anuvataram should be emended to anuvataram, but this is not necessary as the form is explainable as it stands; see Johansson, Shh. ii, p. 90. The form suṇāra is difficult. The reading is certain. Various conjectural emendations have been made. With the emendation suṇāra, things are just as bad as ever as -apa does not become -a in the Gītā dialect. Personally I think we should try to explain the form as it stands. I would not be surprised if suṇāra were a fusion of a subjunctive *suṇāre and an optative *suṇeyu (cf. Shh. suṇeyu) somewhat as Dhauhi and Jangada nikkhamare, or a fusion between a subjunctive *suṇāre and an imperative *suṇamāṇa somewhat as the Śūtra imperatives in -atu (a fusion of the subjunctive -ati and the imperative -atu). It will be noticed that we have such an imperative in Kāśi suṇātau as Bühler has pointed out. See also Johansson, Shh. ii, p. 89. However for the want of further material the whole matter must be left undecided.

60. The optative asa.

61. The optative bhave.
62. The participle karoto (i.e. karonta) as a nom. sing.
63. The participle karum, xii. 4, karu, xi. 4 (with m. graphically omitted).

What Franke says on kru at Gīn. 1895, p. 585 is unconvincing. The form is certainly a participle. The stem kru- seems to be a compromise between karo- and kru-.

64. Gerunds in -tpa, Skt. -tād: adocettpa, davayippa, paricajtpa.
65. The future īkāpāyipām.
66. The p-causative in sukkāpāyipān.
67. Certain lexical features as svayam, sāmiṣya (AJP. 30, pp. 183—187), mahidāya, pasati, yananāya, niratham, nistāṇāya, ghara (AJP. 31, p. 63), panythesā, dighāya, amapāram, bhavasūrdhīta (unless an error induced by katamātā and dadhāḥatā in the same line), tuditptide (*tudāteena-?), sreçāpañca, īloki (from i + īloki as Franke first pointed out; formerly wrongly taken to be a contraction of īha + ī; per contra note īha = Skt. īha), praçantesa, ekuda, madhurutāya, gucheyam, apanigdhāya (see below), vrachā (see below), niyatu, nayāsu, ayāya (see below).

I do not venture to decide if dōkacasa is a mere corruption or stands for *-lokacasa as Bühler has suggested.

Lassen long ago (I. A. 11, p. 251—11, p. 238) saw a root guhānd enclosure (on which consult the St. Petersburg lexicons) must be assumed to account for apanigdhāya: see Johansson, Skd. ii, p. 67, Fischel, GGA, 1881, p. 1330, following Pott, 18, p. 27, considers this guh as an older form of Skt. guh; and he endeavors to support this view by the modern Indo-Aryan vernaculars. As I am ignorant of these, I cannot criticize his opinion from that point of view. But the Skt. participle guhānd and the Avestan V γους show that the Skt. V γου comes from Aryan *ghilē, Indo-European *ghilā; see Wackernagel, Al. Gr. i, pp. 247, 251; Brugmann, Grundriss, i, p. 59,4. Guh is for *ghūndh by Grassmann’s law, and is simply a parallel form to *ghilā as vadh (Old Bulgarian vodh, Lithuanian ved, Avestan v vàd ‘fihren’, Old Irish ‘fithim’ to *vadh (Old Bulgarian vez, Lithuanian vez, Avestan vez, Sanskrit ve, Latin ves). The word vrachā is ordinarily taken as being the equivalent of Skt. vyka— with va as the development of Indic y. As this would be the sole case in which such a development is found in this dialect (per contra note katu, vyapata, mugo, vadā, &c.)
one would properly regard the form with suspicion. But another factor should be taken into consideration, namely, that strictly the word should be transcribed as rechá, for we transcribe the same symbol as re in sarecetra. I regard rechá as a clerical error, being a mixture of *rechá (Skt. rekṣa-) and *ruchá (Vedic rūkṣa-). It may be added that the other versions, save the Shábházgarhi one which differs in the wording, have correspondents to rūkṣa-. In Prákrit we have the equivalents of both rekṣa- and rūkṣa-

Franke's explanation of rayána being due to sandhi is untenable as other examples of such sandhi are not found in the Gírnár redaction. If aigáta is phonetic for *airgáta, then Johansson's explanation (Shb. ii. p. 87, footnote 1) is correct. But it is possible that we have an analogical extension of ni from *nīḥ. Then rayána would be for ny-a-, from nî-a-. The form aigáta is an imperfect of the ya conjugated according to the ya-class.

These are all the special characteristics of the Gírnár dialect that I venture to point out at present. Opinions will probably differ regarding some minor points as to what should have been left out and what should have been included. For examples vowel-quantities are not distinguished in the Khariṣṭhi alphabet, nor i from ī, u from ū in the alphabet of the KālŚi recension. Hence I have ignored for the most part the dialects the alphabets of which are deficient in the way indicated, when treating vowel-quantities. Again I have not listed the contraction seen in Gírnár morá (Skt. mayúra-) as characteristic of the dialect, because I suspect 'Mágadhan' influence in the Shb., Mans. correspondents (JAOS. 30, p. 84). But I have not ventured to list this contraction as a special point of contact between the Shábházgarhi, Manshura and Gírnár dialect, for the reason that at present there is no positive evidence for such contraction in the dialects of Shb. and Mans. Similarly regarding Gírnár manuṣamikítá (Skt. caktá-) and a few other cases. In all such cases I have tried to use my best judgement; and I am confident that it will be found that I have listed all leading features of this dialect.

Special points of contact with the dialect of the Shábházgarhi and Manshura redactions.

I have previously treated these in JAOS. 30, pp. 87-89. To them may be added ayaḿ as a nom. sing. feminine. If the reading of Shb. [osulh]ani be correct, the u and dh are
to be added also; cf. Gînâr osadhâni, 'Mâgadhan' osadhâni. Mans. os[i]hîni is a corruption of some sort, the a may be due to 'Mâgadhan' influence; but -îni is surely unintelligible. The dh of Gînâr osadhâni is, of course, due to the influence of the preceding (original) lingual ɔ. This tends to place the change of ɔ to s is a late period of the Gînâr dialect. The dh of 'Mâgadhan' osadhâni points to an early change of ɔ to s in this dialect. Moreover Gînâr sakâm (i.e. sakkan), Shâházgarhi șako (i.e. šakko) should be associated; cf. Jau- gâda sakîye (Skt. šakya-). The -y- passive (Mâgadhan -iy- [JAOS. 30, p. 91]), and the participle sauto (written sato in Shh.; Fleet wrong) belong also under this rubric. It is quite clear that the final merging together of Indic ɔ, ɔ, ɔ into ɔ is a late development in the Gînâr dialect. I have shown above that ârɔ and âry are treated differently: this shows that ɔ and ɔ must have been kept apart for some time. The fact that original ɔy converts a following intervocalic n to n presupposes an intermediate stage *ɔy before the final stage ɔn. Similarly the change of ɔ̩̌-st to s-ṣt presupposes that the change of ɔ̩̌ to s was late; see JAOS. 30, p. 89, AJP. 30, p. 291. So that it is highly probable that this retention of Indic ɔ̩̌, ɔ̩̌, ɔ as distinct sounds is to be connected with the maintenance of these in the historic period of the dialect of the Shâház- garhi and Mansêhra redactions. Furthermore it appears that the assimilation of r to certain adjacent consonants in the Gînâr dialect is also of recent origin. For ârɔ and âry are kept apart though they are treated precisely alike in the dialect of the 'Mâgadhan' versions. Again r, though assimilated to following dental stops, does not convert these to linguals as is the case in the 'Mâgadhan' dialect. Hence the assimilation though a parallel development was an entirely separate one. In so far as r is not assimilated to certain adjacent consonants, this tends to show that the assimilation to certain consonants is late. (I should add however that to-day I think it quite certain that the assimilation of r in the combination ârɔ[y] is early, and common to Shh., Mans., and G. Formerly I was doubtful regarding this point.) If then these two suggested rapprochements are true, then the Gînâr dialect was very much more intimately related to the dialect of the Shâházgarhi and Mansêhra redactions than hitherto supposed.

In my essay on the etymology of Sanskrit puṣṇa-, which is
in *TAPA*, 40, I have collected some evidence that tends to show that *r* was assimilated to an immediately following *n* in the dialect of Shhb. and Mans. The evidence, as I stated there, is not wholly satisfactory. Yet it may be urged that at any rate *r* never is found before *n* in the transmitted texts. The assimilation is found in the Gîrnâr dialect; and if it took place in the dialect of Shhb. and Mans., this would be another special point of contact. In the 'Mâgadhan' dialects *n* is lacking; its place is taken by *n*. Now I do not think it all probable that this *n* is an archaism as compared with Sanskrit, Gîrnâr, &c., *n*, but that it is rather a secondary change from Indic *n*. If this is so, then *mn* from *rn* would presuppose an intermediate stage *mn* (i.e., *mn*); and thus it is possible that the assimilation of *r* to an immediately following *n* is rather a Pan-Middle-Indic trait as is the assimilation of stops of one order to stops of another order. But the fact that the assimilation of *r* to *rn* in the 'Mâgadhan' dialect must be kept apart from the corresponding assimilation in Gîrnâr (see above) is against this belief. It will be recalled that both *n* and *r* are linguals.

Special points of contact with the dialects of the Shâhbbârgarhi, Mansehra, and Kâlsi redactions.

I have treated these in *JAOS*, 30, p. 90. To the traits mentioned may be added *asu* as a third pl. optative (G., Shhb. *asv*, K., Mans. *asv*); and *a* for *u* in Gîrnâr *pasopagâni*, &c.

Special points with the dialect of the Kâlsi redaction.

Owing to the fact that in edicts i—ix the dialect of the Kâlsi redaction is practically pure 'Mâgadhan', and that in the remaining edicts 'Mâgadhisms' are not infrequent, it is difficult to point special points of contact with the Gîrnâr dialect, even if they existed. As I mentioned before (*AJP*, 30, pp. 297, 417, 421) there is some evidence to show that in the Kâlsi dialect *r* though assimilated to following dental stops, does not convert them to linguals; and there is some evidence, though very meagre, to show that in the true native words original *r* does not linguallize adjacent following dental stops. It is possible that these constitute real special points of contact with the Gîrnâr dialect. But if the assimilation of *r* in
the case of rth, &c. is a late development in the Gīrṇār dialect, as I have assumed above, then the assimilation of r in such cases may be merely a parallel development, not a special point of contact. And in so far as the Gīrṇār and Kālī dialect do not always agree in having the same vowel developed from Indie r (G. katu-, K. kita-) it is possible that the non-
lingualization of dental stops after original r in both dialects is a chance-coincidence (the t of kitu- is likely enough due to ‘Māgadhan’ katu-). At present these are the only possible or probable special points of contact between the two dialects that I can point out. If they are not real points of contact, we face the proposition that they are no special points of contact between the Gīrṇār and Kālī dialects. This would lead to an important conclusion, namely, that there are no true special points of contact between the dialects of the Gīrṇār, Kālī, Shāhbāzgarhī, and Mansehra dialects; where apparently such exist we must assume that the special points of contact are between the Gīrṇār and Shāhbāzgarhī, Mansehra dialects on the one hand; and between the Kālī and Shāhbāzgarhī, Mansehra dialects on the other. [Note J. kām(mane), Dh. (k)am(ma)ne as opposed to G. kammīya, Shb. kramaye, K. kammaye. Mans. kramane is a ‘Māgadhism’.

**Special points of contact with the ‘Māgadhan’ dialects of the Fourteen-Edicts.**

It is not always easy to tell what are true points of contact between these dialects. For example my is retained in G. as well as the ‘Māgadhan’ dialects. But Mansehra my is without question a ‘Māgadhism’ as is shown by the Shāhbāzgarhī correspondent mm. Now as y otherwise is invariably assimilated to a preceding adjacent consonant in the Gīrṇār dialect, it would seem likely that my in this text was a ‘Māgadhism’. As a parallel where a ‘Māgadhism’ has completely usurped the place of a native product we have Mansehra final s for o, and pāṭi for prati. Unfortunately we have no means of checking the Gīrṇār redaction by another text written in the same dialect as we have in the case of the Mansehra redaction. We must admit our inability to determine the point at issue with absolute certainty. The most we can say is that as there are so many special points of contact between the dialects
of G., Shb., and Mns, that it is highly probable that my was also such a point of contact.

We encountered the same difficulty in treating the special points of contact between the Mansehra and Shāhbazgarhi dialect and the 'Māgadhan' dialect (JAOS. 30, pp. 91—93). I may perhaps add that to-day I have what I consider conclusive evidence that gerunds in tu in Shb. and Mns. are 'Māgadhismas'; see AJF. 31, p. 60.

A few apparent special points of contact can easily be shown to be entirely separate though parallel developments. For example there is but one sibilant in both. But I have shown that this is a relatively late development in the Gīrnār dialect. Again though there is partial agreement in the assimilation of r to adjacent consonants in these dialects, the fact that they differ in the treatment of -ārṣ(y)-, G. -ās- 'Māgadhan'-ass-, shows that the assimilation of r in these combinations is a wholly separate development. Moreover though r is assimilated to dental stops in both when they follow immediately, yet in the 'Māgadhan' dialect the dental stops are thereby converted to linguals, whereas in the Gīrnār dialect the dental stops remain as such (see AJP. 30, pp. 296, 297, 416, 417, 419). Consequently the entire process of assimilating r to any adjacent consonants whatsoever must be kept absolutely apart in the dialects concerned. They are parallel developments but not special points of contact. Just so in regard to the treatment of original r. It becomes a for the most part in both dialects. But adjacent following dental stops are not thereby converted into linguals in the Gīrnār dialect as they are in the 'Māgadhan' dialect. Hence the process though similar in both case is an entirely independent parallel development. The fact that the same vowel is not always developed from r (e. g. Gīrnār mīga 'Māgadhan' mīga, Skt. mīyas) confirms this belief.

What then are true special points of contact between the Gīrnār and 'Māgadhan' dialects? Indic su- remains, e. g. svąga- (i. e. svagga-), Skt. svarga-; t for d in the Iranian loan-word -tipy; Indic śc becomes ęcḥ (written cḥ), e. g. pachā, Skt. paśca (see JAOS. 30, p. 85); -nyā- remains (JAOS. 1, c. p. 91); kim ti (Shb., Mns., K. kiti (see Johansson, Shb. ii, p. 52); intervocalic -j- is retained (JAOS. 30, p. 83); -j- is retained in the correspondents to Skt. vyañjanatas (JAOS. 30,
the gen. sing. of in-stems retains the old form, e.g. G. Priyadasino, J., Dh. Priyadasine (Shb., Mans. Priyadruśṣa, Kāśi Priyadrusā; Mans. Priyadraśīne, K. Priyadasine are 'Māgadhisms'); the infinitive in -tave. These are all the special points of contact that I venture to enumerate at present. Note how few they are as compared with the special points of contact with the Shāhbazgarhi and Manshura dialect.
The Babylonian Calendar in the Reigns of Lugalanda and Urkagina.—By George A. Barton, Bryn Mawr College, Bryn Mawr, Pa.

Within the past three years a large number of documents from the temple archives of Telloh, dated in the reigns of Lugalanda and Urkagina have been published, and these documents show that the calendar of the period which they represent was in some respects different from the calendar of the time of Sargon, or of the dynasty of Ur, or of Hammurabi, or of the later periods.

For the most part, the names of the months in the time of Lugalanda and Urkagina were taken from agricultural processes and the agricultural festivals connected with them. There is but one exception to this; one month is named from a star. The names of these months had not yet crystallized into one conventional form. The names of several of them are expressed in a great variety of ways. Two or three of these names have survived into later times, as have fragments of several others of them. One who would reconstruct the calendar of this early time must be guided by the following clues. 1. He must adjust the month to the season described in its name. A harvest festival month must come at the time of harvest; a sheep-shearing festival at the time of sheep-shearing, &c. 2. He should

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1. These are the Russian publication of the collection of Nicolas Likhatscheff, St. Petersburgh, 1908, (cited below as Ru), Allotte de la Fuye's Documents préassyriques, Fasciculus I, 1908, Fasciculus II, Paris, 1909, (cited below as DF), a few of the texts in T. G. Pincher, Amherst Tablets, London, 1908, (cited below as A), De Genonlic's Tablettes sumériennes archéiques, Paris, 1909, (cited below as TSA). These works contain more than five hundred documents from this period. To these should be added the seventy-six tablets comprising series one and two in Thureau-Dangin's Recueil de tablettes chaldéennes, Paris, 1903, (cited below as RTC). Professor A. T. Clay has kindly permitted me to examine his unpublished copies of the texts of this period which belong to the Library of J. Pierpont Morgan. (They are cited below as Mo.)
study the survival of the month names of this period and their fragments in the later times, and may often gain help in determining the place of a month in the earliest time by the place its name held in later month lists. The use of these lists requires caution, however. They represent not only other times, but other localities, and often the survival of other primitive names. Then several things may have affected them. If these month names originated before 3000 B.C., the precession of the equinoxes has carried the zodiac forward since that time, so that whereas then the vernal equinox occurred in the sign of Gemini, from about 3000 to about 750 it occurred in the sign of Taurus, and then in the sign of Aries. While in this earliest period astronomical considerations played almost no part, it is conceivable that at a later time the months may have been attached to the zodiac sufficiently to be slightly drawn out of position by the precession of the equinoxes. Again, special displacements occurred. King Dungi, of the dynasty of Ur, was deified and was assigned a festival. It can, I think, be shown that when that occurred the feast of the goddess Bau was pushed forward, and held a month later. Possibly in one or two instances the name of a month was through a new interpretation transferred to a different part of the year; but this should not be assumed without proof. The month lists which are of assistance in this study are published as follows: RTC, No. 180; ERH, p. 299; VR, 43; VR 29, 1—12a. This last list is repeated in ASKT, 64, 1ff., AL.7, 92ff., and AL.4, 114ff. To these should be added for the time of the dynasty of Ur the comprehensive grain account in CT. 111 (No. 18343) and TCI No. 77, in which the months are all mentioned, in such various combinations that their position in the year can usually be determined.

3. The nature of the transactions in the reigns of Lugalanda and Urkagina dated in these various months should be taken into account to see what light they throw upon the season of the year. 4. The nature of the transactions in dated documents of the dynasty of Ur, (these published in CT, I, III, V, VII, IX & X, in Reisner’s Tempei-Urkunden,1 in RTC, in A, in Barton’s HIC,2 in Lau’s Temple Records,

1 Cited as RU.
and Radau's *Early Babylonian History*, cited as EBH), should be studied for light as to the season at which certain things were done. The assumption seems just that similar agricultural work had to be done at the same time of year.

In the following discussion all these sources of information are drawn upon.

There are two reasons why this discussion is undertaken. 1. Genouillac in TSA, p. xvii ff. has made an arrangement of the calendar which starts, I believe, with a wrong premise, and is accordingly wrong in many of its conclusions. 2. The Russian publication referred to above, which contains more than three hundred tablets and much rich material on the calendar, was apparently unknown to Genouillac, and the addition of this material warrants a new discussion.

Genouillac rightly begins his discussion with the month of the Feast of Bau. This month name continued in common use through the time of the dynasty of Ur, and Gudea twice states that the ZAG-MU, or New Year's festival occurred on the feast of Bau (stat. E. v. 1–2, stat. G 111. 5). Genouillac assumes accordingly that the month of the Feast of Bau was identical with the month March 15th to April 15th. In this he is, I believe, mistaken. In VR 43, 36 a the month of the Feast of Bau is said to be one of the names for the month DUL-AZAG. In VR, 29, 7a and ASKT, 64, 7a DUL-AZAG is said to be a name for Tashrit, the seventh month of the year. The occurrence of this name in this position in this list can, I think, be explained only as a survival of the position of the month in a list earlier than the dynasty of Ur. It follows, accordingly that down to the time of Gudea the year at Telloh began at or near the autumnal equinox, as the Jewish year did in pre-exilic times, and as the religious year does among the Jews to the present day. This fundamental error has made much of Genouillac's outline of the calendar wrong. It is hardly conceivable that an important feast should have been transferred from the spring to the autumn in this way. In a country where the winter is mild and is a season of agricultural work which culminates

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2. The phrase reads ITU [EZIN-] BA-U.
3. This had been recognized by Radau, EBH, 295.
in a spring harvest, and where the summer is a time of drought, it is more natural to begin the year in the autumn when vegetation is reviving after the summer heat. In Babylonia, too, this corresponds to the beginning of the date harvest—\(^1\) a harvest of great importance to the country—when the goddess of plenty begins anew to bestow her gifts. Such a time was most fitting both for a festival to the goddess and the beginning of a new year. The month of the Feast of Ban was, then, September-Oct. Eighteen documents from the reigns of Lagalanda and Urkagina are dated in this month. They are: Ru, Nos. 64, 167, 209, 217, 219, 235, 239, 253, and 261, DP, Nos. 51, 96, and 112, TSA, No. 20, A, No. 14, RTC, Nos. 27 and 39 and Mo, Nos. 1476 and 1494. These documents, however, throw little light on the month itself, as they consist almost altogether of pay rolls and lists of sacrifices—both of which might be written in any month of the year. The predominance of lists of sacrifices is, however, fitting to the new year season.

Later at the time of the dynasty of Ur the month of the Feast of Ban was pushed forward two months. It happened probably in part at the time king Dungi was deified. In honor of the king, perhaps, the feast of the New Year was given to his month, and made the Feast of Dungi, while the Feast of Ban was transferred to the next month. By that time other causes had already pushed the month of Ban forward one month. It still came, however, approximately at the season of dates. So it came about that a pay roll of dates (CT, VII, No. 1776) is dated in the month of the Feast of Ban.\(^2\)

Thus all the indications that we have point to the autumn, not the spring, for the month of the Feast of Ban, and to a year in ancient Lagash which began in the autumn.

Our next step should be guided by RTC, No. 39 and Mo, 1476—two tablets which, though dated in the month

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\(^1\) See Doughty, Arabia Deserta, 2nd ed. I, 557, 561; Zwemer, Arabia the Cradle of Islam, 125, and Burton, Semitic Origins, 111.

\(^2\) It is no disproof of this that an account of quantities of dates sold for money (CT, V, 17765) should run from the month Amaruai (Jan.—Feb.) to Shukul (July—Aug.), but rather a confirmation of it, for these would be the months when dates were sufficiently scarce to be bought for money.
of the Feast of Bau, contain lists of provisions for the 
month of the DIM-eating feast of Nina. DIM was a kind 
of grain, the ripening of which was apparently celebrated by 
a feast. DIM-eating is expressed by the signs DIM-KU. 
Here we are confronted by a difficulty, DIM-KU is almost 
certainly the same as the combination found in the dynasty 
of Ur texts, usually read by scholars ZIB-KU. The four 
wedges of DIM, when carelessly written, as they were in the 
period of Ur, have not until recently been recognized as the 
equivalent of the earlier sign. On the tablet, RTC, 180 (of the 
Ur period) DIM-KU is the third month before the month 
of the Feast of Bau, and not the month after it. There were, 
however, in the Lagalanda period two months which bore 
the name of this grain—one was the month of the DIM-eating 
feast of Ningirsu, the other the DIM-eating feast of Nina. 
In countries like Egypt and Babylonia, in which agriculture 
is fostered partly by the overflow of the rivers and partly by 
irrigation, three different harvests may occur. In Egypt 
today there is the winter crop sown after the subsidence of 
the inundation, which is raised with almost no irrigation. In 
Babylonia, where there are winter rains, such crops grew with 
no irrigation at all. In Egypt the summer crops are sown in 
April, and are harvested, according to the rapidity with which 
they ripen, from August to November. Babylonia, too, as will 
be shown below, had also its summer crops raised by irrigation. 
DIM probably included the two grains, sesame, and the grain 
known today in Babylonia and Palestine as dhurah (52). Ses-
amé is harvested I am informed by Dr. John P. Peters and 
D. Z. Noorian (who was formerly a resident of Babylonia), in 
July and Aug., while dhurah is harvested late in the summer. 
If the sign designated two grains which ripened at different 
periods, or if two crops of the same thing were raised in the 
same summer, the feast of the first harvest would naturally be 
dedicated to Ningirsu, and the second, to Nina. At all events, 
the indications of the tablets are that there were two separate 
feasts, which celebrated the harvesting of this grain.

1 See Baedeker's Egypt, p. lvi.
2 See Rawlinson's Ancient Monarchies I, 12, Jastrow's Religion of Bab. 
& Asyr., p. 29, Roger's History of Bab. & Asyr. I, 273 ff., Burton, 
Semitic Origins, 156.
We conclude then from RTC, No. 39 and Mo. 1476 that the month of the DIM-eating Feast of Nina (EZEN-DIM-KU-\textsuperscript{a}NINA) followed the month of the feast of Bau (EZEN-\textsuperscript{a}BA-U), and corresponded to October-November.

The following tablets of the time of Lugalanda and Urkagina are dated in this month: Ru, Nos. 6, 230, 254, 272, 288, DP, Nos. 106, and 109. Their contents present quite a variety, Ru, 6 is a pay roll; Ru, 230, a list of skins of sheep; Ru, 254, quantities of wool, 269 and 272, quantities of fishes which formed an important part of the festival; Ru, 288, quantities of drinks and wood; DP, 106 and 109, both record quantities of dates and some other fruit. All the transactions are appropriate to an autumn month.

Ru, 269 states that fishermen brought quantities of fish for the grain-eating, the DIM-eating festival of Nina (EZIN-ŠE-KU EZIN DIM-KU-\textsuperscript{a}NINA). This shows that the DIM-eating festival of Nina was also called sometimes by the more general name of "grain-eating festival of Nina"—a fact which proves that the month name ITU EZIN-ŠE-KU-\textsuperscript{a}NINA, which is found in Ru, 57, 225 and 260 is a variant name for the "Month of the DIM-eating festival of Nina". These tablets are respectively a pay roll, a list of skins, and a list of supplies.

RTC, 30, a tablet of the time of Lugalanda, records the bringing of a quantity of fish for the DIM-eating feast of Nina of the month of the Feast-of-the-going-out-of-the-sea (EZEN-AB-UD-DU). If the DIM-eating feast of Nina was in this month, the name must have been another name for the month Oct.-Nov. Genouillac makes it follow the month of the Feast of Bau, so making it April-May, but is unable to explain the appropriateness of the name. That it belongs in the part of the year in which we have placed it is shown by V, R, 43, 52—57a, where the name spelled AB-BA-UD-DU occurs as the name of the 10th month, Tebet (cf. V, R, 29, 10a), i.e. Dec.-Jan. It has there been pushed along one month further—a thing which probably happened when the month of the Feast of Bau was pushed forward.

\textsuperscript{1} The Sumerian is ambiguous. It may be interpreted to mean that EZEN-AB-UD-DU is simply the date of the tablet in which case EZEN-AB-UD-DU would be another name for the month of the Feast of Bau.
This name—month of the Feast of the-going-out-of-the-sea—probably designated the month of low water. The overflow of the Tigris and Euphrates, which begins with the Tigris in March, has ceased on the Euphrates by the end of September. The rains do not begin until December, so that the month Oct.-Nov., after the overflow and before the rains, would be the month of lowest water. This again confirms our placing of the month. What is probably a variant of this name occurs in an unpublished tablet in the Harvard Semitic Museum, a copy of which has been loaned me by Dr. Mary I. Hussey. It reads: ITU GAR-KA-ID-KA, "Month of the food of the river", and is most probably interpreted as a variant name of this feast.

As the next month—November-December—Genouillac places the month SIG-BA, the month of wool, on the ground that as the cool weather approached the people would be employed in making their winter garments. The one document dated in this month known to him (TSA. 27) is a receipt for flails and some wooden pegs from a carpenter. One would expect such objects to be sold nearer the threshing season, which is shown below to have coincided in Babylonia with the time of sheep shearing. There was a month named from the shearing of the sheep, as Genouillac noted and as we shall show below, and the "month of the wool" would be a fitting alternate name for that. It is shown below that these names were applied to the month March-April. Moreover in the time of the dynasty of Ur the wool was distributed to the weavers either in the month of the Feast of Tammuz (HLC. Pl. 51) or the Feast of Ban (HLC. Pls. 23, 24), that the garments might be made before cold weather.

Nevertheless I suspect Genouillac is partly right in thinking that Nov.-Dec. had something to do with garments. A new month-name, which may be thus explained, has come to light in the Russian publication. In Ru 241, a list of skins for garments is dated, ITU ŠI-GAR-MA, which may be rendered, "the Month they put on" garments" (cf. Br. No. 11978 and No. 6778). As one sees men in the East today clothed in the cold rainy time in sheepskin coats, so this month-name appears to refer to time of putting these on.

1 It seems reasonable to regard GAR-KA as a variant writing of B. 11978, akulta, rather than to interpret by M. 9232, egirre.
As to the name of the month Dec.-Jan., in this early time, I am in doubt. I am, however, tempted to believe that it may have been the month ITU UZ-NE-GU-RA-A-A (Ru, 226), the "Month they call the goats." After the rains begin, grass begins to grow, and it would be a natural time to lead the goats away to pasture again. Possibly a reference to some such process has survived in the month name ITU APINGAB-A (V, R, 43, 40—45a), which might be read the "Month the shepherds separate." If that name perpetuates the name of the one before us, and our supposition as to the time of year intended is correct, we must suppose that it was displaced at a later time and put back, for in V, R, 43 APINGAB-A stands for Oct.-Nov. The text Ru, 226, is a list of skins, and such lists are dated at all seasons of the year.

This month (Dec.-Jan.) corresponds to the month MU-SU-UL the period of the dynasty of Ur. The large transactions of that dynasty dated in that month are payments in wheat (CT, VII, 18395) and flour (CT, X, 12246)—transactions which do not help us in determining the correctness of our guess.

Next, we believe, should come the month called in Ru, 1, ITU AMAR-A-A-SIG-GA and in Ru, 222, ITU AMAR-A-A-SI-DA. AMAR was either young grain, or a variety of grain (cf. HLC, Pt. II, p. 23, i, 9 and p. 24, iii, 10). As AMAR stands for the young of animals also (cf. Reisner, U, No. 2, iii, 6 and passim), probably here it stands for young grain. The month-name probably means, the "Month of the filling-out-of-the-young-grain." According to DP, 60 and 69, there was a "Feast of Amaraasi." DP, 60 is a list of sheep and quantities of oil furnished to the wife of Urkagina for that festival, and DP, 69 of food and garlands (in Semitic Minas, cf. M. 3853 and BA, V, 638, 13) furnished to the same lady. There was, then, a kind of a festival of first fruits from which the month was named. We place the month in Jan.-Feb. because in CT, I, No. 77 it is placed just before SE-KIN-KUD, and throughout the dynasty of Ur held this position. Genouillac, who apparently gains his conceptions of the Babylonian agricultural seasons from the climate of southern France, makes this month May-June and calls it "the month when the crops begin to whiten." Many grain account tablets from the

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1 This would be a fresh of first fruits similar to the Hebrew feast of unleavened bread.
time of the dynasty of Ur, as will be pointed out below, show that the harvest was over, the grain threshed and ready for distribution by the month April-May, so that it must have been possible for them to have the feast of first fruits in February. Of the two documents from our period dated in this month, one (Ru, 1) is a long pay roll (and pay rolls are dated in all months of the year), and the other (Ru, 222) is a list of skins received. Skins were likewise received in all months. In later times the month Amaraasi seems to have been the time for leasing asses, which were much used in the harvesting operations of the months which followed. Thus RU, 29 is an ass account from Amaraasi of one year to Sukul (July-Aug.) of the next. Flour accounts are dated in Amaraasi (CT, VII, 12932), payment of wages to IM-E-KID-A workmen (CT, X, 14313), payments of wheat (CT, VII, 12940 and 18409).

1 It is possible that AMAR-A-A-SIG-GA was Feb.-March and that SE-KIN-KUD was one of the names for March-April. One would be forced to think this the case, if he reasoned from modern conditions only. Mr. D. Z. Noorin writes me: "In southern Babylonia barley is harvested in the latter part of March, immediately after barley, wheat is harvested, and so is rice rather early in April. Round about and south of Nippur all tender vegetation dies or dries up by the end of March except such as grows along the canals or swamps." Hilprecht, *Babylonian Expedition of the University of Pennsylvania*, Series D, Vol. I, p. 448, states that the workmen left Nippur at the middle of April to harvest their barley and attend to agricultural affairs. This would imply that, if the climate remains unchanged, AMAR-A-A-SIG-GA and SE-KIN-KUD should come a month later than we have placed them. It is, of course, possible that by the period of Ur these months may have been pushed forward one place. It should be remembered, however, that the names of both months remained unchanged during the Ur period, that both were names meaning of which was well understood, and that, if their season had not really corresponded to the actual time of the harvest at that period, it is highly probable that other names would have supplanted them. As noted above, too, there is abundant evidence in the Ur texts that at the time the grain was threshed and ready for storage by April-May, so that it is probable that in ancient times the harvest came slightly earlier than now. Possible confirmation of some climatic change in the Mesopotamian valley may be found in the fact that as late as 1470 B.C. elephants were still roaming in upper Mesopotamia in the general region of Carchemish. Thebesmes III, of Egypt hunted 120 of them there in the vicinity of Nity. (See Breasted *Ancient Records, Egypt*, Vol. II, § 588, and *History of Egypt*, p. 304.) This would seem to be evidence that in ancient times the climate was warmer than now.
and an account of the sale of dates for money, brought to a close (CT. V, 17752).

The next month was called ITU ŠE-KIN-KUD-DU, the "Month of cutting-the grain," a name which the month Feb.-March bore at the time of the dynasty of Ur (cf. TCI, No. 77). One document from our period is dated in it, RTC, 55. It is a list of quantities of AŠ-plant foods. From V, R, 43, 1—6 b it would appear that the month Amarasasi later was named from AŠ, perhaps because the AŠ-plant was cut in it. At all events in the times of Urkagina AŠ-plant products were to be had in the month ŠE-KIN-KUD.

Probably a variant name of this month at this early time was ITU-AMA-UDU-TUK, or "Month the sheep become mothers." A tablet of the reign of Lugalanda, (Ru, 184), bears this date. It is the record of articles brought by a shepherd for the wife of Lugalanda. The month of the weaning time in the East is most naturally Feb.-March.

The next month, called in later times ŠE-IL-LA (cf. CT, III, 18343, iii, 31 and passim), was agriculturally a busy one in Babylonia, and was, if I rightly understand the agricultural references, designated by several names in the period of Lugalanda and Urkagina.

To begin with a name in which the name elements which have survived to later times appear, it is called in Ru, 234, ITU UDU-SU-ŠE-A-IL-ŠINA, the "Month when the goddess Nina carries grain to the sheep." In three documents, (Ru, 211, Mo. 1474, and TSHA, 18), it is written, ITU UDU-ŠE-A-IL-LA, the "Month sheep-grain-carried," which is evidently an abbreviation for the longer form previously quoted. Other forms of the name are as follows: ITU UDU-SU-ŠE-A-GU, "Month to the sheep grain they feed," (DP, 47), ITU UDU-SU-ŠE-A-ŠINA, "Month to the sheep the grain of Nina," (Ru, 153, 176, 265), ITU UDU-SU-ŠE-A-ŠINA-GIR-SU, "Month to the sheep the grain of Ningirsu," (Ru, 196, 208, 274, TSHA, 6, Mo. 1503); ITU UDU-SU-ŠE-A, "Month to the sheep the grain," (Mo. 1469); ITU ŠE-GAR-UDU, 'Month, they feed the sheep," (Ru, 231); and ITU AN-TA-GAR-RA-A, "Month of feeding," (RTC, 20).

Genouillac puts this month in July-Aug. on the ground that forage was short and they then had to feed the sheep. I doubt the correctness of this for two reasons. 1. The part of
the name that has survived (SE-IL-I₂A) was, as every one knows, the name for March-April. 2. There is no one month in the summer when sheep had to be fed more than during some other months. In CT, III fourteen texts published on plates 11—15 record certain amounts of grain which were for certain sheep and cattle, but the texts are dated all the way from Gudranemumu (May-June, No. 13892), to the Feast of Dungi (Sept-Oct, No. 13882). On the other hand it is probable that the sheep were used in threshing the grain (goats were used in the time of Hammurabi, see Code, xxxviii, 96—98), and that while the threshing was going on they were fed on straw, šubu, and perhaps some grain. This would concentrate a feeding on an especial time, and would agree with the survival of the name to later times. I therefore believe we should place this month at March-April where we find it later.

There was another phase of activity, to which the energies of a large portion of the community were directed. The time at which sheep are shorn in Babylonia today, Mr. D. Z. Noorian informs me, is the end of March. So the sheep which had been collected to assist in the threshing were in ancient times probably shorn of their wool before being sent back to pasture again. Accordingly, when we find a month named ITU MAL-UDU-UR, "Month of sheep-shearing" (RTC, 36), we are justified in supposing that it also refers to the month March-April. A shorter form of this name is found in Ru, 228, where it is called ITU MAL-UR, "Month of shearing." Sheep-shearing was an important function and was attended with feasting, as is shown in 1 Sam. 25 and 2 Sam. 13:23, and it is not strange that an agricultural population should have named a month from it.1

A more popular name at Lagash seems to have been ITU SIG-BA, "Month of wool." This name occurs five times in the documents of our period (Ru, 9, 224, 229, Mo 1456, and TSA, 27). There can, it seems to me, be no doubt that it refers to the same month as the sheep-shearing. Still another variant of the name appears in Ru, 63, where it is written ITU SIG-BA-U-ETTA-GAR-RA-A, "Month the goddess Bau bestows the wool."

That these four names which have to do with wool refer to the same month, seems to me most probable. At the time of the dynasty of Ur, wool for clothing was distributed

1 See Additional Note on p. 271.
from EZIN-DUMU-ZI to EZIN-BA-U (July to Oct.), see HLC, Nos. 1 and 29. Between the sheep-shearing and these dates there was time for cleansing it.

The texts which we thus place together treat of the following topics all of which are appropriate to the time of year, viz.: DP, 47, is a list of provisions of all sorts presented by Barnamtarra, wife of Lugalaanda, to various temples; TSA, 18 is a pay roll; TSA, 6, a list of perfumes; Ru, 208, a list of oxen for sacrifice; Ru, 153 and 176, sheep and goats for sacrifice; four tablets contain lists of sheep-skins; two, lists of fishes; two supplies of grain; and one (Ru, 211) is a receipt for a cow.

The next month was named from the storing and accounting for grain.† Four tablets (Ru, 16, Mo, 1505, and TSA, 14), bear the date ITU KARU-DUB-BA-A, or “Month of storehouse accounts.” Ru, 249 expresses it ITU KARU-DUB-DA. On one text (DP, 119), the month is written ITU KARU-IMI-A-TA. IMI is here a variant of DUB in the sense of Duppu, “account” (cf. Br. 8360), so that the name still means “Month of storehouse accounts.” On still another document (RTC, 56) it is expressed ITU ŠI-NAM-DUB-NI-BA-DUR-BA-A “Month when accounts are opened” (literally “established,” cf. Br. 10528). This refers to the fact, which the great grain account tablet of the dynasty of Ur (CT, III, 18343) establishes, that grain accounts which ran for a year were opened in GAN-MAŠ (April-May, the month was called GAN-MAŠ from the time of Sargon, a name not yet found in the Lagalaanda documents) and ran to ŠE-IL-LA. See CT, III, 18343, vii 34, 35, viii 46, 47, x 23, 24 and xvi 42, 43. CT, V, 18358 is also wheat account for five years which ran from GAN-MAŠ to ŠE-IL-LA. It was also a favorite time for the beginning of shorter accounts. All the following texts are wheat accounts beginning in GAN-MAŠ: CT, VII, 17761, CT, IX, 13134, 19050, 21348, CT, X, 14308. While wheat accounts exist which were opened in other months, e.g. ŠE-IL-LA, CT, VII, 18427, GUD-RA-NE-MU-MU, HLC, 61, EZIN-NE-ŠU, CT, X, 14316, ŠU-KUL, CT, III, 19740.

† That the storage of grain is of very great antiquity at Lagash, is shown by the elaborate storehouse constructed by Ur-Nina, something like a century and a half before the time of our period. Cf. Henze, Une ville royale chaldeenue, p. 95f., and L. W. King, History of Sumer and Akkad, p. 92ff.
IX, 18657, and CT, X, 14315, DIM-KU, CT, X, 21355, EZIN-DUMU-ZI, CT, VII, 18422, MU-SU-UL, CT, VII, 18395, AMAR-A-A-SI, CT, VII, 18409, SE-KIN-KUD, CT, VII, 13166, DIR-SE-KIN-KUD, CT, X, 12235), the documents from the dynasty of Ur show that GAN-MAŠ saw the opening of more accounts than any other month. This fact had, no doubt, a natural cause in the fact that the grain was then threshed and ready for market, and confirms us in the belief th at the month April-May was the "Month of storehouse accounts," ITU KARU-DUB-BA-A.

I therefore regard it as the early name for that month, which by the time of Sargon was displaced by the name GAN-MAŠ, "Month of the division of the fields." — a name which probably refers to the repair of the canals for the irrigation which began in the next month.

As the next month we are, I think, compelled by the documents of the period of the dynasty of Ur to place ITU GUD-RA-NE-MA-A, "Month the faithful oxen go out" — a month found in DP, 143 and RTC, 32. The documents of the period

1 Genouillac (p. xix, n. 8) reads the name ITU-ḪAR-RA-NE-ŠAR-A on the basis of a remark of Thureau-Dangin in ZA, XVI, 345, n. 1 — a remark based on the writing of the month name in RU, 222, a tablet of the period of Ur. This writing also occurs in the Ur tablet published in HLC, II, p. 75 although it is not certain in either case that the first sign is to be read ḪAR instead of GUD. A copy of the month name quoted from an unpublished tablet by Thureau-Dangin, Inventaire des tablettes de Telloh, p. 9, where the name is spelled GUD-RA-NE-ŠAR-MU, shows that in the Ur period the name was pronounced Gudranumum. Thureau-Dangin himself has abandoned the reading ḪAR for the first syllable. ŠAR has the value MU when it means "to sing" (B. 4347) and "to shine" (B. 4346), but the value MA when it means "to go out" (B. 4362). That it had the value MA in our period the phonetic complement A shows. The MU of the Ur period arose, I believe, from phonetic deflection. The value RA attaches to the sign DU when the latter means "go", "walk" (B. 4871) or "be firm", "faithful" (B. 4884). We might accordingly read "the walking oxen" instead of "the faithful oxen".

2 The value ḪAR for GUD is attested only in III R, 68, 64 a — a late syllabary. It may have arisen from the assimilation of Ḫ to the following r in this month name and from the softening of the initial palatal. It is quite uncertain whether GUD was pronounced ḪAR as early as the Ur period.

2 In RTC, 32, the name is ITU GUD-RA-NE-MA-A-4NINA-KA, "Month the faithful (or walking) oxen go out for Nima". It seems
of Ur show conclusively that the month followed GAN-MAŠ. For example HLC, 53 (Pt, II, pl. 72) reads ITU GUD-RA-NE-MU-MU ITU EZIN-ŠE-ŠU-RA (Month Gudranemumu to month of the Feast of Neshu), which shows that Gudranemumu preceded Neshu. HLC, 81 (Pt, I, Pl. 33) reads ITU GAN-MAŠ-TA [ITU] EZEN-ŠE-ŠU-KU [ITU] III[šam], (from the month Gammash to the month of the feast of Neshu, three months). Putting the two statements together it follows that for that period Gudranemumu followed Gammash. HLC, No. 72 (Pt, II, Pl. 81) shows it in another way. We read ITU ŠE-IL-ŠA-TA ITU GUD-RA-NE-MU-MU-KU... III[šam] (from the month Šeilla to the month Gudranemumu... three Months) from which it follows that Gudranemumu was the third month. So far as I can see there is no good reason for supposing that the months were not in the same order in the period of Lugalanda.

The oxen went to the fields to work at the irrigating machines, as is shown for example in the Neo-Babylonian text published in BE, X, 44 and translated by Clay, Light on the Old Testament from Babel, 421. The month May-June occurred at the time when the combined flow of the Tigris and Euphrates rivers was at its height, and it strikes one as strange that oxen for irrigating purposes should have been so extensively employed then as to cause a month to be named from the fact. It is this which leads Genouillac to place this month in autumn, Sept.-Oct., when the rivers were subsiding. It seems, however, a violent preceding to suppose that the month was transferred a third of a year between the two periods. It is quite possible that the name is equally appropriate where it stands.1 It is quite probable that summer crops and orchards stood beyond the range of the overflow of the rivers and needed the aid of irrigation. It was customary, apparently, to begin such irrigation at this time. In a later list of months (V R, 43), a transformation of this name occurs as the name of the second month (April-May, see ll. 3—8 where the name ITU GUD-SI-DA occurs). Prob-

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1 It is not certain that they went to work at the irrigating machines. They may have gone to plough for the autumn crop.
ably this use of the ox in a month-name, however, had in this list an astronomical import and was connected with the second month to correspond with the Bull sign of the zodiac. It does not indicate that the ox-laboring month of the time of Lugalanda was the second instead of the third.

The one document dated in this month is a list of quantities of grain and fishes.

The next month was called by the same name that it bore at the time of the dynasty of Ur, ITU EZIN-ŠE-ŠU, “Month of the Feast of Neshu.” Genouillac makes this the month Oct.-Nov., apparently because many tablets dated in the month designate quantities of seed for various fields. It is clear, however, from the evidence presented above, that the month was the fourth month or June-July in the time of the dynasty of Ur, and it seems gratuitous to suppose that earlier it came at a different time of year. The distribution of seed grains in tablets of the Ur period dated in this month may well have been for the crop which was to be gathered in October, or it may have been customary to have the distribution well out of the way before autumn. Two documents in the Lugalanda period are dated in this month, Ru, 29—a list of supplies—and RTC, 53—a pay roll.

The next month was, we believe, ITU EZIN-DIM-KU-ŠIN-ŠU, “Month of the DIM-eating Feast of Ningirsu,” so called in Ru, 60, 218, DP, 117, TSA, 32, 48, and RTC, 34, but also called in A, 8, and Mo. 1457 and 1480, simply ITU EZIN-DIM-KU, “Month of the DIM-eating feast.” Our reasons for distinguishing this feast from the DIM-eating feast of Nina have already been given. Our reason for placing it here is that A, 83 has a passage which reads ITU DIM-KU-ZI-TA ITU EZIN BA-U-KU ITU 4šam (from the month DIM-KU to the month Ezin-Bau, four months) which shows that at the time of the dynasty of Ur two months intervened between DIM-KU and EZIN-ŠA-ŠU. Now the month list in TCI, 77 begins with ITU-ŠDUMU-ZI, then comes ITU EZIN-ŠDUN-GI, then, ITU EZIN-ŠBA-U. Combining these two passages it follows that at the time of the dominance of Ur the feast of DIM-KU came next before the month of the feast of Tammuz. As we shall show below that the Babylonian year at the time of Urukagina closed with
a month which was in reality the month of the feast of Tammuz, we place the month DIM-KU, or the DIM-eating festival of Ningursu, here in July-Aug. It seems fair to assume that, although the two months had been pushed forward a month by the time of Dungi, that they would retain the same order. From the analogy of the names of the month of the DIM-eating feast of Nina already treated, we are led to regard the name ITU EZIN-SE-KU-4NIN-GIR-SU, "Month of the grain-eating feast of Ningirsu", as a variant name of this month. Ru, 197, 257, and RTC, 67, are dated in it.

The tablets which bear this date treat the following topics:—Ru, 60 is a list of provisions for asses and men, Ru, 218, a list of provisions, DP, 117, a summary pay roll, while TSA, 48 and RTC, 34 are records of quantities of fishes, A, 8 is a receipt for salt. TSA, 32, a list of oxen and cows, Ru, 197, and RTC, 67, lists of supplies, and Ru, 257, quantities of oil. The business which appears here is business which was carried on throughout the year. While not characteristic of any one month, it is not inappropriate to July-Aug. One text, Ru, 2, presents what is, I believe, a variant name for this month, and the only astronomical name which appears in these texts. The tablet—a list of provisions for temple servants—bears the date ITU MUL-BABBAR-SAG-E-TA-SUB-A-A, the "Month the star Babbar lays down its head," or "abandons its leadership." BABBAR means "bright," "white," and is the well known ideogram for the sun, but in the later Babylonian astronomy was a name for the planet Jupiter. Babylonian astronomy as such was, however, the accumulation of many centuries of observation, developing, as Kugler has shown, at a relatively late date. At the early time of which we are speaking BABBAR, "the white star," might have been equally well applied to any other star equally bright. The following considerations lead me to believe that in the month-name before us Sirius, not Jupiter, is intended.

1. Sirius, the brightest of the fixed stars, is about equally bright with Jupiter, and it comes about each year with a regularity with which Jupiter does not. BABBAR would be a very natural name for a primitive folk to apply to it, and in

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1 See Jensen, Kosmologie, 126ff.
2 Sternhunde und Stern dienst in Babel, Münster in Westfalen, 1907.
naming a month they would be far more likely to name it for a star which they had observed came regularly in that month than for a planet which wanders about from month to month.

2. At the time of the dynasty of Ur there is evidence that a month was sometimes named after Sirius. In RTC, 180, the name ITU LIG, “Month of the dog” occurs, and the tablets, HLC, Pt. II, No. 2 (Pl. 52) RTC, 283 and 286 are dated in it. In II R, 43, 63a we find a star name MUL LIG 4BABBAR, (or if read Semitic, Kakkabu Kalbu 4Samaâ, i. e. the star “dog of the sun”). This star is recognized by Kugler and others as a name for Sirius.¹ Now in a text of the period of Ur (RTC, 276), this month is expressed thus: ITU LIG-BA-BAD, the “Month the dog dies” (cf. Br. 1517). This is, I take it, a reference to what astronomers call the “heliac rising” of the dog star. The sun approaches more and more closely to a star until finally it rises so nearly simultaneously with the sun that it cannot be seen. The last time it can be seen is called its “heliac rising.” When the star disappeared in the rays of the rising sun it might naturally be described as the “month the dog dies,” and an earlier age might as naturally describe it as the “month the bright star abandons its leadership.” The two descriptions appear to refer to the same phenomenon. Kugler, (op. cit. p. 234), reckons that the heliac rising of Sirius about 700 B.C. was, for the latitude of Nineveh, July 25th. Of course for Lagash it would be slightly earlier. If these names, then, refer to Sirius they would refer to an event about coincident with the beginning of the month July-Aug.

3. Another reason for thinking that Sirius would first attract the attention of the Babylonians is that it attracted the attention of the early Egyptians, and gave them the foundation of their calendar. This calendar was adopted, Meyer² and Breasted³ hold, about 4240 B.C. If the brightest of the fixed stars could thus attract the attention of one early people, it could easily that of another.

If the months DIM-KÛ and LIG (or BABBAR-SAG-E-

¹ See Kugler, op. cit., 230 and 273 also, Brown, Primitive Constellations, I, 277 ff.
³ Ancient Records, I, 30, and History of Egypt, 14.
TA-ŠUB-A-A) were, as we have supposed, originally the same, they had ceased to be so by the time of the dynasty of Ur, for RTC, 180 has the names on two successive lines as two different months. It must be borne in mind, however, that by that time considerable displacement in month names had taken place. A month ŠU-KUL had been introduced before DIM-KU, Dungi had appropriated a month, and various slight changes had occurred.

The next month in the year was in the Ur period sacred to Tammuz, and was called ITU EZIN-4-DUMU-ZI (cf. TCI, 77). Tammuz was closely associated with the goddess Ishtar, and in the list in V.R., 43 this month is called ITU KIN-4-ININNI, "Month of the mission of Ishtar"—referring, no doubt, to the myth of the descent of the goddess to the lower world. According to the myth she went to the lower world because Tammuz was dead, and the feast of Tammuz was accompanied with wailing for the death of the god. While the name Tammuz (DUMU-ZI) has not yet been found in a month name of the Lagalanda period, it is probable that the month is alluded to under three different names. One of these is ITU EZIN-4-LUGAL-ERIM, "Month of the feast of the god King-of-Erim." Two documents are thus dated: Ru, 202 and RTC, 59. I contended some years ago that Lugal-Erim was a masculinized Ishtar. That he was either that or Tammuz himself is altogether probable, for NA-NA or Ishtar was the goddess of Erim. This month is not, then, to be placed in the winter as Genouillac does, but is to be recognized as the month of the Tammuz festival, Ang.-Sept.

What I regard as a variant name of the same month occurs in Ru, 313, where we read ITU GAL-ŠAG-GA, "Month of the man of favor" (possibly to be rendered "Month of the man of the palm tree"). The primitive Tammuz was associated with the palm tree, and the closing lines of "Ishtar's Descent" (Rev. 47—49) show that the epithet "man of favor" would not be inappropriate to Tammuz. Probably, therefore, we have here a reference under another epithet to the same god, and through him to the same month. As the tablet records a

1 Semitic Origins, pp. 183, 187.
2 See Semitic Origins, 89 E.
payment of money by a man of Elam, the subject matter does not help us in determining the time of year.

Still another variant I would connect, though with less confidence, with the same month. This occurs in Ru, 227 and reads ITU GAL-UNUGGA, "Month of the man of Eridu." The tablet is a list of skins presented by a NU-BANDA, officer of E-NAM-DUMU, or the "Temple of Sonship." Is it fanciful to see in DUMU here the same element as the DUMU in 4DUMU-ZI? If it is not, this tablet is connected with a temple of Tammuz.

The writer showed some years ago that the religion of at least one of the cities of which Lagash was composed was connected with Eridu, and that there was a sacred palm tree at Eridu. Combining these facts with the previous epithet, we gain some probability that we have here another reference to the month of Tammuz.

We have now completed the circuit of twelve months, but we have in the tablets of our period one intercalary month. It is the month in which DP, 99 is dated, and is expressed ITU GAL-LA-A, "Appointed month" (cf. Br. 2253). GAL is the ideogram by which the appointment of an intercalary month was expressed in the period of the kings of Ur, see CT, III, 18343, iii, 45, vii, 40, ix, 12, 49, and xvi, 45. There can be no doubt, therefore, of its meaning here. The tablet records a list of cows and oxen under a NU-BANDA officer.

While the above arrangement of the months is necessarily in part tentative, we have endeavored to utilize all available information, cuneiform, agricultural, geographical, religious and astronomical, in making it. It does not, as does that of Genouillac, presuppose the transfer of month names half way around the year before the time of the dynasty of Ur. Such changes of the position of month names by a month or two before that period as we have pre-supposed are made credible in part by the introduction of new month names, in part by the imperfection of the year, which had to be adjusted by intercalary months, and in part by the loss of the original significance of certain names as they became abbreviated.

We may tabulate our results as follows:

1 Semitic Origines, 196.
2 Ibid, 197.
First month, Sept.-Oct.
ITU EZIN-šBA-U
ITU EZIN-DIM-KU-šNINA
ITU EZIN-šE-KU-šNINA
ITU EZIN-AB-UD-DU
ITU GAR-KA-ID-KA

Second month, Oct.-Nov.

Third month, Nov.-Dec. (?)
ITU ŠI-GAR-MA

Fourth month, Dec.-Jan. (?)
ITU UZ-NE-GU-RA-A

Fifth month, Jan.-Feb.

Sixth month, Feb.-March.
ITU ŠE-KIN-KUD
ITU AMA-UDU-TUK
ITU UDU-ŠU-ŠE-A-IL-šNINA
ITU UDU-ŠE-A-IL-šLA
ITU UDU-ŠU-ŠE-A-KU
ITU UDU-ŠU-ŠE-A-šNINA
ITU UDU-ŠU-ŠE-A-šNIN-GIR-SU

Seventh month, March-April,
ITU ŠE-GAR-UDU
ITU AN-TA-GAR-RA-A
ITU MAL-UDU-UR
ITU MAL-šR
ITU SIG-BA
ITU SIG-šBA-U-E-TA-GAR-RA-A
ITU KARU-DUB-BA-A
ITU KARU-IMI-A-TA
ITU ŠI-NAM-DUB-NI-BA-DUR-BA-A
ITU GUD-RA-NE-MA-A-šNINA

Ninth month, May-June.
ITU GUD-RA-NE-MA-A-šNINA

Tenth month, June-July,
ITU EZIN-šNE-SU
ITU EZIN-DIM-KU-šNIN-GIR-SU
ITU EZIN-šE-KU-šNIN-GIR-SU
ITU EZIN-DIM-KU
ITU MUL-BABBAR-SAG-E-TA-ŠUB-A-A

Eleventh month, July-Aug.
Twelfth month, Aug.-Sept. (?)

ITU EZIN-3LUGAL-ERIM
ITU GAL-SAG-GA
ITU GAL-UNUG3-GA
ITU GAL-LA-A1

A study of the month names in this, the earliest list of Babylonian months known to us, impresses one as a strong argument against the astral theory, which the pan-Babylonians make the basis of their work. Of thirty six month-names, but one is astral. One is the name of the intercalary month; one has to do with the sea or the rivers; while all the rest have to do with agricultural occupations or agricultural festivals. The predominant influence of the heavens, which the pan-Babylonians postulate, is entirely lacking.

Additional Note.

In connection with the remarks about the importance of sheep-shearing in ancient Lagash made above on p. 261, it should be noted that Urkagina in Cone B (Sarzec, Découvertes, p. LI) bears witness to the importance of this operation. In col. II, 4—6 he says MAL-URU-URU-AZAG-GA-KA-NI MU-NA-RU, "The sheep-shearing house of Uruazaggia he built." This implies that sheep-shearing was a kind of public event, and would account for the naming of a month from it,
Some Early Amulets from Palestine.—By James A. Montgomery, Assistant Professor in the University of Pennsylvania.

The following inscriptions are in the possession of Mrs. Henry Draper of New York and the New York Public Library. Dr. Billings, Librarian of the latter institution, placed some of the photographs in the hands of Prof. W. Max Müller, who generously handed them over to me; and subsequently Dr. Billings and Mrs. Draper allowed me most liberally full access to the originals, along with permission to publish them. But the original inscriptions are so minute that any study of them has been made on the photographic reproductions, which fortunately magnified and rendered more distinct the fine and worn characters of the originals.

The originals were once all in the possession of Mrs. Draper, who gave most of them to the New York Public Library. The following account of them is given in the Bulletin of that Library, vol. XII (1908), p. 5, as follows: "Three Hebrew amulets of silver and two of gold, in silver and glass frames, one of the gold amulets having attached the gold cylinder case in which it was worn, all having been found at Irbid [in the Hauran in 1853] and belonging in date to about the second to the fifth Centuries, A.D."

The discoverer of the inscriptions is a dealer in oriental antiquities in New York City, and from him I obtained the following information:

"The amulets Dr. Billings sent you to translate were found in tombs excavated under my personal supervision at Irbid in the Hauran, Syria. Some of them were found last summer [1909] and some two and three years ago. They were worn

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1 This is discrepant with the date given in the Bulletin. The writer then alludes to a long inscription of similar character, (but evidently late) now in possession of Messrs. Tiffany & Co., New York, which has been partly translated by Dr. William Hayes Ward.
in cases of gold (Mrs. Draper has three or four of the gold cases), sometimes in bone cases."

Irbid lies east of the southern end of the Lake of Galilee, just west of the Haj route, and is now an important town. As indicated above, the inscriptions are written on small pieces of metal foil, the largest of them being less than $4 \times 1^{1/2}$ inches in size, and were folded in gold or bone capsules. The minuteness of the script appears upon observing that one of the inscriptions (A) contains 32 lines, and another which is still smaller, 42 lines.

A.

Inscription of 32 lines on silver foil, in possession of the New York Public Library; $3^{1/4} \times 1^{3/8}$ inches. After line 9 follow several rows of conventional round figures, with some characters which recall the Greek alphabet; then a line of larger figures mostly rectilinear. One figure is a cross with a small circle at each end. The circles probably indicate the magician's seal; compare the use of the circle in the incantation bowls.

**Text.**

<table>
<thead>
<tr>
<th>Line</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>בְּהֵמָה דְּמָעָה בּכֵיצָה דָּרוֹן</td>
</tr>
<tr>
<td>2</td>
<td>שְׁמַעְתָּה בְּעָדִיתָה דְּרָמָה לְזֶמַע</td>
</tr>
<tr>
<td>3</td>
<td>דְּעֵז דְּדוֹרְבֶּהָ דְּרָמָה אֶפְּרָק</td>
</tr>
<tr>
<td>4</td>
<td>לַקְּלָה אַלָּ הַזָּה עָמַרְתָּה אֶן</td>
</tr>
<tr>
<td>5</td>
<td>מַהֲשֵׂם בְּבֶן בְּרָמָה בְּשֶׂרֶף</td>
</tr>
<tr>
<td>6</td>
<td>שְׁמַעְתָּה בְּעָדִיתָה דְּרָמָה</td>
</tr>
<tr>
<td>7</td>
<td>עַלְּקָלָה דְּדָרוֹתָה מַזָּה עֲלָה</td>
</tr>
<tr>
<td>8</td>
<td>עַלְּקָלָה לַצָּה אַמָּה אַמָּה</td>
</tr>
<tr>
<td>9</td>
<td>אַמָּה אַמָּה אַמָּה אַמָּה</td>
</tr>
<tr>
<td>10</td>
<td>אַלָּ הַנָּזַעְנַע בְּבֶן אָבְרָהָם אָבְנָא</td>
</tr>
<tr>
<td>11</td>
<td>בְּשַׁלְּפָה מְכֻבָּת שֵׁם לַשְּׁמַע</td>
</tr>
<tr>
<td>12</td>
<td>לָשַׁמְּשָּה מְכַלַּמְּהָה חֲלָמַע נָב</td>
</tr>
<tr>
<td>13</td>
<td>...שָׁה דָּרֵפֶּמַה אַלָּ הַנָּזַעְנַע</td>
</tr>
<tr>
<td>14</td>
<td>הָוָה מְכַלַּמְּהָה אָמַעַת</td>
</tr>
<tr>
<td>15</td>
<td>הָוָה מְכַלַּמְּהָה אָמַעַת</td>
</tr>
<tr>
<td>16</td>
<td>עַלְּקָלָה דְּדָרוֹתָה בְּיָה</td>
</tr>
</tbody>
</table>

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1: See Baedeker, *Palästina u. Syrien* p. 185; Merrill, *East of the Jordan*, p. 293. Extensive ruins exist here and the place has been identified with Arbela.
Translation.

1. And now with the wand of Moses and the shining-plate of Aaron
2. the high priest, and with the seal of Solomon, and with [the shield]
3. of David, and with the mitre of the chief priest, have I pronounced (?)
4. [the word: I am Yhwh, and repeatedly have I exercised] them on behalf of Šahpur, his name,
5. of (?) Šmwr, and for Marian his daughter
6. and the unborn-child in her bowels, from the days [of ever]
8. ? ??
9. ? ??

10. Oh, intercede in behalf of him, Abraham our father.
11. With a seal (?) stamp him. And hear my prayer
12. on account of the dead: “Rise ye forever and ever,” (?) that his so-
13. ul thou bring forth. Do thou drive out that . . . ?)
14. and his devourer I have exorcised. And n-
15. ow, my father, scold them away from Marian and from
16. the unborn-child in her bowels, by Yahweh (?)
17. who has been (so) revealed—Yah教学 is his name,
18. Amen; and from this Marian daughter of Š,.
19. and from the unborn-child which shall be this year.
20. In the name of the great God, A-
22. Peace to this Marian daughter of Š.
23. and to the unborn-child which is in her bowels, from
24. the lilith of her canopy. . . . She-
25. mariah[(?)] angel of Yahū protect (?)
26. her for ages. Hallelu le-Yah, on behalf of
27. this Šahpur and for this Marian daughter
28. of Š. and for the unborn-child in her bowels
29. ? ? ?
30. [and for the unborn-child] in her bowels in her body
31. . . . and from Marian daughter of Šahp-
32. ur. Amen, [Halleluia], Selah.

Notes.

Line 1. The sorcerer claims to be armed with the full magical equipment of the magicians of yore.¹ רמית is the Targumic translation of the biblical השם of Moses (e. g. Targ. Oak. to Ex. 41). The הר Başkanlığı is the biblical הכתוב, the plate of gold on the high priest’s mitre, e. g. Lev. 8 a.

Line 2. David’s magical perquisite was his shield, and so I restore at the end of this and the beginning of the following line, הר التداول. This is probably the earliest literary reference to that magical element; see JQR. XIV, p. 111, for an early (3d century?) representation of it.

Line 3. The term indicating the priest’s property I conjectured to be the mitre, and following a suggestion of Professor Jastrow, comparing the Biblical הכתוב, הכתוב, “helmet,” I suppose that הרלמות refers to a high head-dress. The theme KB, KP, &c. appears in various forms, in the sense, “heap up, be gibbous,” &c. Compare also the rootแผ่, with its derivative תוחております, “turban” of the ordinary priest, and the Syriac מספר, “heap up.” The latter root illustrates the ס in our word.

The הרortality is the high priest of the second temple (הכתוב), when no anointing was practised, so called because of his

¹ Cf. the Greek magical papyri, e. g. Wessely, Griechische Zauber-
papyrus, Wiener Denkschriften XXXVI, 2, p. 129, I. 109ff.; “I am Moses thy prophet to whom thou gavest thy mysteries.”

² The Oxford Lexicon lists these words alphabetically; but they should appear under וס and וס.
many garments. The last word in the line I conjecturally restore to נַשְׂפֵּר, Afel; in the sense “pronounce” the word is generally used in the Pael, but the Afel appears as variant in the ancient Bamberger Codex of Targum Onkelos to Lev. 27:2, Num. 6:2.

Line 4. נַשְׂפֵּר is fairly certain. נַשְׂפֵּר I take to be the fem. of the Pael ppl. used adverbia. Verbs may be supposed at the end of the line and the beginning of the next (the latter with the pronominal suffix דֶּלֶת), which would express the operation of the magical apparatus.

Line 5. נַשֶּפֶר (with pleonastic ה) is parallel to the Jewish Aramaic בָּל הֶלֶת, more לֶלֶת הַלָּשׁוֹן, “on account of,” with feminine pl. ending instead of the masculine. It is resumed with ב in the next line, and is probably to be read in l. 26, being resumed there with בָּל, נַשְׂפֵּר is a unique and early spelling of the famous Persian name Šahpuhre, appearing in the Semitic dialects as Sabor. The first great king of this name flourished in the third century, but the name was an old one in Persia.

Line 6. נַשְׁפֶּר: the missing latter may be ב or ב. We should expect the parent’s, especially the mother’s name to be mentioned; but the Aramaic would require ב, unless we may suppose that the Hebrew ב has persisted. דָּבָר would be a good feminine name, i.e. “fat,” or possibly דָּבָר, “Octavia.” If ב read, ד is the name of a place. פֶּרֶשׁ is the Hebrew פֶּרֶשׁ, the ד is unique. It may be a local dialectic form; cf. מִדְרָשׁ and מַרְשָׁע. A similar prayer for the unborn child, מִדְרָשׁ מַרְשָׁע, appears in one of the (unpublished) Mandaic incantation bowls in the University of Pennsylvania Museum.

Line 10. מַרְשָׁע: if the first character is correctly read, the biblical מ and Targumic מ. The following verb is the biblical and Rabbinic מ. The accompanying preposition ד is peculiar, but is not out of place with a verb of touch. This prayer to Father Abraham is unique, although the atoning and intercessory power of the Fathers is a prevailing Jewish doctrine. The form of the prayer recalls the supplication of the rich man in hell to Father Abraham in the parable in

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1 See Yoma 73a, and Levy, Neubibl. u. chald. Worterbuch, IV, p. 413.
2 See Berliner, Targ. Onkel ad loc.
3 For the feminine form cf. the Syriac נַשְׂפֵּר דֶּלֶת, פֶּרֶשׁ דֶּלֶת.
4 See Justi, Iran. Namenbuch, p. 384.
Lu. 16. קב is the probable reading at end of the line, but ב appears in 1.15.

Line 11. מבר is sure, and I restore the preceding word to מנה at a venture. In magical language Abraham is asked to stamp the dead man as his own. Compare the sealing of the redeemed in Rev. 7.4, and the comments upon Ezek. 9.4 in Shabbath 55a: "The Holy One said to Gabriel: Go and mark with ink a Taw upon the forehead of the righteous that the angels of destruction, מלבנים, may have no power over them," &c.; and further on: "Taw is the last letter of the Holy One, for R. Hanina said. The seal of the Holy One is מ Patriot. The suffixal form מ... is characteristic of Onkelos in the imperative. שמל is a common biblical and Rabbinic word for a spell. There is room for a missing character at the end of this line and at the beginning of the next.

Line 12. The particle מ introduces the following imperative quotation, as in Syriac. דוע is without מ as in Ps. 21.4. Some incantation of magical import is here quoted; cf. the fragment of an early Christian hymn in Eph. 5.14: "Awake thou that sleepest, and arise from the dead, and the Christ shall give thee light."

Line 13. My restoration מבר is possible so far as the remains of the characters are concerned, but the interpretation of the whole passage is not satisfactory. מ may be the pronoun, while מבר may be the Hebrew and Rabbinic שמר, supposing an original stem מבר. The final word would then represent some evil spirit; but it may possibly be מבר, which would alter the interpretation of מבר.

Line 14. מבר: cf. the legend in Sifre of the מבר who await the death of the wicked to tear out his soul, and n. b. Satan's part in disputing over the body of Moses, Jude 9.

Line 15. מבר: n. b. the jussive without the parenthetical מ. This verb often appears in the bowl incantations in the quotation of Zech. 3.2.

Lines 16 l. At the end מבר is most likely to be read; this would be then the expression of the pronunciation of the Tetragrammaton, as preserved in Samaritan tradition, and

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2 See Montgomery, JBL XXV (1906), p. 49.
corresponding to the modern pronunciation Yahwe. This is a unique spelling in Hebrew. The next line הָלִי is evident, and doubtless refers to the revelation contained in הָלִי; it is probably the passive particle (cf. Biblical Aramaic), and practically equivalent to מְתַוְּרָּה. הָלִי is being actually the כַּלֹּהַם. The letters preceding הָלִי are uncertain. There follows מְתַוְּרָּה, cf. מְתַוְּרָּה in l. 25. This is exceptional in the magical forms of the Tetragrammaton, and archaic; cf. Assouan Papyri.

Line 18. קָרֹּת יָדוּ: the restoration is made from l. 28.

Line 19. מֵת and יָדוּ both Targumic; for the latter cf. Targ. Yerush. Num. 22 28. Here the pronoun מֵת and in ll. 18, 28 מֵת, and the masc. מֵת, l. 27.

Line 24. מִלְלוּ or מִלְלוּ = canopied-couch, see Jastrow, Dict. of the Talmud. Evil spirits lurked especially in roofs, trees, and all kinds of coverings, and were most noxious in proximity of a bed. The latter part of the line is obscure. The last letter in the line may be שׁ, to make מִלְלוּת שׁ, a favorite angel of charms. מֵת may be the pronoun of address to the angel.

Line 26. מֵת מֵת: various perversion of this magical word are found, e.g. in the Greek magical papyri.

Line 28. We expect the particle ו before וב, but there is no room for it (ו is almost certain). I have found cases in the Mandaic bowls from Nippur where after the pronoun suffix ו is omitted, the suffix appearing sufficient to establish the genitive relation. So also in the Assouan papyri; we find the relative particle omitted in the construction "year x of such a king." e.g. Sachau's Papyrus A, l. 19, וַיְדַוָּר בָּחֶשָם XIII תַּנָּא. For the abbreviation וב for וב, cf. Sayce and Cowley, Assouan Papyri, E 17, וב — וב וב; also the Talmudic abbreviations.

Line 30. מֵת מֵת, the Targumic מֵת מֵת, Jastrow, op. cit. p. 221 a; also found in Ben Sira 41 11.

The charm is made out for the repose of soul of a certain head and for the health of his daughter מֵת, who is pregnant. In the latter part, the scribe has not very much to add and monotonously repeats the subjects of his charm. But the first

1 Perhaps the same pronunciation is also intended in the magical term מְתַוְּרָּה, found in the text published by Stübe, Jüdisch-babylonische Zaubertexte, l. 145. P.S. The same form I also find in texts at Pennsylvania.


3 See Schwab, Vocabulaire de l'angéologie, s. v.
part of the charm is fresh and original in comparison with the usual stereotyped forms of incantation.

The orthography is marked by absence of vowel letters, e.g. such words as דֹּלֶל הָעָלָה, הָעָלָה, יָרָא, צֹּבַּע, לַעֲגָו; yet דֹּלֶל, לַעֲגָו, הָעָלָה. Final נ appears instead of ס, as in early Aramaic, and as in the Samaritan usage; the one exception is סְנָאָס, where ס is used after נ. The masculine suffix is written מ, to distinguish it from the feminine.

The forms of pronoun, verb, &c., can all be exemplified from the early Palestinian Targums, and the vocabulary is of like character. The noun הָאָטָפ and the prepositional הָאָטָב are new. רֵאָשַׁ is an early and unique spelling.

The script is of the fully formed square type, but certainly early, as reference to Euting’s tables in Chwolson, Corpus inscriptionum hebraicarum will show. I may specify the long left leg of ב, the single form for פ—a long perpendicular stroke, the lack of distinction between ה and ע, and the archaic ב. Taking into consideration the language and the spelling, I would assign the inscription to the second or third century after Christ. There may be also noticed the archaic use of continuing words over the line. The inscription would thus be the oldest amulet of any length which we possess.

The charm largely consists in conventional Jewish phrases and repetitions. It contains however some novel features. The elaborate introduction, with the self-assertion of the conjurer, is of interest, and so is the union in the one charm of prayers for the dead and the living, and also for the unborn. Unique is the prayer to Abraham. The Divine Name is spelled not only הנני, but also, archaically, ונ, and וו, doubtless the phonetic representation of the pronunciation of the Ineffable Name.

B.

Inscription of 40 lines on silver foil, in possession of Mrs. Henry Draper of New York; 3½ x 1½ inches. The charm is so obliterated that despite the use of a bromide enlargement I have been able to obtain but little consecutive sense from the inscription, and hence have not thought it worth while to give a reproduction. It appears to be of the same age as A, though the vocalization is very fully carried out, but differs from that in consisting largely of magical formulas. I give the little that is legible.
A talisman on bronze foil (size unknown to me as I have not seen the original), in the New York Free Library. The remains of nine lines are visible. The first two lines are almost illegible. To the left are some magical signs; the only discernible one being a cross, whose arms terminate in a circle—the same figure is found in A. The charm is addressed against the evil eye and certain named calamities and demons, and was probably intended to be worn on the person. In my interpretation I have had the assistance in part of a translation made by Mr. S. A. Binion of New York. The charm is of a character that still survives in Palestine among the Jews; for examples see Hanauer, Folk-Lore of the Holy Land (London, n. d.) p. 318 ff.
Text.

3. [Protect the ... ]

3. and the body of Georgios son of Pagatios from all evil, from the eye of [his father] 

4. and from the eye of his mother and from the eye of women 

4. and from the eye of men and from the eye of virgins 

5. [Yhwh] Sebaoth is with us, the god of Jacob is our refuge. 

Selah, Amen, Amen, Selah, Amen.

6. [Yhwh] Sebaoth, Amen ...

7. ... ailment and shame and spirit and demon. Amen, Amen, 

7. ... ailment and shame and spirit and demon. Amen, Amen, 

Selah, Amen, Amen, Amen, Amen,...

8. ? ... ?

9. ... Amen, Amen, Selah, Amen.

Notes.

Lines 6 and 8 have evidently some identical words, but both are almost entirely obscure. The last word in each may be משסה, i.e. a name of salvation. Line 5 is a quotation of Ps. 46:8, 12:

In line 7 מַהוּל is for מַהוּל (MHVLT), with equivalence of הָאָדָם and ה as in the Babylonian incantation bowls. The vocalization is very fully expressed, e.g. in the scriptural quotation, which is written by ear and not from knowledge of the text. Both script and spelling refer this charm to a much later date than A. Georgios is a common name in late Greek and Syriac; Pagatios, or Pagatis, I have not found elsewhere.

1 Professor Gottheil has given a brief account of these amulets in the Journal asiatique, X. ix (1907), p. 150.
Graphic Analysis of the Tone-accents of the Siamese Language.—By Cornelius Beach Bradley, Professor in the University of California, Berkeley, Cal.

The so-called "tones" of certain oriental languages of the Chinese type have been not merely stumbling-blocks in the way of the practical learner, but puzzles to the scientific student as well, because of a lingering uncertainty as to the precise quality and definition of each separate tone, and because of the irrational or even misleading nomenclature often applied to them. As to their general nature, indeed, there is substantial agreement: They are pitch-variations corresponding to such inflections of voice as in most languages regularly accompany sentence-stress, and serve to distinguish different kinds of sentences; as, for example, "He has come" (with falling tone indicating simple statement), "He has come?" (with rising tone indicating question), "He has come" (with compound tone indicating incredulity), and so on.¹ In tonal (pitch-accenting) languages, however, these pitch-variations are not used to distinguish between sentences of similar form, but between individual words in other respects similar. In such languages "tones" are elements as inseparable from the enunciation of words as are the vowels and consonants which make up their articulation. Each word in the language, therefore, has its own fixed and inherent "tone," subject only to such variation as may be brought about by varying conditions of emphasis or speed or nervous excitement. The "tones," in short, are pitch-distinctions inherent in words, and necessary to the right apprehension of their content or meaning, rather than applied to words adventitiously and occasionally, as tokens of the modal aspect of sentences in which they occur.² So far

² Wershoven: pp. 8—9; Frankfurter: p. 18; Bastian: p. 360.
all are agreed; and beyond this there is, of course, substantial agreement in the actual practice of all who have really mastered the native speech and accent. But in the various accounts which such persons give of the several "tones," we have all the uncertainty and discrepancy which inevitably attend the attempt to determine phonological matters by reference to the ear and the subjective consciousness alone. The native scholar is here even more helpless than the foreign;—his processes of utterance are wholly instinctive, and therefore more difficult of analysis. As for nomenclature, when the native tells us that a certain tone is "high" or "level," we doubtless have some inkling—though a very inadequate one—of what he means. But when he tells us that this an "entering" and that a "retiring" tone, we are hopelessly at sea. These are terms of pure subjective fancy, and have no directive force whatever for one who does not already know what they are intended to mean. As for the foreign scholar, his "expectant" and "anxious" tones are quite as impossible as any invented by the native.\footnote{Of course, not all the designations here cited have found their way into authoritative print; nor are all from the Siamese field. For illustration}

In thinking this matter over with reference to the Siamese language, which is one of the tonal group, it occurred to me

\footnotesize{\textsuperscript{1}The following are some of the more important references on the subject of Siamese tone-accent: John Taylor Jones, \textit{Brief Grammatical Notices of the Siamese Language, with appendices}, Bangkok, 1842; Caswell, \textit{Treatise on the Tones of the Siamese Language} (the manuscript was composed about 1847, finally printed in the \textit{Siam Repository}, vol. II, Bangkok, 1870); D. J. B. Pallegoix, \textit{Grammatica Linguae Thai}, Bangkok, 1860 (this work has been frequently quoted and followed by later writers; a special feature is Pallegoix' attempt to represent the "tones" by musical notation); D. B. Bradley, \textit{Elementary Tables and Lessons in the Siamese Language}, Bangkok, 1875 (this is the date of my copy which is the eighth edition; the book is printed in Siamese throughout); A. Bastian, \textit{"Uber die siamesischen Laut- und Tonaccents}, in \textit{Monatsberichte der Akademie der Wissenschaften}, Berlin, 1867, pp. 357—386 (in his account of the "tones", the writer, for the most part, follows Caswell); F. J. Wershoven, \textit{Lehrbuch der siamesischen Sprache etc.}, Leipzig, 1891; Samuel J. Smith, \textit{The Principles of Siamese Grammar, Comprising the Substance of Previous Grammars of the Language}, Bangkok, 1889; O. Frankfurter, \textit{Elements of Siamese Grammar, with appendices}, Bangkok, 1900; for an interesting discussion of the origin and nature of pitch-accents see A. Comarady, \textit{Eine Indochinesische Causativ-Denominative Bildung und ihr Zusammenhang mit den Tonaccents etc.}, Leipzig, 1896.}
that since the essential element in all these "tones" is undoubtedly pitch, and since the permanent records of speech made possible by modern mechanism register pitch as wave-length in the tracing, it should be possible to make sure of the facts by actual measurement, and so to end the controversy. Some years ago, therefore, while busy with other points of Siamese phonetics, and making records with Abbé Rousselot's apparatus, for other purposes, I made a series of records of the "tones" as well. I never found time, however, for their proper study and analysis until this last year, when I took them in hand and worked them out, with results which I have plotted on the accompanying chart. The actual operation, however, was by no means as simple as it might seem; and calls, perhaps, for some little explanation, that there may be no misapprehension as to the nature or value of the results. In the first place, since the instrument records all sorts of air-pulses caught in its receiver;—the shocks of contact and release, the physical impact of breath, the intricate pattern of resonance-waves peculiar to each different vowel, the varying intensity of utterance shown in the amplitude or swing of the waves, and the harmonic overtones of the particular voice—all these as well as the fundamental pitch of the vibrating chords; and moreover since these are not analyzed out and separately recorded, but are superimposed the one upon the other in a single intricate pattern, precisely as they are in our hearing of them; it becomes important to the success of our investigation that everything else save fundamental pitch should be either eliminated or minimized. It was comparatively easy to exclude some of the disturbing elements by choosing for the experiment

<table>
<thead>
<tr>
<th>Name</th>
<th>Rising</th>
<th>Falling</th>
<th>Circumflex</th>
<th>Middle</th>
<th>Depressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pallegrin</td>
<td>Altus</td>
<td>Demissus</td>
<td>Gravis (sic)</td>
<td>Rectus</td>
<td>(Circumflex)</td>
</tr>
<tr>
<td>Frankfurter</td>
<td>Alte</td>
<td>Demissus</td>
<td>Gravis (sic)</td>
<td>Rectus</td>
<td>(Circumflex)</td>
</tr>
<tr>
<td>Wersheven</td>
<td>Steigend</td>
<td>Fuldend</td>
<td>Eingehend (sic)</td>
<td>Gleich</td>
<td>Tief</td>
</tr>
<tr>
<td>Bastian</td>
<td>Aussteigend</td>
<td>Fuldend</td>
<td>Rückkehrend</td>
<td>Elsen</td>
<td>Niederge- druckt</td>
</tr>
<tr>
<td>Siamese Writers</td>
<td>High</td>
<td>Low</td>
<td>Second Accent</td>
<td>Middle</td>
<td>First</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Accent</td>
</tr>
</tbody>
</table>
syllables in which they do not appear. But pure vowels alone would not do either, since the conditions of bona fide speech must be observed;—that is, genuine words must be used. After various experiments it appeared that the combination of nasal consonant plus long open vowel gave the most stable and least confused record; since the nasal, being itself vocalic, passes over without shock into the vowel. I was fortunate also to bethink me of one such combination—the syllable na—actually in use in the five different "tones" of long syllables, making five distinct words of identical articulation—perfect homonyms save for the tonal distinctions in question. The conditions were thus almost ideal for the success of the experiment. Furthermore, for purposes of comparison and control, records were taken of two separate utterances of the series of five words.

In the Rousselot apparatus, a cylinder covered with smoked paper revolves at uniform speed under a needle which vibrates from side to side in response to the air-pulses of the voice. The trace appears as an intricate, crinkly curve, the result of the interference or coincidence of the various elements already described. The first step was to distinguish the waves of fundamental pitch from those extraneous elements, and then to measure them. Thanks to the precautions taken, the longer waves of pitch in most cases emerged unmistakably, as the long ocean swell emerges from the complex of minor waves and ripples which it carries. At some points, however, the wave-crests were more or less confused by interference. In such cases the well-known principle of continuity in movement of pitch was applied to discover the true crest, and the result was checked by comparison with the duplicate record.

The length of the waves as shown in the trace ranged from .035 in. at the upper limit of pitch to .125 in. at the lower. In the middle portion of the register .01 in. makes the difference of a whole tone between F and G. To ensure greater accuracy, as well as to economize effort, the wave-lengths were not measured singly, but in groups of five. Using the quantities so obtained as vertical ordinates of pitch, and arbitrarily assuming equal horizontal spaces of convenient length as ordinates of time, the curve of each of the tones was separately

1. It was not possible, of course, to give all the syllables precisely equal time in utterance. As shown in the measurements, the time actually varied from about 1/2 to 3/4 of a second. In order that difference of
Chart of the Five Tones of Long Syllables in Siamese.
plotted on the chart. I feel sure that the curves as plotted are accurate translations to the eye of those pitch-sequences which the ear recognizes as the five tones of Siamese speech.\(^1\)

One striking feature of the result, and one which concerns not Siamese speech alone, is the almost entire absence of straight lines in these figures. This feature seems constant in all speech so far examined. It means, of course, that the speaking voice does not hold the same pitch true even for a very short interval of time. That which the ear recognizes as a monotone, is in fact a sinuous curve oscillating about an average level. The glides also vary in steepness of slope in different portions of their course. All of them show a double or triple curvature. Uniform pitch is by no means practically impossible, as the case of the singer shows; but incessant variation of pitch is doubtless one chief difference between the speaking and the singing voice.

The five "tones" whose pitch-curves have thus been analyzed, are the only ones hitherto recognized in Siamese speech by writers who have dealt with the subject. The list of five, however, is not quite the complete list, as I hope presently to show. But, taking it as it stands, the five "tones" fall obviously into two groups:—\(a\) three sweeps or glides, of large movement and definite figure, designated on the chart as rising, falling, and circumflex; and \(b\) two tones of small variation and indeterminate figure, the middle and the depressed. I think it has never been pointed out that these two groups stand in entirely different relation to vowel-quantity. The long sweeps and glides require appreciable time not only for their proper

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\(^1\) In order to give a clearer idea of the scope and relations of these "tones," I have plotted our musical scale on the margins of the chart. It will be observed that the figures group themselves about the line of medium pitch, which in the experiment was approximately F. But this medium pitch, it must be remembered, is no fixed datum. It varies not merely as between individual voices; but in the same voice it rises and falls with every shifting flood or ebb of psychical excitement; and in its movement it carries along with it the whole scheme of tones related to it as their center. Under excitement moreover, and under sentence-stress, the sweep of these curves is far greater than it is in quiet talk or in the unemphatic parts of the sentence. No two records of the same tone are precisely alike in pitch, though the pattern of the curves and their general relation to each other are remarkably constant.
execution by the voice, but also for their proper recognition by the ear. For this, the time of a long vowel or of a diphthong seems absolutely necessary;—a short vowel is ordinarily quite insufficient. But there is one very interesting exception. The nasal sounds m, n, and ng are sonorous, and are capable of rendering pitch as truly as are the vowels. For tonal purposes, therefore, a nasal consonant operates as an extension of the time of a preceding short vowel in the same syllable, precisely as does the final element of a diphthong. The three tonal sweeps, therefore, are heard only in syllables with a long vowel or a diphthong, or else with a short vowel plus a nasal consonant.

To all ordinary apprehension the two remaining "tones" on the chart are monotones. Very few students have noticed, or are ready to admit even when it is pointed out, the pronounced final drop in that middle tone. The other is not only lower in pitch but has besides a peculiar element or color, which I believe to be nasal resonance, though I have not yet had opportunity to verify the matter by instrumental test. Since these two are effectively monotones, there is apparently no reason why they should not be found indifferently in syllables either short or long. As a matter of fact they are found in both, though in short-syllables native scholarship recognizes only the depressed "tone." The other, at the medium pitch of voice, and reached with least effort, we should expect to find most common. But no short Siamese monosyllable, if spoken by itself with conscious attention, ever takes this tone. It is heard only in continuous speech, that is, in the atomic elements of quasi-compounds and phrases, and is doubtless the result of weakening before stress. Thus it is that it has escaped notice altogether.

There is yet one other "tone," found only in short syllables, which has similarly escaped notice, apparently because it has been carelessly identified either with the rising glide or with the circumflex. The oversight here has escaped detection largely because of the fact that the Siamese scribes have not thought necessary to provide any device to mark this "tone." This third "tone" found with short vowels is a short high note pitched at about the level of the crest of the circumflex, but lacking both the introductory rise of the circumflex and the long deep drop of its vanish. It does not appear on the chart
for the same reason that the other "tones" of short vowels do not appear;—these facts had not yet been reached when the records were made. When subjected to instrumental analysis—which I hope ere long to be able to give them—the three "tones" of short vowels should appear as short horizontal lines nearly straight, occupying rather less than half the space of the long "tones," and in general position coincident respectively with the crest of the circumflex, with the middle monotone, and with the low monotone. Between the long and short varieties of the last mentioned "tones" there is no need to distinguish, since there is practically no difference in pitch or in quality. But the short high "tone" is so manifestly distinct from any other long or short, that it should be added to the traditional list of five to make the series complete. There would be then six "tones";—three with long vowels only, or with their equivalents; two with vowels either long or short; and one with short vowels only.

It is my expectation soon to apply this same method of instrumental analysis to the "tones" of Chinese speech also. If the method should turn out to be really conclusive as to the nature and the figure of the "tones"—and I see no reason why it should not be so,—it ought to lead to a more rational nomenclature of them in both languages. The names affixed to the curves on the chart, and used in the course of this discussion, are, in the main, those suggested long ago by Rev. Mr. Caswell, and adopted in German form by Dr. Bastian. For the newly discovered sixth "tone," I offer with hesitation the name "elevated," chosen principally because it balances its mate the "depressed." It could not well be called "high" because there are already two other tones which might claim the same designation. But Mr. Caswell's names receive surprising justification from the results of this analysis;—they are really descriptive, as all such names should be. If, as the confusion and the uncertainty which have gathered about this matter are cleared up, Mr. Caswell's nomenclature should once more take its deserved place in general use, it would be only one more testimony to the keenness and accuracy of the now almost forgotten scholar who contributed so much toward the training and equipment of the Prince who afterwards became King Mahâ Mongkut, and whose reign ushered in the modern era for Siam.
The "Field of Abram" in the Geographical List of Sheshonk I.—By James Henry Breasted, The University of Chicago.

In a recent fascicle of this journal Professor M. G. Kyle has discussed the above geographical name in the great list accompanying the large historical relief of Sheshonk I at Karnak. Professor Kyle concludes that the identification of the second portion of the name as Abram "scarcely comes within the bounds of possibility." It is important for Old Testament scholars to know whether this conclusion is well grounded or not.

In the first place Professor Kyle is in doubt as to the accuracy of the text which I used in making the identification. He refers to my discussion of the matter in my Ancient Records of Egypt (IV, pp. 352—353), where I have clearly indicated that I had photographs of the text (ibid., p. 348, note a). It seems not to be known to Professor Kyle that I first published this identification in 1904 in the American Journal of Semitic Languages in an article entitled "The Earliest Occurrence of the Name of Abram" (AJSL, Vol. xxi, pp. 22—36).¹ I there (p. 35) included a perfectly clear photograph of the name, in which not a doubtful sign occurs. Moreover the same photograph was later inserted in my History of Egypt (p. 530) in connection with a mention of the identification, and this passage, mentioning the identification and referring to the photograph, is particularly referred to by Professor Kyle with page

¹ Even if I attached any consequence to questions of priority in such matters, I would not raise the question with my good friend Spiegelberg who published the same identification the same year. We did so in entire independence. Moreover as I stated (in AJSL, xxi, p. 36, n. 24), Erman's papers show that he had noticed it in 1888, but did not publish it; and my friend Schaefer had also noticed it independently. It is of importance to remember in this discussion, that four scholars have made this identification independently.
reference. I do not understand how it could have been read without noticing the reference to the photograph in the text, and also to the earlier article in the American Journal of Semitic Languages appended in a footnote. In any case there is no reason for uncertainty as to the text which I used, nor the slightest basis for calling it in question.

This term "The Field of Abram" contains three words and although the second and third are Asiatic words foreign to the Egyptian scribe, he has prefixed the Egyptian article "P". To this Professor Kyle objects that it is impossible that the Egyptian scribe should have translated the foreign article into Egyptian, even granting that it was prefixed to a geographical name. I quite agree with him. This unsatisfactory assumption is however not necessary.¹ The first noun in this compound is, as is now commonly recognized the Semitic word הַמִּדֶּנֶּה "field", which occurs eight times in this geographical list, showing that it was a current element in the geographical names of Palestine at this time. Nothing is commoner throughout the foreign world at the present day than for some such native geographical term to be used without translation. In the East we constantly say "the tell of A," "the wadi of B," "the ghor of C," and when we were in the cataracts of Nubia we frequently spoke of "the bab of so and so," meaning one of the natural gates in the rock barriers of the cataracts which the natives call a "bab." In the same way הַמִּדֶּנֶּה "field" was a current geographical designation in Palestine, but not itself a proper name. The Egyptian took it up and spoke of "the hekel of this" and "the hekel of that," using the Egyptian article before it. This continued into New Testament times in Palestine. Compare ἀλασαραῖον "Field of Blood" or "Field of Sleep." That this is the case is shown conclusively by the parallel use of the well-known Semitic word פֶּרֶּה "valley," which also occurs in this list with the Egyptian article "P" before it. Just as we say "the Wadi Tumilat," prefixing the English article to the Arabic word "wadi," so the Egyptian said "P-Ι-hekel of —," and "P-Ι-'emek of —," meaning "the field of —" and "the valley of —".

¹ I accepted it formerly (AJSL, xxi, p. 32, n. 11), but I have had more experience in the East since then, and the above explanation seems to me conclusive.
Professor Kyle also objects to the interpretation of לֹּם as forming a compound with the following word. The existence of such compounds in the list is proven by the example in which בְּנֵי is the first member, or compounds with הַרְבּוּ “stream” and בְּנֵי “south country,” examples so conclusive that it is fruitless to discuss the question. Moreover Professor Kyle’s own proposed explanation (for which, by the way, no demonstration is offered), viz., that this first member means “vicinity,” “neighborhood” or “community” demands connection with a second identifying word as much as does the word “field”; or are we to suppose that the Egyptian scribe eight times recorded the name “community” in this list, as the name of eight different towns in Palestine!

As to the transliteration of the word Kyle is mistaken in stating that I “change the final vowel to u,” with the implication that this is done in violation of the text. In writing foreign words, and later also in writing words for which he had inherited no current or generally prevalent orthography, the Egyptian scribe usually employed for each consonant a syllabic sign containing two consonants, of which however he read only the first, the second being a very weak consonant, corresponding to Semitic ʕ, ʕ or ʔ. Many if not all of the letters of his alphabet had grown up in this way. Thus א the old writing for t, “a loaf of bread,” became the letter כ”ו; א the slope leading to the high desert plateau, as its archaic forms show, the writing for כ “high,” is the letter כ”ו; א ר “mouth” is the letter כ”ו.1 There was nothing new to the scribe therefore in this acrophonic system which he employed for writing foreign names. We call it “syllabic writing,” but it has been widely misunderstood and various futile efforts have been made to interpret the weak second consonant of each sign as a vowel. In view of what Sethe has brought out in his “Verbum” and Burchardt’s recent study of the foreign words (see below), it is safe to say that such modern efforts have been conclusively shown to be unsuccessful. The Egyptian scribe wrote our word בּד thus:

\[\text{\includegraphics{image}}\]

We may slavishly transliterate this: $P^\prime \text{huw}-\text{rw}^\prime$, but (disregarding $p^\prime$, the Egyptian article), the reading intended by the Egyptian scribe was $h-k-r(=l)$. The weak $w$ in $\text{rw}$, which is the correct reading of the lion is the occasion of Kyle's remark that I have "changed the vowel," though of course there are no vowels in the text.\footnote{On the weak $l'$, by which the scribe writes $l$ at the end, see my note, Records, vol. iv, pp. 352–353, note f.}

Turning now to the more important final word of the group, which three others beside myself have independently identified as "Abram," we find it written as follows:

This is to be transliterated thus $\text{b'r-m}$ and read $\text{brm} = \text{mbr}$.

Kyle first objects to the reading of the first sign $\underline{\text{I}}$, as $\underline{\text{A}}$ or $\underline{\text{S}}$, because in the writing of ordinary, that is non-foreign words this sign has the value $\text{mr}$. Against the reading $\underline{\text{S}}$ he quotes Brugsch who once read it $\text{mr}$, though noting that Brugsch also read it $\underline{\text{S}}$. For these two different readings by Brugsch there is of course a reason, for it was Brugsch himself who discovered and demonstrated the reading $\underline{\text{S}}$ for $\underline{\text{I}}$ in the "syllabic writing." The reading $\text{mr}$ which Kyle finds in Brugsch's Geographische Inschriften belongs to 1857–1880, when this work of Brugsch appeared. Years later he discovered the proper reading of the sign and published it in the Zeitschrift für Aegyptische Sprache in 1874 (pp. 142–143). He clearly proves the new reading $\underline{\text{S}}$, and refers to the old reading $\text{mr}$ as an "Irrtum ..., den sämtliche Aegyptologen mich selbst nicht ausgeschlossen, begangen haben in Bezug auf die Lesung des Zeichens $\underline{\text{I}}$ in bestimmten Wortverbindungen."

Egyptology is among the sciences which are making rapid progress and Brugsch's old reading of over fifty years ago was one which he himself consigned to the populous limbo of incorrect and obsolete readings. Kyle also quotes the English edition of Ermann's Aegyptische Grammatik as throwing doubt on the reading of $\underline{\text{I}}$ as $\underline{\text{S}}$. That edition represents a state of knowledge nearly twenty years old; it is entirely out of date and although I translated it myself, I have reason to hope that it will ere long be superseded by an English edition based on the third German edition, now in press. But even in the
second German edition of 1903 the reading of  as \( \text{hw} \) \((-\text{k})\)
in "syllabic writing," is inserted without question (p. 217). Moreover, as I know from my notes of Erman's lectures twenty years ago he never questioned Brugsch's reading \( \text{ṣ} \) for  in "syllabic writing." His interrogation point in the first edition of his grammar has nothing to do with its use as \( \text{ṣ} \), but refers to something quite different. The value \( \text{k} \) which the sign  has in a large number of foreign words, is due to the fact that there arose a confusion in the usage of the Egyptian scribe between the sign  (\( \text{hw} \)) and  (\( \text{mr} \)), which in the lapidary style are very much alike.  and  in "syllabic writing" strictly equal \( \text{hw} \), or disregarding the weak second consonant it is used for \( \text{l} \), and this constantly corresponds both in genuine Egyptian words and in the writing of Palestinian words to the Semitic \( \text{ṣ} \). All the numerous examples will now be found collected in Burchardt's recent and careful compilation of foreign words transliterated in Egyptian hieroglyphics and it would be superfluous to repeat any of them here.

Not only was the reading \( \text{ṣ} \) demonstrated by Brugsch thirty six years ago, but we may go further and show that the reading \( \text{mr} \) in our word is impossible. In the "syllabic writing" the consonants \( m + r \) cannot be indicated by one sign! If the scribe finds the consonants \( m + r \) in a foreign word which he is transliterating, he renders them invariably by a syllabic sign or signs for each consonant, thus: for \( m \): \( \text{my} \), \( \text{my} \), \( \text{my} \), \( \text{my} \) (or \( \text{ṣ} \)), \( \text{my} \), \( \text{my} \), \( \text{my} \), \( \text{my} \); for \( r \): \( \text{r} \), \( \text{r} \), \( \text{r} \), \( \text{r} \) (rarely \( \text{t} \)). Anyone at all incredulous on this point can satisfy himself of the fact in Burchardt's convenient list, though the fact has been common property among Egyptologists for twenty years. The reading \( \text{mr} \) for  in our word is absolutely impossible.

Finally Professor Kyle objects to the reading of  as \( \text{m} \) and affirms that the second sign, the arm, is entirely ignored in the transliteration "Abram," and further that "the arm is

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2. See especially §§ 56—60 and 77—83.
a strong vowel letter which ought not without special reasons to be ignored in the transliteration." As a matter of fact or with the is the usual writing for in the "syllabic writing"; and even in Erman's grammar of twenty years ago, in the treatment of the alphabet (§ 35), the meaningless with initial in Egyptian words is duly noted. Its frequent use throughout the "syllabic writing" in the initial, medial or final position is a commonplace of modern knowledge.

It will be seen that none of the objections offered by Prof. Kyle cause any difficulty. I may refer to another interpretation of the name which has occurred to me since first publishing it in 1904. The consonants might be the plural of and "The Field of Stallions" or "Bulls" would give excellent sense. It lacks however the preciseness which we expect in such a defining genitive, a preciseness which is only obtained by the use of a proper name after such a common word as "field." This is one of the objections also to the interpretation suggested by Maspero years ago, viz. that "brm" is "meadows." To this we may also object that in Hebrew occurs only in compounds with a following noun in the genitive, and that the plural is never found. I am therefore still inclined to see in the word the earliest occurrence of the name Abram.

Chapter V.

Other Ka Suffixes.

The Suffix ika. § 92—94.

92. a) Without Vridhi.

1) With meaning “having, possessing” (= 3 ka)—(2 words).

$\text{tāṇḍika (AV.)},$ having a tusk or tooth, $\text{tāṇḍa}.$

$\text{paryāyikā (AV.),}$ having (i.e. composed in) strophes, $\text{paryāyā}.$

2) With meaning “of,” “belonging to” &c. (= 2 ka). Adjectival, primarily. (13 words.)

$\text{khaṇḍika (B.S.) < khaṇḍa.}$

$\text{godaṇika (S.) < godāna (cf. gāud-; § 94).}$

$\text{gonāmika < gonāmā.}$

$\text{jyaṭṭṣṭomika (S.) < jyaṭṭṣṭomā.}$

$\text{deṣika (U.) < deṣā.}$

$\text{pitṛmedhika (U.) < pitṛmedhā.}$

$\text{mahācārtika (S.) < mahācārtā.}$

$\text{yamika (SV.B.) < yama.}$

Three other words, which may have either the suffix ika or its equivalent 2 ka; see § 52.

93. b) With Vridhi. Meaning always — 2 ka, “of,” “connected with” &c. Especially common in the Śūtras; infrequent before them. Not one case in RV.—Only two in AV. (vārsika, vāsanṭika).—In all the Samhitās and Brāhmaṇas only 16 cases (nearly all in Br.), against 64 found for the first time in Śūtras. The Upaniṣads add 11 which are not found in the other early literature; occurrences are much less common than in the Śūtras.

Double Vridhi,—i.e. vṛiddhi of the principal vowels of both parts of a compound primitive—appears in the Veda only three times, to my knowledge: dārcapāturṇamāsika (Cāṇkh.Čr. 5. 18. 7) < dārcapāturṇamāsa; sārvavādika (Kauč. 67) < sārvavāda; and sāṭkāṇḍika (Kauč.) sāṣ-koṣa. Other instances in later language.
94. Word-list. Suffix *ika* with Vṛiddhi (*āgni* = of or pertaining to Agni, and so forth). (105 words)

*āgni*ka (S.) < *agnī.*
*agni*stomika (B.S.) < *agni*stomā.
*agnyādhēyika* (S.) < *agnyādēyā.*
*ājārika* (S.) < *ājāvī.*
*ādhikārika* (S.) < *ādhi*kāra.
*ādhīyātmika* (U.) < *ādhi*yātmā.
*ādhīyāyika* (U.) < *ādhi*yāya.
*ādhīvarika* (B.S.) < *ādhīvarā.*
*ānumānīka* (S.) < *ānumānā.*
*ānuyājika* (S.) < *ānuyājā.*
*āparāhkārika* (S.) < *āparāhkānā.*
*ābhicaranīka* (S.) < *ābhicaraṇā.*
*ābhicārika* (S.) < *ābhicārā.*
*ābhīplavika* (S.) < *ābhīplavā.*
*ābhīyudāyika* (S.) < *ābhīyudāya.*
*āvādānīka* (S.) < *āvādānā.*
*āvika* (S.U.) < *āvī.*
*āvāmedhīka* (B.S.) < *āvāmedhā.*
*āvakāhika* (B.S.) < *ēkāhā.*
*āūṣṭika* (S.U.) < *ēṣī.*
*āuttaravedika* (B.) < *uttaravedī.*
*āuṣpavasathīka* (S.) < *āuṣpavasathā.*
*krāvemika* (S.) < *krāvemā.*
*gāudānīka* (S.) < *godaṇa.*
*catuṛthāhnīka* (S.) < *caturthāhan.*
*catuṛthika* (S.) < *caturthā.*
*catuṛdhākāranīka* (S.) < *caturdhākāraṇā.*
*catuṛviṃṣika* (S.) < *caturvīṃṣā.*
*chāṇḍomīka* (S.) < *chāṇḍomā.*
*jyāiṣṭhasamīka* (S.) < *jyeṣṭha-samān.*
*taḍārthika* (S.) < *taḍārtha.*
*tri-varṣika* (S.) < *tri-varṣa.*
*dākṣināṃgika* (S.) < *dākṣināṃgni.*
*dārcapūrnamāsīka* (S.) < *dārcapūrnamāsā* (Double Vṛiddhi).
*dācatrīka* (B.S.) < *dācatrāṇā.*
*dhārmīka* (U.) < *dhārma.*
*nāimittika* (S.) < *nimitta.*
*nāyamika* (S.) < *niyama.*
*nācārika* (S.) < *niçeśāra.*
*nāīśhika* (U.) < *niśhā.*
*pāṇicāmānīka* (S.) < *pāṇicāmāhan.*
*pāramārthīka* (U.) < *paramārtha.*
[pārśthika* (S.) < *prśthā- Suffix 2-ka—see § 29a.]*
*pāunarādāyika* (S.) < *puna-rādhēya.*
*pāurṣamātikā* (B.) < *puruṣamātā.*
*pāurvāhikā* (S.) < *purvānā.*
*prākaraṇīka* (S.) < *prakaraṇa.*
*prāgāthika* (S.) < *prāgātha.*
*prātinidhika* (S.) < *prātinidhi.*
*prādeca* (S.) < *prādeca.*
*prāyañcitikā* (S.) < *prāyañcitā.*
*brāhmānānīka* (S.) < *brāhmān-dānā.*
*bhāṣtika* (S.) < *bhāṣti.*
*mādhuparkīka* (S.) < *mādhuparkā.*
*yājñīka* (S.U.) < *yajñā.*
*yārēchika* (U.) < *yārēchā.*
*rājasūjīka* (S.) < *rājasūya.*
*lāghavīka* (S.) < *lāghava.*
*lauki* (S.) < *laukā.*
*vāyovīdīyīka* (B.) < *vāyovīdyā.*
*vārunaprāghāsīka* (S.) < *vārun-naprāghāsā.*
vārṣaçatika (S.) < varṣaçata.
vārsika (AV. +) < varṣā.
vāsañtika (AV. +) < vasañtā.
vāḍkhala (S.) < vīḍkhala.
vāṭānīka (S.) < vīṭānā.
vādīka (U.) < vēdā.
vāciçika (S.) < vīceṣa.
vācva-devika (S.) < vācva-devāvā.
vāṭīka (S.) < vratā.
çākunika (S.) < çakunā.
çāçvatica (S.) < çāçvanti.
çālāçukika (S.) < çalākoça.
(Double Vriddhi.)
sādañhika (S.) < sādañhā.
sāṃvatsarika (B.) < sāṃvatsarā.
sāṃcāsika (B.) < sāṃcāsā.
sāṃcāyika (S.) < sāṃcāya.
sāṃsiddhika (U.) < sāṃsiddhi.
sāṃgrāmika (S.) < sāṃgrāma.
sāṃghāṭika (S.) < sāṃghātā.
sattrika (B.S.) < sattā.
sattika (U.) < sattā.
sāmniçpātika (S.) < sāmniçpāta.
sāptamika (S.) < sāpticām.
sāptarāṭrika (B.) < sāptarāṭrā.
sāmayāćārika (S.) < sāmayāçāra.
sāmayājika (S.) < sāmayāja.
sāmika (S.) < sāman. (See § 38.)
sāmipātika (S.) < sāmipāti.
sāmipradāyika (U.) < sāmipra-
dāya.
sārvañkāmika (S.) < sārvañkāma
(as n.).
sārvañkālīka (S.) < sārvañkāla.
sārvañjñika (S.) < sārvañjñā.
sārvavarnika (S.) < sārvavarna.
sārvavāidika (S.) < sārvaveda
(Double Vriddhi.)
sāvika (S.) < sāvā.
sāugandhika (B.) < sugandha.
sāūtrāmanika (B.) < sāūtra-
manī.
sūmika (S.) < sūma.
stāubhika (S.) < stobha.
svābhāvika (S.U.) < svābhāva.
svārasāmika (S.) < svārasāman.
hāvījñāika (S.) < hāvījñānā.
hāmantika (VS. TS. +) < he-
mantā.
hātūrika (S.) < hotrā (or hotṛ).

The Suffix aka. 95—97.

95. For 1 aka, see § 16, where the examples are quoted.
(2 words.)

2 aka.—Nouns of action from verb stems. Usually neuter;
one or two fem. See § 17. (8 words.)
abhimēthikā (CBr.), ribald talking, < abhibhām.
-āyaka in ānāyaka (CBr.), not eating, fasting (as noun), < vac.
codaka (Katyāc.), invitation, direction, < vac.
jīvika (U.), manner of life, < vac. But cf. jīva, life. Perhaps
secondary.
pātaka (S.U.), sin, fall, < vac. But cf. pāta; very likely secondary.
pūraka (U.), "filling" of the lungs, inspiration, < vac.
prakṣepaka (U.), throwing (noun), < pra-vāc.
recaka (U.), expiration, < vac (cf. pāraka).

Cf. also pravālikā < pravālha, n., or from pra-vālha; § 91.
The noun *kumbhaka*, "inflation" (of the breath-passages, i.e. keeping them full of air, a religious exercise) Amrt.Up. 9 et alibi, gets its -*ka* by levelling from the nouns *pūraka* and *reçaka* (see above), which are found in close juxtaposition to it (they being also religious exercises). *Kumbhaka* is of course formed from the noun *kumbhā* (because the appearance of a person performing the exercise suggested a pot), while the other two are formed by the suffix *aka* from roots.

96. 3 *aka*.—Participial adjectives and nouns of agent. At first only the latter use is found. All the Vedic cases outside the Upaniṣads, except two in the Śūtras, are exclusively used as nouns (of agent), not as adjectives. In the Upaniṣads the two uses are found mingled about as in later Skt.—The only words which appear before the Upaniṣads are:

**AV.**—[piḥaka, n. of a class of demons, "abuser"? Vpiy.
| kreṭika, pl. the Pleiades (as a sword); Vkreṭ. See § 20.

**VS.**—[abhikroçaka, reviler, abhi-Vkruc.
| viḍyaka, soother, vi-Vli.

**Br.**—[ilṣaka (GBr.), spectator, Viks.
| puripriceha (GopBr.), inquirer, pari-Vprceh.

and four words quoted in Whitney’s Verb-forms as primary derivatives from the Brāhmaṇas, which may belong here; I have not been able to find where they occur. They are:

- dhuvaça-Vduḥu.
- pāṭaka- Vpat.
- lambhaka- Vlambh.
- sāraka- V sr.

| avabhedaka, "splitter," epithet of headache, ava-Vbhād.
| upāsaka, servant, upa- Vās.
| khādaka, eater, Vkhād.

**Śūtras**—[preśaka, spectator; as adj. deliberating on, pra-Viṣa.
| vināyaka, n. of demons, vi-Vni.
| saṃjñāraka, animating, sam-Vjīv.

The remaining words are all Upaniṣadic, and a majority of them are adjectival (participial) in meaning. There are signs of a tendency for these words to take the meaning of the cauṣative of the verb-root from which they are derived; so, e.g., tāraka, "one who takes across or saves;" pravartaka "one who sets in motion." In the Classical language this tendency became very prominent, and the number of such cauṣative words in -*aka* is large, as will be shown in Part II of this book.
97. In this list, which includes all Vedic words in 3 auka, the roots are listed alphabetically; roots compounded with prepositions are placed under the simple roots. The accent was on the root-syllable regularly. (45 words: 40 different roots.)

The Suffix uka. §§ 98—99.

98. (For Secondary uka, see § 21, where supposed examples are quoted.) Primary. Words of present-participle meaning (besides á-lambhuká, see § 24, with gerundival meaning) from verbal roots. Practically limited to the Bráhmana language (see §§ 22—24). Of 71 Vedic words all but four are found in the Bráhmanas. These four are:

sánuká (RV.), V.san. vikasuka (AV.), vi- V. kas.
ráhhuca (S.), V.reh. lambhuka (U.), V.lambh.

The AV. has furthermore three words which are also found in the Bráhmanas, viz: ghátuka (V.hau), a-pramáyuka (pra-V.mí), sánkasuka (sam-V.kas). This makes five pre-Bráhmanic in-
stances; for the Y.V. Samhitās proper do not contain a single instance, so far as recorded. Following are the 71 Vedic words I have noted, arranged alphabetically under the 57 roots. On the forms of the roots, see § 24. The accent is on the root-syllable, whether the root is simple or compound,—unless a-privativ is prefixed, in which case it has the accent. The only exceptions are sānukā (RV.), vi- and sān-kasukā (AV.), which date from the formative period of the suffix; sānukā was not felt as Vsan + suffix -uka, but as an u-base from

<table>
<thead>
<tr>
<th>99. açanāya açanāyuka.</th>
<th>naç</th>
<th>nañçuka.</th>
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<tr>
<td>i + abhi abhyāyuka.</td>
<td>pat + parā</td>
<td>parāpūtuka.</td>
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<tr>
<td>+ vi vyāyuka.</td>
<td>pad + pra</td>
<td>prapāduka.</td>
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<td>r ārūka.</td>
<td>pis</td>
<td>pēsuka.</td>
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<td>rā ārtukā.</td>
<td>pūs</td>
<td>pēsuka.</td>
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<td>rākārā dhukā.</td>
<td>bandh + ud</td>
<td>udbāndhukā.</td>
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<td>+ sam samārdhukā.</td>
<td>bhid + vi</td>
<td>vibhindukā.</td>
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<td>+ ā ārdhukā.</td>
<td>bhu</td>
<td>bẖāruka.</td>
</tr>
<tr>
<td>+ vi vyārdhukā.</td>
<td>bhraṇç + pra-</td>
<td>prabhraṇçuka.</td>
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<td>kārākā.</td>
<td>mad + ud</td>
<td>umāduka.</td>
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<td>kās + vi vikasukā.</td>
<td>man + abhi</td>
<td>abhimānukā.</td>
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<td>+ sam sānkasukā.</td>
<td>mi + pra</td>
<td>pramāyukā.</td>
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<tr>
<td>kārākā.</td>
<td>mūh</td>
<td>mōhuka.</td>
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<tr>
<td>kārākā.</td>
<td>mṛ</td>
<td>māruka.</td>
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<tr>
<td>kram + apa apakramukā.</td>
<td>mṛj + nis</td>
<td>nirmāryukā.</td>
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<tr>
<td>+ upa upakramukā.</td>
<td>mrit + nis</td>
<td>nirmretukā.</td>
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<td>kāso dhukā.</td>
<td>yoj</td>
<td>yājuka.</td>
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<td>gam + ā āgāmukā.</td>
<td>ruc</td>
<td>rōcuka.</td>
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<td>grah grahukā.</td>
<td>rudh + apa</td>
<td>aparōdhukā.</td>
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<tr>
<td>car + abhy -ava -abhyacār- uka in ā-n-u.</td>
<td>ruh + abhy-ā</td>
<td>abhyāroḥukā.</td>
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<tr>
<td>cyu + pra pracyāvuka.</td>
<td>vadh + abhi</td>
<td>(an)abhiyāvāduka.</td>
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<td>jau jāmukā.</td>
<td>vid (1)</td>
<td>vēduka.</td>
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<tr>
<td>ji jāyukā.</td>
<td>vid (2)</td>
<td>vēduka.</td>
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<tr>
<td>daṇc daṇcukā.</td>
<td>ēr</td>
<td>vārṣuka.</td>
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<td>das + upa upadāsukā.</td>
<td>vṛg</td>
<td>vēṣṭuka.</td>
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<td>dah dāhukā.</td>
<td>vṛṣṭ</td>
<td>vēṣṭuka.</td>
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<tr>
<td>+ nis -nirdhukā in ā-n.</td>
<td>cūṣ + ud</td>
<td>uccōṣukā.</td>
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<tr>
<td>nam + upa upanāmukā.</td>
<td>sṛ + sam</td>
<td>sanācāruka.</td>
</tr>
<tr>
<td>naç nāçukā.</td>
<td>sād + apa-ni</td>
<td>apanīṣāduka.</td>
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<tr>
<td>Sanskrit</td>
<td>Transliteration</td>
<td>Sanskrit</td>
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<td>san</td>
<td>sānukā</td>
<td>han</td>
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<td>sthā</td>
<td>sthāyuaka</td>
<td>hr</td>
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<tr>
<td>+ upa</td>
<td>upasthāyuaka</td>
<td>+ pra</td>
</tr>
<tr>
<td>+ prati</td>
<td>pratiṣthāyuaka</td>
<td>hlād</td>
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<tr>
<td>in ā.p.</td>
<td></td>
<td>hṛv + vi</td>
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<tr>
<td>+ praty-ud</td>
<td>pratyuttāyuaka in ā.p.</td>
<td></td>
</tr>
</tbody>
</table>

The Suffix يكا—see § 25, where all quotable examples are given. (3 words.)

The Suffix يكا. See § 26. (20 words.)

100. a) Verbal adjectives or nouns of agent from Verbal bases. (ācarika. AV., tearing pains; < āV ēṛ in dissyllabic form ṣari; primary ka.)

-ṛjika, RV., AV., gleaming; Vṛj (in ārjuna, ṛjā, ṛjīti).

In āśīr-, bhā-, gō-ṛjika. That the word ever means “mingled with,” except in a purely secondary way, I do not believe, gō-ṛjika is commonly rendered “mixed with milk,” but more accurately it means “milk-shining,” “gleaming with milk” (of the soma-mixture).

dūṣika, AV. n. of demons, “spoilers;” Vdūṣ (dūṣ).
dṛṣṭikā, TS., beholder, Vdṛṣ.
dśbika, RV., n. of a demon, Vāṛbh-. weave, tie.

(parparikā?—RV. 10. 106. 6.—BR. merely quote Sāy.—
“Zerreisser oder Erfüller;” other comm. have various guesses; nothing certain. The whole hymn is late, and purposely mystical and obscure. With reference to turphāri, which is closely connected with it, I should suppose that parparikā is a secondary formation to *parphāri; but it might be primary, from the root of parpharutī (next verse). Ludwig “zerstreuen,” Grassmann “Gaben ansstreuen.”]

(viṣārika, AV., a disease; primary ka—see ācarika. But cf. viṣārā.)

vṛdhikā, RV., n. of Indra, “increaser;” Vvṛdhā.

101. Other Uses.

b) Gerundive Adjectives from Verbal bases:

īśikā (AV., +), “to be shot,” an arrow, Vīś.
dṛṣṭikā (RV.) “to be seen,” splendid, Vdṛṣ.

c) Abstract Nouns from Verbal bases:

dṛṣṭikā, and (once) ā (RV.), appearance, Vdṛṣ.

mrūdikā, and (deriv.) mardikā (RV.), favor, mercy, Vmrūḍ.
(d) Secondary nouns from nouns, with mng. of "1 ka.

śṛśīkā (AV.), n. of an evil spirit; "bear-like?" < śṛśa?

kačīkā (RV.), weasel; < kača, the same or a like animal.

kumbhīkā (AV.), a sort of demon; perhaps cf. kumbhā.

(e) Wholly uncertain are the following words (see General

Index for what little can be said about them):

āṭika
kuḍākā (puḷikā)
cupunikā
parārikā

čārśikā
sāṭika
sāṇika
sūṣitika (for çuḷākā?)

The Adverbial Suffix k—see § 27, where all quotable examples
are given.

The Primary Suffix ḫa. See § 28.

102. Nothing remains after what has been said (§ 28) but
to give an alphabetical list of those words which have most
the appearance of primary derivatives. Any attempt to assign
definite meanings to the suffix, except in a general way as
has been done in § 28, would be fruitless. How many of the
words here listed are really formed from true "roots" or bases
with the suffix ḫa, not from lost adjectives or nouns, is a
question that is very difficult to answer.—It will be noted that
the words are nearly all ancient, most of them appearing in
the RV.—In the case of some it is very doubtful whether the
suffix ḫa is really contained in them. When this is the case
it will be indicated.

103. Word list.—Primary ḫa. (About 30 words.)

āṭka (RV.), a garment; Av. udaka.

āḍarīka (AV.), a disease, "tearing pains," < ā-Vṛ, in dissyllabic
form ḫari. Cf. viḍarīka.

āṣuka (ĀrṣBr.), n. of a sāman, < ā-Vṣu? Comm. < asuka, an
alleged n.-pr.

ēka (RV., +); one. IE. base of-

karkā (AV.), white, ?

kṛśīkā (RV.) a cert. bird. Prob. onomatopoetic.

jāhākā (TS, VS.), hedgehog. Vhā.

nāka (RV.), heaven. Suggested Vnam; IE. nā + ka. Quite
uncertain.

nīka (ĀrṣBr.), n. of a sāman.—Cf. nī?

nīṇkā (RV.), a neck ornament. ? Cf. OHG. musca, OIr. nasc.

nīhākā (RV.), storm. ?

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pāka (RV.), very young; simple &c. Prob. Vṛ̥ pā + ka, "suckling."
pikā (VS.), a bird. Uhlenbeck compares picus; very doubtful.
baka (KS.), n. pr. (in Class. Skt., a crane). Prob. non-suffixal k-
beška, bāiška, bleska, meška, vesška, vleska (Y. V. +), a snare.
Perhaps from Vṛ̥, vay-weave. But Brugm. has a different
etymology, assuming vleska as the orig. form.
mūka or mukā (VS.), dumb. Cf. mūrā, mā-ā, Lt. mūtus.
-mēka in numēka (RV.), well-established. Vṛ̥.
yāṣka (S.), n. pr.? (yāṣkā, patron.);
rākā (RV.), full-moon. Cf. yā(ī)?
līka (TS.), n. of an Āditya. Vṛ̥, stick, lie, ?
vakkā (TS.), tree-bark. Perhaps cf. Vṛ̥y, cover,
vīcirika (AV.), a disease, cf. dācirika; < vi-Vṛ̥, in dissyllabic
form ća.ri-. But cf. vīcirā!
vṛkkā (RV.), kidney, for vṛkka, as Av. vṛkālo shows. Further
etym.?
talkā (RV.), price. Uncertain.
čuṣka (RV.), dried up. Vṛ̥cuṣ. Av. huṣka.
čolā (RV.), sound &c. Vṛ̥cu.
čau-kīśkin (AV.), of uncertain meaning and etymology.
samipuṣka (S.), unground. Mistake for sam-çuṣka?
(syāka (RV.), arrow = Av. harēko, Vṛ̥hare; non-suffixal k).
(stuka), child (TĀr.), text probably corrupt.
(stūkā, hair-tuft, called by Wh. primary, but see § 42.)
stoika (RV.), drop, Vṛ̥stu, as in ghṛta-stāvas (better than the
derivation from Vṛ̥cut by metathesis).
spāṭika (U.), crystal. Vṛ̥spāṭ, burst, only Dhātup; Uhlenbeck
compares spalten.
-sphākā (AV.) in pivaḥ-sphākā, swelling with fat. Vṛ̥spā(ī).

Chapter VI.
The Suffix in Av., compared with RV.; the Prehistoric
Suffix.

Based on list of Av. words in Bartholomae's Wbch.
104. In striking contrast to the fullness and richness shown
in the development of the ka suffixes in Skt. stands the meager
use of them in the most closely related language, Avestan. Not
only are the Av. instances very few in number (barely over
50 in Bartholomae), but semantically the conditions are primitive compared with those existing even at quite an early date in the sister language of India. However, if we examine separately the ka suffixes found in the RV. alone, we shall find a striking resemblance between them and those of the Av. And from a combination of the two it will be possible with a fair degree of confidence to deduce the values which the suffix had in the common Ind.-Iran. period. We shall find, it may be added, that these values were surprisingly restricted, in comparison with the extent to which the suffix developed in later Skt. It will be seen at once that this fact may have an important bearing on the question of the origin of the suffix in the still more remote IE. period.—Probably it will appear that too much weight has been placed on the great frequency of the suffix in some historic languages, notably Skt. and Gk. But there is no evidence that it was at all common in the parent language; rather, there is evidence to the contrary.

105. Let us first take up briefly the state of the suffix in the RV. The only common use of it is our first category, 1 ka (§ 9), to which (with its subdivision, the diminutive ka) belong over half the ka words whose derivation is determinable. Inside this division the dim. and pej. words again largely predominate, with about 40 words as against 11 cases of 1 ka in its non-dim. use as a suffix of characteristic. Over half of the 40 diminutives are pejoratives of one sort or another.—The adjectival suffix 2 ka (§ 11) is unknown except for 7 pro-nominal adjectives (mūmakā &c.) and the n. pr. kučikā (§ 52) which is more or less uncertain, though it has been cast aside. Only the faint beginnings of the Possessiv and Bahuvrihi suffix 3 ka appear, with three cases of a transitional character, which might be considered cases of 1 ka (characterizing adjectives). Interesting are the two RV. cases of 4 ka, giving activ value (§§ 13, 19).—None of the derived suffixes ika, aka, uka, ika, are found, if we except cāndika (said to be a patronymic < čānda on no other authority than Sāyāna), suyaka and sutāhikā (uncertain and in any case not belonging in meaning to the later suffix aka), sunukā (really a case of primary ka from the verb-stem sanu-, like vicārika (§ 103) from cāri-V(c); and the curiously anachronistic word jāgarikā (§ 25). The little group of ika words (§§ 100, 101) is not very clear and may be neglected. The five RV.-adverbs in -
are also not clear, but are most likely developed from forms of 1 ka. There remain only the dozen or more primary ka derivatives.

106. Practically, then, in the RV, the suffix is used (1) as a primary suffix, most often giving active verbal force (which also appears in two secondary adjectives); (2) as a secondary suffix, forming nouns and adjectives of likeness and characteristic; (3) as a dimin. and pej. suffix (developed out of the preceding); (4) as a secondary suffix forming adjectives of appurtenance and relationship (almost restricted to pronominal bases).

107. These same conditions are approximately reproduced in the Av., though not in the same numerical ratio; the proportion of diminutives is very much smaller, and the pejorative category is much less clear-cut and certain than in the RV., so that its existence might even be doubted from the standpoint of the Av. language alone. The investigation of such fine shades of meaning is extremely difficult in the Av. because of the limited material. A number of words which evidently contain suffixal ka cannot be classified with certainty as to semantics because the primitives from which they were derived do not chance to occur, so that we cannot be certain as to just the touch which the suffix added. Following is an attempt to classify the ka words of Av. along the same general lines already applied to the Vedic words.

108. Suffix 1 ka (§ 9). 12 words: n) noun < noun; mg. "like, similar to" (§ 40).

mAṣṭika, man (home; perhaps orig. adj. humanus?) < masya.

The a is probably a textual mistake.

b) adj. or subst. < noun, mg. "characterized by (a quality or thing)."

apakhrasaka, reviling (i.e. having a nature giving to reviling, characterized by reviling, not the same as a verbal adj.); as Barth rightly says, from *apakhrasä (apa-khrus) = Skt. apakroṣa, n.—The accidental resemblance of this and one or two other words to the late Skt. development of primary rka (see § 96) should mislead no one. Cf. nipāśaka, with analogous meaning, but proving by its suffixal na that it is a nominal derivat.

apaskarakā, scornful, < *apaskara (hypothetical), "scorn." Cf. apakhrasaka. Barth cannot explain the etymology. Could it not be from apa-(s)kar? In Skt. apa-kar means "injure, insult."
daitika, wild beast, presumably from dat; “characterized by, remarkable for teeth.” The i is probably euphonic; cf. Vedic iyat-t-ikā, mit-t-ikā, § 36.—Cf. AV. 4. 3. 4 vyāghrām dait-vatam prathumām.


nipaśaka, envious (i.e. characterized by envy), <ni-paśna (hypothetical), envy, <ni-paśna (Vpaś = Skt. paś).

paṇića, “having the character of *paṇi = Skt. pūtī, cleansing”; i.e. cleansing (adj.).—This partakes of the character of 4-ka, by its active force.

bandaka, subject, vassal, <banda, fetter. Contrast Skt. bandhaka, captor (-aka).

nivaṇaka, terrifying, <ni-vaya, terror (ni + vay, bay, = Skt. bhī). Cf. upakhraṇaka.

vazuraka, great; cf. vazār, mighty. Perh. cf. Skt. ojas &c. If so, it would mean “characterized by, having, strength.” In this word and in daitika we have formations leaning in the direction of the possessive suffix (3-ka), which however remain abortive in Av.


c) subst. <adj. (§ 46), syāmaka, u. of a Mt., <syāma = Skt. syāma, dark, black. Cf. AV. syāva- (in comp.), id.

109. Simple Diminutives. (11 words.)
apaṇmāyaka, minor, child (usually adj.), <a-paṇmāy, id. (“not having full age”).

araeka, a sort of ant. Etym. unknown. Dim.? Cf. Skt. pipālaka.

Lat. formica, &c.

kaunikā, girl; Dim. of kau, kuṇyā = Skt. kanyā.


kausikā, very tiny <kus, tiny, (cpv. kas, sup. kasiṣṭha; the i-(ka) seems to have been carried over from these forms).

kutaka, small, cf. NP. koda, child. Presumably Dim.

carātiṣṭā, young woman. <carāti, id. Dim.; of Endearment?

jāhi, wife (of demon, beings); common, wicked woman. jahi has the same meanings. Dim. (orig. of endearment? or Pej?)

pasuka, domestic animal, from and = pasu. Dim.? cf. Skt. paṣu.
nārīkā, woman, wife, chief wife (ahuric; opp. to jāhikā).

<nārī, woman, wife = Skt. nārī. Dim., prob. of endearment.

nāmādka, brushwood, small kindlings. = nāmāta. Perhaps dim.

For the dropping of -a cf. Ved. čālka < čālā, § 29 b.

110. Pejorative Diminutives.

The extensive development of the contemptuous and imprecatory meanings of the suffix ka which characterize the Veda is markedly lacking in the Av. In fact, on the basis of the Av. language alone it would scarcely occur to any one to set up this department of the suffix.—Nevertheless, there is a group of evil words in ka, mostly names and epithets of demoniacal personages, which seems to me too numerous to be quite accidental. Cf. the Ved. use of the suffix with names of demons, § 78.—It cannot be claimed to be absolutely certain that the suffix in these Av. words was felt in this way, but it is at least quite probable. Besides jāhikā above (which may have been originally endearing) the following are the words in question. Their etymologies are largely uncertain. (10 words.)

dahaka, n. of demons (also epithet of Vayu.)—Cf. Skt. dāsā, dāsya, Av. dāhyu.

dahāka, n. of a fabulous demon-king. Cf. dahāka.

(dūžāka); opprobrious epithet of the hedgehog.—Barth. takes it as a Bah. < dūž + aka; otherwise it might be a pej. formation.

(druka), n. of a disease, sin, or the like. Etym.? If suffixal at all, the ka is probably imprecatory.

pairikā, enchantress. Barth. in BB. 15. 8 = Skt. parā--; very improbable, phonetically as he admits in his Lex., and also semantically. No etym. of value has been suggested. Prob. imprec.

māraka, n. of devilish beings. Etym. and Mg. unc.: prob. < māra = Skt. mārā; dull, stupid. Pejorative.


rapaka, supporting, siding with (only with daevanam). < *rapa Vrap; Imprec.?

zairimyāka, n. of the tortoise, a demonic beast; acc. to Barth, "abbreviation" of zairimyāmusra, with dim. (i.e. imprec.) suffix.
111. The Suffix 2 ka (§ 11). (5 words.) As in the RV., the clearest examples are pronominal adjectives: ahmāka = usmāka, yuśmāka = yuśmāka. Furthermore: anāmaka, n. of a month, lit. "of, belonging to, the Nameless (the Supreme Deity)," acc. to Barth, <"anāman. If this is correct, the suffix is 2 ka.—arīka, hostile, is better derived from *arī = Skt. arī, enemy. Barth's labored derivation seems inferior.—Here seems also to belong: pacīka <"paca (Vṛpac) in the adj. yāmō-pacīka, with khumbā, "a vessel intended for burning glass." In this sole instance we have what looks like the Skt. suffix ika (§ 92). The lack of parallels in RV. and Av. is against this, however. Probably the i was really the result of some analogy, now indiscernible.—if it is not a corruption of the text.—That vākhodrikā, n. of a Mt., is a Vṛddhi formation from an imaginary *vākhodra is a quite arbitrary assumption on the part of Barth. There is no Av. instance of vṛddhi with a ka suffix. Neither does the RV. know this phenomenon, which only comes in with the development of the suffixes 2 ka and ika.

112. Primary ka (§ 103). (7 words.)

zināka, destroying, a true verbal adj. <zinā-, present base of Vṛzā—udka, garment, = Skt. akha.—sārdka, kidney, = Skt. vyēkā.—huśka, dry, = Skt. čuśka.—marōdika or mūrōdika, mercy, = Skt. mṛdikā. The appearance of i (Skt. i) in derivatives from this root is as perplexing as it is persistent.—arāska, (supposed to mean) envy, cf. arasya, Skt. irṣyati. Abstract noun from root; cf. Ved. glōka <iru, and the following.—suūkā n. or f. advantage(?); <Vśu—to be of advantage to. Abstract noun <root, cf. arasaka. (Or, possibly, <Vśuc = Skt. guc?)

113. Unclassified. (10 words.)

The following Av. words mostly must have suffixal ka, but are not clear etymologically.

kugnākā, n. of a city.—tudākā, n. of a Mt.; has the appearance of being derived from a pres. part. stem, cf. Skt. ejātā, byhatā.—dravāka, howling, groaning (imprecatory ka?).—porṣkā, price; see Barth. Which and references there quoted. If from the base IE. *pret- (as generally assumed), the suffix must be -skā, for *prētā could not give Av. porṣkā.—frāṣumaka, buttocks.—nuśkā, grand-father, -mother.—yuska, disease, perhaps for *yukṣ-ka, cf. Skt. yākṣma.—vākhodrikā, n. of a Mt.—vādi-midka, in urunγo-c, n. of a Mt. Uncertain; Barth. conjectures
-mādka = mit = Skt. mit, pillar.—sanaka, mouth (of the Tigris). Etym. unknown.

114. The Prehistoric Suffix ka.

What, then, on the basis of these results, appears to have been the state of the suffix in primitive Aryan? Although argument from negation has its dangers, it is hardly likely that uses of any frequently occurring suffix which are found in later Skt., but not in the RV., nor in the Av., could have belonged to the prehistoric Ind.-Iran. On that hypothesis, we must rule out the derived suffixes īka, ūka (Verbal), ūka and ūka, all of which are practically lacking in RV. and Av. ¹ We therefore cannot accept Brugmann’s statement (Gr. II: 1 p. 488) that the adjectival suffix -īgo- (= Skt. īka) is found “throughout the entire IE. territory.” In the oldest strata of Aryan it cannot be proved to have existed, unless by one or two sporadic and doubtful examples; and its extensive growth in Skt. is certainly a late development. The use of ka as a possessive suffix (3 ka) shows only the barest beginnings in RV., and as a conscious suffixal category is also post-Aryan. The suffix 2ka evidently existed in Aryan, but its use was principally restricted to pronominal stems. The adverbal -k is not demonstrably Aryan, no instance occurring in Av.—We have left, then, as the demonstrable uses of the ka-suffix in Ind.-Iran.: 1) the formation of nouns of likeness or adjectives of characteristic; 2) the diminutive and (perhaps) pejorative formations, 3) occasional formations with 2ka, mainly pronominal adjective, and 4) the primary formations from verbal bases, apparently inclining towards the meaning of verbal adjectives or nouns of agent (with which meaning also a few secondary formations are created). This primary use of the suffix was proportionately much more frequent, it seems, in the prehistoric language than in the literature we have, where it has died out as an active formant, overwhelmed by the flood of secondary ka formations. In its

¹ Neglecting jāgāsva, the alleged patronymic jāgāśa, and the isolated Av. jācika. As has been said (§ 108) the i of Av. jāvika is probably merely euphonic, cf. Vedic mṛttika, and in any case its meaning does not fit with the ordinary meaning of the suffix īka (= 2ka). -kāvika, which Brugsch quotes as an example of Av. īka, is still less apt, for it is obviously a diminutive formation, and in Aryan they always take simple ka. As has been indicated (§ 109) its i is probably analogical, from kusānā, kusāvika.
place sprang up the various derivativ ka-suffixes of Skt. which have this active value exclusively.

115. If these conclusions be accepted, it will be seen at once that the suffix *ka* was much more restricted in early times than is often assumed. It may be that in the same way the extensive use of -kos suffixes in Gk. and other languages will prove to be secondary. At any rate, from the Aryan point of view the range of the IE. *kos* or *qos* appears to have been quite limited.

116. We cannot conclude this brief allusion to the IE. suffix *ka* (which will probably at some future time receive more fitting consideration) without mentioning Leskien's interesting chapter on the related *k*-suffixes of Lithuanian¹, especially as it seems to bear out in general our position as to the comparatively restricted use of *ka* in IE. In Lith., according to Leskien, *ka* appears principally in the derivativ suffixes *ika*, *oka*, *uka*,—all evidently of secondary origin and not dating back to the Ursprache. They preserve (in a confused and rather hit-or-miss way) practically the same meanings which we arrived at as the values of the suffix in Aryan, to wit: 1) primary formations, verbal adjectives and nouns of agent; 2) secondary formations of characteristic (*1ka*), especially making substantivs out of adjectives (cf. § 46); 3) diminutives; 4) secondary adjectives and patronyms (our 2 *ka*); the secondary adjectives are principally words in -*oka* (*=* Skt. Av. *-āka*) from pronominal stems,—so that the correspondence is almost marvellously close. I should be very loath to believe that this is entirely accidental; I think that we have here the kernel of the suffix *kos* (*qos*) in IE.

117. To show that the derived suffix *-ika* in Lith. does not really support the hypothesis that such a suffix existed in IE. we need only mention that its principal values are 1) formation of nouns of agent from roots, 2) formation of diminutives from nouns. Neither of these meanings for *-ika* is found at all in Skt. literature,—least of all in the Veda,—An interesting parallel to Skt. formations in *-aka* (masc. neut.), *-īkā* (fem.) is the Lith. combination of masc. *-uka* with fem. *-īke*. Whether this is enough to establish an IE. fem. suffix *-īkā*, corresponding to masculins in *-o-ko*, is doubtful; but such a phenomenon would

¹ Bildung der Nomina ins Liitauischen. p. 504 ff.
be quite conceivable, and is contradicted by nothing of which
the writer is aware. To be sure the masculine -aka (IE. -oko-)
is replaced in Lithuanian by a different form of the suffix.

Statistics of Vedic k-Words.

118. Detailed statistics are hard to give. Some of the words
are used in different senses and hence counted twice; others
are classified under more than one head because they might
belong to any one of them. The following figures are approxi-
ately correct:

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1 ka (circ. 110 + Dim., circ. 180)</td>
<td>290</td>
<td></td>
</tr>
<tr>
<td>2 ka</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>3 ka (21 + Bah. 96)</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>4 ka</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Unclassified Secondary ka</td>
<td>87</td>
<td></td>
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<tr>
<td>Total Secondary ka</td>
<td>circ. 550</td>
<td></td>
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<tr>
<td>Suffix ika (with Vriddhi 105; without 15)</td>
<td>120</td>
<td></td>
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<tr>
<td>aka (1 aka 2; 2 aka 8; 3 aka 45)</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>āka (Participial 71; others 5)</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>īka</td>
<td>3</td>
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</tr>
<tr>
<td>īka</td>
<td>circ. 20</td>
<td></td>
</tr>
<tr>
<td>k</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Primary ka</td>
<td>circ. 20</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>circ. 860</td>
<td></td>
</tr>
</tbody>
</table>

General Index and List of Vedic k-Words.

-āṇḍaka = āṇḍa, ifc. Bah.—Māitr. Up. | 55 |
-āksaka = āksāṇ, ifc. Bah.—KSA. 5, 3, Cfr. -āksika and | 54 a, 55 |
āḷamālikā, "little rosary," n. of an Up., Mukt Up. | 62 |
-āṣīkā, ifc. Bah. = āṣī, TS. 7, 5, 12, 1, cfr. -āksaka and | 54 a, 55 |
agnihotrika, n. of an Up., Mukt. Up. | 51 |
-āṅgaka, ifc. Bah., = āṅga, KSA. 5, 3 | 54 a, 55 |
aṇjāvikā, see s. v. avikā | 44 |
aṇjālikā (or nyanjālikā?), ?Comm. hastāgravarttinam anja-
līm.—The passage (Tār. 1, 6, 1) reads: tuvām [sc. āčira]karoṣi ny aṇjālikām | tuvām karoṣi ni jānukām | ni jānuka
me ny. añjalikā | ami vacam upāsatam iti |.—The accents are hopelessly confused.—The whole passage is very dark and uncertain. The comm. takes ni with karoṣī in the first clause, and in the third supplies bhavatu. His laborious explanation is about as follows: "The winter causes people to make an añjalikā (see above) downwards (towards the fire, for warmth).—It causes them to bend the knees (see s. v. jārunā) downward (to warm the body at the fire).—Let there be of me a bending of the knees, an añjalikā!"—These (wise people) cherish this saying (during the winter)."  

ānīyaskā, moro tiny, AV. < ānīyas, smaller  
ātka, armor, garment, RV. &c.  
   n. of an Asura, RV.  
ādhika, additional, < ādi; Kātyā. Čr.  
anantaka, n. of a Nāga, Gāruḍ. Up.  
(ānīka, face.) -ka not suffixal, but an a-extension of a formation in -(y)aie, -ic; cf. prātika, abhīka &c. The base is compared with Gk. οἴ. For the i cf. ān.—or otherwise it may be merely analogical to prātika &c., as is undoubtedly the case with samikā (q. v.), from samyāṇe  
ānuka, subordinate, < ānu. ČB.  
āntaka < ānta, ending, ender, AV. &c.; as npr. Death, 56, 19  
AV., VS. &c.; (antakā) border, ČB.  
antikā < ānti in adv. forms -am, -at, -a; near. RV., AV.  
anyakā, other (contempt.—imprec.), < ānya. Only RV. 74, 82  
apakramuka, retiring, TS. &c.  
apanigaduka, lying down apart, MS.  
aparābhuka, detaining, MS.  
obhikroṣaka, reviler, VS. (so Say.—"nindaka"; so also BR.): Griffith—"watchman" 96, 97  
abhiniṣṭaka, stale (food).—? Mān. Gr. 2. 13. 5. See  
Knauer's note  
abhimmadyatā, somewhat drunk, ČB.  
abhimmānuka, insidious, ČB. Ait.B., &c.  
abhimēthikā, insulting speech, ČB.  
-abhīvaḍuka in an-a, not greeting, Gop.B. Viśt. 99  
-abhyavacāruka in an-a, not attacking, MS. 99  
abhīyāyuka, coming to, Kap. S. 99  
abhīyārōhuka, ascending, MS. 99
āmanikā, — ? AV. 20. 130. 9 (Mss. āmanako mānāsthakāh; RWh. āmanikā mānīchādāh; RVKh. 5. 15. 7 āmanako mānāsthakāh, q.v.). 58

(ambātaka, corrupt Ms. reading AV. 20. 127. 5. RWh. ameta gā.).

-ambātaka, ifc. Bah., as try-ā, having 3 mothers? n. of Rudra RV.

ambālīkā, dear little mother, VS. (voc., ambālīke).

ambālīkā (voc.), dear little mother, VS. &c. (Also n. of sister of Rudra) VS. &c.

arśitaka, n. of a plant, AV. The Comm. do not attempt to explain the word. Cf. ṁṛga-ṛāśitā (Lexx. only), a medicinal plant and pot-herb; ṛāti, war (Lexx.), ṛaṭ shrīk.

arśitàka, having the disease ārśita, Kāuḍ. (acc. to MW. Addendum) 58

ārūka, quarrelsome, ČB.

(ardhaka-ghātin) — ? AV. Prob. the Ppp. adheya-ghātin is the true reading. "Slayer of travellers" means Rudra, who is besought to spare the speaker. The verse is in a charm for safe travel. See notes of Bloomfield and Henry for discussion 99

ārūhaka, prospering, ČB.

ardhaka, small (dim. and contempt.) RV. &c...

armakā, heap of ruins, RV.

(in Kāuḍ. 26 appears to be an adj. "ruined").

ālakam, in vain (contempt.) RV.

alabhaka, the fruit of the gourd, AV., RVKh.

(ālika) < a-li-ān, cf. ānīka; a-li- cf. ālās, alius &c.

alpakhā, īkā, small (dim. obs.) AV., ČB.

āvakā (once, MS. 3. 15. 1, -ka), a plant; AV., VS. &c.

avaghatarikā, n. of a musical instrument, Čaṅkh. Čr.

avacatnukā, Āit. Br.—Say—"n. of a country." Obscure

avacarantikā, AV. contempt, < avacaranti

avatākā (Mss. and RWh. avatākā), little spring, AV.

avadhuṭakā = avadhuṭā, n. of Upaniṣad, Mukt. Up.

avabheda, "piercer," headache, Pār. Gr.

(āvakā. (Br. 9.1.2.22, artificial word, as if avāh [avān]+ka.

invented to explain āvakā, q.v.).

avākā (or āvakā), ewe-sheep, lamb, RV., AV.

ajāvīkā, goats and sheep, = (dvandva)ajāvi, ČBr.
açanáyuka, hungry, CB.

See 1

- açitika, ifc. Bah., as säçitika, with (i.e. plus) eighty,

açvalá, horse (imprec.), VS. TS. &c.

ástaka, consisting of 8, ÇBr.: n. pr. Áit. Br. < ásta; -ká, the
day of the moon's quarter, AV.

asakára, — asá (obs.), VS. &c.

asina aqua, envious, Maîtr. Up.

ástaka, home, AV. < ásta— ifc. Bah. in svastaká— AV.

asamiká, adv. -iké, at home, < ástam, id., by analogy with
-ika formations like prátika &c., cf. ánika, álika, sāniká)—

asthaka (KSA. 5. 3) and -asthika (TS. 7. 5. 12. 2) ifc.

Bah. — asthánt (ásthí).

See 2

asmáka, our, RV. &c.

51, 30 a Note

ahállika, prattler?, CB. (BrArUp.),


ágantúka, accidental, adventitious, Ácy. Çr.

ágámuka, coming to, MS.

ágni, of Agni, or the sacrificial fire, Kátyá Çr. &c.

agnistomika, of the agnistomá, ÇBr.

agnyádheyika, of the agnyádheya, Kátyá Çr.

âjávika, made of goat's and sheep's hair, Káuç

âti, n. pr. of the wife of a Rishi, Chá. Up. — Vat.: cf. átaka

(only Lexx.), átika, n. of a YV. school; áta, n. of Nágá


(adháriká, see áhráriká).

ánáliká, “egg (i.e. bulb)-hearing,” the lotus, AV. Káuç.


âdhikáriká, of the adhikáras (individual sections), Çákh Gr.

âdhyátmika, of the adhyátmá, Gáudap.

âdhyánya, occupied in reading (âdhyáya), Táit. Up.

âdhvaríka, of the adhvará, ÇBr., Kátyá Çr.

ánúmáni, inferential, Áp., Kátyá Çr.

ânuyájika, of the after-sacrifice, Mán. Çr.

ánugá, shot after? TS. 2. 3. 4. 2. Uncertain word.

âparâhína, of the afternoon, Ácy. Çr., Kátyá Çr.

âpartuká, unseasonable, Káuç.

âbhicaraníka, maledictory, Kátyá Çr.

âbhicáríka, incantation, Káuç.
ābhīplavika, of the Abhiplava, Ācy. Ćr. ........................................ 94
ābhuyadāyika (concerning the rise of anything; as n.), a
kind of grūḍḍha. Ācy. Ćr. ........................................ 94
ābhūka, powerless. AV. ........................................ 72, 33
(āmanaka, see āmanika.)
āmalaka, a tree and its fruit, Chā. Up. and Class. <āmala
spotless? .......................................................... 49
āmivatā, pressing, pushing? TS. 4. 5. 9. 2.—See viksaṇatā
and vicinvatā. These three are among a list of honorific
epithets of certain gods, found in the Catarudriya. No
dim. force of any kind is discernible .......................... 42
ārakāt, far, from a distance (Imprc.), QBr. ............. 83, 37
āranyaka, a class of Vedic works, Arun. Up. ............. 49
ārūka, hurting TÂr. .............................................. 99
ārūnakātuka, of the arūpa-ketus (spirits), TÂr. .......... 49
(ārksāka, see rks.)
ārēkatā, n. of Čaṇa, RV. A Patronymic, ultimately (and
perhaps directly, cf. § 11, 49) rēcat, Varc, cf. infin.
rēcase (RV.) ...................................................... 58
(āryikā) RV., a n. pr., deriv. of rjika, q. v. ................. —
ārāhaka, beneficial, Čānkh B. .................................. 99
-ālavbhukā in an-ā, not to be touched, TBr., Kâth. .... 24
āvadānika, offered after being cut up in pieces, Vāit. .... 94
āvapāntikā, scattering (grains, of the bride in the wedding-
rite) AV., Pâr. Gr. &c. Suffix obviously cannot be pejo-
rative; some related texts have āvāpānti; may be merely
metrical, and the Sûtra passages then due to reminiscence
of the older (metrical) version .................................. 45
āvikā, of sheep; woollen, Q.B.; Kâty Ćr. .................. 94
-āçaka in an-ā.—not eating, a fast, Q.B. .................. 95
āçarika, rheumatism, AV. ...................................... 103
-ācērka, ifc. Bah. = ācēśa, TS. ................................. 55, 36 (s.) a.
āçvamedhika, of the āçvamedhā, QBr.; Kâty Ćr. &c. .... 94
-āśandika in sās-, ifc. Bah., Kâty Ćr. ......................... 55
āśuka, n. of a Sâman Ārś Br. .................................. 103
(āsmākā, our, RV.—see āsmākā)
-ikṣvākū (or iksvākū), n. pr. RV., AV.—< ikṣu sugar-cane? 33 c
indragopaka, little fiery Amrt. Up. ......................... 62
invalō, n. of a Sâman SV.; of a constellation TBr. <inva 46
iyattakā, -ikā, so tiny, RV. ..................................... 74, 36
iplkā (once -i, Kânc 1), arrow, reed, AV., Q.B. &c. .... 101
ispula, arrow = ḫunu. AV. 41

iṣṭakā, brick, cf. Av. ḫṣṭya. VS.; TS. &c. 46

iṣṣaka, spectator. ČBr.; Āṣ. Gr. 96, 97

iṣikā, arrow, MS. The variant from iṣikā is doubtless meaningless, probably a mistake 55

-ukthaka in sōkthaka, having an ukthā. ČB. 55

uccāṣa, drying up, Gop. Br.; ČBr. 99

updāti, outer bark of a tree, Brh. Ār. Up. Cf. āṭapati. 58

upāṭaka, producing, Nrsut. Up. (in -ka-tva, noun) 97

udāka, water, RV. &c. 42

uddāśaka, devouring, Nrsut. Up. (in -ka-tva, noun) 97

uddālaka, n. of a teacher, ČBr. &c.; cf. uddāla, a plant. 58

udbhāndhana, one who hangs up, TS. 99

udbhāśaka, shining, Nrsut. Up. (in -ka-tva, noun) 97

ubhāvantaka, roaming, Nrsut. Up. (in -ka-tva, noun) 97

unmāntaka, insane, Āgram. Up. 68

unmāṭa, fond of drink, MS.; TS. 99

upākramuka, approaching; acc. to Wh. Gram., in Brāhmaṇas 99

upajīheika, upajīka, upadīka, ant.; RV. &c. 62

upadīṣa, falling, TS. 99

upanāmuka, bending towards, ČBr. 99

-upaniṣatka, in uktōpan.—having heard the Upaniṣād, ČB. 55

(Brh. Ār. Up.)

-upapātaka, minor sin, Nār. Up. &c. 66

-upaṣatka in try -u, ifc. Bah. Āp. Čr. 55

upasthāyuka, approaching, Kāth. 99

-upāṇatka in an-up, without sandals (upānāḥ), Kāty Čr. 55, 36

upānasvaka, n. of Indra, Āp. Čr. Cf. upānasā, adj., being in a carriage, RV.; n.—the space in a carriage, AV. 58

upāsaka, servant, Kauç &c. 96, 97

(urūka, owl, —ūluka, Āit. Br.) —

urvārukā, gourd, RV., AV. A late and interpolated verse 44

ūluka, owl, RV. &c. 79

ulūkhalaka, mortar (Dim. End.) RV. 74 (as voc.) 67

(ulkā, firebrand; ka prob. not suffixal, cf. tarkas, Volcanus) —

ūluma, firebrand, Āit. Br.; ČB. &c. Unc. etym. 58

urūka, bullock (contempt.) RV. 71, 29 a, Note

ūṭika, n. of a plant, subst. for Soma, Kāth. &c. Probably mistake for pūtika, q.v.; or else the two words have influenced each other 101
āuaka, defective, lacking, Čaṅkh. Gr.  
80
urdhvaka, raised, Saṁny. Up.  
45
ṛṣāka (or, as Wh. conj., ārk-) AV.1 Say "inhabited by bears," which is mere etymological guesswork. The whole passage is obscure, and this word is prob. corrupt.  
58
ṛṣikā, n. of an evil spirit, AV.; VS.; ČBr. Cf. ṛṣa?  
101
ṛṣikā, beaming, gleaming (in cpds.); RV. &c. (as āvīr-ṛj.)  
100
ṛdhāk (or rdhāk), separately, RV. &c.  
27
ṛdhmuka, causing increase, Āṣ. Gr.  
99
55
ēka, one, RV. +  
103
ēkāḥ, singly, RV.; just one, AV.1  
47, 66
5, 3, 52 notes it as a solitary form, without explanation or parallel. BR. suggest an uṇa formation.  
47, 29 e
ēkatrīṇa, consisting of 31, Gāndap.  
53
ējākā, kind of insect, AV.1  
81
ēḷōpatraka, n. of a Nāga, Gānd Up.  
78
āṅkāhika, of the one-day offering, Ait Br.; ČBr. &c.  
94
āṅkākā, of the eda (sheep), ČBr. &c.  
49, 79
—n. a vicious ram (should be ēlaka?) ČBr.  
āṅtareyaka, the Ait. Br.; see I. St. 1—106, 7  
50
(āṅvakā, n. of two Śāmans, āṅvaka; Āra, Br.) —  
94
orimikā, n. of a section of the Kāṭh. S.; see I. St. 1, 69, 70.—  
Uncertain  
58
āṅṭara vedika, of the northern altar, ČBr.  
34
āṅpavasathika, of the upavasathā—rite, Āṣ. Gr.  
94
kakāṭīka—? part of the head (Wh. hindhead), AV. Obscure.  
58
(Prob. for kṛkāṭikā, neck-joint, = kṛkāṭa id. AV.)  
kāṭuka, sharp, bad, RV., AV.  
80
kanīḍa, a minute part of any thing, in vaṭa-k., Sarvop.  
62
kántaka, thorn, AV. 14. 2. 68 (?); ČBr. &c.—kanta only in cpds.—Uhlenbeck holds it to be prakr. for *kriṇṭaka, Vṛt.—Unc.  
44
kanṭhaka, ikā, in saha-k., with the throat, AV.  
55
kādruka in tri-k., having three vessels, RV., AV.  
55
Uhlenbeck cf. kσφεσ and Honig.  
58

1 Either accent.
kanākaka, sort of poison, AV.¹ (?) ............................ 79
kanānakā, mistake for kaninakā, pupil of the eye, only TS.¹ ............................ 62
kanīṣṭhakā, īkā, smallest, only AV.¹; kanīṣṭhikā, little finger ............................ 63
ČBr. &c. ............................ 63
kaninakā, -ā, kaninakā, -īkā, pupil of the eye, RV. &c. ............................ 62

The words never, in the passages which occur, have the primitive meaning of "boy" or "girl" (kanina, -ā).

kanāyakā, pupil of the eye, Ait. Ar. ............................ 62
kāplaka? v. l. kālpaka. TBr.—Mg. unknown ............................ 58
kambīka, husk of rice, AV. ............................ 40
karkā, white, AV. The ka is perhaps not suffixal. Ue. ............................ 103
karkata, crab, Brahm. Up. ............................ 44
karkandhukā, RV. Kh. 5. 22. 3 = (karkandhukā) AV. 20. 136. 3—jujube-berry. (<karkandhu) (Dim.) ............................ 62
karkarikā, kind of lute, AV. ............................ 62
karkotaka, n. of a Nāga, Gāraud. Up. ............................ 78
kārnaka, "carlet," tendril, ČBr.; handle (also -kā), TS., MS.; of the two legs extended, AV.¹; (-karnakā) i.e. Balh. = kārna, TS. ............................ 62, 86, 55
karnaveśaka, earring, =-ta. Pār. Gr. ............................ 44
kalanka, spot, in nisk-, Nār. Up.—Uncertain ............................ 58
kālpaka in a-k., irregular, Gāndāp. (see also kāplaka) ............................ 55
kalmatikā, RV.—glorious? Epithet of Rudra. Sāy., says from *kalmalika (not found) = tejas. Cf. kalmāl—(AV.) "glory"? Grassmann "sankelind."—Ludwig "pfleilträger," which according to his note is "offenbar" the meaning; I confess I am unable to follow him.—The word kalmāl (see above) is itself very doubtful and might mean anything, so that Sāyana's interpretation, which Roth, Grassmann and Delbrück follow, is dubious ............................ 58, 31
kačikā, weasel?, RV. ............................ 101
kačōka, n. of hostile demons, RV.; AV. Cf. kācā? ............................ 58
kāmukā, ? RV. See § 21 ............................ 21
(kaṇṭaka, thorny, <kaṇṭaka) ............................ 
kaṁkā, n. of certain letters in a mystic alphabet; Rāmap. ............................ 58

Up. Presumably <kāma ............................ 58
kāmuka, desiring; a lover. TS. ............................ 99
kāraka, maker &c. Garbh. Up. ............................ 97
kāruka, artisan, artificer (?), acc. to Wh. Vbh. roots, in Brāhmaṇas. I find no instance before Epic times ............................ 99
kāṭakā, unidentified bird, VS.; "Blackish" ............................ 64
kālika, n. of a Nāga, Garuḍa. Up. 78
kāverakā, n. pr., patronymic < kāvera, AV. 49
kāsikā, cough, AV. 79
kīnčukā (in su-kā), a plant or flower; RV. AV. 58
kīnjkarka, plant-stalk, Āṣy. Čr. 44, 29b
kirikā or gīrīkā, epithet of gods in Čatarudriya, meaning unknown, various guesses (sparkling, Eggeling; sprinkling, Griffith) VS. &c. 58
(-kiṣka see evakṣikān.)
kiṣaka, the middle syllables of a mantra—Haṁs. Up. (as being the stake or post, kiṣa, to which the extremes are attached) 40
kiṣṭhāriṣā in pāda-k. ČGr.; a position of the feet 91
kunika, n. of a teacher, Āp. 46
laṇḍikā, little pot, Sanny. Up.; also title of an Up. 62
kumārakā (or kumāra-), ikā, boy, girl, (<kumāra>) RV.; AV. &c. 62, 79
kumbhaka, retention of the breath, as relig. exercise; Amṛt. Up. &c. 40, 95
kumbhika, kind of demon, AV. Cf. kumbhā 101
kulika, n. of a Nāga, Garuḍa. Up. 78
kulikā, a bird, VS. (MS has pulikā).—Uncertain; cf. kulipīya, an animal (VS); Uhlenbeck cf. Russ. kulik, snipe &c. 101
kuvācakta, AV.—corrupt and uncertain. RV. Kh. reads ṣahakṛṣ ca vācaktaḥ, which Scheitl thinks is the true reading 58
kuṣikā, n. pr., RV.; pl. his descendants, RV. &c. Prob. < kuṣ, pin used as mark in recitation from texts 52
kuṣitaka, n. of a bird, TS.; of a man—Tāṇḍya Br.—Uncertain 58
kuṣumbhaka, RV., venom-bag of an insect (< kuṣumbha) 71, 79
kuṣthikā, dew-claw, spur, AV., Āṣy. Br. 40, 90
kuṣuka, n. of a teacher, Vaiṣṇava Br.—Entirely obscure 58
kuṭhaka, rogue, cheat; Māṭr. Up.; Āp. 79
(λýka—said to mean “throat” or “navel”; Prob. onomatopoetic, cf. lykara, lykana—partridge. In lyka-dācu, a demon; -kāku, cock; -lāsā, lizard) —
lykaka, false, artificial, Gāṇḍap.
lyṭtikā, the Pleiades (as a sword), AV. &c.; cf. kartikā, dagger (Cl.). The noun lyṭṭi seems to mean only “hide, skin.” Prob. Primary -aka. 20, 96, 97
lyṭṭaka, all, Čāṅkha. Čr. 16. 29. 8 (Leyx. wrongly 9) — lyṭṭnā 45
kṛmukā, kind of tree, = kramukā, q. v.; ČBr., Kauč. 44
kṛnuka, "blackish," n. of a plant, Kauč. 64
-kṛcčadhā in sarva-k., having all the hair, AV. (Bah.) 55
kārātāika, of the kārātas (contempt.), AV. <kārāta. 72
kṛcčātāka, a plant and its fruit, Čālikh. Gr; presumably <kṛcča. 58
(kālikā, a bird, < and = kālikā, q. v.; VS., MS.) —
(kaučikā, <kṛcčikā, son of kṛcčikā, or friend of kṛcčikā [Indra]).
(kāṇiśatāka, -ki, patron, < kṛṣṭāka, and n. of a Brāhmaṇa).
kyāka, fungus, Āp., Dh.; Gānt.—Obscure 58, 29 d
kramukā, the betelnut tree, Saḍy. Br. = kramu (only
Lxx.), kramuka 44
(kramukā, piece of kindling-wood, TS. &c., < kramukā by
assimilation).
klītaka, dough, paste, Ācy. Gr. &c. Obscure 58
kṣitikā, a part of a lute, Kauč. ? Cf. kṣiti?. 58
kṣullāka, small (dim.); AV., TS. &c. < kṣudrā. 63, 68, 72
kṣurikā, "little razor," n. of an Up., Kṣur. Up. 62
kṣādhu, hungry, TS., QB. 99
kṣāmikā, made of linen, Kauč 94
kṣetikā, an evil bird, RV., AV. &c. Prob. onomatopoetic. 103
khaṇḍika, pupil, Kalpaś.; n. of a man, Qb. (cf. sāṇḍika) 92
khanātika, little shovel, Āp. Čr. 17, 29 (NBD. "dig up") 62
khaṇavaka, mutilated (imprec.) AV. <khaṇa. 80
khaṇḍika-? Gobh. 3. 3. 8.—Comm. piṣyasamāhi; but see
Oldenberg's note 58
khaḍaka, eater, Gobh. Gr. ap. Pravace. in Č. K. Dr. 96, 97
gānuka, astrologer, < gana; VS. &c. 51
gavādhu or gavē-, cox barbata, TS. = gavādhu (not Vedic) 44
gavānikā, groins (?), AV.—metr. for gavinī 41
(gavādhukā, gāve-, deriv. < gavādhuka). —
(girikā, MS., for kārikā, q. v.). —
godānīka, of the godānī-rite, Gobh. 3. 1. 28 (cf. gaud-)
gonāmikā, n. of MS. 4. 2, called after gonāmā formulas 92
gopikā, protectress, Gop. Up. 44
golakā, ball (dim.), Gobh. Gr. &c. 62
golattikā, kind of animal, VS., TS.; cf. lattikā (Un.) lizard 58
gaudānāika, of the godānā-rite, Ācy. Gr. &c. (cf. god-).
groāhukā, seizing, TS. (cf. grāhu- RV.) 99
ghātika, kind of wood, Ācy.Cr.; = ghūta and vādhaka 46
ghātuka, slaying, AV., TB., ČB. &c. 99
cakraka, wheel, Maitr. Up. 44
trikā, in threes, RV., Lāty &c. .......... 47
trāvārsika, a triennial performance, Āev. Čr. ........ 94
trāvāvidyaka, practised by trāvāvidyaś, Āp. .......... 50
- n., their doctrine, Mān. Čr.
tvākka, ifc. Bah. = tvāc, skin, TS. in a-t. ....... 55
dāṅgaka, biting, TBr., TS., Kāth. ......... 99
dandaka, a class of meters, Chandāsas, Han. Rām. Up. ... 45
dantāka, ifc. Bah. = dantas, TS., ČBr. ....... 55
dandācikā, biting, malignant, VS., TS., ČBr. ....... 25
dācaka, consisting of 10, Chandāsas .......... 53
dāharaka, short, Kānṣ. Br. ........... 63
dāksināṅgika, performed in the southern fire, Mān. Čr. ... 94
dāyaka, giving (in Veda only ifc.), Mukt. Up. .......... 97
dāyaka, heir, <dāyā, Gr. S. .......... 53
dārca-prātirnāmāsika, of the New- and Full-moon sacrifice, Čānkh. Čr. ........... 94
dācātirikā, celebrated like the dācātirā, ČBr. &c. .... 94
dāhuka, burning, TBr., Āp. Čr. .......... 99
-dākka in a-d., having no part of the heaven, ČBr. ....... 55
dātaka, n. of Agni, Gr. S. Cf. Vādū, du ........ 58
dāraka, far (pej.), RV., AV. ........... 80
dāśikā (dāśikā Māitr. Up. 1, 3), rheum of the eyes, VS., Kāth., ČBr. ........ 32, 79
dāśika, n. of demons, AV., Primary, Vādū, and not to be confused with the foregoing, which is secondary, from the n. dāsi .......... 100
dēbhika, n. of a demon, RV. ............. 100
dṛṣṭika, worthy to be seen, splendid, RV. .......... 101b, c.
- n. appearance, RV. &c.—kā, id, RV.
dṛṣṭikā, beholder, TS., Āp. Čr. ........... 100
-īkā, an inferior class of goddesses, Āit. Br., ČBr. ...... 66
dyunnika, n. pr., supposed author of RV. 8. 76. <dyummin,
glorious .......... 46, 36
dāvakā, by twos, RV. ............... 47
dvārakā, “City of Gates,” Vasu Up. ........ 53
dhanuska, small, poor bow, Lāty ........ 71
dhāyantikā, sucking (contempt.), AV. Ppp. folio 115b, line 1 73
dhāníkā (prakr. form of dhān-), vagina, AV., TS. &c. 86
dhānīkā, vagina, RV. Kh. 5. 22. 8. 86
dhārākā, vagina, VS. ÇBr. 86
dhārmīka, righteous, Chā. Up. 94
dhārmīka, righteous, Mān. Çr. 21
-dhāvanaka in danta-dh., n. of a tree, Kāu.ç, prob. < dhāvana,
cleaning (a tree "for teeth-cleaning") 50
dhuvaka, acc. to Wh. Vb. forms from vāhu, in Jām. Br. 96, 97
dhēnukā, female, Weibchen; AV., Pañcav. Br. &c. 89
naṇaḍaka, perishing, Kāth. 99
(nāg translated) -i-kā, naked, wanton (imprec.), AV. (< nāgā). 80
naḍaka, hollow of a bone, Kātya Çr. 40
napāṭaka, concerning a grandson, n. of a cert. sacrificial
fire, Kāth. 51
nāpunāka, eunuch (contempt.), ÇBr., Kātya Çr. &c. 71
nabhāka, m. pr., Ait. Br.—Cf. nabhā, nābhās? 58, 29c
nāraśakā, hell, TĀr. Uhlenbeck cf. evac-tor &c. Not clear. 58
nāka, heaven, RV., AV., VS. &c. 103
nāḍikā, throat, AV. (< nāḍi) 40
(nābāhāka, adj. or patron < nābhāka, RV.) —
nābhikā, navel-like cavity, ÇBr. 40
-nāmaka, ikā ifc. = nāmar, Bah., Čiras. Up. 55
in nāmikā, ring-finger (for semantics see Br.), ÇBr. &c.
nāyaka, leader, chief, Gauḍap. 97
(nāraka, hellish, < nāraka, AV. &c.; VS. nārakā). —
nācuka, perishing, TS. 99
nāsiṅka, nostril, du. nose, RV., AV. &c. 62
nīka, n. of a Sāman, Ārs. Br. 103
nikharvaka, one billion, Pañcav Br. 44
nikhātaka, cut into a little, AV. 65
(nījāṅkā? see jāṅkā, TĀr. 1. 6. 1.)
nimik, secretly, RV. 27, 29a
nimūṣṭika, of the size of a fist, Āit. Ār. 5. 1. 3. 6 (p. 405. 6). 53
nimūṣṭi, a measure of that size.
nirvadaka, read nirvadhaka (Deussen), hindering, Brahm. Up. 97
-nirdāhukā in ā-n., not burning down, MS. 99
nirnāguka, withdrawing from, TS. 99, 24
-cakṣuśka in a-c., without eyes, Brh. Ār. Up. 55
cíndātaka, short petticoat, ČBr., Kāty Čr. Obscure derivation 62
cāturthaka, fourth, Nāḍ. Up. 45
cātuśka, consisting of 4; Lāty, Vāsu Up. 53
candrīkā, moon, Rāmap. Up. 91
cāroka, wanderer, mendicant, ČBr. (also n. of a Y.V. school). 46
carmāka in a-c., without skin, TS. 55
cāturāhānika, of the 4th Day, Čaṅkh. Čr. 94
cāturthika, of the 4th Day, Lāty 94
cāturāhākāraṇika, of a division into 4 parts, Āp. Čr. 94
cāturvinçika, of the 24th day, Čaṅkh. Čr. 94
cāturāhottikā, of the cāturāhott-service, MS. 49
cārika in upatha-c., having byways for a course, Nṛṣut. Up. (in -ka-teu, noun) 54, 55
cīcītsukā, physician, ČBr. &c. 51
ceccīka, kind of bird, RV., TBr. Obscure 58
cītika in sāt-c., i.e. Bah., ČB. 55
cintaka in kāla-cintaka, considering; Gāndap. 97
cūpanikā, one of the Pleiades, TS. Obscure 101
cīlaka, top of a column, Cūl. Up. 40
cēlaka, n. of a man, ČB. 46
codaka, direction, invitation, Kāty Čr. 95
chāndonikā, of the chandonas, Čaṅkh. Čr., Kāty Čr. 94
chāyaka, n. of a demon, AV. 78
chābuka, chin (Class. Skt. cibuka), RV., ČBr. &c. Obscure. 58
janakā, n. of a king, ČBr. (Brh. Ār. Up.), cf. jāna 53
jāmbhaka, “crusher,” n. of a demon, VS. 78
jayantaka, n. pr., Rāmap. Up. < jayanta, victorious 46
jarāyuka, after-birth, Sāmav. Br. = jarāyu. No reason is
apparent for the use of the form in -ka in this passage. 44
jarāyuka, leech, in tṛṇa-j., caterpillar, Brh. Ār. Up. Thought
to contain jāla-āyu = āyus (Bah.), but cf. jalāuka and
other forms. Popular etymology has operated here.
Origin uncertain 58
jāhaka, hedge-hog, VS., TS. Supposed to be from Vīhā. 103
jāgarākā, wakoufl, RV. 25
jātaka, newborn child, Kauč. 62
(jānuka, -ki, patron, from jānakā)
jānukā, bearing, MS., Āp. Čr. Cf. janā, AV. 99
jānukā—? TĀr. 1. 6. 1; Comm. jānu-pradeṣa. See s. v.

anjalikā .......................... 58

jāpaka, muttering, Nṛp. Up. .............. 97

jāyuka, conquering, MS. Cf. jāyū, RV. ................ 99

jālākā, little net, web, Brh. Ār. Up. ............. 62

(jihvākā see upā-j.) jihvaka ifc. Bah. — jihvā 54a, 55

jīvākā, epithet of water (end. dim.), MS. &c., Ācy. Ćr.; life, Kathop. 44, 95, 67 q. v.

jumbākā, n. of a Varuṇa, VS., QBr. Obscure .......... 58

jyākā, bowstring (pej.), RV, AV. ................. 79

jyāsthasāmika, adj. <jyeṣṭhasāman, Gobh. 3. 1. 28 ........ 94

jyotāyamānakā (MSS. -maka), n. of demons, AV. ....... 81

jyotistomika, of the jyotistoma, sacrifice, Kāty Ćr. .... 92


dharikā and adhārikā, centipede, Āp. Ġr. Obscure .... 58

takā, that (contempt.), RV, AV., Kāty Ćr. ............... 75

taksāka, n. of a Nāga, AV., Kānc. (= -ṣa) ............ 78


tarāṇaka, sprout, AV. ........................................ 62

tādarthika, intended for that, Kānc. ...................... 94

tādātmaka, īkā, denoting the unity of nature, Rāmat. Up. 49

tāraka, carrying across, saving, Māitr. Up. .............. 97

(tārakā, adj. of stars; < tārakā) .................. —

tārakā (< tārā), star, AV., TBr., QBr. &c. ........ 44

tāluka, du. n. the two arteries supplying the palate, Tait. Up. 50

tāvākā, thine, RV, (only 1 Vedic occurrence reported) (<tāvā) .......... 49

tiracikā, a horizontal region? So BR.—Ācy. Ćr. ....... 46

tāvākā, a plant of evil name, Ć. Br., Ācy. Ćr. &c. .. 79

tūndika, having a snout or trunk (tūnda), AV. .... 92


tūṣṇika, silent, in Veda only adv. -tam, silently, Mān. Ćr. 45

tuṣṭām, id. RV.—The text is dubious, and Knauer

calls this word suspicious.

tretiyaka (<tṛtya), recurring the 3rd day, AV. .......... 51

(tṛṣṭaka) -iṭā, rough (creature), AV. ................. 80

-tejāska, ifc. Bah. — tējas, Brh. Ār. Up. ............. 55

tāttiriyaka, of the Taitt. school, Mukt. Up. .... 50

tāvānīkā, (voc.) n. of a female demon, AV. Obscure 78
nirmitaka, conjured up, illusory, Gāndhap.  80
nirmṛtaka, withering, Pañcav Br.  90
-nivartaka in a-n., not flying or dicing, Máitr. Up.  97
-nivitka ifc. Bah. = nivid, Ait. Ār.  55
nīkā, a neck-ornament, RV, AV, &c.  103

Uncertain. Uhlenbeck compares OHG. nusza. Ir. nasc, ring.
nihāka, storm, whirlwind, RV, TS. Obscure  103
nāsimitika, occasional, accidental, Kāty Čr. &c.  94
nāyaṇamīka, settled, prescribed, Āp.  94
-nāṣcārika, in a-n., not distracting, Āp.  94
nāṣṭhika, final, perfect, Āṣram. Up.  94
(nyaṣajālikā? See s. v. anjaṭālikā. Tār. 1, 6, 1.)  46, 91
nyāstikā, n. of a plant, AV, †.  46
nyānkhumānakā, see -mānakā.

pakvākā? AV, RVKh. Prob. corrupt. The Lexx. do not render the word. Grij. “that knoweth.” May be either “ripe, mature,” or “gray, hoary,” <pakvā. Uncertain.  58
-paṇcaka, consisting of 5; a group of 5, Gop. Up.  53
paṇcavinčaka, consisting of 25, Gāudap. Mahā. Up.  53
paṇḍaka, eumuch, weakling, Kāṭh &c. (contempt.).  71
patantaka, kind of rite. Lāṭy. Cf. patat?  58
patāṇḍikā, flying off, unsteady (imprec.), AV.  80
patā exists. Vpat; formation dubious  58, 298
-patānika, ifc. Bah. = pātnī, wife, Ait. Br., Kāty Čr.  55
padmaka, n. of a serpent-prince or demon, Gāruḍ. Up.  78
parāpātuṇka, abortive, TS.  92
parābhāṣikā, perishing, transient, Kāṭh.  99
parārākā, leek, Āp.—Obscure; v.l. paḷaṇikā.  58
paridipaka, lighting up, Gāndhap.  97
pariprucchaka, inquirer, Gop. Br.  97
parivrājaka, wandering (mendicant), Arun. Up.; Āṣram Up.  97
-paričritka, ifc. Bah., = paricrit, Kāṭy Čr.  55
-pariṣatka, ifc. Bah., = pariṣād, Gobh.  55
pariṣāraka, n. of a place, Ait. Br., pari- Vsr; formation uncertain  58
pariṣāra as n.reported by Wils. only—“wandering about.”  58
parutka, having knots or joints, Āp. Čr.  53, 36 (8)—b
parūṣaka, a tree (= parūṣa) and its fruit, Çāṅkh Čr.  44
parītka, RV, Kh. 5, 15, 8, v.l. patikā; corrupt and unint-
interpretable.
parpharika, ? RV. 100
parāyātka, strophe, AV. 93
pālijaka, n. of a demon, AV. 78. Obsolete.
pācauka, i.e. Bah. = pāca (or pācū), Āgy. Čr. 55
pāka, very young, Čānkh Čr. 3, 2. — simple, RV., AV. &c. 103
pājuka, a kitchen implement, Āp. Čr. Etym. 58
pāacanāmaka, of the 5th Day, Čānkh Čr. 94
pātaka, acc. to Wh. Vb. roots in the Brāhmaṇas. Vījā 96, 97
pātaka, fall, downpour, Saṁny, Up. 2; sin, Čānkh Čr. &c. 95
pādakā, little foot (End. Dim.), RV. 67 (< pāda)
pādāka, slipper, Āやはり. Up. 62
pāpaka, evil, ČBr. &c. (< pāpa or pāpā) 80
pāramārthika, real, actual, Mukt. Up. 94
(pāvivrajaka = adj. < pāvivrajaka, Kau.)
pārśṭhaka, after the manner of the Pṛṣṭhā, Lāty &c. 49, 29 a.
pāvāka, clear, bright, RV. &c.; n. of Agni, TS. &c.; fire, in general, Mund Up. 2, 1, 1 18 Note; 58
An ancient word; from Vījā, but exact formation uncertain. Early appearance and accent forbid taking it as primary -aka, which Say. does (“cobhaka”).
pācauka, concerning cattle, Kāty Čr.; Čānkh Čr. 49
pācubandhaka, of the pācubandha, Āagy. Čr.; Čānkh Čr. 49
pikā, Indian cuckoo, VS. (Uhlenbeck cf. picus; very doubtful) 103
pīṅgalakā, ikā, yellow, tawny, AV. (< -lā) 64, 72
pīnyāka, oil-cake, Āp. (no reference given). Obsolete 58
-pitraka, i.e. Bah. = pītṛ, Kāty Čr.; Āagy. Čr. 55
pīrmedāka, of the pīrmedha. Saṁny. Up. 92
(pīdakā = for pīdakā q. v. MS.) 58
pīnakā, staff, bow, AV.; VS.; TS.
Uhlenbeck cf. xīna and OSlav. pīnī, tree-trunk;
piśitaka (< -lā), ant, Cha. Up. — ikā, ant, only Adbh. Br.
(Prob. to be emended to -aka or ikā) 62
-ikā, small ant, AV.; ÇBr.; Paśc. Br. &c.
piśpakā, a sort of bird, VS. (cf. pippika, Class. a bird or beast) 58
piyūka, n. of a class of demons, “abuser,” AV. 96, 97
piyūṣaka, biestings, RV. Kh. 5, 15, 14. — The parallel AV.
text has piyūṣa, but the meter needs an extra syllable,—
which the later compiler evidently added 41
pūklaka or pūlkaka, n. of a despised tribe, MS. Not certain 71
pundarika, lotus blossom, RV.; AV. .......... 58

Prob. connected with pundari-srajā (TBr.),—but the meaning of this pundari is uncertain; cf. pundarin, another flower (Lekx.).

putraka, little son, RV.; AV. (<trā) .......... 62, 67

-purośvākyā, i.e. Bah. = purośvākyā, ČBr. in a-p. .... 55

-purośikā, i.e. Bah. = purośic, ČBr. in a-p. ........ 55

(puṅkā—MS.—variant for kuṅkā, q.v.) .......... 101

(puṅkaka, see puṅkaka.)

puṅkika (once -ika, Ācy. Čr. 6. 8), a plant, (<pūṭi), substitute for soma, TS.; Kaṭh.; ČBr. &c. ...... 46, 31

puṅkaka, filling (noun), Amṛt Up.; Dhyan. Up. .......... 95

-puṅkaka in nyāya-p.—having reason as precedent—Gāndhap. .... 55

-puṅkā in harinā-p., female young of an animal, Āp. Čr. .... 62

puṅkā, isolated, scattered (adv.), RV., AV., &c. ...... 27

puṅkā, rice or grain flattened and ground, TBr. <puṭhū .... 46

puṅkā, serpent, RV.; AV.; TS. Cf. ṣaṭās, acc. to Uhlenbeck loanword from Ind.-Iran. "pura- .... 58, 29 c

puṅkā, a mixture of ghee, milk &c. (cf. puṣat), AV. : Pār. Čr. .... 58, 15

-ki, a disease, or the she-demon causing it, AV. .... 46

puṅkā, n. pr. RV. .......... 46

puṅkā, spreading out, ČBr. .......... 99

puṅkā, thriving, Saḍv. Br. .......... 99

pundarādhyāya, of the pundarādhāya-rite, Ācy. Čr. &c. ... 94

pundarāṣadhikā, of a human-sacrifice, ČBr.; Kaṭy Čr. .... 94

pundarāṇānika, of the forenoon, Kaṭy Čr. .... 94

prakṣepaka, throwing (n. act.), Mātr. Up. .......... 95

pracalāka, chameleon, Āp. pracalāka—cloudburst (?) TS.—

Cf. pracalāka, Class., reptile; pracala, creeping &c. 46, 29 c

pracitaka, n. of a meter, Chandāṣ. .......... 44

pravāsī, transitory, fragile, Čānikh Br. .......... 99

-pratijāpatika in sa-p., i.e. Bah.—Āit. B. .... 55

pratitṛṭkā, echo, VS.; Kaṇṣ. Up. .......... 42

-pratisthāyaka in ā-p., not standing firm, MS. .... 99

pratīcida, AV., <pratici, t. of pratyañc; mg. uncertain;

"offence" ? .... 80

-pratyaṅgūya in a-p., not rising respectfully, Gop. Br. .... 99

pradūtrikā, (female) giver, MS. .......... 91, 35 a

pradāyaka, bestowing, Garbh. Up. .......... 97

pradūṣaka, very poor, Chā. Up. (pra—intens; -ka—Pity.) .... 68
prapāṭhaka, section, n. of divisions of cert. works, as TS., 62

prapāṭhaka, falling prematurely (fetus), TS.; Kāth. 99

prabāhuk, on an even line, Āit. Br.; TBr.; TS. &c. 27

prabhruṇaka, falling off, vanishing, ĆBr.; TBr. 99

pramāṇuka, perishing, AV.; TS.; TBr. &c. 99, 23

pravartaka, one who sets in motion, Ćvet. Up. 97

pravartamānāka, sinking down, RV. 73

pravāhikā, riddle, challenge, Āit. Br.; Cāṅkh Čr. 91, 95

prasarpaka, assistant or spectator at sacrifice, Āev. Čr.; Lāty 46

prahastaka, n. of RV. 8, 86, 13—15. —Kāṣṭ Ār.; Cāṅkh Čr.;

<prahasta, extended hand. Application not clear to me.

—Lex. gives Cāṅkh Br., wrongly 58

prahārūka, carrying off, Kap. S. 99

prakarāṇika, of the prakaraṇa, Mān. Gr. 94


pragāthika, of or derived from the Pragātha (i.e. RV. 8),

Lāty &c. 94

-prānaka i.e. Bah. —prānā, KSA. 5. 3 aprānakāya svāhā,

cf. TS. 7. 5. 12. 1 aprānakāya svāhā 54 a, 55

pratīdiśhika, substitute, Kāty Čr. 94

pratiṣṭrutka, existing in the echo, Brh. Ār. Up. 49

prādeśika, chief of a district (pradeṣa), Kāṣṭ. 94

prāyaścittika, expiatory, Āev. Čr. 94

prāṣṭātika, a leguminous plant, Āp. Čr. Cf. prāṣṭātika, sātika,

various grains (Class.) 58

priyāṅgukā, panic seed (dim.), Sāmavidh. Br. 62

prēkṣaka, deliberating on, Mān. Gr.; as n. spectator 96, 97

plōcukā, rapidly growing up, ĆBr.; Kāty Čr. 45, Note

baka (a crane, only Class.), n. of a demon, Mān. Gr.; of a

seer, Kāth. &c. 103

bātāraka, m. pl., lines of light appearing before closed eyes,

Āit. Ār. 58

bāddhaka, captive, AV. <bādāhā 79

bāhhrukā, brownish (clearly dim.), CB.; (bā-) ichneumon,

VS. &c. (<bāhhrū) 64

bālākā, crane, VS. &c. Obscure 58

bāhika, n. of a man, CB.; of a people, AV. 52

bādhaka, a cert. tree, Gobh.; also as adj. of the bādhaka-

tree. Uncertain; cf. bādha (?), obstacle, trouble, &c. 50

bālaka, young; child, Kṛṣ. Up. &c. 63
(bālāka, metonymic from balākā as n. p.)

-bāhūka, i. c. Bah. = bāhū, Āc. Gr. (in ud-b.) 55


bṛhotika, i. c. Bah., Čānkha Čr. (in tato-b.) 55

bṛhatka, n. of a Sāman, Pañcava. B. 42

(bodhaka in ātmā-b. q. v.)

brahmāka, i. c. Bah. = brahmān, Āc. Čr. 55

brahmāudanika, (fire) on which the brahmāudanā (the priest’s rice) is boiled; Kāṅg. (with or se. agni) 94

bleska, noose, snare, Kāth. 103

-bhāsmoka, i. c. Bah., Gop. B. (in sa-bh.) 55

-bhāttāka, retainer, Āp. (in nitya-bh.) 94

bhāradvājakā, skylark = -ji. Sāmav. B. 44

bhāvika, being, becoming, TS, Kāth &c. 99

bhāṣika, general rule, Čānkha Čr. &c. 40, 29 a

bhīṣyaka, mendicant, Pār. Gr. 44

bhinnaka, broken (contempt.), Mantra B. 72

bhūmpāṣakā, a plant, = āru (m.), Sāmav. B. 2. 6. 10. 91


bhūnaka, terrestrial animal or being, Adbh. Br. 49

mākaka, kind of demon, AV. 79

mākāka, fly RV. : AV. &c. 62

mangalika, of good omen, AV. 67, 29 a

-majjāka, i. c. Bah. = majjān, TS. 55

madusikā (v. l. mad-, mand-, madh-, mandh-) a dwarfish girl, unit for marriage, Āp. Gr. 58

manika, water-jar, Āc. Gr.; Gobh. &c.—Ātt. Br. 7. 1—acc. to Sāy., a fleshy excrescence on an animal’s shoulder. 40

manipūraku, a mystic circle on the navel, Haṁs. Up. 1 44

mamālīka, frog, RV. &c. Uncertain origin. 58

manḍurikā (eddd.; MSS. — rīti), vile, filthy woman, AV. 86

(moc.) 86

mādhu, n. pr., ČBr. (mādhu) 53

mādhūka, a bee, Čānkha Čr.; a tree and its fruit, ib. 51

mādhūlaka, sweetness, honey, AV. 48

mādhyanikā, the middle finger, Prāṇ. Up. 46, 91

mādhevaka, bee, Adbh. Br. 51, 33 b

manaskā, mind (impr.), AV.; i. c. Bah. = mānas, Kāth Up. &c. 79, 55, 54 a

...
mānasthāka, RVKh. 5. 15. 7,—"freundlich gesinnt" (Scheft.).

see s. v. āmanākā

manānak, RV. Obscure word, see


māmakā, my, only RV.

markatāka, kind of grain, Āp. Čr.

māryākgā, male, Männchen, RV;

maṇākā, gnat, AV., VS. ČBr. &c. (w. r. maṇākā)

māstaka, head, Mahānā. Up., and māstīka, brain, RV.,

AV. &c. Cf. māstū-lūṅga, brain. The base seems to

have been māst-ā, i or u. Uncertain

mahānāmmika, of the Mahānāmmi, Gobh.

mahāvratika, of the Mahāvrata Sāman, Čāṅkā Čr.

mārīkāla, female, AV.1

-mānākā, īfc. Bah., = mānā, TS.

mākti, du., RV,1 This word has been variously rendered.

Ludwig makes it an adj. to naptya, either "brillend"

(V. mak: application?), or (and this I believe to be right)

from base mā- of the 1st. pers. pronoun; see § 30a, Note.

The phrase then means "my daughters he has helped...

to marriage (janitvaṇyā)." This interpretation seems to

me secured by comparing mākina, which L. apparently

did not notice, but which is obviously a derivative from

the stem mākti

50, 30a. Note

mākina, mine, RV. < mākti, q.v.

50, 30a. Note

(mākṣika, spider, Brahm. Up., prob. deriv. < mākṣikā.)

mātya, "das Mutterwesen," (Deussen) n. abstr. < mātī,


mādānaka, kind of wood, Kauč.—Uncertain; cf. mādana

(adj.)

58

mādhparkāka, of the mādhuparkā rite, Čāṅkā Čr.

-mānaka in nyūṅkha-mānaka, having a desire to insert the

nyūṅkha, Čāṅk. Br. 25, 13; 30. 8 (Bah. from māna).

BR. regard it as a participle; but there is no verb nyūṅkhāti,

only nyūṅkhayaūī. The sentence is: tasmān nyūṅkhayaūī
yūṅkhamanāka iev vai prathamam cicariṣu carati.

From this the following semantic proportion is evident—
nyūṅkhamanāka : nyūṅkhayaūī = cicariṣu : carati. Ergo,

ny. = "desiring to perform the act nyūṅkhaya, i.e. to

insert the nyūṅkha."—The noun māna = "desire"

55

mānasya, human, ČBr. (< manusya)
māmakā, mine, RV. &c. (< māma) 49
mārukā, dying, TS; Mān. Gr. Cf. marā- 99
(mārākā, deriv. of mṛkā, RV. &c.) 101
mukharikā, bit of a bridle, Kāy. Čr. 16. 2. 5 (Lexx.
wrongly 4) 62
muddaka, n. of an Up., Muk. Up. 46
mukkā, testicle, RV. &c.; female organ (in du.), AV. &c. 86
mukkā, n. of a fighter, Kṛṣ. Up. 53
mukkā, moment, RV. 62
muka or mukā, dumb, VS, QBr. 103
mukā, little basket, QBr. 62
mūsaka, rat or mouse (Dim.), Gārud. Up., -išā, id. VS. 62
mṛdayākā, merciful, RV. 45, 294
mṛdayākā, favor, only RV, AV. 101
māttikā, earth, clay, VS; Āit. Br. &c. 44, 36
-mēka in sumēka, well-established, RV. Most often of heaven
and earth 103
-medākā, ifc. Bah. = mēda, TS, in a-m. 55
menakā, n. of a daughter of Mēnā, Śaṭv. Br. (metron.) 51
(meṣka for bleska &c., only m-hata, Āp. Čr.)
mānākā, n. of a Mt., TĀr.—Metronymic < mēnā 49
-mocaka, releasing, Muk. Up. 97
mōhuka, falling into confusion, TS. 99
yahā, which (contemp. obs.), RV. &c. 75, 86
-yajāska ifc. Bah. = yujās, QBr., in a-y. 55
-yañtrika ifc. Bah. = yanta, Kāty. Čr. 55
yāntraka, īkā, tamer, subduer, Pañca Br. < yañtra, letter 51
yamika, dn, n. of 2 Sāmans ("Twins"), Āṛṣ. Br., SV. 92
yaṭikā, club, Kṛṣ. Up. 44
yasha, n. pr., Ācy. Čr. &c.; pl. his pupils or descendants 103
-yacaka, beggar, in pur-y., Māitr. Up. 97
-yacanaka, beggar, in mitya-y., Māitr. Up. < yacana, request 56
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Index and Word-list (Vedic Words).
The Mayūraśtaka, an unedited Sanskrit poem by Mayūra.
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What little knowledge we have of the poet Mayūra rests largely on legend and tradition, but it is now generally accepted that he flourished in the seventh century of our era, was one of the habitués at the court of the emperor Harsavaradhana, and was the rival, in the field of literature, of Bāna, author of the Kadambari and of the Harṣacarita.

In an old legend, preserved principally in Jaina tradition, and existing in several versions, 1 we are told that Mayūra, on one occasion, wrote a licentious description of the charms of his own daughter, Bāna’s wife. That lady, enraged, cursed her father, who, in consequence of the curse, became a leper, and was banished from court. Nothing daunted, however, he set to work to regain his health and his lost position, and composed the Sūryaśātaka, 2 consisting of a hundred stanzas in praise of Śūrya, the sun-god. At the recitation of the sixth stanza, the sun appeared in bodily form, and cured the poet of his leprosy. Bāna, jealous of Mayūra’s triumph, and seeking

1 The principal versions of this legend are found in two anonymous commentaries on the Jaina poet Māmataṅga’s Bhaktamāraratna, in Mādhuśūdana’s commentary on Mayūra’s Sūryaśātaka, and in the Prabhāndhacintamani of Merutūṅga, who was a Jaina. For the anonymous commentaries on the Bhaktamāraratna, see F. E. Hall, Subandhu’s Vaiśeṣicadattā, Calcutta, 1850, intro., pp. 7, 8, 49, and Rajendralal Mitra, Catalogue of Sanskrit Manuscripts in the Library of HisHighness, the Maharaja of Bikaner, Calcutta, 1880, p. 671, no. 1463, and Böhler, On the Cengikāśataka of Bānakīrṣṭa, Indian Antiquary, vol. 1 (1872), pp. 111—115; for the commentary of Mādhuśūdana, see Böhler, On the Authorship of the Ratnavali, Indian Antiquary, vol. 2 (1873), pp. 127—128; and for the Prabhāndhacintamani, see the translation of that work by C. H. Tawney, Calcutta, 1901, pp. 64—66.

2 This is Mayūra’s best-known work. The most accessible edition is that in Kṛtyamālā Series, no. 19, Bombay (2nd ed.), 1900.
to emulate his example, had his own hands and feet cut off, and then composed the Candisatakā, in honor of Cupātī, the wife of Śiva. But in the recitation of his poem, he did not have to proceed any further than the sixth syllable of the first stanza before the goddess appeared and restored his limbs to their former condition. Now it happened that a Jaina, Mānautūgā, was present, and wishing to show that the Jainas were not lacking in miracle-working powers, he ordered himself to be loaded with forty-two chains, and to be locked up in a room. He then began to compose the Bhaktāmarastotra, which consists of forty-four stanzas. At the conclusion of each stanza, one of the forty-two chains dropped off, and when the whole forty-four stanzas had been recited, the locked doors flew open of their own accord, and he was free. The king, Harṣa (or Bhoja, as some accounts call him), had witnessed all three miracles, but deciding that Mānautūgā was the greatest, he became a convert to Jainism.

In one version of the legend, that, namely, given by the first anonymous commentator on the Bhaktāmarastotra, the name of the obnoxious poem that so displeased Mayūra's daughter, and that brought upon Mayūra the curse of leprosy, is said to be the Mayūrāstaka. While recently working up the life and writings of Mayūra for a forthcoming volume of the Columbia University Indo-Iranian Series, I noted that a poem of this name was recorded in Professor Garbe's catalogue of the Sanskrit manuscripts at Tübingen University. Through the kindness of Professor Garbe and of Dr. Geiger, the librarian at Tübingen, the manuscript containing the Mayūrāstaka was forwarded to Professor Jackson for my use. The material is birch-bark, folded in book form, each leaf being 7\(\frac{3}{4}\) by 6\(\frac{3}{4}\) inches, with 16 lines of writing to a full page. The writing is in the śūradā script.

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1 Ed. with commentary, in Kavyamāla Series, Part 4, Bombay (2nd ed.), 1899.
2 Other accounts say 34 or 48 chains; cf. Hall, op. cit., pp. 8, 49.
4 Richard Garbe, Verzeichniss der indischen Handschriften der königlichen Universitäts-Bibliothek, Tübingen, 1889, no. 182, P.
and the date should probably be placed in the seventeenth century.\footnote{The ms. in Garbe’s Verzeichniss (see note preceding) 182 F. was one of those purchased in 1894 by Marc Aurel Stein at Srinagar in Kashmir (Verzeichniss, p. 3), and the date is according to the Saptarsi era (ibid., p. 5, n. 1; personal letter from Prof. Garbe, April 4th, 1911). “At the end of the Duryasatuka [one of the pieces in the collection contained in the manuscript in question] the copyist gives the date (lanka) samvat 87, vastriti 3, pada” (Stein in Garbe, Verzeichniss, p. 78), and, as Prof. Garbe writes me, “die Ähnlichkeit der äußeren Beschaffenheit aber zeigt, daß die beiden darauf folgenden Stücke [Vetulastotra, Mayurasataka] in umährend derselben Zeit geschrieben sein müssen”.

The Saptarsi era began B.C. 3076 (Bühler, in Weber, Indische Studien, vol. 14, Leipzig, 1876, pp. 407-408). During the centuries which, in consideration of the average age of birch-bark manuscripts (see Bühler, Indische Palaeographie, Strassburg, 1896, p. 88), can alone be here taken into account, the fifth of Sṛkṣvanā fell on Saturday in the year 87 of any century of this Saptarsi era only in 4687 and 4487. — Saturday, Sṛkṣvanā 5, 4687 corresponding to Aug. 13, 1611 (Gregorian calendar), and Saturday, Sṛkṣvanā 5, 4487 to July 25, 1411, of the Julian calendar (as reckoned according to Robert Schram, Kalendarigraphische und chronologische Uebers., Leipzig, 1898). Since of these two dates the former is the more likely, we may ascribe the completion of our manuscript to Aug. 13, 1611. (On the Saptarsi era, see Sewell and Dikshit, The Indian Calendar, London, 1898, p. 41; Günzel, Handbuch der mathematischen und technischen Chronologie, Leipzig, 1906, vol. 1, pp. 382-384; A. Cunningham, Book of Indian Eras, Calcutta, 1883, pp. 6-17.)}
are common to it and to the Sūryaśataka, and that Mayūra did not disdain the erotic sentiment elsewhere is shown by a perusal of the descriptive verse on two asses, which is found under his name in the Subhāṣitāvali of Vallabhadra, and also in the Sūryagadharapaddhāti. It may count for something, too, that the meter of three of the stanzas is the srządharā, the same as that in which the Sūryaśataka is composed, as well as most of the anthology stanzas attributed to Mayūra.

In view of all the facts and circumstances as set forth, it seems not unreasonable to believe that the poem Mayūraśataka, contained in the Tübingen manuscript, is a creation of the poet Mayūra, although it must be acknowledged that the evidence is not especially strong. It may be argued, for example, that the name Mayūraśataka may mean "the aṣṭaka on the peacock", or that the commentator on the Bhaktimorarastotra ascribed it to Mayūra merely because of its name, or that it is the composition of another Mayūra, not the seventh-century poet of that name.

But on the other hand stand the facts that the name śrīmayūraśatkam is found in the colophon of the manuscript, that the subject-matter of the manuscript poem harmonizes with the content of the Mayūraśataka described by the commentator, that there is not the faintest allusion to a peacock in any of the stanzas, and that there is a general similarity in point of style between the manuscript poem and the known writings of Mayūra. The pros are, on the whole, stronger than the cons, and it can at least be said that there is no direct evidence to show that Mayūra did not write the Mayūraśataka contained in the Tübingen manuscript. Until such evidence is adduced, I am inclined to accept it as his work.

It gives me pleasure to express my thanks to Professor Jackson and to Dr. Gray for many valuable suggestions, and also to Professor Barret, who was good enough to verify my transliteration of the śāradā script.

MAYURASTAKA.

Verse 1.

om namah šrīhariharābhīyām
esā kā prastutāṃga pracalitanayanā haṃsahīvaṃvrajanta
dvān hastān kuśukumārdhaṇa kanakaviścita
...ū...
...ūṃgāṃgēgataḥ sa bahukṣumaṃyata bhuddhavīmā hasanti
tāmbūlamā vampahaste madanavaśīgata gūhyaṃ śālam praviṣṭāṃ

1 The meter is śraddhāraḥ.
2 In the matter of transliterating the nasal, I have faithfully followed the manuscript, which is inconsistent, sometimes writing anusvāra instead of the appropriate nasal consonant. Compare, for example, ṭagāṃṣa (2a), priyāṃṣa (3d), and gopanāṃṣa (8d), with ṭhrāṁṣaṃ and amāṃṣa (7b). Note also anṭaḥ (or antah (3c), campaka with lingual nasal, instead of campaṅa (8b)), and sampaka for sampakṣa (5b). In the use of the nasal before k, there appear to be no irregularities except amūkṣaṃganti for āṃkṣaṃganti (2b); cf. kūkṣaṃ (1b), and pākṣa (7c).

The word लिला is one of the stock terms used to define the natural graces of the heroine; cf. Dakarūpa, a Treatise on Hindu Dramaturgy, tr. Haas, New York, 1911, 260. "Sportiveness (līlā) is the imitlotion of a lover in the actions of a fair-limbed maiden."

4 One, possibly two consonants must come between the a and the ś; the syllable containing the ś must be heavy, and six syllables must be supplied after the ś.

One syllable is missing.

8 Betel was as much an adjunct of love-making among the ancient Hindus as candy and confections are to-day. Usually it was brought by the man to the girl, but here the girl appears to be carrying it as a gift to her lover; cf. Schmidt, Beiträge zur indischen Erotik, Leipzig, 1902, p. 729.

7 The left hand the erotic one, as implied, for example, in the epithet "left-handed", when used to denote the obscene form in the Tantra cult?

8 I take gūhya to be a gerund (cf. Whitney, Skt. Grammar, 982 c), but the author doubtless intended that it should be read also, though with short a, as first member of a compound with śālāṃ-gūhyāśālāṃ, "private chamber"; cf. gūhyāsakā (4d).

In śārada, the same ligature represents both śa and śha. Prof. Barrett, who has transliterated part of the Pāippalāda Manuscript of the Atharvaveda, which is in śārada (cf. JAOS, vol. 26, 2nd part, pp. 197-205), writes me: "about śa and śha; as far as I have seen, there is no difference made, the same sign serving for both."
Translation.

Om. Reverence to the illustrious Hari and Hara. Who is this (maiden), with beautiful limbs and wandering glance, approaching with the gait of a kamsa? Her two hands are moist with saffron, her.....composed of gold.

She has.....on her [body]; she is decked with many flowers, girl with a lute, and is smiling. Concealing betel in her left hand, and having yielded to the power of love, she enters the [private] chamber.

Verse 2.

esā¹ kā bhuktamuktā pracalitamayanā svedaśaśagnāṁgavastāḥ, pratyūse yaśī bala² nṛga iva cakīta sarvataś śaṁkayanti kensām vaktropadmaṁ sphuradadhararasam satpatēnaiva pitam svargah³ kenādyā bhukto haranayanahato maṇmathah⁴ kasya tuṣṭāḥ.

Translation.

Who is this maiden that, not partaking of food and with wandering glance, and with garments clinging to her limbs with perspiration.

¹ The meter is śrīpūrāṇa.
² For perspiration as a mark of love, see Sappho, frag. 2, v. 4, ṣaḥaśaśagnāṁgavastāḥ.
³ In erotic, śaśaśagnāṁgavastāḥ means a young girl under sixteen, who wishes to be loved in darkness, and delights in betel (Schmidt, pp. 243-246; especially the citation (p. 244) from Anuṅgaśāsana, fol. 5b). She is also a nṛga, "gazelle" (cf. ṣaśaśagnāṁgavastāḥ), and harinī, in 3b and 8e), so eats little (cf. bhuktamuktā in 2a), and has high-set (saṁvatā) breasts, cf. Schmidt, pp. 212-213.
⁴ Satpada suggests dharmas, which means both "law" and "lover".

In the ligature here transliterated by aś, I have taken the first element to be the sign for jāmāduṣya, the surd guttural sputant, cf. Whitney, Sā. Grammar, 69, 179d, 171c. Prof. Barret, however, in his transliteration of the Paippalāda Manuscript of the Aṭhāravasāda, adopted aś as the transcription of the character, compare, for example, JAOS, vol. 26. 2nd part. New Haven, 1906, p. 218 foot. v. 18, eṣaḥ kāmaḥ, and p. 220 foot. v. 35, jāmāduṣya, with the Paippalāda facsimiles, folios 6a, line 3, and 7b, line 12, respectively. But he has since written me: "The signs which I transliterated aśu and aṣu are not exactly representatives of lingual aś, but that seemed the best rendering."
At dawn goes here and there, timid [and] distrustful, like a gazelle?
How is this? Has this lotus face with its lower lip’s welling nectar, been sipped by a bee?
By whom has heaven been enjoyed to-day? With whom has Kāma, [once] slain by Śiva’s eye, been pleased?

Verse 3.

aṣṭāṁśaṁ kāstanapāḥārakathinaṁ madhye daridrāvatī vibhṛantā hariṁ vilodanayanā samtrastaṁ yūthdgatā antahāsvaṁ dagajendragandagaliṁ samhitāyā gacchati

1 The meter is kāndulavibhṛiti.
2 Perhaps, “stiff with the burden of her swelling breasts”, i.e., she must walk very upright, or the weight of her breasts would make her stoop-shouldered.
3 There may be an obscene pun in madhye daridrāvati, for the passionalness of the nṛṣṇi, see Schmidt as cited p. 348, note 3. For daridrāvati, not found in the lexicons, cf. Whitney, Skt. Grammar, 1233 d.
4 For hariṁ, “gazelle”, see nṛṣṇi, p. 348, note 3.
5 The reading of the manuscript is samtrastaṁ.
6 The manuscript is broken above the se ligature, but the restoration of the s is unquestionably correct.
7 According to folk-belief, even in modern India (cf. W. Crooke, The Popular Religion and Folk-Lore of Northern India, 2nd ed., Westminster. 1896, vol. 2, p. 240), there is, in the forehead of an elephant, a magic jewel, the gajamukha, which grants to him who possesses it his every wish. The author seems here to be comparing his heroine to this magic jewel.
8 I have rendered samhitāyā as “like”; cf. St. Petersburg Wörterbuch, unabridged ed., s, v. ṭhā. 3. The compound of ṭhā and sam is not found in the lexicons, but occurs twice in this poem; cf. 8c.
9 The whole of line 3 may be read with a second rendering, containing an obscene pun: “She goes, possessed, through her wanton sport with [her lover], of that which falls from the temple of the rutting lord of elephants,” i.e., possessed of the sada, which also means seven virile and jāphāra virā; this latter, in the case of the nṛṣṇi, has the odor of flowers (Schmidt, p. 213), and would therefore attract bees (or lovers; cf. p. 348, n. 4), just as the sada of a must-elephant does. [Prof. Jackson takes this second rendering to be the correct interpretation, as opposed to that presented in the text and in notes 7 and 8.]
drṣṭvā rūpam idam priyāṃgagahanam\(^1\) vṛddho\(^2\) (ṣ)pā-kāmā-yate\(^3\)

**Translation.**

Who is this timid gazelle, with a burden of firm, swelling breasts,
With roving glance, and slender of waist, gone forth from the frightened herd?
She goes like as she were fallen from the temple of a rutting lord of elephants,
Seeing this form, with its adornment of beautiful limbs, even an old man becomes a Kāma.

**Verse 4.**

vāmenāveṣṭayantī\(^4\) pravirālakusumam keśabhāram kareṇa
prabhraṣṭam cottartīyam ratipatitagnām mekhalīṃm dakṣinena
tāmbūlāṃ codvahantī vikasitavadanaṃ\(^5\) muktakēṣā narāgā\(^6\)
nīskrantā guhyadesāṃ madanavāsagatā mārum prārthayanti

**Translation.**

With her left hand doing up her heavy hair, on which few flowers [now remain],
And with her right holding up her upper garment, her girdle, whose cord had slipped down

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\(^1\) The compound priyāṃgagahanam may be read in two ways. In the first way, take gahanam as from gahān, “adornment”, and the second reading, which is obscene, may be found by taking gahanam as “place of concealment”; and priyānga as a tatpurusa compound, priya denoting the lover.

\(^2\) Is vṛddho a reference to Bāna, the husband of Mayūra’s daughter? Bāna may have been of the same age as Mayūra, and so considerably older than his wife.

\(^3\) The regular causative of the root kām is kāmāyate. I therefore take kāmāyate to be a denominative from Kāma; cf. Whitney, Skt. Grammar, 1899 e, and Brugmann, Vgl. Gram. der ind. Sprachen, Strassburg, 1892, 2, 789 (p. 1107). The meter requires that the second syllable of kāmāyate should be long.

\(^4\) The meter is aṣaṣṭhāra.

\(^5\) “With blooming face”, or, pungently, “with open mouth”, “yawning”.

\(^6\) The word narāgā is not found in the lexicons, but on the analogy of sāreṣā, “not ill”, I have taken it to mean “not passionate”, i.e., “with passion averted”.
During love, and her betel; with blooming face, with disheveled hair, with passion sated,
Coming forth from the private chamber, having yielded to the power of love, she longs for the breeze.

Verse 5.
esā¹ kā navayāvanā śaśumakhti kāntāpathi² gacchati
nidrāvyākulīta vighūrganayanā sampakvabimbādharā
kēśār vyākulīta nakhār vidalīta³ dantāiś ca khanḍikrītā⁴
kenedān ratirākṣasena ramīta śārdūlavikrīdita

Translation.
Who is this lovely one advancing along the path, moon-faced, in the bloom of youth,
 Bewildered with sleep, her eye rolling, her lower lip like a ripe bimba fruit.
 Bewildered by her [disordered] locks, scratched by finger-nails, and torn to pieces by teeth?
 How is this? By a demon in love has she, imitating tiger-sport, been beloved!

¹ The meter is śārdūlavikrīdita. Note the pun possibly implied in śārdūlavikrīdita, line 4.
² I resolve as kāntā āpatkī. Compare the Vedic āpatkī (RV. 1. 64. 11), which evidently means, as Geldner (Der Rig-Veda in Auswahl, Stuttgart, 1909, vol. 2, p. 11) says, “auf der Straße fahrend” (cf. also Bezzenger, in Visnu, Abhandlungen zur. idg. Sprachgeschichte Aug. Kick . . . . . ge- widmet, Göttingen, 1903, pp. 175—176), a comutation which is also supported by Śkyāna’s commentary ad loc. Or, perhaps we should read kāntā patkī, with patkī as fem. nom. sing. of *patkha (*patkī), with which compare the epithets of the Maruts—āpatkī, viśpatkī, antarapatkī, amapatkha, RV. 5. 52. 10; yet note tripatkā.
³ The manuscript reads viṃdalītā.
⁴ References to scratching and biting, as concomitants of indulgence in rāti, are found throughout Sanskrit erotic literature. For nakkhaccheda (scratching with the nails), see Schmidt, pp. 478—496, and for ṅaṅkamacakcheda (biting with the teeth), ibid. pp. 496—508. Is there not also in khanḍikrītā a possible punning allusion to the khanḍabhṛkā ("broken-cloud") bite on the breast, in form of a circle, with uneven indentures from the varying size of the teeth (Schmidt, p. 504)? The reference to his daughter’s disheveled appearance, as being due to the scratches and lacerations, may have been responsible for that lady’s anger and her consequent curse of Mayūra (see intro.). And in this connection it may be added that the obscene puns in verse 3 would probably not tend to lessen her displeasure.
Verse 6.

esāḥ kā paripārṇacandravādānā gaurimṛgā̃ kṣobhīṇī̄
śīlāmattajendraḥ śāmansagamanā̄
[śūnā]śṛṣṭāśādharagandhaśīlāmukī vācā mṛdūlāsīṁ
sa śāghydh puruṣes sa jtvatī varo yasya priyā līḍrī

Translation.

Who is this frantic tigress, with a face like the full moon,
With the gait of the hansa, or of the lordly rutting elephant
in wantonness.

With her face cooled by the perfume of her sighing lower lip,
and gently mirthful in her speech?
That man is to be envied, that lucky one lives, who has truly
such a one as his beloved.

Verse 7.

esāḥ kā jaghanasthālī saulalītaḥ pranmatātāmādhikā

1 The meter is kārdulavārādīta.
2 I take gaurimṛgā to mean “beast of Gaṅgī” (with a pun on mṛgī [cf. note on mṛgī, p. 348, n. 3] as the sort of girl the heroine is), and the beast of Gaṅgī (in her incarnation as Durgā) is the tiger. As Pārvatī also, Gaṅgī’s vehicle is the tiger; cf. Moor, Hindu Pantheon, London, 1810, plates 29, 21, 24. My interpretation as “tigress” seems also to be strengthened by the allusion to “tiger-sport” in the last line of the preceding stanza.
3 The word kṣobhīṇī is not recorded in the lexicons except with lingual nasal as the name kṣobhīṇī; of a certain kṛuti in Samjhitāvārāsāmyāraḥ, 23 (cf. St. Petersburg Wörterbuch, abridged ed., s. v. kṣobhīṇī); it is here probably best regarded as the feminine of kṣobhāṇa or of kṣobhīna.
4 In Maṇī, 3.10 (kamsaśrāyagamśina), the guits of the hansa and of the elephant are mentioned as among the desirable graces of women.
5 Seven syllables are needed to fill out the line.
6 The manuscript is broken here, but part of a vertical stroke can be seen, and the restoration of an ā seems certain.
7 The manuscript reads jīvātī. For the sentiment expressed in jīvāti compare the well-known line of Catulhus (5.1), Virginius, moe Lesbia, atī nam omenus.
8 The meter is kārdulavārādīta.
9 Lalita is one of the stock terms used to define the graces of the heroine; cf. Ḫaṭarūpa, tr. Huas, 2.88, “Loiling (lalita) is a graceful pose of one of fair form.”
bhrūbhāṅgam kuṭilam tv annagaḍhamusah prakhyam prabhacandra
tvā rākacandrapalapaṃkajamukhi kṣāmodari sundar
tvā vinuddam tvā idam vibhāti talitam tvā veladhānjam tvā gacchati

Translation.

Who is this lovely one that goes, with rounded hips, with
an excess of ecstatic love—

Her curving brow like the bow of the Bodiless (Kāma), and
like the moon in splendor—

With lotus face like the cheek of the full moon, and she
[herself] slender-waisted and beautiful?

This neck of her lute seems like a raised quivering arm.

1 In the ligature here transliterated by kp, I have taken the first
   element to be the sign for the upadhmāniga, or surd labial spirant; cf.
   Whitney, Skt. Grammar, 69, 170d, 171c. In Prof. Barret’s transliteration
   of the Pāippalāda Manuscript, this same ligature is transcribed by sp
   and raṣ parī, with the Pāippalāda fascicules, folio 4b, lines 11 and 12),
   though Prof. Barret says (see above, p. 348, a. 5) that it does not exactly
   represent sp. If the word dharmasaprakhyam be regarded as a compound,
   we should naturally expect the dental sibilant before initial p, as is the
   case, for example, in such a word as sacapsati (cf. Whitney, Skt. Gram-
   loc. cit.), yet, in favor perhaps, of its being so regarded, it may be noted
   that above (stanz 6d) we have dhūkṣhak purusas, which cannot be a
   compound, with vimarga before initial p. However, it should be remarked
   that the Pāippalāda Manuscript, before initial p, seems to use, indiffer-
   ently, either vimarga or the ligature under discussion; cf. the instances
given above with folio 6a, line 7, dévas pradikṣā, and folio 7a, line 5,
   nīṣṛtyah śceṣṭham.

2 The accusatives in line 2 are hard to explain, unless they may pos-
   sibly comprise an extension of the simple adverbial accusative, on which
   see Carl Gaisford, Der Accusativ im Veda, Breslau, 1889, pp. 171—175,
   215—233. Or, perhaps bhrūbhāṅgam is to be regarded as neuter (cf.
   note on bhuja below), though it is not found as neuter elsewhere.
   If it is neuter, it probably becomes the subject of an sāh understood.

3 The form vinuddanda is not given in the lexicons, the regular spell-
   ing is viniddanda, though the word is given only by the lexicographers,
   and is not found in the literature.

4 In talitam, the manuscript shows only the upper part of the i, the
   vertical stroke being missing.

5 Bhuja is not found as neuter elsewhere, but for neutrers of this
   class of compounds (including vinuddanda), see Wackernagel, Altindische
   Grammatik, Göttingen, 1905, H. 1. 15b (p. 39); and on the interchange
   of masculine and neuter (cf. daṇḍah and daṇḍar), see Delbrück, Vgl.
   Synt. der ind. Sprachen, Strałsburg, 1899, 1. 37 (p. 180).
Verse 8.

esāḥ kā ratihāvabhāvaṁ vilasaccandrānananam dibhṛati

gātram caupakadāmagaurasuddhāṁ puastanālambitaṁ

padbhyaṁ samarchati pragalabhahariṁ samhityā sveçchāyā
kīm cāiśā gaganānganā bhuvitale sampadītā brahmanā
tī śrīmayurāṣṭakam samāptam

Translation.

Who is this with a face like the shining moon through her
<incitement to> and her <state of> amorousness,
Drooping from [the weight of] her full-rounded breasts, with
a body like the yellowness of a garland of champaka flowers,
A wanton "gazelle", going on two feet, in dalliance as she feels?
Surely this is a celestial nymph, produced on earth by Brahma.

Here ends the illustrious Mayurāṣṭaka.

1 The meter is śārdulavārṣidāta.
2 I have rendered bhāta in two ways, "incitement to" and "state of".
3 The manuscript reads māurasuḍṛkaṁ, which is unintelligible. I have

emended to paurasuddhāṁ, at the suggestion of my friend, Dr. C. J. Ogden,
who referred me to the compounds kanakacampakadāmagaurcīṁ (Bilhana’s
Cāuraṇacārika, v. 1), and caupakadāmagaurcī (Muhābhārata 15. 26. 13).
4 Pragalbhā is another of the stock terms (cf. lilā, ta, and talitā, uṣa) defined in Hindu rhetorical treatise; it is translated "experienced" by

Haas, in his translation of the Dukkha, 2. 29. For pragalbhā, as a

type of heroine, cf. Schmidt, pp. 264—266.
On the Etymology of Ishtar.—By George A. Barton, Professor in Bryn Mawr College, Bryn Mawr, Pa.

In the Journal of this Society, XXVIII, 113–119, Professor Haupt published a theory of the etymology of Ishtar. The article is packed with the wealth of philological material that we have learned to expect from the pen of this distinguished Semitist. There was one crucial point, vital to the whole case, in which the argument rested on one single example—an example, too, which did not prove the conclusion drawn from it. The present writer was, accordingly, never convinced that the etymology offered was correct. As the subject is a difficult one, no dissent was immediately expressed. Since it now appears that Dhorme has been mislead by it,1 it is not out of place to discuss the point a little further.

Haupt derives the name Ishtar, הִנְשָׁלָה, &c. from the stem בָּשָׁה, from which הִנְשָׁלָה comes, by the infixing of a י after the second radical. This י Haupt regards as perhaps the feminine ending י moved backward, although he recognizes that it may be the reflexive י. Now it so happens that בָּשָׁה begins with ב, and הִנְשָׁלָה with י. The name is found in Hebrew, Phoenician, Moabitish, Aramaic, South Arabic, and Ethiopic, in all of which languages the י appears. That the same consonant stood at the beginning of the word in Semitic Babylonian, is shown by the fact that the name begins with י. This י, as is well known, is often found in Babylonian and Assyrian where an י was originally the accompanying consonant. To derive the name of this deity, once universally worshipped by the Semites, from בָּשָׁה, one must prove that in primitive Semitic ב could be changed to י. In proof of this Haupt offers but one example. The Hebrew יִשָּׁל, Assyrian ištin, he derives from the Sumerian aštan.

This derivation from Aš = 1 and Ta-Aân = “amount” is, however, hardly tenable. Haupt refers for proof only to

the work of Schott, *Altbabylonische Rechtsurkunden*, p. 163 n. 4 and p. 208. All that these references prove is that TA−A−AN can mean “amount”. They have no bearing on the compound AS−TAN. Moreover Prince has pointed out, (Sumerian Lexicon, p. 195), that *isti* cannot well be derived from ASTAN, because as early as the time of Hammurabi (Laws, xi. 6), it made a feminine *isti*. The Sumerian origin of the one example on which the whole case rests is, accordingly, very questionable. If *isti* were really derived from ASTAN, the initial *y* would be paralleled in modern Syriac in which Ireland appears as *יִזְרָאֵל* and oxygen as *יִזְרָאֵל* (cf. Noëlle, *Grammatik der neusyrischen Sprache*, p. 60). As noted below, this phenomenon is accompanied in modern Syriac by an interchange of *t* and *s*; this is paralleled in Babylonian and Assyrian by the confusion of all the gutturals except *z*. That outlying dialects of Semitic in which distinctions between the gutturals were passing away could exhibit such phenomenon, is not strange, but it is quite another thing to ask us to believe that such interchange occurred in uncontaminated primitive Semitic. *Ist* appears in Hebrew in the Babylonian period of Hebrew history as *יִתְמָּשׁ*. It occurs in Jeremiah, but not in the text of the Book; only in the editorial title (1:3) and an exilic supplement (52:5). Its earliest occurrence is really in Ezekiel (40:49). Whether of Semitic or foreign origin, it does not appear in the Semitic dialects generally.

*תומשׁ*, on the other hand, is a primitive Semitic word. It is found in all the great divisions of the Semitic speech. To prove that it is derived from the stem *תומשׁ*, it is necessary to show that in primitive Semitic *י* and *י* were interchangeable. Proof for this is altogether lacking.

It is perfectly true that in widely scattered Semitic dialects *י* sometimes stood for *י*, but, as Haupt admits, this was all in comparatively late time. It came about when in many parts of the Semitic world *י* was losing its original quality.

Thus in Hebrew, *רֶשֶׁם* (Esther) is probably a spelling of Ishhtar taken over from the Babylonian after the quality of the *י* had disappeared. Similarly, in the Targum Yoma and the Palestinian Talmud *יהל* occurs for *יָזָל*, “to weary oneself” and *יָשָׁר* for *יָשָׁר* “it is unfavorable”. In the Talmud *יָשָׁר* is sometimes spelled *יָשָׁר* (cf. Dalman, *Aramäische*...
Such examples prove the same confusion of these sounds in Jewish Aramaic. In late Parnc, too, the distinction between $u$ and $v$ was lost. In CIS, 1, 3734 מ$א$ס “hear” occurs instead of the ordinary י$נ$ש (cf. 3714), while in 3872 י$ו$ is written for the relative pronoun ordinarily spelled י$ו$ (cf. 3854). In Palmryne Aramaic we have י$נ$ת for י$נ$ת (cf. Lidzbarski, Ephemeris, I, 198).

In Mandan, though there are numerous cases in which $u$ has replaced $v$ (cf. Nöldeke, Mandäishe Grammatik, 69 ff.), there seem to be few if any cases in which $v$ stands for $u$, though it sometimes stands for $v$, thus לו$א$ becomes לו$א$ (cf. ibid. 60 ff.). In modern Syriac it is not distinguished from $u$, thus ל$א$ stands for and beside ל$א$ in the sense of “narrow”, ל$א$ beside ל$א$, “between” (cf. Nöldeke, Grammatik der neusyrischen Sprache, 60).

This confusion is also found in late dialects of South Semitic. Thus in Tigre, Tigrina, and Amharic, ‘and’ are hopelessly confused (cf. Brockelmann, Vergleichende Grammatik der semitischen Sprachen, pp. 124, 125). In the Mehri dialect of South Arabia the $u$ has entirely disappeared and is replaced sometimes by $l$, sometimes by $u$ and sometimes by $z$ (see Jahn, Grammatik der Mehri-Sprache pp. 2 and 9).

Apart from such confusion, which arose from a weakening of the pronunciation of $v$ as the language decayed, the only change of which there seems to be any trace is the change of $v$ to $u$ in certain cases. Thus in Syriac and Palmryne $v$ before another $v$ was dissimilated to $u$. In Syr. מ$ג$ג, “rib”, became מ$ג$ג: In West Syriac, $v$ before $v$ became $u$; ‘uhdänä, “contract”, became "uhdänä" (cf. Brockelmann, op. cit. 241 ff., and Nöldeke, Syriac Grammar, p. 25). In Syriac, $v$ before $p$ is sometimes dissimilated to $u$, "qlänä" becoming "qlänä" (Brockelmann, p. 242). Of the opposite change of $u$ to $v$ the older dialects afford no example.

Not only is this true, but the stem י$א$ appears in South Semitic as well as North Semitic, where, as in North Semitic, it is spelled with $u$. In a South Arabic inscription י$א$ is a goddess, parallel in name as in functions to י$א$ (cf. Hommel, Anfänge und Abhandlungen, II, 206). The occurrence of this name in the south as well as in the north, proves that these two names, י$א$ and י$א$, were from primitive times philologically and orthographically distinct.
The etymology of Ishtar must accordingly be sought in a stem beginning with י. The present writer has twice suggested such an etymology (Hebraica X. 69-71, and Semitic Origins 102 ff.), deriving the name from the stem מְשַׁרְשֶׁר. In the work last referred to it was suggested that, as מְשַׁרְשֶׁר means an "irrigating ditch" and מְשַׁרְשֶׁר "that which is watered by rain alone", the name meant "she who waters", or "is watered". I should have added as an alternative meaning "the self-waterer".

A writer in the Nation (vol. L.XXV, p. 15), who withheld his name, but whose identity it is not difficult to divine, criticised this view because the Arabic lexicographers assert that the term מְשַׁרְשֶׁר was applied to the palm tree because it "stumbled upon the water necessary to it and did not need to be irrigated". Such a statement is, however, not decisive. It is doubtful whether an Arabian lexicographer's guess as to the origin of a custom or an etymology is superior to that of a modern scholar, especially as the lexicographer bears witness in the same context (Lisan, VI, 215), that the term was applied to "whatever seed is watered by the water of stream or rain" (וּפָרֵבָל הָו מְשַׁרְשֶׁר מֵא הַצַּעַר מָא שִׁפְעַי בֵּית הַסִּיל וַתָּמְשַׁר). This is a statement of general usage, concerning which the lexicographer's testimony is valuable. It is of much more weight than his guess as to the reason of the usage. If the root מְשַׁרְשֶׁר was applied to whatever seed was watered by natural processes, it certainly had something to do with water, or watering. Paton (Hastings Encyclopedia of Religion and Ethics, II, 116 ff.) has accepted this etymology, suggesting that it was applied to the men of a spring and meant the self-waterer. He points out that all over the Semitic world springs were supposed to be the dwellings of numina. This is a very probable suggestion, superior, I believe, to the application of the etymology made by me.

In whatever way the meaning is to be explained, the evidence, philological and religious, points to an etymology from the root מְשַׁרְשֶׁר as a term connected with irrigation. The יְשַׁרְשֶׁר is most plausibly explained with Paton as the infixed יְשַׁרְשֶׁר of a reflexive, infixed as in the viith stem of Arabic, afterward undergoing metathesis with the following radical after the analogy of י before a sibilant in North Semitic. Parallel forms from both North and South Semitic were cited by me in Hebraica. loc. cit.
The Etymology of Syriac dastabêra.—By Roland G. Kent, Assistant Professor in the University of Pennsylvania, Philadelphia, Pa.

On two Aramaic, or rather Syriac, incantation bowls, listed as CBM¹ 16086 and CBM 16019, in the Archaeological Museum of the University of Pennsylvania, there occurs the word אָסֶרֶד, which is here found for the first time. On CBM 16086 the word occurs four times, in the following phrases:

“This אָסֶרֶד against all the demons and satans and devils and Liliths”, etc.

“He wrote against them a אָסֶרֶד, which is for all time by the virtue of” certain magical syllables.

“I have dismissed you” (the devils) “by the אָסֶרֶד”.

“Charmed and sealed and countersealed is this אָסֶרֶד by the virtue of” certain cabalistic syllables.

On CBM 16019 the word occurs for times likewise, in phrases that are practical duplications of those on CBM 16086.

Prof. J. A. Montgomery, who is preparing these bowls for publication, asked the writer to investigate the etymology of the word, which is manifestly non-Semitic.

אָסֶרֶד may be read dastabêra or dastabêra. Certain features are plain: 1. The final -ד is the “emphatic Aleph”, and is therefore to be disregarded from the etymological standpoint, as a Semitic addition to the original word. 2. The word, from its context, must denote either the bowl, or the writing on the bowl, or the charm that the bowl effects, or some similar idea. 3. The first part is evidently the Pahlavi dast ‘hand’, — old Persian dasta-, Avestan zasta-, Skt. hasta-. This as an element of a compound lends itself well to the idea necessary; “handwriting” occurs at once as a natural meaning. 4. Since אָסֶרֶד is from the Persian, the word is a borrowing

¹ CBM = Catalogue of the Babylonian Museum.
from the Persian — more narrowly speaking, from the Pahlavi or middle Persian, as the bowls are of about the sixth century A.D.

What now is the element -bîr- or -bêr-? Unfortunately neither this word nor any word resembling it is to be found in the Pahlavi glossaries; and recourse must be had to the consideration of the possibilities from the phonetic standpoint:

In Pahlavi initial b represents older Iranian b; thus Pahlavi brâz "brother" = old Persian and Avestan brātar-, Sanskrit bhṛtar-. This Iranian b represents Indo-European b and bh, appearing in Sanskrit as b and bh respectively. Perhaps older de initial appears as b in Pahlavi, though this is uncertain. Iranian p after vowels becomes Pahlavi b; but as this ṃ is the second element of a compound, such an origin for b is here unlikely.

Pahlavi ṭ represents older ṭ; or ṭ with compensatory lengthening as in ṭir — Avestan tīryi- 'arrow'; or ya ṭya². If on the other hand ṃ be read -bēr-, Pahlavi ẓ may represent the earlier dipthong ai, appearing in old Persian as ai and in Avestan as āe and ō2, or ā changed to ẓ by the influence of a y in the next syllable, as in ārān — Avestan āryana-; or ẓ contracting with immediately following y that developed from (Avestan) y, as in anārān — Avestan anayrānam; it develops also from āya āhya āy². Pahlavi ṭ may represent earlier ṭ; less often ṭṛ, ṭṛ, hr, ṭṛ, ṭṛ, possibly ṭḍ (old Persian ṭḍ, Avestan ṭṛ); ṭ may be first disposed of.

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1 Hoshanji and Haug, An old Zend-Pahlavi Glossary, ed. 2, 1870; West, Mângâ-i-Khârd, with glossary, 1871; West and Haug, Glossary and Index of the Pahlavi-Texts Ardâ Viraf, &c., 1874; de Harlez, Manuel du Pahlavi, 1889.
3 Bartholomae, Vorgeschichte der iranischen Sprachen, §3.2, 3, in Geiger and Kuhn, op. cit., vol. 1, part 1.
4 Salemann, op. cit. §33. N. 2. 5 ib., §15, §18.
6 ib., §36. 7 ib., §59 l, §21 d. 8 ib., §39.
9 ib., §36. 10 ib., §41. 11 ib., §21 d. 12 ib., §41.
17 ib., §90. 18 ib., §30. As rd may become Pahlavi I with loss of the ∂, it would appear likely that as ṭ ordinarily remains r, this group might develop also into Pahlavi ṭ.
has the meanings 'lightning; a well; a couch, bedcover; flood; to memorize; brother, hero, brave'; none of these would in the compound yield a suitable meaning. Apart from that consideration, چ ژ is in some meanings derived from Hebrew and in the others from Arabic, so that it is out of the question here.

To turn now to the Avestan words¹, several fit fairly well the phonetic requirements²:

*바* *雅*- neut. subst., 'carrying, receipt'.
*바* *雅*- (graphic for *바* *雅*), adj. 'to be chewed, solid', in reference to food.

*바* *雅*-, ptc., 'carried'.
*바* *雅*-, masc. subst., 'door, gate'².

Of these none seems semantically possible.

Sanskrit yields a few words suitable for consideration:

*바* *雅*-, adj., 'bright, happy'; as neut. subst., 'fortune'.
*바* *雅*-, adj., 'to be supported or maintained'; as masc. subst., 'soldier, servant'; as fem. subst., 'wife'.

*바* *雅*-, adj., 'frightening, terrifying'.
*바* *雅*-, adj., 'timid'.

*바* *雅*-, adj., 'belonging to or being at a door'².

Here, at last, we find in *바* *雅*- a likely source for ژ ب: ژ ب may well be the Syriac representation of a hypothetical old Persian *داست* *بیر*-; Avestan *ژاست* *بیر*-; Sanskrit *هاست* *بیر*- 'a thing terrifying by the hand(writing)', that is, a 'written deterrent' as opposed to a 'spoken deterrent' against the demons.

This implies, of course, that *داست* depends upon -بیر- in an instrumental relation; but in such compounds the first element may stand in any case relation to the second; cf. Sanskrit *هاست* *کامالا*-م 'a lotus held in or by the hand', *هاست* *دیپا*- 'a lantern carried in or by the hand', *هاست* *سِ جا* 'a

¹ Bartholomae, *Altorientalisches Wörterbuch*.

² Should initial ژ be considered a possibility for the ژ of ژ ج, then we must take the following words also into account: *پارسا*-, neut. subst., 'feather, wing'; *پارسا*-, adj., 'former'; *پارسا*- (graphic for *پارسا*-), adj., 'first'; *پارسا*-, masc. subst., 'protector'. Of these, the last in a -پا- derivative, would yield a good meaning, but the phonetic development seems to the writer highly improbable.

² The bowls were placed at the corners of the house, not at the door, so that derivation from this word is precluded.
sign made with the hand', *hastābhāranam* 'an ornament for the hand', *hastālabha-s* 'support for the hand, refuge, hope'; Greek *χειρ-γράφη* 'a leading by the hand', *χειρό-γραφος* 'written by the hand', *χειρό-ματι* 'diviner by palmistry'; Latin *manu-suetus* 'accustomed to the hand, tame'; Gothic *handu-waurhtis* 'made with the hand'; English *handbill* 'a printed sheet to be distributed by hand', *handbook* 'book of reference suitable for carrying in the hand or for keeping at hand', *handcuff*, *handpress*, *handshake*, *handiwork*, *manufacture*.

As for the meaning of *dasta*- 'handwriting', this is a meaning found in English *hand*, German *Hand*, French *main*, Italian *mano*, as well as in Greek *χειρ* and in Latin *manus*.

Hyperides ap. Poll. II. 153 ἐκ οὖσαν χειρὰ ἡμᾶς ὑποτίθεν 'to deny his own hand'.

I Epistle to the Corinthians xvi. 21 ἐν συνεργίας τῇ ἐκ τῆς χειρὸς Παύλου 'the salutation of me Paul with mine own hand'.

Cicero in Catil. 3. 5. 12 *manum suam cognovit* 'he admitted his own hand'.

Cicero ad Att. 8. 13. 1 *lippituinus meas signum tibi sit librarii manus* 'let the scribe's handwriting be evidence to you of my eye-trouble'.

Cicero ad Att. 7. 2. 3 *Aelidis manum amabam, quod tam prope accedebat ad similitudinem tuae litterae* 'I liked Alexis' hand, because it was so like your writing'.

κατάληψις seems now to mean a 'handwritten deterrent' in distinction from a 'spoken deterrent'. 'Hand' is indeed not infrequently used in opposition to 'word', but in the sense of 'force'; so Iliad 1. 77 ἐπιγράφω σε ἔργων ὑπέτασσε 'that you will defend me by word and by deed'; but in the case of a charm the meaning 'force' is impossible. The alternatives are a 'written charm' and a 'spoken charm'; and the word 'hand' is readily available to distinguish the former from the latter.

An interesting parallel to 'spoken deterrent' is found in Sanskrit: *vāc-,* fem., 'voice' and *kṣatā- 'hurt, wounded, destroyed, violated', when compounded, form a neut. subst. *vāk-kṣatā- 'offense by words', as opposed to physical assault: and *vāc-* with *daṇḍa-*, masc., 'stick', makes *vāg-daṇḍa- 'speech assault, reproof, reprimand, verbal injury'.

1) Cf. Iliad I. 395 ἐπέποτο ἐπὶ σε κατεργάζεται, and the common idiom ἄγγειλα κατεργάζεται.
The Etymology of Syriac dastabīrā.

Phonetically and semantically, therefore, there is no objection to this etymology for נָדָבָד, but there are two other possibilities in the Avestan, that should not be overlooked:

1. bōnra-, neut. subst., 'fight, strife', for earlier *baiba-, would become Pehlevi bēwr, and if borrowed with omission of the weak sound w would give Syriac bēr-, with an excellent sense: 'strife or fight by means of handwriting'. The omission of the w is however a serious objection.

2. Avestan varzya- 'activity, work', a substantivized neuter adjective, - faciendum'. In old Persian this would appear as *v(a)rda-ya (written *v(a)rda-)ya). Now in the change from old Persian or Avestan to Pahlavi the group r + consonant + y, or consonant + r + y, loses the consonant and the y palatalizes an a in the preceding syllable to e: Pehlevi dēr = Avestan *darya-, modern Persian dērah = Avestan tōbrā-, dēr 'lion' = Avestan xwābrā- 'royal'. Hence old Persian *varzya-, Avestan varzīya- would become Pehlevi *vēr. Were this borrowed with a hardening of v to b, נדבָד with בּ from this source would mean 'handiwork, handwriting'. This etymology is however rendered questionable by the uncertainty of the treatment of Pahlavi v and by the question whether the change of a to e in the manner described would be complete and definite enough to cause the resultant e to be represented by Semitic *.

To return then to Sanskrit hastā-bhīra-, Avestan *zasta-bīra-, old Persian *dasta-bīra-: that we should find on a Syriac bowl a word which was borrowed from Pahlavi, although we have no trace of it in Persian of any date, is not so remarkable as it might at first sight seem. The sacred literature of the Parsis, as now extant, is but a small portion of the original writings. Even a casual glance at Bartholomae's Altiranisches Wörterbuch reveals that many words occur but once in the extant texts; whence it is evident that many

1) Sanskrit bhāra-, masc. 'fight' shows the root in simpler guise; Avestan bōnra- has intensive reduplication, *bhaï-bhīra-; cf. Bartholomae, Indogermanische Forschungen X. 100. This intensive reduplication is seen in Greek σβάλλον 'cunningly wrought', σβαλλω 'fine flour', σβάλλω 'I dart quickly'; cf. Brugmann, Griechische Grammatik, § 299, 1.

2) Salemann, op. cit. § 41.
words used in the lost portions perished with them 1. There is therefore no inherent improbability in assuming the former presence of Avestan and old Persian *bira-, Pahlavi *bir, surviving in Syriac dasta-bir-ā.

1 Yet it is possible that the aorist of the denominative verb to the stem Avestan *bira- is concealed within the corrupt form birachat, occurring Persânkhā 18: tašu. mazā mitapāti yā tašu. mazā birachat, translated by Bartholomae “ein Askwerk im Pfandwert des Leibes muss verriichten, wer ein Drugwerk in Pfandwert des Leibes verbrochen hat”. Cf. Bartholomae, op. cit., p. IX. 3; col. 965 s. v. birachat; col. 637 s. v. tašu. macah-. If we have here a denominative to *bira-, it must have progressed from the meaning ‘terrify’ to ‘commit a terrifying, frightful act’, a quite natural semantic change.
The Washington MS. of Joshua.—By Max L. Margolis,
Professor in the Dropsie College, Philadelphia, Pa.

Prof. Sanders, the editor of the Washington MS. of Deutero-
nomy and Joshua belonging to the Fraser Collection, discusses
the textual problem presented by the new uncial at length.
Its aspects are shown to differ in the two books. In Joshua
“Θ (= Washington MS.) and A (= codex Alexandrinus) stand
closer together than in Deuteronomy, but still represent fairly
independent traditions, as is shown by the 253 agreements
between Θ and B (= codex Vaticanus).” In the forms of
names “Θ agrees with A nine times as often as it does
with Θ.”

In view of this close relationship it is to be regretted that
the editor chose to base his collation on B rather than on A.
I have therefore made a fresh collation. I found that Prof.
Sander’s work, if some three or four inaccuracies are excepted,
is most perfect. The same cannot, however, be said of Swete’s
work. In round 50 places Swete’s collation is inaccurate so
far as the readings of A are concerned.

On the basis of my fresh collation, the relationship of Θ
and A as members of one and the same group is unmistakable.
Certain omissions in Θ are intelligible, i.e. explainable as
having arisen through homoioteleuton, only when the text of
A is compared. Comp. 7, 17; 11, 5; 17, 8; and for the con-
verse process, 19, 31. In some of these cases, it is true, another
manuscript steps in in the place of A as the basis of the mu-
tilated text underlying Θ, so N. Which goes to show that we
are dealing here with a group consisting of Θ, A, N, possibly
M, and a number of cursive.

The disagreements between Θ and A in the proper names
are, generally speaking, of a nature to substantiate rather
than to invalidate the affinity of the two uncials, the diver-
gence between them being trifling, when their common devi-
tion from B is compared. Comp. e. g. αἰλακ Θ αἰλακ A / αἰκλ [read αἰκλ, see below, = χρι τ] B. There are, of course, instances in which it would seem that either Θ or A has moved nearer to B. But their proportionate number is in the first place too small to be taken into account; and secondly, in nearly all of them we have to do with readings on which the two forms of the text as represented by B and A have never divided to an appreciable extent. This holds good even where the Hebrew is at variance. For, if A be but a text adjusted to the Caesarean standard codex, it can be shown that Origen was conservative in his treatment of the χρι, introducing tacit emendations only where the common reading seemed at least to him to be hopelessly corrupt. Then the different hands of the two codices must be taken into account. When furthermore the remaining group-members are consulted, the reading of Θ or A reveals itself as singular or sub-singular.

As for the remainder of the text not covered by proper names, my own count yields 208 cases in which Θ goes with B against A. In 23 of them the various hands of the three uncials have come into play. Of the large remainder of 185 instances in which Θ coincides with B against A, more than one half (95) show A in isolation which is absolute in by far the greater number (55). Of these absolutely singular readings, 29 are clear errors; 4 are decidedly inferior; of the remaining 22, two may perhaps represent corrections to minimize the dissonance with the Hebrew, while the bulk are of a trifling character. As for the 40 relatively singular readings, 10 may be pronounced to be errors and 6 inferior; in 4 there is a more or less certain adjustment to the Hebrew, while in one instance the omission of a redundant pronoun cases the Greek; the remaining 19 instances concern trilites.

So far I am able to furnish accurate statistics. But my tabulation still remains to be finished. In a summary way I can see now that codex 121 is a close relation of A, sharing together errors and singular readings; also that some readings of A go back to the χρι in some other form than the one which is revealed in B.

Where A has moved nearer to B, it is frequently a case of omitting asterisked passages. Both Θ and A are excerpts from the Septuagint column in Origen's work which have been adjusted to a χρι: text. Following the well-known prescription
of Jerome, obelized passages were on the whole retained, while asterisked passages were omitted. Yet the redactors of the two texts in question did not always coincide in the amount excised.

As to the relative merit of $\Theta$ and $\Lambda$, $\Theta$ is the more accurate text. But inferior readings are found even in $\Theta$. The two check each other's errors admirably.

An accurate estimate of the place of $\Theta$ and $\Lambda$ in the narrower group to which they belong is impossible without a fresh collation of its constituent codices, both uncial and cursive. In view of the inaccuracies in Swete's apparatus, as pointed out above, an edition of the complete text of $\Theta$ with the variants from $\Lambda$ is deemed desirable by the present writer, to serve as a basis for a collation of the other group-members, like $M$ and $N$ and the rest. On our steep road to the earliest form of the Septuagint, we need resting places, points of vantage; such are the groups, narrower and wider, into which the extant texts may be divided. The proper names in the Book of Joshua are the milestones which guide the investigator in finding his way to texts held together by group affinity. Thus, in the Book of Joshua, there are all told six groups, of which three show traces of Origen's Palestinian text. Among these is the group to which both $\Theta$ and $\Lambda$ belong.
A Letter from the Mahdi Muhammad Ahmad to General C. G. Gordon. — By George Sverdrup Jr., Professor in Augsburg Seminary, Minneapolis, Minn.

This letter from the Mahdi to General Gordon is found in a manuscript belonging to the collection of Arabic manuscripts made by Count Landberg, and presented to the Yale University Library in the year 1890 by Mr. Morris K. Jesup. The manuscript is a collection of letters, or rather copies of letters, written by the Mahdi on various occasions. It is a companion volume to one which is in the possession of the Egyptian Intelligence Office in Cairo. Some of the letters found in the Yale manuscript are also found in the Cairo manuscript. It differs from the Cairo manuscript in this, that it contains no letters of other dignitaries as the Cairo one does. The Cairo manuscript was captured in the battle of Toski, August 3, 1889. Just where or how Count Landberg obtained possession of this manuscript the writer has been unable to discover.

The Yale manuscript is paged continuously up to page 503, of which the last nine lines are blank. Pages 251—352 are missing, i.e. five quinion gatherings. There are in all 21 gatherings; four quaternions, and the rest quinions. The pages have 20 lines. The dimensions of the manuscript are nine and one eighth by six and three eighths inches; the written surface seven and one eighth by four and five-eighths inches. At the bottom of every odd-numbered page there is a catch-word. Count Landberg has added a table of contents.

In the manuscript there are 148 letters and proclamations each beginning with the phrase: "In the name of God the Merciful" &c. The لله محمد and the beginning word of quotations from the Koran are written with red ink. No chronological order is followed in the arrangement of the documents. The dates are missing from many of the letters, among which is also the Gordon letter. In his appended "Régistre" Count
Landberg says: "fort à regretter est cette omission surtout dans la lettre intéressante, adressée à Gordon pacha". This omission can be supplied, at least for the date on which Gordon received the letter, as will be shown. The Gordon letter is found on pages 470–475 of the manuscript.

The bibliography for the history of the Sudan for the period 1880–1900 is large, especially in periodical literature. Attention here is called only to the very important sources. First of all are the British Government "Blue Books". The most important then are: The Journals of General C. G. Gordon, C. B., at Khartoum, printed from the original manuscript with an Introduction and Notes by A. Egmont Hake, Boston 1885; Letters of General C. G. Gordon to his sister M. A. Gordon, London, 1888; Fire and Sword in the Sudan, 1879–1895, by Rudolf C. Slatin, C. B., translated by F. R. Wingate, London 1896; A Prisoner of the Khaleefah (Twelve Years Captivity at Omdurman), by Charles Neufeld, London, 1899; Ten Years Captivity in the Mahdi's Camp, by Father Joseph Ohrwalder; The Life of Gordon, by Demetrius C. Bulger, two vol. s, London, 1896; Mahdiism and the Egyptian Sudan, by Major F. R. Wingate, D. S. O., R. A., 1891; and Modern Egypt, by the Earl of Cromer, two vol. s, New York, 1908. Lord Cromer's appreciation of General Gordon is far from impartial; but his book throws much light upon the many misunderstandings between these two men. In Arabic there is the important تاريخ السودان by Na'oum Bey Shoucair, Chef de Bureau in the Agent-General's Office in Cairo, printed in Cairo, 1904. Na'oum Bey Shoucair undoubtedly had much to do with gathering the material for Wingate's book. At any rate the two are very similar in plan and contents.
The Text of the Letter (Arab. ms. Yale 543).

470 "سم الله الرحمن الرحيم فمجد الله والصلاة على سيّدنا محمد وآله مع التسليم. وعند فين العبد المُعترف لينبَّأ حمزة باللعبي بْن السيّد عبد الله الأنصاري، بإريانية ضيوفية. "وقد دون، باستكانة أن الله سبِّح وتعالى مع جلوي، وكبريه، يحترم ولا يُفْهَل ولا يُرَتَّل بالسُّنَّة عن القوم المُحذرين وهو على المحذرين.

قال تعالى ("اللهُ مَلَكَ الْعَالَمَۢيَّاتَ أَحْكَمَهُمْ مِّنْ أَلْطَمَّاتِ إلى النَّورِ وَهَٰذِينَ لَهُمْ أَرْضَيْنَۢ وَمَيْتَاهُمْ لَمْ يُخْلِصُوا مِّنْ الْعَمُّوَّرِ إلى الْعَصْرَِۢ أَنَّ هُمْ أَخَذَتْ النَّارُ هُمْ فِي يَدِيِّهَا نَحِيلُونَ، وقد تُبِّأ في القرآن الحكيم وغيره من كتابة النديمة. وعلى إنسان كل رسل الله وتبعي وحصين في دينه يثنم الدنيا وحذّر منها العقلة وساهم كل آخر ورغبهم فيها لأنها دار البقاء والشرف والبقاء الصريح والبقاء الشائع والميّز الشرح البشري كم يشعر بهذه كلماتها قولة تعالى ". إنْ خَلَفْنَا أَنْتَ عَبْدَ اللَّهِ الْأَمْرُ وَمَّنْ أَهْلَهُ وَدِينَهُ وَأَنْتَ الْخَيْرُ الْأَكْبَرُ مَنْ أَتَتْهَا تَفْتَحَ أَنْتَ عَلَى مَنْ أَجَّلْنَاهُ وَعَفَّنَاهُ وَأَنْتَ مِنْ أَمْرِهِ فَأَطْهَرْنَا أَنْتَ عَلَى مَنْ أَطْهَرْنَا إِلَى مَعْرِفَةِ مَنْ أَذَّنْنَا وَسَوْيَ مَنْ أَذَّنْنَا إِلَى البَيْدَاءِ إِلَى مَحْيِ الْشَّمْسِ وَأَنْتَ رَجُلُ أَمَّنَ أَتَّجَلَّى إِلَى اللَّهِ وَرَضْيَهُ وَلَكَ نُفَطِّرْنَا قُضْلَ اللَّهِ يَتَابِعُ مَنْ يَتَابِعَ وَاللَّهُ دُوِّنُ الْفَضْلِ الْعَظِيمِ فَمَدْلُولُ الآيَاتِ يَعْقِبُونَ أَنَّ الدُّمَّارَ، على جملة الأيمان بالله ورسوله الله المُعترف إلى الله وتركيب الموجود ليس له، والسبب لطيبته ونيل " ما تَقْلَبَةَ الأنْفُسِ وَكَبْرُ الأنْفُسِ وَالله لا تَعْجِرُوا لحِدِّ من ذَلِكَ وَسَخَّارِيَهُ وَمِن كُلَّ رُدُوٍّ نَّدَا وَلا خِيرَةَ أَنَّهَا يَدُ العقَدِّ الأفْقِهِ وَعَبْدَ اللَّهِ وَحَيَانًا. وَتَحُبُّ الْوَلَدِ."

Supply ولاي b Sura 2:208-210. c ms. d Sura 57:19-21. e ms. f ms. g هذا. h madra.
بيها لا إله إلا ربك ساحرة نحترم ليس فيها راحة ولا تعليم

التعليم إلى ما عند الله من الحاكم في دور التعليم بل من
التعليم أولاً والثاني على الإبهاء أكله الله في أصل النار بدليل قوله تعالى

"لا إله إلا الله لا إله إلا الله وتعالى الرحمن الرحيم".

وعليه أنه لا طالب تحت جاه الدنيا وحياتها وستنها وهم"لا
المسيرة المظلمة في الآخرة ولذلك جاء من سيديدا ميس دح مريم
علي نبيها وعليه "صلاة الله وسلمه الله خالد المماليك والمراة".

أدركوا الدنيا ولا تعمروها" أي لي أبعاد لكم الفيديا مسكناً ومالكوا
تستجابة الله تبوقعًا وأوثقوا في الوقت مسجداً وكمل تاسم ومرت

475 ومنه عليه السلام يُغْتِصُبُ المولودين" كانوا تعلم النصرة بالشريعة
البردية ولا تكونوا "الله يبوقعًا وأوثقوا في الوقت مسجداً وكمل تاسم ومرت

476 ومنه عليه السلام يُغْتِصُبُ المولودين" كانوا تعلم النصرة بالشريعة
البردية ولا تكونوا "الله يبوقعًا وأوثقوا في الوقت مسجداً وكمل تاسم ومرت

477 ومنه عليه السلام يُغْتِصُبُ المولودين" كانوا تعلم النصرة بالشريعة
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479 ومنه عليه السلام يُغْتِصُبُ المولودين" كانوا تعلم النصرة بالشريعة
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481 ومنه عليه السلام يُغْتِصُبُ المولودين" كانوا تعلم النصرة بالشريعة
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484 ومنه عليه السلام يُغْتِصُبُ المولودين" كانوا تعلم النصرة بالشريعة
البردية ولا تكونوا "الله يبوقعًا وأوثقوا في الوقت مسجداً وكمل تاسم ومرت
داع إلى الله وحلفة رسول الله صلى الله عليه وسلم، وآتي المهدي المتاعب، لا تفوت وقد أظهرنار الله، رحمة لمن طلعت، واتباع سلالة النبي محمد صلى الله عليه وسلم وكنفته يا علما من عظمة وحالة، وأتبع شيطانه ونفسه ووهاب واتخذني نداء وقد خاتمتك قبل هذا بإيضام أمرٍ مُفطَّلٍ وتقُول أني السلام والإيمان وإن الوليد عليك أن تجيب في السمع والطاعة قبل أن ترى ما قد رأيت مع آتي الله أيّشتكى به الرب السباق ليس فيه الآية رشدك وصلماك وفورزها مبكيك في حالك ومالك إن كنت وتكيك الضال الذي كماله كأنا هو حسن حقنا فيك وأتي ما زلت أذنر يبا، وأزنت لك المثير رجاء أن يشوع الله صدرك للسلام فشئ إلى أمر الله الممالك والأعمال، وتبكون مثناً أطين وعُلُق لرب العباد وخشى يوم الدين، يوم لا يُعنى مثلاً من مون لشيء ولا حياة ولا مات ولا آهل ولا جبال ولا حال من الأمور بل يضعك الدمع وتبكي الوحيد كما قال جبريل شاهد وحض سلطانه وأمام من أوثين بناته يbihواه فzew دَمْ ينفوذ أطراف كابنات إلى الفنن أثري ملكي خنسانيه قُدَم في دينه راعية في جمعة كاليه قطوفها ذاتية أكرمو وأكسرها هناما بما ارسلتم في الآيات الكافيءة وأمام أن أوثين بناته يبهواه فنفوذ، يا ليتك ما أبعت وفأرتهن وللمر أثر ما تخسنانيه، ما تيبها كنت فالكانت ما أتيت حتى بارية هذا الذي سلكانيه خادمو قطوفهم، فلهجتم صلة ثم في سبيله كرمته شعريت دُراها فلمسكوكو إنك لا يبتلى بِالله العظيم وقد تنبيني أنك أفعال مخربة في الظاهر مع اهل الإسلام لأنه قال الله تعالى: وأذن في كفرنا وأعمالنا كسيرات نفسنا تمسك العدالة، والله أعلم ما كنا، إذا نعى الله لم ينذك شياً ووجود الله عمنًا فتها وجبت الأمانة، وأبعت مع الله، سويت الناس أو كتبتم في 천 مقتضى يهتاء موج من قروه موج رسولبه صاحب الله، بُعثت عيني مرتين ببعضه
A Letter from the Mahdi Muhammad Ahmad, Esq.
الذين معك، ويقضي وراءهم. زمنًا وردت لليمين الهيكل، وردت لكم هذا وهو مرسولكم. صحبة أرقصة فوقًا من أهلكم الذين يغادرون لله، كلما فلوا من الطيبة ونظموا الوجوه فجراهم الله خيرا وهم الأجداد أحمد وابنهم الذي بعثتاهه لكم أولاً مع رب جوادكم ومعهما مسلمين وهم يوسف وكيلهم وجابر كتبتهكم فإن كان لكم سعادة، فإنكرتم في القارة أي سولو جواباهم لكم والمذكورين باذروا إلى اجبناءكم وأسلموا قبل حضورنا وكونوا معهم "حاله واحدة حتى نأتيكم في عدهم اليمين إلى الفور إن شاء الله تعالى وها هو "أجاري" قيبلياً ينسنا على الرحم فعند حضورنا إذا وجدناكم مسلمين فيها ولا "أجاري" كتب لله أمرًا كان "TextWriter" وضحه أهل الدين قلنا أي تغلب تغلب فرحتين و"أجاري" نحن إذا أسلمت يا أبشرنا لك قبل حضورنا فتكت أنتم على نفسكم ومالك و"أجاري" يدخلنا وكل من ملكت يبدأ من قليل وكثير ما عدا حق المهره الخصوص به فيله نينية 475 وكل من "متك" معك من المسلمين، كذلك أخذ بينهم على هذا الشرط الذي حزناً أهلاً وقد أتمنا على ذلك جميعكم بابان الله ورسله وابن العبد لله فحصوا حراكم ورسونا أفراحكم، واموالكم ولا تفرقكم كثرة العذاب والكره والحنيل، التي هي "متك" معك وحججنا الله الذي لا الله إلا هو ولا مقترح ترقبنا ولا تذهب بجوده كيف، وهو المتك، "أجاري" والاجندهن تزامنا، الوقت بالمغة الإياس إذا علاتم بهم جوابنا ولا أفلا وقد تحرر منا إلى عاملنا محمد عثمان ابن اخوه التولية علмиه وأكننا عليه بأن يعايلكم حسبنا إما أننا فإن قنف الله في قلوبنا نار الإيمان وأطامنتم.
Translation

470 In the name of God, the Merciful, the Compassionate! Praise belongs to God, the Generous Patron, and prayer with peace upon our Lord Muhammad and his family.

From the Servant, humble in the eyes of his Lord, Muhammad al Mahdi ibn as Sayyid Abdullah to the representative of Britain and of the Khedive Gordon Pasha.

We hereby inform you that God (Praise belongs to him the Most High) in his patience and generosity is long suffering, but he does not neglect and he does not turn aside his wrath from the guilty people, and he is the patron of the believers. The Most High said: God is the patron of those who believe; he leads them out 471 of darkness into light; but they who do not believe, their patrons are demons who lead them from light into darkness:

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they are fellows of the fire, in which they shall remain for ever."

He has pointed out [the true way of life] in the glorious Koran and others of his ancient books and by the tongue of every apostle, prophet, and faithful devotee, censuring this world and making the wise wary of it. He has called them to the hereafter and incited them to it, for it is the house of continuance, strength, glory, great honor, the exalted place, the sublime abode, and the pleasant life. Just as the word of the Most High points out in regard to all this: "Know that this present life is only a toy, a plaything, a vain amusement, a source of rivalry among you, and a striving for increase of property and children. It is like a rain-growth whose vegetation pleases the unbelievers, then it withers away and you may see it turn yellow and finally it becomes dry stubble. But in the hereafter [there will be] a severe punishment [for those who seek the glory of this world]; and pardon from God, and favor [for those who renounce it]. The life of this world is only a deceitful provision. Hasten with emulation after pardon from your Lord, and Paradise, the extent of which equals the extent of heaven and earth, prepared for those who believe in God and his apostles. This is the bounty of God which he will give to whom he pleases and God is endowed with great bounty."

One who is guided aright as to the signs knowns that he who acknowledges the truth of the belief in God and his Apostle is very near to God, he must attain his desire, he will get his reward and be given what souls like and eyes delight in. Verily no one can escape his punishment and penalty and every evil of this world and the next except through him [God] together with great fear of his [God's] wrath and renunciation of this world and its life and of any reliance upon it. It is transitory, base, deceitful, treacherous. There is no peace in it, and no pleasure in comparison with the great good which is with God in the abode of joy. But whoever loves this world and cherishes it above the next, God will cast him headlong into everlasting hell, as the word of the Most High says: "And he who has transgressed and

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* Koran 5:78-79.
has chosen this present life: "Verily hell shall be his abode." So it is plain that there is no profit in the honor of this world and in its life, wealth and property, but only prolonged regret in the hereafter. To this effect there has come down from Jesus, son of Mary (upon our prophet and upon Him be the blessing of God and his peace) the saying: "Oh company of disciples! Pass through this world, but make not your abode in it. Verily I have not found for you in it an abiding place. Take the temples of God as [your] house and take your houses as temples, every one of you also the traveler." And from Him (upon whom be peace) is the following: "Oh company of disciples! Eat barley-bread with coarse salt, but do not eat except when hungry. Put on garments made of woven hair-cloth and go out from this world saved. Verily I tell you the sweets of this world are bitter in the next and the servants of God are not those who live in worldly pleasure."

And from the Apostle of God *(God bless him and give him peace): "Two hungry wolves let into a sheep-cote would not do more damage to it than the desire of man for condition and high station does to his religion."

It is told that he (God bless him and give him peace) was walking along with a number of his companions in one of the streets of Medina when they came upon a dead goat cast aside in it. So he said (God bless him and give him peace) "By Allah, surely this world is more despised by God than this goat by its owners to cast it aside." And because it is more despised than a carcass, the Apostle of God (God bless him and give him peace) enjoined upon his companions and the rest of his people his word: "Let that of this world which satisfies any one of you be like the provisions of a traveller." And he said (God bless him and give him peace) in giving warning against it: "It may be likened to two things. [The second is that] this world is like the condition of a traveller under the shade of a tree, then he goes away and leaves it. There is no guide except God, as also the Most High said: "He therefore who is directed, will be directed to the advantage of his own soul, but he who errs, he will err."
Since this is so, then it is 18 plain that I am the one who invites to God, and the Khalifa of the Apostle of God (God bless him and give him peace) and that I am the Mahdi, the expected one, 18 and this is no boast.

God has authorized me to proclaim mercy upon whosoever obeys him and follows the direction of his prophet Muhammad (God bless him and give him peace), and vengeance 24 upon whosoever rebels against him and disobeys him and follows his devil, his own inclination and desire, and cleaves to this world. I have ad dressed you before this explaining my condition in detail and have invited you to Islam and the faith. You should 27 have answered with submission and obedience before you had seen what you have seen. And, what is more, that which I told you 27 before was only to guide you aright, and for the sake of your peace and happiness in your condition and your property, if you had known and understood 18 the truth of what I said. And. How good my intention towards you was! And I have not ceased trying to promote your welfare and wishing you good in the hope 27 that God might open your breast to Islam and that you might turn to the command of God, the king, the all knowing, and that you might be one of those who submit themselves 27 and yield to the Lord of servants and who fear the day of judgement, "a day wherein the master and the servant will be of no avail to one another," 27 nor rank, 473 or property, nor household, nor family, nor condition of wealth. But the promise is true and the threat reliable as he who is great in rank and strong in power said: "And he into whose right hand his book shall be given, will say: 'Take, read my book; verily I thought 27 that I should be brought to my account.' His shall be a pleasant life in a lofty garden whose fruits shall be near at hand. 4 Eat and drink with enjoyment, because of what you have sent before you in the days which are passed. But he into whose left hand his book shall be given, will say 'Would that I had not received this book and that I had not known what my account is! Would that I had died! My riches do not profit me and my power is gone 4 from me.' Take him and bind him and cast him into the fire to be burned, then put him into a chain.

* Koran 4441.
of the length of seventy cubits, because he believed not in the Great God."

And it has been reported to me that your deeds are good externally with the people of Islam. But God the Most High said: "But the unbelievers, their works are like the mirage in a plain, which the thirsty [traveller] thinks is water, until, when he comes to it, he finds it nothing; but he finds God with him and he will fully pay him his account, and God is swift in taking account; or, as the darkness in a deep sea, covered by waves on waves, above which are clouds, being darkness one above the other, when one stretches forth his hand, he can scarcely see it. And unto whomsoever God does not grant light, he enjoys no light at all."

So adorn your work with faith, and cleanse it from the pollution of unbelief, since you will then become high in position and your works will become good externally and internally, and the fruits thereof will be yours.

You have gone to the pains of making inquiry in regard to us formerly in that you addressed us and sent us a messenger and asked return of the embassy; and this is to me evidence that you are the wisest of the people of your government since they have not addressed me as you have with their profession of Islam. You alone are excepted. But their wickedness has been revealed to me, that they are the worst of men in unbelief; and they shall perish at my hand company after company. But my desire for you is escape from this so that you may be safe with those who are safe and that you may be of the perfect who ponder "upon the creation of heaven and earth" and who understand in their sagacity the power of God and they say: "Oh Lord, By no means have you created this in vain, Praise be to thee, deliver us from the torment of hell. Oh Lord! Verily, whom you cast into hell, him you cover with shame, and assuredly the evil-doers have no helpers. Lord, we have heard a crier summoning to the faith, saying, Believe in your Lord! 474 We believe, Oh Lord, so pardon us our faults and wipe away from us our evils and receive us among the pious, Oh Lord, and give us what you have promised us by your apostles and do not cover us

*a* Koran 63:25-30.  
*b* Koran 24:19-20.  
*c* See Remark 2.  
*d* Koran 33:9.
with shame on the day of resurrection. Verily, you do not abandon the promises."

See how gracious is the answer of God to them in his word: 20 I will not permit the work of him among you who works to be lost, whether it be male or female; the one of you is from the other. They therefore who have left their country and have been turned out of their houses and have suffered for my sake and have been slain in battle; verily I will wipe out their evil deeds from them, and I will surely bring them into gardens through which rivers flow, a reward from God and with God is the most excellent reward. Let not the success of the unbelievers in the land deceive you, it is but a slender provision and then their receptacle shall be hell, an unpleasant couch. But they who fear the Lord shall have gardens through which rivers flow, they shall dwell therein forever. This is the gift of God, for what is with God will be better for the righteous."

The reply which you have written to the dervishes who are shut up has come to me and he whom you mention giving information that you desire submission, but the interference of the counsellors who are with you hinders you. On this account my pity increases for you and for them and for the weak who are shut up from me, and I wish for them all right guidance.

I have thought about your condition, standing by the obligation God has imposed upon me, and I have written to you this [letter] and it is sent to you by four dervishes of our helpers who have freely given themselves to God in seeking for the joy which is with him, and great is the reward and God will reward them well. They are Muhammad Ahmad and Baṣir, those whom we sent to you in the first place with the reply to your letter, and with them are two Muslims, Muhammad Yusuf, your lieutenant, and Jābir (these are their names). So if you choose prosperity and desire your salvation in the two abodes, [then] on the arrival of our answer to you and to the [others] named, hasten to reply to us and submit yourself before our arrival and be with them.

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  b Koran 3:89.  
  c See Remark 2.  
  d See Remark 3.  
  e See Remark 4.  
  f See Remark 5.
in one state until we arrive in two days in haste, if God the Most High wishes, and behold he is my protector.

My intention is personally to hasten after them. So if, on our arrival, we find you Muslim then all will be well; but if not then God will accomplish what is decreed. "And they who do wrong shall know with what treatment they shall be treated in the hereafter."

So know that if you submit yourself, as we have advised you, before our arrival, then our pledge of safety will be for you, your property, your household, and everything which your hands control, both little and great, excepting the special perquisite of the Ameer as that is a booty. And whoever of the Christians who are with you that submits himself likewise is safe upon this condition which we have just written.

We pledge you safety upon this condition, all of you, with the pledge of God and his Apostle, and the pledge of the servant of God. So put an end to the shedding of your blood, and look to your lives and property, and let not the greatness of your number, the assistance and the army upon which you rely, deceive you. Our reliance is God, than whom there is no other. His might cannot be measured and his army cannot be defeated. How could it be, seeing that he is "the Wise and the Knowing"? The fulfillment of the covenant is surely hindering upon us as soon as you agree to the conditions in our reply, otherwise not.

A letter has been sent by us to our agent Muhammad Othman Abu Kerjah with orders in regard to you and we have authorized him to deal with you in accordance with our pledge.

So if God has put into your heart the light of faith and you continue in grace, then go out to the said man and have a conference with him through the mediation of the dervishes who are sent and do not delay, as formerly, in following the erring ones, especially the evil counsellors.

[The saying] has come down: "When you see a wise man loving this world, be suspicious of him as to his position in regard to your religion, and do not ever listen to him in any advice of his." Verily they love this world and are nothing

* Koran 84.42.  ** Koran 20.38.  ** Koran 63.72; 341.
but dogs. His word is (God bless him and give him peace): "This world is a carcass and those who desire it are dogs." Whether they like or not, the command of God, the Most High, is executed inspite of them. So the first demand upon them is obedience and a reasonable reply. If they believe in God, surely it is well for them.

And were it not for the fact that I have the light of God and the authorization of his Apostle (God bless him and give him peace) I would not have invited any one; nor would it be fitting that I say anything nor busy myself with the matter, for a moment even.

This is a warning to you, so hearken and turn to your Lord and submit yourself to him before punishment comes upon you. Then you will not be helped.

Verily God does not injure man in anything, but man injures himself. So beware lest you injure yourself and repent when repentance avails not.

Happy is the man who is warned by another and hastens to his own good. So come to salvation before your wings are clipped.

Peace be upon him who follows the right guidance.

Remarks.

Remark 1. The letter is not dated in the manuscript. From the sources available it appears that Gordon received only three formal letters from the Mahdi. At least no reference to any others has been found. Of these three the first one, which was received by Gordon March 22, 1884, is translated in full in Major (now Sirdar) Wingate's book: Mahdiism and the Egyptian Sultan (1891) pp. 111—115, and is dated March 10, 1884. The second letter was received by Gen. Gordon Sept. 9, 1884, the day before the steamer "Abbas" was sent down the Nile. It together with the other documents was lost in the wreck of the "Abbas". The third letter was received.


by Gordon Oct. 22, 1884, and is translated in full in Appendix U pp. 453-459 of the “Journals”. This last letter tells of the wreck of the “Abbas” on Sept. 18, 1884.

This points at once to our letter as the one Gordon received Sept. 9, and which was lost in the wreck of the “Abbas”; but as there is a possibility of other letters of which no mention has been found, further proof is necessary.

The letter which Gordon received on Sept. 9 was sent by means of two Muslims and some dervishes. The names of the two Muslims as given in Ibrahim’s letter are Mohammed Yusuf and George Calamantino; and as given in the manuscript letter are Muhammad Yusuf and Jâbir. In a letter from Abd-er-Rahman el-Nejumi, el-Jâbir is identified with George Calamantino. The letter referred to in Gordon’s Journals as being received on Sept. 9 and the manuscript letter were sent by the same messengers.

Muhammad Yusuf was the Italian Giuseppe Cuzzi. Cuzzi was taken captive at the fall of Berber, May 26, 1884, and sent to Abu Kerjah, who was in command of the besiegers of Khartoum. Abu Kerjah tried through the mediation of Cuzzi to induce Gordon to surrender, and failing in this he sent him to the Mahdi at Rahad. The Mahdi sent him back to Khartoum together with George Calamantino with letters for Gordon. In his Journal for Sept. 11 Gordon says: “Soon after Cuzzi had left for the Arab camp two dervishes came in with the Mahdi’s letter.” The facts seem to be that, when the messengers from the Mahdi arrived at the Arab camp besieging Khartoum, Cuzzi for some reason or other wanted to get into Khartoum before the letter was delivered, and as soon as he returned to the camp the letter was sent in. As stated in Gordon’s Journal, Sept. 11, there is some discrepancy in the account, for he says Cuzzi came into the city “yesterday” i.e. Sept. 10, while

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a See Gordon’s Journals, Oct. 22.
b See the letter of Ibrahim Abd el-Kader in App. A to Gordon’s Journals, p. 371, which is dated Sept. 9, 1884; and cp. the manuscript letter p. 474 l. 11, 13, and 14.
he says the letter was received Sept. 9. Slatin says that Calamantino was admitted into the city but Cuzzi refused admittance. It may be that Cuzzi incurred Gordon's suspicion, and was refused permission to come into Khartoum a second time.

The Mahdi says in the manuscript letter that he has authorized Abu Kerjah to treat with Gordon. Gordon says in his Journals for Sept. 13: "Mahdi proposes that I should put myself on my surrender (!) under Abou Guglix, who is a notorious breaker of the dervish rules." And in a letter from Gordon to Abd-er-Rahman is the following: "Mahomed-Achmed informs us that he ordered Abou Kerjah to convert us to his faith." The letter is dated 2nd Zu'l Hejeh 1301; Aug. 24, 1884. In Gordon's Journals Abu Kerjah is consistently called Abou Guglix.

The following, which undoubtedly refers to our letter and is a good summary of it, is taken from a letter from Abd-er-Rahman en-Nejumi to Gordon. This letter has no date, but it was received by Gordon Sept. 21. It says: "The Imam has written to thee the truth in leading thee to God; and also that which concerns thy salvation and that of those with thee and how thou mayest attain salvation in this world and in the next."

The above evidence points clearly to our letter as the one that Gordon received Sept. 9, 1884.

It is impossible to determine the date on which the letter was written. It must have been after June, 1884, and probably before the Mahdi left Rahad, which according to Ohrwalder was Aug. 8, and according to Slatin Aug. 22. Both Ohrwalder and Slatin are very sparing in giving exact dates.

Remark 2. Just what the reference in ms. letter p. 473 l. 14 is, is not evident. It may be that Cuzzi when he came to the Mahdi represented himself as a messenger from Gordon, and told the Mahdi that he was authorized to tell him that Gordon would surrender if he dared, but that the Ulema of Khartoum prevented him. The Mahdi calls Cuzzi in the

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* Slatin, F. and S. in Sudan, p. 304—305.
* Vide ms. letter 474 l. 6.
* App. M to Gordon's Journals p. 397.
* Aug. 24 is wrong; it should be Sept. 23.
* Ms. letter 475 l. 9.
letter "your wakil" (lieutenant).* It is impossible that Gordon should ever have offered to surrender and turn Muslim. Cuzzi may have presented things thus to the Mahdi to gain his favor. Ohrwalder says that the Mahdi received him well, loaded him with presents and then sent him back to Gordon with a letter.

Giuseppe Cuzzi had been English Consular Agent at Berber. Shortly before the fall of Berber (May 26, 1884) Cuzzi had been dismissed by Sir Evelyn Baring (now Lord Cromer) for criticizing Baring's plan of opening the road from Suakin to Berber. Gordon therefore thought that Cuzzi had betrayed Berber to the Arabs for revenge. Neither Slatin nor Ohrwalder say anything about Cuzzi as being a traitor, but circumstantial evidence is against him. For after the fall of Berber Cuzzi was sent to Abu Kerjiah who was besieging Khartoum. Abu Kerjiah sent him to Gordon to induce him to surrender but failed. He was then sent to the Mahdi who received him so well. After the letter had been delivered to Gordon Cuzzi went again to Berber. He evidently had more freedom than Slatin or Ohrwalder. The probability too that he entered Khartoum alone before the letter was delivered points to some double dealing on his part — whether he was plotting against Khartoum or simply working to save himself is hard to tell. If Cuzzi was such a man, it is easy to believe that he posed before the Mahdi as an agent of Gordon. This would also give a good reason why the Mahdi should write this letter. The other two letters were written, each of them, because of some special reason — the first one in answer to Gordon's letter appointing the Mahdi Sultan of Kordofan, and the other to tell Gordon about the capture of the steamer "Abbas".

It may also be that the reference is to the first messages which Gen. Gordon sent to the Mahdi making overtures to him and appointing him governor of Kordofan, the first step in carrying out the British-Egyptian policy of evacuating the Sudan and withdrawing the Egyptian troops. That was what Gordon had been sent to the Sudan to do.

Remark 3. By the "weak"* were probably meant the wives and children left behind in Khartoum by Muhammadans who

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* Ms. letter 474. I. 16.
had gone out to the Mahdi and submitted themselves to him. This was a cool piece of calculation on the part of these men: for, if Gordon held out till the English came, their families and property were safe, should the Mahdi succeed in taking Khartoum they could rely upon their fidelity in the Mahdi's cause to protect their families and property. Because Gordon permitted this he is criticized severely by Father Ohrwalder who maintains that the ethics of war are not those of peace and had Gordon driven these "weak ones" out he would have saved on his food supplies and have been able to hold out longer. It was at no time Gordon's policy to hinder those who wished to go out to the Mahdi. He would not, however, permit those who went out to come back again. The men who went may have told the Mahdi that the reason they did not take their families with them was that Gordon would not permit them to do so.

During the siege there were several attempts at conspiracy which Gordon nipped, putting the leaders in prison. The reference may be to such men.

Remark 4. In the letter there are five persons mentioned by name: Muhammad Ahmad, Bashir, Muhammad Yusuf, Jabir, and Abu Kerjahl. Muhammad Ahmad and Bashir are spoken of as having been the messengers who brought the letter of March 10, 1884. Muhammad Ahmad is too common a name to be easily identified. There is a Muhammad Ahmad wad el Bedri who is called by Ohrwalder one of the Mahdi's early and favorite adherents. Wad el Besir is mentioned by Ohrwalder as being sent by the Mahdi to lead the revolt of the tribes of Gezireh which is between the Blue and White Niles. Slatin also mentions this man and calls him a brother-in-law of the Mahdi. Ohrwalder calls him a son-in-law of the Mahdi. These two men are probably the ones referred to in the letter.

Muhammad Yusuf is Giuseppe Cozzi, and Jabir is the Greek George Calamantino. Abu Kerjahl's name is spelled variously Abou Gurgy, Abu Girgeh, and Abu Girgah. He is also called
Abou Gagliz. His full name is Hajji Muhammad Osman (or Othman) Abu Kerjah. Abu Kerjah is written ابوعقرجه. In Egypt both ق and ج are pronounced as hard گ. Gordon’s name is spelled in two ways: جوردون and وزدروش.

Remark 5. Ms. letter, p. 474 l. 16. At first glance this seems to give a clue to the date of the writing of the letter; but, if the letter was written before the Mahdi left Rahad, it would mean that the Mahdi expected to reach Khartoum two days after the messengers with the letter did. There is no means at hand for determining how long it would take the messengers to cover the distance of about two hundred miles between Rahad and Khartoum. It would seem from this that the letter must have been written some time in August — probably after the middle — which would point to Slatin’s date of Aug. 22 for the Mahdi’s departure from Rahad as the correct one.

Remark 6. In the Appendix to Book III, of Major Wingate’s book: Mahdiism and the Sudan, pp. 535—549, there is a tabulated list of the letters and proclamations of the Mahdi and his successor Khalifa Abdullah Taashi which are contained in a manuscript captured at the battle of Toski, Aug. 3, 1889. In this battle the English completely routed the Arabs, and their general en-Nejumi, the man who was chief in command of the Arabs besieging Khartoum from September on, was slain. In this list of letters there are two given from the Mahdi to Gordon, pp. 24—26 and 26—28 of the letter-book. The date given is Jumada el-Awal 1301, Christian date 1885 (sic). It should of course be March 1884. These letters (the two are one letter with a short postscript of six or seven lines, as can readily be seen by comparing the résumé of the contents with the letter itself) are translated in full in the body of Wingate’s book, pp. 111—115. There are in this letter-book one hundred thirty-three letters, ninety-nine of which are from the Mahdi. The book contains one hundred forty or more pages, of which pages 33—38 are missing. There is no chronological arrangement of the letters, which run from 1881 to 1888.

Remark 7. In regard to علیه السلام.

In his “Régistre”, Count Landberg says: “Que le manuscrit date d’une époque postérieure à la mort du Mahdi, est prouvé parce qu’on trouve parfois après son nom les mots علیه السلام.”
This is hardly sufficient proof, for the use of the phrase after the Mahdi's name is found in letters clearly written before his death. There is a document, given as Appendix D to Gordon's Journals, which is an answer written by the Ulema of Khartoum to the Sheikh Abdel Kader Ibrahim and to Wad en-Nejoomi, dated 23rd Zu'l Kada, 1301, Sept. 14, 1884. In this document (op. cit., p. 379) the Ulema complain that the followers of the Mahdi use this phrase in connection with his name. That the fact is so, can be seen from Appendix L. to the Journals, a letter from Abderrahman en Najoomi and Abdallah en Noor to Gordon Pasha, where the phrase is used after the word "Mahdi". The examples of its use in this way could be multiplied. The Ulema say that Abd el-Ghani en-Nabushi said in his book, the Hadik en-Nadih: "No one ought to be distinguished by the Salaam excepting the prophets, for one cannot say, 'Ali, on whom be peace'; and this rule applies both to living and dead alike, excepting that a person present may be addressed thereby, for people say, 'Peace be upon thee'." In a footnote to the same page: "Peace be on him", the usual formula of salutation to a true believer if alive, and used of prophets when their names are mentioned.

Monosyllabic Roots in Pampanga.—By Carlos Everett Conant, University of Chicago.

One of the most interesting of the Philippine languages to the student of Indonesian phonology is the Pampanga, spoken by about 280,000 people in the province of the same name which forms the northern boundary of Manila Bay.

Altho its territory is contiguous to that of the Tagalog, spoken in Manila and the surrounding provinces, Pampanga presents a variety of striking phonological peculiarities not shared by its neighbor. Among these may be mentioned the following:


2. Vocalic change in the first syllable of a root $^1$, e.g. Pamp. $katum$ 'a brush' but $ketan$ 'object brushed'; $kulubun$ 'cover' but $kulubunan$ 'object covered'.

3. The treatment of the Indonesian $RGH$ consonant $^2$, which in Tagalog, as in most Philippine languages, becomes $y$, but appears as $y$ in Pampanga, e.g. Pamp. $gumut$ 'root'; Tag. Bis. Bkl. $gamut$; Pamp. $uyut$ 'vein'; Tag. Bis. Bkl. $ugut$.

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$^1$ The term 'root' is employed in this paper in its traditional sense, namely, to indicate the disyllabic type of base (Brandtstetter's Grundwort, cf. Wurzel und Wort in den Indoneischen Sprachen, Lucerne 1919) characteristic of Indonesian languages. Whatever may have been the prehistoric type of the Indonesian root, which is regarded by some scholars, notably Pater W. Schmidt, Brandtstetter and K. Wulff, as monosyllabic, the fact remains that the existing languages of the Indonesian branch par excellence regularly build their derivatives on disyllabic bases, which, be their ultimate origin what it may, are felt and treated as roots subject to no further analysis, and hence may with entire propriety be spoken of as such in any discussion not concerning itself with the very problematic word structure of the parent speech.

4. The representation of the indifferent vowel (pepet) by a, while it appears regularly as i in Tagalog, e. g. Pamp. ipas "roach": Tag. ipis; Pamp. bayat "weight": Tag. big'at.

5. Metathesis of initial consonant and following vowel, which is generally an a, e. g. Pamp. al'au <latau 'to float': Tag. lit'au; Pamp. aby'as <bayas 'rice': Tag. big'as, this last example showing also the treatment of the RGH consonant and of the pepet vowel in Pampanga.

6. The contraction of two concurrent like vowels, e. g. Pamp. tan 'to stop, cease': Tag. Pangasinan li'an; Pamp. duma 'to reach shore, land (of boats)': Tag. Bis. Bkl. duni. Such contraction is also regular in Ibanag (spoken in the Kagua Valley, North Luzon), e. g. Ibg. biy 'breecch-clout': Tag. Bis. Bkl. halag; Ibg. biy 'all, nothing but, Ger. lauter': Iloko, Pang. biy. Sulu (spoken by the Mohammedan Malays of the Sulu Archipelago) contracts not only originally concurrent like vowels, e. g. Sulu to 'right (hand)': Bis. Bkl. to'o, but also dissimilar concurrent vowels, e. g. Sulu nog 'descend': Bis. nuyog, Tag. (pa)nuyog, and those brought together by secondary Sulu loss of intervocalic l, e. g. Sulu o 'head': Tag. Bis. Ilk. ulo; Sulu soko 'fault, blame': Tag. Bis. Bkl. sula. Syncopation of intervocalic l also occurs in Tagalog, but less regularly than in Sulu (compare the examples last given), and without resultant contraction, e. g. Tag. daan 'way, road': Sulu dan: Bis. Bkl. dalan.


As a result of the regular vocalic contraction pointed out above (6) and the sporadic loss of an accentless syllable, a considerable number of Indonesian dissyllabic roots have been reduced to monosyllables in Pampanga. Leaving out of account some twenty monosyllabic words consisting of enclitic pronominal forms, accentless adverbial and connective particles, the articles, and interjections (many of these being unquestionably of onomatopoetic origin), there remain about thirty-five monosyllabic

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roots in the language. The majority of these may readily be identified with roots of the ordinary dissyllabic form in other Philippine languages.

1. Roots showing contraction of Pamp. aa to a:
   1. dās <*daas <*daēs 'arrive': Tag. dais.
   2. kān <*kaan <*kēn 'eat'. Ilk. kān, Tag. kān, Bis. kā'en.
   Sund. Dayak mahal. For loss of h in Pamp. see above (p. 1).
   4. pāt <*paat <*paēt 'chisel': Ilk. Pang. pāt, Tag. pāt,
   Bis. pāht, Mal. Dayak pahat.
   5. sāp <*sāp <*sēp 'farm hand': Bis. sāp, Bkl. sēp
   'apprentice, artisan's assistant'.
   6. tān <*taan 'stop, cease': Tag. tān, tahān, Pang. tān.
   7. lāt <*laat 'all': Tag. laat.

II. Roots showing contraction of uu to u:
   duu (with varying accent), Tir. duu, Ibg. duu.
   10. lūd 'proseguir para acabar': Ilk. lūd 'ruin, destruction,
   completely destroy'.
   11. liuk 'bay, inlet': Tag. Bis. Ilk. Pang. Bagobo lōok or līuk,
   Ibg. lat (for liuk where the original surd stop has become in
   pronunciation the glottal stop and hence has lost its identity;
   cf. Ibg. but in use beside the correct historical form buk 'hair' :
   Ilk. buuk, Pang. buuk, Pamp. buuk), Sulu lōk.
   12. bun 'cure (meats), preserve or dry (fruits)': Tag. Bis. Bkl.
   bōn or bōn.
   13. pūn 'base, stem, trunk, origin, beginning, capital': Ilk.
   Bkl. pūn, Pang. poon(ōn), Tag. Bis. pūn(ōn) Sulu, Mal.
   Sund. pūnun, Tir. pūn, Mgd. pūn or pun, Ibg. fun.
   14. sūb 'steam': Ilk. sūb, Pang. sūb, which are connected by
   metathesis with Tag. Bis. Mgd. Tirurai sūbu of nearly
   identical meaning.
   15. siun 'rise (of tide), be born on the tide': Bis. suin
   'wander aimlessly, go with the current'.
   16. tiud 'hit the mark, aim straight, be true': Bis. Pang.
   tiud 'true, consider true, believe'.

*Whenever ę appears in this paper it indicates the indifferent vowel
(pepet), which regularly becomes a in Pamp.
17. tug 'basket of woven palm leaves': Tag. Bis. tūhug, Ibg. tug.
18. tis 'make good, remedy, repair': Tag. tūne.

III. Roots showing contraction of i or u with the pepet vowel:
19. sid 'a kind of fish corral': Tag. siid, Bis. sīhoč, Bkl. siād.
20. tūd 'knee': Tag. Bkl, Bis. Sulu tūhad, Ibg. tuād, Tir. stu, Sund. tuur, Toba tut, Kawi tūr. Kawi and (apparently) Toba have the same contraction. Compare also Tolu buk 'hair' with Sund. buk and the Phil. cognates in No. 11 above. In this connection it is interesting to note that Pamp. and Ibg. exactly reverse each other in their treatment of the words for 'hair' and 'knee', tho the vocalism of the two words is precisely the same:

<table>
<thead>
<tr>
<th>Philippine</th>
<th>Tagalog</th>
<th>Pampanga</th>
<th>Ibanag</th>
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<tbody>
<tr>
<td><em>buk</em> 'hair'</td>
<td>buhuk</td>
<td>buak</td>
<td>buk</td>
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<tr>
<td><em>tuč</em> 'knee'</td>
<td>tūhad</td>
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IV. Roots showing apocope:
22. sut 'humble oneself to another': Bis. suta 'confess publicly'.

V. Roots showing apheresis:
23. dam 'borrow': Bkl. hadām, harām, Tag. hīrām, Bis. hulām. The penultimate vowel, lost in Pamp., is an original pepet. The medial consonant is a good example of the RLD law.
24. pan 'perhaps, perchance': Tag. apān, apān 'perhaps', Ilk. pan, apān, papān, or agapān 'altho', Cebuan Bis. apān 'but, however', Panayan Bis. apān 'but, however'.
25. dat beside ināt 'quotescumque'.
26. pu beside apā 'sir, Mr.'
27. sak beside asāk 'to pack'.
28. tē (as interj.) beside pātē 'dead'.
29. tan beside atān 'stop, cease'.
30. tās beside atās 'high, height'.
31. tin beside atān 'to have'.

¹ Tag. tōhug, tūhug have u (instead of the regular i) for the pepet vowel by assimilation to the original u of the penult. Cf. Conant, Pepet Loric. Brandstetter, Prosocaus, p. 41 ff., considers the monosyllabic forms buk. buē as original, from which the disyllabic forms are developed by expansion (Zerleihung). Against this explanation, see my op. cit., Table V, Note 2.
The syllable most frequently lost by apheresis consists of the unprotected vowel a, either original, as in the case of Pamp. pan: Tag. Hlk. Bis. apán; Pamp. pu: Pamp. Tag. Pang. Bkl. Bis. apá; or from pepet, as in dam (above No. 23).

VI. Words showing contraction following syncopation of t<RLD:

32. ē (long open ē = OEEng. ē) beside ai and aī 'no, not', from a+dī, cf. Hlk. dī and adī, Bontok aī, Pang. an-dī and aī-va, Ibg. si (z for d initially before i as in Ibg. xīā: Tag. Bis. etc. xīa 'tongue') and aī.

33. mē, from older mai from *mali 'come, go': Bkl, Sulu, Mal. Toba, mari, Bis. um-arī generally shortened to marī (marī ka 'come here!' But Pamp. (u)mai may have been original (see below).

The history of this very common word is as interesting as it is complicated. Made up originally of demonstrative particles denoting place or direction, it has been an easy prey to contamination with other words and particles of similar meaning.

To be connected with the foregoing cognates are Bontok umāi in umā-ak 'I come', and, without um-, dīka 'come'; where -ka is the enclitic 2 pers. pron., Pang. dia 'here' (cf. gāda dia 'come here'), Tag. halī 'come here'. In these examples we have evidently the demonstrative particle dī (cf. Blake, JAOS xxvii, 350ff.) with the dectic particle a either prefixed: Bis. arī, Bont. aī, Tag. halī (with initial breathing as often in Tag.), or suffixed: Pang. dia. Tag. and Bont. employ the adverb alone as an imperative, while Bis. may either use arī alone or with the imperative prefix um- in the same sense. Here the base is distinctly felt as arī. aī, and also in Sulu mari, kari. But in Bkl. Mal. Toba mari we have a stereotyped form with initial m, which, after loss of the original u of um-, was no longer recognized as a prefixed element, cf. Mal. Toba minum 'drink' for IN um-inum.

On the other hand: Hlk. umāi (generally pron. mai), Ibg. umāi, Tirurai mai, in mai dimi 'come here', point to a root aii, which is actually found in the sense of 'walk, go, come' in both Ibg. and Tir. Magindanao aii 'foot' is doubtless the same word.

That there has been a confusion between these two prototypes there can be little doubt, and to either of them could
be referred Pamp. mai, Chamorro mage, and the Polynesian mai 'hither, thence' found in Samoan, Haw. Tahiti and Marquesan.

The present study has yielded no cognates for the following monosyllabic roots: hal 'to order brought', dan 'lower leg', din 'to give', kid 'to remove from the fire (frying pan, etc.)'.

Puk 'to assign' and tul 'a measure for cotton' are Chinese loan words used in mercantile language. puk being Chin. 植 pü' to allot, assign', and tul being 手见 teh r 'a basket used as a measure for raw cotton'.

It is evident from the foregoing examination of monosyllabic roots that Pampanga, like Ibanag and Sulu, represents a stage of linguistic development much more advanced than the other Philippine languages, which show the unreduced disyllabic root so characteristic of both Indonesian and Polynesian.

But while the process of abbreviation was going on in Pampanga, there seems to have been even here an instinctive tendency to restore the disyllabic character of the affected words which, as monosyllables, were felt to be incomplete, by prefixing a weak, colorless vowel, generally a. The movement doubtless took its origin from the large number of words having an initial a resulting from metathesis (see above p. 390). Thus, under the influence of adú < *talú (Phil. têlû) 'three' and apât (Phil. épât) 'four', *dwa (IN dua, rua, lua) 'two' became adwâ. Similarly Pamp. atyân (Phil. tian) 'abdomen', apya (Phil. pia) 'noble, good'. In the case of roots used always with formative elements the monosyllabic character of the root was not felt and hence most of the monosyllabic roots denoting action remained in their reduced form.

1 Of Conant, Consonant Changes and Vowel Harmony in Chamorro, Anthropos, vi, p. 148.

Chicago, April 10, 1911.
A Divine Lament (CT. XV. Plates 24—25).—By J. Dyneley Prince, Ph. D., Professor in Columbia University, New York City, N. Y.

Obverse.

11. likir (LID SA) zol (NL) ma-al a (ID) nu-ma-al-Heart which is full (and) strength I have no
men (DU) longer.

12. nin-men (DU) kisal-ma (MAL) likir (LID SA) nu-ma-Though I am lady, in my sanctuary heart I have
al-la-men (DU) no longer.

13. e-ne-am (RAM)-ma (MAL)-ni ba-da-ul-e en-na sa (DI) in-His word drove me; when it
ga-mu-ul-duq (KA) i-de-ma (MAL) la in-si-il-gaba (GAB), reached me, my face verily it cast down.

14. ud-ba nunuz-li ag (RAM)-gin (DU)-na-mu ud-ba me When to my progeny I wished to go; then where li-e-a were they?

15. dim-di ud-ba nunuz-li ag (RAM)-gin (DU)-na-mu Weakling, when to my progeny I wished to go;
ud-ba me-e li-e-a then where were they?

16. ud e-ne-am (RAM) An-na ma(ra) i-ir-a-bi When the word of Anu to me they brought;

17. e-ne-am (RAM) dimmer Mu-ul-Il-la (LAL) ma-ra i-ir-the word of Bél to me when
a-bi they brought it;

18. e (BIT) - mu-a nu-si-in-gin (DU) - na-ba into my house when they came;

19. zar-ra-an kur-ra mu-si-in-tur (TU) - ra-ba upon the way of the land when they entered;
20. mā.........mu-ši-in-gin (DU)-na-ba
     on the ship........when they went;
21. mā.........mu-ši-in-us-sa-ba
     on the ship........when they stood;
22. mu.........a mu-ši-in-tur (TU)ra-ba
     when to........they entered;
23. mu-(la) mu-e-sir (BU)-mal s-ni-in-tur (TU)-ra-ba
     the men with shoes on, when they entered;
24. Šu mu-lax-xa-ni.........(mu-ši-in)ir-ra-ba
     their unwashed hands (on me)....when they laid them:

Reverso.

1. ma-an-ga mā vag-ga (MAL)......
     when, although ruler, on the prow of the ship (I stepped)
2. ga-sa-an-ga mā egir-ra ba-e-sub (RU)-a-ba
     when, although lady, on the stern of the ship I trod;
3. ni (IM)-te amar (ZUR)-a-bi ba-e-te-a-ba
     when of its own accord that brood drew nigh;
4. ur-ri me-ri su-e-sir (BU) ma-ul-la-ni kisal-na (MAL) ma-
     the foe, having shoes on their feet, into my sanctuary
     ni-in-tu
     entered;
     nakri ša ina šepišu sēnu šaknu ana maštaka irubam
5. ur-ri-bi šu mu-lax-xa-ni ma-šu (KU) mu-ši-in-ni-ir
     that foe his unwashed hands on me he laid,
     nakri ša qatšu lā mesiši šāši ubla
6. Šu mu-ši-in-ir ni (IM) mu-an-te ma (MAL)-e ni (IM)-bi
     His hand he laid on me; fear he caused: I fear of him
     ma-te
     felt,
     qatšu ublamma uparridannī
7. ur-ri-bi šu-ni mu-ši-in-ir me-da mu-un-gam-
     That foe his hand he laid on me; in me he made a bowing
     men (DU)
     down,
     nakri ša qatšu ublamma ina puluxti ūmišannī
8. ur-ri-bi ma (MAL)-e ni (IM) ba-da-an-te ēne mu-mu-
     That foe I fear felt for him; he feared
     da-an-te
     me not.
     anāku adluxma šū ul iplaxanni
9. ur-ri-bi tub (KU)-mu mu-an-kar dam-a-ni ba-ni-in-tug (KU)
That foe my garments he seized; his wife he clothed with them.
čulaiti įxeutannina ašatsi ulabbisîn

10. ur-rîbi sa-mu mu-un-tar dumu (TUR)-nîba-ni-
That foe my jewels he snatched; his daughter he adorned
in-la (LI) with them.
nakri ša ukâri ipru'mu maratsu iskun

11. li-gub (DU)-ba-bi am (A-AN)-gug me
His courts I must tread; even I.
manzassu akabbas

12. dim (GIM)-ma ni (IM) ma (MAL)-su (KU) ki am (A-AN)-si-
When of my own desire for myself the sanctuaries I
qin-qin seek;
ina ramânia ašrâti esînenê

13. ud-ba ni (IM) ba-te ba-e (UD-DU)-ta na-e (UD-DU)
then fear I feel to go forth, (and) I go not forth.

14. e (BIL)-mu (MAL) ba-an-ul-li-en ingar-ma (MAL) ba-ab-
Out of my house they drove me; out of my enclosure
xu-lax-e they frightened me.
inâ bitîa urrixanni ina LOBALA na-ullditani

15. tu [za] ni (IM) te-a-dim (GIM) pišur-ra ud-ba e-ir
Like a terrified dove on a beam then I went up;
kîma summatum pâriti ina qusûri abît

16. su-din xu tal (RI)-la-dim (GIM) du (XI) de al-gi-ri
like a sudin fluttering to a cleft I betook me;
kîma sudinnu pârisi ina niâgibi erêri

17. me-e e (BIL)-mu-da xu-dim (GIM) im-ma-ra-tal (RI)-en
me out of my house like a bird they caused me to fly;
inâ bitîa kîma içgûri ušâpîšani

18. gu-ša-an men (DU) eri-mu-da xu-dim (GIM) im-ma-ra-though I am lady, out of my city like a bird they caused
tal (RI)-en me to fly.

19. egir-mu-a e (BIL)-mu egir-mu-a gu (KA) mu-un-de-de-e
“Behind me is my house, behind me”, I say;
bitî arkiâ iltanassia
20. nin-men (DU) eri-mu egir-mu-a gu (KA) mu-un-de-de-e
   “though I am lady, my city is behind me”, I say;
   beliku ali urkia
21. le-ib Ni-si-an-ki-mu egir-mu-a gu (KA) mu-un-de-de-e
   “the brick walls of my Nisin are behind me”, I say;
22. e'e (AB) e (BIT) gal-maxmu egir-mu-a gu (KA) mu-un-
   “the abode of my glorious temple is behind me”, I
de-de-e
   say;
23. le-ib Lā-ra-ak-ki-mu egir-mu-a gu (KA) mu-un-de-de-e
   “the brick walls of my Larak are behind me”, I say;
24. gig (MI) tuš (KU)-imina-mu egir-mu-a gu (KA) mu-un-
   “dark are my seven dwellings behind me”, I
de-de-e
   say;
25. me-e e (BIT)-mu e (BIT)-nu me-en a-dim (GIM) in-
   I to my house “thou art no more my house”, thus
   na-gu (KA)
   I speak.
   anāku ana bitia ul biti attam ki aqbu
26. me-e eri-mu eri-mu nu-me-en a-dim (GIM) in-na-gu (KA)
   I to my city “thou art no more my city”, thus I speak.
27. na-an-ni-tu-tu ne um-mi-ka-a la-bi mu-ka-e
   “I cannot enter it”; thus I speak (and) its beauty biteth me.
   la errubu aqīma
talušu ikkalanni
28. na-an (RAM) -da-ma (MAL) ne um-mi-ka (i)-si-is-bi
   “I shall be there no more”; thus I speak (and) weeping for it
   mu-ta-gi (gi)
   overwhelmeth me.
lā uttak . . . . . . ki aqīma zixīlu
ušanašanni

Commentary.
This text, which is the last of the Prince-Vanderburgh
series, CT. XV, 7—30, has been published with translation by
Dr. Stephen Henry Langdon in his “Babylonian Psalms”, 1909,
pp. 1—6, but without commentary. The Assyrian paraphrase,
which is not a translation of this text, I have taken from
T. G. Pinches “Lament of the Daughter of Sin”, PSBA., 1895,
pp. 66 ff., which is a parallel, but not an identical text with
CT. XV, 24—25. I am indebted to Dr. F. A. Vanderburgh
for his helpful collaboration and assistance in the publication of the entire series.

There can be little doubt that this lament was written and sung by the priests of Nana, whose image was taken by the Elamites in 2270 B.C., according to the Prism Inscription of Assurbanipal, Col. VI, 107—124. Assurbanipal in 635 B.C. retook and restored the image to its original habitat in Uruk (Erech) amid great rejoicings at his pious act. The goddess had been absent from her shrine for sixteen hundred and thirty five years. The fact that in the present hymn the lamenting deity does not mention Uruk, but Isin, does not militate against this idea, because we know that the dynasty of Isin prided themselves on their cult of Nana and that they were especially assiduous in building and restoring the shrines of this goddess. Nana's chief sanctuary was E-an-na ('house of heaven') in Uruk (Erech), but she also had temples in Agade (E-ul-maṣ) and at Ur. This hymn is of particular importance from an historical point of view, as it confirms the Assurbanipal record. It was, no doubt, sung and composed shortly after the rape of the goddess in 2270 B.C.

\[\text{Observa.}\]

11. LIŠ-SA can only = likir (8897) 'heart'. NI = suš = baru 'be full', 5314.

13. ba-da-ud-e: in Rev. 14 = arāzu(u) (urrāzu) 'drive, cause to hasten'. That UL can mean this is clear from MSL. p. 85, primarily = 'bull'; note ul = naqāmu 'gore, push', said of a bull, 9144. en-NA here probably = 'when, as soon as' = adi 'until'. 2809. ša-dug = kaššu 'reach, arrive at', 9542. ša = tú 'very', 7047. gaba (GAB); val. du = pâ-cur 'loosen', 4473; GAB also = labânu 'cast down', said of the face, Sb. 342 (4481).

14. munur = lipu, 8177; pîrû, 8179 'progeny', and li can = ana 'unto', V. 27, 44. RAM = ag = maššu 'love, measure, intend'; note it = našari 'intend', 4744 (see MSL. 21). me = šalu, 10366; šalu, 10365 'where? The combination li-e-a is difficult, but li = šašu, 1118; šatu, 1119 'that one', so that li-e-a here may be regarded as a prolongation of li with the demonstrative sense: i.e., 'where are they'. Another possibility is to consider LI here to mean 'stand', since LI = gub and gub (DU) also = našaru 'stand'; This does not seem to me so probable as the first suggestion, The
context certainly demands the question 'where are they', or 'where were they'? 

15. I regard di after dim here as an ES. gloss to denote the correct pronunciation of dim = dunnamû, 4253; idalu, 4255 'weakling'.

Lines 11—15 indicate the goddess's state of mind on being informed of what is to follow; viz., that she is to become an exile from her children.

16. To ma here we must add the postpositive -ra as in Obv. 17. Note ma-šu (KU), rev. 5.

21. In the above lines, the goddess is made to describe the approach of her captors, and the route they took in removing her from her shrine. First (obv. 19), she is carried by way of the land; then she is placed apparently on a ship (obv. 20—21) to be carried away to Elam. That the captors were regarded as thoroughly alien desecrators is seen from line 23 following, and Rev. 4—5.

23. su-e-sir-mal; literally 'skin or leather (SU) of the street' (E-SIR = sāqû), the whole combination meaning šēnu 'shoe' + mal = šakānu, 5421, i.e., mu(lu) su-e-sir mal 'the men who have shoes on' = the profane invaders of her shrine, which must be entered unshod by her worshippers.

24. On šu nu-lax-xu-ni 'unwashed hands'; another sign of their desecration; see Rev. 5.

Reverse.

In lines 1 and 2, ma-an must = the double corner wedge sign = damû 'mighty', 9955; šarru 'king', here probably 'queen', 9961. The suffix -ga probably has the force of li = lina which here we may render 'though'. The idea is that although the goddess was queen and lady, she was compelled to step on the hostile ship, which was to bear her away from her shrine and people. Cf. the parallel from Pinches cited by Radan, Misc., Sumer. Texts, 1910, p. 386 and n. 1. The verb RU = šub in our text = naddû 'set, place', še.l. here 'foot', corresponds to the Pinches version kār = karānu.

3. I render ni (IM)-te of their own accord, as IM clearly means ūnûnû here (Fossey, 4192) and not 'fear'. The 'brood' anar (ZUR) = bûru, 9068, 'approaches' (to) her shrine to molest her of their own volition.
4. Now begins the Assyrian parallel from PSBA., xxii., p. 66, line 6, in this line an exact translation. Note the relative Sumerian suffix -ani in ma-al-la-ni ‘those who have’, &c. For kisal-maštulu, see obv. 12, and cf. IV. 27, 8—9b.

5. lax = misu ‘wash’, Sh. 76. Note also ma-su(KU) for ma-ra in obv. 17.

6. The Assyr. *uparridianni* means ‘he hustles him away’, ‘hustles him out’ (!) is a translation of a parallel text. In our Sumerian line ni(IM) is the direct object of the verb te; IM-TE = pułuxtum ‘fear’, 8465. Note below on line 8.

7. gam = qaddu ‘bow down’, used of the neck kisadu, Fossey, 3664. It is rendered by the Assyr. parallel ina pułuxtum nimidianni ‘in fear he lowers me’; from matā ‘lower, decrease’.

8. Cf. line 6 rev. with this, and note the omission of nakri šu = urri-bi from this line. The Assyrian translator uses adlux ‘I am disturbed’ for ni(IM) ba-da-an-te ‘I feel fear for him’.

9. kar really means ekēmu ‘seize; snatch’, 7740, in contrast with the more vivid Assyrian izzušanni ‘he tears it off me’.

10. za here for Pinches za-ga = uku tari (kad) means ‘cuts off violently’. The Pinches version reads maratsu ‘his daughter’, which is not indicated here by the sexless word dumu (TUR) ‘child’.

11. guq = kabasu ‘tread’, 1372. Note the overhanging me, clearly the first personal pronoun.

12. dim(GIM) = summa ‘if, when’, 9125; = ki ‘as, when’, 9126.

13. I render ba-e(UD-DU)-ta as dependent on the preceding verb. That the prefix na-can mean ‘not’, as a variant of nu, is seen from Fossey, 796—797.


15. Pinches’s form paritti (thus corrected by Langdon) is of uncertain meaning. Cf. IV. 22, 5a: labartum parittum (?). The form abit Langdon translates as if from nabatu ‘repose’, but it is from nū ‘dwell’. This is not indicated in the present Sumerian text, which plainly signifies ‘go’ = e-ir.

16. RI = tul = parásu ‘fly’. 2571. du(XI) = nigiça here is undoubtedly cognate with di-da-al = nigiça, PSBA. xxii. 65; dü = di. The usual ideogram is ki-in-dar, ki-in-dir, 9683.
gi-ri — gir-ri — šepu 'foot'; tallaktu 'going'; simply = 'go'. I regard ešerì as an istafal from ùrru 'go, proceed'.

18. I render qašan 'lady' here, just as nin may mean both 'lord' and 'lady'.

21. ši-ib — libittu, 7492. Ni-si-in-ki-mu: my Isin'. NI has the value i as well as ni.

23. la-ra-ak-ki-mu 'my Larak' = Imarsa (?). Jastrow suggests (by letter) that larak may mean 'a grainery'. My interpretation of the combination agrees with this, viz., la-laš 'fullness, plenty' (Fossey, 530) + postpos. -ra + ak = epēšu 'make'. The combination la-ra + ak-ki would then mean 'the place (ki) which is made (ak) for plenty' = 'storage' (la-ra).

24. 'Seven dwellings' probably refers to her shrines.

27. ne 'this' = annu, 4580. See also next line below.

28. ma (MAL) -ma (MAL) — basā 'be', 5430. In 11604: tšiš — nissatu; qīxtu 'lamentation'. A-ŠI is the bāšu-weep-sign. I render Pinches's parallel qīxta as equivalent to qīxtu 'weeping'. Usanāšanni 'it overwhelms me', from ša; cf. IV. 7, 14—15a: 'he shakes him' = itanāsāššu.
Indo-Iranian Word-Studies.—By Edwin W. Fay, Professor in the University of Texas.

1. A good deal of attention has been paid in late years to Foy’s proposal (KZ. 35, 31) to separate Iranian hačā ‘ab, ex’ from Skr. sacā ‘cum, unā cum’. To solve this problem seems, however, a task of no great difficulty. Authorities so out of date as the Latin lexicon of Lewis and Short seem to me in their note on secus ‘secundum, alior’ to present the right point of view for the solution of the semantic problem, and if modern observers differently conceive the problem, almost nobody seems to doubt the cognition of secus¹ with sequitur, nor of Skr. sacā with secutae.

2. In Etymology, as well as touching the Homeric question, there will always be chorizonts, owing to the difference in human temperaments and the inherently greater ease of analysis as contrasted with synthesis. But temperament or no, preponderance of evidence now throws a searcher into one camp, now into another. Temperamentally, I sympathize with the antichorizonts, and certainly in regard to Iranian hačā, the usage of which I now propose to examine, on the basis of the examples collected by Bartholomae in his magnificent lexicon. Now Bartholomae compares hačā with Skr. sacā, but not without acknowledging that he feels the force of Foy’s objections. I suppose, however, that it is on the legal principle of asserting definition from usage that he rubricates his examples as though the primary sense of hačā were ‘from’. But if hačā is cognate with sacā it were well to attempt a rubrication based on ‘cum’ as the approximately original sense, that is for Indo-Iranian.

3. Sporadically in Avestan, and still less in Persian, hačā, though we more conveniently render it by ‘from’, is combined with the instrumental, which is not, on the face of things, a

¹ The notion of inferiority clearly arises in our colloquial description of cigars and other goods of poorer quality as “seconds”.
case to indicate the separative relation. But we can often here restore the sense of ‘cum’, e. g. in Y. 10. 17 (ap. Bthl., 1751, II. 1. 2),

arazataēna haēa taŝta zaranaēnei aōi taxē where, though as regards the context argenteo ex poculo aureum in <poculum> affundo is the letter rendering, yet arg. cum p. may be defended as the original conception, cf. in Latin the following, albeit far less concrete, examples from Ennius: Ann. 175, tum cum corde suo divum pater atque hominem rex effatur: and, much more specifically, ib. 540, effudit voce proprio cum pectore sancto.

In the latter example cum is attached to a “sociative” with which it does the work of an abl. of means, but in both contexts the combination with ef- is noteworthy, and from a usage like 540 the separative relation might have developed. In such contexts as this (see Vahlen in Rh. Mus. 14. 566 for other examples) cum might also have developed—or shall we say have sunk to—use as a mere case exponent. This is what has happened, in a sense, with OPers. hačē which, though used with the instrumental, is an invariably case exponent of the ablative.

4. In Old Persian, the adjective ha-mitēriya- ‘rebellious’ is construed with* hačā + abl. Etymologically mitēriya- belongs with Skr. metheta (dual) ‘inter se pugnant, altercantur’. I see here a ‘compromise construction, as though in Latin (1) alienatus [a] + abl. had been so associated with (2) altercans cum + instr. as to yield *(3) alienatus cum + abl.; or as though in Greek the interplay of (1) ἄλλοτριόν τω τω and (2) ἄλλοτριόν άνθρωπον [σω] ἔρι had yielded *(3) ἄλλοτριόν <σω> τω. For the general psychological problem involved cf. Latin divertium facere cum aliqua, and the English conflict between differ from and differ with. In Irish, fri ‘adversus, in’ reached the sense of ‘cum’ in comparisons (“gleich gegen = gleich mit”), which developed into a sociative and instrumental ‘cum’, and at last, with verbs of separation, into ‘ab, ex’ (cf. Windisch. Irische Texte, Wrthch., pp. 577—578). The following examples are in point: Bh. 2. 2 (≈ 1750, II. 1. 1. 0), daḥyāvaḥ. tūḥ hačānaḥ ha-mitēriyaḥ abāvaḥ = regiones quae cumne altercantes factae sunt; Bh. 1. 11 (≈ 1778, top, s. v. ham) paśaḥ kāraḥ hōruvaḥ. ha-mitēriyaḥ abāyaḥ hačā ha-bujiyaḥ = inde populus universus stomachatus fuit cum Cambysē.
5. In the Gathic passage Y. 37. 2 (= 1749, II. 1. 1. B), yai gauš hača šyinti = qui a bove habitant, we might rather interpret by qui cum bove stant (for habitant), and Mills renders by "who abide beside the kine".

6. Common in Gathic as in later Avestan is the locution asāt hača which verbally = rītu 2 cum, but idiomatically e rītu, e veritate. For the origin of this locution we might assume a contamination of an Indo-Iranian *srād 3 rected, combined with *suca rītus 'cum rectitudine' (cf. the actual form ūn-rūdād "um der Sünde willen", Delbrueck, ai. Synt., § 74), but we will do better now to enquire what suca, instrumental of a noun sac- 'a following, pursuit', might mean, and I would indicate my answer to the question by rendering asāt hača by 'e-ri- tum consequentia' or, sacrificing the case relation, by 'ritum sequ- dum', cf. secus consuetudinem in CIL. 5, 4017; and secus merita eius. Inscr. Orelli 7. 70.

7. But asāt hača 'ritum secus' is a phrase so trite in its adverbial sense that we shall do well to examine its less phraselogical uses, e. g., Y. 51. 5 (= 1749, II. 1. 1. B), yūbā asāt hača gauš rīdāt vāstryo = num per ritum bovem acquirat agricola (ind. quest.). Here the ablative alone expressing cause or rather consequence, would suffice, but hača reinforces the consequential idea. Similar are Y. 43, 14, asāt hača frāstā = <haec petitis> ritum secus recipiatur; Y. 53, 1, yesi hōī dāft ayāpta asāt hača = ut ei det maiores ritum secus; Y. 45, 4 a. h. vādā... yā im dāft = ritum secus (per r.) cognovi... quis eam <vīta> faciat; Y. 44, 17, perhaps especially perspicuous because of rāthémē, yō rāthémē a. h. = qui secus ritum secus. With other nouns note Y. 32, 2, xēbrat hača... pahti-marot = per regnum... respondit, V. 9, 2, yaoēdavryāt h. = purificaciónem... secus.

8. Semantically, general lines of reasoning strongly recommend the definition of hača by 'in consequence of' (see § 6), and the combination of hača in this sense with the ablative is just what we should expect, cf. Delbrueck, ai. Synt, § 74, "nicht selten übersetzen wir den Abl. durch in Folge von". This

1 We might restore the sense of 'in-the-train' to hača, see §§ 6, 9.
2 Interpret rītu according to the gloss rītus: Sasanis, l. 6, 'religio, pictum'.
3 I am transcribing these forms as though they were Sanskrit.
definition adequately solves the examples under Bartholomae's rubric H. 1. 3 (= 1750), to-wit: V. 18. 1, diētāt haça uñrava sasuhiōe = fraudis causa (better fraude<cm> secus) sacerdos nominatur. Further note Y. 35. 10 (= 1751), where aśānt haça (= ritum<cm> secus) is rendered by Bartholomae (col. 88, top) as "un des Aśa willen" but by Mills as "by reason of thy Righteous Order"; here the prior rendering may be etymologically justified by "in pursuit of", and the latter by "in consequence of".

9. With persons, the combination haça + abl. designates the agent, the person in consequence of whom the act is performed. Examples are: V. 19, 6 (= 1750), harsēryāt haça gāviši = matre ab vocatus sum; D. 6, 3 (= 1751) haça-ma<at = a-me <mandatam>, where we might think of 'in attendance upon' as the primitiv sense of haça.

10. The next examples are of haça with the ablative after verbs of fearing. The act of shrinking which is the physiological expression of fear lies; I take it, behind the Vedic construction of the ablative with verbs of fearing, and the same note accounts for separatives as represented in the Latin location ab aliquo metuere, timere. In the Persian and Avestan usage of haça with the ablative I suppose that the simple ablative, expressing the idea of (shrinks) 'from', has yielded to a somewhat phraseological (shrinks) 'in consequence of'. The examples I have selected are P. 21 (= 927, mid.) niyuṣtī si<at >haça, auyyo = metuit ille...ignis ab aquis; Yt. 10, 99 (= 1743, II. 1. 1. β), yahmaḥ haça fratresonta = quo ab metuebant; D. 5. 2, dāhane<at >tyā haça-ma<at = atarsa<at = regiones...quaes ab-me(d) metuebant; Bh. 1. 13, haça darśma<at (?) atarsa<at = <populus> ab <cins> saevitate metuebat; Bh. 4. 5, haça drauṛāb darśam patipayo<at >ucā = a fraudulentia valide cave; D. 4. 3, imam dahāum aṭur<at >mazādū patah haça haīnāya = hanc regionem, A. M., servato ab exercita.

11. In the location with verbs of fearing haça 'in consequence of' had sunk nearly to the level of being a mere case exponent (cf. Brugmann, Kvg. § 593, and note the Spanish use of exponential á before names of personal direct objects), and there was the same possibility with verbs of obtaining and demanding (= seeking to obtain), which took a separative case, e. g. Homeric ταύνη, ἀλήγερο = (a) filio accepti, Skr. grhyāyāt vāllumātah = 'accipiat (a) bonō', Latin ἱμνάδ cepti (CIL...
1. 530); áxarāt irvōs (ex. xapā) — postulare (ab) aliquo, Skr. kena ambho gacatam bhūyat — per quem aqua petita <est> a-rege. Iranian examples are: Y. 44. 17 (1749, II. 1. 1. B, cf. col. 1670), hača armom cavanı hača xemati — num voluntatem impetrem a vobis 1 (= per vos, in Folge von); Bh. 1. 14 (1750, II. 1. 1. c) hača anazaam taumaya parabartum — a nostri (sic) gente ablatum; Y. 62. 7 (1748, II. 1. 1. β) vispaḥyō hača ivaotı huberstum — omnibus ab postulat bene-sacrificatum; Y. 31. 14 (1749, II. 1. 1. B), yaša uddo dadantı dāhanam hača aśaunō — quae postulata sunt debitorum (neuter) ab Aša-discipulo. 2 — In this category we may, with some reinforcement of the etymological sense of hača (see §§ 6, 9), render by 'with compliance from' (i. e. on the part of).

12. With the verbs of obtaining (cf. Lat. parare) we may associate verbs of begetting (cf. Lat. parere), satisfying ourselves by citing the one example of Yt. 13. 87 (1748, II. 1. 1, 1. β), yahman hača frihvarasat nafō — quo ex [cum] procreavit gentem.

13. Much the larger number of examples of hača + abl. follow after verbs of motion, and it hardly seems likely that here we have a mere casual exponent brought over from the separative connotation with verbs of fearing (§ 10). For this usage it is tempting to seek for hača direct derivation from a root noun *sek-*; quasi 'iter, cursus, trail, track', a definition certainly justified a priori by the usage of verb forms of the root sek-. This leads us to the simple definition of hača by 'away, weg (von) &c.' (cf. Fick-Stokes, Wtcb., p. 296). Still, in matters of definition the argument a posteriori furnishes the line of procedure I prefer to follow, and it is worth our while to ask whether, in the construction of verbs of motion with hača + abl. hača did not originally go with the verb, somewhat in the sense of 'secundum' (= along), e. g. in Bh.

1 Mills renders by 'shall I proceed to that conference with you'.
2 This is what I understand Bartholomae to mean by his rendering (col. 738, mid.); die Schuldforderungen die auf Grund der Buchungen an den Aša-anhänger gestellt wurden. Mills renders by 'What prayers with debt-confessions are offered with the offering of the holy'.
3 The assumption of a root noun sek- 'trail, track' leads to a pretty result for a somewhat isolated usage of ēri vis: in 278, 197, ērām | pahhā mā, ērām ēm pākā tērērē tērērē. If we read tērērē here, we have a reference to the route of the homegoing bride. In form, we may compare skr. mei seōs (Utr. 4. 1. 3. 7) 'in my support, mibi auxilio', but literally something like 'mei (gen.) <in> comitatu'.

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2:12 (= 1750, II. 1. 1, b), paševa’ adam nįjyam hača bablya
ruu — postea ego abii secundum Babylon [unless in a military context like this hača meant in expeditions], i.e. ‘along’ or ‘on’ from Babylon. In such contexts, if hača were subsequently drawn to the noun, ‘secundum’ would pass through ‘porro’1 to ‘ex’. — Again, in sentences containing verbs with plural or joined subjects or objects, hača in the sense of una, really to be taken with the verb, might have been drawn as a mere exponent to the separative ablative following. Examples: V. 5. 19 (1746), yuqožyha tačinti āpo zayuñata hača putuktat
dzi rąyo couru-kasam — purificatae rumunt aquae una cę mari
P. ad mare V.: Yt. 10. 39 (1746), zaritacel uazanma hača bə-
zubbyo — tela quidem... missa una cę lacertis; V. 3. 7 (1747),
duunu han-dwaranti...hača gorąla — diaeboli con-current... una cę-
foßa; Yt. 9. 16 (1747), uqa-baranu uza ūnsonca baranomca hača
maził ʞanbyo — au-femam amba famemque sitimque una cę
creatoris locis; V. 9. 53 (1747), ahmo hača mashalaca sōtrəstaca
arət... üunça orətscət — co una cę locoque domaque absi-
sistet... fortunamque opulentiaque; Yt. 8. 32 (409, c. v. us-han-
dava-), duunam han-histanta us-honduvat hača garət — vapore
constant (= colliguntur) us-hinu- una cę muri.

14. Far be it from me to assert that these restorations of a vanished sense to examples of a developed hača — a restoration that may be diagrammed in part by saying that una cę
yielded [una] a — prove an original meaning of ‘una, simul’, but it is well to show from extant examples that the developed sense may be but an accident, a mere consequence of the word’s having become otiosum in certain contexts; and if hača — una with verbs of motion came to be felt as otiosum, its other ablative connections — I particularly think of verbs of fearing with their note of physical recoil2, see § 10 —

1 i.e. Eng. ‘forth’. — I find in the rather full English-French lexicon of Fleming and Tibbins that forth is defined by ‘en avant, ensuite; dehors, au dehors &c.’ This ought to mean that alter ensuite may be used to replace alter en avant, but this usage is unknown to several high authorities on French diction whom I have consulted.

2 The tautology of com- and una may be compared with the doubled fun with fras in Homer (I. 571).

3 Cf. stdyuo — ‘to flee or escape from’ (with gen.; Odys.), but stdvis =
stda; stda in Hesychius; cf. Lith. šęgyti ‘ferrari’. 
rendered it liable to be taken up as a mere casual exponent. With verbs of fearing, 'in consequence of' readily yielded 'from', and we bridge over to the purely local sense by assuming the start to have begun from the nouns of place-persons like Skr. Dyáus, Greek Αἰθή, Latin Orcus.

15. The local sense may also be glimpsed in a context like the following where, after describing the origin of two mountains, the text continues, Yt. 19, 2 (1747), ahnut haçā garayō fraoxśyan — inde successim (= ensuite) <hi> montas proccescent. Also note Yt. 19, 34, where vácennm ahnut haçā xvaro... frausat (= evident er ea ex gloria... abscessit) may be etymologically realized by thinking of English 'to part with', contaminated with 'to (de-)part from'.

16. In the old Persian we find a rather neat testimony to the rôle I have assigned, in the development of the idiom of haçā + abl., to the construction after verbs of fearing, viz: D. 4, 2 (1752), where we have iyam duhyās... haçā aniyonu naiy tarsatiy — ea regio... cum (sic) àex hoste non metuit. Here we have the instrumental (cf. Bartholomae in Gr. Ir. Phil. 1 § 378, 6) retained with haçā (= 'in consequence of').

17. A quite isolated accusative regimen (cf. Lat. secus, secundum) is found in V. 12, 1 (1752), where haçā is taken in the general sense of 'ad' (= as regards), évat ožyam uyamnayan pídro haçā pitarem &c. — quamidn eorum <funera celebrantes> manent, filius propter patrem &c., where I take propter for 'in consequence of'. In V. 5, 1, 2, haçā 'from' is combined with the accusative in the location 'from the tops of the mountains (= haçā karsvācā gairanqum) to the depths of the valleys' (= avi jafnavā raqanqum), and conversely; cf. also Yt. 10, 67 (1752) 'from region to region' (haçā karsvar avi k.). In both these locations 'secundum' (= down along, cf. sec, flumen) would serve, i.e. (1) 'down along the mountains into the valleys' and 'along the valleys up to the mountains, and (2) secundum <alteram> regiones ad <alteram> r. We have besides (3) Y. 61, 5 (1752), yáçā him janāma... vispāiš haçā karsvan yáš hapta — ut cum expellamus... universus [cum] <ex> regiones (sic) illis septem, where haçā takes an instrumental of the adj. and an accusative of its noun. Here perhaps haçā karsvan (= secundum regiones) represents a use originally distributive (cf. Lat. in dies), i.e., 'along region
after region; which tended to develop to the sense of *ultra (praeter) regiones.*

18. I think I have now shown how, starting with an etymological sense of 'in consequence,' ensuite, in Folge,' with instrumental regimen, we account, in not all too complicated a manner, for the development of a sense approximating 'from,' which made *hačā* a fit exponent — or shall I say coefficient? — for the ablative. With the accusative, the sense of 'secundum' may have developed into 'ultra' (= 'beyond, past').

19. This brings us to the support chiefly relied upon by the chorizons who would separate Iranian *hačā* from Skr. *sácā,* viz: OIr. *sech,* defined by Zeuss as 'praeter, ultra, supra, extra.' The cognation of *zech,* with the root of *sechim* 'sequor' seems to me properly upheld by Fick-Stokes (i. e. c), and by Brugmann (Kvg. § 618), as against Foy and Thumb (see Walde, s. v.). Thurneysen in his grammar defines *sech* by corbei an (Eng. 'along past,' often simply 'by'), and compares Lat. *seces,* but it does not appear whether he derives *seces* from *sequitur* or not. As I see it, if we start with the sense of 'following,' i.e. 'in attendance upon,' we come easily to 'alongside of' (a person) and then to 'by,' and finally 'past, beyond,' cf. e.g. in Windisch's Texte, p. 207, 26 *luid seocu,* which means *saxum* 'fit praeter eam. In other contexts *sech* may be rendered by our English use of via — 'by way of,' Germ. *über* in the address of a letter. See the description of a travel route in the Scél nucci Mic Dáthó § 20 (Windisch, i. e. p. 106, 5 sq.) where *sech* is followed by various names of places 'past' which the traveller went. The adverbial use of *zech* (= 'außerdem') is etymologically given by folglich, besides'. Welsh *hep* 'sine' has developed on the lines of Oec. *perom* 'sine' (: Lat. *per*) "eigentlich 'darüber hinaus!" (Walde, p. 574).

**Sanskrit sakā.**

20. As a corollary to the discussion of Iranian *hačā* a word may be said of Skr. *sakā* which occurs one each in the Rig and Atharva Vedas, and both times in a hymn which is a charm against snakes (or, for the Rik hymn, against poison

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*I am entirely skeptical as to Walde's explanation of *sákā,* which I am beginning to define by 'away, weg, via' and to connect with OIr, see Class. Phil., 4, 301, fn.*
in general). I am prepared to admit that each of the hymns (RV. I. 191 and AV. X. 4) is popular rather than hieratic in point of diction and that linguistically considered they are late. But religiously considered, a snake charm is likely to be early and when in such a charm a word is found that is virtually absent from the other literature¹ that word is no less likely to be a technical archaism than a popular neologism. According to the lexica (supported by native authority) sakā- is a diminutive of the article sa-, being defined as dieser geringere, — winzige (PW²), and compared with ṣakā- yaka- (PW¹). These comparisons are not illuminating, for ṣuka- is not genuinely extant, and yaka in RV. 8. 21. 18 (anyakē yakē = alitruncque quicunque) seems to me clearly equivalent to a Greek 
*δ-pæs (sic)—that is to say that yu-kā- compounded here does the usual work of yah kâh (+ -ca). But if sakā-really is a derivative of the article, I think rather of the -c(e) of hic, iltic, istic, though this raises the question whether we restore 
*ke (so Brugmann) or *ke as the startform of Lat. -ce. For the full adjectivization of sa-kā-s, as compared with iltic(e), cf. Lat. ipsus | ipse.

21. The passages for sakā are, in translation, as follows, "The little girl of the Kiratās, she the little one, digs a remedy" (Whitney’s translation of AV. X. 4. 14) and "This little bird, so very small, hath swallowed all thy poison up." (Griffith’s Rig Veda, 1. 191. 11). And I can but think it curious that the two most genuine uses of one word are found in descriptions of antidote procurers. In either case sakā may be a participial and mean ‘sequens’ (= quaerens, cf. quœrit of the antidote-seeker in Aeneid 4. 513—515), or even ‘secans’; or it may be an instrumental of a noun sa-kē- ‘bill’ (= gladium; rostrum), allied to Lat. sacena, and saxum. If we were quite sure that sakā meant ‘small’, we might still derive it from the root of secut, in the sense of ‘segment’ (‘fragment’), cf. Eng, snip and bit.²

¹ Of course I have at my command no other guide to usage than the Petersburg lexicon.

² This semantic correlation perhaps obtains in the following words, Lat. minor (Gay, A.J.P., 26. 176), quœ-pis (ib. 177), Lat. pœulum (ib. 188), parvus (194), ūltis (292), Skr. dahhrās (385); further cf. Skr. kr̥drās: kṣod-ati (so Uhlenbeck).
Sanskrit sācis (advb.) ‘sidewise, aside’.

22. The relation of meaning between sācis and sācata ‘sequitur’ is, as Uhlenbeck recognizes in his lexicon, not obvious. I define sāci, spoken of a dependant, a pedisequus, one of the suite, by ‘alongside of, beside’ (cf. Ir. sech§19) whence by subsequent restriction—or enlargement?—‘on (the) side: aside’; cf. Eng. aside from (with a sense near to the sense of Welsh hep ‘sine’ §19, fin.), and beside in ‘beside the question, the mark’ &c.

Sanskrit sak-thān- ‘thigh’.

23. With the root of secut I would join Skr. sak-thān- ‘thigh’ One cannot read his Homer and find μποις ἔθαυσε (= ‘the thighs they cut off’) without realizing that *sakté- ‘cut’ would constitute a very proper designation for the thigh, cf. Eng. ‘cuts’, of the different portions of a slaughtered animal. Flexionally, sakthān- has been modelled on asthān- ‘bone’.

Two Sanskrit Words for the Hanl.

24. I have, in another place (AJP. 31, 416) explained Skr. aṃ-guṭha-śa ‘thumb’ as a compound of three members = ‘innam-stans’. In the same essay (pp. 416-19) I interpreted the stariform *tri-st(h)as ‘third’ (but *tri-st(h)as in Latin testis) as ‘tip-standing’ (of the left mid-finger), and the stariform *km-ṣṭh(s)-sthō-s ‘sixth’ as ‘co-ex-stans’ (of the second thumb in the digital enumeration).

25. In view of these three finger-names in -sthō-s (-sthī-s)—with which we may do well to compare Gr. μαλακ:ή ‘palm’—

1 Possibly aśā originally simply meant ‘cut’, and belongs with aśas ‘part’, to a root aśā, found in Lat. sev-ā of ‘bites’.

2 The phonetic difficulty, with the relation of Lat. essi- (gen.) to Skr. āsthī, was not solved by Johansson in IF. 14, 322, for the stariform od-thi- would, to the best of our knowledge, yield Skr. *aṭṭhī- and not āsthī-. But I know no phonetic obstacle to assuming for the starsform *aṭṭhī-; whence -ṭṭh- with the treatment of ṭṭh in Latin, but a different treatment in Sanskrit. This *aṭṭhī- was a compound, and if (o)dhsth- tended in the primitive speech to (o)sth-, recollection may have reintroduced the vanishing (or vanished) d. I define od- by ‘stone’; Skr. aṭṭra- ‘stone, cliff’ (fādgha, sīf = stump), and -āṭṭhī- either means ‘state, condition’ (the whole = “possessing the stone-condition’): the root aṭṭga-; or it meant ‘hard’ in this compound (↔ stone-hard), and is cognate with the root to which Eng. stone. Lettic stān ‘Risenstange’ belong (see Prollwitz, s. v. stra).
we may ask if in Skr. gābhā-sti-s ‘hand, forearm’ -sti(h)i-s ‘stains’ is not to be recognized as the posterius, reduced in value to a mere suffix. The sense of gābhā-stis will be ‘Greifer’ (cf. Viennese Greiferl), and it will belong with Lat. habēt ‘holds’ (see Uhlenbeck, s. v.).

26. By the same token we may divide Skr. hāsta-s into hā + sti(h)a-s. What is hā? It is either for hab(h)- or for had(h)- with the final sonant dropped before sti(h). I suppose the startform to have been rather *ghed-sti(h)a-s than *ghabh-sti(h)a-s but without being able to give a perfectly convincing reason for my preference, even though Greek ὁμοορος shows o in the root syllable. The root ghed- (guttural, not palatal) in the sense of ‘grasp’ is well attested (see e.g. Walde, s. v. prehendo), though some of the forms cited, e.g. Lith. pasi-gendu ‘desidero, cupio’ belong more naturally with the root *ghed(h)- in βαρονιος ‘precari’: Av. jaidya ‘orare’. A palatal variety (ghed-) of a root with pure guttural is not to be incontinently rejected. Thus Skr. hāsta-s, from *ghed-sti(h)a-s, also means ‘seizer’, and ‘seizer’ is the apparent (and I believe the real) definition of Gothic handus (: hinjan ‘seize’) as well as of Greek ξηπ. Why suspect this definition? is not the scientific language of today, when set to point out the differences between man and his ape-progenitor, driven to the designation of the hand as the ‘Greif-hand’, as the ape’s foot is a ‘Greif-fuß’?

27. It is valuable for the definition to compare Lith. pa-žastis ‘armhole, armpit’. The way in which the sense derived is made clear by quoting Horace, epist., 1. 13. 12, ne forte sub ala fascicularum portes librorum, ut rusticus agnum. In short, the arm-hole is an arm-hold as, conversely, a ship’s hold is a ship’s hole. I have elsewhere given to pa-žastis, but with less semantic support, I think, the definition of ‘res impressa’, and to Skr. hās-ta-s the definition of ‘quod ferre’, deriving it from the root ḥes- ‘ferire’ (see Mod. Lang. Notes, 22. 38).
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