cer

PT
26
865


## Garnell Alnuwergity Mibrary

Ythata, Aem 想nan

BOUGHT WITH THE INCOME OF THE

## SAGE ENDOWMENT FUND

THE GIFT OF
HENRY W. SAGE
1891

The date shows when this volume was taken.
To renew this book cony the call No. and give to the librarian.

## 

All borrowers must regis $<$ ter in the library to borrow books for home use.

All books must be returned at end of college year for inspection and repairs.

Limited books must be returned within the four week limit and not renewed.

Students must return all baoks before leaving town, Officers should arrange for the return of books wanted during their absence from town.

Volumes of periodicals and of pamphlets are held in the library as much as possible. For special purposes they are given out for a limited time.

Borrowers should not use their library privileges for the benefit of other persons.

Books of special value and gift books, when the giver wishes it, are notallowed to circulate.

Readers are asked to-report all cases of books marked or mutilated.
Do not deface books by marks and writing.



## Cornell University Library

The original of this book is in the Cornell University Library.

There are no known copyright restrictions in the United States on the use of the text.


Sincescly qours
hannice Blormficter,

# STUDIES IN HONOR OF MAURICE BLOOMFIELD 

PROFESSOR OF SANSKRIT AND COMPARATIVE PHILOLOGY IN THE JOHNS HOPKINS UNIVERSITY<br>BALTIMORE, MARYLAND

BY A GROUP OF HIS PUPILS


NEW HAVEN
YALE UNIVERSITY PRESS
LONDON - HUMPHREY MILFORD - OXFORD UNIVERSITY PRESS
MDCCCCXX
R


r

> 105
> +4

> A495701
> COPYRIGHT, 1920, BY
> YALE UNIVERSITY PRESS
Foreword ..... v, vi
List of Co-operatina Dedicators ..... vii-xiii
In Memoriam: A. W. Stratton, A. H. Ewing. ..... xv
Biograpitical Sketch ..... xvii-xxi
Bibliography xxiii-xxxi
Contributed Artioles
L. C. Barret : Pāippalāda and Rigveda ..... 1
H. H. Bender: On the Lithuanian Word-Stock as Indo- European Material ..... 19
F. R. Blake: Congeneric Assimilation as a Cause of the Development of New Roots in Semitic ..... 35
G. M. Bolling : The Recension of Cānakya used by Galanos. ..... 49
G. W. Brown : The Sources of Indian Philosophical Ideas ..... 75
W. N. Brown : Escaping One's Fate, A Hindu Paradox and its Use as a Psychic Motif in Hindu Fiction ..... 89
E. W. Burlingame: Buddhist-Zoroastrian Legend of the Seven Marvels ..... 105
Fr. Edgerton: The Philosophic Materials of the Atharva Veda ..... 117
E. W. FAY: Irradiation and Blending ..... 137
H. M. JoHnson: Rāuhiṇeya's Adventures, The Rāuhiṇe- yacaritra ..... 159
H. W. Magoun : Agni Vṛtrahan and Verethraghna ..... 197
Ruth Norton : The Life-Index, A Hindu Fiction Motif ..... 211
S. G. Oliphant : The Vedic Press-Stones ..... 225
R. S. Radford: Licensed Feet in Latin Verse: A Study of the Principles of Exceptional Shortening, of Diaeresis, and of Short Vowels in Hiatus ..... 251
Indices ..... 273

F-
!

$1 \quad 1$

多

## FOREWORD

These Studies are offered to Maurice Bloomfield, on the fortieth anniversary of his doctorate, as an expression of affection for teacher and friend, and as a mark of homage to one of America's foremost scholars.

It would have been easy to increase the bulk of the volume, and, no doubt, its scholarly value, by calling for contributions from his friends and colleagues. But to the Committee in charge of the work it seemed best that the contributors should be only those who have stood to him in the relation of pupil to. teacher. For it is his qualities as a teacher, no less than as a scholar, that have won for him a place perhaps unequalled among American humanists of this generation. All the world knows his scholarly work. But all of academic America, at least, is no less aware of the extraordinarily stimulating influence which he has exerted upon those who have been privileged to sit under him.

Moreover, it seemed necessary to restrict the scope of the volume still further. Professor Bloomfield's courses in Comparative Philology and Comparative Grammar have been given for over thirty-five years and have enrolled many hundreds of students. Through these pupils his influence has been felt in every field of linguistic activity in this country and in many other spheres of humanistic work. The Committee was for a time attracted by the idea of planning a volume to center upon exhibiting the wide range of this influence. But in the end it was decided to make the volume more unified by limiting the contributions to those subjects which have chiefly engaged his own attention. Even thus limited, the scope of the volume remains sufficiently wide.

At the conclusion of our work we feel that it is far short of all we should wish it to be. We shall not offer as an excuse the peculiar difficulties ${ }^{1}$ of the times in which it was conceived and

[^0]brought forth; for we feel that at no time could any such effort have produced results worthy of Professor Bloomfield. But we ask him to accept the volume from the contributors as a token of their affection and esteem, and as a pledge that they will continue to work along these lines with a living, grateful recognition of the instruction and inspiration for which they are indebted to him.

## SUBSCRIBERS AND CO-OPERATING DEDICATORS.

Henry L. Abbot, Cambridge, Mass.
Justin E. Abbott, Summit, N. J.
Emil Abegg, Zürich, Switzerland.
Julian W. Abernethy, Burlington, Vt.
Cyrus Adler, Philadelphia, Pa.
William F. Albright, Jerusalem, Palestine.
Dines Andersen, Copenhagen, Denmark.
Earle B. Babcock, New York City.
F. H. Baetjer, Baltimore, Md.

Marshall Ballard; Bay St. Louis, Miss.
Philip L. Barbour, New York City.
Lewellys F. Barker, Baltimore, Md.
George E. Barnett, Baltimore, Md.
George A. Barton, Bryn Mawr, Pa.
John W. Basore, Princeton, N. J.
A. J. Bell, Toronto, Canada.

Charles E. Bennett, Ithaca, N. Y.
C. Theodore Benze, Philadelphia, Pa.

George O. Berg, Northfield, Minn.
William Sturgis Bigelow, Boston, Mass.
Charles Edward Bishop, Morgantown, W. Va.
Leonard Bloomfield, Urbana, Ill.
Franz Boas, New York City.
Alexandër L. Bondurant, University, Miss.
W. D. Booker, Baltimore, Md.

John M. Brendal, Perham, Minn.
James Wilson Bright, Baltimore, Md.
Carl Darling Buck, Chicago, Ill.
Karl Budde, Marburg, Germany.
Westcott Burlingame, Albany, N. Y.
Charles Dana Burrage, Boston, Mass.
R. Butin, Washington, D. C.

Moses Buttenwieser, Cincinnati, Ohio.
W. Caland, Utrecht, Netherlands.

Morgan Callaway, Jr., Austin, Tex.
John Campbell, New York City.
Edward Capps, Princeton, N. J.
Albert J. Carnoy, Louvain, Belgium.

Mitchell Carroll, Washington, D. C. Adam Carruthers, Toronto, Canada. J. McKeen Cattell, Garrison-on-Hudson, N. Y.

Jarl Charpentier, Upsala, Sweden. Francis A. Christie, Meadville, Pa. Walter Eugene Clark, Chicago, Ill. Erma E. Cole, New London, Conn. Hermann Collitz, Baltimore, Md. Samuel Daiches, London, England. Mme. Martelle Elliott Davis, J'acoma, Wash.
Marchese Comm. Giacomo De Gregorio, Palermo, Italy.
Arthur A. Dembitz, Philadelphia, Pa.
Herman L. Ebeling, Baltimore, Md.
Edward Edwards, London, England.
George V. Edwards, New York City.
F. C. Eiselen, Evanston, Ill.

Aaron Ember, Baltimore, Md.
Henry Lane Eno, Princeton, N. J.
A. E. Erkes, Leipzig, Germany.
H. R. Fairclough, Stanford University, Calif.

Thomas Fell, Annapolis, Md.
John H. Finley, Albany, N. Y.
Simon Flexner, New York City.
Harold N. Fowler, Cleveland, Ohio.
Tenney Frank, Baltimore, Md.
Fabian Franklin, New York City.
Solomon B. Freehof, Cincinnati, Ohio.
Henry Snyder Gelman, Philadelphia, Pa.
John Marshall Gest, Philadelphia, Pa.
Alice Getty, Paris, France.
Paul Geuthner, Paris, France.
T. Casper Gilchrist, Baltimore, Md.

Basil Lanneau Gildersleeve, Baltimore, Md.
John Glenn, Jr., Baltimore, Md.
Charles J. Goodwin, Bethlehem, Pa.
Elihu Grant, Haverford College, Pa.
Edwin L. Green, Columbia, S. C.
Sir George A. Grierson, Camberley, England.
Lucia C. G. Grieve, Ocean Grove, N. J.
Karl Joseph Grimm, Gettysburg, Pa.
B. Howell Griswold, Jr., Baltimore, Md.

Luise Haessler, New York City.
George Ellery Hale, Pasadena, Calif.

Wm. Gardner Hale, Stamford, Conn.
Clayton M. Hall, Ruxton, Md.
George M. Hall, Baltimore, Md.
W. S. Halsted, Baltimore, Md.

Hollister Adelbert Hamilton, Elmira, N. Y.
M. S. Handman, Austin, Tex.
W. A. Harris, Richmond College, Richmond, Va.

Fairfax Harrison, Belvoir, Va.
James Taft Hatfield, Evanstoń, Ill.
Paul Haupt, Baltimore, Md.
Francis J. Hemelt, Washington, D. C.
Philip S. Henry, Asheville, N. C.
E. Müller Hess, Berne, Switzerland.

Liewis Hodous, Hartford, Conn.
Jacob H. Hollander, Baltimore, Md.
E. Washburn Hopkins, New Haven, Conn.

Herbert Pierrepont Houghton, Waukesha, Wis.
W. H. Howell, Baltimore, Md.

Henry M. Hurd, Baltimore, Md.
H. Hyvernat, Washington, D. C.
A. V. Williams Jackson, New York City.
H. C. G. von Jagemann, Cambridge, Mass.

Bartlett B. James, Baltimore, Md.
Morris Jastrow, Jr., Philadelphia, Pa.
James R. Jewett, Cambridge, Mass.
K. F. Johansson, Upsala, Sweden.

Allan Chester Johnson, Princeton, N. J.
R. F. Johnston, Peking, China.

Florin H. Jones, Coytesville, Pa.
Thomas F. Kane, Grand Forks, N. Dak.
George Charles Keidel, Washington, D. C.
Robert James Kellogg, Shawnee, Okla.
H. A. Kelly, Baltimore, Md.

James A. Kelso, Pittsburgh, Pa.
Roland G. Kent, Philadelphia, Pa.
James W. Kern, Lexington, Va.
David Martin Key, Jackson, Miss.
R. Brent Keyser, Baltimore, Md.
J. Kirste, Graz, Austria.
C. Klincksieck, Paris, France.

Sten Konow, Kristiania, Norway.
A. G. Laird, Madison, Wis.
H. Carrington Lancaster, Baltimore, Md.

Charles R. Lanman, Cambridge, Mass.
Berthold Laufer, Chicago, Ill.
James T. Lees, Lincoln, Nebr.
W. G. Leutner, Cleveland, Ohio.

Eugene Levering, Baltimore, Md.
Bruno Liebich, Heidelberg, Germany.
Christopher Longest, University, Miss.
A. O. Lovejoy, Baltimore, Md.

Henry F. Lutz, Philadelphia, Pa.
Sir C. J. Lyall, London, England.
J. Gresham Machen, Princeton, N. J.

Ralph Van Deman Magoffin, Baltimore, Md.
J. H. T. Main, Grinnell, Iowa.

Theodore Marburg, Baltimore, Md.
Mrs. John Markoe, Philadelphia, Pa.
Edward B. Mathews, Baltimore, Md.
S. J. Meltzer, New York City.

Clarence W. Mendell, New Haven, Conn.
R. D. Messayeh, New York City.

Alfred W. Milden, University, Miss.
Charles W. E. Miller, Baltimore, Md.
Robert Edwin Miller, U. S. Navy.
Helen Lovell Million, Mexico, Mo.
Edward W. Morley, West Hartford, Conn.
James B. Nies, Brooklyn, N. Y.
Charles J. Ogden, New York City.
Henry S. Pancoast, Philadelphia, Pa.
Stewart Paton, Princeton, N. J.
Daniel A. Penick, Austin, Tex.
George Wharton Pepper, Philadelphia, Pa.
Walter Petersen, Lindsborg, Kansas.
Aristides E. Phoutrides, New York City.
T. Noël de L. Purcell, London, England.
E. J. Rapson, Cambridge, England.

Samuel Rea, Philadelphia, Pa.
Lord Reay, London, England.
J. N. Reuter, Helsingsfors, Finland.

David M. Robinson, Baltimore, Md.
J. G. Rosengarten, Philadelphia, Pa.

Lessing Rosenthal, Chicago, Ill.
Robert Bruce Roulston, Baltimore, Md.
Adelaide Rudolph, New York City.
Thomas DeC. Ruth, Washington, D. C.

Frank Knight Sanders, New York City.
Virginia Saunders, New York City.
Gottlieb Schaenzlin, Baltimore, Md.
Nathaniel Schmidt, Ithaca, N. Y.
Wilfred H. Schoff, Philadelphia, Pa.
H. Schumacher, Washington, D. C.

Charles P. G. Scott, Yonkers, N. Y.
John A. Scott, Evanston, Ill.
Helen M. Searles, South Hadley, Mass.
Edward H. Sehrt, Baltimore, Md.
Joseph S. Shefloe, Baltimore, Md.
George Shipley; Baltimore, Md.
H. H. Sipes, Philadelphia, Pa.

John R. Slattery, Paris, France.
M. S. Slaughter, Madison, Wis.

Charles S. Smith, Washington, D. C.
John C. Smock, Hudson, N. Y.
Charles William Sommerville, Memphis, Tenn. ${ }^{-}$
A. L. Taylor 'Starck, Cambridge, Mass.
R. B. Steele, Nashville, Tenn.

Sir Aurel Stein, Oxford, England.
Georg Steindorff, Leipzig, Germany.
John Lammey Stewart, Bethlehem, Pa.
Alvin H. M. Stonecipher, Indianapolis, Ind.
Robert P. Strickler, Baltimore, Md.
Claire M. M. Strube, Baltimore, Md.
E. H. Sturtevant, New York City.

Satalur Sundara Suryanarayanam, Lalagvahavam, Madura,
South India.
William Marshall Teape, Sunderland, England.
Sir Richard Temple, London, England.
W. S. Thayer, Baltimore, Md.

Hugo P. Thieme, Ann Arbor, Mich.
Edward Joseph Thomas, Cambridge, England.
Henry Alfred Todd, New York City.
Albert H. Tolman, Chicago, Ill.
William Trelease, Urbana, Ill.
Ebbe Tuneld, Lund, Sweden.
Frederick Tupper, Burlington, Vt.
Mrs. Lawrence Tùrnbull, Baltimore, Md.
J. Ph. Vogel, Leiden, Holland.
B. J. Vos, Bloomington, Ind.

Jacob Wackernagel, Basle, Switzerland.
M. Walleser, Heidelberg, Germany.

William D. Ward, Los Angeles, Calif.
Samuel W. Wass, Toronto, Canada.
Leroy Waterman, Ann Arbor, Mich.
Wịlliam H. Welch, Baltimore, Md.
Monroe Nichols Wetmore, Williamstown, Mass.
Louis N. Whealton, Long Beach, Calif.
Miles White, Jr., Baltimore, Md.
Daniel Willard, Baltimore, Md.
J. Whitridge Williams, Baltimore, Md.

Edward Allen Wilson, San Antonio, Tex.
Roy Martin Winger, Seattle, Wash.
Henry Wood, Baltimore, Md.
James Haughton Woods, Cambridge, Mass.
K. V. Zetterstéen, Upsala, Sweden.
R. Zimmermann, Bombay, British India.

## LIBRARIES AND OTHER INSTITUTIONS.

American Philosophical Society, Philadelphia, Pa.
Boston College Library, Chestnut Hill, Mass.
The Case Memorial Library of the Hartford Seminary Foundation, Hartford, Conn.
College of William and Mary, Williamsburg, Va.
Cornell University Library, Ithaca, N. Y.
Free Public Library, Newark, N. J.
Harvard College Library, Cambridge, Mass.
Haverford College Library, Haverford, Pa.
Iowa State Library, Des Moines, Iowa.
Library American Museum of Natural History, New York City.
Library Company of Philadelphia, Philadelphia, Pa.
Library of Johns Hopkins University, Baltimore, Md.
Library of Lafayette College, Easton, Pa.
Library of Princeton University, Princeton, N. J.
Library of State University of Iowa, Iowa City, Iowa.
Library of The University of California, Berkeley, Calif.
Library of The University of Chicago, Chicago, Ill.
Library of The University of Pennsylvania, Philadelphia, Pa.
Library of The University of Wisconsin, Madison, Wis.
Library of Union Theological Seminary, New York City. Library of Washington University, St. Louis, Mo.

Libreria de Jesús Menéndez, Buenos "Aires, Republica Argentina. Musée Guimet, Paris, France. The National Library of Wales, Aberystwyth, Wales. Nevada State Library, Carson City, Nev. The New York Public Library, New York City. North Dakota Masonic Grand Lodge Library, Fargo, N. Dak. Northwestern University Library, Evanston, Ill. Ohio State University Library, Columbus, Ohio. Princeton Theological Seminary Library, Princeton, N. J. San Francisco Law Library, San Francisco, Calif. Smith College Library, Northampton, Mass.
' Southern Baptist Theological Seminary Library, Louisville, Ky. University of Michigan Library, Ann Arbor, Mich.
University of Nebraska Library, Lincoln, Neb.
University of Rochester Library, Rochester, N. Y.
Vermont State Library, Montpelier, Vt.
Wellesley College Library, Wellesley, Mass.
Wesleyan University Library, Middletown, Conn.
Yale University Library, New Haven, Conn.

IN MEMORIAM

ALFRED WILLIAM STRATTON AR'THUR HENRY EWING<br>QVOS CONDISCIPVLOS NOSTROS IN INDIA<br>LABORANTES MORS INTEMPESTIVA<br>RAPVIT

## BIOGRAPHICAL SKETCH

Maurice Bloomfield was born on February 23, 1855, at Bielitz, Austria. When he was four years old his family moved to the United States, and his boyhood was spent in Milwaukee and Chicago.

He began his collegiate studies at the old University of Chicago (1871-4), and finished them at Furman University, Greenville, South Carolina (1876-7), where he received the degree of Master of Arts in 1877. These were the times when the Ku Klux Klan was active in South Carolina, and ever since then he has had well-reasoned and clear-cut opinions on what is called the Negro Problem (compare the entries in the Bibliography under the years 1890 and 1892). During his stay in the south he came under the influence of Crawford H . Toy, who was then teaching in Greenville. The direction of his career was definitely determined by his work under William Dwight Whitney at Yale, where he registered as a graduate student in the fall of 1877. From there he went as Fellow, to the recently opened Johns Hopkins University, where Chárles R. Lanman was then in charge of instruction in Sanskrit. Here he received, in June, 1879, the degree of Doctor of Philosophy. Immediately after this he went abroad to study in Germany.

The decade then ending had witnessed the birth of the modern science of. Comparative Indo-European Philology. Early in that decade a revolution had started with such works as Ascoli's 'Glottologia' (of which a German version, Vorlesungen über die vergleichende Lautlehre, appeared in 1872), Johannes Schmidt's Verwandtschaftsverhältnisse der indogermanischen Sprachen (1872), and Fick's Die ehemalige Spracheinheit der Indogermanen Europas (1873). Then came Brugmann's articles in the ninth volume of Curtius' Studien (1876), the discovery of Verner's Law (1877), and the discovery of the facts concerning the Indo-Iranian palatals by Collitz ( $B B \cdot 2.291$ ff. and 3. 177 ff., 1878 and 1879)-out of which three sources, principally, developed a new theory of Indo-European Ablaut.

The climax in the transition to the new period came just about the time when Bloomfield went to Germany. He was attracted and stirred by the work of the rising schools of philologists, both 'Junggrammatiker' and others; and his early publications show
how great was their influence upon' him. At the same time he continued his Indological studies, especially in the field of the Veda; and here too he came under inspiring influences. He spent a year at Berlin, studying Indic Philology with Álbrecht Weber, Hermann Oldenberg, and Heinrich Zimmer; Classical and general Comparative Philology with Johannes Schmidt; and Celtic with Zimmer. Then for another year, at Leipzig, he studied Indic and Celtic Philology with Ernst Windisch, Classical and Comparative Philology with Georg Curtius and Karl Brugmann, and Slavic with August Leskien. He seems also to have been greatly influenced by some of his fellow-students, particularly by M. A. (now Sir Aurel) Stein, and Hermann Collitz. Collitz was later to become his colleague at Johns Hopkins University, as Professor of Germanic Philology. Stein was his fellow-student at both Berlin and Leipzig, and they have remained warm friends to this day; Bloomfield has always had the greatest admiration and regard for Stein, who has given evidence of reciprocating these feelings. Among his other fellowstudents were Paul Deussen, the historian of philosophy; Kuno Meyer, the Celtist; Ernst Leumann, the Indologist; B. Güterbock, G. Mahlow, and F. Hartmann.

In 1881 Bloomfield was recalled from Europe by President Gilman to take charge of the work in Sanskrit at the Johns Hopkins University, where he has ever since been Professor of Sanskrit and Comparative Philology.

On June 20, 1885, he was married to Miss Rosa Zeisler. ${ }^{1}$ Two children were born to them: Elinor Marie (now Mrs. A. Sanders DeWitt, of Detroit, Michigan), and Arthur Leonard (now Associate in Medicine in the Johns Hopkins University). He still occupies during the academic year the same house, at 861 Park Avenue, Baltimore, in which he settled immediately after his marriage. His summers are usually spent with his family at Breadloaf, in the Green Mountains, Vermont.

Professor Bloomfield's relations with European scholars, dating in many cases from his student days, have remained close and intimate. To some extent he has kept up such associations by correspondence-altho he has been heard to express doubts as to whether this effort is, in general, worth while. Yet he counted Max Müller, for instance, a warm personal friend, and this friendship was kept up to the day of Müller's death, altho they never saw each other. Various trips to Europe have also helped to keep him in touch with his friends and colleagues

[^1]there. 'His second trip took place in 1884, when he went to Tübingen to work with Rudolf Roth on materials in preparation of his edition of the Kāuśika Sūtra, and where, incidentally, he was welcomed and entertained by his old friend Stein. After a lapse of fifteen years he made a third trip, this time also to Tübingen, in 1899, to confer with Richard Garbe, his co-editor of the chromo-photographic reproduction of the Kashmirian Atharva Veda. Later he visited Europe as the representative of the Johns Hopkins University at three of the International Congresses of Orientalists-at Hamburg in 1902, at Algiers in 1905, and at Copenhagen in 1908; and in 1911 he was the University's delegate at the five hundredth anniversary celebration of the University of St. Andrews, Scotland. At Copenhagen he laid before the Congress of Orientalists his Vedic Concordance, for which he was awarded the Hardy Prize by the Royal Academy of Bavaria.

During the winter of 1906-7 he delivered the seventh series of lectures in the course of American Lectures on the History of Religions before various educational institutions in this country. These lectures were afterwards printed in his book, The Religion of the Veda.

He is a member, and has been vice-president and president, of the American Oriental Society; a member and councillor of the American Philosophical Society; a member of the German Oriental Society, of the American Philological Association, of the International Committee for Congresses on the History of Religions, of the Advisory Council of the American Simplified Spelling Society, and of the National Institute of Social Sciences ; Foreign Member of the Bohemian Academy of Prague, Honorary Member of the Finno-Ugrian Society of Helsingfors, and Fellow of the American Academy of Arts and Sciences.

In 1906 the honorary degree of LL.D. was conferred upon him by Princeton University at its sesquicentennial celebration. His alma mater, Furman University, gave him the same degree in 1908. He also received in 1916 the honorary degree of L.H.D. from the University of Chicago at the celebration of its twentyfifth anniversary.

His scholarly activities are fully recorded in the Bibliography, and there is no need to repeat what is said there. Yet it seems desirable to indicate in a summary fashion the chief lines they have followed.

Almost his first publication was an edition of a text dealing with Vedic ritual; and from that time to this he has never
ceased to make the interpretation of the Veda-from all possible angles-one of his foremost interests. In this field the great monument that he has reared is the Vedic Concordance. It is a tool for Vedic investigation which will remain in use as long as Vedic studies are pursued, and with which the St. Petersburg Lexicon alone can be compared. But his peculiar genius as a Vedic interpreter can best be seen elsewhere. While all Vedic texts, and particularly the Rig Veda, have received their share of his attention, it is more especially the Atharva Veda that he has made his very own. His studies begin with interpretations of individual Atharvan hymns; continue with the edition of the Kāusika Sutra, the translation of Hymns of the Atharva Veda for the Sacred Books of the East, and the chromophotographic reproduction of the Kashmirian Atharva Veda; and culminate in his brilliant volume on The Atharva Veda for the. Grundriss der indo-arischen Philologie, which will doubtless remain for many years to come the standard work on the subject. He has also inspired several of his pupils to independent work in various phases of Atharvan literature. In this field he stands far beyond all rivals; there can be no question that he is the greatest Atharvanist of the world.

His early interest in Comparative Philology has never left him. Such an interest was the usual thing among Indologists in those days; the two fields always, or nearly always, went together. With the enormous widening and deepening of the scope of both of them, this combination has become much more difficult and consequently rarer. Professor Bloomfield is almost the last representative of the older tradition; for the other living scholars of his own generation have almost without exception abandoned one or the other of the two subjects. His enthusiasm for Indo-European Pre-history was fired anew in the early years of the present century by the remarkable finds in Turkestan, and later in the Hittite country; and it is safe to predict that he will never turn his mind away from such matters. In general linguistics the calling of due attention to the process of 'adaptation' was his achievement. It promises to be paralleled in importance by the new points of view opened up in his article 'On Instability in the Use of Moods in Earliest Sanskrit.' In historical grammar the subject of noun formation, especially suffixal formation, has keenly interested him; he has devoted several penetrating studies to it, and under his stimulus three of his students have written doctoral dissertations in it. It should be noted that, besides the courses in Comparative Phil-
ology and Comparative Grammar of which mention has been made in the Foreword, he has for many years regularly conducted courses in Avestan and Lithuanian, primarily for students of Comparative Philology. Other courses of a similar sort have been given sporadically.

Indian religions have also deeply interested him, as can be seen from his various monographs, beginning with an article on Buddhism published in 1892, and especially from his book on The Religion of the Veda-the best account of Vedic religion in the English language, and perhaps in any language. More incidentally and in passing he has touched upon the various philosophic systems of India. Of late he has become very much interested in Indian folklore and story literature, and has conceived the idea of gradually elaborating an encyclopedia of the recurring motifs of Hindu fiction. The interest and value of such studies he has himself illustrated in a number of articles, and several of his pupils are helping him to carry on this work. Two articles in this volume are contributions to this 'encyclopedia.'

It should be noted, finally, that he has by no means failed to take an interest in the literatures of the Pāli and Prakrit dialects. In both-especially in Pāli and the Jaina Māhärāṣṭrīhe has conducted classwork for many years. And while his publications do not show so much evidence of his activities in these fields as yet, his pupils would be surprised if his learning and acumen did not in them also bear fruit more extensively, in the fullness of time.

## BIBLIOGRAPHY OF PROFESSOR BLOOMFIELD'S WRITINGS

It is hoped that this bibliography includes a reference to everything published by Professor Bloomfield down to the year 1920. Cross references are furnished in cases where he has written on the same subject in more than one place; and when articles referred to are merely abstracts of longer articles published elsewhere, this fact is indicated.

The items are arranged chronologically according to the year of publication. In general we have treated as the year of publication the year that is printed on the title-page of the book, or volume of a periodical, in question. An exception has been made, however, with the Journal and Proceedings of the American Oriental Society. The issuance of these was, particularly in the early days of the Society's existence, very irregular; and each volume usually included, in those days, parts which had appeared at different intervals of time. Yet each volume, of course, carries only one date on the title-page. We have therefore abandoned our rule in this case, and have recorded articles published in $J A O S$ and $P A O S$ as of the year when they actually appeared in print. ${ }^{1}$

The following abbreviations of titles of periodicals are used in the bibliography:
$A H R=$ American Historical Review. $A J P=$ American Journal of Philology.
$B B=$ (Bezzenberger's) Beiträge zur Kunde der indogermanischen Sprachen. $G G A=$ Goettingische Gelehrte Anzeigen.
$I A=$ Indian Antiquary.
$I F=$ Indogermanische Forschungen.
$J A O S=$ Journal of the American Oriental Society.
$J H U C=$ Johns Hopkins University Circulars.
PAOS = Proceedings of the American Oriental Society.
PAPA $=$ Proceedings of the American Philological Association.
PAPS = Proceedings of the American Philosophical Society.
TAPA $=$ Transactions of the American Philological Association.
$W Z K M=W i e n e r$ Zeitschrift für die Kunde des Morgenlandes.
$Z D M G=Z e i t s c h r i f t$ der deutschen morgenländischen Gesellscháft.

[^2]1878 On the Vedic compounds having an apparent genitive as prior member. PAOS 11.v.
1879 [Noun-formation in the Rig-Veda. Dissertation; unpublished.]
1880 The ablaut of Greek roots which show variation between E and O.AJP 1. 281 ff.; JHUC no. 7, December, 1880, p. 79.
1881 Das Gṛhyasamgraha-parisisṭa des Gobhilaputra. ZDMG 35. 533 ff ., 788. (Cf. below, 1882, On the Gṛhyasamgraha-parisista of Gobhilaputra.)
The relation of $\epsilon i \delta \omega{ }^{\prime}$ : $\langle\delta v i \bar{a} . ~ J H U C$ no. 12, December, 1881, p. 163.
On non-diphthongal $e$ and $o$ in Sanskrit. PAOS 11. lxxiv ff.
Review of Gustav Meyer's Griechische Grammatik. AJP 2. 507 ff.
1882 Final AS before sonants in Sanskrit. AJP 3. 25 ff .; JHUC no. 13, February, 1882, p. 174, cf. ibid., no. 17, August, 1882, p. 243.
 (Cf. below, 1885, Four etymological notes.)
On the Gṛhyasamgraha-parisista of Gobhilaputra. JHUC no. 15, May, 1882, p. 205. (Cf. above, 1881, Das Gṛhyasamgraha-parisista des Gobhilaputra.)
On differences of use in present-systems from the same root in the Veda. PAOS 11. cxxvi ff. (Same subject as next.)
A search for the functional or dialectic differences in the present systems of the Veda. JHUC no. 20, December, 1882, p. 26. (Same subject as preceding.)
On the Rev. L. F. Mills' edition of the Gāthās. AJP 3. 499 f.
Arthur C. Burnell and the Talavakāra Brāhmaṇa. JHUC no. 21, February, 1883, p. 51 f.
Historical and critical remarks introductory to a comparative study of Greek accent. $A J P 4.21 \mathrm{ff}$. (Abstracted in next.)
On the general theory of Greek accentuation. JHUC no. 22, April, 1883, p. 66. (Abstract of preceding.)
On the etymology of фiरos. JHUC no. 25, Augùst, 1883, p. 141.
On certain irregular Vedic subjunctives or imperatives. PAOS 11. clxi ff.; JHUC no. 27, November, 1883, p. 6. (Abstracts of next but two.)
On an edition, proposed by the writer, of the Kārsika-Sūtra of the Atharva-Veda. PAOS 11. clxx (bis) ff. (Cf. next but two.)
Review of Bühler's Leitfaden für den Elementarcursus des Sanskrit. AJP 4. 350 f.
1884 On certain irregular Vedic subjunctives or imperatives. AJP 5. 16 ff. (Abstracted in preceding but two.)
On an edition, proposed by the writer, of the Kāuśika-Sūtra of the Atharva-Veda. JHUC no. 29, March, 1884, p. 52 ff. (Cf. preceding but two.)
On the probability of the existence of phonetic law. AJP 5. 178 ff.; (abstract) JHUC no. 30, April, 1884, p. 74.
On the position of the Vāitāna-Sūtra in the literature of the Atharva. Veda. PAOS 11. cexxiii ff. (Abstract of next.)

## 1885

Oñ the position of the Vāitāna-Sūtra in the literature of the AtharvaVeda. JAOS 11. 375 ff . (Abstracted in preceding.)
Four etymological notes. 1. Latin usque : Vedic ácchā.-2. $\pi \epsilon \in \pi \omega \nu$, 'ripe,' and $\pi \epsilon \in \pi \omega \nu$, 'mild, weak.'-3. On a probable equivalent in Sanskrit of the Greek particle ä $\rho, \dot{\rho} \dot{a} .-4 . \dot{\alpha} \mu \beta \lambda \alpha \kappa \epsilon i \nu \quad$ : Sanskrit mlecchati. AJP 6. 41 ff. (Cf. next three, and above, 1882, The etymology of $\dot{\alpha} \mu \beta \lambda a \kappa \epsilon i \nu$.
Latin usque : Vedic ácchā. JHUC vol. 4, whole no. 36, January, 1885, p. 32. (Cf. preceding.)
$\pi \epsilon ́ \pi \omega \nu$, 'ripe,' and $\pi \dot{\epsilon} \pi \omega \nu$, 'mild, weak.' Ibid., p. 33. (Cf. preceding but one.)
On a probable equivalent in Sanskrit of the Greek particle á $\rho$, dò. $J H U C$ vol. 4, whole no. 39, May, 1885, p. 76 f. (Cf. preceding but two.)
Note on the study of Sanskrit and Comparative Philology. JHOC vol. 4, whole no. 41, July, 1885, p. 119 f.
On a new group of Vedic words belonging to the root pras', 'to ask.' Ibid., p. 119. (Abstract of next.)
On some Vedic derivatives of the root praś, 'ask,' hitherto misunderstood. [präś, 'debate,' etc.] PAOS 13. xlii ff. (Abstracted in preceding.)
1886 The correlation of $v$ and $m$ in the Veda. JHUC vol. 5, whole no. 49, May, 1886, p. 93. (Abstract of next.)
The correlation of $v$ and $m$ in Vedic and later Sanskrit. PAOS 13. xevii ff. (Abstracted in preceding.)
Review of Lanman's Sanskrit Reader. AJP 7. 98 ff.
Three hymns of the first book of the Atharva-Veda. [AV. 1. 2, 1. 12, 1. 14.] Ibid., exii ff. (Cf. next but two.)
Introduction to the study of the Old-Indian sibilants. (With Edward H. Spieker.) Ibid., cxvii ff.
Two hymns of the Atharva-Veda, ii, 11, and vi, 128. Ibid., cxxxii ff. (Cf. next.)
Seven hymns of the Atharva-Veda. (Later known as Contributions to the interpretation of the Veda, First Series.-AV. 1. 2, 1. 12, 1. 14, 2. 11, 2. 27, 6. 100, 6. 128.) AJP 7. 466 ff. (Cf. preceding, and preceding but two.)
1887 On the jāyānya-charm, AV. 7. 76. 3-5, and the apacit-hymns (6. 83 ; 7. 74. 1-2; 7. 76. 1-2) of the Atharva-Veda. PAOS 13. cexiv ff. (Cf. below, 1890, Contributions, Second Series, No. ${ }^{1}$ 1.)
On the so-called fire-ordeal hymn, AV. 2. 12. Ibid., cexxi ff. (Cf. below, 1890, Contributions, Second Series, No. 3.)
1888 The origin of recessive accent in Greek. AJP 9. 1 ff., 220.
1889 On the etymology of the particle om. PAOS 14. cl ff.
On the Vedic instrumental paḍbhis. (Ibid., clii ff. (Cf. below, 1890, Contributions, Second Series, No. 6.)
Review of Simon's Beiträge zur Kenntnis der vedischen Schulen. $A J P 10.227 \mathrm{f}$.
'Contributions from various Sanskrit manuscripts to Böhtlingk's Sanskrit Lexicon of the St. Petersburg Academy, about 300 in number (see the prefaces to vol. iii, 1882, and vol. vii, 1889).'Quotation from Bibliographia Hopkinsiensis, Part I, Philology (see below under 1892), page 7 .
1890 The Kāuśika-Sūtra of the Atharva-Veda, with extracts from the commentaries of Dārila and Kesava. JAOS 14. New Haven, 1890.

Review of Balg's Comparative glossary of the Gothic language. AJP 11. 99 ff.
On a Vedic group of charms for extinguishing fire by means of water-plants and a frog. PAOS 15. xxxix ff. (Cf. next but three, No. 5.)
Women as mourners in the Atharva-Veda. Ibid., xliv ff. (Cf. next but two, No. 4.)
On the är. $\lambda \epsilon \gamma$. talīdyà, AV. 7. 76. 3. Ibid., xlvii $f$. (Cf. next but one, No. 2.)
On the so-called Nirukta of Kāutsavaya. Ibid., xlviii ff.
Contributions to the interpretation of the Veda. Second Series. 1. On the jāyānya-charm, AV. 7. 76. 3-5, and the apacit-hymns of the Atharva-Veda.-2. On the är. גeq. talīdyd, AV. 7. 76. 3.-3. On the so-called fire-ordeal hymn, AV. 2. 12.-4. Women as mourners in the Atharva-Veda. [AV. 14. 2. 59-62, etc.]-5. On a group of Vedic charms for extinguishing fire by means of waterplants and a frog.-6. On the Vedic instrumental padbhis and the word pádbī̃śa. AJP 12. 319 ff . (Cf. above, under 1887, 1889, and 1890.)
Study of human types. [The Negro question.] The Baltimore Sun, April 3, 8, 11, 15, 20, 23, 26, and 30, and May 2 and 8, 1890.
1891 On adaptation of suffixes in congeneric classes of substantives. AJP 12.1 ff .

Review of Brugmann's Grundriss der vergleichenden Grammatik der indogermanischen Sprachen. Ibid., 362 ff.
Contributions to the interpretation of the Veda. Third Series. 1. The story of Indra and Namuci.-2. The two dogs of Yama in a new role.-3. The marriage of Saranyū, Tvastar's daughter. JAOS 15. $143 \mathrm{ff}{ }^{1}$
Contributions to the interpretation of the Veda. Fourth Series. 1. The meaning of the root yup.-2. On jalāsah, jalāsabhesajah, jaläsam, and jālāsam.-3. On the thirteenth book of the AtharvaVeda. AJP 12. 414 ff .
1892 The negro problem. The Christian Register, vol. 71, no. 8 (February 25,1892 ), p. 120.
${ }^{4}$ According to PAOS 16. iii, this was published in 1892; but this statement is evidently erroneous, since the above article was reviewed in December, 1891 in both the Academy and the Revue Critique.

The essentials of Buddhist doctrine and ethics. International Journal of Ethics, 2. 313 ff .
The foundation of Buddhism. New World, 1. 246 ff .
[Announcement of] A Vedic Concordance. Being a collection of the hymns and sacrificial formulas of the literature of the Vedas. JHUC vol. 11, whole no. 99, June, 1892, p. 99 ff. (Cf. next but one.)
Contributions to the interpretation of the Vedas. Third, fourth, and fifth series. [Brief summary.] Ibid., p. 101 f.
Announcement of a Vedic Concordance, being a collection of the $p \bar{a} d a s$ of the hymns and sacrificial formulas of the literature of the Vedas. PAOS 15. clxxiii ff. (Cf. preceding but one.)
Bibliographia 'Hopkinsiensis. 1876-1891. Part I: Philology. [Edited by Maurice Bloomfield.] Baltimore, 1892.
Review of Hillebrandt's Vedische Mythologie, Vol. I. New World, 1. 796 ff . (Cf. next.)

1893 Review of Hillebrandt's Vedische Mythologie, Vol I. AJP 14. 491 ff. (Cf. preceding.)
On the origin of the so-called root-determinatives. PAPA 24. xxvii ff. (Cf. below, 1894, IF 4. 66 ff.)
The myth of Soma and the eagle. Festgruss an Rudolf von Roth, Stuttgart, 1893, p. 149 ff. (Cf. next but two, No. 1.)
On the $\ddot{a}_{\pi} \pi \cdot \lambda \epsilon \gamma . \operatorname{rujãnäh,~RV.~1.~32.~6,~with~a~note~on~haplology.~}$ PAOS 16. xxxii ff. (Cf. below, 1896, Contributions; Seventh Series, No. 3.)
The etymology of uloka. Ibid., xxxv ff. (Cf. below, 1896, Contributions, Seventh Series, No. 4.)
1894 Contributions to the interpretation of the Veda. Fifth Series. 1. The legend of Soma and the eagle. (Cf. preceding but two.)-2. On the group of Vedic words ending in -pitvá (sapitvá, prapitva, abhipitvá, apapitvá). JAOS 16. 1 ff. (Presented orally in 1892, but published in April, 1894.)
Contributions to the interpretation of the Veda. Sixth Series. 1. The legend of Mudgala and Mudgalānī.-2. On the meanings of the word śusma.-3. On certain aorists in $-\bar{a} i$ - in the Veda. $Z D M G 48.541 \mathrm{ff}$.
A century of comparative philology. JHUC vol. 13, whole no. 110, March, 1894, p. 39 ff .
Trita, the scape-goat of the gods, in relation to AV. 6. 112 and 113. PAOS 16. cxix ff. (Cf. belowf, 1896, Contributions, Seventh Series, No. 6.)
On the group of Vedic words ending in -gva and -gvin. Ibid., cxxiii ff. (Cf. below, 1896, Contributions, Seventh Series, No. 5.)
On the so-called root-determinatives in the Indo-European languages. $I F{ }^{\prime} 4.66 \mathrm{ff}$. (Cf. above, 1893, PAPA 24. xxvii ff.) .
Review of A. C. Kaviratna's Charaka-Samhita. AJP 15. 235 f.

1895 On assimilation and adaptation in congeneric classes of words. $A J P$ 16. 409 ff .

Review of Ragozin's Story of Vedic India. AHR 1. 103 ff .
Race-prejudice. New World, 4. 23 ff.
Review of Max Müller's Three lectures on the Vedānta philosophy. Ibid., 155 ff.
On Professor Streitberg's theory as to the origin of certain IndoEuropean long vowels. TAPA 26. 5 ff.
1896 Two problems in Sanskrit Grammar. 1. On the instrumentals in $n \bar{a}$ from stems in man (mahina, varina, prathina $\bar{a}, b h \bar{u} n \bar{a}$, etc.).2. On the relations of the vowel groups $\bar{u} r$ and $u r$ to $\bar{\imath} r$ and $i r$ in Sanskrit. PAOS 16. clvi ff.; reprinted, by special request of the editor of $B B$, in $B B 23.105 \mathrm{ff}$. (See below, 1897.)
Contributions to the interpretation of the Veda. Seventh Series. 1. The myth of the heavenly eye-ball, with reference to RV. 10 . 40. 9.-2. The original daksinā, or fee of the priests.-3. On the $\ddot{a} \pi \cdot \lambda \epsilon \gamma$. rujānāh, [RV. 1. 32. 6], with a note on haplology and haplography.-4. The meaning and etymology of uloka.-5. On the group of Vedic words ending in -gva and -gvin, with notes on visnu, is-kar, and adhrigu.-6. Trita, the scape-goat of the gods, in relation to AV. 6. 112 and 113. AJP 17. 399 ff. (Regarding Nos. 3-6 cf. above, under 1893 and 1894.)
On the 'Frog-Hymn' RV. 7. 103, together with some remarks on the composition of the Vedic hymns. JAOS 17. 173 ff .
The meaning of the compound atharvā̄ $\bar{n}$ irasah, the ancient name of the fourth Veda. JAOS 17. 180 ff.
1897 La religion védique d' après les hymnes du Rig-Veda. Par Abel Bergaigne. [Tomes I-III, Paris, 1878-1883.] Tome IV. Index. Par M. Bloomfield. [Bibliothèque de l'école des hautes études, Fasc. 117.] Paris, 1897.
Hymns of the Atharva-Veda, together with extracts from the ritual books and the commentaries. [Sacred Books of the East, Vol. 42.] Oxford, 1897.

Review of Hillebrandt's Ritual-literatur. Vedische Opfer und 'Zauber. AJP 18. 350 ff.
Two problems in Sanskrit Grammar. BB 23. 105 ff. (See above, 1896.)

Indo-European notes. 1. On the vocalism and accent of the middle participle in the Indo-European languages.-2. Ionic ${ }_{\epsilon} \sigma \kappa \epsilon=$ é $\sigma \tau \epsilon$ 'till.'-3. Latin salūs: salvos.-4. The fractional numerals in Avestan. TAPA 28. 55 ff.
1898 Max Müller's Reminiscences. [Review of Müller's Auld Lang Syne.] The Philadelphia Press, April 10, 1898.
The position of the Gopatha-Brāhmana in Vedic literature. JAOS 19, second half, 1 ff.
The meaning and etymology of the Vedic word vidátha. Ibid., 12 ff . A note on Dr. Bühler. [Necrological.] IA 27. 371 f .

1899 The myth of Purūravas, Urvasī, and Ayu. JAOS 20. 180 ff .
A proposed photographic reproduction of the Tübingen manuscript - of the Kashmirian Atharva-Veda, the so-called Pāippalāda-sākhā. JAOS 20. 184 f .
The Atharva-Veda. [Grundriss der indo-arischen Philologie und Altertumskunde, II. Band, 1. Heft, B.] Strassburg, 1899.
1900 Review of Max Müller's Rāmakrishna: his life and sayings. $A H R$ 5. 347 ff .

Review of Monier Williams' Sanskrit-English Dictionary. AJP 21. 323 ff .
On the wedding stanza, Rig-Veda 10. 40. 10. Ibid., 411 ff.
1901 On the relative chronology of the Vedic hymns. JAOS 21, second half, p. 42 ff .
On r̛cīsama, an epithet of Indra. Ibid., p. 50 ff.
On the Sanskrit original of the Pranou Oupnekhat (Pranava Upanisad) in the Persian translation of the Upanisads. Miscellanea linguistica in onore di Graziado Ascoli, Torino, 1901, p. 31 ff .
The Kashmirian Atharva-Veda (School of the Pāippalādas), reproduced by chromophotography from the manuscript in the University Library at Tübingen; edited . . . by Maurice Bloomfield and Richard Garbe. Three volumes. Baltimore, 1901.
1902 Photographic reproduction of the Kashmirian Atharva-Veda. $J H U C$ vol. 21, whole no. 155, January, 1902, p. 28 f.
The symbolic gods. Studies in honor of Basil L. Gildersleeve, Baltimore, 1902, p. 37 ff .
Review of Caland's Altindisches Zauberritual. GGA 164. 489 ff .
On the initial sound of the Sanskrit words for 'door.' Album Kern, Leiden, 1903, p. 193 f.
Alfred William Stratton. [Necrological.] $A J P$ 23. 351 ff.
1903 The god Indra and the Sāma-Veda. WZKM 17. 156 ff.
1904 On some alleged Indo-European languages in cuneiform character. $A J P 25.1$ ff.
Cerberus, the dog of Hades. The Monist. 14. 523 ff . (Reprinted in book form; see next but one.)
On the minor and problematic Indo-European languages. PAPA 35. xxvii ff.

1905 Cerberus, the dog of Hades. The history of an idea. Chicago, 1905. (Reprint from The Monist, 14. 523 ff .; see preceding but one.)
1906 Brahmanical riddles and the origin of theosophy. Congress of Arts and Science, Universal Exposition, St. Louis, 1904; New York and Boston, 1906; ii. 481 ff.
The long-lost Mani Bible. Discovery of manuscripts in Chinese Turkestan. Harper's Monthly, 112, March, 1906, p. 527 ff.
On conflicting prayers and sacrifices. JHOC vol. 25, whole no. 192,

## Bibliography

December, 1906, $1 \mathrm{ff} .=$ Actes $d u$ XIVe congrès international des orientalistes (Alger 1905), Paris, 1906, p. 242 ff.
Four Vedic studies. 1. On the verbal root $k!p=k l p$ in the Veda.-2.-On the än. $\lambda \epsilon \gamma$. vīrenyah, RV. 10. 104. 10.-3. On the äm. $\lambda_{\epsilon \gamma}$. $d \bar{a} r u m, ~ R V .7 .6 .1 .-4$. The Vedic instrumental padbhîh for the second time. JHUC vol. 25, whole no. 192, December, 1906, p. $10 \mathrm{ff} .=$ Actes $d u$ XIVe congrès international des orientalistes (Alger 1905), Paris, 1906, p. 232 ff.
Seven emendations of the text of the Rig-Veda. (RV. 8. 18. $13^{c}$; 1. $30.16^{c}$; 3. 5. 5 a ; 8. 29.6 a ; 6. 49.15 b ; 1. 119. $8^{\mathrm{c}}$; 3. 36. 7a.) JAOS 27. 72 ff.
Corrections and conjectural emendations of Vedic texts. AJP. 27. 401 ff.
A Vedic Concordance. Being an alphabetic index to every line of every stanza of the published Vedic literature and to the liturgic formulas thereof, that is an index to the Vedic mantras, together with an account of their variations in the different Vedic books. Harvard Oriental Series, Volume 10. Cambridge, 1906.
The religion of the Veda. The ancient religion of India (from Rig-Veda to Upanishads). American Lectures on the History of Religion, Seventh Series. New York and London, 1908.
Introductory note (pp. v-vii) to Letters from India, by Alfred William Stratton. London, 1908.
The etymology of MPE
On the newly discovered Indo-European language called Tocharian. JHUC vol. 27, p. 1108 ff.; whole no. 210, November, 1908, p. 106 ff.
1909 On certain work in continuance of the Vedic Concordance. JAOS 29. 286 ff .

On some disguised forms of Sanskrit paśu 'cattle.' 1. The stem $k s$ u.-2. On the supposititious root rapś. IF 25 (Festschrift für Karl Brugmann), 185 ff.
Review of von Schroeder's Mysterium und Mimus im Rig-Veda. $A J P 30.78 \mathrm{ff}$.
1911 Some Rig-Veda repetitions. JAOS 31. 49 ff.
1912 Review of Caland's Das Vāitāna-Sūtra des Atharvaveda. GGA 174. 1 ff.
The Sikh Religion. Studies in the History of Religions, presented to C. H. Toy, New York, 1912, p. 169 ff.

On. instability in the use of moods in earliest Sanskrit. AJP 33. 1 ff .
On the variable position of the finite verb in oldest Sanskrit. IF 31 (Festschrift für Berthold Delbrück), 156 ff.
Review of Stein's Ruins of Desert Cathay. AHR 18. 113 ff .
1913 The character and adventures of Mūladeva. PAPS 52. 616 ff.
1914 A plea for more classical education. Johns Hopkins Alumni Magazine, 2. 267 ff.

On talking birds in Hindu fiction. Festschrift Ernst Windisch . . . dargebracht, Leipzig, 1914, p. 349 ff.
Review of Feist's Kultur, Ausbreitung, und Herkunft der Indogermanen. $A H R 19.840$ ff.
1916 On the etymology and meaning of the Sanskrit root varj. JAOS 35. 273 ff. (Issued February, 1916.)

On two cases of metrical shortening of a fused long syllable, RigVeda 8. 18. 13 and 6. 2. 7. Aufsätze zur Kultur- und Sprachgeschichte, vornehmlich des Orients, Ernst Kuhn gewidmet, München, 1916, p. 211 ff.
On recurring psychic motifs in Hindu fiction, and the laugh-andcry motif. JAOS 36. 54 ff.
Rig-Veda Repetitions. The repeated verses and distichs and stanzas of the Rig-Veda in systematic presentation and with critical discussion. Harvard Oriental Series, Volumes 20 and 24. Cambridge, 1916.
1917 On the art of entering another's body; a Hindu fiction motif. PAPS 56. 1 ff.
Some cruces in Vedic text, grammar, and interpretation. 1. ajuryamur for ajur (yám) yamur, and other haplologies.-2. chardís for chadís, a case of contamination or word blend.-3. Some $\sigma \chi \dot{\eta} \mu a \tau a .-4$. On the expression návyaj̀m sányase.-5. On stanza 6 in the hymn of Saramā and the Panis, RV. 10. 108.-6. On the meaning of ulchachid.-7. Irregular 'relative clause constructions. $A J P$ 38. 1 ff.
1919 The fable of the crow and the palm-tree: a psychic motif in Hindu fiction. $A J P 40.1$ ff.
The Life and Stories of the Jaina Savior Pāregvanātha. 254 pp. Baltimore, Johns Hopkins University, Press, 1919.
The mind as wish-car in the Veda. [With a new interpretation of RV. 1. 32. 8, mâno rúhänāh.] JAOS 39. 280 ff .
Fifty years of Comparative Philology. TAPA 50. 62 ff .
1920 The dohada, or craving of pregnant women: a motif of Hindu fiction. JAOS 40. 1 ff.
Notes on the Divyāvadāna. JAOS 40.336 ff .

# PĀIPPALĀDA AND RIG VEDA 

LeRoy Carr Barret<br>Professor of Latin, Trinity College

The title of this paper may easily suggest too much, and also too little. It is proposed to deal with such material in the first eight books ${ }^{1}$ of Pāippalāda as appears also in RV, considering only variant readings and the structure of corresponding hymns. But a large amount of the material appears not merely in these two collections but in yet others also, especially of course AVS, so that much of the paper is concerned with a comparison of the readings of $\mathrm{Ppp}, \mathrm{RV}$ and S . In the introduction to Ppp Bk 1 (JAOS 26. 203) I recorded the impression that Ppp tends to agree with RV against $\mathcal{S}$; this study is made in an effort to test the validity of that impression. Altho the Ppp material is drawn from the first eight books only, these books occupy nearly three sevenths of the entire manuscript; the investigation is preliminary but is not based on material so meagre as to be unworthy of consideration. The study may be called a preliminary consideration of the text of the Ppp, primarily in its relations to $R V$ and $s$.

In several brief chapters the material is presented, with some evaluating comments. Regularly the reading of Ppp is given first, then the reading of RV, then the reading of other texts; reference to stanzas is made by the Ppp numbers; usually the words are quoted exactly as they stand in sandhi, but no mention is made of Ppp peculiarities of sandhi. The Ppp readings are usually given as edited, but the reading of the ms is given where it seems needed.

## I. Material appearing in Pāipp and $R V$ only.

(A.) Päipp 1.84 has 8 of the 12 stanzas of RV 10. 58, and adds 2 new ones; the order of stanzas may be compared thus:

$$
\begin{array}{ll}
\operatorname{Ppp} & 1,2,3,4,5,6,7,8,9,10 . \\
\operatorname{RV} & 4,3,1,-, 5,2,8,-, 7,11 .
\end{array}
$$

[^3]Ppp shows only ordinary Atharvan adaptations: in 1a Ppp catussraktim, RV caturbhrṣțim; 10a parā parāvatam, parāh parāvatah; in st 4 it has vāyum antariksam (wrongly edited) and in st 8 candram nakṣatrāni.

Päipp 1. $10^{\prime \prime}$ is RV 10. 168 followed by two new stanzas: stt 3 and 4 in Ppp are 4 and 3 in RV. Some variants are significant. In 1a Ppp ms has mahimā for RV mahimānam, but this may be only a graphic error; 1b bhañjayann for rujann to the detriment of the metre; 1c Ppp ms divasprg yety, probably intending ety, for RV divisprg yāty; 1d atho eti for uto eti. For 2b RV has āinam gachanti samanam na yoṣāh, Ppp ms nāinaḿ gacchanti sumaneva yoṣā: cf. RV 4. 58. 8a (Ppp 8. 13. 8a) abhi pravanta samaneva yosāḥ, and RV 6. 75. 4a te ācarantī samaneva yoṣā; noting that RV 4. 58. 8 occurs in VS and KS, and RV 6. 75. 4 in VS, TS, MS and KSA, while RV 10. 168. 2 is in RV only, the Ppp form is established and explained : read for it āinam gacchanti samaneva yoṣāh. In 2e Ppp vidvān, RV sayuk; 2d patir viśvasya bhuvanasya gopāh, asya ${ }^{\circ}$ ㅇ rājā. For 3a Ppp has ātmā vāi devānām bhuvanasya gopāh, RV ātmā devānām ${ }^{\circ}$ garbhaḥ; note that Ppp 2d and 3a have same cadence: in 3d ekah for esah may be only a graphic error; in 3c Ppp has ghoṣa id asya śrūyate, avoiding the difficulty of RV ghosā ${ }^{\circ}$ 。 śrṇivire. For 4c Ppp (and GB 1.2.8) apām yonị̄ prathamajā ṛtasya, RV apām sakhā ${ }^{\circ}$ ṛtāvā.

These variants show characteristic Atharvan modulation, accomplished however with some restraint and intelligence. The two new stanzas are anustuabh, 5cd appearing S 10.8.14ed: in style they do not match the others.

Päipp 4. 26 is RV 8. 91 with stt 3 and 4 in reverse order: in 1d and e Ppp has sunavāni, RV (and JB) sunavāi: 3a karat kuvit, kuvit karat; 6b tanvain pari, tanvam mama; 7e Ppp and RV pūtvy, Ś 14.1.41c pūtvā.

Pāipp 4. 28 shows only one variant from RV 1. 106, vājayantam for vājayann iha in $4 b$; in RV the verb with vājayann is imahe.

Päipp.5. 38 is RV 10. 136 with the addition of what may be an eighth stanza. Variants: 2d ayukṣata, avikṣata; 3d paśyata, paśyatha; 4b svar bhūtāvacākaśat, viśvā rūpāva ${ }^{\circ}$; 4 d yatah, hitaḥ; 5a indrasyāśvo, vātasyāśvo; 5d sadyaṣ pūrvam utā̀param, yaś ca pūrva utāparah, 6b devānā̀n, mrgānām; 6ic muniṣ ${ }^{\circ}$ samividvān, keśī ${ }^{\circ}$ vidvā̀nt; 7c munir, keśī. With 4ab cf. $\mathbb{S}$ 6. 80.1 where $S$ has viśvā bhūtāva ${ }^{\circ}$ : Ppp svar is confirmed by its version of S 6: 80. 1 on f. 247 b where it has svar bhūtā vyacācalat.

Päipp 5. 39 is RV 10. 126 with stt 4 and 6 interchanged. Variants: 2 d nethātha, nethā ca; 5d ādityam, agnim; 7b vocatives, nominatives; 7e priyāh, priye. , For st 3 Ppp has ttan no tanū yūyam $\dagger$ ūtaye varuṇa mitrāryaman | nayiṣthā no neṣani stha parșiṣthāṣ parṣino ati dviṣah; RV has te nūnam no 'yam ūtaye varuno mitro aryamā | nayisṭhā u no neṣani parṣisṭhā u nah parṣany ati dvisah. It may be that in $2 \mathrm{~d} \operatorname{Ppp}$ has no variant, but in st 3 there is a clear attempt to reshape the RV form.

Pa $\bar{a} i p p 6.17$ is RV 1. 19 with one stanza, possibly two, added. The Ppp ms gives clearly enough the 9 stanzas of RV 1. 19, interchanging stt 4 and 5 and also the similar pādas 7 b and 8 b ; then it has ā yantu maruto ganāai stutā dadhatu no rayim | $\bar{a}$ tvā kanvvāhūṣata grnamintu vipra te dhiyah marudbhir agna ā gahi. If now we may suppose that 'marudbhi' has fallen out after rayim we could read two gayyatrī stanzas at the end of this hymn each with the refrain as in the first nine,- the first of these a new stanza, the next RV 1. 14. 2 with devebhir replaced by marudbhir. The hymn would thus be wholly symmetrical with 11 stanzas; it may be significant that Ppp 6. 16 (= RV 1. 187) has eleven stanzas. It seems to me then that for its 6.17 Ppp has added two stanzas to RV 1. 19, the second of the added stanzas being itself in RV.

Pāipp 8. 14 is RV 1. 95. In 2b Ppp vibhrtam, RV vibhrtram (TB vibhartram) ; 3a prati, pari ; in $4 \mathrm{~b} \operatorname{Ppp} \mathrm{~ms}$ has mātṛñ ja ${ }^{\circ}$,
 variant, an attempt to correct a supposed lack of rhythm; in 9a Ppp etu, RV eti. In 11a Ppp ms has ghṛ̣āno RV vṛdhāno; if it must be emended grṇāno would be simplest. The only significant variation here would seem to be in 6d.

Considering now the hymns so far reported there is ground for saying that Ppp has handled this material with restraint: this may be due to the nature of the hymns, which belong to the later RV groups, but the striking thing is how much the Ppp versions resemble the RV hymns, not how greatly they differ.
(B.) Report must be made of some scattered stanzas and pādas.

Päipp 3. 36 along with new stanzas (1 and 4) has RV 1. 102. $4,6,9,10$. In 2a Ppp has jayāsi na parājayāsāi, RV jigetha na dhanā ruröhitha; in 2cd ${ }^{\circ}$ sisisimahe sa tvam na indra havaneṣu mṛ̂a, ․ siśsimasy athā na ${ }^{\circ}$. codaya; in 3a sa sam akratāyat, amitakratuh simah; $\operatorname{Ppp} 3 \mathrm{~d}=$ its $2 \mathrm{~d}, \mathrm{RV}$ athā janā vi hvayante siṣāvah; in 5a Ppp jayema tvayā yujā vrtā vṛdho, RV (and Śs 7. 50.4) ${ }^{\circ}$ yujā vrtam; in 5c Ppp and RV varivas, $S$ varīyas;

6a Ppp sam ārabhe, RV havāmahe; 6d indra karāsi, indrah krnotu. This is probably a vihava prayer, wherein the stanzas which appear also in RV have been considerably modulated to the Atharvan purpose.
Four separate hymns of Ppp contain noteworthy pickings from the material in RV 1. 191: Ppp 4. 16, against ghrānā, handles about one third of the pādas of RV stt 1-7, its st 3 being a close parallel to RV st 2; 4. 17. 5-7 are fairly close to 1.191. $15,14,13 ; 4.19 .1-3$ are fairly close to $1.191 .11,10,12 ; 5.3$. 1-3 have some echoes of 1. 191. 7-9. Ppp uses RV st 13 at the end of its hymns 3. 9, 4. 17, and 4. 19, giving only the pratika the second and third times. The distribution of this material in Ppp is striking; also its associations there.

Pāipp 5. 9. $4 c d$ and 6. 8. $6 c d$ are adaptations of RV 10. 155. 2cd; Ppp 6.8.7 is RV 10. 155. 3 reading in b madhye for pāre, and in d yāhi for gacha.

Päipp 7.3.1ab is RV 6. 48. 7ab with tigmebhir (arcibhir) for brhadbhir. Päipp 7. 3. $6 c d$ is RV 10. 85. 31cd and S 14.2.10cd without variant.
Päipp 7. 11 begins with S 3.21. 10; stt 2-6 contain some pādas_ appearing also in RV 10. 162.3, 4, and 6 (S 20.96) and MG 2. 18. 2 ; the last 3 stanzas are new.

Certain other single RV pādas appear, worked into stanzas of the Pāipp, but they do not seem to offer any definite testimony for this study: they are Ppp 1.54.1a; 1.95.4d; 7.6.1d, 8d; 7. 13. 2b; 7. 18. 4b; 8. 20. 9d.

Of the material in this sub-group that of Ppp 3. 36 seems to show the closest relation to the RV as we know it: much of the rest, belonging to lowly Atharvan ranges, might be regarded as taken into the two collections from a common store and worked up independently.
II. Material in Pāipp, RV, and other collections, but not in S.
(A.) Pāipp 1. 109 is RV 6.74, also in MS 4.11.2; stt 1, 3, 4 are in KS 11. 12; stt 1 and 2 in TS 1. 8. 22. 5 and they constitute S 7. 42. The'stanzas which in Ppp are 1, 2, 3, 4 are in RV 2, 4, 1,3 and in MS 3, 4, 2, 1. Ppp 1c is nearly TS 1.4.45. 1c ; 1d agrees with TS 1. 8. 22. 5 and S, and with verb in 2d person appears in RV 1. 24. 9, TS 1. 4. 45. 1, MS 1. 3. 39 , KS 4. 13. Ppp st 2 varies from the RV version only in c, duritāvadyāt for varuṇasya pāsāat; cd is very different in MS. Ppp 3ab is very close to $a b$ as in RV, MS, and KS ; $c$ is new and $d$ is a variant
of $d$ in the MS stanza corresponding to Ppp st 2, having jetvāni for MS samtamāni. Ppp st 4 has a number of verbal variants without difference of meaning or intent.

This group of stanzas is handled freely in Ppp yet its version is perhaps a little closer to that of RV than to that of MS. The material was familiar in various quarters, and was evidently in a somewhat fluid state.

Päipp 2. 41 occurs RV 10. 159 and ApMB 1. 16, but Ppp has 5 stanzas, the others 6. Variants: le Ppp tenāham, others aham tad; 2b viṣādanī, vivācanī; 2d upācarāt, upācaret; 3d Ppp ms patyār, RV patyāu, ApMB patyur; 4ab original in Ppp but resembling the others; 4 c Ppp and RV idam tad, ApMB aham tad; 5ed Ppp muṣnāmy anyāsām bhagam varco ${ }^{\circ}$, RV āvṛssam ${ }^{\circ}{ }^{\circ}$ rādho ${ }^{\circ}, \mathrm{Ap} \mathrm{MB}$ āvitsi sarvāsām rādho varco ${ }^{\circ}$.

Pāipp has reduced the number of stanzas to its norm for Bk 2 and introduced some original readings; otherwise it is slightly more in agreement with RV.

Päipp '6. 16 appears RV 1. 187 and KS 40. 8: RV and KS agree save in 7a; Ppp has reversed the order of their stt 8 and 9. In 1d Ppp has viparyamardayat, others (also VS and N) viparvam ardayat; 3a à gahi, ā cara; 3d edhi nah, advayāh ; 6a yat te, tve; 7a adaṣ (KS thus), ado; 7c madhupito, madho pito; 7d gamyā̀n, gamyāḥ ; 9b balim sam, pariñśam. The Ppp variants in 1d, 3d, and 9 b seem surely to result from attempts to avoid more difficult readings: and so may fall somewhat under suspicion.

Päipp 8. 13 is RV 4. 58, appearing also VS 17. 89-99 and KS 40. 7: all the stanzas occur in ApS but not together. In 3a Ppp ms has śrn̄gas, and GB 1.2.16, perhaps following Ppp, ${ }^{2}$ has śrn̄gās; all others correctly śrūgā. In 4a Ppp has hi kam, others hitam; 6b sūyamānāḥ, pūyamānāh. In 7b Ppp ms has bhindanty which might stand tho all others have bhindann ; 8a pravante, pravanta; 8b nasante, nasanta; 9a abhicā́kaśiti, abhicākaśìmi ; 10a Ppp and others arṣata, S 7. 82. 1a arcata; 10d Ppp and others pavante, S pavantām:, 11c Ppp anīkāt samithād, others anike samithe. In stt 7, 9, and 11 Ppp seems to attempt more obvious readings and in st 10 its agreement with the others against $S$ is significant.

Looking at these four hymns we note that Ppp 1. 109 is a rather original version of material which RV and MS present in a somewhat patched-up form; there is no clear evidence of interdependence. In the other three hymns Ppp shows in the

[^4]main only characteristically Atharvan modifications; and particularly in the last two it would seem fair to say that the agreement with RV is more striking than the variations from it, but it must be noted that for these two hymns RV and KS have identical texts.
(B.) Some scattered stanzas must be reported.

Päipp 1.53.2 appears also TS 5.7.4. 3: pāda a occurs RV 10. 82. 2b, and in several Yajus texts.

Päipp 1. 65 has 2 new stanzas followed by 2 which Kāuś. quotes in the Ppp form: these are adaptations of RV 10. 97. 20 and 14, $\times$ which hymn occurs also VS 12. 77ff. and TS 4. 2. 6. $\operatorname{Ppp} 3 \mathrm{~d}$ and 4 cd are original ; in st 3 it speaks of one plant, the others of several, but Ppp shifts to the plural in st 4.

Pāipp 2. 30 has for stt 1 and 2 RV 1. 89. 2 and 3 (=VS 25. 15 and 16) with only one variant; in 1d Ppp ms has devānām āyus, RV and VS devā na, but MS 4. 14. 2 has devā nā which probably should be read in Ppp. For st 3 Ppp has RV 10. 15. 2 , reading in b ye 'parāsas pary īyuh, RV ya uparāsa īyuh, S 18. 1. 46 ye aparāsa īyuh; but in d Ppp and RV vikṣu, Ś diksu; VS, TS, and MS agree with RV in this stanza. Ppp st 4 is new, st 5 occurs MS 4.14.17; TB 3.7.12. 2; TA 2.3.1.

Päipp 6. 3. $5 c d$ is an adaptation of RV 6. 52. 15cd (also KS 13. 15); Ppp, in a hymn to the waters, has ta asmabhyam sūdayo viśvam āyuh ksapa usrā varivasyantu śubhrāḥ, RV and KS te asmabhyam ișaye ${ }^{\circ} \circ{ }^{\circ}$ devāh (Ppp ms has asmābhyamin).

Päipp 7. 3. 10 adapts RV 2.33.1 (also in AB and TB) : in a Ppp reads à te pitar marutām sumnam emi, RV etu; in b yuvathāh, yuyothāh ; in d jāyāmahi ${ }^{\circ}$ prajayā, jāyemahi ${ }^{\circ}$ prajābhih.

Päipp 7. 5. 9c gayasphānaṣ prataraṇo vayodhah, RV 1. 91. 19 c and others ${ }^{\circ}$ suvīrah.

Päipp 7. 6 is similar in import to 3.12 : its last stanza is RV 7. 54. 1 which occurs also in TS, MS, SMB, PG, and ApMB. In c Ppp has prati nas taj juṣasva, others prati tan no; for d Ppp catuṣpado dvipada à veśayeha ( $=$ S 13.1 .2 d ) ; Kāuś. 43. 13 quotes the Ppp form of the stanza.

In using these smaller bits of material Ppp shows some freedom of adaptation but in no case any ineptitude; in 2.30. 1d there seems to be an agreement of Ppp and MS against RV and VS.
III. Material in Päipp, RV, Ś, and other collections.
(A.) Päipp-4. 1 corresponds to RV 10.121 and S 4. 2; TS, MS and KS also have versions. A full report of variants is not needed here; see Whitney's Translation for details. Comparison of stanza order :

| Ppp | $1,2,3,4,5,6,7,8$. |
| :--- | :--- |
| RV | $1,2,3,5,6,4,7,-, 8,9,10$. |
| S | $7,1,2,4,3,5,6,8$. |

All versions save is have the same opening stanza; yet Ppp st 8 appears only in the two AV versions: the Yajus-texts give only 8 stanzas. In KS the order of stanzas is almost that of Ppp, reversing stt 2 and 3 . Ppp st 2 appears in $\mathbb{S}$ as 1 ab and 2cd, Ppp st 3 as $2 a b$ and 1 cd ; the other texts all give these stanzas as in Ppp. In 4ab Ppp agrees with RV, S differs greatly and is poor: Ppp 4c has the form given by MS and KS, occurring also RV 2. 12. 2c. Ppp stt 5 and 6 agree rather closely with MS and KS ; Ppp st 7 is really new but resembles a stanza in the Yajus-texts; for pāda d it has, not the refrain, but ekasthūṇe vimite dṛ̣ha ugre. In st 8 (also lacking refrain) Ppp puts garbham in a and vatsam in b ; following st 8 Ppp has what might be a 9th stanza, tho I think not.

The Ppp version of this hymn has its own peculiarities,' and except for the presence of st 8 it is closer to RV than to $S$; its most striking agreements are with MS and KS which have versions rather worse than that of TS but not as bad as that of S.

Pāipp 4.7 corresponds to RV 10. 163, ApMB 1. 17, and S 2. $33 .{ }^{3}$ A table will compare the structure of the versions:


RV and ApMB are practically identical, having 6 stanzas, the AV versions have 7. At the end of each stanza Ppp has vi vṛāmasi, RV vi vṛhāmi te, Ś agreeing with RV in 1d-6d but with Ppp in 7 e . This hymn being little more than a list of parts of the body offers abundant chance for verbal variants: in general arrangement the AV versions are not greatly divergent but in details Ppp is rather original. In $1 b$ Ppp āsyād uta, RV and S chubukād adhi; 1d lalātāā, jihvāyā; 2d urasto, bāhubhyām. In $4 \mathrm{~b} \operatorname{Ppp}$ and S have udarād, RV hrdayād; in 4 and 5 Ppp

[^5]varies considerably from the wording of $S$; in 6 c it reads with S but omits the superfluous bhāsadam; in 7 ab it is nearer to RV, but for 7ed has exactly $S 7$ ce. The independence of $\operatorname{Ppp}$ is evident, yet its version clearly belongs in the AV tradition.

Päipp 4. 29 which appears also RV 1. 97, S 4.33 and TA 6. 11. 1, seems to have only one variant; in 8 a it has nāvayā with RV and TA, S nāvā.

Päipp 4. 31 appears RV 7. 41 and S 3. 16; also in VS, TB, and ApMB. In 1d Ppp and the others have huvema, $S$ havàmahe. In 4 c Ppp ms has utodite maghat sūrye, edited utoditāu maghavant sūrye; better would be utodite: S utoditāu, others utoditā. In 5a Ppp ms has devās with other texts against $\mathbb{S}$ devas (Ppp edition should give devās) : in 5c RV and VS have johavīti, Ppp and all others johavīmi ; in 6a Ppp 'namantu, others namanta; 6c Ppp and others no, S me: 7c Ppp pravīnā, RV, VS, and S prapītā, TB and ApMB prapīnā. Here Ppp tends strongly to agreement with RV and others against $\mathcal{S}$; in 3 pādas it seems to have original readings.

Päipp 5. 4 contains the 9 stanzas of RV 10. 128 (TS 4. 7.14); S 5.3 corresponds but has 11 stanzas; to make up its 14 stanzas Ppp adds as its st 9 a stanza occurring TB 2. 4.3.2, as its st 11 RV 6. 47. 11 (S 7. 86.1), for its st 13 a new one. The order of stanzas may be compared thus:

$$
\begin{array}{ll}
\text { Ppp } & 1,2,3,4,5,6,7,8,9,10,11,12,13,14 . \\
\mathrm{RV} & 1,6,2,4,3,5,8,7,-,-,-,-9 . \\
\mathrm{TS} & 1,6,2,4,3,5,8,7,-, 10,-,-,-9 . \\
\mathrm{S} & 1,2,3,4,5,6,8,9,-, 11,-, 7,-10 .
\end{array}
$$

Ppp st 10 is RVKh 10. 128. 1; it may be significant that Ppp has as its last stanza the last stanza of the RV version. Ppp gives the 5th stanza of the RV version as in RV and TS ; but $S$ expands it into two (the table does not indicate this).

In 3d Ppp, RV, and TS kāme asmin, S kāmāyāsmāi; 7b Ppp and RV puruksuh, S and TS purukṣu; 14d Ppp, RV, VS, TS, KS akran, $\mathbb{S}$ akrata. But in 2 be Ppp agrees closely with $\mathbb{S}$, also in 4 a and d, $5 \mathrm{~d}, 6 \mathrm{~b}, 7 \mathrm{a}, 8 \mathrm{~b}$ and d, and 14 c .

In structure Ppp shows here in general a closer contact with the versions given in RV and TS, but in verbal variants it is more often in accord with $\mathbb{S}$. Taking $P p p$ and $S$ together Oldenberg's observation ${ }^{4}$ seems still to hold: So tritt durch das ganze Sūkta den Abweichungen von $T$ der A-Text, denen von A der T-Text entgegen.

[^6]Pāipp 7. 4 is the apratiratha hymn S 19. 13, appearing RV 10. 103, also in SV, VS, TS, MS, and KS. The stanza order is identical in the two AV versions where the hymn begins with a stanza which does not appear in RV, and stt $10,12,13$ of RV are lacking; the AV collections use these stanzas elsewhere (Ppp 1. 56, S 3. 19). ${ }^{5}$ The agreement of $\operatorname{Ppp}$ and $S$ as to the order of stanzas in this is important; noteworthy also is the almost complete verbal agreement of the two against RV. In 4d Ppp has ūrdhvadhanvā as in TS, MS, and KS; RV and $\bar{S}$ ugradhanvā: in 6b Ppp alone reads satvāno.

The evidently intimate connection between AVP and AVS in regard to this hymn may be cited in support of Roth's suggestion ${ }^{6}$ that much of $\mathbb{S} \mathrm{Bk} 19$ is culled from Ppp.
(B.) Some scattered material is now reported.

Päipp 1.12 is S 2.28 ; for 1 c the AV versions have a variant of a pāda which occurs RV 6. 75. 4b, also in VS, TS, and MS.

Pāipp 1. 20 corresponds to S 1. 19;' st 4ab is a hemistich which occurs $S 6.15 .2 \mathrm{ab}$ and 6.54 . 3ab; st 4 cd is S 1.19 .4 cd and RV 6. 75. 19cd (SV 2. 1222) without variant.

Päipp 1. 25 is S 1.33 ; st 2 ab appears without variant as RV 7. 49. 3ab, also in TS, MS, and ApMB.

Päipp 1. 28 is $\mathrm{S}_{1.22}$, and the last stanza occurs also RV 1. 50. 12, TB 3. 7. 6. 22, and ApS 4. 15. 1: in a Ppp has śsueṣu with RV, RB and ApS, S sukeṣu; but in a and d Ppp has te with S , others me.

Päipp 1. 30 corresponds to 19.52 : st 1ab occurs RV 10. 129.4, also in TB, TA, and NrpU. Ppp, $S$ and NrpU have in a kāmas tad agre sam avartata, others sam avartatādhi. But in 2b Ppp and RV 10. 91. 1d have suṣakhā sakhīyate, Ś sakhā ā sakhīyate.

Päipp 1. 53 has four stanzas which are grouped together in TS 5. 7. 4. 3: the ms then has anyāis ca followed by RV 10. 191. 3 which corresponds to S 6.64 . 2 (also in MS and TB) ; in Ppp the stanza agrees exactly with RV. In Bk 19 (f 242b) Ppp has $\$ 6.64$ but presents only 2 stanzas omitting, perhaps by accident, S 2d and 3abe: it then has 'cānyat pustake' followed by RV 10. 191. 3. It would seem that the RV form of this stanza was strongly in the mind of the $\operatorname{Ppp}$ redactor.

Päipp 1. 56 contains RV 10.103. 13 and 10, and RV 6. 75. 16 : much of this material appears differently arranged in S 3. 19. 6-8. The 3 RV stanzas appear also SV 2. 1212, 1208, 1213; VS

[^7]17. $46,42,45$; TS 4.6.4.4. The stanza order and structure is compared thus:


For 2a Ppp has ud dharṣantām maghavann āyudhāni, RV ud dharṣaya ${ }^{\circ}$, $\mathcal{S}$ ud dharṣantām maghavan vājināni: Ppp begins 2c ud dharsantām, RV and others ( $\dot{S}$ omits) ud vṛtrahan: in 2d Ppp and ŚS begin ud vīrānām, others ud rathānām: Ppp and S begịn 4c jayāmitrān, others gachāmitrān: in 4d Ppp and others have māmīsām kam canoc chiṣah, S māmīsām moci kaś cana. In structure Ppp clearly runs with RV and the Yajustexts, but it is noteworthy how its words agree now with RV now with S .

Päipp 1. 77 can be restored only in part owing to mutilation of the ms: what is given is S 7.84 .2 and $3, \mathrm{RV} 10.180 .3$ and 2, TS 1. 6. 12. 4, KS 8. 16. In 1c Ppp and others amitrayantam, $\mathbb{S}$ amitrāyantam. It is to be noted that $\mathbb{S} 7.84 .1$ occurs in Ppp 3. 33 which corresponds to S 2. 6; along with the 5 stanzas of $\mathbb{S} 2.6 \mathrm{Ppp}$ has $\mathbb{S} 7.84 .1$ and 7.82 .3 , and gives its stanzas exactly in the order in which they occur in VS 27, TS 4. 1. 7. 3, MS 2. 12. 15, KS 18. 16. It is probable then that Ppp 1. 77 did not contain S 7.84 .1.

Pāipp 1. 83 is mutilated but it is clear that in 2e Ppp has dāksāyaṇāhiraṇyam with RVKh 10. 128. 8, against S 1. 35. 2 and VS 34. 51.

Pāipp 1. 93. $2 c$ is a pāda which should be edited to agree with RV 10.90.2c, ArS 4. 6c and VS 31. 2c, etc.; it has īsāno, S 19. 6. 4 c has îśvaro.

Päipp 1. 110 has only the first 4 stanzas of $\leqslant 19.58$; the 4th stanza occurs also RV 10. 101. 8; KS 38. 13; ApŚ 16. 14. 5. In b Ppp and $S$ have varmā, others varma.

Päipp 2.9.5 (reappears with variants as 5. 11. 6 and 8. 10. 11) may be compared with RV 10. 184. 2; SMB 1. 4. 7 ; ApMB 1. 12.2; S 3. 25.3. In 2.9.5c (wrongly edited) and 8. 10. 11c Ppp has ${ }^{\circ}$ aśvinobhā as in $S$; in 5.11 .6 c it has ${ }^{\circ}$ aśvināu devā, and the ms in the margin below 8. 10. 11 rewrites the stanza with ${ }^{\circ}$ aśvināu devāu: RV, SMB, and ApMB have ${ }^{\circ}$ devāu.

Pāipp 2. 22 corresponds to S 3. 17: Ppp stt 1, 2, and 5 which are 2, 1, and 4 in S, appear RV 10. 101. 3 and 4, and 4.57.7; MS 2. 7. 12 has all the stanzas of the Ppp version except st 5. In 1 lb Ppp krte kṣetre, others kṛte yonāu; 1c Ppp and S virājah,
others girā ca. In 2c Ppp seems to agree with S sumnayāu, RV sumnayā; Ppp unlike the others adds a 4th pāda. In 5b Ppp pūṣā mahyam rakṣatu, RV pūṣānu yachatu, S pūṣābhi rakṣatu. In these stanzas Ppp goes its own way, yet shows some striking verbal agreements with $\mathbb{S}$.

Päipp 2. 32.5 is $S 19.62$ without variant: a similar stanza is RVKh 10. 128. 11, which appears with slight variants also HG 1. 10. 6 and ApMB 2. 8. 4.

Pāipp 2. $70.5 a$ is a variant of S 1.2.2a jyāke pari no nama; Ppp ms has vīcite for jyāke, and in view of RV 6. 75. 12 (also in VS, TS, MS) rejīte pari vṛñdhi nah with its variant vṛjīte in KSA 6. 1a, the probable reading for Ppp seems to be vṛjīte.

Päipp 2. 74 corresponds to $S 3.3$; st 1 is adapted, probably with corruptions, from RV 6.11. 4 (MS 4. 14.15) to which Ppp is nearer than is $S$ : Ppp cd amum naya namasā rātahavyam yuñjanti suprajasam pañca janāh, RV āyum na yam rātahavyā añjanti suprayasam ${ }^{\circ}$, S yuñjanti tvā maruto viśvavedasa āmum naya ${ }^{\circ}$ 。

Päipp 3. 5 is S 3.2: the last 2 stanzas occur RV 10. 103. 12 and RVKh 10. 103. 1, also SV 2. 1211 and 1210 and VS 17. 44 and 47. In st 5 Ppp and S agree against the others: in 6 b Ppp asmān abhy ety, RV abhyāiti na ${ }^{\circ}$, S asmān āity abhy; in 6c Ppp and others gūhata, S vidhyata; in 6 dPpp and S yathāiṣām, RV yathāmissān.

Päipp 3. 12 is S 3.21; st 6ab occurs RV 8. 43. 11ab, also in TS, MS, and KS.

Päipp 3. 35 is S 19.15 : the 1st stanza occurs RV 8. 61. 13 (also SV, PB, TB, TA, MahānU and ApS) without variant, tho Ppp ms has tvam na in c for tan na of the others, and also writes maghavan as in S, SV, PB and TB. St 4 is RV 6. 47. 8 and TB 2. 7. 13. 3; Ppp and S have in c ugrā, others resvā, in d Ppp and S kșiyema, others stheyāma. Here again the agreement of Ppp and $S$ is noteworthy.

Pāipp 4. 2 is S 4. 8: st $^{2}$ occurs RV 3. 38. 4, VS 33.28 and KS 37. 9; with them Ppp reads in bstriyas, $S$ stiyam. In c Ppp ms has viṣnor, which is read by the commentator on $S$ and a couple of SPP's mss.

Päipp 6. 3, a hymn to the waters, has for its st 4 RV 10. 17. $10, \mathrm{~S} 6.51 .2$ (also in VS, TS, MS, KS). In a Ppp, S, MS, and KS sūdayantu, RV and VS śundhayantu; in c Ppp and MS ${ }^{\circ}$ vahantu, others ${ }^{\circ}$ vahanti; in d the Ppp ms has ā pūtay emi which von Schroeder gives as the reading of two of his mss and the Kapisṭh S.

Päipp 6. 20 is S 19.47: st 1 occurs also RVKh 10. 127. 1 and VS 34. 32 without variant: st 3 is RVKh 10. 127. 2 and 5 S 9. 28. 10, both of these having yuktāso in b where Ppp and $S$ have drastâro; but in e Ppp reads santr with them, $S$ santy.
Päipp 7.12. 3 and 10 appear RV 10. 145. 3 and 1 , and S 3. 18. 4 and 1, ApMB 1. 15. Ppp has for st 3 uttarāham uttarābhya uttared adharābhyah | adhas sapatnī tsāmakty adhared adharābhyah : others uttarāham uttara uttared uttarābhyah | adhaḥ sapatnī yā mamādharā sādharābhyah.

Ppp uses the first stanza of the other versions for its last, with a variant of their 2 d for its pāda d; Ppp krnute kevalam patim, others patim me kevalam kuru ( S krdhi).
Päpp 8. 3 is S 4.9 with additions: st 11 occurs also RV 10. 97. 12 and VS 12. 86. In a Ppp and S have añjana prasarpasi, others osadhīh prasarpatha, and consequently they have in c bädhadhva (ugro ${ }^{\circ}$ ) where $S$ has bādhasa ${ }^{\circ}$; but Ppp ms reads bādhadhvam showing probably some influence of the RV form. In e Ppp has tasmād, others tato. For its last stanza Ppp has S st 7; pādas ed of this occur RV 10.97. 4 and VS 12.78, and in c Ppp with the others has vāsa, $S$ aham.

The following pādas also belong in this section: Ppp 1. 21. 3c; 1. 99. 1d; 2.5. 4b; 7. 7. 3d; 7. 10. 1d, 6c.

Reviewing this chapter it may reasonably be said that as regards the arrangement of the stanzas of its hymns Ppp tends to agree with RV, and more particularly with Yajus-texts, rather than with $\mathcal{S}$; in wording it is rather often unique, it tends to agree with $R V$ in giving readings better than $S$ gives, but when it is a matter of modulation to distinctly Atharvan tone and purpose it is more likely to agree with $\mathbb{S}$.

## IV. Material in Ppp, RV, and S.

(A.) Pāipp 1.11 corresponds to RV 10. 174 and S 1. 29; RV st 4 and $\delta$ st 4 are omitted. ${ }^{7}$ Stanza order compared thus:

| Ppp | $1,2,3,4,5$. |
| :--- | :--- |
| RV | $1,2,3,-5$. |
| S | $1,2,3,5,6$. |

It will be sufficient to note only the following variants. In 1a Ppp and S maninā, RV havisā ; 1b Ppp and RV abhivāvrte, S abhivāvṛhe; $2 d \operatorname{Ppp}$ and $\mathcal{S}$ durasyati, RV irasyati; 5c Ppp and $S$ vīrānāām, RV bhūtānām. Ppp agrees throughout in giv-

[^8]ing forms of $\mathrm{vr} t+\mathrm{abhi}$, except possibly in 3 b ; but note its manininā and vīrānām.

Pāipp 1. 62 is $\dot{\mathrm{R} V}$ 10.161. 1-4 ( $\mathrm{S} 20.96 .6-9$ ) and S 3. 11. 1-4. For 1c Ppp has a new pāda, and begins 1d tata ${ }^{\circ}$ : in 3a Ppp and S satavīryena, RV śataśāradena; in 3c Ppp and S indro yathāinam, RV śatan yathemam; for 4 c Ppp gives the better reading of RV, but gives 4 d as in S. Ppp and RV agree on the unity of these 4 stanzas tho RV adds a 5th to make up its 10. 161 ; this agreement is emphasized by the fact that Ppp 1.61 is made up out of the material of S $3.11 .5-8$ plus $S 7.53 .5$.

Päipp 2. 88 is RV 10. 152; in S the stanzas are 1.20.4 and 1. 21. 1-4: stt $1-3$ of $\mathbb{S} 1.20$ occur in Ppp Bk 19. While Ppp and RV clearly agree on the structure of the hymn (it stands in Ppp Bk 2 whose norm is 5 stt) its verbal agreements are rather with S except that in 1b Ppp reads with RV amitrakhādo adbhutah, $S$ amitrasāho astrtah ; in 5d Ppp and RV yavayā, S yāvayā, but this might easily be a miswriting in Ppp.

Päipp 3. 34 is S 3.20 ; st 1 is RV 3.29.10, the next 6 are RV 10. 141. Comparison of stanza order is thus:

$$
\begin{array}{lr}
\mathrm{Ppp} & 1,2,3,4,5,6,7,8,9,10 . \\
\mathrm{RV} & 10,1,2,5,3,4,6,-,-, \\
\mathrm{S} & 1,2,3,7,4,6,5,8,9,10 .
\end{array}
$$

The last 2 stanzas appear only in AV, all the others occur scattered in Yajus-texts. ${ }^{8}$. In the Ppp ms after st 1 appears what seems to be 3 pratikas, the first of which occurs TS 1.7.13.4: they do not seem to be a part of the hymn but they indicate a cleavage after st 1.

Ppp and S agree against RV as follows: 1c roha, sīda; 1d rayim, girah; 2c viśām, viśas; 3 d rayim ${ }^{\circ}$ dadhātu, rayo ${ }^{\circ}$ dadātu. But in $3 d \operatorname{Ppp}$ and RV have nah, S me; in 7c Ppp gives the better reading of RV, devatātaye, for $\mathcal{S}$ deva dātave. Except in 7c the agreement of Ppp and $S$ is marked.

Päipp 4. 12 occurs RV 10.84 and S 4.31 , with the same stanza order. In 1b Ppp ms gives rsamanāso rssadā suggesting the form of RV or TB rather than that of S; in 1c Ppp alone has tiksṇesava; in 1d Ppp and TB yanti, RV and S yantu. In stt 2 and 3 Ppp variants are original, save that it agrees with $S^{\text {s in }}$ 3d nayāsā ekaja, RV nayasa ${ }^{\circ}$; in 4a Ppp (ms iḍatāṣ) may agree with RV iḍitah rather than S iḍitā; $4 d \mathrm{Ppp}$ and $R V$ kṛ̣mahe, S kṛ̣masi ; 6a Ppp sahasā, others sahajā ; 6b Ppp and

[^9]RV abhibhūta, s' sahabhūta; 7b Ppp ms dattam varunaś ca manyo (emended varuna) varies from each of the others; 7d of Ppp is new. The most important variants of Ppp here are original, but it has one important agreement with $R V$ in 6 b .

Päipp 4. 32 is RV 10. 83 and S 4. 32; stanza order the same in all. In 1c Ppp and $S$ have redundant vayam, $R V$ omits it; 1d Ppp mahīyasã, RV and S sahasvatā ; 2c Ppp ms has manyur as in $S, R V$ and others correctly manyum; $3 b$ Ppp jahīha, others jahi; 4c Ppp and S sahīyān, RV sahāvān; 5d Ppp and S baladāvā na ehi, RV baladeyāya mehi; 6a Ppp and RV upa mehy, S upa na ehy; 6b Ppp upa na $\bar{a}, R V$ abhi mām à, $S^{\prime}$ abhi na $\bar{a}$; 7a Ppp and Śs bhavā no, RV bhavà me; in 7bed RV and $S$ agree against Ppp. The agreement of Ppp and RV in 6a is striking: more striking, perhaps, are the agreements of RV and S .

Päipp 5. 18 corresponds to RV 10. 137 and S 4. 13, but has 2 more stanzas. Stanza order is compared thus:

$$
\begin{array}{ll}
\operatorname{Ppp} & 1,2,3,4,5,6,7,8,9 . \\
R V & 1,4,2,3,5,-,-, 7,6 . \\
\mathrm{S} & 1,5,2,3,4,-, 6,7,-.
\end{array}
$$

Pāipp st 7 is RV 10. 60. 12; for st 9 see S 6. 91.3 and Ppp 3. 2. 7. It will be noted that $\mathcal{S}$ substitutes RV 10. 62.12 for RV 10. 137. 6 ; Ppp does the same but uses RV 10. 137. 6 as its last stanza. The first 5 stanzas seem to be a basic group which the three collections have extended each in its own way.

In st 1 Ppp has original readings: in a ud dharathā for un nayathā, in c uto manuşam tam for utāgaśs cakruṣam, in d dāivaṣ krụuta jīvase (cf RV 8.67. 17c) for devā jīvāyathā punah; its 2 d is somewhat original; in 5d Ppp agado 'sati, others arapā asat; in 8c Ppp śambhubhyāni, RV tvā, S hastābhyām. Ppp and RV agree against $S$ only in 3d parānyo for vy anyo, $4 \mathrm{c}^{-0}$ bhesajo for ${ }^{\circ}$ bhesaja. Ppp and S agree against RV in 5a imam for iha, 8d tvābhi mṛ́samasi for tvopa spṛsamasi, 9 c viśvasya for sarvasya. ${ }^{9}$

Päipp 6. 1 occurs RV 10. 120 (S 20. 107. 4-12) and S 5. 2. Ppp and RV have same stanza order, S 5. 2 reverses stt 6 and 7. In 1d Ppp agrees with RV, SV, VS, AA; 2d Ppp sam te navantah pipṛtā madesu, all others navanta prabhṛtā ; 3a Ppp and others vب̣ñjanti viśve, S prãcanti bhūri; $4 b \operatorname{Ppp}$ ranam. raṇam, RV made-made, S ranee-rane; 4 d Ppp durevà yātudhā̄nāh, RV yātudhānā durevāḥ, S durevāsah kaśokāh ; Ppp st

[^10]6 agrees with RV st 6 in contrast to the irregularities of $S$ st 7 ; in 7c Ppp ms has ā mātara sthāpayase jighantva, RV ā mātarā sthāpayase jigatnū, S̄ à sthāpayata mātaram jigatnum; in st 9 Ppp and RV agree, for it is very likely that mām in the Ppp ms is for mahān, and its yavasā for śavasā, tho vayasā might be considered. The agreement of Ppp and RV is marked; the original reading of Ppp in 2 d might be due to a rather late emendation.
(B.) Some scattered stanzas are now reported.

Päipp 1. 51. 4 appears RV.1.31.16, and the first two pādas S 3. 15. 4 ab (a st of 6 pādas) ; these pādas do not fit well into S 3.15. Ppp uses the stanza more appropriately, agreeing with RV in b except that it has at the end of $b$ dūram as in $S$ (and LS 3. 2. 7) for RV dūrāt.

Päipp 1. 111. 1 appears RV 10. 60. 11 and S 6.91. 2; in a Ppp and S vāto vāti, RV vāto 'va vāti; Ppp d nyag bhavatu te viṣam, $R V$ and $S^{\circ}$ rapah. St 2 of this same hymn is an adaptation of RV 1. 191. 4 and S 6.52.2: pāda a is the same in all, Ppp b is corrupt but clearly differs from the others which agree; for c Ppp and S ny ūrmayo nadīnām, RV ni ketavo janānām; Ppp d ny ucchuṣmā rasānām, RV and S ny adrṣṭā alipsata. The stanza appears in Ppp Bk 19 (f 242b) in the Ppp version of $\mathbf{S} 6.52$ : there it agrees with RV except ayaksata for aviksata. Further note that the first hemistich as in RV and $S^{S}$ is Ppp 4. 16. 7ab (see above p. 4). In Ppp 1. 111 the stanza has been modified to suit the import of the hymn which is against snake-poison.

Pāipp 2. 5 is $\mathbb{S} 2.12$ : st 6 occurs also RV 6.52. 2. In a Ppp and $S$ atīva, RV ati và; in b Ppp and $S$ nindiṣat kriyamānam, RV kriyamānam ninitsat; in d Ppp and RV abhi tam śocatu dyāuh, ŚS dyāur abhisañtapāti. Ppp 2.5.8cd (=S 2.12.7cd) are reminiscent of RV 10. 14. 13cd.

Pāipp 2.6.1cd reads idam dhenur aduhaj jāyamānās svarvido abhy anuktir virāt: $S 2.1 .1$ has prśnir in c and in d abhyanūṣata vrāh; RV 10. 51. 19d is idam dhenur aduhaj jāyamānā, of which Ppp is at least reminiscent. For st 3 of this hymn Ppp uses a stanza which appears VS 32. 10; TA 10. 1. 4; MahānU 2. 5; in d it has samāne dhāmany, S samāne yonāv, others trtīye dhāmany: cf RV 10. 82. 3.

Pāipp 2. 33. 2cd is reminiscent of RV 10. 145. 6ce which is also S 3. 18. 6ce.

Pāipp 2.3\%.2 (repetition as 3.30 .1 is indicated by pratika)
is given in the form which appears $\mathbb{S} 19.57 .1 ;$ \& 6.46 .3 varies only in d, having dvisate for apriye, and RV 8. 47. 17d has āptye; RV also has samnayāmasi in b, AV `nayanti; and RV adds two pādas.

Päipp 3. 1 is S 3.4 with an 8th stanza whose 2 d hemistich is RV 10.173. 6 cd (Ppp atra in c, RV atho); $\$ 7.94$ has the entire RV stanza but reads in c yathā na ${ }^{\circ}$ for atho ta ${ }^{\circ}$, in $d$ sammanasas for balihrtas.

Päipp 3.2 is $\mathcal{S} \dot{3} .7$ with $\dot{S}$ st 5 at the end: Ppp and $\dot{S}$ have the same pāda d tās tvā muñcantu kṣetriyāt. In Ppp 5. 18 (S 4. 13 and RV 10. 137) this stanza occurs again, and again as the final stanza; and pāda d then agrees exactly with RV and S 6.91. 3d tās te krnvantu bheșajam (see above p. 14).

Päipp 3. 6 is S .1 : st 4 occurs also RV 3. 30.6 ; in a RV has pra sū ta, S prasūta, and Ppp might be either as it has no accents; in b Ppp yāhi, othérs etu; for d Ppp viśvam visṭam kṛ̣uhi satyam eṣām, RV visvam satyam ${ }^{\circ}$ viṣtam astu, $\mathrm{S}^{\text {S }}$ viṣvak satyam ${ }^{\circ}$ cittam esām.

Päipp 4.6 is S 4.5 ; stt $1,3,5,6,7$ of AV are RV 7. 55. 7, 8, 6 , 5, and RVKh 7. 55. 1. In 1a Ppp has hiranyaśrñ̄go, RV and S sahasra ${ }^{\circ}$ : 3a Ppp vahyeśayās proṣtheśayā, RV proṣtheśayà vahyeśayā, Ś proṣṭheśayās talpeśayā ; 3b Ppp and RV narī̀ yās talpaśīvarīh, $\mathbb{S}^{\circ \circ}$ vahyaśīvarīh; 5a Ppp ms and $S$ yaś carati, RV yaś ca carati ; 5b Ppp and Ś yaś ca tisṭthan vipaśyati, RV yaś ca paśyati no janaḥ; 5c Ppp 'kṣāni, RV akṣāni, Š akṣiṇi; 7a Ppp svapna svapnādhikaraṇena, RVKh svapnah svapnādhikarane, S svapna svapnābhikarànena; 7c Ppp and $\dot{S}$ otsūryam, RVKh ā sūryam ; 7d Ppp dvyuṣam caratād, RVKh dvyuṣam jagriyād, S āvyuṣam jagṛtād; 7e Ppp and Ry 10. 166. 2 b aksatah, S akṣitah.

Päipp 5.7 is S 4. 15; st 10cde appears RV 5. 83. 6bcd and S st 11cd and 12a; in c Ppp and S have pra pyāyatām $\circ$ 。 reto, RV pra pinvatā ${ }^{\circ}{ }^{\circ}$ dhārā̄h; all agree in the other pādas. Stt 12 and 13 of Ppp are 13 and 14 in S, and RV 7. 103. 1 and RVKh 7. 103. 1: the only variant is that the khila has upaplavada for AV upapravada in pāda a.

Päipp 6.2 is S 5.1: st 6 of S is RV 10. 5. 6 but Ppp gives only pādas ab and reads in b anekām for ekām of the others.

Pāipp 6. 11 corresponds to S 5.6 and like it seems to be only a group of disconnected stanzas: S st 3 occurs also RV 9. 73. 4 and Ppp using it as st 4 puts in as its st 3 RV 9. 73. 6. In 3a Ppp reads pari ye sambabhūvuh for RV adhy à ye samasvaran; in 3 b ślokavantas sāumanasya for ślokayantrāso ra-
bhasya; in cd Ppp is defaced but possibly does not vary from RV. In $4 a$ Ppp has sahasradhāram abhi, RV sahasradhāre 'va, S sahasradhāra eva; Ppp has a clearer text, tho possibly not better; in c Ppp and S tasya, RV asya. Ppp st 5 corresponds to $S$ st 4 and both have a debased form of RV 9.110. 1, but Ppp reading cannot be restored with assurance; the ms reads divas tud arnavān nīyase.

Pāipp 7. 2 is $\mathbf{S} 5.23$; Ppp st 7 uses for pāda a ud asāu sūryo agāt (= RV 10. 159.1a; S 1.29.5a) ; Ś has ut purastāt sūrya eti ( $=$ RV 1. 191. 8a) which has not appeared in Ppp thus far; but ud asāu ${ }^{\circ}{ }^{\circ}$ has appeared 3 times.

In this section belong also Ppp 1. 7. 2b; 5. 13. 1b, 8c.

## Summary.

To a large extent the variations tell their own story. In regard to the entire hymns appearing only in Ppp and RV it may be said that in content they are not distinctly Atharvanyet reasons for their inclusion in Ppp can be seen-and no strong effort was put forth to adapt them, for even the variants and the two stanzas added to RV 10. 168 do not seem to change the tone much. As RV hymns these are not among the worthiest productions, but as AV hymns they by no means drop to the low levels of much AV material. The treatment of the material of ch. 1B is freer, as would naturally be expected : especially noteworthy is the handling of the stanzas of RV 1. 191, its composite structure being emphasized by the Ppp distribution.

Of the four entire hymns that appear in Ppp, RV and elsewhere except $S$, the first two are real Atharvan, the next two are not distinctly so and as in the hymns of ch. 1A there was no strong effort made to adapt them: this may however be due to their presence in KS. The probable agreement of Ppp 2. 30. 1d with MS seems to be important: indeed a study of the relations of Ppp to MS and KS may yield more important results than those attained here.

In ch. 3A several points stand out clearly: Ppp shows originality both in structure and wording; it shows agreements with RV, also with MS and KS, in regard to stanza order and in the combination of hemistichs into stanzas, e. g. the opening stanza of Ppp 4. 1 and the arrangement of hemistichs in 4.1.2 and 3 and in 5.4.6; but set off against these we note the presence of 4. 1. 8 only in Ppp and $S$, a closer agreement with $S$ in the
structure of Ppp 4. 7, and a stanza order in 5. 4. 1-8 more like that of $S$ than like that of $R V$ and TS; Ppp has some noteworthy agreements with RV and others, as in 4. 1. 4, 4. 29.8, 4. 31. 1 and 5 , and 5.4.3, but it has also verbal agreements with S no less striking, as in stt 4, 6, and 7 of 4.7 and in several stanzas of 5.4 ; and finally Ppp 7.4 and S 19.13 are in almost complete agreement.

Eight hymns are reported in ch. 4 A as being given as entire hymns only in Ppp, RV and S; in two of them (1. 62 and 2. 88) the agreement of Ppp and RV as to structure is marked, in two others (1. 11 and 5. 18) Ppp agrees with RV not more than with $S$; in 3.34 Ppp and S agree exactly in structure, in 4.12 and 4.32 the three texts agree, and in 6. 1 the variation of $S$ is probably not significant. In the matter of verbel variants Ppp offers some original readings, it shows agreements with RV some of which are better than the readings of S, e. g. in 1. 11, 1. $62.4 \mathrm{c}, 3$. $34.7 \mathrm{c}, 4.12 .6 \mathrm{~b}$ and particularly in 6. 1 ; yet it shows rather more agreements with $S$ and some of these are poorer than RV, as in 4.32. 1c and 2c. The material taken up in ch. 4B shows just the same diversity. This swing of Ppp from agreement with RV to agreement with $S$ may be made clear in another way: Bloomfield in his book on the AV in Bühler's Grundriss discusses in § 43 the relation of S to RV and sets out a number of examples illustrating 'the constant removal of the Atharvan stanzas from the more archaic hieratic form and thought sphere to the plainer habits of speech and thought of the people'; Ppp Books 1-8 do not contain all his examples but when they do appear Ppp agrees with RV in just about half of them.

As summarizing the results of this study we may set down the following propositions which a fuller acquaintance with the Ppp will probably confirm : 1) the originality and independence of Ppp is rather more distinct and important than some of us may have realized hitherto ; 2) the agreement of Ppp with RV (or Yajus texts) is more notable in regard to structure than in regard to words; 3) Ppp does show some tendency to agree with RV against $S$ in wording, having a considerable number of agreements with RV upon readings better than those of $\mathbb{S}$, but this is balanced by an almost equal number of agreements with poorer readings of $s ; 4$ ) it will probably become quite clear that most of the hymns of S Bk 19 are drawn from Ppp.

[^11]
# ON THE LITHUANIAN WORD-STOCK AS INDOEUROPEAN MATERIAL 

Harold Herman Bender<br>Professor of Indo-Germanic Philology, Princeton University

, No argumbner is necessary to show the importance of the rôle that Lithuanian has played on the Indo-European stage. The coryphei from Bopp on have paralleled it with Sanskrit, Greek, and Latin. As early as 1856 August Schleicher (Litauische Grammatik, Prag, p. 2) said: 'unter allen lebenden indogermanischen sprachen zeigt es [das litauische] in seinen lauten die bei weitem grösste altertümlichkeit'. More than one philologist of the present generation has made the flat statement that the Lithuanian is the most archaic of all living Indo-European languages. ${ }^{1}$

The statement has always been based primarily upon the preservation in Lithuanian of Indo-European ablaut, accent, and inflectional forms. To be sure these are the chief contributions of Lithuanian to comparative research, but it might surprise even the eulogists of the language to learn that the recent etymological dictionaries and the philological journals give comparative value to a total of Lithuanian words that is not far behind the number of Greek words discussed in Prellwitz's Etymologisches Wörterbuch der griechischen Sprache, making due allowance in each case for cross-references and simple derivatives.

In some respects, however, comparative study of Lithuanian has been handicapped from the very beginning. Other languages had a long written tradition that immediately became available to the comparative student, subject only to his revision according to comparative methods and the results of modern research. In some instances this tradition covered not only the literature of a race from prehistoric times, but also centuries of
${ }^{1}$ Notice e. g. Whitney, Language and the Study of Language ${ }^{6}$ (New York, 1901), p. 215; Schrader, Reallexilion der indogermanischen Altertumskunde (Strassburg, 1901), p. 891; Hirt, Die Indogermanen (Strassburg, 1905), pp. 125, 196; Feist, Kultur, Ausbreitung und Herkunft der Indogermanen (Berlin, 1913), p. 440; von Schroeder, Arische Religion (Leipzig, 1914), p. 223.
investigation of grammatical, lexicographical, and even etymological matters. Lithuanian literature, on the other hand, has been largely one of oral tradition. The dainos, or folk-songs, from every point of view its richest product, ${ }^{2}$ have only in relatively recent times, and then only in part, been reduced to writing. The speech has always been on the whole a peasant speech. Lithuanian has never had a Pānini, an Apollonius, an Ulfilas.
Even to-day there is no adequate dictionary or grammar of Lithuanian. The fault has not lain with the lexicographers and grammarians of the language. Each in his own way has hewn a trail with the initiative and perseverance of the explorer. The difficulty lay in the terrain they had to cover. To mention names like Szyrwid, Mielcke, Nesselmann, Kurschat, Juškevič for the vocabulary; Schleicher, Kurschat, Wiedemann for the grammar; Brückner and Prellwitz for loan-words; Geitler and Bezzenberger for special investigations-to mention these names is merely to select the names of a few of the pioneers, and to recall our debt to them.

But surely no one has tried to run down a doubtful Lithuanian word to its source without being willing to admit with feeling that recorded Lithuanian verbal and formal tradition is a very uncertain matter and that Lithuanian orthography leaves much to be desired. In orthography one finds the same sound variously represented by $s z, \check{s}$, sch, $\check{z}$, and a German digraph; in declension one finds readily nineteen distinct written forms of the genitive singular of the first personal pronoun, depending upon period, dialect, and position in the sentence; in vocabulary one finds derived from one stem, in one system of transcription, and in one dialect at least seventeen different words for 'girl'- and the number of dialects in Lithuanian has not yet been counted.

The language has been fortunate, however, in attracting the

[^12]active interest of some of Germany's best philologists. But the comparative students who knew the language best realized perfectly that their immediate task was to record as much linguistic material as possible before it should be too late. They were the collectors in the field; the mounting and classification could be left to others-which is not to say that men like Leskien and Brugmann did not successfully play both rôles. With the increasing Polish, Russian, and German influence in Lithuania, with the coming of the railroad, the telegraph, and the press, with the spread of Christianity, much of the old Lithuania was beginning to disappear, especially in the western part of Lithuanian territory. Words that had been current for centuries were becoming obsolete. The grandmother crooned before the hearth a folk-song that she had learned as a girl but which her grandchildren did not know. It was often considered even sacrilegious to sing the ancient songs of the heathen thundergod or the amorous moon. ${ }^{3}$

Only one scholar has made any serious and successful effort to arrange the bulk of the Lithuanian material for comparative use. ${ }^{4}$ In 1884, as a part of Bd. IX of the Abhandlungen der philol.-hist. Kl. der kgl. sächs. Ges. d. Wiss., Leskien published
${ }^{3}$ Thus Leskien in Leskien-Brugmann, Litauische Volkslieder und Märchen (Strassburg, 1882), p. 3: 'Trotz dieser Fülle wird die Volkspoesie dort nicht lange mehr leben; die bei dem heranwachsenden Geschlecht stark fortschreitende Germanisirung vertilgt natürlich auch die Lieder. Unter den Litauern selbst besteht aber eine Abneigung gegen ihre alte Poesie. Sämmtliche maldininkai, d. h. die Leute, welche Gebetsversammlungen (surinkimai) halten und sich daran betheiligen, halten das Daina-singen für Sünde, und mit ihnen viele andere fromme Leute, wenn sie auch nicht gerade maldininkai sind. Es mag der Einfluss von dieser Seite sein, dass, so weit meine Erfahrung reicht, das Singen und Hersagen von Liedern, so unschuldig sie meistens auch sind, nirgends mehr für recht anständig gilt. Die Leute lehnten die Mittheilung derselben oft aus diesem Grunde ab, und wer sich dennoch dazu bewegen liess, hatte zuweilen eine Strafpredigt von Bekannten und Nachbarn auszuhalten'. Likewise Kurschat, Grammatik der littauischen Sprache (Halle, 1876), § 1651: 'Wie sittlich rein und zart eine Daina gehalten sein möchte, in den Augen des ernsten Littauers [im preussischen Littauen] wird sie dennoch als ein Ausdruck einer Lustigkeit angesehen, mit welcher der Träger des geistlichen Amtes nicht in Berührung kommen darf, ohne dadurch entweiht zu werden'. See also Schleicher, Litauische Grammatik, §3, and the last paragraph of the introduction to Bezzenberger's Litauische Forschungen (Göttingen, 1882).
'I omit here such studies as Sommer's Die indogermanischen iā- und io-Stämme im Baltischen (Leipzig, 1914). Sommer handles a particular problem and a particular class of words; nor is his material, painstaking and abundant as it is, handily arranged for the general investigator.
at Leipzig his Ablaut der Wurzelsilben im Litauischen; in 1891, as a part of Bd. XII of the same Abhandlungen, appeared his Bildung der Nomina im Litauischen. Leskien's work displayed so much insight into Lithuanian and so much outsight into Indo-European that it has stood to this day more or less as the finished product of Lithuanian's contribution to comparative etymology. The proponent of a new etymology goes straight to Leskien and, usually, no further. With only one or two exceptions (notably Berneker's Slavisches etymologisches Wörterbuch) the etymological dictionaries of other languages have drawn, directly or indirectly, but in the end almost solely, upon Leskien for the Lithuanian. One distinguished and valuable etymological dictionary obtained its Lithuanian contributions from Leskien a generation and more ago; thru edition after edition they were subjected to practically no revision or augmentation, despite the fact that diacritical marks and even letters were constantly dropping and changing in the reprinting, and despite the fact that Lithuanian scholarship had really made some progress in the meantime.

In a number of instances Leskien (rarely, to be sure) or some later writer made an error in the transcription of a Lithuanian word, or by accident ascribed to Lithuanian a Lettish or Old Prussian form. In the Ablaut the little 'le' that distinguishes a Lettish, word from its Lithuanian predecessors and successors is easily overlooked; in the Nomina one often has to recognize a word or its literal make-up, or else make some investigation of Leskien's systematization, before one can designate the word as Lithuanian or Lettish. In these two ways, at least, forms that, so far as we know, never existed in Lithuanian have got into the journals and etymological dictionaries, and have won acceptance as genuine Lithuanian forms. ${ }^{5}$

These, however, are chiefly questions of detail. A more important matter is the tendency to accept at face value the

[^13]ablaut groups proposed by Leskien, almost as if they were finally and definitely all-inclusive and all-exclusive. But Leskien himself would be the first to acknowledge the limitations of his material. For example, he says (Ablaut, 266): 'Es enthält das Verzeichniss also nur diejenigen litauischen und lettischen Worte, die mit anderen derselben Wurzel in einem Ablautsverhältnisse stehen, dagegen nicht diejenigen, deren Stellung in einer bestimmten Vocalreihe sich nur etymologisch durch Vergleichung der anderen indogermanischen Sprachen bestimmen lässt'. ${ }^{6}$ His groupings were often frankly tentative and sug'gestive; his work abounds with the question-mark and the phrase 'zweifelhafte Zusammenstellung'.

And yet again and again illustrations and theories have been based upon Leskien as if there were no other evidence available as to form and no other opinion as to ablaut-grouping. To take one concrete example: gaudonẽ 'horse-fly' is connected by Leskien (Ablaut, 298; Nomina, 392) with gaũsti 'buzz, hum'. Every etymologist that has since treated the root has included this particular stem-simply because Leskien does and because it seems natural for a fly of any kind to buzz. A little investigation would have disclosed the fact that the horse-fly never makes a sound, and that gaudoné belongs to gáudyti 'to seize, to catch', an entirely different Indo-European root. ${ }^{7}$

Thanks mainly to Leskien, the Lithuanian word-stock, as it is now available to comparative students, needs only a moderate

[^14]degree of correction and revision in order to become quite reliable Indo-European material. But a large mass of lexicographical and other information is available (if not directly at hand) to the Lithuanian student that is not yet available to the general philologist. Just here, it seems to me, lies the immediate task of the comparative student of the language.

Lithuania hopes to revive the old University of Vilna; somewhere she will soon have a university of her own. Despite German and Russian restrictions, a number of young Lithuanians have had university training. The past quarter of a century has revealed a remarkable development of Lithuanian national and linguistic consciousness. Her language has always been Lithuania's proudest possession-now more than ever when she sees the dawn of national independence. It seems fair to assume that in the near future the collection of dainos, the recordation of dialectic forms, the accumulation and publication of linguistic matter in general may safely be left in large part to the Lithuanians themselves. From then on the work of the more general student will be the verification, classification, and application of the material gathered.

The illustrations that follow have been developed from casual notes selected almost at random from hundreds of similar suggestions, the worth of which cannot be determined until they have been worked out one by one. But the examples given here are, I believe, fairly representative. It is hoped that the illustrations may have some intrinsic value, but my present purpose is primarily to show the necessity of some revamping of the Lithuanian Wortschatz for comparative use, and secondarily to indicate roughly the kind of investigation that seems to be needed.

1. In'Leskien's Ablaut (p. 295) appears the following ablaut group (quoted literatim) :
' $u$. dumbù (le $d u b u$ ) dubaú dùbti hohl werden, einsinken; le dubli m. pl. Koth, Morast; dubùs hohl; duburýs N Loch im Boden (KLD [ ] schreibt dūburýs, daneben dumburýs)~ dùbinti hohl machen.- i. dưbiu diubiau dübti aushöhlen; le di̛bs hohl, tief ; důbë, le důbe Höhle; le důbuls, le di̊bule Vertiefung; ? le dirmis Höhlung, Abgrund~le důbēt aushöhlén.au. daubà Schlucht; dauburýs dss., N auch daubura.'s
[^15]An investigation (made for another putrpose) of every line of Uhlenbeck, Kurzgefasstes etymologisches Wörterbuch der altindischen Sprache (Amsterdam, 1898-9) ; Kluge, Etymologisches Wörterbuch der deutschen Sprache ${ }^{7}$ (Strassburg, 1910) ; Feist, Etymologisches Wörterbuch der gotischen Sprache (Halle, 1909) ; Berneker, Slavisches etymologisches Wörterbuch (Heidelberg, 1908 ff.-thru Band II, p. 80) ; Walde, Lateinisches etymologisches Wörterbuch ${ }^{2}$ (Heidelberg, 1910); Boisacq, Dictionnaire étymologique de la langue grecque (Heidelberg-Paris, 1916) ; Brugmann, Grundriss der vergleichenden Grammatik der indogermanischen Sprachen ${ }^{2}$ (Strassburg, 1897 ff.-thru II, 3, 1. Lieferung) -an investigation of these standard etymological works shows their almost complete dependence upon this little group of words in Leskien in their treatment of the Lithuanian contributions to the Indo-European root *dheub ( $p$ ). The derivation made some years later by Leskien (Nomina, 360) of dùgnas from *dùbnas finally found its way into the dictionaries. Brugmann, in his treatment of Nominalstämme, worked thru Leskien's Nomina and added therefrom to our root two stems that were not in Leskien's Ablaut. Berneker adds three words from Juškevič. ${ }^{9}$ With these few exceptions not a single Lithu-

[^16]anian word is added to Leskien's ablaut group by the dictionaries just mentioned. But the sum of Leskien's group plus the additions in the dictionaries by no means represents, either formally or semantically, all of importance that Lithuanian has to say about IE. "dheub ( $p$ ).

There is no pretense that the following group is complete; at least, simple and obvious derivatives of included words are purposely omitted. It will be understood that in listing each word I express the opinion that it is probably related to the Lithuanian root under consideration. ${ }^{10}$
daburỹs 'Wasserwirbel, Strudel'. Nesselmann 124, Leskien Nom. 448.
daubà 'Schlucht; enges, tiefes Tal; Höhle'; Juškevič also 'a level valley between two mountains'. ${ }^{11}$ The spread of the
(Heidelberg, 1880 ff.) ; Nesselmann $=$ Wörterbuch der littauischen Sprache (Königsberg, 1851); Schleicher = Litäuische Grammatik (Prag, 1856); Sommer $=$ Die indogernanischen $i \bar{a}$ - und io-Stämme im Baltischen (Leipzig, 1914) ; Szyrwid= Dictionarium trium linguarum in usum studiosae juventutis ${ }^{5}$ (Vilna, 1713); Trautmann $=$ Die altpreussischen Sprachdenkmäler (Göttingen, 1910); Uhlenbeck $=$ 历urzgefasstes etymologisches Wörterbuch der altindischen Sprache (Amsterdam, 1898-9); Walde $=$ Lateinisches etymologisches Wörterbuch ${ }^{2}$ (Heidelberg, 1910).
${ }^{10}$ Both vocalism and semantics exclude dambras 'jew's-harp'. Leskien Nom. 438-9 correctly follows Brückner 79 in considering da $\tilde{m} b r a s$ a Slavic loan-word. dambralũpis 'a person with thick lips' seems, however, to lean upon vã̈bras id. From Kurschat $L D W b$. one can form the proportion, vañbras 'ein Dicklipp': vambralüpis id. = dañbras 'Brummeisen': dambralũpis 'ein Dicklipp'. It would be charactéristically Lithuanian to say that a man with a thick, down-hanging lower lip had jew's-harp lips, i. e. lips adapted for playing the instrument. I connect vambras with vañplys' der mit offenem Munde oder mit dicker, herabhangender Lippe dasteht oder umhergeht', vampsóti 'mit offenem Munde dastehen', and then with atvipti (pres. vimpu) 'herabhangen' (von den Lippen usw.) and the group in Leskien Abl. 355. Notice also vañbryti 'fortgesetzt in den Wind hinein bellen, belfern' (Kurschat LDWb. 487).
${ }^{11}$ In ascribing English definitions to words quoted from Juškeviě I have tried to give a composite of his Russian and Polish definitions and his Lithuanian illustrations and synonyms.

It will be noticed frequently, as in the case of daubà, that Juškevič's accent differs from that given by other authorities. Such discrepancies are common thruout the language; they are based primarily upon differences of dialect. A native of one locality will often accent a dissyllabic word on the first syllable, a native of another locality will stress the second syllable. Neither considers the other wrong. I have also observed more than once that a Lithuanian will write the accent on one syllable (or at
word and the variety of its meanings are indicated by its occurrence in Kurschat DLWb. s. v. Grotte, Gruft, Höhle, Schlucht, Thal, Thalschlucht, Loch, Grund.
daubas 'Tal'. Bezzenberger BGLS. 279.
daubé 'Tal'. Nesselmann 148.
daubike 'ein kleines Tal'. Geitler LS. 81.
daubiszkis 'Bergschluchtangehöriger, Höhlenbewohner'. Nesselmann 148, Kurschat LDWb. 79.
daubotas 'Höhlen, Schluchten enthaltend; voller Abgründe'. Nesselmann 148, Lalis 69.
dauburà 'Schlucht'. Nesselmann 148. Cf. Brugmann II, 1, 358.
dauburele (dauburè̀lè ?) 'eine enge Schlucht, ein kleines Tal'. Nesselmann 148. On -êlè, -èlė cf. Kurschat Gram. § 354 ; Leskien Nom. 481; Sommer 167, 198.
dauburỹs 'eine von Bergen eingeschlossene tiefe Stelle, Schlucht'. Kurschat LDWb. 79, ete.
duba 'real estate, farm'. Lalis 79. The semantics are explained by dúbinti 'to hollow, excavate' and dubininkas 'farmer'. ${ }^{12}$
duba 'Scheune'. Geitler LS. 82. The semantics are not clear. One thinks of the preceding $d u b a$, and also of Lett. $d u b a$ 'aufgestellte Garbe, Garbenreihe', of which Leskien says, (Nomina, 227), 'wohl zu diebti hohl werden'. But it probably means 'a hollow place" and is identical with düba, q. v. below; notice particularly Juškevič's definition of the latter word.
dúba 'the hollow of a tree'. Juškevič 356.
dubelis ( $\grave{u}$ or $u$ ? ) 'eiserner Zapfen oder Bolzen, dergleichen gebraucht werden, um die Radfelgen mit einander zu verbinden' (Nesselmann 147); 'nach M[ielcke] die Radsperre, in Südlitt. ein Nagel, der zwei Stücke am Wagen verbindet' (Kurschat LDWb. 96). German loan-word; not from doppelt, as Kurschat suggests, but from *dub, dobel, döbel, dübel, diebel (cf. Brückner 13), of which
least accept the writing as correct), but speak it on another. These facts, it seems to me, have not been sufficiently recognized. Most studies in Lithuanian have been made from the point of view of one dialect or one region. They must not per se be taken as standards of Lithuanian speech, historically or otherwise.
${ }^{12}$ döbai (Nesselmann 144) 'die Beize der Rotgerber' and dübai (Nesselmann 147), dübos (Kurschat LDWb. 96) 'Gerberlohe' are Slavic loanwords. Cf. Brückner 81. For the Slavic stem see Berneker, s. v. dobŭ.

Kluge ${ }^{8}$ (s. v. Döbel) says, 'dazu vielleicht lit. dumbù (dùbti) hohl werden'. For Old Prussian dubelis see Trautmann $\mathrm{pp}_{\dot{i}} 90,324$.
díbyju, dúby'ti 'to eat much, to overeat'. Juškevič 356. The connotation is that of a large belly; see various words below.
dubỹn eĩti 'tiefer werden; (von der Krankheit) zunehmen, sich verschlimmern'. Nesselmann 147 after Szyrwid. On the adverbial form see Kurschat Gram. § 799.
dübininkas 'farmer'. Lalis 79. The first definition in Lalis is 'tanner', which is the usual meaning of the word (e. g. Nesselmann 147, Kurschat LDWb. 96). I assume two distinct stems and connect dübininkas 'farmer' with duba 'farm', dùbinti 'to dig', and, consequently, with our root dùbti. dübininkas 'tanner' is to be connected with the Slavic loan-words mentioned in the note to $d u b a$ 'farm', above.
dùbinu, dùbinti 'hohl machen, etwas aushöhlen, vertiefen'. Kurschat LDWb. 96, Jus̆kevič 356. Lalis 79 translates, 'to tan, to curry, to dress, to hollow, to excavate'. I assume two roots along the lines indicated under the preceding word; but with the difference that here the usual and traditional meaning is 'to hollow out', and not 'to tan'.
dubirania 'die Höhle des Mundes'. Nesselmann 148, on the questioned authority of Brodowski's early eighteenth century lexicon. Cf. Kurschat LDWb. 96 and Nesselmann VI. dubiù, dubëti 'to become full of holes, to become hollow'. Juškevič 356.
dúbla mase. 'a big-bellied old man'. Juškevič 357.
dublë 'a woman with a large abdomen'. Juškevič, s. v. dublýs, q. v. below.
dúblés ${ }^{13}$ fem. plu. 'Gedärme'. MLLG. I, 225. Notice Leskien Nom. 463, 'vgl. etwa le dubl'i Koth, Schlamm, zu dubt einsinken'. Cf. also Leskien Nom. 461.

[^17]$d u b l i ~ i n t e r j . ~ u s e d ~ o f ~ t h e ~ c l u m s y ~ w a l k ~ o f ~ a ~ b i g-b e l l i e d ~ m a n . ~$ Juškevič 357. Cf. Leskien, IF 13. 195.
dubliai 'intestines, entrails'. Lalis 79. See dúblès, above. On the development of this meaning notice Berneker's Slavic citations under the related stem dŭno (Berneker 245-6).
dublinëju, dublunëti 'to walk with a protuberant abdomen, like a swagbelly'. Juškevič 357. Cf. Leskien, IF 13. 195.
dublingé masc. \& fem. 'an awkward, big-bellied person'. Juškevič 357.
dublinge 'ein Darmsack, der auf einer Seite geschlossene Processus vermiformis, hier im Volksmunde Bottend genannt, der zum Wurststopfen verwandt wird'. Nesselmann 147. dublinginè 'Bottend'. Nesselmann 147 and Kurschat LDWb. 96 after Brodowski.
dúbìinu, dúblinti 'to walk like a big-bellied man, to wobble'. Juškevič 357. See dublinëju, above.
dublýs 'a big-bellied man'. Juškevič 357. Cf. Leskien, IF 13. 195.
dublýs 'belly'. Juškevič 357. Cf. Leskien, IF 13. 195.
dubrávas 'a hollow or hole in the road, rut'. Juškevič 357, Lalis 79. Despite Lith. dúburas and Berneker 242 (s. v. dưbrŭ), I consider dubrávas a compound: dub-rávas. rãvas 'a hollow or ditch in the road' does not appear in Nesselmann or Kurschat LDWb., but it does appear in Geitler LS. (106) and Lalis (301) ; and it is a common word in contemporary speech. For the comparative belongings of rãvas see Walde 664; I share none of Walde's hesitancy as to the Slavic origin of the Baltic stem (cf. Brückner, Archiv f. slav. Philol. 20. 494; Brückner 124; Trautmann 414). But apparently the compound was 'made in Lithuania'; nor is it necessary to defend it against the charge of tautology. At the same time I admit that a suggestion of popular etymology would be harder to answer. dubsaũ, dubsóti 'to stand like a dying tree with a hollow trunk'. Juškevič 357.
dúburas 'Grube voll Wasser, Loch, Tümpel'. Juškevič 357. Cf. Berneker, s. v. dŭbř̆.
duburys 'Loch im Boden, Tiefe, Quelle'. Nesselmann 148. See dumburỹs and Kurschat LDWb. 96, Lalis 79, Geitler LS. 63, Leskien Nom. 448, Brugmann II, 1, 358.
duburiuotas 'full of depths'. Lalis 79.
dubùrkis 'a hole or deep place in creek or river, swimming hole, pond'. Juškevič 357. Cf. Berneker, s. v. dŭbrĭ.
dubùs 'hohl, ausgehöhlt; löcherig (vom Wege); tief (von Gefässen)'. Nesselmann 147, Kurschat LDWb. 96, Juškevič 357, Lalis 79-80.
dùgnas 'Boden, Grund'" belongs here if it is from *dùbnas. Cf. Leskien Nom. 360, Brougmann I, 521.
duñblas 'Schlamm, Morast'. Cf. Leskien Nom. 451. For the Lettish see Leskien Nom. 338 (dumbrājs), 436 (dumbrs), 439 (dumbras). For the Old Prussian see Trautmann, s. v. padaubis, p. 387.
dúmblija 'a very muddy place, an expanse of mud'. Juškevič 363.
dum̈blinas 'mit Morast oder Schlamm sehr beschmutzt, bedeckt, voll Schlamm oder Morast'. Kurschat LDWb. 98, etc. Cf. Leskien Nom. 400.
dumblýnas 'Morast'. Cf. Leskien Nom. 409, Brugmann II, 1, 623.
dumblỹ̈ne 'Morast'. Kurschat LDWb. 98. Cf. Leskien Nom. 409.
dumblìngas 'muddy'. Juškevič 363.
dúmblinu, dúmblinti 'to make muddy, to make cloudy'. Juškevič 363.
dúmblus 'muddy'. Juškevič 363.
dumblưjưs, dumblutis 'to become muddy' (e. g. water). Juškevič 363.
dúmbrus 'wet, misty, mouldy'. Juškevič 363.
dumbù, dùbti 'hohl werden, einsinken'. Cf. Leskien Abl. 295. dumburỹs 'Loch, Quelle, gegrabener Teich, vom Strudel ausgehöhlte Tiefe in einem Fluss'. Cf. Geitler LS. 82, Bezzenberger LF. 109, Bezzenberger BGLS. 40, Leskien Nom. 448.
dǐba 'Höhle'. MLLG. III, 106, line 7; Leskien Nom. 232. For meaning see also Juškevič 372: 'a hollow place, especially a simall heated room in a barn for drying grain'.
dübaté 'ein Grübchen (z.B. im Kinn, in der Wange)'. Nesselmann 148.
dưbée 'Vertiefung, Loch, Höhle, Grube, Grab'. Cf. Leskien Abl. 295.
důbekasys 'grave-digger'. Lalis 81. See důbkasỹs, below.
důbele (důbēlė ?) 'ein Grübchen (z.B. im Kinn, in der Wange)'. Nesselmann 148. On -èlè, -éllè see references under dauburele, above.
dibiëtas 'grubig, löcherig' (vom Wege). Nesselmann 148. Cf. Leskien Nom. 562, Brugmann II, 1, 406.
dübinu, důbinti 'aushöhlen, ausschnitzen'. Nesselmann 148. See dùbinu, above.
dǐbiu, dǐbti 'aushöhlen, ausschnitzen'. Cf. Leskien Abl. 295. dủbkasys 'Grubengräber, Totengräber'. Nesselmann 148, etc. Notice diobe-kasys, above. For -kasỹs cf. grab-kasys 'Grabengräber' (Kurschat LDWb. 130; Kurschat DLWb. 561, s. v. Gräber) and.kasù, kàsti 'graben'.
dưbpãraszas 'Grabschrift'. Nesselmann 148. For -pãraszas see Kurschat LDWb. 293.
diobummas 'die hohle Gestalt des Auges in Krankheiten, das Hohlliegen des Auges'. Nesselmann 148.
dübìté 'Grübchen' (auf der Wange). Nesselmann 148; Kurschat $D L W b$. 568 , s. v. Grübchen.
iszdubãviju, iszdubãvyti 'to take out', e. g. 'to extract (a child at birth) by forcible delivery'. Juškevič 571.
iszdǐbëju, iszdえ̉bëti 'to become hollow'. Juškevič 572.
For the Slavic and Indo-European relations of the Lithuanian group, see, especially, Berneker, s. v. dupa, dŭbř̆, dŭno.
2. glomóju, glomóti 'umarmen'. I consider the word a purely Lithuanian variant of the common verb globóju, globóti 'umarmen, umfassen', iterative to glóbiu, glóbti 'umarmen, umhüllen' (q. v. Leskien Abl. 370; Berneker, s. v. glob'q). Berneker (s. v. glenü), Walde (s. v. glomus), and others make glomóti a separate Lithuanian root and connect it with glemžiù, glem̃zzti 'knautschen, zusammendrücken, stopfen, fressen'. The inclusion of glomóti iter. in the ablaut group glew̃zzti, glamžýti iter. (q. v. Leskien Abl. 362 ; Berneker, s. v. glenŭ) is phonetically possible, but, to my mind, highly improbable. There is no evidence of a simple verb from which an independent glomóti could have been directly derived. Whatever connection there may be in IE. 'between the two roots and the two ideas (cf. Walde, s. v.'glomus), it is sheer violence, semantically, to take Lithuanian glomóti 'umarmen' from Lithuanian globóti 'umarmen' and attach it to Lithuanian glem̃žti 'knautschen, stopfen, fressen'.

Furthermore, glomóti is not a well-authenticated form. Kurschat (LDWb. 128) gives the word, apparently from Nesselmann $264^{\text {b }}$, but does not know it personally. Neither Juškevič nor Lalis has it. Leskien evidently found little authority for it; it does not appear at all in the Ablaut, so far as I can discover.

Altho the grammars do not recognize any formal interchange between $b$ and $m$, there is no phonetic difficulty in the assumption that glomóti $=$ globóti. Notice, e. g., raimas 'bunt' = raïbas and szlùbas 'lahm' $=$ Lett. slums.

To Leskien's ablaut group (370) should be added globa 'guar-
dianship, protection, assistance' and various words immediately following it in Juškevič and Lalis. ${ }^{14}$
3. lekmene 'puddle, slough, quagmire'. The word appears in Mielcke, whence, apparently, it is borrowed by Nesselmann (355), who connects it with no root, and by Kurschat LDWb. (225), who surrounds it with brackets, thus indicating that it was not entirely familiar to him. So far as I know, the word is not current in Lithuania to-day.
lekmene is discussed by Leskien (Nomina, 361, 420), who would read lëkmene and connect with lékna 'a low meadow' and lëknas 'marsh, swamp, grove'. Leskien is followed by Walde, s. v. lacus.

The quality of the first vowel is, of course, the chief difficulty in Leskien's reading, but the semantics, also, are not entirely satisfactory: there is no evidence that -mene is a diminutive suffix in Lithuanian.

Both of these difficulties would be obviated by reading lekmene as lekmene and connecting it with lenkmene 'joint at the elbow or knee' (cf. Bezzenberger LF. 135, Geitler LS. 94, Bezzenberger BGLS. 298, Leskien Nom. 420, Leskien Abl. 334) and then with lenkiù, leñkti trans. 'to bend'. On the $e$ for en, see Kurschat Gram. §§ 147 ff . On the semantics, notice the familiar word lénke 'small valley, hollow' (which is indisputably related to lenkmene and to leñkti), and English hollow in the double sense of 'hollow of the knee' and 'a low, swampy place'.

With lękmenè, lëknas, leñkti, etc. cf. Albanian l'єngór 'flexible'; Old Bulgarian na-leko, -lešti 'to bend (the bow)'; Old High German chrumbe-lingūn 'in a crooked direction'; etc.
4. szlivis is given as an adjective, 'schiefbeinig', by Leskien Abl. 286, whence it is copied by Berneker, s. v. klono. But the word does not exist as an adjective. There is a noun szlivis and an adjective szlivas (cf. Kurschat DLWb., s. v. -beinig) ; it was undoubtedly the latter that Leskien intended to write. The correct adjectival form does not appear elsewhere in the Ablaut, nor does the incorrect form appear in the Nomina, which was published later. For such pairs as szlivis noun : szlivas adj. cf. Leskien Nom. 302. For szlivas cf. Leskien Nom. 344; Brugmann II, 1, 204, 207.
5. szleĩvis 'schiefbeinig' likewise has no existence as an
${ }^{14}$ After the above article was written I submitted glomóti to the Sprachgefühl of Lithuanians of wide linguistic experience. They did not know the word, but connection with gle $\tilde{m} z ̌ t i$ was unthinkable to them, and connection with globoti was so obvious as to need no proof.
adjective. It appears in Leskien Abl. 286, and thence in Brugmann I, 490 and Berneker, s. v. Elońo. Leskien cites, as his authority for szleĩvis, Leskien-Brugmann LV. 140 ; but there, as well as Leskien-Brugmann LV. 345, the form is szleivas. szleĩvas does not appear in Ablaut, nor does szleĩvis appear in Nomina. On szleivals cf., in addition to Leskien-Brugmann LV., also Kurschat DLWb., s. v. -beinig; Leskien Nom. 344; Lalis 370 ;-and for etymology Uhlenbeck çráyati; Feist hlain; Brugmann I, 490 and II, 1, 204, 207, 590, 663; Berneker klońo; Walde clīno, clīvus; Boisacq кגívo.
6. ${ }^{*} d y k \grave{a}$. I assume a feminine noun stem ${ }^{*} d y k a ̀$ with some such meaning as 'emptiness, nothingness, vanity, nothing', and from it I derive the following:
'dykà adv. 'vainly, gratuitously', from the instr. sing. *dykà. Cf. e. g. drasà adv. 'boldly' from drasà 'boldness'.
dykaĩ adv. 'vainly, gratuitously', from the dat. sing. *dýkai. The change in accent is in keeping with the tendency of adverbs to throw the accent to the adverbial ending (cf. Schleicher p. 219). Notice also Nesselmann 142: 'gewöhnlich dykáy, selten dýkay'.
$\grave{u} \check{z}$ dýka (acc. sing.) in, for example, $\mathfrak{u} z \check{z}$ dýka $k \tilde{a}$ darýti 'to do something for nothing'.
$a \tilde{n} t d y ́ k i \bar{u}$ (gen. plu.) 'ostensibly, simulatively'.
dyka-dïnis 'one who eats his bread without making return for it (in work), a hanger-on, sponger, parasite, idler, sport'.

The basic meaning of *dykà is illuminated by the following: dýkas 'empty, idle, vain, useless, barren, unfruitful', ${ }^{15}$ e. g. dykà szaknìs 'a root that does not grow,' 'dykà žẽẽè 'unproductive soil'; dykáuti 'to be idle, to lead the life of a tramp or a sport'; dykinti 'to empty, to spoil'; dykis 'idleness, vanity'; dyk-laikis, dyk-metis 'vacation, dull season'; dyk-smiltee 'sandy desert'; dyk-pisỹs (Kurschat LDWb. 87) 'der ohne Erfolg 'Beischlaf vollzieht', etc. Notice also Lett. dîks 'free from work', dîkâ stâwét 'to be idle'.

On the-etymology of the stem cf. Zubatý, Archiv f. slav. Philol. XVI, 390 ; Berneker, s. v. dikŭ.
7. pañksztas 'Vogel'. It is, of course, difficult to prove the non-existence of a word, but I am very skeptical as to the existence of paũksztas. paũksztis, -czo masc. 'Vogel' is a familiar

[^18]noun. Leskien-Brugmann LV. (181, 268, 341) gives also paũksztis, -ës fem. and paũksztè -es fem. But paũksztas doés not appear in the dictionaries available to me. Nevertheless it has crept into etymological literature. Brugmann I, 446 gives no authority for it. Kluge ${ }^{7}$, s. v. Vogel ${ }^{1}$ refers ${ }^{16}$ etymologically to Berneker, IF 9. 362. On that page Berneker quotes paüksztas four times (for paunszktas in line 1 read paũksztas): 'lit. paũksztas Vogel aus *phóuq-sto'. Berneker's article gives, incidentally, two references for paũksztas, viz., Bopp, Gloss. comp. ling. sanscr. ${ }^{3}$ and Fick, Etym. Wb. ${ }^{3}$ I cannot find the form, however, in either Bopp or Fick. In the former paũksztis occurs on page 224; in the latter paũksztis appears at V. 409 and VI. 608, as well as twice in the indexes.

I find only one textual or lexicographical bit of evidence for paũksztas, viz. in the glossary of Schleicher's edition of Donalitius (St. Petersburg, 1865). There the form is given simply as 'paúksztas vogel, tier überhaupt' with no other indication as to the gender or the declension. I have not examined carefully every line of Donalitius to see whether the form paüksztas actually occurs, but considerable search reveals only the form paûkszczei (Mêtas II, Vasarôs darbaĩ, 104), which cannot be the plural of any nominåtive stem save paũksztis, which (nota bene) does not appear in 'Schleicher's vocabulary to the text.
Princeton, New Jersey.

[^19]
# CONGENERIC ASSIMILATION AS A CAUSE OF THE DEVELOPMENT OF NEW ROOTS IN SEMITIC 

Frank Ringgold Blake<br>Associate in Oriental Languages, Johns Hopkins University

As early as 1891 Professor Bloomfield called attention to the fact that, in the Indo-European languages, words belonging semantically to the same class have a strong tendency to influence one another morphologically, producing new forms which are a blend of several more original forms, as e. g., Latin sinexter, a blend of sinister and dexter, or Gothic fotus 'foot' and tunpus 'tooth', both of which have passed into the $u$-declension under the influence of handus 'hand' and kinnus 'chin, cheek' respectively. ${ }^{1}$ This class of analogical modifications he calls congeneric assimilation. ${ }^{2}$

Professor Bloomfield has frequently suggested to me that the development of Semitic roots containing two consonants, the so-called bi-consonantal roots (like e. g., $\sqrt{ } q \mathcal{q}$ ), into triconsonantal roots or stems (like $\vee q \not \subset c ̧$ 'cut off', $V q \subset i$ 'cut off, decide, judge', $\sqrt{ } q \varsigma b^{b}$ 'cut off', $\sqrt{ } q \varsigma p p$ 'tear, break', $\sqrt{ } q \varsigma^{6}$ 'cut into', $\checkmark q \not \subset r$ 'cut off, reap') was probably largely due to congeneric assimilation. That such is probably the case is recognized by Brockelmann, the author of the best comparative Semitic Grammar, published 1908 (cf. Br. p. 285). The present article will be devoted to an investigation of the operation of congeneric assimilation in Semitic in the formation of new roots, with the idea of showing to what extent the theory of Professor Bloomfield is justified.

[^20]The chief Semitic languages will be abbreviated as follows: As. $=$ Assyrian, Ar. $=$ Arabic, E. $=$ Ethiopic, H. $=$ Hebrew, S. = Syriac... The Semitic characters will be transliterated thruout. Note the following transliterations: ${ }^{\prime}=$ Semitic Aleph (glottal catch) $;^{\prime}=$ Semitic Ain (violent glottal catch) ; $h=$ As., H., and S. Heth, Ar. pointed Ha, E. Harm (guttural surd spirant) ; $h=$ Ar. unpointed Ha, E. Haut, or their Parent Semitic equivalent (violent $h$ ) ; $s=H$. Sin (an $s$ sound) ; $\check{s}=$ Semitic Shin (sh), occurring originally in three varieties $\check{s}_{1}, \check{s}_{2}$, $\check{s}_{3} ; z_{1}=$ a Parent Semitic sound occurring as $z$ in H., As., E., as $d$ in S. and as $d$ (sonant th) in Ar.; $\underline{d}=$ Ar. Dhal (sonant th); $p=$ Ar. Tha (surd $t h) ; d=$ Ar. Dad $\left(<\mathcal{c}_{3}\right) ; t=$ Semitic Teth $\left(t+{ }^{\prime}\right) ; \xi=$ Semitic Sade (an emphatic sibilant or affricative ?), occurring originally in three varieties $\varsigma_{1}, \varsigma_{2}, \varsigma_{3} ; q=$ Semitic Qoph $\left(k+{ }^{\prime}\right) ; \bar{g}=$ Ar. Ghain or its Parent Semitic equivalent (sonant guttural spirant) ; ${ }^{a}=\mathrm{H}$. Pathah furtive (a semi-vocalic $a$ element) : H. and Aramaic stops become spirants after vowels, but this change is disregarded in the transliteration: the remaining signs are clear. Note the abbreviations $\mathrm{Br} .=$ Brockelmann, Grundriss d. Vergleich. Gram. d. Sem.,Sprachen, vol. 1, Berlin, 1908; R. = Růžička, Konsonantische Dissimilation i. d. Sem. Sprachen, Leipzig, 1909 ( $=$ Beiträge z. Assyriologie, VI. 4).

The word 'root' in this article is used only of the consonantal skeleton of words, for as a result of the prevalence of internal vowel change in Semitic the consonants are the only part of the word that remains constant. These roots are of course simply abstractions, and were never uttered without being combined with vowels.

In the Semitic languages the vast majority of all roots are of the triconsonantal type (e. g., $\sqrt{ } q t l$ 'kill', $\sqrt{ } \mathrm{klb}$ ' $\mathrm{dog}^{\prime}$ ) but we have a few words which are based on monoconsonantal roots (e. g., H. pê 'mouth') or on biconsonantal roots (e. g., H. bēn 'son'), and a few which contain more than three consonants (e. g., H. 'aţallēp 'bat'). This prevailing triconsonantalism is, of course, secondary; the root system of Parent Semitic must have been much more varied, mono- and biconsonantal roots at any rate being far more numerous. The fact that many triconsonantal roots are undoubtedly developed in some way from biconsonantal roots, has led to the view that all triconsonantal roots are expansions of more original biconsonantal bases, but such a view is not borne out by the evidence; it is far more likely that Parent Semitic possessed numerous roots with all
varieties of consonantism from one consonant to three, and possibly higher. ${ }^{3}$

The existence of a group of roots in which two consecutive consonants are identical, like that quoted in my second paragraph, does not give us the right to assume a priori that all the triconsonantal roots in question are based on a biconsonantal root consisting of the two identical consonants. ${ }^{4}$ The interrelation of the forms must be determined not only by applying all the familiar principles of phonetic and morphological development, but also by testing each case for changes due to the principle of congeneric assimilation.

There is, of course, no doubt whatever that congeneric assimilation is an important agent in producing new forms in Semitic, as it is in all languages, but its most obvious manifestations in this group of languages are to be found in the realm of internal vowel change, the consonants remaining intact. In a great nùmber of cases nouns and verbs belonging to the same semantic categories have the same vocalism. This is due of course to the fact that some few characteristic members of the group had the present vocalism, which was extended by analogy to the other members of the group. ${ }^{5}$ For example Hebrew adjectives denoting physical defects have the form qitțēl, e. g., 'illēm 'dumb', 'iuuēr 'blind', etc.; nouns of occupation in most Semitic languages may be indicated by a form qatț̂al, e. g., H. gannāb 'thief', daiiān 'judge', Ar. qaççâbun 'butcher'; Arabic color words have the form 'aqtalun, e. g., 'ahmarun 'red', 'azraqun
${ }^{3}$ For a general discussion of the theory of Semitic roots cf. Br. pp. 285287. Brockelmann upholds the theory that the great majority of all Semitic roots' are triconsonantal; cf. also E. König, 'Neuere Stammbildungstheorien i. semit. Sprachgebiete,' $Z D M G$ 65. 709-715 (1911). For a presentation of the theory that whole classes of words now triconsonantal were originally biconsonantal, cf. A. Müller, 'Verba Ain-Waw und AinAin,' $Z D M G$ 33. 698-700 (1879); B. Stade, Lehrb. d. Hebr. Gram., Leipzig, 1879, pp. 109-114; K. Ahrens, 'Der Stamm d. schwachen Verba i. d. semit. Spr.,' $Z D M G$ 64. 161-194 (1910). H. Bauer, in 'Das Problem d. schwachen Verba i. Gemeinsemit.,' $Z D M G$ 66. 106-114 (1912), attempts to combine the two views.
${ }^{4}$ Cf. Gesenius-Kautzsch, Hebräische Gram., 28. Aufl., Leipzig, 1909, pp. 106-108.
${ }^{5} \mathrm{To}$ this extensive working of congeneric assimilation is largely due the most prominent characteristic of the Semitic languages, namely that modifications in the meaning of the root are expressed for the most part by internal vowel change: cf. Steinthal-Misteli, Charakteristik d. hauptsäch. Typen d. Sprachbaues, Berlin, 1893, p. 427 ff.
'blue', etc.; Sernitic verbs denoting states and conditions have most frequently the form qatill, qatul in the perfect, e. g.; Ar. fariha 'rejoice', hasuna 'be beautiful', etc.; and so on. ${ }^{6}$ There is an abundance of evidence, however, to show that congeneric assimilation affects not only the vocalism but also the consonants of Semitic roots. ${ }^{7}$

In finding what new roots are due to the workings of congeneric assimilation, it is necessary to bear in mind that there are many other ways in which new roots can be developed in Semitic, and it is necessary to determine whether any of these ways apply to any given root or group of roots before we are justified in using them as examples of the analogy in question. The principal other methods by which new roots may be developed are the following:
(a) Prefixes. Those prefixes which are used in the processes of derivation in the various languages as we have them, may have been employed in a more primitive period to develop triconsonantal from biconsonantal roots. The consonantal elements of these prefixes are: causative ', $h$, $\check{s}$; reflexive-passive $n, t$; nominal ', $m, t$. Hence, if a root begins with one of these consonants, it may be a primitive derivative, e. g., Ar. 'afala 'set (of sun)', H. šāpal 'be low', H. nāpal 'fall', may possibly be causative and reflexive derivatives of $V \mathrm{Vl}$; H. memer 'bitterness', apparently from $\sqrt{m m r}$, is really from $\sqrt{ } m r r$ with nominal prefix. Certain triconsonantal roots seem to have been made by prefixing an element $u$ (North Semitic i) to biconsonantal roots, as is indicated by the fact that the biconsonantal root occurs separately, e. g., Ar. ualada, H. iālad 'bear', but imperatives lid, lēd. Hence a similar suspicion surrounds initial $u(i)$.
(b) Infixes. A second consonant $t$ may be a reflexive infix, as in Ar. iq-t-atala from $\sqrt{ } q t l$ 'kill'.

[^21](c) ${ }^{8}$ A consonant $u$ or $\underset{\sim}{i}$ may be developed out of $u$ or $i$ between two consonants, e. g., H. quiiēm 'establish' from $\checkmark q m$ 'rise', Ar. mautun 'death' from $\sqrt{ } m t$.
(d) ${ }^{8}$ A $u, i$ may be added after the second consonant of a biconsonantal root: cf. H. qūçaç 'cut off' (cf. e below) with H. $q \bar{a} \bar{c}_{\bar{a}}$ 'cut off' ( $\left.<\sqrt{ } q \varsigma i\right)$.
$(\mathrm{e})^{8}$ The second consonant of a root may be doubled to form an additional consonant, e. g., H. qāçaç 'cut off' from $\checkmark q \varrho$, Ar. içfarra 'be yellow' < $\sqrt{ }$ cfr.
(f) A doubled middle consonant of a triconsonantal root may be represented by a single consonant preceded by $n, m, r$, or l, e. g., H. kissê, S. kurseîa 'chair, throne'; Biblical Aramaic iindac for *iidda' from Vid' 'know'. This phenomenon is usually explained as due to dissimilation (cf. Br. § 90 , R. passim) but it needs further investigation.
(g) New roots may result from the assimilation of one of the original consonants to another consonant of the same word, or to the adjoining consonant of another word, e. g., $\checkmark k b t$ (As. kabtu) 'be heavy' appears in H. and E. as $\vee \vee b d$ (H. $k \bar{a} b \bar{b} d$, E. $k a b d a$ ) with assimilation of $t$ to the $b$; S. impf. of the verb 'to give' appears to be from $\vee$ ntl instead of from $\sqrt{ } n t n$, but this is due to the fact that final $n$ was assimilated to the $l$ of the preposition 'to', which so frequently followed the verb (cf. Br. pp. 152, 291).
(h) New roots may result from dissimilation, e. g., S. 'el' $\hat{a}$ 'rib' ( $\sqrt{ }$ ' $l^{6}<V^{\prime} l^{6}<\sqrt{ } \epsilon_{3} l^{6}$, cf. H. çēl $\bar{a}^{\epsilon}$, Ar. dila $u^{n}$, As. çêlu 'rib'), cf. Br. p. 241.
(i) New roots may result from metathesis, e. g., S. $\operatorname{tar}^{6} \hat{a}$ 'gate' ( $\sqrt{ } t r^{6}<\check{s}_{1} r^{\prime}<\sqrt{ } \check{s}_{1}{ }^{\text {r }} r$, cf. H. ša' $a r$ 'gate').
(j) New roots may result from the wrong division of a single word, e. g., the feminine ending $t$ may be considered part of the root, as in H. delet ( $<^{*}$ dal-t)'; S. sammah 'to name' owes its $h$ to a wrong division of semâhât, the plural of sem 'name', in which $h$ is probably developed phonetically out of the plural ending $\hat{a} t$ (cf. Br. p. 455, § 243).
(k) New roots may result from the wrong division of two words, e. g., Modern Ar. jâb 'bring' from jâ 'come' + preposition $b i$ 'with', which is the common expression for 'bring' (cf. Br. p. 290).
It is also necessary in setting up a congenerically assimilated group to make careful comparisons among the cognate lan-

[^22]guages, in order to determine whether the congeneric assimilation took place in the time of the separate life of the individual languages, or whether it lies back in the period before this. As the Semitic languages fall into the three main divisions, East (Assyrian), North (Hebrew and other Canaanitic dialects, Syriac and other Aramaic dialects), and South (Arabic and Ethiopic), those changes that lie back in the period before the separate life of the individual languages may belong either in the Common or Parent Semitic period, or in the period of the separate life of one of the main divisions of the Semitic family.

In speaking of the analogical influence of one root upon another it is of course not to be supposed that these consonantal skeletons directly affected one another; the analogic modification must have taken place in connection-with existing words consisting of both consonants and vowels.

When congeneric assimilation is responsible for the development of a new root, the analogical influence usually affects either the initial or final part of a word, but apparently it may also affect an interior consonant when the adjoining initial or final is the same as that of the word which is responsible for the change. For example the irregular $t$ in Hebrew pitrôn ( $\sqrt{ } p t r$ ) 'interpretation', for which we should expect a $\check{s}(\sqrt{ }$ pssr), is perhaps due to the influence of words based on the roots $p t i$, pth, which have the sense of 'to open'. Congeneric assimilation may also give rise to metathesis, as in the case of Syriac $\check{s} u l b \hat{a}$ 'bird's tail' ( $\sqrt{ }$ šbl), which has been conformed to dunbâ 'animal's tail'.

In some few cases it is apparently possible to show that another consonant has actually been added to a root as the result of the analogy of congeneric words. In other cases roots are evidently derived by congeneric assimilation from other roots of the same number of consonants. ${ }^{9}$ In a very large number of instances, however, it is only possible to group together two or more roots in which identical initial or final root consonants, or the common possession of a group of two consonants, gives presumptive evidence that the roots have influenced one another, without our being able to say anything definite about their relationship or development.

The examples that follow, therefore, will be grouped in these three classes: I. Cases of actual addition, II. Roots clearly modified by other roots, III. Groups of related roots whose

[^23]exact relationship is uncertain. Each of these will be divided into two subdivisions: A, those cases in which the analogical modifications are common to two or more languages, and hence may be presumed to go back to the period before the separation of the languages, either to the common Semitic period or to the separate life of one of the main divisions of Semitic: B, those cases in which these influences are confined to a single language. The examples here given are simply illustrative; many others, chiefly of class III, have been collected, which are not included, and without doubt a great mass of additional material exists. The examples are practically confined to Assyrian, Ethiopic, Arabic, Hebrew, and Syriac, and will be grouped in this order under the various headings.

## I. Cases of Actual Addition.

## A.

1. Ar. pa'labun, As. šelabu, šelibu 'fox' has a fourth consonant, $b$ which does not appear in H. $\check{s} \hat{u}$ ' $\bar{a} l$, S. $t a^{\text {' }} \hat{l} \hat{a}$ 'fox', Ar. $b u^{\text {' }} \mathrm{a} l u^{n}$ ' 'female fox'. This additional $b$ seems to be due to the fact that a large number of animal names in Semitic end in $b$, e. g., *kalb 'dog', * $z_{1} i^{\prime} b$ 'wolf', *dubb 'bear', etc. The fourth consonant $b$ in common Semitic *'arnab 'rabbit', *' aqrab 'scorpion', may be due to the same reason, tho the triconsonantal stems from which they are developed apparently do not occur. In Arabic the ending $a b$ appears in several additional animal names, e. g., jundabun 'locust', 'ankabun 'spider' (also 'anka$b \hat{u} t u^{n}$ ), probably a secondary extension of the ending $-a b$ in Arabic.

## B.

1. As. amšala, anšala 'yesterday' probably owes its $l$ to itimâli, timâli 'yesterday', cf. amš-at 'yesterday evening'. V'mš + feminine ending (so Br. p. 294).
2. E. 'af 'mouth', which is a descendant of Parent Semitic ${ }^{*} p \hat{u}$, * $p \hat{\imath}$, *$p \hat{a}$ 'mouth', as shown by the forms 'af $\hat{u}$, 'af $\hat{a}$ before suffixes, owes its initial ' to the initial ' of the related 'anf 'nose'.
3. E. sezer 'span' has undoubtedly added a prefixed $s$ element to the original root (cf. H. zeret, S. zartâ, Vzr + feminine ending), but whether the $s$ is a causative prefix, or is due to some analogy, does not appear.
4. Ar. lamasa 'touch' is perhaps derived from massa 'touch' thru the influence of the numerous verbs with initial $l$ meaning 'lick, slap,' etc. (cf. below under III, B).
5. In the Arabic dialect of Malta ohla 'first' is apparently a modification of $\hat{u} l a$ on the basis of ohra 'other' (so Br. p. 293).
6. H. sanuērìm 'blindness' may owe its $u$ to 'iuuēr 'blind'.
7. H. 'äkèn 'surely' is probably a modification of $k \bar{e} n$ 'thus, so' due to the influence of 'āmēn 'surely, so be it'.
8. H. kaptôr 'capital of a pillar', which to judge from the synonym kôteret comes from $\vee \mathrm{k} t r$, may possibly owe its $p$ to sepet 'capital'.
9. In the modern Syriac dialect of Tur Abdin, in Mesopotamia, the so-called Torani, ramšul 'evening' (cf. S. ramšâ) owes its final $l$ to atmiul 'yesterday', while ramhul 'tomorrow' (cf. S. mehâr) has apparently prefixed the syllable ra following the analogy of ramšul (contrast Br. pp. 231, 293), and changed its final $r$ to $l$ to conform to the other two words (cf. Brockelmann, Semit. Analogieb., p. 108).
10. The second consonant $h$ of S. reheț 'run' (H. rûç, Vr $\mathcal{G}_{1}$ ), behet (H. bûš, $\sqrt{ } b \check{s}_{1}$ ) 'be ashamed', is usually explained as a phonetic development from intervocalic ' or $u$, which occurs in certain forms like the active participle (e. g., $q \hat{a}$ 'em from $\sqrt{ } q m$ 'rise') between the two root consonants of verbs of this class (cf. Br. p. 53), but there is no adequate explanation why ' or $u$ should become $h$ in just these two cases. It is not impossible that the $h$ of the first of these two verbs is due to the influence of reheb 'be swift'. This would also explain the possession of stative vocalism ( $e$ between second and third consonants of the perfect) by the active verb 'run'.

## II. Roots Clearly Modified by Other Roots.

All the examples here given are of class B, tho examples of class A also doubtless exist.

1. As. nêšľ 'lion' (cf. H. laiš, Ar. laibun, S. laitâ) whose n is usually explained as dissimilation for $l$ (so Br . p. 231), may be due to the influence of related words with initial $n$ like nimru 'panther', našru 'eagle', nadru 'fierce, fierce animal'; the last word is often used as a modifier of 'lion', e. g., labbu nadru 'fierce lion'.
2. The exclusively As. stem rapâšu 'be wide', which is a synonym of napâšu, whose root $n p s \check{c}$ is common to all the Semitic languages, is probably a modification of napâšu made under the influence of *rêbu 'wide', which has been entirely crowded out by the new formation, being preserved only in rêbitu 'open place, square (in a city)'. Contrast Br. p. 231.
3. As. raggu 'evil', whose $g$ is usually regarded as an irreg-
ular representation of Semitic ', may owe its $g$ to the influence of words. like eg $\hat{u}$ 'sin', aggu 'angry'.
4. The initial ' of E. 'ed 'hand' (common Sem. Vid) is probably due to the influence of 'eger 'foot'.
5. Ar. la'anna 'perhaps' for the usual la'alla, ordinarily explained as the result of dissimilation (cf. R. p. 50 ; Br. p. 221), may owe its $n$ to the influence of 'anna 'that', 'inna 'behold', since all have a similar syntactic use, standing at the beginning of a sentence with the subject pronoun following as suffix, e. g., 'anna-hu 'that he . . .', 'inna-hu 'behold he . . .', la' alla-hu 'perhaps he
6. Ar. šâkaha 'be similar' is apparently a blend of šâbaha and šâkala 'be similar' (so Br. p. 294).
7. H. $g \bar{a}^{\prime} a{ }^{\text {ch }}$ 'tremble, waver' (cf. Ar. $j a^{\prime} a z a$ 'push') perhaps owes its $\check{s}$ to the influence of $r \bar{a}$ ' $a \check{s}$ 'be shaken, tremble'.
8. The Phenician perfect itn 'give', which contrasts sharply with common Semitic $\vee$ ntn, probably owes its $i$, not to dissimilation (cf. Br. p. 228, R. p. 64), but to the synonymous root ikb (cf. Biblical Aramaic iehab, S. $\underset{\sim}{i} a h b$, H. imperative hab, Ar. and E. $\sqrt{ } u h b)$.
 $i \bar{a} s \bar{s} \bar{a} n$ 'old') modified thru the influence of $i \bar{a} b \bar{e} \bar{s}$ 'be dry'; 'old' and 'dry' are closely connected ideas.
9. H. miqlāț in 'ârê miqlāt 'cities of refuge' seems to be a modification of a noun ${ }^{*}$ miplāt $t<\sqrt{ } p l t$, 'escape $र ~ u n d e r ~ t h e ~ i n f l u-~$ ence of miqdās 'sanctuary'.
10. H. 'ațallēp 'bat' is perhaps modified from *'ațallēb, with final $b$ as in so many animal names (cf. above, I.A), under the influence of ' $\hat{p} p$ 'bird': $b$ occurs in the Greek transliteration of the Phenician cognate, viz., ódodoßad.
11. H. palmôn̂ 'so and so', Dan. 8, 13, is a blend of pelôn $\hat{\imath}$ and 'almôn̂̂, which are regularly employed together, viz., pelôn $\hat{\imath}$ 'almônt, in the sense of 'so and so' (so Br. p. 295).
12. H. pelēt̂̂, in the phrase pelēt̂ $\hat{u}$-kerēt $\hat{\imath}$ used as a designation of David's bodyguard, probably means Philistines, pelišt̂̂ the regular word being modified by its neighbor kerēt̂ 'Cretans' (so Brockelmann, S'emit. Analogiebild., p. 108). Here the new word has fewer consonants than the original.
13. H. çāmaq 'dry up' is perhaps a modification of çāmê' 'be thirsty' under the influence of dàlaq 'burn'.
14. H. šahat 'pit, Hades', which has no certain etymology, may be pahat. 'pit' (S. pahhet 'bore', Ar. fahata 'dig') influenced by še'ôl 'Hades'.
15. H. $\sqrt{ } n t \underset{t}{ }$ in $\tan n \hat{u} t$ 'shake, be moved', Ps. 99,1 , is probably a modification of $\sqrt{ } m t$ (also Ar., E.) 'waver, move' under the influence of its synonym $\vee n d$ (also Ar., S.); so Fraenkel, op. cit., p. 62.
16. H. pätar 'interpret', whose $t$ should be $\check{s}$ according to the regular phonetic law (cf. S. pešar), perhaps owes its $t$ to the influence of $\sqrt{ }$ pti, $\sqrt{ }$ pth 'to be open, to open'. The regular representative of Sem. $\sqrt{ } p$ šr $_{3} r$ occurs once, viz., pēser 'interpretation', Ecc. 8, 1.
17. H. rāmas 'tread' (for *rāpas, cf. Ar. rafasa, S. repas) perhaps owes its $m$ to rāmaśs 'creep'; so Fraenkel, op. cit., p. 62.
18. H. mäsak 'mix' (for "māśag, cf. Ar. mašaja) probably owes its last two consonants to the influence of $n \bar{a} s a k$ 'pour'; so Fraenkel, op. cit., p. 61 f.
19. In H. 'āçam 'shut the eyes' we probably have a meta-
 of 'attam 'close the mouth' (Ar. 'ațama): this explanation, which occurred to me independently, is given by Fraenkel, op. cit., p. 62.
20. Biblical Aramaic šeparpârâ 'dawn' may be a modification of *̧̧eparpârâ (cf. S. çaprâa 'morning') under the influence of šepar 'be beautiful'.
21. S. gehek 'laugh', whose initial consonant should be '(cf. Ar. dahika, H. çăhaq), which is the regular representative in Aramaic for $\epsilon_{3}$, is said to owe its $g$ to dissimilation (cf. Br. p. 242 ); but it is not unlikely that the $g$ is due to the influence of the numerous verbs of utterance with that initial, e. g., $g e^{6} \hat{a}$ 'call', gesar 'roar', ge' ar 'scold', genah 'wail, sob' (genah may be a similar modification of $V$ 'nh, cf. H. 'ānah, As. anâhu).
22. The $z$ of S. $z \hat{a} d e q \hat{a}$ 'right, 'proper', zaddeq 'justify', etc., which is usually explained as due to dissimilation (cf. R. p. 220), may be borrowed from zîp $\hat{a}$, 'lie, deceit', zaiiep 'make false', whose meanings are in a way the opposite of the above, and from zekâ 'be pure, justified'.
23. S. qelubîa 'cage, basket' (contrast H. kelûb 'cage', S. $k u l b a ̂ s ̂ a ̂ ~ ' b a s k e t '), ~ m a y ~ o w e ~ i t s ~ i n i t i a l ~ q ~ t o ~ t h e ~ s y n o n y m ~ q a p s \hat{a}$ 'cage, basket'.
24. S. ramšâ 'evening' is certainly a modification of *'amšâ (Ar. 'amsun, H. 'emeš, As. amšat), tho the disturbing influence does not appear.
25. In S. šulbâ 'tail of a bird' (cf. H. Hāōbel 'train, skirts') we have a transposition of $b$ and $l$ due, to the influence of $d u n b \hat{a}$ 'tail of an animal'.

## III. Related Groups of Roots.

## A.

Most of the words given here occur in at least two of the main divisions of Semitic (viz., East, North, and South), and hence the analogic changes may be presumed to have taken place in the Parent Semitic period. Those roots that occur in only one division are marked with the initial of the division. Those whose occurrence in more than one subdivision is doubtful are also marked with the proper initials, the initial of the doubtful division being followed by (?). Roots that occur in only one division may have been drawn into the group here given only after the separation of Parent Semitic into its main divisions.

1. $\sqrt{s_{3}} t i$ 'drink', $V \check{s}_{i} q i$ 'cause to drink'.
2. $\sqrt{ } \quad \check{s}_{3} \check{s}_{3}, V \mathrm{~V} \check{s}_{3} \check{s}_{3}$ 'touch'.
3. $V i b \check{s}_{3}, V^{\prime} b \check{s}_{3}$ 'be dry'.
4. Vrhb 'be wide', Vrhq 'be distant'.
5. Vkr', root of Ar. kurấ 'un 'leg', H. lerā̄́aim 'legs'; and $\sqrt{z_{1}} r^{6}$, root of Ar. dirầ $u^{n}$, H. zerồac', S. derâa $\hat{a}$ 'arm': Prof. A. Ember suggests that possibly $\sqrt{ } z r^{6}$, which has no etymology, is a modification of zeret 'span', $V z r+$ feminine ending (S. $z a r-t \hat{a}, \mathrm{E} . \operatorname{se-zer)}$.
6. $\sqrt{ }$ pti 'be open, simple', $\sqrt{ } p t h$ 'open', $\vee p q h$ 'open eyes'.
7. $\sqrt{ } \mathrm{rgz}$ 'be restless', $\sqrt{ } r g \check{s}_{;}$'be stirred up', $\sqrt{ } r^{\text {c }}{ }_{3}$ 'tremble, shake'.
8. V$\check{s}_{3} k n$ 'dwell', $\sqrt{\check{s}_{3}} k b$ 'lie', $\sqrt{ }{ }_{1} \check{s}_{1} b$ 'sit'.
9. $\sqrt{ } r^{\prime} \check{s}$ 'tremble', $\vee r^{\prime} d$ 'tremble, quake', $\sqrt{ } r^{\prime} l$ 'dangle, swing', $\vee r^{\prime} m$ 'rage, roar, thunder', $\vee n h m$ 'growl, roar'.
10. $\sqrt{ } \mathcal{s}_{2} p d, \vee q p d, \sqrt{ } q p_{\S_{2}}, \sqrt{ } q p$ ' $(\mathrm{N})$ 'draw together'.
11. $\sqrt{ } n q$ ' split, separate from', $\sqrt{ } n q b$ 'bore, perforate', $\vee n q r$ 'bore out, cut out', $\sqrt{ } n q z_{1}(\mathrm{~N}, \mathrm{~S} ?)$ 'puncture', $\sqrt{ } b q^{6}$ ( $\mathrm{N}, \mathrm{S}$ ?) 'split'.
12. $\sqrt{ } n g p$ 'gore, shake', $\sqrt{ } n q p$ 'strike down', $\sqrt{ } t p p$ or $\checkmark d p p$ 'beat drum' (cf. H. tāpap, Ar. daffa), $\sqrt{ } p g^{\prime}$ ( $\mathrm{N}, \mathrm{S}$ ?) 'strike, meet', $V n g$ ( N ) 'touch'.
13. $V \varsigma_{2} h l$ 'neigh', $V \varsigma_{2} u h$ 'cry out', $V \varsigma_{2}^{\prime} q$ 'cry out', $\sqrt{\mathcal{G}_{2}}$ rh 'cry out', $\sqrt{ } z^{\prime} q$ 'cry out', $\sqrt{ } n h q$ 'cry out, bray (of an ass)', V $n h g$ 'gasp, sigh', $\sqrt{ } n h m$ 'growl, roar', V $n$ 'd 'lament', V'nh or V'nh (cf. Ar. 'anaha, As. anâhu) 'sigh', V'nq (N) 'groan'.
14. $\sqrt{ } d l p$ 'drip, leak', $\sqrt{ } n t p$ 'drip, drip with', $V^{\prime} r p$, 'drip', $\checkmark r^{\prime} p$ 'drip, come forth', $\vee \bar{g} d p$ 'overflow, overhang', $\bigvee s ̌ \not t p$ 'stream forth', $V \varepsilon_{1} p(\mathrm{~N})$ 'flow, overflow'.
15. $\sqrt{ } q t \vec{t} b$ 'cut off', $\sqrt{ } q t t y$ 'cut off', $\sqrt{ } q t n$ 'be small', $\sqrt{ } q t p$ 'pluck off', $\sqrt{ } q t^{t}$ ' 'cut', $\vee q \not q m(\mathrm{~N}, \mathrm{~S}$ ?) 'cut off, bite', $\sqrt{ } q t l(\mathrm{~N})$ 'kill' ( the original root $q t l$, so in Arabic and Ethiopic, may have been changed to $q t \bar{l}$ in North Semitic thru the influence of other roots of this group; the $t$ is usually explained as due to partial assimilation to the $q$, cf. Br. p. 154).

## B.

1. As. šeĝ̂ (H. šāga', Ar. saja'a) 'rage, howl', šagâmu 'roar, howl', ragâmu 'cry out', ramâmu 'cry, roar', nagâgu 'cry out' (?).
2. As. šapâku (H. šāpak, Ar. safaka) 'pour out', natâku (H. nātak) 'flow(?)', ramâku 'pour out', tabâku 'pour out', šar$\hat{a} q u$ 'present to', sarâqu 'pour out, offer a libation'.
3. As. zumbu 'fly' (common Sem. $\sqrt{ } z_{1} b b$, H. zeb̂̂b, etc.), $z i b \hat{u}$ 'locust', zikkit $\hat{u}$ 'a kind of fly', zizânu 'locust', zunzunu 'small locust', zirzirru 'small locust', zuqaqîpu 'scorpion', zirbâlu 'a small creature that destroys plants (?)'.
4. As. $a b a \hat{a} r u$ (cf. H. 'abbîr) 'be strong', dabru, darru, dannu, datnu 'strong, powerful'.
5. As. gabšu (H. $\vee$ gbšs 'become thick, congeal') 'in great quantity', gašru 'strong, mighty', rab̂̂ (common Sem. Vrbi 'become great') 'great', rašbu 'mighty, awe-inspiring', ruššû, hुušš $\hat{y}$ 'splendid, fearful, awe-inspiring'.
6. As. siriam (H. širiôn, siriôn, S. šerîannâ) 'coat of mail', huliam 'helmet'.
7. E. hadafa (Ar. hadfun 'rudder') 'steer, control', qadafa 'row'.
8. E. nadha (H. nādah), nad'a 'push'.
9. E. 'ahara (common Sem. V'hr) 'delay', dehra 'after'.
10. E. 'agadâ 'limb', 'eger 'leg' (cf. common Sem. $\sqrt{ } \mathrm{rgl}$ ).
11. E. $d a f^{\prime} a$ (Ar. dafa' $a$ ) 'push', çaf' $a$ 'slap'.
12. E. ḩarasa (H. hāraš) 'cut, engrave, plow', quaraça (Ar. qaraça), haraça, haraça, 'cut'.
13. E. falaiaa (H. $\vee$ pli, $\vee p l$ '), balaça, falaça, falața (H. and S. Vplt 'escape'[?]), 'separate, divide', qatqat,a 'break'.
14. Ar. dafa'a (E. daffa), dasá a, dasara, dafara, dafaša 'push', dara'a 'drive back'.
15. Ar. lattasa (H. lāţaš, S. lețaš) 'strike', lațaha, lataha, lațama, 'slap', lața'a 'kick'.
16. Ar. safaqa (H. sāpaq) 'slap', çaqa'a, safa'a, çafaqa, hafaqa 'slap'.
17. Ar. rafasa (S. repas 'prance, stamp'), ramaha 'kick'.
18. Ar. habața (H. hāabt, S. hebaț) 'strike, kick with front legs (of a camel)', laț, $a$, labața 'kick'.'
19. Ar. ranna (H. rānan 'cry aloud, rejoice') 'resound', 'anna (H. 'ānan, S. 'an) 'groan, squeal (of a child)', hanna 'ring, resound', hanna 'sigh, cry', țanna 'make ring', danna 'hum, buzz (of gnats)', daqqa 'ring, resound, make ring'.
20. Ar. jauzun 'middle', jaufun 'center' (cf. S. gauû̂ 'middle').
21. Ar. qalbasa 'put on a hood' is certainly connected in some way with labisa 'put on clothes'; it may have been derived from the quadriliteral root $\sqrt{ } k r b l$ in $H$. mekurbāl 'clothed', Biblical Aramaic karbelâ 'cap', As. karballatu 'cap', with which perhaps H. qôba', kôba' 'hat, helmet' are to be grouped.
22. Ar. maçça (H., S. Vmçç), marada, radic a, rada'a 'suck', rağapa 'suck (of animals)', marapa 'suck fingers', šariba 'drink' (E. saraba, šaraba), qadiba 'absorb', saḥaba, jadaba 'draw in', lasiba 'lick a plate'.
23. Ar. lahika (H. lāhak, S. lehak), lahisa (E. lahása) 'lick', laqqa (H. lāqaq) 'lap', lasada (perhaps connected with H. lāšād 'fat, cake prepared with oil', E. lasd 'buttèr') 'lick', lahafa, lahasa, lajana, la'iqa 'lick', lajada 'lap', lassa, lasiba 'lick a plate', lați'a 'lick fingers'-lapama 'kiss'—lațasa (H. läțaš, S. lețaš), lațaha, lataha, lațama 'slap'-lața'a, labața 'kick'.
24. H. kihhēd (E. kehda 'deny, renounce') 'hide, deny', $k i h h e ̄ s$ 'lie, deny, renounce'.
25. H. qērē ${ }^{a}$ (S. and E. Vqrh) 'bald on the back of head', gibbē ${ }^{a} h$ 'bald in front' (cf. Ar. jabh-atun, jabînun 'forehead').
26. H. nāțaš, rātaš 'throw down, stretch out'.
27. H. pālaț (S. pelaț 'escape', E. falața 'separate'[?]) 'escape', $V m l t$ in ni-mlat 'escape'.
28. H. māh̆aç (Ar. mahada, S. meḩâ, As. mãhâçu) 'smash', mähaq 'smash'.
29. H. lišk $\bar{a}$, nišk $\bar{a}$ 'chamber' ( $n$ usually explained as dissimilation from $l$, cf. Br. p. 228).
30. H. śāțan (Ar. šațana, Aramaic sețan) 'accuse, attack', śātam 'attack, persecute'.
31. 'H. šālah (S. šelah) 'send', Všlk in hi-šl̂k 'throw'.
32. H. dāh̄̄ (Aŕ. daĥ̂, S. deḩâ) 'push', dāhap (As. da'âpù 'push') 'hasten', hād $\bar{a}$ (Ar. and S. Vhdi 'lead') 'stretch out hand', hādap 'push'.
33. H. pāaga' (S. pega') 'strike upon', pāgaš 'meet', nāga' (also in Jewish and Egyptian Aramaic) 'touch', nāgaš (As. nagâšu 'tread, go') 'approach'.
34. S. țurțârâ, țurțâsâ 'crepitus ventris'.
35. S. gad (Ar. jadda, H. gādad), gedam (Ar. jadama, E. gazama), gam 'cut off'.
36. S. țeraš, țarțeš, țarmeš 'soil, blot'.
37. S. tamtem (Ar. tamtama) 'stammer, stutter', tartém 'murmur, grumble'.
38. S. hegâ (H. hāgā 'growl, think'), hedas, hemas, herag 'think'.

The present investigation indicates the importance of bearing in mind the principle of congeneric assimilation in any study of the etymology of Semitic words. There is a strong tendency among Semitic scholars to attempt to explain any given sporadic change as phonetic, all sorts of special sound changes, assimilations, and dissimilations being posited in order to connect words which do not come under the ordinary phonetic laws. ${ }^{\text {io }}$ In many of these cases a more natural explanation is found by having recourse to analogy as in a number of the examples given above. ${ }^{11}$ -

That Semitic roots of similar meaning do very frequently influence one another, not only in their vocalism, but also in their consonantism, is proved beyond a doubt by the cases in sections II and III; moreover the evidence for the actual addition of another consonant to a root, tho meager, is enough to indicate that such additions were made. It is entirely likely that additional investigations will greatly strengthen the case here made out.

But it is not surprising that we are unable to trace with certainty the development of many triconsonantal roots from biconsonantal or quadriconsonantal from triconsonantal. The origin of most of the roots probably lies so far back in the past that it is impossible to reconstruct the situation that gave them birth.

It may however, I think, be stated as beyond dispute that congeneric assimilation is one of the important principles governing the development of new roots from more original roots in Semitic, whether the new root is one of the same number of consonants as its progenitor or progenitors, or one having an additional consonant.

[^24]
# THE RECENSION OF CĀNAKYA USED BY GALANOS FOR HIS 'EK $\triangle I A \Phi O P \Omega N$ ПOIHT $\Omega$ N 

George Melville Bolling

Professor of Greek, Ohio State University
The ultimate goal of studies upon Cānakya must be the reconstruction of the ur-Cānakya-the collection of verses from which descend the numerous collections that have circulated in India under the name of the famous minister of Candragupta. That goal lies far in the future, for it cannot be approached until the various recensions are themselves rendered readily accessible. This too is far from being done-more than twothirds of these recensions being as yet known only from manuscripts. A preliminary survey of the material has however been made by Oskar Kressler in his dissertation, Stimmen indischer Lebensklugheit, Frankfurt a.M., 1904, pp. 195, a very laborious and praiseworthy piece of work, which must for years constitute the starting point for all further Cānakya investigations.

This book has, however, serious defects which must be noted briefly. Apart from minor omissions and errors there are three matters of general importance. First, one soon notices that in nearly every recension not all the verses are accounted for. The chief cause seems to be that the missing verses have variants in their pratikas, and Kressler has imagined that his duty to them was done when he entered them in his Vorindex. The result is that, while one starting with the variant version can find the vulgate parallels, the reverse is not true. The references to the Indische Sprueche are also by no means complete, and in particular the Nachtraege, nos. 7425-7613, have been almost entirely overlooked. Secondly, the comparisons have often been made in a very mechanical fashion. For instance $\operatorname{Lgh} T$ v. 5 and Ind. $S p r .4781$ are equated, tho they have nothing except the opening words $m \bar{a} g \bar{a} h$ in common, while differences such as ksama $\bar{a}$ -dhanuh-śāntikhadgah. (Ind. Spr. 6438) or agunasya-nirgunasya at the beginning stop the comparison of otherwise identical verses. Last and most important is the exclusion of material which was not in such shape that it could be utilized immediately. Thus no attention was paid to the material published by Eugene Monseur, Cānakya Recension de cinq Recueils de

Stances Morales, Paris, 1887. In this book the five recensions have been fused, and their verses arranged under various headings, so that they could not be indexed profitably until a reconstruction of each recension had first been made. That however is merely a matter of time and care, and will have to be done by some one at some time in the future.

Another recension neglected is one known to us only through the medium of a translation, and.the purpose of the present paper is to put that recension into a form in which it too can be utilized, and thus to pave the way for another survey which will include all the Cānakya material.
 humously edited by G. K. Typaldos and G. A. Kosmetes, Athens, 1845), pp. 65-106, presents a Greek translation of nominally 330, actually 319, verses under the title Подєтька̀, оікоvонкка̀ каi
 title at its face value, for he speaks (Ind. Spr. ${ }^{2}$ I, p. xi) of Sprueche, die . . von ihm . . . gesammelt sind, ${ }^{1}$ and to have regarded this collection as an anthology formed by Galanos. The single fact, however, that Galanos has left blank spaces opposite the numbers of eleven verses suffices to show that this is not the case. For such omissions must be due either to mistakes in the numbering of a manuscript, or to the presence in it of passages rendered untranslatable by mutilation or corruption. It is clear therefore that this collection was not formed by Galanos, but found by him in some manuscript. In the absence of a colophon ${ }^{2}$ he devised a title of his own, and
 the nānāśāstroddhrtam of the opening stanza.

Under the circumstances an attempt at the reconstruction of this manuscript seems desirable, and it has succeeded to a degree that appears to warrant its publication. On internal evidence the text turns out ato be nothing more nor less than another Cānakya manuscript, but representative of a recension entirely independent of all those treated by Kressler and Monseur. To this view Klatt approached, but the idea of an anthology formed by Galanos kept him from reaching it. Con-

[^25]sequently in his dissertation De trecentis Cannakyae poetae Indici sententiis, Halle 1873, he rates the इavaкéa ov́vo廿ıs (i. e. Galanos' translation of $L g h$ ) as the more important, and speaks (p. 11) of this collection as 'sententiae e variis poetis petitae, quae ovd入oүń a libris Cānakyae ascriptis non differt, nisi quod nomen Cannakyae nusquam commemoratur.' Even this difference is not real. For instance in the Bombay recension the name of Cānakya is to be found only in the commentary and in the adhyäya-divisions, not in the text proper. The whole truth was first seen by Monseur, who (p. x) writes: 'Le recueil que Galanos a traduit sous ce titre était d'ailleurs un véritable Cānakya, ayant beaucoup d'analogies avec mon Nîtiśāstra, avec le Ćānakya de Klatt et avec le Vṛddha-Cāṇakya de Bombay.'

For gauging Galanos' habits as a translator an excellent standard can be found in a comparison of his इavaкєa ov́vouts with the Codex Vaticanus of the Lgh recension. For this is either the manuscript from which the translation was made, or a copy of it transcribed at Galanos' order for presentation to the Greek government. Space forbids the discussion of details, but the general result is that Galanos is interested in the contents and makes no particular effort to preserve the form. How he will at times transpose, expand, and condense is illustrated


 pādaim vā saingrahet tu subhāsitam | mūrkho 'pi prājñatā $\dot{m}$ yāti nadībhin sāgaro yath $\bar{a}|\mid$. Of course it is not always the case that his renderings are so free. Many of them are quite close, and it is only by dealing with the collections as wholes that one can acquire a feeling for what is possible and what is not possible for him. ${ }^{3}$

The value of such a reconstruction lies in its main outlines. As far as these can be drawn at all they can be drawn with practical certainty; and indeed many of the single items have been noted by Klatt and Boehtlingk and recorded in the Indische Sprueche. ${ }^{*}$ But beyond this it is, I believe, possible to go and to determine, with varying degrees of probability, many questions of detail.

[^26]In the effort to accomplish this I have used the following material upon the following principles. First and most important the Indische Sprueche (abbreviated hereafter as $B$ ) with its critical apparatus, the works of Klatt, Kressler (from whom I take the sigla for the various recensions), and Monseur ( $M$ ) already cited, and the following editions of Cānakya. For VB I have used a copy of the smaller Bombay edition with Marathi commentary as described by Weber, Boehtlingk, and Kressler, but published in 1847, about a decade earlier than theirs. ${ }^{5}$ The copy of $W b$ could remain in my hands for only a short period, and consequently I have depended on the Indische Sprueche largely for its readings. For $E H$ I have used only Haeberlin's anthology and accordingly abbreviate as $H$ merely. For LghT I have used my own transcript of the Codex Vaticanus. The Agra recensions ( $V A g L g h A$ ) of which there seem to be no copies upon this continent are thus the only printed ones to which I have not had access.

In choosing between variants I have been guided first by the degree of correspondence with the translation. When that criterion fails, I tend to prefer Cānakya readings over those of other texts. Between Cānakya readings the presumption is in favor of the recension which, in the particular part of the work in question, seems closest akin to Galanos' text.

The symbols used in printing are as follows. In the absence of any indication the readings occur in some source or sources; words in square brackets [ ] have been left untranslated by Galanos; words in angular brackets $<>$ are retranslations from the Greek, that is are not found in any Sanskrit version known to me; words between wavy lines $\iint$ are ones for which the correspondence with Galanos seems doubtful or unsatisfactory. I have added the references to the texts I have been able to consult, enclosing the numbers in parentheses when they offer any real variants from the text adopted. If the number in the Galanos collection stands alone, the pratizka of the verse is to be found in Kressler; if it is enclosed in parentheses, I am sus-

[^27]picious of his statements. If a star is added to this number the verse is not in Kressler's material ; if this star is in parentheses, there are nevertheless reasons for connecting the verse with the Cānakya collection. Verses which I cannot identify are printed in the Greek. The numbers missing from my text are those which Galanos left blank. Readings and references. followed by F. E. in parentheses are due to suggestions kindly offered by Franklin Edgerton.

1. 'praṇamya śirasā viṣnum trāilokyādhipatim prabhum | nānāśāstroddhṛ̣tam vakṣye rājanītisamuccayam || VB i. 1.
2. tad aham̉ saṃpravaksyāmi lokānām hitakāmyayā yena vijñānamātreṇa $\int$ sarvajñatvam prapadyate $\int \|$
$V B$ i. 3.
3. $\int$ adhītyedam yathā śāstram naro jānāti sattamah dharmopadeśavikhyātam kāryākāryaśubhāśubham s
Probably $=W k$ i. 2, cf. Kressler, Vorindex, idam sástram. $\quad V B$ i. 2.
4. tyaja durjanasamisargam bhaja sādhusamāgamam | kuru punyam ahorātram smara nityam anityatām | $V B$ (xiv. 20), B 2621.

 каì т̀̀v катทүорía.
5. śrūyatām dharmasarvasvaṃ śrutvā cāivāvadhāryatām | ātmanaḥ pratikūlāni pareṣām na samācaret || $B 6579$.
6. varjaye t ksudrasam̄vāsam anistasya ca darśanam | vivādàn saha mitrena $\int$ dūratah parivarjayet $\int \| M 145$.
7. kāle ca ripunā samdhihih kāle ca mitra<sami>grahah | kāryakāraṇam āśritya kālam kṣipati paṇuitah ||

Lgh iv. 14, B 7496.
9. mūrkhaśiṣyopadeśena duṣtastrībharanẹna ca dviṣatā samprayogeṇa paṇ̣ito 'py avasīdati ||
$V B$ i. $4, B 4911$.
10. kah kālaḥ kāni mìtrāni ko deśaḥ kāu vyayāgamāu kasyāhaḿ kā ca me sáaktir iti cintyam muhur-muhuh || $V B$ iv. 17, $B$ (1502).
11. paravādamं parasvam ca parahāsyam parastriyah | paraveśmani vāsaḿ ca na kurvīta kadā cana ||

M 101, B (3925).
12. uttamāih saha sāmgatyam paṇitiāih saha sam̉kathām alubdhāih saha mitratvam kurvāno nāvasīdati || $B$ (1183).
(13.) paro 'pi hitavān bandhur bandhur apy ahitaḥ paraḥ ahito dehajo vyādhir hitam <kṣetrajam> āuṣadham || B 3988.
14. sa bandhur yo hiteṣu syāt sa pitā yas tu posakah |. sa sakhā yatra viśvāsah sa déso yatra jīvati $\|$
(15.) sā bhāryā yā gṛhe dakṣā sāntā cāiva pativratā | nityam̀ dharmaratā <satyā> satatam priyavādinī $\|_{B} 7003$.
16. yasya bhāryā śucir dakṣā bhartāram anugāminī | . . . . . . . sā śriyo na śriyah śriyah || M p. 61, B (5446).
Cf. Kressler: yà tu bhāryā sucib; the group 15-17 seems to be found together (but in reverse order) in $V A g W k$.
17. yasya bhāryā virūpākṣī kaśmalī kalahapriyā |

Suttarottaravādī ca $\int$ sā jarā na jarā jarā || $B$ (5445).
18. duṣtā bhāryā saṭham mitram bhṛtyaś cottaradāyakah | sasarpe ca gṛhe vāso mṛtyur eva na saḿśayah \|

$$
V B \text { i. } 5, B 2891
$$

19. $\overline{\bar{a}} \mathrm{padartham}$ dhanam raksed dārān rakṣed dhanāir api
ātmānam satatam rakṣed dārāir api dhanāir api || $V B$ i. $6, B 958$.
20. tyajed ekam kulasyārthe grāmasyārthe kulam tyajet| grāmam் janapadasyārtha ātmārthe prthivī̀ tyajet || $\dot{V} B$ iii. $10, B$ (2627).
21. calaty ekena pādena tișthaty ekena buddhimān | nāsamīksya param sthā̀nam pūrvam āyatanam tyajet ||

$$
H 32, B 2264
$$

22. lubdham arthena gṛhṇìyāt stabdham añjalikarmanā |
mūrkham chandānuṿ̣ttyā ca yathārthatvena panḍitam ||

$$
V B \text { vi. } 12, B(5860)
$$

(23.) svabhāvena hi tuṣyanti devāh satpuruṣa dvijāh.| itarāh khānapānena vākpradā̀nena paṇ̣itāh ||

$$
B 6767 \text { (cf. 7300). }
$$

24. uttamamं praṇipātena śūram bhedena yojayet |
nīcam alpapradānena samam tulyaparākramāiḥ ||

$$
B \text { (1174). }
$$

(25.) yasya yasya hi yo bhāvas tena tena hi tam naram | anupraviśya medhāvī kṣipram ātmavaśam nayet || $\boldsymbol{B} 5393$.
26. nadīnām ca nakhinām̉ ca śrñ̄giṇām śastrapāninām | viśvāso nāiva kartavyah strị̄u rājakuleṣu ca $|\mid$

$$
V B \text { i. } 15, H(27), B(3214)
$$

27. arthanāśam manastāpam gṛhe duścaritāni ca|
vañcanam cāvamānam ca matimān na prakáśayet ||
Pāda c as in Vikramacarita (F. E.). $\quad V B$ (vii. 1), $B$ (583).
28. siddhamantrāuṣadham dharmam gṛachidram ca māithunam |
kubhuktam kuśrutam cāiva matimān na prakāśayet ||
Cf. Kressler: susiddham. $\quad V B$ (xiv. 17), $B 7046$.
29. yasyām tasyām prasūto hi gunavān pūjyate narah dhanur vañ́saviśuddho 'pi nirgunah kịm kariṣati || $B$ (5369).


30. aphalasyāpi vṛkṣasya chāyā bhavati śitalā M 179. nirguno 'pi varam bandhur yah parah para eva sah \|
31. kasya doṣah kule nāsti vyādhinā ko na pīditaḥ | vyasanam̉ kena na prāptam kasya sāukhyam nirantaram $V B$ iii. 1, B 1606.
32. ekodarasamudbhūtā ekanakṣatrajātakāh | na bhavanti samāh sisile yathā badarakantakāh $\|$
$V B$ v. $4, B 1423$.

 $\tau \iota \sigma$.
33. ko 'tibhāraḥ samarthānām kim dūram vyavasāyinām ko videśah suvidyānām kaḥ parah priyavādinām ||

$$
V B \text { iii. } 13, \text { Lgh iii. } 9, B 1926 .
$$

(36.) sā sā sampadyate buddhiḥ sā matiḥ sā ca bhāvanā | sahāyās tādŕ̛sā eva yādrśsí bhavitavyatā || 37034.

37. kim̉ karoti naraḥ prājñah preryamānah svakarmanā prāg eva hi manuṣyāṇām buddhiḥ karmānusāriṇi ì Lgh iv. 8, $B$ (1728).
38. na ca vidyāsamo bandhur na ca vyādhisamo ripuh <na ca satyasamo dharmo na ca dānasamam tapaḥ $>\|$ $H 75^{\text {ab }}, B 3231{ }^{\text {ab }}$.
39.* nāsty ārogyasamam் mitram <na ca dharmasamo gunaḥ > na cāpatyasamaḥ sneho na ca duḥkham̉ kṣudhā samam || B 3690 .
40.* sugandham ketakīpuṣpam kaṇtakāiḥ parivesṭitam |
yathā puṣpam tathā <sādhur> durjanāih parivestitah ||
41. guṇāh kurvanti dūtatvamं dūre 'pi vasatām satām | ketakīgandham äghrāya svayam gacchanti ṣatpadāh |

$$
\text { Lgh (vii. 2), } \dot{B} 2128 .
$$

42.* yasya kṣetram nadītīre bhāryā ca parasamgatā sasarpe ca gṛhe vāsah katham syāt tasya nirvṛtih || B 53'64.
(43.) nadītīre ca ye vṛkṣā yā ca nārī<nirañkuśā> | mantrinā rahito rājā na ciram tasya jīvitam || $B 3291$.
The variant from Lgh 1. 9, cf. also $B 3290=V B$ ii. 15.
44.* <kṣamāsamam tapo nāsti na samitoṣasamąm sukham na ca dayāsamam dānam na ca mrtyusamam bhayam $\|>$
Cf. Kressler: śäntitulyam and $B$ 2011, 6439.
45. yasmin deśe na saṁmāno na vṛttir na ca bāndhavāh | na ca vidyāgamaḥ kaś cit tam deśam parivarjayet ||
Cf. also Monseur, p. 60.
$\nabla B$ (i. 8), $H$ (37), $B 5352$
46. anāyake na vastavyamin na vased bahunāyake | strīnāyake na vastavyañ na vased bālanāyake \| $B 279$.
47. āture vyasane cāiva durbhikṣe satruvigrahe | rājadvāre śmaśāne ca yas tiṣthati sa bāndhavah |

$$
V B \text { (i. 12) } H(17), B \text { (1221). }
$$

(48.) strīnāỏm dviguna āhāro lajjā cāpi caturguṇā | șaḍgựo $\int$ vyavasāyaś $\int$ ca kāmaś cāṣtagunah smrtah || $V \dot{B}$ i. $17^{\mathrm{abd}}, H 78^{\mathrm{c}}$.
Cf. also $B 1082,4091,7204$.
49. anrtam sāhasam māyā mūrkhatvam atilobhatā |
aśaucatvam nirdayatvam strīnām doṣāh svabhāvajāh ||
$V B$ ii. $1, B$ (328).
50. na svapnena jayen nidrām na kāmena jayet striyah |
nendhanena jayed agnim <na cārthena jayed dhanam>\| B3504, cf. $M$ p. 55.
51. nadī pātayate kūlam nārī pātayate kulam |
nārīnām ca nadīnām ca svachandalalitā gatiḥ || $\mathbf{B} 7561$.
52. bhojyam bhojanaśaktiśs ca ratiśaktir varān̄ganā vibhavo dānaśaktiś ca nālpasya tapasah phalam || $V B$ ii. $2, H$ (52), B (4640).
53. sukule yojayet kanyām putram vidyāsu yojayet | vyasane yojayec chatrum isṭam dharmena yojayet || $V B$ iii. $3, B 7058$.
54. agnihotraphalā vedā dattabhuktaphalam dhanam
ratiputraphalā dārāh śīlavrttaphalam śrutam || $B$ (71).
55. na rājñā saha mitratvam na sarpo nirviṣah kva cit | na kulam nirmalam tatra strijano yatra jā̀yate || M 85.
56. sthāneṣv eva niyoktavyā bhrtyāś cābharanāni ca | na hi cūduãmanịh pāde prabhā̄ān iti budhyate $\| B$ (7221).
57. vājivāraṇa<śástrān̄āற̀m kāṣ̣hapāsānavāsasām nārīpuruṣatoyānām antaram mahad antaram $\lfloor B 6029$.
58. upakāragṛhìtena śatruṇā satrum uddharet pādalagnam karasthena kaṇṭakeneva kanṭakam || H 22, B 1279.
59. apakāriṣu [mā pāpam cintayasva kadā cana] |
svayam eva patiṣyanti kūlajātā iva drumāh || $B 390$.
60.* uttamam suciraḿ nāiva vipado 'bhibhavanty alam | rāhugrasanasam̉bhūtam kṣạo vichāyayed vidhum ||

B 1172.
61. udyamah sāhasam dhāiryam balam buddhih parākramah | ssaḍ ete yasya tisṭhanti tasmād devo 'pi sañkitah || $B 1247$.
62. pārthivasya ca bhṛtyasya vadāmi guṇalaksaṇam te niyojyā yathāyogyam trividheṣv eva karmasu

$$
\text { B } 7587^{\mathrm{ab}}+\text { Gal. } 79^{\mathrm{cd}} .
$$

Cf. also Monseur, p. 68, and for the following section Klatt, p. 37.
63. iñgitākāratattvajño [balavān priyảdarśanaḥ]| apramādī sadā dakṣah pratīhāraḥ sa ucyate ||

H 108, B 1089.
64. medhāvī vākpaṭuh prājñaḥ sarvabhāvaparīkșakah | dhīro yathoktavādī ca eṣa dūto vidhīyate |

$$
H(106), B(4976), M \text { p. } 60 .
$$

65. Ssakṛdukta (gṛhītārtho laghuhasto jitāksarah | sarvaśāstrasamālokī prakrṣṭo nāma lekhakaḥ

मे $104, B 6654$.
66. samastaśastraśāstrajño vāhaneṣu jitaśramaḥ | śāuryavīryagunopetah senādhyakṣo vidhīyate ||

$$
H(105), B 6841
$$

Cf. Kressler: samastanītio and śastraśāstra ${ }^{\circ}$; a verse beginning samastahayaśăstrajño has probably been lost by haplography.
(67.) putrapāutraguṇopetaḥ śāstrajño misṭapācakah | śuciś ca vyavasàyyī ca sūpakāraḥ praśasyate \|
Cf. Kressler also under: pitrpäitāamaho.
$H$ (107), $B$ (4111).
68. āyurvedakrtābhyāsaḥ sarvajñah priyadarśanah | àryaśilaguṇopeta eṣa vāidyo vidhīyate $\| H$ (103), $B$ (999)
69. vedavedāñgatattvajño japahomaparāyaṇah | ās̃īrvādaparo nityam eṣa rājñah purohitaḥ

$$
\dot{H}(101), B 6269 .
$$







(72.) putrapāutragunopetah sarvaratnapariksakah śucir avyabhicārī ca ḃhāṇdādhyakṣo vidhīyate ||
In pāda $a$ we may suspect a dittography. $\quad K(56)+B(6477)$.
73. kulaśīlaguṇopetah satyadharmaparāyaṇah | pravinah preṣanādhyakṣo rājādhyakṣo vidhīyate \||

$$
H(102), B(1830)
$$

74. prājñe niyojyamāne tu santi rājñas trayo gunāh
yaśah svarganivāsaśs ca puṣkalaś ca dhanāgamaḥ ||

$$
H(85), \boldsymbol{B}(4303)
$$

75. mūrkhe niyojyamāne tu trayo doṣā mahīpateh | ayaśaś cārthanāśaśs ca narake gamanam dhruvam ||

$$
H(86), B(4304)
$$

Galanos' text had been corrupted to: ayaśa svarganās saśs ca through the influence of the preceding verse.
76. krūram vyasaninam lubdham apragalbham sadārjavam anāyam vyayakartāram nādhipatye niyojayet || $\mathbf{B} 7510$.
77. yat kim cit kurute bihrtyah śubham vā yadi vāśubham tena samivardhate rājà̀ sukrtāir dusc̣rtāir api || $B 5040$.
78. tasmād bhūmīsívaro nityam $\int$ dharmakāmārthasiddhaye $\int$ | gunavantam niyuñjīta gunahīnam vivarjayet ||

$$
\text { B } 4303 \text { app. }
$$

79. bhrtyā bahuvidhā jñeyā uttamādhamamadhyamāh | te niyojyā yathāyogyam trividheṣv eva karmasu \|\| $B$ (4623).
80. paṇạite ca guṇāh sarve mūrkhe doṣás ca kevalam tasmān mūrkhasahasreṣu prājña eko na labhyate || $H$ (4), B (3876).
81. tyajet svāminam atyugram atyugrāt krpanam tyajet | kṛpaṇād aviśessajñam tasmāc ca kṛtanā́śanam || B 7530.
82. durjanaḥ parihartavyo vidyayālamkrto 'pi san | maṇinā bhū̄sitah sarpah kim asāu na bhayam̉zarah H $25, B 2850$.
83. tulyārthaṃ tulyasāmarthyam marmajñam் vyavasāyinam | ardharājyäharam bhrtyam yo na hanyāt sa hanyate \| B 2584.

 ठиабтоо́фшv.
84. [valmīkami]madhu <kālaś>ca śuklapakṣe ca candramāh | rājadravyamं ca bhāikṣam ca stokam stokena vardhate \||

M 147.
86. khalaḥ sarssapamātrāni parachidrāṇi paśyati | ātmano bilvamātrāni paśyann api na paśyati || $B 2045$.
87.(*) na viśvased amitrasya mitrasyāpi na viśvaset viśvāsād bhayam utpannam mūlāny api nikṛntati ||
Cf. below, v. 90; read perhaps: <visvastād>. B 3429.
88. viṣād apy amrtam grāhyam amedhyād api kāñcanam | nīcād apy uttamā vidyā strīratnam duṣulād api ||
$V B$ i. 16, H 16, B 6227.
89. sarpaḥ krūrah khalah krūrah sarpāt krūratarah khalah | mantrāusadhivaśaḥ sarpaḥ khalaḥ kenopaśāmyati || $\boldsymbol{H}(26), B(6899)$.
(90.) na viśvaset kumitre ca mitre cāpi na viśvaset kadā cit kupitam mitram sarvaguhyam prakāśayet ||
$V B$ ii. $6, H$ (20), $B$ (3430).
91. durjanaḥ <parihartavyo> nāiva viśvāsakārakaḥ| madhu vasati jihvāgre hṛdaye tu halāhalam \|| $H(24), B$ (2852).
Cf. Kressler: durjanah priya ${ }^{\circ}$; corruption due to assimilation to v .82.
92. mukham̉ padmadalākāram̉ vākyam candanaśítalam | hṛdayam karttrīsadṛ̂́am trividham dhūrtalakṣanam | Possibly read: <jituvā candanaŝitalā>.

B 4882 app.
93. mātā vāirī pitā satrur bālo yena na pāthyate |
sabhāmadhye na śobhante hañsamadhye bakā yathā ||
$V B$ i. 11, $H$ (9), $B$ (4800).
94. lālayet pañca várṣāṇi daśa varṣāni tādayet
prāpte tu ṣoḍaśe varṣe putram mitravad ācaret
$V B$ (iii. 18), $H$ 11, $B 5848$.
95. lālanād bahavo dosās tādanād bahavo gunāh | tasmāt putram ca śs syam ca tādayen na tu làlayet ||

$$
\dot{V} B \text { ii. } 12, H(12), B(5847)
$$

96. ślokena vā tadardhena pādenāikākṣareṇa vā |
avandhyam divasam kuryād dānādhyayanakarmabhih ||

$$
V B \text { (ii. 13), } B 6594 .
$$

97. kim kulena viśālena vidyāhīnasya dehinah | akulīno 'pi saāstrajño dāivatāir api pūjyate || $V B$ (viii. 19), $H(6), L g h(v i i .1), B 1734$.
Probably with dusskulinno as a gloss.
98. rūpayāuvanasampannā [viśālakulasambhavāḥ]
vidyāhīnā na śobhante nirgandhā iva kimśukāh

$$
V B \text { iii. 8, viii. 21, } \dot{H} 7, B 5795 .
$$

99. śarvarīdīpakaś candrah prabhāte dīpako raviḥ|
trāilokyadīpako dharmah suputrah kuladīpakah || $B 6428$.
100. ekenāpi suputreṇa [vidyā̀yuktena sādhunā]|
āhlāditam kulamं sarvam yathā candrena śarvarī || $V B$ iii. 16, $B 1416$.
101. ekenāpi suvrrkṣeṇa puṣpitena sugandhinā
vāsitam tadvanamं sarvam suputrena kulam yathā ||
$\dot{V} B$ iii. 14, H 13, B 1418.
102. ekena śușkavrksẹena dahyamānena vahninā dahyate tadvanam sarvam kuputrena kulam yathā || $V B$ iii. 15, $H$ (14), $B$ (1412).
103. kim jātāir bahubhiḥ putrāih sóokasamtāpakārakāih varam ekaḥ kulālambī yatra viśrāmyate kulam ||
$V B$ iii. 17, B 1746.
104. (*) dāne tapasi śāurye ca yasya noccāritam yaśah | vidyāyām arthalābhe vā mātur uccāra eva sah $\| \dot{B}$ (2761).
This verse may be confused in Kressler with equivalents of $B 2760$.
105. te putrā ye pitur bhaktāh sa pitā yas tu poṣakaḥ| tan mitram yatra viśvāsaḥ sā bhāryā yatra nirvṛtih ||
$V B$ ii. $4, B 2611$.
106. mātā yasya gṛhe nāsti bhāryā vā priyavādinī |
araṇyam tena gantavyam yathāranyam tathā gṛham || H 44, B (5387).
107. paṭhakah pāthakaśs cāiva ye cānye saastracintakāh sarve vyasanino mūrkhā yah kriyāvān sa paṇ̣itaḥ ||
Cf. Kressler also under lekhakah.

$$
\text { Lgh ii. } 7, B(5865)
$$

110. ke cid ajñānato nastāah ke cin nasțāh pramādatah |

$L g h$ ii. 11, M 47.
111. pustakeṣu ca yā vidyā parahasteșu yad dhanam| utpanneṣu ca kāryeṣu na sā vidyà na tad dhanam | V̇B xvi. $20, L g h$ v. $3, H(83)^{\prime}, B$ (4156).
112. ekam evākṣaram yas tu guruh śsisyam prabodhayet| pṛthivyām nāsti tad dravyam் yad dattvā cānṛnī bhavet || $V B \times v .2, B$ (1367).
113. janitā copanetā ca yas tu vidyām prayacchati annadātā bhayatrātā pañcāite pitaraḥ smrtāh ||

$$
\nabla B \text { iv. } 18, B 2328 .
$$

114. uttamasyāpi varnasya nīco 'pi gṛham āgatah |
bālo vā yadi vā ṿrddho sarvasyābhyāgato guruh ||

$$
M 23, B 1177^{\mathrm{ab}}, K 90^{\mathrm{abd}}
$$

115. lakṣmīr lakṣanahīne ca kulahīne sarasvatī apātre ramate nārī girāu varṣati vāsavah || K (182) ap. B 3793 app.

 $\delta_{0} \theta \dot{\eta} \sigma \epsilon \tau a \iota$.
116. śuci bhūmigatam toyam suçir nārī pativratā | śuciḥ $\int /$ ksemakaro $\int$ rājā <brahmacārī sadā> śucih ||
Cf. Kressier: śuddhamं bhūmio. VB (viii. 17), Lgh iv. 1, $\dot{B} 6481$.
117. śastram śāstram kṛṣir vidyā <bhāryā lakṣmī nṛpas
tath $\bar{a}>\mid \quad M(159), B$ (1898). sudṛ̣̣ham cāiva kartavyam krṣṇasarpamukham yathā ||
Cf. Vikramacarita SR 14. $2=\operatorname{MR} 14.27 \mathrm{f} .=\mathrm{BR} 14.1$ (F. E.), and Kressler: kresir vidyā.
118. upakāriṣu yah sādhưh sādhutve tasya ko guṇah | apakāriṣu yaḥ sādhuḥ sa sādhuḥ sadbhir ucyate ||
$B$ (1281).
119. śāile-śāile na māṇikyam māuktikañ na gaje-gaje | sādhavo na hi sarvatra candanam na vane-vane \||
$V B$ ii. $9, H 55, B 6523$.
120. jalalekheva nīcānāmi yat krtam $\tan$ na dṛ́syate | atyalpam api sādhūnām śilālekheva tisṭhati || $B 7524$.
121. atilāulyaprasaktānāmं vipattir nāiva dū̄ratah | jīvam naśyati lobhena mīnāś cāmiṣadarśsane || $M 6$.
With yariant: vāyasāmisalubdhānā̀̀ matsyänām iva dṛ̂̌yate, cf. B 2421, 4523.
122. 

alasam mukharañ stabdham krūram vyasaninam satham | asamitustam abhaktam ca tyajed bhṛtyam narādhipah ||

$$
B(639)
$$

(124.) dhanahīno na hīnaḥ sa dhanam kasya hi niścalam | vidyājñānena yo hīnaḥ sa hīnaḥ sarvavastusu $\| L g h$ viii. 2.
125.
sinhāad ekam̉ bakād ekam̉ ssikṣec catvāri kukkuṭāt vāyasāt pañca śiksec ca ṣat śunas trīṇi gardabhāt || $V B$ vi. $15, H$ (66), $B$ (7041).
126. prabhūtaṁ kāryam alpam vā yo narah kartum icchati | sarvārambhena tat kāryam sin̄hād ekam் pracakșate ||

$$
V B \text { vi. } 16, H^{( }(67), B(4261)
$$

127. indriyāni ca samyamya bakavat pandito narah | kāladeśopapannāni sarvakāryāni sādhayet ||
$V B$ (vi. 17), $H$ (68), $B$ (6950).
128. prāgutthānam ca yuddham ca samivibhāgam ca bandhuṣu | svayam ākramya bhuñjīta śikṣec catvāri kukkuṭāt ||

$$
\dot{V B} \text { vi. } 18, H(72), B(5510)
$$

129. gūụhamāithunadhārṣtyam ca kāle cālayasamgraham | apramattam aviśvāsah pañca śiksec ca vāyasāt ||

$$
\bar{V} B \text { vi. } 19, H(71), B(2183), M \text { p. } 51 .
$$

130. bahvāsī̀ svalpasamitustah sunidro laghucetanah | svāmibhaktaś ca śūraś ca ṣaḍ ete ŝvānato guṇāh || $V B$ vi. $20, H(69), B 4427$.
131. suśrānto 'pi vahed bhāram sīitoṣnam na ca paśyati samitustạ́ś carate nityam trīni śiksec ca gardabhāt ||

$$
V B \text { vi. } 21, H(70), B \text { (694). }
$$

132. etāni viñsatim pādāny ācariṣyati yo narah |
sa jeṣyati ripūn sarvān kalyānaś ca bhaviṣyati || M 34.
Read viñśati for metre; cf. Kresṣler: ya etān viñsáti guñān.
(133.) na kaśs cit kasya cin mitram na kaś cit kasya cid ripuh | kārannād eva jāyante mitrāṇi ripavas tathā ||

B 3187, cf. 3189 app.
134. Śokārātibhayatrāṇam prītiviśrambhabhājanam | <kenāmrtam> idam srṣ̣am mitram ity akṣaradvayam || B 6527, cf. 1908, M 21.
135. prastāvasadṛ́sam vākyam $\int$ svabhāvasadṛ́sam priyam $\int \mid$ ātmaśaktisamam kopam yo jānāti sa paṇititah ||
$V B$ xiv. 15, B 4287.
Possibly: svāminah sadr ŗìm kriyām, cf. app. to $B$.
136. <rūpena naśyate nārì kopena tu tapasvinah | naśyate gāuh kulabhrāmāc candālānnād dvijāas tathā $\|>$,
This is perhaps $C N$ 283, cf. sārn̄gādhara Paddhati 1444 (F. E.).
137. avañśapatito rājā mūrkhaputraśs ca paṇ̣itạ̣ | adhano hi dhanam prāpya tṛ̣avan manyate jagat || $H(81), B 653$.
138.* sthānam nāsti kṣano nāsti nāsti prārthayitā narah | tena [nārada] nārīnām satītvam upajāyate \|| $\mathbf{B} 7222$.
Cf. Vikramacarita SR vi. il (F. E.).


140. kokilānām svaro rūpà̀ strīn̄ām rūpàm pativratam vidyā rūpam kurūpānām kșamā rūpám tapasvinām || $V B$ iii. $9, \dot{H}(46), L g h(v i i .3), B$ (1919).
Possible variants are: nârīrūpam (H Lgh), sāntī rūpam (Lgh).
141. mahānadīprataraṇam mahāpuruṣavigraham | mahājanavirodham̀ ca dūratah parivarjayet || $B 4759$.
142. upadeśo hi mūrkhānām prakopāya na śāntaye | 1287. payaḥpānam bhujañgānāmi kevalam viṣavardhanam ||
143. jānīyā̀t preṣane bhṛtyān bāndhavān vyasanāgame | mitram cāpattikāleṣu bhāryāḿ ca vibhavakṣaye \||
$V B$ i. 11, $\dot{H}(21), B 2405$.
144. duradhītā viṣam vidyā $\int$ ajīrnam bhojanam̉ viṣam $\int \mid$ viṣam gosṭhī daridrasya vṛddhasya tarun̄ī viṣam ||
Cf. Kressler: anabhyāse. $\quad V B$ (iv. 14), $\dot{H} 98, B 2836$.
145. parānnam paravastraṃ ca paraśayyām parastriyah | paraveśmanivāsam ca dūratah parivarjayet ||

$$
\text { M 102, cf. B } 7584
$$

146. adhamā dhanam icchanti dhanam mānam ca madhyamāh | uttamā mānam icchanti māno hi mahatām dhanam ${ }^{\prime} \|$ $V B$ viii. 1, $B$ (216).
147. susṣam māñsam striyo vṛddhā bālārkas taruṇam dadhi | prabhāte māithunam nidrā sadyah prāṇaharāni ṣat || $\dot{H} 6 \dot{4}, B 6498$.
148. ajārajah khararajas tathā sammārjanīrajah | <dīpakhaṭvotthachāyā ca> śakrasyāpi śriyam haret || B 7432, cf. 98.
Possibly: hanti punyain purākrtam, cf. $M 56$; but Galanos inclines to the avoidance of mythology.






151.* strīṣu rājasu sarpeṣu svādhyāye <śatruvigrahe | B7217, agnāu durjane> viśvāsam kah prājñah kartum arhati ||
152.* yo 'rị̣ā saha samd dhāya sukhaṃ svapiti viśvasan | sa vṛksāgre prasupto vā patitah pratibudhyate \|
149. nātyantasaralāir bhāvyam gatvā pấsya vanasthalīm chidyante saralās tatra kubjās tiṣṭhanti pādapāḥ||

$$
V B \text { vii. i2, } B 3564 .
$$

154. nātyantam mṛdu <bhāvyam tu mṛduh sarvatra pīdyate mṛdum hi kadalam dṛ̣̣tvā ko nāvakartum icchati $\|>$
Pratika of $C N 49$ is so given; I should have expected: nätyantamrdubhir bhāvyam.
155. namanti phalino vṛkṣā namanti gunino janāh | B 3365. śuṣkakāṣṭham ca mürkhaś ca bhidyate na ca namyate ||



156. dhanyās te ye na paśyanti deśabhañgami kulaksayam parahastagatām bhặryām mitram ca viṣamasthitam

B 3084.
158. <kúpātre nirvṛtir nāsti kubhāryāyām kuto ratị̣ |
kumitre nāsti viśvāsah kurājye nāsti jīvitam \|>
Cf. Kressler: kumitre nāsti. cf. $M$ p. $50, B 1800 \mathrm{app}$.
 jīvitasya māno mūlam māne mlāne kutah sukham || cf. B 4828.
160.* udaye savitā rakto raktaśs cāstamaye tathā | sampattāu ca vipattāu ca mahatām ekarūpatā \| $B$ (1237).
161. balamं mūrkhasya <mūrkhatvamं> cāurānām anrtam balam $\mid \quad H(62), B$ (2866). durbalasya balam rājā bālānām rodanam balam ||
Cf. Kressler: durbalasya. The variant must be a corruption of māunitvam.
162. kubhāryāṃ ca kudeśaḿ ca kurājānam kusāuhṛdam | kubandhum ca kumitram ca dūrataḥ parivarjayet || $B$ (1802).
163. vyādhitasyārthahīnasya deśāntaragatasya ca narasya śokataptasya suhṛddarśanam āuṣadham $B$ (7606), cf. $M$ p. 68.
164. parokṣe kāryahantāram̀ pratyakṣe priyavādinam | varjayet tādṛ́sam mitram viṣakumbham payomukham || $V B$ ii. $5, H$ 18, B 3979.
165. varayet kulajāàm prājño virūpām api kanyakām | rūpavatī̀n na nīcasya vivāhah sadṛ̂́s kule ||
$V B$ (i. 14), B 5982.
166. dhanadhānyaprayogeṣu vidyāsamgrahane tathā | āhāre vyavahāre ca tyaktalajjah sadā bhavet || $V B$ (vii. 2, xii. 21), $H$ (35), B (3042).
167. niḥspṛ̂ho nādhikārī syān nākāmī maṇ̣anapriyah nāvidagdhah priyam brūyāt spasṭavaktā na vañcakah || $V B$ v. $5, B$ (3786).
168. varam̉ hālāhalam pītam sadyaḥ prāṇaharam viṣam na tu varam dhanāḍhyasya bhrūbhañgakuṭilam mukham || M 144.
169. mūrkho hi parihartavyah pratyaksam dvipadáh paśuḥ| bhinatti vākyaśalyena adrṣtạ̣ kaṇṭako yathā ||
Cf. Kressler: mürchas tu. $V B$ iii. 7, B 4924.
170. putrās tu vividhāih súlpāir niyojyāh satatam budhāiḥ | nītijñā buddhisampannā bhavanti khalu pūjitāh ||

$$
V B \text { (ii. 10), } B \text { ( } 4116 \text { app.). }
$$

171. pustake pratyayādhītam nādhītam gurusamnnidhāu| sabhāmadhye na sobhante $\int$ jāragarbhā $\int$ iva striyah $V B$ xvii. 1, $B$ (4155).
172. yasya nāsti svayam prajñā śāstram tasya karoti kim | locanābhyām vihīnasya darpaṇạ kim karisyati ||

$$
V B \times .9, H 109, B 5380
$$




 sa vṛkṣāgre yathā suptaḥ patitah pratibudhyate || B 3099 (4219), 5646.
175. kṛte pratikṛtam kuryād dhiñsite pratihinisitam | tatra doṣam na paśyāmi yo duṣte dustam ācaret ||

$$
V B(\text { xvii. } 2), B 1874, M \text { p. } 50 .
$$


 $\pi a \rho^{\prime} a \dot{\jmath} \tau \hat{\omega} \nu$.
177. tāvad bhayeṣu bhetavyam yāvad bhayam anāgatam | āgatam tu bhayam drṣțā prahartavyam aśañkayā ||
$V B$ v. $3, B$ (2550).
178.* ṛnaśesam agniśeṣam śatruśeṣam tathāiva ca |
punah-punah pravardhante tasmāc cheṣam na dhārayet ||
B 1332.
Cf. Kressler: rnáséeso.
179. kāvyaśāstravinodena kālo gacchati dhīmatām | vyasanena tu mūrkhānām nidrayā kalahena ca || EB 1711.
Cf. Kressler: gìtavādya ${ }^{\circ}$; also Vikramacarita SR I. 3 (F. E.).
180. pitā rakṣati kāumāre bhartā rakṣati yāuvane | rakṣanti sthāvire putrā na strī svātantryam arhati $\|_{B} 4067$.
181. atikleśena ye hy arthā dharmasyātikrameṇa tu $\int$ satrūn̄ām $\int$ pranipātena te arthā mā bhavantu me $\|$
$V B$ xvi. $11, B(128)$. 182 gunair uttamatàm yanti noccāirāsanasamsthitāh prāsādaśikharastho 'pi kākah kim garudāyate ||
$V B$ xvi. $6, B$ (2161).
(183.) aśakyam nārabhet prājño akāryam nāiva kārayet |' asatyam na ca vaktavyam niṣphalam nāiva sevayet ||

$$
K 218^{\mathrm{abd}}, B 712^{\mathrm{abc}} \text {, cf. } M 14 .
$$


 тотанои́s.
Read: na krị̆̀̇et pannagäih prāajnah or saha, as it begins or ends the stanza.



The latter part, I suspect, was intended for a footnote, cf. citation of Hesiod at 141.
187. īpsitam manasah sarvam kasya sampadyate sukham | dāivāyattam yatah sarvañ tasmāt samintosam āśrayet
$V \dot{B}$ xiii. $14, B 1148$.
188. ripurājāgnisarpānāà dusṭastrīvanasan̄ginām |

S nadīnā̀̇ $\int$ śastrahastānạ̄̀ viśvāsam nāivà kārayet ||
M 137.


191. [gate śoko na kartavyo] bhavisyam nāiva cintayet | vartamãnena kālena vartayanti vicakṣanāḥ ||
$V B$ (xiii. 2), B 2072.
Possibly $a$ had been supplanted by a variant of $c$ : vartamannena samtustio.



Cf. M 209: cāpalyam lāulyatā̀ kopam.



Cf. B 2160: ksīrodadhisamutpannah kālakcütah.
194.* <yogam vinā dhanam nāsti adhanasya kuto guñāḥ agunasya kuto dharmo adharmasya kutah sukham \|>
195. dharmārthakāmamokṣāṇām yasyāiko 'pi na vidyate | ajāgalastanasyeva tasya janma nirarthakam ||
$V B$ (iii. 20), xiii. 10, B 3120 app.

196-7.* dharme rāgah śrute cintā dāne vyasanam uttamam | indriyārtheṣu vàirāgyam samiprāptam janmanah phalam || B 3132.
198.* kharaḿ śvānam gajonmattam raṇḍām ca bahubhāṣinīm <kurājānamं> kumitram ca dūratah parivarjayet ||

B 2042.

(199.) śakațàm pañcahastena daśahastena vājinam | hastinam śatahastena deśatyāgena durjanam ||
$V B$ (vii. 7), $B$ (6341).
(200.) kim karoti narah prājñaḥ sūro vāpy atha paṇ̣itah | dāivam yasya chalānveṣi karoti viphalāñ kriyām ||

Lgh iv. 7, B 1729.
201. yasya putro vaśibhūto bhāryā chandānugāminì |
vibhave yaś ca samitusṭas tasya svarga ihāiva hi ||

$$
V B \text { ii. } 3, H(42), B 5382 .
$$

202.* ādityasyodayo gānam tāmbūlam bhāratī kathā | iṣtā bhāryā sumitram ca apūrvāni dine-dine || B 932.
203. nātyuccaśikharo merur nātinīcaṇ rasātalam vyavasāyapravṛttānām nāsty apāro mahodadhih || Lgh vii. 6, B (7569).
204. şaṭpadah puṣpamadhyastho yathā sāram் samuddharet tathā sarveṣu <kāvyeṣu> sāram gṛhṇāti buddhimān ||
$B$ (6605).
205.* karmabhūtim imām̉ prāpýa kartavyam karma yac chubham |
agnir vāyuś ca somaś ca karmanāṃ phalabhāginah ||

$$
\text { B } 1564 .
$$

206. jīvantam mṛtavan manye dehinam dharmavarjitam | mṛto dharmeṇa saṃyukto dīrghajīvì na saḿśayah ||
$V B$ xiii. $9, B 2430$.



207. sa dharmo yatra nādharmas tat sukham yatra nāsukham | jñānam ca yatra nājñ̄ānam sā gatir yatra nāgatih || M170.

 $\tau \hat{s}$ àvouias cívì tà évavtía.



 $\sigma \kappa \lambda \eta \rho a \gamma \omega \gamma i ́ a s$.
208. kṣīyante sarvadānāni yajñahomabalikriyāh
na kṣīyate <mahā>dānam abhayam sarvadehinām ||
$V B$ (xvi. 14), B 2023.

 Cf. B 6930 .
209. nāhāram cintayet prājño dharmam eva hi cintayet | āhāro hi manuṣyāṇām janmanā saha jāyate ||
$V B$ (xii. 20), B 3695.
215.* rājyam ca sampado bhogāh kule janma <pavitratā>|
pāṇ̣ityam āyur ārogyam dharmasyāitat phalam viduh ||
B 5772.
210. dāridryanāśanam dānam śilaḿ durgatināśanam ajñānanāśinī prajñā bhavanā bhavanāśinī ||

$$
V B(\mathrm{v} .10), B(2775)
$$

217. <jñā̄nam̉ vi>jnñānadānena nirbhayo 'bhayadānatah | annadānāt sukhī nityam nirvyādhir bheșajād bhavet || B 2455.
The change in $a$ not only coincides with Galanos' $\gamma \nu \omega \bar{\omega} \sigma t s \gamma / \nu e \tau a i '$ but $j \tilde{n} \bar{a} n a v i j \bar{n} \bar{a} n a^{\circ}$ is cited by Kressler from Bhj.
218. mātṛvat paradārāñś ca paradravyāṇi loṣtavat. ātmavat sarvabhūtāni yaḥ paśyati sa paśyati
$V B$ xii. 14, $H$ (5), B 4805.
219. anityāni śarīrāni vibhavo nāiva saáśvatah |
nityam samnihito mrtyuḥ kartavyo dharmasamgrahah ||
$V B$ xii. 12, B 292.
220.* mātulo yasya govindah pitā yasya dhanamijayah |
so 'bhimanyū rañe sete niyatih kena bādhyate \|| B 4802.
220. grheṣv arthā nivartante śmaśānād api bāndhavāh | śarīram $\int$ tīrtham ādāya $\int$ punyapāpāih samam gatam || M 55, cf. B 601.
221. na ca mātā pitā yāti na ca bhrātā sahodaraḥ |
puṇyam <eva> samam yāti <na sutā na ca bāndhavāh>
Possibly $d$ is nothing but a variant to $b$.
| B 3229.




For the thought cf. $B 4793$, for the form $B 1623$.

 $\tau \grave{\eta} \nu \sigma \epsilon \lambda \dot{\eta} \nu \eta \nu$.
222. krtakarmakṣayo nāsti kalpakoṭiśatāir api avaśyam eva bhoktavyam kṛtam karma śubhāśubham || $T j D 257, B 1854$.
223. avaśyà bhāvino bhāvā bhavanti mahatām api nagnatvam nīlakaṇṭasya mahāhiśayanam hareh $T j D 256, B 671$.



The opposite is maintained $B 4755,4764$.
224. svayam karma karoty ātmā svayam tatphalam aśnute svayam bhramati samsāre svayam tasmād vimucyate \|
$V B$ vi. $9, B 7305$.
230.* ālasyam hi manusyāṇām śarīrastho mahān ripuḥ | nāsty udyamasamo bandhuḥ kṛtvā yan nāvasīdati || $B$ (1030).
231.* krtāntavihitam karma yad bhavet pūrvanirmitam | na sakyam anyathā kartum piṇ̣itāis tridaśāir api || B 1870.
225. nāprāptakālo mriyate viddhah saraśatāir api | S truāāgrenāpi samsprṣṭah / prāptakālo na jīvati || $B 3595$.
226. yathā dhenusahasreșu vatso vindati mātaram tathā pūrvakṛtañ karma kartāram anugacchati ||
$V B$ (xiii. 15), B 5114.
227. janma-janma yad abhyastam dānam adhyayanam tapah | tenāivābhyāsayogena tad evābhyasyate punah ||
$V B$ (xvi. 19), $B$ (2331).
228. varamं parvatadurgeṣu bhrāntam vanacarāih saha na mūrkhajanasamparkah surendrabhàvaneṣv api || B 5975.

 $\dot{v} \psi \eta \lambda \eta \eta^{2}$.
229. <dhanavān akulīno 'pi sarvatra paripūjyate śaśino jātavañśo 'pi nirdhanaḥ paribhūyate $\|>$ cf. Lgh viii. 1.
230. yasyārthas tasya mitrāni yasyārthas tasya bāndhavāh | yasyārthah sa pumāñl ioke yasyārthah sa ca paṇditah \|

$$
V B \text { vi. } 5 \text { (vii. } 15), B(5409)
$$

239. vayovrrddhās tapovrddhā ye ca vṛddhā bahuśrutāh | te sarve dhanavṛddhānām dvāri tisṭhanti kimkarāh ||

Lgh̆ viii. 3.
240. arthānām arjane duḥkham arjitānā̀m ca raksane āye duḥkham vyaye duḥkham dhig arthā̀ duhlehasamiśrayāh || $B$ (605).
241. gàtibhañgaḥ svaro dīno gātrasvedo mahad bhayam | marane yāni cihnāni tāni cihnāni yācake || $B$ (2811).
242.* mahatā̀n prārthanenāiva vipattir api sobhate dantabhañgo hi nāgānām ślāghyo girividāraṇe || $B$ (4746).



Cf. $B$ 2456, 2457, 2709, 4506, 6540.

 ©єєй үívєтаı.

 ढ̇ $\boldsymbol{\sigma} \tau \downarrow$.
246. yasya cittam dravībhūtam krpayā sarvajantuṣu | tasya jñānam ca mokṣaś ca kim jaṭābhasmacīvarāih ||
$V B$ (xv. 1), $B{ }^{(5368) .}$

 $\tau \omega \bar{\omega} \pi \rho o ̀ s ~ \zeta \omega \dot{\eta} \nu$.


249.* dānam̉ pūjā tapaś cāiva tīrthasevā śrutam tathā | sarvam tad viphalam tasya yasya cittam na śudhyati||




252. yasya sneho bhayam tasya sneho duḥkhasya bhājanam | snehamūlāni duḥkhāni tāni tyaktvā vaset sukham ||
$V B$ xiii. $6, B 5401$.


254.* <dhanam yasya bhaven mānaḥ suciram tasya jīvitam>| prabhrasṭamānadarpasya kim dhanena kim āyuṣā || B $4828^{\text {cd }}$.
255.* prājñas tu jalpatām punsām śrutvā vācah śubhāśubhāh | guṇavad vākyam ādatte hañsaḥ kị̣iram ivāmbhasah ||
Galanos' translation lacks the limitation to a conversation. $\quad \boldsymbol{B} 4923$.
256.* vasen mānādhike sthāne mānahīnam vivarjayet mānahīnam surāih sārdham vimānam api varjayet ||

B 6003.
257. muhūrtam api jīveta narah śuklena karmaṇā na kalpam api kastena lokadvayavirodhinä \||
$V B$ xiii. 1, B 4905.
Galanos' translation is free.
258. saṁsārakatuvṛksasya dve phale amrtopame kāvyāmrtarasāsvādáa āāāpah sajjanāih saha ||
$V B$ (xvi. 18), B (6636).
259. ākārāir in̄gitāir gatyā cesṭayā bhāṣitena ca
netravaktravikārāiśs ca grhyate 'ntargatam manah ||
B 848.
260. rājñi dharmiṇi dharmisṭhāh pāpe pāpāh same samāh |
rājānam anuvartante yathā rājā tathā prajāh ||
$\nabla B$ xiii. 8, Lgh ii. 6, B 5768.
261. nāsti satyam sadā cāure na śāucam vreṣalīpatāu |
madyape sāuhṛdam nāsti dyūtakāre trayam na hi ||
B 7576.
262. sakṛj jalpanti rājānah sakṛj jalpanti sādhavah | sakṛt kanyāh pradīyante trīny etāni sakrt-sakrt || $V B$ (iv. 10), $B 6650$.
263. abhrachāyā trụād agniḥ khalaprītih sthale jalam veśyārāgah kumitram ca ṣad ete budbudopamāh B 516.
264. guṇāh sarvatra pūjyante pitrvañśo nirarthakah vāsudevam namasyanti vasudevam na te janāh |

Lgh vii. 4, B 2143.
265. daridrān̄ām anāthānām bālaviṛddhatapasvinām anyāyaparibhūtānām sarveṣām pārthivo gatih \| $\|$ (7443).
Cf. Kressler: anāthānā̀̀.
266. ācāraḥ kulam ākhyāti deśam ākhyāti bhāṣanam | <sam̀mānah > sneham ākhyāti vapur ākhyä̀ti bhojanam ||
Merely a scribe's blunder for sambhramah.
$V B$ iii. $2, B 870$.
267. arthārthī bhajate loko na kaś cit kasya cit priyah | vatsah kṣirakṣayam dṛștvā parityajati mātaram || $M 180$. Cf. also $B 2541,3186,3187,3189$.
268.* devadravyena yā vṛddhir gurudravyena yat sukham S tad dhanaṃ' $\int$ kulanāśāya mrto 'pi narakam vrajet ||

$$
B(2941)
$$




Contrast B 3115 .
271. rājā kulavadhūr viprā niyogī mantrinas tathā sthānabhlraș̣̣̄ā na śobhante dantāḥ keśā nakhās tathā B 5750 .
272.(*) bhāvaśuddhir manuşān̄ām jñātavyā sarvakarmasu | anyathālingyate kāntā bhāvena duhitānyathā $B$ (4579) app.
G. seems to have read älingate. His vióy must be a lapsus for aatépa.





Cf. B 2547.
275.* pañca naśyanti [padmākṣi] kṣudhārtasya na saṁśayah | tejo lajjā matir mānam் mahattvam cāpi pañcamam || B 3855.




 є́avтov̂ $\gamma \lambda \omega \bar{\omega} \tau \tau a \nu$;
Cf. Lgh. vi. 10.



 ромфаías.


281. varamं hi narake vāso na tu duścarite gṛhe narakāt kṣiyate pāpam kugṛhāt parivardhate \|
From Subhāṣitāvalī 3163 (F. E.).
282. durjanāịh saha sañgena sajjano 'pi vinaśyati| prasannam jalam ity āhuh kardamāih kaluṣàyate

B 7546.
283. guṇo 'pi doṣatā̀m yāti vakrībhūte vidhātari anukūle punas tasmin doṣo 'pi ca guṇāyate \| $B 7518$.
284.(*) kṣamī dātā gunagrāhī svāmī bhāgyena labhyate | nṛparaksah sucir dakṣo bhṛtyah khalu sudurlabhah ||

$$
B(2013)
$$

Probably: nrpa<raktah> or nrpa<bhaktah >. Cf. Kressler: kssāmī?
285. yāvat punyodayah puńsām tāvat sarve 'pi kimkarāh puṇyachede tu samjjāte bāndhavās te 'pi vidviṣah \|| M 133.
286.* gāuravam prāpyate dānān na tu dravyasya samgrahāt| āgacchan vāñchito lokāir vārido na tu vāridhih || B $2209^{\mathrm{ab}}, 4346^{\mathrm{cd}}$.
287.* duṣtasya daṇdah sujanasya pūjā
nyāyena kośasya vivardhanam ca
apakṣapāto $\int$ 'rthiṣu $\int$ rājyarakṣā
pañcāiva yajñāh kathitā nṛpānām || 3890.
288.* marusthalyām yathā̀ vṛṣtih kṣudhā̈rte bhojanam tathā | daridre dīyate dānam saphalam [pāndunandana] || B 4730 .
289. daridre dīyate < dānaṃ sarvadā tat praśasyate nādaridre tu yad dattam kim vāridena vāridheh $\|>$
290.* <mṛtasyāpi nivartante pañcāitāni na saḿśayaḥ śāstram̀ vāpī kūpo vṛksah suputraś cāiva pañcamah \|>
291.* <dharmaḥ pitā kṣamā mātā bhāryā jñeyā dayā tathā itarās tu guṇāh putrā.bāndhavās te sudhīmatah \|>
292. dhanikah śrotriyo rājā nadī vāidyas tu pañcamah| pañca yatra na vidyante na tatra divasam vaset ||

$$
V B \text { i. } 9, H(36), B
$$

293. S lokayātrā $\int$ bhayam lajjā dākṣinyam tyāgaśīlatā pañca yatra na vidyante na kuryāt tatra samgatim ||
$V B$ i. $10, B$ (3862).
(294.) dadāti pratigẹhṇāti guhyam ākhyāti prechati| bhuñkte bhojayate cāiva ṣaḍvidham prītilakṣanam || B 2703.

 ruvaîka.
Cf. $B^{2}$ 2993, 2994.
(296.) sarvanāśe samutpanne ardham tyajati paṇditah | ardhena kurute kāryam sarvanāso hi $\int$ duḥsahah ${ }^{\text {S }}$ |l B 6929.
Read: <mūrkhatā>?
294. saṁtoṣas triṣu kartavyah svadāre bhojane dhane triṣu cāiva na kartavyo dāne cādhyayane tape \|

$$
V B \text { (vii. } 4, \text { xiii. } 19), B(6799), M \text { p. } 65 .
$$




299. asamintusțā dvijā nastuāh sam̉tusțtās ca mahībhrtah | salajjā gaṇikā nastūa nirlajjāś ca kulān̄ganāh ||
$V B$ viii. 18, $H$ (80), $L g h$ (iv. 3), $B$ (755).
(300.) aśakyam̉ nārabhet prājño akāryảm nāiva kārayet | yathādeśagatadharmam yathākālam ca jīvayet || $B \quad 712^{\mathrm{ab}}$.
301.* <ghṛtam bhūṣanam annasya yāuvanam narabhūṣaṇam | $\left.\begin{array}{l}\text { dhanasya bhūşanam dānam் } \\ \text { vākyasya bhūṣaṇam satyam }\end{array}\right\}$ svāmino bhūṣanam kṛpā $\|>$
(302.) vastrahīnas tv alam̉kāro ghrtahīnam ca bhojanam svarahīnam ca gāndharvam būāvahīnam ca māithunam || B 6011.
305. riktapānir na paśyeta rājānam devatāṃ gurum | nāimittikam <ca vāidyam ca> phalena phalam ādiśet ||

B 5786.
306. priyavākyapradānena sarve tuşyanti jantavah | tasmāt tad eva vaktavyam vacane kim daridratā ||
$V B$ xvi. 17, B 4352.
307.* <daṇdena na tu mānena sarvam etad vidhīyate | gardabhādi dundubhiśs ca dāsì bālāh striyas tathā $\|>$
308. āyuh karma ca vittam ca vidyā nidhanam eva ca pañcāitāni ca sṛjyante garbhasthasyāiva dehinah ||
$V B$ (iv. 1), xiii. $4, B$ (992).
309. manasā cintitam kāryam̀ vācā nāiva prakāśayet | mantreṇa rakṣayed gūḍham kāryam cāpi niyojayet || .,
$V B$ ii. $7, H$ (38), B (4687).
311. ājñāmātraphalam rājyam brahmacaryaphalam tapah
jñ̄ānamātraphalā vidyā dattabhuktaphalam dhanam ||
B 880.
312.*, vasisthakulajāto 'pi yah khalah khala eva sah candanād api sambhūto dahaty eva hutāśanaḥ || $B 6001$.
314. maksikā vraṇam icchanti $\int$ dhanam $\int$ icchanti pārthivāḥ nīcāḥ kalaham icchanti śantim icchanti sādhavah ||
$L g h$ v. $9, B 4651$.
315.* ādāu tanvyo bṛhanmadhyā $\int$ vistāriṇyah pade-pade $\int \mid$ yāyinyo na nivartante satām māitryah saritsamāh || B 940 .
316.(*) jīvite yasya jīvanti <bhṛtyā> mitrāni bāndhavāh |

- saphalam jīvitam tasya ātmārtham ko na jīvati || 2439.

Cf. Kressler: yasmiñ jīvati (Klatt would so emend) ?




Cf. B 6628, 6629.



320. trnāl laghutaras tūlas tūlād api ca yācakah | vāyunā kim na nīto 'sāu mām ayam̀ yācayed iti ||
$V B$ (xvi. 15), $B$ (2590 app.).



Contrast $B 4587$.
324.* <vyādheh samam nāsti sarīraśosanam mātuḥ samam nāsti śarīrapoṣanam | bhāryāsamam nāsti sarīratoṣaṇam vidyāsamam nāsti śarīrabhūṣaṇam \|> After $M 50$.
325. kāke śāucam dyūtakāreṣu satyam sarpe kṣāntiḥ strīṣu kāmopaśāntiḥ | klībe dhāiryam madyape tattvacintā rājā mitram̉ kena dṛsṭam śrutam vā || $B 1618$.
326.* sarv<eṣu dharmesu dayã> pradhānā
sarveṣu pāneṣu jalam pradhānam |
sarveṣu sāukhyeṣu <vadhūḥ> pradhānā
sarveṣu gātreṣu śirah pradhā̀nam ||
$V B$ (ix. 4) $, M(173), B$ (6959).
327. kāntāviyogah svajanāpamāna

ṛnasya śesam kujanasya sevā
daridrabhāvād vimukham ca mitram
vināgninā pañca dahanti kāyam \| $V B$ (ii. 14), $B$ (1630).
328.* avinīto bhrtyajano nṛpatir adātā saṭhāni mitrāni
avinayavatī ca bhāryā mastakaśūlāni catvāri \|| $B 691$.
329. sarve kṣayāntā nicayāḥ patanāntāh samucchrayāh |
samyogā viprayogāntā maranāntaṃ ca jīvitam \|${ }^{\circ} B 6948$.
330. na sā sabhā yatra na santi vr̛ddhā
na te vṛddhā ye na vadanti dharmam
nāsāu dharmo yatra na satyam asti
na tat satyam yac chalenābhyupetam || $B 3483$.
Columbus, Онio.

## THE SOURCES OF INDIAN PHILOSOPHICAL IDEAS

## George William Brown

## Professor of Old Testament Literature, College of the Bible, Lexington, Kentucky

It is ugually held that the characteristic Indian philosophy, which first presents itself in a developed form in the Upanishads, is a direct evolution from the older faith of the Aryans, as that faith is revealed in the older hymns of the Rig Veda. To be sure, it is admitted that there is something extraordinary in the development. A highly organized ritual, such as one finds described in the Rig Veda, with its exaltation of the priesthood and of sacrifice, would not normally lead into a system in which the priesthood is ignored and the sacrifice is regarded as useless. The abnormality is the more marked when we find that the ritual was continued alongside of the non-ritualistic system characterized by the philosophy, and in many ways was still more highly developed in the days of the Sūtras. Chronologically, it is usually granted that the speculative hymns of the Vedas are among the latest passages in those books, that the earlier Brāhmanas were nearly or quite contemporaneous with these hymns, and that the earlier Upanishads were nearly or quite contemporaneous with the later Brāhmanas. In the same way the Sūtras link on to the Upanishads. Sūtra and Upanishad seem to stand at opposite poles (reference is of course made here to the Sūtras dealing with the ritualistic side of things). The chain of development presented is that of a ritualistic system in the older Rig Veda, developed thruout the Brāhmanas and Sứtras-the normal development. But there appear certain hymns, manifesting different tendencies, in the later parts of the Rig Veda; traces of the same thought are found in the Brāhmanas, and these ideas are the essential part of the Upanishads. We have, then, side by side, two fundamentally different systems of thought; the one strongly polytheistic, with a highly elaborated ritual; the other paying little attention to gods as such, certainly to personal gods, and taking the form of a monistic or dualistic philosophical system.

A fundamental question in connection with this phenomenon is, whence came the newer and philosophical ideas? Assuming
that only the Aryan element contributed toward the development of Indian thought, that the earlier inhabitants of the land were destroyed, or at least culturally reduced to zero, by the invading Aryans, it is usually taught that the almost atheistic philosophy of the Upanishads is a natural sequence of the earlier polytheistic ideas manifested in the original parts of the Rig Veda. The one argument which may be best invoked to substantiate this assumption is the chronological one, for characteristic Upanishadic thought certainly did follow characteristic Vedic thought. Yet this argument alone is not conclusive. It is offset by the wide difference in the fundamental ideas of the earlier and later systems. Again, it may be just as effectively invoked to prove that the philosophic ideas were derived from some other source, such as the pre-Aryan civilization of the country, which was gradually assimilated by the invading Aryans. In fact, this assumption is one that deserves far more consideration than it has usually had. Why should we assume that only Aryan elements enter into later Indian culture? On the contrary, why should we not assume that later Indian culture is a composite product, as practically all later cultures are composite products, and that both the Aryan and the non-Aryan elements contributed to it?

That the non-Aryan element of the population was not wholly exterminated is an unquestioned fact. The southern part of India, in fact nearly all the peninsula proper, is racially unAryan. And tho Aryan languages have spread more than Aryan blood in the occupation of the land, the South is still linguistically unconquered. If we accept Risley's conclusions in toto (cf. H. H. Risley, The People of India, 2nd ed., p. 33ff.) we find the prevailingly Aryan element of the northwest of India becoming continually weaker as we go east and south, so much so that the non-Aryan or Dravidian element in the Gangetic Doab, the ancient Madhyadeśa, is stronger than the Aryan element. Farther east, in ancient Magadha and Videha, the Aryan element is still smaller, and the population must always have been prevailingly Dravidian (or at least non-Aryan)., Even if one disagrees to a large extent with Risley's conclusions, one can not escape the general conclusion that the non-Aryan part of the population is a very large one even in these parts of the country. We can not, therefore, accept the view that the Aryans exterminated the original inhabitants; the facts are against such a view.

Granting, as we must grant, that the South has from the earliest times been Dravidian-using that term in the loose and convenient sense of non-Aryan-and that a considerable strain of Dravidian blood is to be found even in the North, the question at once arises as to whether or no this Dravidian element of Indian population contributed to Indian culture. A priori, whenever there is a blending of two races, we expect a blending of their cultures, and the amounts contributed by the respective races should be in proportion to their numerical strength. But this dictum can never work out with numerical exactness; the stronger and more advanced race will inevitably contribute more, in proportion to its numbers. Since the population of India certainly has a very large Dravidian element, and probably is prevailingly, and in many parts overwhelmingly, Dravidian, a priori we should expect the culture to be very largely Dravidian. Was the superiority of the Aryans, then, so great as to make the Dravidian influence negligible? From the political and military standpoint, it is hardly to be questioned that the Aryans were superior to the Dravidians. But were they as superior in other respects? And even if they were superior, was their superiority sufficient to overcome the handicap of numerical inferiority? For we can hardly think that in the Doab and the Magadha-Videha region the Aryan strain was more than twenty-five per cent of the population; according to Risley's conclusions, it could scarcely have been more than half that much. The task of organizing and Aryanizing so vast a mass of Dravidians along wholly Aryan lines would have been immense; it is difficult to conceive how it could have been accomplished. Again we know that the ancient Dravidians carried on commerce with the western world.' Not to mention the investigations of Indian writers of repute, H. G. Rawlinson's Intercourse between India and the Western World (pp. 14, 30) notes the number of articles of commerce supplied to the western world by Dravidian India, and the number of Dravidian loan words in Greek and other languages, names of these articles. It would seem that at least the ancient sea traffic of India, which must have been considerable, was very largely in Dravidian hands. This is made the more probable by the relatively slight mention of sea traffic in ancient Sanskrit Iiterature. But the commercial bent of at least parts of the Dravidian population is not merely a matter of conjecture. To the present day Dravidian merchants of the south are just as keen as the Aryan
merchants of the north. There is no reason for thinking that this was not always the case. The only natural inference from these facts is that the ancient Dravidians, or at least some of them, must have been highly civilized and well-organized.

It is vain to go to the epics for trustworthy historical matter; yet if any dependence is to be placed on their statements, the cities of the Dravidians, their wealth and their culture, compared very favorably with those of the Aryans. Owing to the rise of Buddhism in northern India, to the facts that the earliest known Indian alphabet seems to have been introduced thru the northwestern frontier, and that the Panjab was the scene of the Persian and Macedonian invasions, we have an earlier history of north India than we have of the south. But not very much earlier. And when the authentic history of the south does begin, we find there a highly developed civilization, which is inferior to that of the north, for the most part, only in respect to those matters which were due to the contact of the north with the Persians and Greeks. There is nothing in history, ancient or modern, which would indicate that the Dravidians were incapable of contributing a very considerable element to the final resultant of Indian culture. There is nothing in the present standing of the Dravidian to indicate such inferiority. The relative intelligence of the largely Aryanized Panjab shows no very marked superiority to that of Dravidian Madras. On a priori grounds, there seems to be every reason for assuming that the Dravidian contributed his full share to Indian culture.

In seeking for matters in which positive Dravidian influence may be traced, one turns first of all to language. It seems to be reasonable to maintain, and it has frequently been maintained, that the whole class of cerebral sounds in Sanskrit was developed after the arrival of the Aryans in India. Either or both of two causes may account for this. The new sounds may have developed thru internal phonetic change, or they may have been introduced from an external source. Since the Dravidians had, and still have, both dental and cerebral sounds in their languages, it is certainly possible that Sanskrit derived these sounds from its contact with Dravidian. This is not the place to argue this question, but to the writer the cumulative evidence as to Dravidian influence in cerebralizing a large number of dentals is very strong. A brief treatment by Grierson of this and other possible cases of Dravidian influence on the phonology of Aryan languages in India will be found in Linguistic Survey of India, iv. 279 f .

More impressive and less open to question is the influence of Iravidian on Aryan inflexion. A most convenient summary of is phase of the matter is given by Grierson, op. cit., pp. 280-1. r. Caldwell, in his Comparative Grammar of the Dravidian or outh-Indian Family of Languages, pp. 39f., 225ff., long ago ointed out the similarity in the use of postpositions in the todern vernaculars and in Dravidian. Both groups of lanuages make use of an oblique form of the noun to which the ostpositions are attached. The order of words in the modern ernaculars has become Dravidian, and not Sanskrit. The use f prepositions has ceased; the conjunctive participle has been eveloped. Even in Sanskrit such forms as kartāsmi and rtavān seem to be exact copies of Dravidian forms. There can sarcely be a doubt that the modern vernaculars have been trerendously influenced by Dravidian. And Sanskrit itself shows vidence of borrowing from the same source.
It is generally admitted that phases of Siva worship, and robably even Siva himself, have been derived from Dravidian ources. Dr. Grierson (op. cit., p. 279) notes that the word iva is Dravidian as well as Aryan, that in Dravidian it means $e d$, while rudra in places in the Rig Veda seems to have the ame meaning. This is a possible reason for the identification f Rudra with Siva. That Tantra worship is derived from the ,borigines is the general opinion of writers on this subject. ;imilarly the worship of Kālī and Durgā is generally believed o be traceable to aboriginal sources. Among others, Bhandarar, in his Vaisnavism, Saivism, and minor religious Systems, p. 115, 144, recognizes strong influences' exercised by the savge tribes. It has been very reasonably suggested that the ;reat pilgrimage places, such as Allahabad and Benares, were acred long before the advent of the Aryans, and that their anctity was simply taken over, as it were, by the newcomers.
There was a marked difference, apparently, between the tryans and the aborigines in the matter of gods. The characeristic Aryan thought is that of a few great gods with distinct sersonalities, as manifested in Indra and his associates. Some, ndeed, are nature gods, as Jupiter Pluvius was a nature god; levertheless, the Aryan gods who are on the active list are ndowed with sufficient personality to enter into a mythology, and few enough in number to be known thruout the entire tryan community. Characteristic Dravidian thought, on the ther hand, recognizes gods innumerable, shadowy beings for
the most part, ghostly beings, or identified with some animal, some disease, some force of nature. One may well fancy the charms of the Atharva Veda-especially when he remembers the struggles of this book to attain canonicity-to represent a portion of the aboriginal cultus absorbed by early Aryans. For the Aryans were in contact with the Dravidians from the first day of their arrival in India. The characteristic Dravidian idea of deity may be obtained from such books as the study of the Village Deities of Southern India by Bishop Whitehead of Madras, or W. T. Elmore's similar study of the Dravidian Gods in Modern Hinduism (Hamilton, N. Y., 1915), also dealing with the same locality. W. Crooke's investigations in North India (see especially his Popular Religion and Folklore of Northern India) show the same characteristics prevalent among the masses in that part of the country. That these differences must have been felt in the time of the Aryan conquest of the north can not be questioned; to the Vedic writers the Dasyus were 'godless' and 'riteless.'

This type of religion is recognized in the Indian census as 'Animism.' One may easily quarrel with the term as loose, indefinite, and inaccurate. But at least it is convenient. Using this term, then, to denote the aboriginal religions of the country, the religions of the lower classes and tribes, we find at the other extreme the highly organized Hinduism with its great gods and elaborate ritual. Tho probably largely influenced by Dravidian cults, it is the best representative of the ancient Aryan faith; it is in the direct line of descent. Between the two extremes one may find every possible gradation, ranging from theism to animism. That is, there is everywhere amalgamation of fundamentally different religious elements. And yet, even in the highest of present day Hindu cults, there are matters which seem to have come from the Dravidian side. Most important of these is the doctrine of transmigration, which appears to be based on Dravidian animistic ideas. Certainly transmigration is a corollary and a counterpart to the usual animistic faith. Then we have specific sacred things, things with which the Aryans were unacquainted before they came into India, such as the pipal and banyan trees, the peafowl, the serpent, the langūr or Hanumān monkey, various species of grass, not to mention sacred places innumerable. Why did the Aryans begin to regard these as sacred? The most plausible reason is that their predecessors so regarded them. The adoption of local Dravidian deities into the higher and organized cult is a
most frequent phenomenon. In fact, in looking at the modern cult from the Dravidian angle instead of from the Aryan angle, one is apt to be led to the conclusion that practically the whole cult is now Dravidian, only the organization remaining Aryan. For the great gods of the Vedas, tho formally worshipped by the higher classes at certain set festivals and on particular occasions, have no real hold on the religious life of the people. They are merely fossils of a past religion, and seem to owe their existence to the wonderful conservatism of India, which maintains everything which has at any time been in the national consciousness. The old Vedic priestly classes no longer exist, at least in a practical sense. Certain forms of ritual do exist, as well as $\$ r \bar{a} d d h a$, or ancestor worship, and these certainly parallel ancient Aryan practice. But we can not be sure that the Ancient Dravidians did not observe ancestor worship; the present cult may owe something to them in this matter as well as to the Aryans.

From all indications, it would seem that the first wave of Aryans carried with it more intolerance and exclusiveness than the later wave or waves. And the contact between the two races must therefore have had less reaction on the Aryans at first than it had later on. With the lapse of time, along with fuller aequaintance with the Dravidians, new and strange ideas begin to appear. The old settled faith in Indra and his associate deities is replaced here and there by philosophical, one might almost say skeptical, queries in the speculative hymns of the Vedas. At a time not very remote from that of the latest Vedic hymns, namely in the period of the earliest Upanishads, a great thought crisis seems to have taken place. The ultimate result of this was the practical overturning of the old Vedic faith, tho, to be sure, eclecticism and syncretism for centuries played their part. The crest of the Aryan wave moved forward; in the early Upanishad period the region of the thought clash is no longer the Panjab or the Gangetic Doab, but along the lower Ganges and the country to the east of the Doab-Magadha and Videha. Here and at this time were born the Upanishads, Jainism, and Buddhism. Born is probably not the right word; what actually happened was the transfer into set compositions, which have been preserved to this day, of the ideas of the time, ideas which were new and startling to the Aryan kings at whose courts these doctrines were preached. But there is no reason for thinking that these doctrines were not of considerable age when they were proclaimed by Gāutama, Mahāvīra, and the

Upanishads. There is good reason for thinking that Jainism, at least, was older than the sixth century B. C. For Mahāvira is not considered to be the founder of a new religion, but a preacher of one already established. One does not have to believe all that is said about the twenty-four Tīrthakāras to believe that there is some fact to support the fanciful stories told about the number of Mahävira's predecessors. It is reasonable to suppose that Mahāvīra's cult was in the main at least an old one in his day, having a long succession of teachers, but-that it was Mahāvīra who brot it into prominence in the Aryan world. Buddhism in its fundamental ideas is so closely related to Jainism that it is evidently a product of the same cycle of thought and culture. When it is remembered that the localities where these two religions came into prominence are practically the same, that Mahāvīra and. Buddha were contemporaries, that the early orthodox Indians often mistook one sect for the other, and failed to distinguish between them, one can hardly help feeling that in the beginning they were sects of a single cult, and go back to a common source. Again, an examination of the earlier Upanishads shows that their doctrines are based on many of the same fundamental ideas as those of the Buddhists and Jains. The great difference seems to be this; Buddhism and Jainism remained more purely national, that is Dravidian; they would not accept the Vedas or the Vedic gods. This and this only stamps them as unorthodox. Apart from their rejection of the Vedas, there is scarce a thing of importance in them which is not to be found in some of the orthodox systems. This very criterion becomes an indication of the non-Aryan origin of the cults. But Upanishadism, if the term be permitted, saves its skin, as it were, by a formal, yet practically meaningless, acceptance of the Vedas-that is, the Vedic hymns, for at the time of the earliest Upanishads, it is very doubtful whether much, if anything, outside of the hymns had been canonized. The Upanishads, then, appear to be a piece of early syncretism. The theory that they represent a simple reaction against the polytheism and ritual of the mantras would call for a labored and persistent polemic which we do not find. The antiritualist position is assumed, rather than argued for. The attitude in general is constructive rather than destructive. The controversy in the Upanishads, and there is plenty of it, is usually over philosophical matters, not over ritual. To the orthodox Aryans, the doctrines of the Upanishads are the New Thought of their time; the kings and
sages at the courts where these doctrines are newly preached hear them with wonder and amazement. Yet the doctrines are, in spite of their newness, apparently the result of a long period of elaboration, and new only to the Aryan court. One may venture the opinion that these doctrines represent the highest phase of the ancient religion and philosophy of the Dravidians, interpreted by Aryans who strove to be faithful to their hereditary cult, but who at best could produce only a syncretism in which the essentially non-Aryan predominated. And all that we know of the advance of the Aryans into India fits in with this theory.

The typical Vedic conceptions are to be found in the earlier books of the Rig Veda. They would seem to represent the Aryan thought, but little contaminated with contact with the Dravidians. In the later hymns of the Rig and in the Atharva we seem to feel something of the effects of the contact between the two races. The charms of the Atharva-a collection whose admission into the canon was very late-must have suggested something un-Aryan to those who opposed its admission to the canon, and who looked with such scorn upon it in every way. When syncretism was more advanced, when Dravidian thought had become familiar, the Atharva could be received as of equal, or nearly equal, sanctity with the Rig (tho there were always those who denied this position to it). The speculative hymns show the first effects of the higher side of Indian animism. The Upanishads show it much more clearly. And the philosophy of India since their time, orthodox and unorthodox, is the philosophy of animism, and not of theism, such as we might expect to be derived from the Vedas:

The first postulate of all the systems of philosophy, including Buddhism and Jainism, is that everything is permeated by spirit, a postulate which is the essence of animism. Everything, organic or inorganic, living or inert, men, animals, birds, insects, trees, plants of every sort, seeds, clods of earth, all things are permeated by the subtle essence which is the essential element of the universe. Nowhere is this set forth more clearly than in the sixth Prapāthaka of the Chāndogya Upanishad, which is one of the earliest. In regard to these and similar things, Uddālaka says, 'That which is the subtle essence, in it all that exists has its self. It is the true, it is the self, And thou, 0 Svetaketu, art it.' Now this is simply systematized animism. Starting with the animistic belief that all objects are permeated by spirit, undertaking to learn the nature
of that spirit, attempting to arrange the conclusions in a system, not only is this conclusion of the Indian philosopher a natural one; it seems to be an inevitable one. This spirit is something which is not cognizable by the senses, yet it is none the less real; in fact it is the essential and most important part of the object. It is the part which one worships or adores. The object can have no existence without it. Animism does not try to prove the existence of such a spirit, neither does Indian philosophy ; both simply assume it. The wonderful new thought which surprised the Indian thinkers at the various royal courts is the all-permeating force of this spirit. The questions which arise concern its nature. To the intellectuals of the Aryan cult the idea appeared sublime; it far transcended the old Vedic ideas of the spiritual. Here is a force, an essence, which sustains even the gods, in comparison with which the gods are of very little importance. One need not deny the existence of the gods, but their status is very greatly reduced; they stand to man only as man stands to the lower creation. The new idea is grasped with charmed surprise; a period of intellectual awakening results. Some syncretizers seek to harmonize the new and the old by lowering the status of the gods, as the Vedāntins do. Others seek to identify this spirit with the Supreme Deity-the Gītā, for instance, identifies it with Krishna. Yet the kernel is the Dravidian animistic conception; part of the external comes from the old Aryan circle.

The differentiation of the philosophical systems may well have had its genesis before the Aryans became thoroly acquainted with the new ideas. From the idea that everything is permeated by spirit, certain questions arise. There are many objects in the universe; does each one have its own spirit, or, to put it more correctly, is each one permeated by a separate spirit? Or is there just one spirit which permeates all things, and is the appearance of plurality merely an appearance? When the animist begins to think, this is one of the first questions to arise. The answer to the question constitutes one of the main differentia of the systems. Sānkhya and Nyaya agree that there is a plurality of spirits; each object has a spirit which is distinct from the spirit in other objects. But the Upanishads (generally speaking) and Vedānta say there is but one spirit which is all-permeating; then Vedānta seeks to account for the apparent plurality when there is really unity. In both answers the fundamental animistic conception is untouched. Acute minds have started with the fundamental animistic conception of spirit,
and strive on this postulate to account for all the phenomena of the universe. Modern Jainism still emphasizes the belief, characteristically animistic, that not only every animal and plant, but every stone and clod of earth has its own peculiar spirit. Current orthodox thought is usually Vedāntic, and maintains that the distinction of individual objects is illusion. There is but one spirit in all the universe, whether that spirit permeate the twice-born Brahman, the degraded Chamār, the yet more lowly worm, or even the grain of sand. The spirit which appears in its highest form in Vishnu or one of his incarnations is the same spirit which appears in the tiger godling of the jüngle, the Smallpox Mother, or the amulet. Truly, with this conception, all worship is one. Monism is thus seen to be the ultimate evolution from animism.

Another very natural question is: when a clod of earth breaks, what becomes of the spirit within it? When a new clod is formed, whence comes the spirit which permeates it? When a seed, a plant, or a body perishes, whither goes its spirit, and whence comes the spirit to similar new objects? To the Sānkhyas and all who believed in the plurality and reality of spirits, the question was inevitable; even to the Vedāntins, whose separate spirits or jivas are illusory, the same problem arises. No more natural answer can be conceived than the animistic reply which the Indian philosopher gives; the spirits migrate from body to body, from object to object. And so the doctrine of transmigration of souls is born. Much of Indian philosophy has been evolved in applying this doctrine to the phenomena of nature. This doctrine is one of the primary conceptions of all Indian thought. No Indian philosophy or religion has ever achieved a following of any importance whatever unless it has accepted the doctrine of transmigration and the animistic conceptions which it presupposes. So fixed is the belief in transmigration that no one ever tries to prove its truth. It is an axiomatic fact, and all the phenomena of life are interpreted in terms of transmigration. So universally is this doctrine held, and so unquestioned is it from the time of its appearance in Indo-Aryan literature, that one can only feel that it was taken over as a fully developed belief, with a long history behind it. In other words, it was something inherited or borrowed from the non-Aryan people with whom the Aryans came in contact.

Nearly all the other matters of Indian philosophy and modern Indian religion are outgrowths of these fundamental animistic conceptions. Why does the spirit dwell in a body, and why
does it change from body to body? Because of works. And why the universe? That the spirit may enjoy the fruit of works. Many things seem to combine to make these answers reasonable. They seem to furnish a solution to the great problem of suffering, which has been attacked unsuccessfully by so many philosophers and thinkers. To the Indian it is perfectly clear; the sufferings of this life are caused by the bad deeds of a previous life. The delights of this life are the results of previous good deeds. Retribution and recompense are thus fully meted out; the Indian is perfectly satisfied in regard to the questions concerning conditions in this life and the outcome of deeds. The immortal soul simply wanders on and on, from body to body, according to the actions it has performed: The relation of soul and body is thus fully explained.

May the soul be released? This is another of the great questions of Indian philosophy. If so, how? All schools agree that it may be released, but different means to release are proposed. We have the knowledge-path so frequently presented in the Upanishads. But there are also the works-path and the devo-tion-path. Then, in connection with the binding and the release of souls another question arises; is the soul really, bound? Sānkhya assures us that the soul is not really bound, tho both soul and matter are real. It only appears to be bound; hence the apparent binding is released by the acquisition of knowledge. Is the universe real? Sān̄khya has answered yes, Vedānta says no. Hence, to the Vedāntin, there can be no binding, for there is nothing to bind the soul. The spirit is the all in all, it alone has existence. When one becomes conscious of this, the soul is automatically released from its illusory binding. All these doctrines, which have won the admiration of many western investigators and thinkers, are in the ultimate test simple, one might almost say-from various points of view-inevitable, conclusions from the primary animistic beliefs which the Aryans encountered when they came into serious touch with the Dravidians of the lower Gangetic plain.

The suddenness with which these doctrines appear in literature has led to the supposition that they are Kshatriya doctrines which the kingly class first evolved and then taught to the Brahmans. It is indeed true that there are isolated accounts of kings teaching these new ideas to Brahmans. But usually the disputes in the Upanishads are not carried on by the king himself, but by the pandits and seers by whom he is surrounded.

Janaka was for the most part a questioner and not an instructor. And so with most of the other kings mentioned. There is little to support the idea that the kings originated these doctrines, tho they may well have known them before the Brahmans did. What seems more probable is that the Aryan or partly Aryan kings respected the culture and religion which they found in their later advance. These, tho different from the culture and faith of the Aryans, do not seem to have been lower. When a tolerant king ruled, his court would most likely contain teachers both Aryan and Dravidian. In the region where the Upanishads, Buddhism, and Jainism are reputed to have arisen, the main element in the population is still Dravidian. It must have been even more strongly Dravidian in the days of Janaka of Videha. It looks as if the conquered Dravidians had revenged themselves by imposing their culture on the conquering Aryans; a kind of revenge which has often taken place in history. Compared with the Upanishads, Buddhism and Jainism reflect less of the real Aryan element. But even in the Upanishads the Dravidian source seems to contribute the larger part. Since the population of India is and has from the beginning of history been prevailingly Dravidian, it is but natural that this syncretized faith should rule the minds of men thruout the land. The ultimate religion, as in many other cases, was simply that which the psychology of the people created. Its sources go back to early animism, tinged everywhere by the hue of distinctively Indian environment. The fundamental animistic and Dravidian ideas were received without question in higher circles about the time of the birth of Gāutama. The disputes were over secondary matters.

A very plausible guess would be that the systems were differentiated before the Aryans became acquainted with them. Their very names, whose real meanings are so uncertain, look that way. It is a well-known fact that every nation borrowing a word from a foreign language has a tendency to pronounce that word as a native one, and in due time the word receives a false meaning and a false etymology. Yoga and Sānkhya are both in appearance Sanskrit words with rather transparent meanings. But their real meanings and applications to the systems seem to be doubtful. It is very possible that they are modifications of words in some Dravidian tongue, perhaps now lost, conveying original meanings quite different from those at present indicated. Even the word Upanishad may eventu-
ally be traced to such a source. And one might well question whether asceticism and caste, of which there are but slight traces in the oldest Sanskrit literature, may not also be Dravidian. One finds caste, for instance, among such unaryanized people as the Santals, and developed along totemistic lines.

It would seem that the time has come to plead for an investigation of the culture of India in connection with the Dravidian and Munda element. Most probably our ideas would be considerably changed in regard to the importance they have played in developing the final form of Indian culture.

Lexington, Kentucky.

# ESCAPING ONE'S FATE: A HINDU PARADOX AND ITS USE AS A PSYCHIC MOTIF IN HINDU FICTION ${ }^{1}$ 

William Norman Brown<br>Johnston Scholar in Sanserit, Johns Hopkins University

Bṛhaspati was his counsellor; the thunderbolt, his weapon; the gods, his troops; Heaven, his fortress; Viṣnu, his patron; and the invincible elephant Āirāvata, his mount-and yet, tho thus endowed with might and power, Indra, the slayer of Vala, was worsted in battle by his foes. How clear it is that we had best rely on Fate! Out, out upon fruitless valor!
(Bhartṛhari, Nītiśatakam 88.)
To the Occident there is nothing more characteristic of the Orient at large and of India in particular than belief in the inevitability of fate, usually summed up in the vague phrase 'Oriental fatalism'. It is not surprising that this trait should be the most easily apprehended by the casual traveller or reader, for 'fatalism' is the most frequent 'outward and visible manifestation' in the individual of the accumulated Hindu religious and philosophic traditions of nearly three thousand years. My own boyhood residence in India preserves no stronger remembrance than the Hindustani words 'Jo hó, so ho (What will be, that will be)', the accepted 'remedy that destroys the poison of worry'. ${ }^{2}$ The sentiment is universally Indic.

[^28]Westerners, however, do not usually recognize that 'Oriental fatalism' is no unity but rather a diversity of beliefs. It is fair to say, I think, that to their mind the whole story is contained, in the word 'kismet', which is properly a Mohammedan concept and signifies the unalterable fate arbitrarily prescribed for each man by Allah at the time of creation. Allah made the universe, wound it up like a clock, and set it running. Every event in the history of the cosmos was foreordained at that time, and similarly every incident in the lives of the countless unborn millions of men. And no human endeavor can alter in the slightest degree the decisions of the Inscrutable. In the final Sanalysis- 'free will' is but an illusion; and man will enjoy happiness or suffer sorrow, spend eternity in the bliss of Heaven or in the torments of Hell, only as has been ordered in the scheme of Allah.

Now, the truly Hindu notion of 'fate' is basically different. The doctrines of Karma (works) and Rebirth, both characteristic of every indigenous Indian religion and philosophy, offer a sharp contrast to the idea of Kismet. Man, or any other animate object, experiences in the present life the inevitable results of the accumulated karma (deeds) of his previouts existences. If his karma has totalled up with a balance on the side of punya (merit), he has 'been born to happiness; if it has totalled up with a balance on the side of $p \bar{a} p a(\sin )$ he has been born to sorrow. Similarly, his actions in this life constitute additional karma which will affect him in succeeding reincarnations. ${ }^{3}$ We can see, therefore, that man is not the impotent subject of an arbitrary deity, but on the contrary is the 'master of his fate,' the maker of his destiny. By his own exertions, and by nothing else, is his lot determined, and the results of all deeds are certain and inescapable. This is a consistent application of the law of cause and effect that places a high value on the human will.

Coupled with the doctrine of Karma is a popular folkloristic belief concerning fate that long ago made its way into the orthodox Hindu religious systems and now permeates the mind of India from Kashmir to Ceylon, from Baluchistan to Burma. A man's fate is written in brief on his forehead or in the sutures

[^29]of his skull, ${ }^{4}$ and he who is clever enough may read the cryptic message. Generally it is thot that the writing is placed there on the sixth night after a child's' birth by Vidhātr, or Dhātr, ${ }^{\text {, }}$. the Disposer, a specialization of the creator Brahma, whose business it is to order the affairs of the universe according to the results of karma, and who is therefore the ordainer of human fate. His character becomes sharply personal to the folk, who picture him as an inexorable deity, sometimes acting automatically, but at other times as an arbitrary power whose decrees are determined by caprice; and it is often hard for the Western observer to see a marked difference between him and Allah as Ordainer.

Fate, of course, is inevitable. Make what effort he will, man cannot alter it. The effects of karma are inescapable; what is written on the forehead is unavoidable. This doctrine is universal in India; every religion and philosophy teaches it; the folk accept it. It colors all Hindu thot, and finds continual expression in Hindu literature. Fiction, particularly, shows its pessimistic dominance, and there are countless stories illustrating the futility of opposing destiny. If it is fated that a man be poor, then he will never receive wealth; for even if God should place a jar of gold in his path, he will suddenly be tempted to play the blind man for a moment, and with eyes closed will pass it by. ${ }^{6}$ So, too, if a woman is fated to marry her son, no effort will prevent the incest. ${ }^{7}$ But the idea of 'the inevitability of fate is so familiar as to need no elaboration here.

It is not so well-known, however, that even in India there are those who refuse to admit the force of this doctrine. Their number, to judge from the infrequency with which they have expressed their sentiments, is small, but they have left conclusive evidence of their incredulity, mostly in the form of stories

[^30]or proverbs. Success in worldly affairs is not to be obbtained by him who makes no effort, leaving all to fate. ' Fortune comes to the man of exertion, the lion-like! ! Paltroons say, "Let Fate give!" Strike down Fate! Play the man with all thy might! Make an effort, and if success does not follow, what fault is there?'s Again, we read in a fable how the fish named Forethot and that named Readywit escaped the fishers, but Fatalist perished miserably. ${ }^{\circ}$ It is only natural that courageous selfreliant men should rebel against the stifling notion of the uselessness of human effort; and whatever may be the doctrines of religion or the conclusions of speculative thot, so these men feel, 'common sense' argues that intelligent effort is bound to be efficacious. 'Practical life' is governed not by fate,' but by the individual's own wit and energy.

There is another means of escaping one's fate open to less worldly-minded folk, those whose mental proclivities are essentially religious. For more than two thousand years, at least, the Hindu mind has recognized two roads to salvation. The more logical and austere of these, and perhaps the more original, is the road of knowledge (jnānamärga). He who, unattached to any of the objects of sense, by meditation penetrates the mysteries of the universe and discerns the true nature of the soulif he follow a system that teaches the doctrine of the soul-and understands its relation to the abstract, impersonal Supreme Soul; or who, as ordered by other systems, grasps the inteftectual truth concerning the origin and cessation of being, is saved. Knowledge is the key, indeed the instrument itself, by which man escapes from the samsāra, the endless round of rebirth. Obviously, such a road to salvation is too rough and steep for any but those whose mental constitution is of the strongest. Pure intellectuality without emotion, entailing complete excision of the self from the world in whole or in part, is too severe a demand to make of the mass of humanity. And so we find a [concession made to the necessities of the less thotful; and the element of a personal deity appears in the various Hindu religions. Nowhere is the process better illustrated than in Buddhism. The teaching of the Buddha, according to the canonical

[^31]exts, denies the existence of a soul and of a supreme god, and orescribes salvation, that is, release from rebirth and entry into Nirvāna, by strenuous mental application that results in mascery of the doctrine of causation and annibilation of the thirst that causes rebirth: Once knowledge is attained, release is sure to follow. But the common man of the Buddhist community sould not travel this hard abstract road to salvation. He lemanded something (Eangible, concrete, a god to worship; and the illogical result is that in the majority of Buddhist lands a personal deity has been established, usually the Buddha himself, who, if the sacred texts are to be believed, has long since passed into Nirvāna and beyond hearing human or any other petitions. Nevertheless, salvation is to be won thru his grace, which is obtained by devotion.

In Hinduism the contrast between the two roads, both orthodox, appears strikingly in the Bhagavadgītā. ${ }^{10}$ Arjuna asks Krṣna, 'Which know best the way to strive, those who in constant exercise with loving devotion worship thee, or those who ever meditate on the (abstract) Imperishable, the Unmanifest?' Krṣna answers, 'Those who worship me with constant devotion, their minds fixed in me, with supreme faith, those I think strive best.' But those who worship the Imperishable, the Indescribable, the Unmanifest, all-pervading and inconceivable, set above (all worldly considerations), ${ }^{11}$ unvarying, constant, they, with the group of their senses in restraint, their minds equable in all circumstances, attain to me as well, delighting as they do in the good of all creatures. But the toil of those whose minds are fastened on the Unmanifest is the greater, for the way of the Unmanifest is won with pain by the embodied. Those, however, who have cast all their works on me, with whom I am supreme, who in meditation worship me with undivided devotion, them with their hearts fixed in me I quickly lift up from the ocean of the mortal round of rebirth, $\Theta$ Pārtha. On me only set your mind, in me fix your consciousness; so shall you be fixed in just me hereafter. This is sure.' We see that the road of loving devotion to the person of Krṣna, whose name inspires in the Hindu much the same sort of feeling that the name of Jesus inspires in the Christian, leads more easily and directly to bliss than the road of knowledge.

The subject of the two roads to salvation is large and too

[^32]involved for treatment here, but I have dealt with it at sufficient length to indicate the importance of bhakti, of loving devotion, in the Hindus' theology. And it is just this same bhakti, which affords so practicable a way to ultimate salvation, that also provides the pious man with the means of escaping from an unhappy fate in this world. The psychological process is that the particular deity selected by the individual for worship, whether he be Viṣnu, Siva, or any other, is so magnified that he not only becomes the supreme god of the pantheon, but also takes over all the functions of creating, destroying, and preserving, and in fact becomes the first principle itself, the substrate, the Atman, the One Real. He is both the abstract, all-permeating Soul of the universe, and the supreme personal God. In this capacity he controls everything, even fate; indeed he himself is fate. ${ }^{12}$ Consequently, he will protect and cherish those who win his favor; and if their fate is hard he will mollify or obliterate it. Further, just as in Christian lands it has frequently been thot that the favor of God could be obtained thru. the mediation of a saint better than by direct approach, so in India requests are often addressed to local saints who thru their influence in Heaven bring the petitions to fulfilment.

There is still a third sphere of thot in which a man may practically escape his fate, that is, he may so mitigate its decrees that altho they are literally fulfilled the sting is drawn from them. In this sphere it is neither human shrewdness nor the intervention of a deity that alters his lot, but'the action of karma itself. As I said above karma is not static, but is constantly Varying according to the acts of the subject. Now, the ordinary assumption in fiction is that man's fate in this life is determined by the karma of his previous existences, and that the karma at present being accumulated will not take effect until the next birth. This is a theory that has orthodox philosophic and religious support; but there exists likewise the companion theory that karma performed in this life may come to fruit also in this life, and the doer may feel its effects, good or bad as the case may be, without undergoing rebirth. Therefore, if at his birth he deserved and was fated to suffer misfortune, he may mitigate it by pious living; or, conversely, if he merited and was destined to enjoy good-fortune, he may lose it by evil conduct.

[^33]According to the logic of this idea it should be possible for a man to escape his fate entirely, but in practise the operation is not pushed to its extreme. The feeling seems to be that the terms of a man's fate must be fulfilled; and, consequently, he receives sorrow or happiness so slight in comparison with that originally allotted him that his fate is effected in letter only, not in spirit.

In the remainder of this paper it is my purpose to illustrate from Hindu fiction these three means of obviating fate. The stories quoted will indicate precisely the mental states of those who believe in the mutability of fate, and at the same time will serve to show the extent, comparatively limited, to which this paradoxical idea operates as a psychic motif in Indian stories. ${ }^{13}$

## Fate tricked by human shrewdness

The locus classicus of our motif is a story of King Vikrama, the Hindu King Arthur, and his wise minister Bhatți. ${ }^{14}$ One day Vikrama was summoned to heaven by the god Indra. There he decided a dancing contest between the nymphs Rambhā and Urvaśī, and so clever was his decision that Indra made him a present of his own throne as a reward, adding the blessing, 'Sitting upon this throne, rule the world in happiness for a thousand autumns (years), O King!' When Bhatți heard of this, he said to Vikrama, 'Now to-day I shall give your majesty, merely by my wisdom, another thousand years upon earth.' 'How can this be?' asked the King. 'Spend six months sitting upon your throne, attending to your kingdom,' answered the astute Bhattic 'and spend the other six months (of each year) in travel abroad. Thus you shall live for two thousand years.' And so the King did, and doubled the length of his life.

This was perhaps an unfair advantage to take of Indra's generosity, but heaven later had its revenge, according to legend. Vikrama had been granted the boon that he should not perish

[^34]except at the hands of a man born of a girl only a year and a day old. Impossible as this condition seemed of fulfilment, the event ultimately transpired, and Vikrama was slain by Sālivāhana. ${ }^{15}$

Cheating death, tho only temporarily, is a universal human - desire that appears in Hindu fiction elsewhere than in the story of King Vikrama. Additional instances of its successful execution will be found below, where a gracious deity accomplishes it for a worshipper.

Alleviation of misfortunes in this present life is usually the desideratum of those who would avoid their fate. In a well told story we read of a clever minister who rescued his master's children from poverty and disgrace. ${ }^{18}$ I analyze it. King Naravāhana had a minister named Jñānagarbha (Knowledgeinterior). A son was born to the King, and when the sixth night after birth had come the minister watched in concealment for Fate to write the child's fortune. Fate wrote, 'Only by hunting shall he support his life. A single creature shall be his portion (daily), never another.' Some time later a second son was born, and his fortune read, 'This son shall be a seller of grass, with but a single ox. Never shall he have a second ox." Still later a daughter was born, and on her forehead was written, 'She shall be a courtesian ; thru fate she shall get only one man a day.' In the course of time King Naravāhana was killed by a usurper, and his children fled, to live their lives as fated. The minister now set out to look for them. The elder son he found eking out a miserable existence on one animal, the sole fruit of each day's hunting. 'Listen to my good advice,' said the minister to him. 'Kill no animal except it be a Bhadraelephant, for on an elephant's frontal lobes are found large pearls. ${ }^{17}$ Fate must provide you with animal after animal of this sort, for so it is written on your forehead.' On seeing the second son daily selling the load of his single ox, the minister instructed him, 'Every day sell your ox. When it is sold, Fate will again give you the ox that is written on your forehead (as your means of livelihood).' In another city he found the girl, a prostitute, bitterly complaining that each day only one man

[^35]came to her, and her earnings were necessarily scanty. Then said the minister to her, 'Child, listen to my advice! From every man who comes to your house demand a hundred dinnāras. By the power of Fate such a man will always come.' The minister then went home. In a few nights Fate came to him in his sleep, and said, 'Ho! You have freed yourself from worry by giving me a tough problem to solve ${ }^{(18)}$ for the tūra (a kind of musical instrument) is sounded with sticks. ${ }^{19}$ Free me from my bond! How can I furnish forever elephants, oxen, and men who will pay a hundred dināras?' The minister said, 'I have proved true the proverb, "A crooked stick has a crooked hole!" That applies to you.' Fate said, 'O mighty-wit, tell me what further I must do! That I shall do as quickly as possible. Free me from this trouble!' The minister said, 'Give to these children of a King their father's kingdom quickly. After that do as you like!' Thereupon Fate brot the two brothers and their sister to the minister; and with the magic aid of Fate the minister drove their enemies from the city: Then the elder son of the King was placed on the throne. ${ }^{20}$

[^36]In another story a Brahman suffered from the annoying fate of never getting enough to eat. ${ }^{21}$ Every day something would interrupt his meal ${ }^{22}$ and thus make it ceremonially improper for him to continue. ${ }^{23}$ Once he went to a feast given by a Raja and there too he was interrupted. The next day the Raja himself served him, and the Brahman seemed on the point of making a 'square meal', but Bidhātā, in fear of being foiled, took the form of a golden frog and tumbled in the Brahman's food. The Brahman, however, did not see him, but swallowed him whole. ${ }^{24}$ For once he was satisfied and left the Raja's court happy. Bidhātā now became anxious for release, but the Brahman turned a deaf ear to all his pleadings. Meanwhile, the universe was on the point of collapse without Bidhātā to direct it, and the gods set about to secure his release. First Laksmi and then Sarasvati asked the Brahman to free him, but he drove them away with a club. At last Siva came, and the Brahman, being a devote of Siva, had to grant his request. But he com-
17. 259; and in Kingscote and Natesa Sastri, Tales of the Sun, p. 230). The children are born to an old ascetic. The wise man is a disciple of the ascetic. The boy, named Kapālī (Unlucky), has only a buffalo on which to support himself and family. This he sells at the disciple's advice, and Brahma is compelled to provide another. The girl he instructs to favor no man unless he brings her a basket of pearls. Some time later he meets Brahma leading a buffalo and carrying a basket of pearls, with which he is daily compelled to supply the two children. He begs release from the troublesome duty, and he and the disciple then come to terms. If this story is oral, it is descended from the archetype of that in the Dharmakalpadruma. The numerous Sanskrit names and the coherent structure of the long South Indian tale, however, render it possible that the story itself may be translated from a Tamil literary text, as are other of Natesa's stories (see my remarks in JAOS 39. 29 and 50). A very poor variant of the second son's experiences appears in Tawney, Kath $\bar{a}$ Sarit Sāgara II. 119. A poverty-stricken man, whose wealth consists of a single ox, performs asceticism in honor of Durgā. She tells him that his wealth is always to be only one ox, but that as often as he sells it another will be provided. No mention is made in the story of the fact that the poor man thus escaped his fate.
${ }^{21}$ MeCulloch, Bengali Household Tales, p. 23.
${ }^{22}$ There seems to be indicated here a feeling that an orthodox Brahman may eat only one meal a day.
${ }^{23}$ By continuing he would be eating 'leavings'.
${ }^{24}$ For references to 'Swallowing' in India, see Hertel in ZDMG 65. 439. For a discussion of the subject covering a wider range of territory, see Hans Schmidt, Jona (vol. 9 of Forschungen zur Religion und Literatur des Alten und Neuen Testament).
plained that it would be unfair to ask him to release Bidhāta, who had tormented him all his life, unless he should secure a guarantee that his troubles would cease. In reply Siva promised to take him and his wife to heaven at once.

Every Hindu must have a son to perform the proper rites in his behalf after death that he may be released from purgatory. Especially cursed, therefore, is he whose fate it is to be sonless. One such man, a Brahman, propitiated Nārāyana (Visnu) and obtained a boon. ${ }^{25}$ He asked for a son, but twice Nārāyana refused him. Then he asked that all his merriments might be shared by gods and men alike. This was granted. He went home, shut his door, and with his wife began to sing and dance. All the gods and men had to dance with him, and the business of the universe was brot to a standstill. Nor would he cease from his 'merriments' un'til he was promised a son.

In the preceding illustrations man has fought the decree of a personal deity, not the force of impersonal karma. He has not struggled against the just consequences of acts previously performed; rather he has opposed the arbitrary will of a despotic god, somewhat similar to the kismet which Allah pre-determines for the Mohammedan. But now we come to a case in which even karma is outgeneralled. ${ }^{26}$

In a previous kalpa (world-cycle) a dishonest gambler died and went to the other world. There Yama said to him, 'Gambler, you will have to live a kalpa in hell on account of your crimes, but owing to your charity you are to be Indra for one day, for once on a time you gave a coin to a knower of the Supreme Soul. So say, whether you will first take out your period in hell or your period as Indra.' When the gambler heard that, he said, 'I will take out first my period as Indra.' Then Yama sent the gambler to heaven, and the gods deposed Indra for a day, and made him sovereign. Then, having attained the power, he called to heaven all his gambler friends and prostitute favorites, and commanded the gods, 'Carry us all in a moment to all the holy bathing places, both in heaven and on earth, and in the seven continents: and enter this very day into all the kings on the earth, ${ }^{27}$ and bestow without ceas-

[^37]ing great gifts for our benefit.' This the gods did, and by means of these holy observances his sins were washed away and he obtained the rank of Indra permanently. The next day Citragupta told Yama that the gambler had obtained the rank of Indra permanently by means of his shrewdness. Then Yama was astonished and said, 'Dear me! this gambler has cheated us. ${ }^{38}$

## Fate overcome thru divine aid

We now come to the class of stories in which a deity saves a worshipper from the power of his evil fate. A familiar tale ${ }^{28}$ tells of an astrologer whose son Atirupa was to die at the age of eighteen. When he was sixteen the boy, who had cast his own horoscope and discovered his fate, set out for Benares. On his way he came to a city where a wickèd minister had arranged a marriage between his epileptic son and the daughter of his master. It was the wedding day, but the minister's son was in the throes of a fit, and since his ailment was a secret to everyone but his immediate family, the minister determined to find a substitute for the ceremony. He chanced on Atirupa, and the marriage was performed with him as the groom. But after the ceremony the minister failed to take away Atirupa before the women of the bride's family could lock the couple in the bridal chamber, and they spent the night together. At this time Atirupa recited an obscure Sanskrit verse to his wife and later expounded it. The next morning the minister sent him away and brot his own son, but the bride drove him off and at once entered upon a series of penances to gain the favor of Siva and thru his grace recover her husband. Shortly afterwards she

[^38]had resthouses built for travellers on the road between her city and Benares, and every one who came to them was asked to interpret the verse Atirupa had recited on the wedding night. Meanwhile, Atirupa performed his religious rites in Benares, and when the fated time came died. Just then, however, the princess's prayers availed with Siva and he granted her a boon. She asked for the return of her husband, and the god, ignorant of Atirupa's death, promised it. When the truth came to light Siva was in an awkward position, but he settled the matter by restoring Atirupa to life after he had been dead four days. ${ }^{30}$ Atirupa then started home, came to one of the resthouses, recognized the verse, and was happily reunited with the princess. ${ }^{31}$

Human shrewdness is combined with divine, saintly, aid in a story ${ }^{32}$ which relates how Nānakśā (Guru Nānalk, the founder of the (sikh religion) indicated to a woman the means of saving her husband, who was doomed to die on the following day. At his suggestion she cleaned her house, prepared sweetmeats, and proceeded along a road until she came to a tank. There she waited until four men approached. These were the angels of

[^39]death. She gave them the sweetmeats, which they ate, and then begged them to spare her husband. Having eaten her food, they could not be so ungrateful as to take him, and they returned to God and explained the situation. He recognized the hand of Nānak in the affair, and granted the man an extension of twenty years. ${ }^{33}$

The terrible fate of childlessness is once reversed thru the help of the saint Gorakhnāth. ${ }^{34}$ It is not in the fate of Rani Bāchal to have a son, says Bhagwān (God). But she intercedes with Gorakhnāth, and he in rather brusque words asks Bhagwān to grant her a son. Bhagwān rubs some of the dirt out of his head and gives it to the saint. The latter gives it to the Rani, who mixes it with water, and shares it with a gray mare, a Brahmani, and a sweeper's wife. All have been barren, and all now conceive.

Childlessness is once again the curse that a pious man asks a saint to have removed. ${ }^{35}$ The saint goes first to Brahma, then to Siva, and finally to Viṣnu, all of whom say that it is impossible for the man to have children. Some years later the man asks help of another saint, and the latter promises him five, which in due time are born. The first saint learns of this and complains to Viṣnu. Viṣnu pretends to be ill and asks the saint to bring him as remedy a cupful of blood from a number of saints. These, however, are so chary of blood that the saint can collect hardly a spoonful. Viṣnu then sends him to the saint who had granted the man the five children, and he fills the cup

[^40]from his own veins. At this Visnu points out how great is this saint's devotion, and how much he deserves that his requests should be granted.

## Fate modified by karma of this life

The effect of karma performed in this life toward modifying and altering the fate decreed a man at birth is illustrated by the story of two men, Sat (Good) and Asat (Bad). ${ }^{36}$ Sat was pious and led a righteous life; Asat was the opposite, drunken, lewd, and blasphemous. One night as Sat was returning from a public recitation of the Rāmāyana, he pierced his foot with a thorn. At that moment Asat emerging from a bawdy house found a purse full of gold. Thereupon he mocked Sat for leading a righteous life that was rewarded with pain, while his own wickedness was accompanied with good fortune. Deeply puzzled Sat asked a Brahman (Nārāyaṇa, i. e. Viṣnu, in disguise) to explain the apparent injustice. The Brahman said that at the time of Sat's birth his previous karma had been so bad that he had been fated to receive the śula (impaling stake) on this day, but his pious conduct in this life had so counteracted the effect of his previous karma that he had received only a thorn in his foot. Asat, on the contrary, had lived so righteously in his former existences that he should have acquired a crown on that day, but his evil conduct since birth had reduced his reward to a purse full of gold. Thus the literal wording of the fate of each had been fulfilled, altho neither had received the destiny originally intended.

As an antithesis to the illustrations I have adduced of escaping fate, I wish to call attention to a case in which an unfortunate man was saddled with a fate that did not belong to him, and came near suffering accordingly. ${ }^{37}$ An oilman died and was led by angels to the Almighty. 'Whom have you brot?' asked the Creator. 'This man's days on earth are not yet completed: take him back before his body is buried, and let his spirit repossess his body; but you will find a vegetable man of the same name in the same city. Bring him to me.' 'The oilman got back to his body barely in time to prevent it from being burnt.

[^41]The various illustrations of escaping fate which I have presented in this paper do not represent a frequent mental attitude of the Hindus. Rather, they are in the nature of exceptions that prove the rule, 'Fate is inevitable.' But they do, I believe, show that there exists in India an indigenous spirit of rebellion against the doctrine of human helplessness, a spirit that undoubtedly finds expression in the actualities of daily life as well as in the fancies of fiction.

Balttmore, Martland.

# BUDDHIST-ZOROASTRIAN LE®GEND OF SEVEN MARVELS 

Eugene 'Watson Burlingame<br>\section*{Lecturer in Pāli, Yale University}

The apocryphal legend of the seven marvels attending the birth of Zoroaster appears to be derived from Buddhist sources. ${ }^{1}$ The legend appears in Zoroastrian literature for the first time about 900 A. D. in the Pahlavi Dinkard and $Z \bar{a} d$-Sparam, and reappears about 1200 A. D. in the Persian Zartūsht-Nāmah. A brief outline of the legend is as follows:

Zoroaster laughs at birth. He is suckled by a ewe. At the instigation of his father, a wizard makes five attempts on his life. He lays him in the way of a drove of oxen, and one of the oxen protects him. He lays him in the way of a drove of horses, and one of the horses protects him. He casts him into the lair of a wolf, and the wolf is struck dumb. He attempts to burn him alive, but the fire will not touch him. He causes a beast of prey to compress his head, and the paws of the beast are paralyzed. The child is recovered by his mother or father.

There are striking similarities between this Zoroastrian legend and a well-known Buddhist legend of the seven marvelous escapes from death of a youth. The Buddhist legend appears for the first time in the Sanskrit-Chinese version of Seng-houei (died 280 A. D.), and reappears, greatly enlarged, in two Pāli commentaries of the fifth century, Buddhaghosa's Commentary on the A $\bar{n}$ guttara Nikāya (about 425 A. D.), and the Commentary on the Dhammapada (about 450 A. D.). The following is an outline of the three known versions of the Buddhist legend:

## BUDDHIST LEGEND OF THE SEVEN MARVELOUS ESCAPES FROM DEATH OF A YOUTH

## Illustrating the Power of Kamma

A. Translated from Sanskrit into Chinese by Seng-houei (d. 280 A. D. $)^{2}$

1. The Future Buddha is reborn as the son of a poor man. The father, not wishing to rear the child, abandons him at a

[^42]cross-roads on a holiday. A Brahman prophesies future greatness for any child born on that day. A householder who is childless orders a man to seek for some abandoned child. The man learns from a passer-by that a childless widow is caring for an abandoned child, obtains the child for a consideration, and turns him over to the householder.
2. The householder rears the child for a few months, when his wife becomes pregnant. Thereupon, having no more use for the child, he abandons him in a ditch. A ewe gives suck to the child, a shepherd rescues him, and the householder, repenting of his evil deed, recovers him.
3. 4. The householder rears the child for a few months, when his wife gives birth to a son. Thereupon the householder's evil thoughts return and he abandons the child on a caravantrail. The child meditates on the Three Jewels ${ }^{3}$ and suffuses his foster-father with friendliness. In the morning a caravan approaches. On reaching the child, the oxen stumble and refuse to proceed. The caravan-leader makes an investigation, rescues the child, and turns him over to a childless widow. Shortly afterwards the householder learns of his whereabouts, and repenting of his evil deed, recovers possession of him for a consideration.
5. After several years have passed, the householder, impressed with the intelligence of the child and-fearing that his own son will be enslaved by him, abandons him on a clump of bamboos, thinking that he will die of hunger. The child loses his balance, falls to the ground, and rolls down the mountainside to the brink of a stream. A villager discovers him, rescues him, and carries him home. The householder, informed of his rescue, is overcome with remorse and for a consideration recovers him.
6. The householder teaches him writing and reckoning and all of the other arts and crafts. The youth increases in wisdom and goodness, comes to be regarded by the people as a holy man, and attracts a large following. Once more the householder is overcome by thoughts of malice. He writes a letter to a smelter, directing him, so soon as his foster-son arrives, to throw him into the furnace. He then directs his foster-son to go and obtain from the smelter the money and other precious objects which are to be his inheritance. At the village-gate the youth meets the householder's own son. The latter asks him to take his

[^43]place in a game of marbles and to win back for him a stake he has lost, offering to carry the letter to the smelter himself. Thehouseholder's foster-son agrees, and the householder's own son goes to the smelter's and is thrown into the furnace. The householder, overcome with misgivings, sends a messenger to find his son. The foster-son returns and tells the householder that his own son has gone to the smelter's in his stead. The householder hurries with all speed to the smelter's, but finds his son reduced to ashes. He flings himself on the ground and is afflicted with an internal malady.
7. The householder, resolved that his foster-son shall underno circumstances succeed him, resolves once more to kill him. He therefore sends the youth to the superintendent of one of his: palaces on a false errand, directing him to carry to the superintendent a secret letter in a sealed pouch. The letter contains the following command: 'When this young man arrives, attach a rock to his girdle and throw him into a deep pool of water.' On the way the youth stops at the house of a Brahman who is a friend of his foster-father's. The Brahman entertains him handsomely. The young daughter of the Brahman notices the sealed pouch, secretly removes it, reads the letter, destroys it, and substitutes another commanding the superintendent to make arrangements for the marriage of the Brahman's daughter to the householder's son, 'with few ceremonies but many and valuable presents.' The next morning the youth continues his journey and delivers the letter to the superintendent, who carries out the order to the letter and after the marriage-ceremonies are over notifies the householder of what he has done. Upon receiving the news, the householder is stricken with a grave malady. When the youth is informed of his foster-father's malady, he is overcome with sorrow, and accompanied by his wife, goes in haste and pays his respects to him. The Brahman's daughter assures the householder of her filial devotion and expresses hopes that he may recover. At these words the householder 'is suffocated with fury' and expires. The Future Buddha performs the funeral ceremonies, and thereafter lives a life of righteousness, 'exhaling the perfume of his virtues in the ten directions.'

Buddhaghosa, the great Buddhist scholastic of the fifth century A. D., was acquainted with at least two versions of this remarkable legend. In his Commentary on the Dīgha Nikāya ${ }^{4}$

[^44]he summarizes what appears to be the older of these two versions as follows:

Passing from the World of the Gods, he was reborn in Kosambi in a certain respectable family. A rich householder who was childless gave money to his mother and father and adopted him as a son. But when a son of his own was. born, he made seven attempts on his life. By the power of the merit which he possessed, he escaped death on every one of the seven occasions. On the last occasion his life was saved by the boldness of a certain rich householder's daughter.
B. Pāli, Buddhaghosa's Añuttara Commentary (c. 425 A. D.) ${ }^{5}$

1. In time of famine a poor man casts his child away on a road. In a later state of existence, as the fruit of that evil deed, he is himself cast away seven times, but as the fruit of merit acquired, he is miraculously preserved from death. Reborn as the son of a harlot, he is cast away on a refuse-heap. A workman, on his way to the house of a rich householder, sees the child surrounded by crows, rescues him, and sends him to his own home by the hand of another man. The householder, who is childless, but whose wife is pregnant, hears an astrologer prophesy that a boy born on that day will attain future greatness. Learning that his wife has not yet given birth to a child, he sends out his men to find the boy. His men report that the boy is in the house of the workman. He summons the workman and obtains the boy for a consideration. He resolves, in case a daughter is born to him, to marry her to the boy, but if a son is born, to kill the foundling.
2. The householder has him cast away in a burning-ground. A ewe gives suck to the child, and a goatherd rescues him and carries him home. The householder learns of his whereabouts and recovers him for a consideration.
3. The householder orders his men to lay him at the door of the cattle-pen. The leader of the herd, the bull, comes out first, incloses the child with his four feet, and protects him from the cattle as they pass. The herdsmen rescue him and carry.him to their own home. The householder learns of his whereabouts and recovers him for a consideration.

[^45]4. The householder has him laid on a caravan-trail, that a cart-wheel may go over him and crush him. The oxen of the caravan-leader's first cart plant their four legs over him like pillars and stand still. The caravan-leader makes an investigation, rescues the child, and carries him off. The householder recovers him as before.
5. The householder has him thrown down a precipice. The child, however, falls lightly on the hut of some reed-makers. The leader of the reed-makers rescues him and carries him home. The householder recovers him as before.
6. The householder's own son and his adopted son grow up together. One day the householder goes to his potter and tells him that he wishes to get rid of a base-born son. The potter is horrified. The householder gives him a bribe and asks him to do the deed. The potter names the day on which he expects to fire "the bake-house, and directs the householder to send the youth to him on that day. When the day comes, the householder sends his foster-son to the potter with the message: 'Execute the commission my father gave you.' As the youth is on his way, he meets the householder's own son. The latter asks him to take his place in a game of marbles and to win back for him a stake he has lost, offering to carry the message to the potter himself. The householder's foster-son agrees, and the householder's own son goes to the potter's and is thrown into the bake-house. In the evening the householder's foster-son returns, but his own son does not. The householder hurries with all speed to the potter, who remarks: 'The job is done.'
7. The householder is stricken with a mental disease and henceforth refuses to eat with his foster-son. Determining to encompass the ruin of the enemy of his son, as he calls him, the householder writes a letter and directs his foster-son to carry it to a workman of his who lives in a distant village, telling him to stop for a meal at the house of a rich householder who lives by the way. The youth does so. The daughter of the house, who was his wife in his fourth previous existence, falls in love with him. Noticing the letter fastened to the hem of his garment, she secretly removes it, reads it, destroys it, and substitutes another commanding the workman to make arrangements for her marriage to the youth. The youth spends the night at the house, and in the morning goes to the village where the workman lives and delivers the letter. The workman carries out the order to the letter and after the wedding-ceremonies are over notifies the householder of what he has done. Upon receiv-
ing the news, the householder is stricken with dysentery and sends for his foster-son, intending to disinherit him. The wife informs the youth of his foster-father's attempt to kill him, and the youth and his wife go to see the householder. The wife hastens the householder's death by pummeling him in the chest. The youth bribes the servants to say that he is the householder's own son. The king confirms the youth in his inheritance.

## C. Pāli, Dhammapada Commentary (c. 450 A. D.) ${ }^{6}$

1. In time of famine a poor man casts his child away under a bush. In a later state of existence, as the fruit of that evil deed, he is himself cast away seven times, but as the fruit of merit acquired, he is miraculously preserved from death. Reborn as the son of a harlot, he is cast away on a refuse-heap. Crows and dogs surround him, but none dares to attack him. A passer-by rescues him and carries him home. A rich householder who is childless but whose wife is pregnant, hears an astrologer prophesy that a boy born on that day will attain future greatness. Learning that his wife has not yet given birth to a child, he summons 'Mother' Black, a slave-woman, gives her a sum of money, and commands her to find the boy and to bring the boy to him. Mother Black obtains the boy for a consideration and turns him over to the householder. The householder resolves, in case a daughter is born to him, to marry her to the boy, but if a son is born, to kill the foundling.
2. At the instigation of the householder, Mother Black lays him in a burning-ground, that he may be devoured by dogs or crows or demons. Neither dog nor crow nor demon dares to attack him. A ewe gives suck to the child, and a goatherd rescues him and carries him home. Mother Black tells the householder what has happened, and at the command of the householder, recovers the child for a consideration, and restores him to the householder.
3. At the instigation of the householder, Mother Black lays him at the door of the cattle-pen, that he may be trampled to death. The leader of the herd, the bull, at other times accustomed to come out last, comes out first, incloses the child with his four feet, and protects him from the cattle as they pass.
[^46]The herdsman makes an investigation, rescues the child, and carries him home. The child is restored to the householder as before.
3. At the instigation of the householder, Mother Black lays him on a caravan-trail, that he may be trampled to death by the oxen or crushed by the wheels of the carts. On reaching the child, the oxen throw off the yoke and refuse to proceed. The caravan-leader makes an investigation, rescues the child, and carries him home. The child is restored to the householder as before.
5. At the instigation of the householder, Mother Black throws him down a precipice, that he may be dashed to pieces. The child, however, falls lightly on a clump of bamboos. A reed-maker hears his cries, rescues him, and carries him home. The child is restored to the householder as before.
6. In spite of the householder's attempts on his life, the child lives and thrives and grows to manhood. But he is like a thorn in the eye of the householder, who cannot look him straight in the face. The householder refrains from teaching him reading and writing, for he is determined, by some means or other, to put him out of the way. One day he goes to a potter, tells him that he wishes to get rid of a base-born son, and bribes the potter to promise that so soon as the youth arrives he will hack him to pieces, throw him into a chatty, and bake him in the bakehouse. He then directs his foster-son to go to the potter and to say to him: 'Finish the job my father gave you yesterday.' As the youth is on his way, he meets the householder's own son. The latter asks him to take his place in a game of marbles and to win back for him a stake he has lost, offering to carry the message to the potter himself. The householder's foster-son agrees, and the householder's own son goes to the potter's and is thrown into the bake-house. In the evening the householder's foster-son returns, but his own son does not. The householder hurries with all speed to the potter, who remarks: 'The job is done.'
7. The householder, unable to look the youth straight in the face, writes a letter to the superintendent of his hundred villages, saying: 'This is my base-born son; kill him and throw him into the cesspool.' He then tells the youth to carry the letter to the superintendent, and fastens it to the hem of his garment. In reply to the youth's request for provisions for the journey, the householder tells him to stop for breakfast at the house of a friend of his. The youth does so. The daughter of
the house, who was his wife in his previous existence, falls in love with him. Noticing the letter fastened to his garment, she secretly removes it, reads it, destroys it, and substitutes another commanding the superintendent to make arrangements for her marriage to the youth. After sleeping all day, the youth continues his journey, and the next morning delivers the letter to the superintendent, who carries out the order to the letter and after the wedding-ceremonies are over notifies the householder of what he has done. Upon receiving the news, the householder is stricken with dysentery and sends for his foster-son, intending to disinherit him. At the third summons the youth and his wife go to see the householder. By a slip of the tongue the householder makes his foster-son his heir. The wife hastens the householder's death by pummeling him in the chest. The king confirms the youth in his inheritance. The wife and 'Mother' Black inform the youth of his foster-father's attempts on his life. The youth thereupon resolves to forsake the life of heedlessness and to live the life of heedfulness. ${ }^{7}$

The following is an outline of the three versions of the Zoroastrian legend:

## ZOROASTRIAN LEGEND OF THE SEVEN MARVELS ATTENDING THE BIRTH OF ZOROASTER

## Illustrating the Power of God

$$
\text { D. Pahlavi, Dīnkard (c. } 900 \text { A. D. })^{8}
$$

1. On being born, he laughs outright, ${ }^{9}$ frightening the seven midwives who sit around him.
2. Sacred beings proceed to him and bring a woolly sheep to him. His mother removes him.
3. At the instigation of his father, a wizard ensconces him in a narrow path and dispatches many oxen on that path, so that

[^47]he may be trampled on by the feet of the oxen. One of the oxen walks forward, stands before the child, and keeps the other oxen away from him. His mother removes him.
5. At the instigation of his father, a wizard ensconces him near a drinking-pool and drives many horses to that drinkingpool, so that he may be trampled on by the hoofs of the horses. A horse with thick hoofs walks forward, stands before the child, and keeps the other horses away from him. His mother removes him.
6. At the instigation of his father, a wizard casts him into a den where a wolf's cubs are slaughtered, so that when the wolf arrives, she may mangle the child in revenge for those cubs. By the assistance of sacred beings, the wolf, on arriving, is struck dumb.
3. At the instigation of his father, a wizard attempts to burn him alive. The fire will not touch him. His mother removes him.
2. At the instigation of his father, a wizard causes a beast of prey to compress the head of the child with his paws. The paws of the beast are paralyzed. The father, alarmed by the emanation of splendor from the child, hastens to make him invisible.
$$
\text { E. Pahlavi, Zād-Sparam (c. } 900 \text { A. D. })^{10}
$$

## 1. [omitted]

7. On the night of the fourth day sacred beings bring a woolly sheep with udder full of milk into the wolf's den, and it gives milk to the child in digestible draughts until daylight. At dawn the mother removes him.
8. The father takes the child and gives him to a wizard to work his will with him. The wizard seizes him and throws him out at the feet of the oxen who are going on a path to the water. The leader of that drove of oxen halts near him, and 150 oxen are kept away from him thereby. The father takes him and carries him home.
9. On the second day the wizard throws him out at the feet of the horses. The leader of the horses halts near the child, and 150 horses are kept away from him thereby. The father takes him and carries him home.
10. On the fourth day the wizard throws him into the lair of a wolf. The wolf is not in the lair; and when it wishes to go

[^48]back to the den, it stops when it comes in front of some radiance, in the manner of a mother, in the place where its cub is.
5. On the third day the wizard attempts to burn him alive. The fire, however, will not burn him ; his 'marks'. protect him.
2. On the day of the child's birth, a wizard twists his head severely, that he may be killed. The child remains fearless, the wizards are terrified, and the chief wizard's hand is withered. That wizard demands the child from his father by way of compensation for the harm done him.
F. Persian, Zartūsht-Nāmah (c. 1200 A. D. $)^{11}$

1. A seer prophesies future greatness for the child. As he leaves the womb he laughs.
2. Two cows come and give suck to the child.
3. He is placed in a narrow way where the oxen are accustomed to pass. An ox mightier than the rest comes forward and protects the child between his forefeet. His mother removes him.
4. He is thrown into a narrow way where wild horses are accustomed to pass. A single mare advances before the rest and comes and stands at his pillow. The horses are unable to bite him. His mother removes him.
5. He is cast into a lair of wolves. The wolves rush upon him. The mouth of the foremost wolf is closed. The wolves become tame.
6. He is cast into fire. The fire becomes as water to him. His mother removes him.
7. A wizard draws his sword to kill the child. The wizard's hands are withered.
[^49]
## CONSPECTUS OF THE SIX VERSIONS

Budphist
Seven marvelous escapes from death of a youth Illustrating the Power of Kamma

250 A. D.
A. Sanskrit-Chinese

1. Exposure
2. Exposure-suckled by ewe
3. 
4. Oxen
5. Precipice
6. Smelter's
7. Superintendent

425 A. D.
B. Pāli (A. cm.)

1. Exposure
2. Exposure - suckled by ewe
3. Cattle
4. Oxen
5. Precipice
6. Potter's
7. Workman

450 A. D.
C. Pāli (Dh. cm.)

1. Exposure
2. Exposure - suckled by ewe
3. Cattle
4. Oxen
5. Precipice
6. Potter's
7. Superintendent

## Zoroastrian

Seven marvels attending the birth of Zoroaster Illustrating the Power of God

900 A. D.
D. Pahlavi

1. Laughs at birth
2. Suckled by ewe
3. Horses
4. Oxen
5. Lair of wolf
6. Bon-fire
7. Beast of prey compresses head

900 A. D.
1200 A. D.
F. Persian

1. Laughs at birth
2. Suckled by cows
3. Horses
4. Oxen
5. Lair of wolves
6. Bon-fire
7. Wizard draws sword
8. Wizard twists head

## Conclusions

Of the seven marvels in the Zoroastrian legend, four are obviously derived from the Buddhist legend : ewe, horses, oxen, bonfire. The three other marvels bear traces of the Buddhist original. Thus, both children attract attention at birth by manifestation of merit, and a seer prophesies future greatness for each. In the Buddhist legend the child thrown down a precipice is unharmed; in the Zoroastrian legend the child thrown into the lair of a wolf is unharmed. In the Buddhist legend the persecutor's own son is killed instead of his fosterson, the latter marries an heiress, and the persecutor himself is
confounded; in the Zoroastrian legend the persecutor who compresses or twists the head of the child is paralyzed.

The Zoroastrian legend as a whole is therefore derived from the Buddhist legend, most probably from the Dhammapada Commentary version.

New Haven, Connecticut. June 1, 1918.

# THE PHILOSOPHIC MATERIALS OF THE ATHARVA VEDA 

Franklin Edgerton<br>Assistant Professor of Sanskrit, University $\int_{\text {Of }}$ Pennsylvania

## I

A quarter of a century ago Deussen ${ }^{1}$ remarked on the need for a special intensive study of the philosophic materials of the Atharva Veda. Since that time Bloomfield's references to the subject ${ }^{2}$ have in part supplied the lack. Yet the matter is so tangled and obscure that much remains to be done before the relation of these productions to the rest of the Atharva Veda and to the higher thought of early India as a whole can be settled. The following pages are intended as a further step in this direction.

It is probably true that the Atharva Veda contains more matter which can be called 'philosophic' than any other Samhitā. Certainly it contains a great deal more of such matter than the Rig Veda. Yet the milieu of the Atharva Veda appears, at first sight, very unsuited to such subjects. In order to explain the inclusion in a book of witcheraft of so much of the speculative literature of the Veda, I have been led to study the purposes of the Atharvan philosophic materials, and to try to discover what ideas in the minds of those who compiled them or included them in the Atharvan collection led to that inclusion. In the course of this study my attention has been called to some features of Vedic 'higher thought' as a whole which, as it seems to me, need to be emphasized more clearly than has been done in the past.

A summary of my conclusions will be found at the end of this article (Part VI). The most important part of the article I consider Part V, altho the logical development of the theme seems to make it necessary, or at least advisable, to put it near the end.

## II

Our general experience with the Atharva Veda leads us to expect in the first instance an exorcistic purpose, a 'blessing'

[^50]or a 'curse,' in any composition found in.it. This is the traditional attitude of the Atharvanic school in India, as represented best by the Kāuśika Sūtra. Of its general soundness there can no longer be any doubt. The use to which the hymns are put in the Kāuśika is, by the internal evidence of the hymns themselves, demonstrably right in such a mass of cases, that the burden of proof now rests on him who would reject its explanation, in individual instances.

The Atharvan śrāuta sūtra, the Vāitāna, is of much lessindeed, of very little-value in explaining the purposes of the Atharvan hymns, because the application of most of them to the śrāuta sphere was entirely a secondary matter. There are however a few hymns ${ }^{3}$ whose true and original purpose seems to be correctly connected by Vāit. with the śrāuta ceremonies. Hence it is not safe to neglect Vāit. entirely in studying the objects of the hymns.

Nor are the later Atharvan ritual texts called the Pariśistas, or Appendices, to be overlooked. Especially in the few cases where Kāuś. and Vāit. fail us, we can often find from the Parisistas the Atharvan use of the hymns. Tho the compilation of the Parisistas is late, their method of operation is genuinely Atharvanic, as is sufficiently shown by the very fact that it accords so well, in general, with the customary method employed by Kāuś. Some scholars indeed hold that the Pariśistas as a whole are broader in their interests, and come nearer to including the complete sphere of Atharvan topics, than Kāus., not to mention Vāit., or even than both together. Whether or not we believe with Caland ${ }^{4}$ that most of the Kāuś. ceremonies are fitted into the framework of the New and Full Moon sacrifice, which would naturally imply an intrinsic limitation in the sphere of Kāuś.; at any rate the fact remains that Kāuś. fails to use at all a not inconsiderable amount of the Atharvan Samhitā. This may be due to mere inadvertence or accidental loss of the thread of Atharvan tradition on the part of Kāuś.; or it may be due to the fact that the scope of Kāuś. is not as broad as that of the Atharva Veda. In either case it is incumbent upon us to try to complete the gap. And we find, as a matter of fact, that at least a large part of the material neglected by

[^51]
## CORRECTION

Page 119: the eleventh line on this page, namely, "the Virāj hymn 8.10 seem to be absolutely ignored in all the" should be placed after the twelfth line, namely, "are employed. The Skambha hymn 10. 7, the mystic 11. 8, and"

The printers regret this error, which was made in their office after the final page proofs had been returned. The proofs were correct.

Kāuś. is worked up in the Parisisṭas. This fact is hostile to the only third alternative (which I consider improbable in itself), that the hymns in question are late intruders in the text of the Atharva Veda. That Kānś. does not include all Atharvan interests is, in fact, indicated by the existence of the specifically śrāuta materials that belong to the sphere of Vāit., to which allusion has been made.

Now if we inquire what use is made of the philosophic hymns in the ritual books, we shall find, first, that one or two of them are not used at all, and that of some others only stray stanzas the Virāj hymn 8. 10 seem to be absolutely ignored in all the are employed. The Skambha hymn 10. 7, the mystic 11. 8, and ritual texts. The other Virāj hymn, 8. 9, is likewise ignored except that Vāit. allows the use of vss. 6 ff. optionally in a sattra rite. So of the brahmacārin hymn, 11. 5, only one vs. (3) is used by Kāuś. in the upanayana. Kāuś. and Vāit. also fail to use the two Kāla hymns, 19. 53 and 54, the ucchista hymn, 11. 7, the odana hymn, 11. 3, and the second Skambha hymn, 10.8 (except that Vāit. uses a single vs. of the last, which by the way contains, in vss. 43 and 44 , the clearest suggestion of the Upanishadic ätman theory known to the AV.) ; but Keśava, the commentator on Kāuś., uses 11. 3 in witchcraft practices and in the brhaspati sava, and the others are all used in the Parisistas.

Next, we may find that when hymns of this category are used, their employment often seems from our point of view secondary and without bearing on the real nature of the hymns. Thus, the Puruṣa hymn, 19.6 ( $=$ RV. 10.90), is used by Vāit., along with the otherwise unknown Puruṣa hymn 10. 2, in the purusa-medha rite. Neither of these hymns appears in Kāuś. at all (tho a purusa-sūkta, doubtless 19. 6, is used several times in the Pariśisṭas), and their employment in Vāit. is as easy to understand as it is shallow and worthless. The sūtra compilers feel it their duty to use, somehow or other, as much of their Samhitā as they can; and especially Vāit., which has not like Kāuś. the advantage (or disadvantage) of a stable tradition to adhere to, ransacks its Bible much in the fashion of some modern clergymen, who first make up their minds to preach on a certain topic, and then wrench and screw some text out of the Scriptures to make it, willy-nilly, fit their subject. ${ }^{5}$ Sometimes even

[^52]Kāuś. may be, or has been, suspected of similar tendencies. For instance, Kāuś. uses all the four hymns of the Rohita book (13) on the occasion of an eclipse of the sun. These hymns undoubtedly have the sun in mind; but except to that extent their language does not prominently suggest such an application. And the use of such brahmodyas as 9.9 and $10^{6}(=\mathrm{RV}$. 1. 164), 5. 1, and 7. 1, in magic rites for general prosperity and success is also hardly to be inferred directly from any materials found in the hymns.

Fully half of the philosophic hymns belong to this category as regards their ritual employment. That is, they are employed only in ways that seem to us, from the point of view of their language (cf. Part $V$ of this article, below), secondary and unintelligent (a few not being employed at all). And indeed,
${ }^{\text {b }}$ Kàus. 18. 25 quotes the pratīka only of 9.9.1. But as 9.9 and 10 really form one hymn (RV. 1. 164), the division in AV. being purely external (in fact they form one complete anuvãlca even in AV.); and as 9. 10 is not dealt with independently; it seems to me likely that the whole unit 9. 9 and 10 is intended by the sūtra. The divisions of these long hymns are largely mechanical anyhow; compare the division of 10.7 and 8. Ppp. largely adopts the practice of cutting up the longer hymns of its Book 16 (which includes nearly the whole of Books $8-11$ of the vulgate) into purely mechanical 'hymns' of ten verses each.-The following possible confirmation of my suggestion as to the intent of Kāuś. 18. 25 was discovered with the aid of references furnished me by Bolling. Among the pratīkas quoted in the same list in Kāuś. 18. 25 is that of 16. 3. The Gaṇamālā (AVPariś. 32. 22) quotes the same list, without difference except that it prefixes the pratika of 1. 4 to the list, and adds iti dve sūkte after the pratizka of 16. 3. It would not be overbold to infer from this that Kāus. also probably meant to employ 16. 3 and 4, altho he quoted the pratika only of 16. 3. The like may then have been intended by the pratīka of 9.9.1. Now, the Ganamālā manuscripts, to be sure, contain no such indication in the case of 9.9.1. But two ganas before (gana 20), they contain a senseless nuvāk(a) inserted before the gana number. The editors of AVParis. could make nothing of this, and quite properly rejected it from their text; see their Critical Apparatus, page 202. Bolling now suggests that this nuvāk (a) may be the relic of a displaced ity anuväkah, originally a marginally inserted correction intended to go in gana 22 after the pratīka of 9.9.1. Since AV. 9. 9 and 10 form in fact one anuvāka, and since all the AVPariś. mss. go back to a single very corrupt archetype (see the editors' introduction), I think it highly likely that Bolling's suggestion is correct, and that the Ganamāla originally indicated the use of the entire anuvāka at this place. If not, the coincidence is certainly startling. This would be a further confirmation of my suggestion as to the intention of Kāuś. 18. 25.
from the prima facie evidence of their language, we should expect nothing else. They show few signs of interest in witchcraft practices (altho I shall show later on that they are really not so far removed therefrom as appears on the surface, and as has been generally supposed). However awkwardly and impotently, they strive after higher things. They are the immediate forerunners of the Upanishads, and on the whole not unworthy of their successors. The gulf that separates them from the operations of the Atharvanic medicine-man is so wide that it seems at first sight unbridgeable.

Yet the bridge is there. It is indicated by the traditional employment of certain other philosophic hymns, or at least hymns containing philosophic materials. The first of these, as joining on most directly to the hymns of the preceding group, is the prāna hymn, 11. 4. The subject of this hymn is the cosmic 'breath,' that is the wind, most strikingly manifested in the storm-wind; hence the obvious naturalistic allusions to storms. This breath of the universe is, quite naturally and yet acutely, made the enlivening principle of everything. The author is thoroly at home in the phraseology and ideology of Vedic higher thought, and applies it all to his subject with a freshness and vigor that suggest an unusual amount of intellectual acumen. He is certainly no mere magic-monger. Yet that does not mean that he is free from natural human desires. Not only the last stanza, ${ }^{7}$ but several stanzas scattered thruout the hymn, ${ }^{8}$ give expression to the active desire that the cosmic 'breath' shall confer boons on him who glorifies it, particularly, of course, by means of its counterpart, the individual 'breath' or 'life' in the human being. So Kāuś. very appropriately uses the hymn in magic performances for long life. In so doing Kāuś. does no violence to the thought of the hymn, even tho the author of the hymn may have mingled more lofty aims with this practical one.

Still more significant are the hymns in which the practical purpose seems clearly predominant. In these cases we find no longer philosophizing tinged with self-interest, but self-interest decked out more or less in the garb of philosophy, or employing philosophic concepts. The constant refrain of 13.3 shows that the primary purpose of the hymn is to discomfit the brahmanhater, and that it is only for this purpose that the sun as a

[^53]cosmic first principle is glorified. It is therefore appropriately used by Kāuś. in hostile sorcery. Or if anyone should suspect the refrain of being a secondary addition, unjustly degrading the hymn as a whole, I would refer him to such hymns as 9. 2, to Käma, cosmic Desire (Passion, or Will-it is very hard to find an exact English equivalent). Here thruout the body of the hymn the constant theme, expressed in ever varying language, is that Kāma shall destroy our enemies; and this is, very properly, the use to which Kāuś. puts it. In this hymn, except in verses 19-24, there is hardly a suggestion of a philosophic idea, beyond the mere name Kāma itself-which (as is still more obviously shown by the other Kāma hymn, 19. 52, in its opening quotation from RV. 10. 129.4) is borrowed from the sphere of the higher thought and set to work in claptrap magic. Compare 4. 19. 6, where the non-existent (ásat) of RV. 10. 129 etc. is similarly pressed into the service of a purely sorcerous performance.

To this same general group belong the sava hymns 4. 11, 4. 34 and $35,10.10$, and 11.3 , in which the beneficent effect of the offering of the ox, cow, or gruel is enhanced by the equation of each in turn with the cosmic first principle. In common with most commentators, I find in the ucchista hymn, 11. 7, only the reductio ad absurdum of this tendency-the apotheosis of the 'leavings' of the offering as the cosmic One. ${ }^{\text {g }}$ Käuś. uses in a manner perfectly consistent with our interpretation all of these hymns except 11. 3 and 11. 7, which are ignored in both Kāuś. and Vāit. (but Keśava uses 11.3 in the brhaspati sava; the only ritual use of 11.7 is found in Pariś. 42. 2. 11, with other $\bar{a} d h y \bar{a} t-$ mikāni in the snānavidhi).

Summing up, we find that the use to which the philosophic hymns are put in the ritual accords partly with the prima facie internal evidence of the hymns themselves as to their objects and the purpose of their inclusion in the Atharva Veda; but that some are used in ways that appear at first sight to be secondary, or are even not used at all.

## III

But now arises the question, what do we mean by 'secondary' employment? Do we mean that the ritualists have lost the

[^54]thread of true Atharvan tradition, and use these hymns in a way different from that intended by their Atharvan compilers? Or are the ritualists right as far as concerns the Atharvan intention, and wrong, if at all, only in so far as that intention was. wrong or "secondary'? And furthermore, just how 'secondary' is the 'secondary' application of these materials to what we may call 'Atharvanic' purposes? Even when to our minds a hymn seems to deal purely with 'higher thought,' can we be sure that lower or more practical motives were absent from the mind of its original composer, not to speak of him who included it in the Atharvan collection?

There are several knotty problems concerned here. I would formulate the two most fundamental ones thus. First, what is the character of the Atharvan tradition of the philosophic hymns, and what is the relation of the Atharvan philosophic materials to Vedic philosophy as a whole? And second, to what extent does Vedic philosophy as a whole naturally and from the start lend itself to such purposes as the Atharva Veda commonly has in mind?

## IV

First. There is ample evidence that Vedic philosophy was in a quite advanced state by the time of the final compilation of the Atharva Veda. There must have been in existence a large body of compositions essaying to deal with such problems as the origin of the world and of man, the internal structure of both, and their interrelation. Intellectual activities along these lines were carried on apparently in the several Vedic schools, or at least in connexion with some of them. The speculative literature preserved to us in the Atharva Veda, and the approximately synchronous speculations of the Yajur Vedas and Brāhmanas, are in all externals quite similar to the other contents of those collections. In particular, they share with them a general appearance of instability, fluidity, and secondariness. They appear not as independent, primary, and unitary compositions, having each a definite date, authorship, and purpose. On the contrary, they seem like masses of floating timbers gathered in more or less by chance from the wreck of a vast hulk, or of several such, whose original structure we can only dimly discern. One is tempted to say that they do not give us the thoughts of Vedic philosophy, but only show us that there was such a thing. This is doubtless an exaggeration; and we must beware of rating too highly the qualities of even the best
thought which can have been produced in the Vedic age. Yet I think it is very evident that the philosophemata of the Atharva, in particular, are essentially rehashes, and often very blundering ones, of older materials, most of which are now lost to us. They are highly important, because they (and others like them in the Yajur-Vedic texts) are all we have to go by in reconstructing the thought of their time and sphere. But they are, like the general literature to which they belong, only the precipitate of an extensive development, only the dregs of the glass.

Tho the evidence for this is largely subjective, it is not likely that any Vedist nowadays will question its general truth. But there is a certain amount of definite and objective evidence for it, which it has seemed to me worth while to collect. I refer to the way in which some Rigvedic philosophic hymns are reproduced in the Atharva Veda. RV. 10. 121, 10. 125, 10. 90, and 1. 164 all occur in the Atharva Veda. The first three are AV. 4. $2,4.30$, and 19.6 respectively; the last is AV. 9.9 and 10. All except 4. $30=\mathrm{RV} .10 .125$ are also found in the Pāippalāda. By comparing the Atharvan versions with those of the Rig we can get an idea of the way in which the Atharva handles such materials, and can draw inferences as to the way it handled materials which are not found in the Rig Veda or in any other collection. While it is not by any means certain that the Rig Veda itself furnishes us the original versions in every case, it is clear that it comes closer to it than the Atharva Veda. The Atharva shows many signs of mere mouthing-over of matter which it did not understand, and of general 'Verballhornung' of the text. This suggests that its versions of other philosophic hymns are probably no less secondary and poor, and that when we find unevenness or nonsense in them too, the fault may lie with the Atharvan compilers and not with the original authors of the hymns. It frequently happens that the Pāippalāda version is closer to the Rig Veda, and better, than the Sāunakīya. Yet on the whole the Ppp. too is poor and secondary.

$$
A V .4 .2=R V .10 .121 .
$$

The vulgate Atharvan version of this hymn is especially confused and bad. In the first place, the order of the stanzas is mixed up, as the following table of correspondences will show. The statements about the Ppp. are based on Barret, JAOS 35. 44 ; Roth's statements, given in Whitney's translation, are inaccurate.

RV 1, 2ab, 2cd, 3ab, 3cd, 4, 5ab, 5cd, 6ab, 6cd, 7ab, 7c, 8ab, AVS 7, 1ab, 2cd, 2ab, 1cd, 5, 4ab, 3cd, 3ab, 4cd, 6ab, 一, 一, AVP 1, 2ab, 2cd, 3ab, 3cd, 6, 4ab, 4cd, 5ab, 5cd, 7ab, 7c, ${ }^{10}$-,

$$
\begin{array}{lll}
\text { RV } & 8 \mathrm{c},-, & 9,10,-,- \\
\text { AVS } & 6 \mathrm{c},- \\
\text { AVP } & 7 \mathrm{c}, 7 \mathrm{~d},-,-, & 8,-9 .
\end{array}
$$

Perhaps the most interesting of the many corruptions in the Atharvan version of this hymn is vs. 6. AV. 6ab, ápo ágre viśvam āvan gárbham dádhānā amŕtā rtajñâh, represents RV. 7 ab ápo ha yád brhatír viśvam áyan gárbhảm dádhānā janáyantīr agnim. No argument is needed to show that the Atharvan compiler has simply made a mess of the line. To try to make real sense out of his version is a waste of effort. Ppp. reads differently, but not less stupidly, tho somewhat closer to
 janayanta mātarah.-To these two pādas the vulgate then appends a version of RV. 8c, reading yấsu devịsu for yó devésu to make it refer to the waters, and improving the meter by omitting éka ( $h$ ).

Stanza 4 (= RV. 5ab, 6cd) presents other instances of a similar sort. RV. has in abla vigorous statement, yéna dyấur ugrấ pṛthivâ ca drlhá yéna svàh stabhitám yéna nákkaḥ. This in the vulgate AV. becomes the colorless and metrically poor yásya dyáur urvã [the simple-minded Atharvanist knows ugrá in a semi-offensive sense too well to let it stand here!] prthiví ca mahí yásyādá urv àntáriksam. (Ppp. agrees with RV.) And in pāda c the strong RV. text, yátrádhi súra údito vibháti, becomes the dull yásyāsấu súro vítato mahitvấ. This has evidently passed thru the middle stage represented by the Ppp. version, yasminn adhi vitata eti sūrah, with which MS. agrees except for the transposition sūra eti at the end. (The change from udito to vitato is phonetic in character, and suggests interesting reflections.) Thus we have here concrete evidence for the way in which these materials were mouthed over again and again, passing thru various stages of corruption and degeneration.

The corruptions of AV. $3 \mathrm{ab}=$ RV. 6 ab are likewise interesting and far-reaching; and again the versions of Ppp., MS., and KS. throw light on their genesis. Without attempting to discuss them fully, I will point out that the Rigvedic ávasā, which

[^55]presents difficulties of interpretation, becomes the simple but uninspired ávataś, tho it is preserved (in a different position) in Ppp.; and that áhvayethām (read ${ }^{\circ} t \bar{a} m$ ) at the end of b seems to hark back to RV. 2. 12. 8a vihváyete (RV. 10. 121. 6ab is undoubtedly based on 2. 12. 8ab, cf. Deussen, Allgemeine Geschichte der Philosophie, i. 1. 128 f.), from which we may guess that even the RV. version of this hymn is partly secondary and that the AV. is not based directly or entirely on it.-In $3 \mathrm{c}=\mathrm{RV} .5 \mathrm{c}$, the Rigvedic yó antárikse rájaso vimánah becomes yásyāsắu pánthā rájaso vimánaḥ, and in Ppp., with a different corruption, yo antarilesam vimame variyah. MS. again agrees with Ppp.
$$
A V .4 .30=R V .10 .125 .
$$

The order of the stanzas is again altered. The number of corruptions is this time much smaller, but there is at least one very interesting one. In RV. 3cd we have tánin mā devā vyădadhuḥ purutrá bhúristhātrā̀ $\dot{m}$ bhưry $\bar{a} v e s$ śáyantīm: 'I am she whom the gods have settled variously in many places; I have many stations, and bestow (boons) on many [or, bestow many (boons, on whom I will)].' The use of $\bar{a}$-viś, causative, in the sense of (implant, and so) bestow good things is guaranteed by AV. 7. 79. 3b. This use is unquestionably found in the RV. passage under consideration. The AV. (vs 2d) changes to àveśáyantah, agreeing with deváh, and understands 'making me enter into many (places).' Aside from the tautology of this, the very rarity of the Rigvedic use of the word suggests that it is original, rather than the AV., which takes it in a commoner sense.

Vs $6 \mathrm{~cd}=\mathrm{RV}$. 2cd: ahám dadhāmi drávinam் havísmate suprāvyè yájamānāya sunvaté. So RV.; AV. changes to drávin̄ä . . . suprāvyà . The change makes the adjective 'helpful' agree with 'wealth' instead of with 'the sacrificer.' It is a rationalizing, or perhaps a merely blundering, lectio facilior.

$$
A V .19 .6=R V .10 .90
$$

Again the order of the stanzas is considerably altered in AV.; and other texts in which the hymn occurs show still different variations (see the introduction to the hymn in Whitney-Lanman). The Rigvedic order is none too prepossessing in places, and in general I-suspect the Rigvedic version of the hymn of being more or less secondary. But certainly the AV. does not offer a single variant that appears better than the RV. I will
call attention to a few instances in which it is clearly inferior, or at least secondary.

Vs $2=\mathrm{RV}$. 4. In ab RV. reads tripád ūrdhvá úd āit púruṣă pádo 'syehábbhavat púnah: 'with three quarters the Puruṣa ascended aloft (on high, beyond), while a quarter of him remained here (in the empiric world).' This evidently means the same as 3cd, 'a quarter of him is all beings, three quarters are the immortal that is in heaven.' The AV. changes a to tribhîh padbhír dyám arohat, which may intend to state the same idea in words of one syllable, but more likely indicates (by its arohat) that the Purusa is thought of as physically ascending the sky-a much more naïve and less philosophical idea. Again in pāda c, RV. says 'from thence (táto, i. e. referring back to ihá, from the one quarter) he spread abroad over the whole universe,' thus deriving the universe from the single quarter of the Puruṣa. The AV. changes táto to táth $\bar{a}$, 'thus,' i. e. by mounting to heaven with three quarters and remaining below with one; in short, it fails to grasp the profound idea of the RV. and uses the whole of the Purusa in forming the universe.

Vs $4=$ RV. 2. In d, RV. has yád ánnenātiróhati (referring to the world of the 'immortal,' here obviously the ritualistic gods). 'which grows (thrives, increases) by (sacrificial) food.' The AV. redactor totally failed to understand this phrase, which is indeed cryptic and requires more penetration than some modern western interpreters have shown. He reads yád anyénábhavat sahá, which is simply nonsense.

Vs $9=$ RV. 5. The RV. has in. ab tásmād virắl ajāyata virájo ádhi púrusah: 'from him (Puruṣa) Virāj was born, from out of Virāj (also) Puruṣa (was born).' The paradox is deliberate, and belongs to the sphere of RV. 10.72.4,5 (Aditi born from Dakṣa and D. from A.). It was too much for the Atharvanist, who must needs change pāda a to virád ágre sám abhavat, which makes the sense simple and shallow enough: 'Virāj was born in the beginning, and from Virāj Purusa.'

Vs $11=$ RV. 7. AV. substitutes prāvers $\bar{a} \bar{a}$, 'by the rainy season,' for barhissi, 'upon the barhis,' in pāda a, under the influence of the season-names in the preceding verse.

$$
A V .9 .9 \text { and } 10=R V .1 .164 .
$$

This brahmodya hymn does not contain a great deal of matter that is, in my opinion, strictly speaking philosophical or theo-
sophical ; most of its riddles are more narrowly naturalistic or ritualistic, tho many of them have a cosmogonic tinge. It happens also that there are few variants of any significance between the text of the RV. and that of the AV. I will mention only the variant in 9.9.10d (RV. 1. 164.10d), because it has been said ${ }^{11}$ that the Atharvan reading is certainly superior to that of the $R V$. and more original than it. In spite of the weight of authority on that side, I venture to maintain that the contrary is quite as possible a priori, and therefore-in view of the general relations of Rig versus Atharvan readings-more likely to be correct. The Rig Veda stanza has, as pādas cd, the following: mantráyante divó amúsya prṣthé viśvavídain vácam áviśvaminvām. The AV. agrees except for viśvavído and áviśvavin$n \bar{a} m$. I should render the RV. thus: 'they proclaim upon the back of yonder heaven an utterance that is cognizant of all, but that does not extend to all.' The AV. makes it: 'those who know all proclaim . . . an utterance that is not known to (discovered by) all.' The making a nominative out of viśvavidam is just the sort of change we expect to find in the shallow Atharvanic philosophasters; they want a subject for the verb mantráyante, and find it very naturally in 'the all-knowers.' And since the root vid occurs already in this word, it seems to me easy to see how an original áviśvaminvām could have been shaped over into áviśvavinnäm by influence of that form containing vid. Such verbal attractions are as common as can be. On the other hand, it is not so easy to see how áviśvaminvām could have originated from áviśvavinnām. There is nothing to suggest the change from a lectio facilior to a difficilior. And yet 'not penetrating to all' makes excellent sense, and is a much less commonplace mode of expression than the Atharvan reading, which seems to me easy to the point of shallowness. This may be subjective; but at any rate the suggested origin of the Atharvan reading is strictly in accord with the canons of text-criticism.

The examples just given are, I think, enough to show that the Atharvan tradition of the philosophic hymns is very unreliable. 'The Atharvanists-the compilers of the Samhitā-apparently did not understand these materials any too well. They mouthed them over ignorantly and blindly, and we cannot feel that what

[^56]they have left us gives much help in understanding accurately the thoughts contained in the compositions. This applies not only to crucial passages, where we should suspect on the face of the evidence that something is wrong. It applies fully as much to passages which appear to be 'plain sailing'; for who can tell how many deep and intricate thoughts have been smoothed out of existence by uncomprehending redactors, as was shown to be the case repeatedly in the hymns borrowed from the Rig Veda?

We should therefore be patient with the statements of Kāuśika and the Pariśista ritualists, even when they prescribe employment which does not seem to be suggested by the language of the hymn. The laek of intelligence (if it is really such, rather than lack of correspondence with our own western notions) may pertain not to the ritualists but to the old Atharvan tradition, to the compilers of the Samhita themselves. The use of brahmodya hymns, for instance, in commonplace spells for prosperity betrays an intelligence no lower than might have belonged to the diaskeuasts who fixed up the Rigvedic philosophic hymns in their Atharvan garb. The 'colorlessness' in many cases of the ritual usage does not prove that it is wrong. How could the purely philosophic hymns be used in magic practices 'colorfully,' that is in a way which would seem to us appropriate to their language (compare on this point the following section)? Yet their inclusion in the Sambitā shows that they must have had some Atharvanic use, unless we assume that they do not belong in the Samhitā at all but are intruders. They are not used in Vāit. to any extent, and so cannot belong as a whole to the śrāuta sphere. The failure of Kāuś. to use many of them may be due to a loss of the thread of the tradition on the part of Kāuś., which after all is not infallible, or to the fact that Kāuś.'s interests are not quite as broad as those of the Atharva Veda. This seems to be confirmed by the fact that most of the hymns neglected by Kāuś. are worked up in the Parisisṭas, and are there used in ways quite consistent with the way in which Kāuś. uses other similar hymns. At any rate, all of the philosophic hymns are just as capable of being used Atharvanically as are many of those which Kāuś. does use.

## V

We now approach the second and more fundamental of the two questions formulated above (page 123). If the ritual
employment of the philosophic hymns gives the clue to their original Atharvanic purpose, that is indicates what the Atharvan compilers meant to do with them; to what extent was this purpose justified by the still more original purposes which animated the composers of the hymns, or the authors of the general sphere of ideas contained in them? To what extent do the philosophic materials fit naturally and from the start into the sphere of the Atharva Veda?

It is commonly assumed that they do not fit at all; that they are foreign elements, calling for an explanation, which it is hard to find. Bloomfield indeed has shown ${ }^{12}$ clearly that they are, at least, very thoroly assimilated; that they are intermingled with the rest of the Atharvan materials in such a way as to form an organic whole. They cannot well be detached as later additions. Nevertheless, Bloomfield thinks that they were incorporated at a time when the Atharvanists had already begun to call their Veda the 'Brahma Veda,' and to associate with this term something of the philosophic tinge which later per tains to the word brahman. Without this assumption he would find it hard to explain their inclusion, since they mark 'in a way the extreme distance from the ordinary witcheraftformula.'

Now it is, of course, self-evident that they are, 'in a way,' very remote from 'the ordinary witchcraft-formula.' And perhaps the fact that Kāuś. fails to use so many of them at all may be taken as an argument for their essential inappropriateness; altho the strength of this argument is considerably lessened by the fact that the Pariśsțtas use most of those which Käuś. neglects, and even refer to a group of them as a gana by the technical term ādhyātmikāni (AVPariś. 42. 2. 9 ff., where the list is given, and 44. 4. 2).

Yet I would venture to suggest that it is possible to exaggerate this inappropriateness. And what I want to emphasize particularly is that they seem much less inappropriate, possibly not inappropriate at all, when we consider the spirit which pervades the atmosphere of Vedic philosophizing in general. The seeming inappropriateness is due, at least in large part, to the difference between our psychology and that of the Vedic Hindus.

To put the matter in a nut-shell, it seems to me that, while the Atharvanists (as we have seen) handled the philosophical

[^57]materials very unintelligently, and made a bad job of their details, they grasped pretty well the general purpose that inspired them, and were quite right in finding that purpose similar to their own purposes.

Aspirations towards higher thought and knowledge in India have always been associated with practical ends. The later systems of philosophy are all supposed to be practical means of attaining mukti. The same word, tho with different connotations, is found also in earlier times as the goal of speculation. Compare for instance the thrice-repeated formula, BrhU. 3. 1. 5-8, sā muktih, s $\bar{a}$ 'timuktih. Here it is a question primarily of 'release' from death and the wasting ravages of time; and something similar is generally meant when the word is used in the early literature. Nevertheless, such passages contain a suggestion of the flavor of the later mukti idea. At least the cat is jumping in that direction.

But this is not all. Some, at least, of the later systems hold out hopes not only of this supreme goal, but also of incidental minor benefits to be enjoyed by the adept while he is progressing towards nirvāna. One thinks of course primarily of the magic powers promised by the Yoga system in particular, and of the whole system of ideas connected with the mahāsiddhis. The Upanishad passage just quoted, after mentioning the various means of 'release,' goes on to speak of the means of 'attainment' (ity atimoksāh, atha sampadah: 'so far the supreme releases; now for the attainings,' BrhU. 3. 1. 8). The 'attainments,' as the following paragraphs make clear, are the winning of certain natural and supernatural 'worlds.' Such and similar ends are frequently mentioned in connexion with Upanishadic speculation.

Indeed, nothing seems more natural to the Hindu than that very practical and worldly benefits, of many sorts, should ensue from superior knowledge. The connotations of the word vidyālater to mean 'magic' out and out-are so well known as hardly to call for comment. How many times do we meet, thruout the Upanishads, as also thruout the Brāhmanas, the phrase ya evam veda! And it almost invariably follows the promise of some extremely practical reward. Not only release from death and the winning of various heavens, but wealth, success in this world, ascendancy over one's fellows, the discomfiture of one's enemies-all these and other worldly benefits are among the things to be gained by the practice of theosophic speculation, as
they were to be gained from the theological and ritualistic speculations of the Brāhmanas. ${ }^{13}$

Indeed, the Brāhmanas, with all their ritualism and formalism, are perhaps closer in spirit to the Upanishads than to the Rig Veda, for precisely this reason, that they emphasize the importance of knowledge-of a true understanding of the inner, esoteric meaning of the things with which they deal. That is why they are the womb of Upanishadic thought. Their hairsplitting theological disquisitions, their brahmodyas, give birth to the cosmic and metaphysical speculations which flower in the Upanishads. ${ }^{14}$ And just as the Upanishads themselves contain many internal indications of their intimate connexion with the Brāhmanas (for example, the passage BṛhU. 3. 1, quoted above, contains speculations which deal solely with ritualistic entities, quite in Brāhmaṇa style) ; even so in particular they, or at
${ }^{13}$ So numerous are the references that might be given to prove this statement that it seems hardly necessary to mention any. They occur constantly thruout the older Upanishads. A few examples: ChU. 1. 1. 10, 1. 2. 14 , 1. 3. 12 , 1. 4. 5, etc.; 3. 12. 9, 3. 13. 1-8, 3. 18. 3 ff.; 4. 5. 3, 4. 6. 4, 4. 7. 4, 4. 8. 4 ; 5. 1. 1, etc.; BrhU. 1. 2. 1, 3, 5, 8 ; 1. 3. 8 (overcoming of enemies), $9,17,19$, etc.; 2. 1. 4,5 (progeny and cattle), 6 (overcoming of enemies), $7 \mathrm{ff} . ; 3.9 .34$; etc. etc. An attentive reading of these and similar passages will reveal the fact that the allotment of particular boons to particular pieces of mystic knowledge is quite analogous to the corresponding allotment of magic ends to Atharvan philosophic hymns in the Atharvan ritual texts. When the language of the philosophic doctrine suggests, or even when by verbal distortions and puns it can be made to seem to suggest, some particular desideratum, that desideratum is the reward promised to the adept in that doctrine. At other times purely general rewards are offered, as in the case of the 'colorless' employment of Atharvan philosophic hymns in the ritual. For instance, in BṛhU. 2. 1. 4-6, he who knows the 'glorious' gets 'glorious' offspring; he who knows the 'full and constant' is 'filled' with offspring and cattle, and his offspring do not depart from (remain 'constantly' in) this world; he who knows the 'unconquerable one' becomes himself 'unconquerable.' Per contra, at the end of the famous third book of the BrrhU., the knower of its mysteries is promised in general terms 'intelligence, bliss, the brahman, (and) the highest goal of the giver of bounty.' These rewards are not one whit more 'colorful' or 'appropriate' than the uses of the Atharvan hymns in the ritual. Yet no one supposes that the promises of rewards in the Upanishads are secondary.
${ }^{14} \mathrm{Cf}$. Bloomfield, 'Brahmanical riddles and the origin of theosophy,' Congress of Arts and Sciences, Universal Exposition, St. Louis, 1904, ii. 481 ff .
least the early ones (like the Bṛhad Āranyaka and the Chāndogya), seldom lose sight for long of the practical ends which they also inherit from the Brāhmanas.

But in both of these two respects do they not touch upon the special sphere of the Atharva Veda? It too deals with practical ends-none more practical. Its objects are of the selfsame sort as the practical objects of Upanishad speculation, strange as this may seem to westerners. And it is a commonplace of Atharvan psychology that knowledge of the end to be gained is a prime means of gaining it. 'We know thy name, O sabháa,' says the author of 7.12 .2 , in a charm to get control of the assembly. 'I have grasped the names of all of them,' says 6 . 83. 2 of the scrofulous sores (apacit) which it is striving to overcome. And so on; the instances are numerous. The 'name' is the essence of the person or thing; so also later, BrhU. 3. 2. 11, the name is that eternal part of man which does not perish at death. He who knows it knows all, and therefore controls all.

Are not these the connecting links between the Atharva Veda and Vedic philosophy? Both seek to win practical ends by means of knowledge, particularly mystic (= magic) knowledge. Such hymns as those to prāna or Kāma (above, page 122) are therefore not secondary blendings between originally unrelated spheres. They appear so to us only because we find it hard to put ourselves in the place of the Vedic philosophers, and to realize how intensely practical were their aims, and how close to the magical were their methods. And it is precisely these hymns, which clearly show the union of philosophy and magic, that are to be regarded as typical of the rest. There are other hymns which do not clearly show by their language any magical or practical purpose. This is not surprising; it seems rather a stroke of luck that there are so many that do show it. Most of the Upanishad passages referred to contain no indication, in their doctrinal parts, of such worldly intentions; yet the promise is appended none the less. In the case of the Atharvan hymns, the lack is usually supplied by the ritual texts. In a few cases these latter have, perhaps by mere accident, failed to treat of the hymns at all, leaving us in the dark as to just what aims were connected with them. Even so there are passages in the Upanishads which contain no explicit promise of worldly rewards. But that does not mean that none was intended. The boons to be gained by 'ya evain veda' are none the less actual for being implied or understood rather than definitely stated. In no case is there any reason for doubting that the original
authors of the hymns, as well as their Atharvan redactors, believed that they had gained, by their mystic or philosophic lucubrations, some desirable object. They would have been highly exceptional Vedic thinkers if they had not held this belief. In Vedic times people did not go in for knowledge for its own sake.

There is, therefore, no reason for surprise at the inclusion of such hymns in the Atharva Veda, nor any reason to question the statements of the ritual texts, which make clear the practical purposes associated with nearly all of the philosophic hymns, at least in the minds of the Atharvan compilers. And there is every reason to believe that these, or at least similar, practical purposes were associated with these and the like productions from the very start. It is not a question of a secondary fusion of unrelated activities, philosophy and magic. On the contrary, all Vedic philosophy may be described as a sort of philosophic magic, or magical philosophy. ${ }^{15}$

Lest I be misunderstood, let me make it clear that I am not trying to defame or degrade Vedic philosophy. I am an admirer of the achievements both of the Upanishadic thinkers and of their earlier Vedic predecessors. It is no more of a degradation to Vedic thought to show that practical aims were combined with it, than it is to Vedic poetry to show that it too was used for definite practical purposes. The old-school Vedists made the mistake of idealizing everything Vedic to too great an extent. Largely thru the work of scholars like Bloomfield, the Veda has been brought down, bit by bit, out of the clouds; and given a resting-place on terra firma. The last remaining citadel of what I might call the 'poetic' school has been the philosophy of the Veda. When I undertook this study, I had no preconceived ideas on the subject, and therefore had no intention of storming this citadel; but as the work developed, it gradually became clear to me that the citadel must fall. If I am right, the work of what I should like to call 'humanization' is now complete. But that does not mean that nothing worth while is left. - We can still admire and enjoy the beautiful Ushas hymns, the intimate and confidential addresses to Agni the friend of man, the spirited resonance of many hymns to Parjanya and Indra, which the Rig Veda gives us, even tho we now know that

[^58]the Rigvedic poets were practical priests, not merely poetic dreamers. In the same way we can do full justice to the boldness and magnificence of the thought of Rig Veda 10. 129, of other Vedic efforts at philosophy, and of many Upanishad passages, even tho we must recognize that the philosophers were also men and had other interests than philosophy.

## VI

To summarize. It is of the essence of Vedic higher thought that it hopes to gain practical desiderata by acquiring knowledge of the esoteric truth about things. This is eminently characteristic of the early Upanishads, no less than of the older stages of thought. This fact was grasped by the redactors of the Atharva Veda, who therefore found such compositions fitted to their own special sphere. It is perhaps no accident that the Atharva contains more materials of this sort than any other Samhita. - The Atharvan redactors, however, have preserved these materials only in a very corrupt form. This is, by the way, equally true of the other materials contained in the Atharva Veda. Comparison with such of these hymis as occur elsewhere, particularly in the Rig Veda, shows the bungling way in which the Atharvanists handled them. The ritual texts, particularly Kāusika, deal with them in a way which in general reflects accurately the intentions of the Atharvan redactors, and does not seriously misrepresent the original authors of the hymns.

# IRRADIATION AND BLENDING 

Edwin Whitfield Fay*<br>Professor of Latin, University of Texas

1. This paper takes its start from Professor Bloomfield's paper on Adaptation (i.e. Irradiation) of Súffixes (see AJP 12. 1-29, anno 1891). The same aspect of verbal interassociation or principle of synchysis was applied to verbs, and the entire subject treated anew, in an ensuing paper on Assimilation and Adaptation (ib. 16.409-434: cf. IF 4.66-78). These vigorous papers waked a wide interest in suffixal irradiation and revealed how synchysis (blending) might affect the structure of roots. In spite of Persson's reluctation (Beiträge, p. 593 sq.: cf. CQ 9.105 fn.), they enabled folk to realize that in rhyming roots the rhyme might be due to semantic interaction (cf. the term affinates applied in CQ 1.16 to capit x rapit) : and that one word might be absorbed into another, so to speak.
2. As the credit is Professor Bloomfield's for the application of the principle of synchysis to roots as well as to stems, the credit is his also for the great simplification offered to classífication by the introduction (see $A J P 17.412$ ) of the term haplology. Scattered instances of the phenomenon had often been noted, but Professor Bloomfield by naming created a scientific category. Blending had also been observed before, and a choice instance, the earliest known to the writer, is of record in Sea-Words and Phrases along the Suffolk Coast (1868-1869), by Edward Fitzgerald, translator and poet, in the entry :

Brustle.-A compound of Bustle and Rustle, I suppose. 'Why, the old girl brustle along like a Hedge-sparrow!'-said of a round-bowed vessel spuffling through the water.

So much for generalities, so much for the history of ideas, and now to the task.

## I. Some Names of Parts of the Body

3. $\pi$ oús: odovis.-It was an act of daring, and in the retrospect I deem it a mistake, when Professor Bloomfield explained the diphthong of $\pi$ oús as patterned after the secondary ov of obovis

[^59](AJP 12.2). But that explanation was far superior to any of those now reported by Boisacq. Before proportional analogies
 (? $\chi \epsilon i \rho$ ): $\chi \epsilon \rho \sigma i$ one can only gasp; and when Sommer (Gr. Lautst. 16 sq.; long anticipated in $A J P$ 15.426) explained $\pi$ oús after oủs he was but moving to amend, without real change, Bloomfield's original motion. Objectively speaking, aov́s: Doric $\pi \omega^{\prime} s$ is not isolated; cf. $\beta$ ovs : $\beta \hat{\omega} s$, and the reduction of - $\beta$ ovs to almost suffixal $-\beta o s$, as in $\Pi$ Ódv- $\beta o s$, might form a phonetic contact for $-\pi o v{ }^{\prime}$ and $-\pi o s$, in $\pi$ o $\lambda \dot{v}$ - $\pi$ os. But Dor. $\omega$ : Attic ov is also certified in $\delta \bar{\omega} \lambda o s: \delta o v\rangle$ os (root dōu), and the $u$-diphthong of mov́s (see $A J P$ 21.198) is certified by $\pi v \delta \alpha-\rho i \zeta_{\epsilon \iota}$ (=dances<foot-stamps). ${ }^{1}$ I then wrote the stem as $p \bar{o}(u) d / p o d$, and now realize the root as (s) pēud in $\sigma \pi \epsilon \dot{\delta} \delta \iota \quad$ (speeds). This is an extension of the root of Lat. pavit (cf. pavimentum with beaten path). ${ }^{2}$ The derivation of 'foot' from 'hasten' is quite comme il faut, cf. Av. dvaritra: dvar.
4. Av. aši and Goth. augo.-In a paper which was accounting for the vocalism of $\pi$ ovis by the vocalism of ódov́s it seems extraordinary that Professor Bloomfield did not explicitly mention Joh. Schmidt's luminous interpretation (see Plbldg. 389) of the $\check{s}$ (for $x \check{s}$ ) of aši (two eyes) by the (lingual) $\check{s}$ of $u s ̌ i ~(t w o ~ e a r s), ~$ and go on to correlate this exhibition of phonetic contact between words for eye and ear with the diphthong of Goth. augo, with au from auso (see Kluge's lexicon and cf. Bugge in BB 18.179). The coherence of these explanations was their proof and the present refusal of this explanation for augo I account mere stubbornness, even if. I have myself ( $K Z 45.123$ §32) thought of aủrai (eyes) as another possible source of the diphthong. For aši after uši note the sequence aši uši [karəna] (gloss, or author's explanatory modernization, of $u \stackrel{s}{i}$ ) in Yt. 11.2. The evidence

[^60]for $c$ extracted from Sk. áksi is nothing (cf.-OBulg. očese) ; and the nom. an-ák ${ }^{3}$ (eyeless), like Av. aiwy-āxštar (overseer), certainly has the $k^{w}$ of oculus. Still the admission of Indo-Iranian $s s s$ in these words would not prove IE cs, for aši may be a blending of $o k^{w}$ (eye) with the primate of Albanian si (eye), root $(s) c(h) \bar{e} i$ (to shine). As regards öктад入os (reported by Arcadius), instead of plunging for IE $o c p$, I rather believe that $\kappa \tau$, if it does not represent a dialectic treatment of $i^{w} t$, was fashioned in that prehistoric stage of the Greek tongue when folk said olyye (ö $\sigma \sigma \epsilon$ ) and okyomai (öббoнal), see Osthoff in IF 27.174. Here possibly, and not to the Ionic dialect, belongs hypocoristic
 cf. Kretschmer, KZ 33.273.
5. Armenian names of parts of the body.-To these Professor Bloomfield devoted an especial section of his paper. He was by all means right in regarding akn (eye) as the model for the other names in $-n$ (not the accusative *podm e.g.).
6. Arm. akn.-Herein $a$ for o shows Iranian influence. Sk. aksán- is not to be explained as anything but a synchysis of áksiand *akan- (:OBulg. olen $\langle 0\rangle$, window). Or the $a$ of akn may indicate a still earlier interaction between $o k^{w v}$ and a cognate of Lat. acies (eye: cf. sharp eyes, sharp-sighted), and from this source $c$ might have intruded into Av. asii.
7. Arm. leard (liver).-With Scheftelowitz (BB 29.59) and Pedersen (KZ 39.351; cf. also Wackernagel, Ai. Gram. i §229c), I think that only one IE word for the liver has come down to us, in its several grades and stems. Of the initial consonants (ly) either, but only one, survived. For the Armenian form I offer the following modification of Scheftelowitz' explanation. 'The primate $l(y) \bar{e} k^{w}$ yielded pre-Armenian $l i\left(k^{\prime}\right)$, i.e. $l i k^{\prime} / l i$, with retention or loss of $k$ in response to sentence euphony. An earlier stage lekw may have been borrowed, as Pedersen suggests, into Kurinian as läq (plur. läqer). From the metaplastic primate $l(y) \bar{e} \bar{e}^{w}-r-t(i)$ (also with $\breve{e}$ for $\bar{e}$; cf. Av. yā̃ara with Sk. yákrt) we should have got ${ }^{*} l i k^{\prime} a r d$; then the proportion $l i k^{\prime}: l i:$ : lik'ard:liard>leard; cf. neard (sinew), perhaps directly from (s) nēy-ṛt(i).—The primate of Eng. liver was likw(e)ros (: yákṛt:: кó $\pi \rho o s: S k . ~ s a ́ a ́ k r t)$ ). I derive the primate $l y$-ek ${ }^{w} / l y o k k^{w}$

[^61](Lat. iocusculum; cf. OPruss. lagno?) from li- (smooth): $\lambda$ êos + $\bar{e} k^{w}$, ĕk ${ }^{w}$ (eye, look) i.e. smooth-looking, cf. the type of ait $\theta o \psi$ and Lat. ferox. In the semantic aspect this is no change from the current equation of liver with $\lambda$ lıapós (see Falk-Torp, lever).
8. Sk. hálī-kṣna (gall-bladder, AV hapax 2.33.3, as defined by Weber; also a sort of animal, cf. halí-ksna, lion).-(a) hal̄̄(yellow) is clear enough; (b) -ksna (metathetic for skna) is a reduction form of $s k[\partial]-n o$ (sheen), root $s k \bar{e} i / s k \bar{a} i$ (with $c$ and $k$, cf. Falk-Torp, skin) ; cf. ksane (in a flash), abhî-ksnam (flash by flash, every moment), perhaps $d y u$-ksá (sky-flashing). A competing posterius is $s k[e] n-o$ (skin, see Falk-Torp, skind). The root (s)ken is a legitimate variant of (s)kei (cf. JAOS 34.341; Boisacq, ä $\tau \eta, \mu a ́ \sigma \sigma \omega, \pi \rho o \mu \eta \theta \dot{\eta} s$; Falk-Torp, vunde).-By a like variation we also explain $\bar{i} / \epsilon \nu$ in $\nu \epsilon \sigma-\gamma\rangle \lambda$ ós : $\nu \epsilon 0-\gamma \epsilon \nu \bar{\eta} s$.
9. Excursus on Sk. -kn $\bar{\imath}$ in color terms.-The type of fem. pali-kn $\bar{\imath}$ (grey) contains neither $k n$ from $t n$ nor $-k^{w}-n \bar{\imath}$ as a weak grade derivative of $o k^{w w}$ (eye, look), but [ $\left.s\right] k n \bar{\imath}$ (sheen or skiin). The only evidence adduced for $k n$ out of $t n$ lies in color terms; which of itself renders suspect a merely phonetic derivation. Jāina Māhārāṣtrī sa-valikīo (quarreling co-wives) is derived by Charpentier in IF 29.389 from *sa-pakni<sapatnī. But interference from $s a+v a c$ (colloquens, convicians) is here to be admitted. If Sanskrit ever had the independent terms ${ }^{*}$ pali-tnī (feminine to $\pi \epsilon \lambda \iota \tau \nu o ́ s)$ and hari-kn̄ (of yellow sheen), synchytic pali-( $t$ )kni (unless palikn $\bar{\imath}$ has the $k$ of Lith. pilkas) perhaps had a fleeting existence, though the Ms. variant patk $n \bar{\imath}$ is no adequate proof of this. Or did 'cook-lady' swim in the stream of thought of the scribe of patkni in VS? On a possible grammatical origin of fem. $-n \bar{\imath}$ see $\S 39$.
10. IE words for kidney.-Here a common semantic but not a common primate. (1) Lat. ( $w$ )r-ēn-es (waterers): sept of urina. (2) $\nu \in \phi$ fós from nep (water, see Walde, Neptunus) + sros (flowing): root (s)rēi, in Sk. sarí-t sari-rá; Lat. rīvus. Prenestine nefrones is from nep+sr-on-; nebrundines from nep + srendh. ${ }^{4}$ (3) ONorse nÿra.-Pre-Germanic neuran (or

[^62]neusan) from (s)nu, in Sk. snuta (dripping). ${ }^{5}$ (4) Sk. vrk-káu, Av. varə-סka.-(a) vr- means water (cf. Sk. vắr); (b) $\delta \dot{k} a$ is from $t(a) k a$, cf. Av. $t a \dot{c} i-\bar{a} p$ (pouring-out-water).

## II. Parts of the Body with st ( $h$ ) .

11. In this group, with its wide evidence for Professor Bloomfield's thesis, its strong testimony to suffixal irradiation, Sanskrit exhibits stha st $(h) i$ st $(h) u$. The Sanskrit, perhaps IE, $s t(h) i$ forms (cf. $\kappa \dot{v}-\sigma \tau \tau s)$ and the $s t(h) u$ forms lost their aspiration when in the flexion $i$ became $y$ (and $u$, $v$ ); i.e. the group of (sibilant+) surd aspirate+spirant was deaspirated. The evidence of fixed $i$ in apāsṭhi-hán, but floating $i / y$ in áyo-apāsṭy(see $A J P 34.15 \mathrm{fn}$.; and cf. paktípakthín=cooking, noun and adj.), proves this beyond a peradventure. But in names of parts of the body st might otherwise have come together, competing with the posterius sthi. In ONorse hlust (ear) : Welsh clust the primate may have been clus-ti, cf. Sk. "śrí-ti (hearing, ear): śrús $-\underline{t} i$ (hearing, obedience). On the other hand, clu-sthi might have been the source of the eventual determinative $s$ in $c l u-s$. The same ambiguity in words like Eng. wrist (<wrid-ti or wrid-sthi). Ambiguous also is Sk. śupti (shoulder): Germ. schaufel (semantics of scapulae, see $C Q$ 1.17); primate (s) cup $[s]$ thi. For irradiation of sth better proof could not be asked than the extension of Sk. vís to vi[s]-sthā (faeces). In Eng. waist, however, st need have no direct correlation with sth as a bodily part confix, originally describing standing and outstanding members (sth $\bar{a}$ ).
12. a. The Hand and Finger Group (see $A J P 34.30$; Brugmann, Gr. 2.1 §479).-Sk. angúsṭtha (thumb), gábhasti (arm or hand; i.e. receiver, cf. gabhá, vulva), hásta (hand<taker), ${ }^{\circ}$ musṭi (fist), -apassti $i^{7}$ (claw); Greek $\pi a \lambda a(\iota) \sigma \tau \dot{\eta}$ (palm, the slapper), à $\gamma o[\rho] \sigma \tau o ́ s ~(r e c e i v e r) ~: ~ O B u l g . ~ g r u ̆ s t ı ̆ ~(f i s t, ~ c f . ~ B e r n e k e r, ~$ p. 371) ; OBulg. pęsť (fist) prŭstŭ (finger); OPruss. instixs (thumb), Lith. nyksztỹs, pirisztas; Alban. g'iśt; OIr. boss

[^63](<bosta), Welsh bys (finger; see Pedersen, Kelt. Gr. §49.5); ONorse il-kvistir (foot-twigs ${ }^{8}>$ toes), Eng. fist.
13. b. The belly, intestines, pudenda.-Sk. anta(s)-styam (:Lat. inte $[s]$-stina), ava (s)-sthá (penis), fem. avastháa (pud. mul.), upástha (idem), kó-stha (belly), kísṭtha (lendenhöhle, cf. liusțhila $\hat{a}$, dew-claw), vi[s]-sthā (=vís, faeces); Greek кv́-o $\theta$ os ( $\dot{A} \dot{J} P 34.24$; but perhaps directly from $\kappa \dot{v} \omega ;$ on $\sigma \theta / \sigma \tau$ in Greek
 der) ; Lith. inkstas (kidney, testiculus) ; ONorse cista (testiculus), Ger. leiste (groin), wanst (see §16).
14. c. Other parts of the body.-Sk. prsthá (back), ó [s]stha (upper lip), a-sthán- (bone), sak-[s]thán- (thigh), (?) mástaka (skull), prs stí (rib), ${ }^{9}$ prthust! $u^{10}$ (of broad top-knot; cf. pulasti, of slick, i.e. smooth-standing hair); Greek $\mu a \sigma \theta^{\prime}{ }^{11}{ }^{11} / \mu a \sigma \tau o s$ (breast), (?) $\mu \dot{a} \sigma \tau a \xi / \mu \dot{v} \sigma \tau a \xi$, äк $\neq-\sigma \tau \iota{ }^{12}$ (backbone); Lat. co-stae crī-sta; Welsh clust: ONorse hlust (§11); MidIr. loss (tail; cf. Welsh bon-llost) ; Léttic làpsta (shoulder-blade), OBulg. čel-ustĭ (jaw-bone; perhaps splitting, i.e. opening-the-mouth, to modify Berneker, s.v.), OPruss. klupstis (knee); Goth. brusts.
15. Sk. va-stí (bladder).-(1) In view of the word bladder it is open to us to derive vastí from the root (a)we $(i)^{13}$ (blow). But (2) vasti is conceivable as waterer, with va-from IE $w n$, a flexional variant of IE wer (water; see Walde, urina), cf. $\boldsymbol{\kappa \kappa \omega \rho}$ : $\sigma \kappa \alpha-$ tós. We actually have Sk. ván-a (water) and should be glad to relinquish the labored derivation of this sense, as in the Petersburg lexica, from wood, through wooden cup or trough, to water.

[^64]Grassmann is certainly right when for RV 10.163.5 he defines ablv. méhanād by penis (quasi minctor), and its epithet vanamkáranạa by water-maker. We also have wen (water) in Lat. unda and Sk. unatti, see §69.
16. Lat. ven-ter (belly<waterer).-For the sense cf. Sk. $u d a-r a ́,{ }^{14}$ and John's Gospel 7.38. In Ger. wanst we have the sth suffix, but Lat. vensica (bladder) comes from wen-dti (watergiving, cf. Sk. bhaga-tti, a share-gift).
17. Sk. vani-sthú (pancreas). ${ }^{15}$-The known facts (as found in PW) are: (1) =sthülāntram (solid innard, i.e. all flesh, $\pi \dot{\alpha} \gamma-\kappa \rho \in a s)$. (2) mänsa-vísesaḥh=flesh-dainty, i.e. ка入入i-крєas, sweetbread; also an element in a stew (SB 3.8.3.25) offered to Viṣuu and Rudra in VS 25.71 ; 39.8, while 19.87 and SB 12.9.1.3 are, to occidental minds, jargon. (3) ulūka-paksi-sadṛ́ah (owl-birdlike), cf. in Ait. Br. 2.7 accus. vanisthum-urūkam (entrails that resemble an owl, Haug).-This resemblance is a problem to solve. The feathery 'eyes' in illustrations of the pancreas (as in Encyc. Brit. s.v.) suggest the plumage of the owl. But it is more likely that the 'head' of the pancreas suggested the nomenclature. Having stated the facts as to vanisthth, without mention of the pancreas or display of the title of the Britannica illustration, I asked my friend and colleague, Dr. H. W. Harper, an experienced anatomist, 'What innard, not a gut, looks like an owl?' With the barest glance at the illustration, which does not in fact clearly reveal the head of the pancreas, he replied 'The pancreas,' and immediately sketched a contour of its head, remarking, 'It is like a hoot owl. ${ }^{16}$ Morphologically vanisthú is a quasi super-

[^65]lative (=most delectable), describing the character of the pancreas as a dainty-sweetbread, ка入入i-крєаs.
18. Greek $\gamma a \sigma \pi \eta \prime \rho$ (belly, womb).-(1) from $\gamma \alpha[\rho] \sigma-\tau \eta \rho$ (cf. Mod. Gr. $\gamma \rho \alpha \sigma-\tau \rho a$, but see Brugmann, Gr. 1. §476.3) : Epic Sk. grasati (swallows; cf. Eng. stomach x oтó $\mu a \chi$ रos, throat) ; or (2) $\gamma a[\lambda]-\sigma \tau \eta \rho$ : Goth. kil-thei, Sk. jathara, with different levellings of the primates gel- $[s]$ thīn (cf. Lat. inte $[s] s t i ̄ n a, ~ O P r u s s . ~-p i ̄ r-$ stans in fn. 9) and gl-sther ( 0 ). The root was either the original noun stem $g(w)$-el (cavity, кoidía) in Lat. vola: yúadov, or the perhaps not different gel (to crowd together, wind a ball, twine, see §55) of Lat. glomus. For the sense cf. $v \eta \delta u{ }^{\prime}$ (netz-haut). The root $g(w) e l$ also in Sk. jála (net), jaṭa jūta (braid, plait); -jūta will partly owe its $u$ to the root $y u$.

## III. A Mythological Interlude

19. The name of Artemis.-For this name of the moon-goddess a primate $r[t u]-$ temi (cf. Sk. rtú, season, month) $=$ month-dividing (tem, cut) yields excellent results. By Disease of Language (see §21) the role of Artemis as á àaरo ${ }^{\prime} \dot{\mu} \eta \eta$ (see Usener, Göttern. p. 239) arose, say from the suggestion of á $\rho \tau \alpha{ }^{\prime} \nu \eta$ (halter).
20. Venus Frutis.-The Roman Venus of the sea appears, at least functionally, in the Greek 'Афоo-סít (foam-tossed, foamtossing; - $\delta i \bar{i} \tau \eta: \delta i v \eta$, eddy), epithet of an IE goddess Wenos, perhaps; cf. Lat. Venilia, unda est quae ad litus venit! (Varro). The Norse Vanir are wind and sea gods, ${ }^{17}$ Naiads; and Freyja (: Sk. priyáá, beloved) may again be an epithet of Wenos. But it is rather, and quite succinctly, to the functions of Venus that I turn, not so much seeking a postulate for her proethnic name. (1) As a sea goddess Venus owes her functions to the stem wen (water, §15) ; cf. Venilia and venenum, potion, ap. Noreen, op. cit. p. 49; and note ONorse vás (won + wos, the latter in OHG wasal, see Walde, unda). What rich metaplasm, wer/wen/wes/ wed (in OBulg. voda), in the stems for 'water.' (2) Venus was
in Lat. vermis (worm); cf. Av. ${ }^{3}$ var, vertere. The form $\overline{e r u c a}$ is a popular etymology, quae eruit, cf. Pliny, N. H. 17.229, uruca quae erodit frondem.
${ }_{17}$ The root (a)we (blow) may also be the ultimate root of the words for water ( $\$ 69$ ). For a contact cf. Lith. áudra (tempest) with Sk. $6 d a t \bar{\imath}$ (heaving, \& blown by the wind). Perhaps a like semantic contact is attested in Lat. flare: fluere. Semantic contacts established between roots phonolog. ically approximate may be said in a substantial sense to unite the roots and furnish analogy patterns, subsequently elevated to morphological and phonetic, i.e. speech, patterns.
goddess of vegetation, pot-herbs; cf. Naevius ap. Paulus-Festus 51.10, cocus edit Neptunum Venerem Cererem (i.e. pisces holera panem). (3) For the goddess of love cf. Sk. vánas (love, desire). (4) The epithet Frutis, interpreted as of the sea goddess, will be from sruti (:Sk. sru, fluere) or from bhruti (seething) :defrutum. Or, interpreted as of vegetation, Frutis will belong with frutex.
21. In the last paragraph there is implicit adherence to Max Müller's Disease of Language. Used with discretion this doctrine is of great worth, as witness the following excerpt from Boas' Handbook of American Indian Languages, p. 71:

> This is a tale which is entirely based on the identity of the two words for dancing and catching with a net. These are cases which show that Max Müller's theory of the influence of etymology 'upon religious concepts explains some of the religious phenomena.
22. 'Appধi--фóvins' (arguta-loquens).-The tale of the Argosslayer is a tale of Disease of Language, i.e. Popular Etymology, and not more recondite than when my five-year-old child invented a war of the tomato upon the tomato-bug (!), or said, apropos of the tiny railway station of Nome, that it was the place where people know things. The IE neuter plural varied between $i$ (not a) and $a$, the former generalized for Indo-Iranian, the latter (synchysis of the type represented in Lat. praesentia apart) in the other tongues. To be sure $a$ may belong strictly to $o$ stems and $i$ to consonant flexion, but Lat. toti-dem and róvoos from totyos: Sk. táti reveals the IE plural in $i$. This is the archaic ending found in the prius ápyєï (: áp $p \eta \eta^{\prime} s$, brilliant). The posterius - $\phi o v \tau \eta$ s belongs with $\phi \omega \nu-\eta^{\prime}$ (voice): bhen, see fn. 41.A neuter plural prius in $i$ also in Hom. $\mu \epsilon \lambda \epsilon-\sigma \tau i-p o s t e r i u s$ from $d \partial-t i$ (cutting, $d \bar{a} \bar{i})$. With $\mathrm{Sk} .=\mathrm{IE}$ neutro-fem. $\bar{\imath} / \bar{\imath}$ cf. the like variation of $\bar{a} / \breve{a}$.
23. Apollo (off-driving).-The sun-god shooting his sheaves of arrows is a phenomenon so often witnessed in Texas that, granting some slight modifications of my own, I can think no other explanation of Apollo's name deserves to stand with Usener's, op. cit. 309 ; and the trifling phonetic error that Usener wrote ' $\mathrm{A} \pi[0]-\pi \epsilon \lambda \lambda$ os (instead of ${ }^{\prime} \mathrm{A}[\pi 0]-\pi \epsilon \lambda \lambda o s$ ) can easily be condoned. The vocative "A $\pi \epsilon \lambda \lambda o v$ yielded "A $\pi 0 \lambda \lambda o v$ (Prellwitz). In rhythmic forms like 'A $\pi \pi{ }^{\prime}{ }^{\prime} \lambda \lambda \omega \nu$ (citations in Usener, p. 307) $\pi \pi$ is due to hypocoristic (energetic vocative) forms with ' $\mathrm{A} \pi \pi$-. Flexionally the posterius started as pelyon. Knowers of Vedic Sanskrit are aware that the comparative (generally only an
elative) is formed directly on the root by a suffix ( $\bar{\imath}$ )-y $\bar{a} n s$, blended of the suffixes yen and yes, which vary only metaplastically in Greek; cf. the differently blended Lith. (y) $\tilde{e} s n-i$ and (?) Goth. izan (see $A J P$ 31.425). ${ }^{18}$ In 'A $\pi o ́ \lambda \lambda \omega \nu$ the long deflected grade of yen carried through, as it did in the proper name Xeíp $\omega$, inferior (the déclassé slave-artist and schoolmaster of the Centaurs) ; also in the town name (acc.) 'O入ı乡 ${ }^{\circ} v-a$ (accent?). But the apparent gradation of 'A ${ }^{\prime} \dot{\prime}{ }^{\prime} \lambda \lambda \omega \nu$ may be secondary, starting in the yos stem accusative *'A $\pi \circ \lambda \lambda \omega$, alternate to *'A $\pi 0 \lambda \lambda o v a$. This acc. *'A $\pi \Delta \lambda \lambda \omega$ picked up a distinctive $-\nu$, cf. $\dot{\alpha}-\gamma \dot{\gamma} \rho \omega s$ (stem in $\bar{o} s$, like the stem of labos, Sk. masc. bhiyấs), acc. $\dot{d}_{-} \gamma^{\prime} \rho \omega\langle\boldsymbol{\nu}\rangle$. Thence, after the pattern of $\mathbf{Z} \hat{\eta} \nu$ : gen. $\mathbf{Z} \eta \nu$-ós : acc. $\mathbf{Z} \hat{\eta} v-a$, acc.
 aîva furnished the pattern.
24. The Genius and the $\Delta a i \mu \omega v$.-As Lat. gemini corresponds to Sk. yamáu (see CQ 9.108,19-20), Genius is to be equated with yam-yă/yamía and gemellus (with el<en<n) may entirely conform with yamala. The Genius was everyman's spiritual double or yokefellow. As yamáu belongs with yam (bind, fasten, hold; cf. yáma, rein), so $\Delta a i \mu \omega \nu$ derives from dḕi, as Bartholomae correctly writes the root in his lexicon, s.v. $d y \bar{a}$. The root yam is really (d)yam (:Av. dy $\bar{a}:: g a m: g \bar{a})$, cf. $C Q$ l.c., and note Lat. re-dim-io. On the functional identity of the $\Delta a i \mu \omega v$ and the Genius see Rohde's Psyche, ii. 316 fn . If we reflect on all the religious advance implied by the proethnic sept of Lat. deus, no need to shrink from granting even abstract religious concepts to the Indo-Europeans.

18 The older theory of the first edition of Brugmann's Grundriss (2, p. 403) was right. Cf. also Johannson in BB 18.50, Wackernagel, Ai. Gr. ii. 1 §24d; Hirt, IF 12.200. In the current Grundriss (2.2 §250), when pushed to his last line of defences for the explanation by a purely formal analogy, Brugmann stakes his entire case for the alleged intrusion of the nasal into the Sanskrit endings in $-\bar{a}<\dot{n}>s i$ on the rivalry (which means synchysis) of nt. pl. possessives in -vănti with participial forms in -vāsi. Nothing could be less probable than the spread of the nasal from the neuter plural. The entire Vedic literature has not a single form in $-v \bar{a}<\dot{n}>s i$, and only one comparative in $-y \bar{a}<\dot{n}>s i$. So much for the infrequency of the forms induced. Of inducing forms, within the range postulated by Thurneysen's theory ( $K Z 33.551$ ), the Vedas (RV) have only 6 neuter plurals in -änti. In view of this statistic Thurneysen's explanation of the nasal in $-\bar{a}<\dot{n}>s i$ by a merely formal general analogy is fantastic, and not to be compared with the synchytic explanation of Johannson, properly accepted by Macdonell, Vedic Gr. §343a n. 5.
25. Egeria.-The change of IE (d)ye- to Lat. ge- is also attested by the name of the spring nymph $E$-geria (out-boiling); root (d)yes in Greek ${ }^{\prime} \epsilon \omega$ (see $C Q$ l.c. §21).
26. vaós (temple).-Without denying the possibility that vaós meant a god's dwelling (see Brugmann-Thumb, Gr. Gr. p. 52) it may be worth while to offer a different explanation and derive from IE nāuso. Evidence for (s)nāu/(s)nĕu (cf. Lat. nāre, to swim: Gk. fut. vévouaı), meaning to scrape, dig, cut: Lat. nāvis (dug-out, see $A J P 25.381$, a trifle earlier, perhaps, than Meringer in IF 17.149 ; cf. for the semantic Falk-Torp, nu baad skip), Lat. novacula (razor, a 'scraper' that often cuts), OBulg. navı̆ (mortuus, i.e. caesus), Lith. novyti (slay, so Lalis: torture), àmóvafє (caedendo-fecit, see $K Z 42.86$ ). Add Sk. nir-aks-nóti ${ }^{19}$ (detes-ticulatur<de-ex-secat) ; and with [e]cs, ks-nāuti (scrapes) ; cf. also Goth. b-nauan (to rub), §51. Falk-Torp also cite a root snu (cut off), s.v. snau. I would define this väós (<nāusos) to accord with Lat. templum, originally the + diagram of the diviner made by drawing E-W and N-S coordinates, though there is no positive and no negative evidence for a templum divinationis in Greece, see Halliday's Greek Divination, p. 270. Or vaós had the semantic of $\tau \epsilon \in \mu$ evos (:Lat. tesca<temsca?), or of Lat. lucus', a god's clearing, whether for worship or for divination ; cf. Cicero, De off. 3.66.

## IV. Indo-Iranian Nasal Verbs of the (Sanskrit) 7th Class

27. The subject of the nasal verbs has been on my mind for over 15 years (see $A J P$ vols. 25-26:37), ever since, under the spell of Professor Bloomfield's theory of blending, I first essayed to apply the principle of synchysis to these formations. As regards the nasal verbs in the 6th Sanskrit Class, the type of limpáti (or of Lat. linquit, see §49) is clearly the product of IE linéti (Lat. linit) +lipéti (cf. aor. $\lambda \iota \pi \epsilon \mathrm{iv})$. But as a system the 6th class nasal verbs contain divers elements (see $A J P 37.171$ §29a for complexes of accusatives in $-m$ with $d$ and $d h$; and below, §68), nasals of different sorts, subsequently allocated to a paradigm. The blending of limpáti is in principle precisely

19 Ambiguous, for ales may belong to $a \xi \ell \nu \eta$ (see §66). In $A J P 37.703$, following native șources, I defined by 'entfrachtet.' But these native definitions may belong to a homonym. Av. xšnu/snu (to gratify) belongs with Sk. [ $s$ ]návate (exclamat, laudat). In $x s ̌ n u x s ̌=[E[e] c s$ before $s$ - (see $A J P$ 1.c.). For a problematic [e]cs in Latin see Walde, 2 frigo; in Greek, see Prellwitz, $\sigma \beta \epsilon \nu \nu \nu \mu \iota$.
the blending attested in OBulg. trese, i.re from+tros; see Walde, terreo.
28. In my first paper I proposed typically to cxplain (1) Sk. badhadi (binds) as what I will now call : low-sise compound (see $A J P 32.408, K Z 45.112$ ) of bodh (to hind) $+(\mathrm{s})$ Mä (to spin) ; (2) sindit (to hind) as a blend of si (root siti) $+(s) m u$ (in OBulg. smuti, ordiri) ; (3) trnedhi (crushes) as a blend of for (to bore) + mein (df. OBulg. máa, infign).
29. In the last paper (AJJ 37.164) yunákit was derived from (a) "yumátit (b) yulití; impl. "nap" (? pres. wnábahi) from *anátit"nábadhi (weaves). Demonstration of ndbh (1.0. 163) almost lacks, owing to the fact that, for the sept of repid $\eta$ (birduct before chond), a 'root' cloud (to at as cloud, min.
 placed nebh. The evidener for ( $s$ ) nsi-p is better ( $\$ 43$ ).
30. My first reconstruction of trnédhi (.t.ll 26.390) was better than I realized. But OBulg. hex! has trine $i$ and belongs with Sk. nilisati (bores, ef. vinkise, RV 5.2.9). Av. nā̈za (point), to the root nijh (nics), whence 3d sg. "ncijidhi>-nédhi (of reood only impv, truedhu in AV 8.8.11). Macdonell (I'cdic Gr. \$463.3) correctly states the fied : "Ther root trh infixes mizn in the strong forms.' But in trihanti (so far as this is not "trnatit *trhati) the root was trijh.--What I now think of the extended root trig is that its determinamt palatal was due to assimilation with $j$ h in nejh/mijh, or whatever was the original root in in meaning hore, or the like ; it mever was redued from trinh (A.IP 26.395). On ru-rlh: $r \boldsymbol{k - n ( a )}$ ) $\boldsymbol{l}_{h}$ see $\$ 42$.
31. Against these symehytie explamations of badhnafti and

20 Warkernagel's rules (Ai. Gr. i $\$ 34$ ) for interior aiz an ad hetore dt dh are incorroct. They should run :s follows. A. (1) afon in wodhum (vehore) and in so-dtaśá (16th): (2) in bithat (itm) and sadhat wan originally long,
 risith, the latter with lle $\bar{r}$, as in Lat. riths, (i) The root mred (Prakritic $d$ ) :lways and only (twioct) moms reilcote (if. . Ihn's rendering of Ch. Up. 5.19.4). It is :lll axtonsion of : haso merit (ef. merill, merry, in Sk. brimiti) as found in Ginth. Ar. mipmeri (ammomemont) <mamri: df. Lat. memoria ( $\mu$ ept- $\mu \nu a$ ). 13. (1) 13y intorior emphony arth yiolds ath in

 métha. (3) Tn kiyc-rthis. (Indra opithot=mmisher) Rige- is a dutivo of

 prius; af. Av. instrum, sroma: Sk. wrimin. C. Tn Stmskrit aldh suffors no change.












 fomigalion ol tho varima rlomomen that rawilled in this mand



## A. Tha Infiral Threaty is rentraly in the dir





 PII.

## 













## 




[^66](cf. $a \tilde{n} j 5$ with $m r j 4$ in Grassmann's lexicon). In $m r j$ (extended from $m r$ ) $j$ is a 'determinant' (cf. §30), a line of facts I shall not deem it necessary to mention for subsequent items.Explained in accordance with the next group, the stem mrnaj is a blend of *mrnáti (wipes) and mrjáti.
37. To avoid being misunderstood, let me say here that I assume that the type of Skr. mrṇáti (crushes) and Lat. linit (smears) was proethnic and may be postulated ad libitum, whereas the mrnajāni type was later, and in all probability restricted to Indo-Iranian. I further specifically assume that this type is examinable, not as a thing made, but as a thing in making, so that I deem it no phonetic breach to assume that mrnjáte and añjáte $\left(j<g^{w}\right)$ have suffered interaction in Sanskrit, even though the root $m r j$ has palatal $j$. Elsewhere in this discussion I have barely raised, not attempted fully to answer, the questions how and why a root like mer was extended by a $j$ to $m r j$. In the explanations from blending ( $\S 38 \mathrm{sq}$.) very different types appear. From their interaction, not by acts of an Esperanto congress, the infix nasal (7th Sanskrit) conjugation grew into being. The $d / d h$ determinants (cf. §57 on scindit: chinatti) were such as to play a particular rôle in the development (§42).

## D. Blends

38. v. rũjate ${ }^{22}$ (they move or strive toward). (a) *r-náti
 (b) rjyate: Lat. regit (as in pergit; cf. root flexion of Sk. rāsti, regit).
39. vi. inddhe (kindles), subj. inadhate. *inati (burns); root $\bar{a} i$ (see Prellwitz ap. Walde, ater; on $\bar{a}[i] s$ see $A J P$ 26.401, with due corrections), attested in the sept of Lat. aes (cf. Ger. messing brennen) and in Sk . $e-t a$ (reddeer), fem. é-n $\bar{\imath}^{23}$ (colored) : Lith. y-nis (rime; perhaps as a tautological posterius in Lat. pru-īna, for which pruswina seems a phonetically impossible primate). Perhaps ai-vós (atrox) also belongs here; for the

[^67]semantic cf. Walde, atrox (appendix). The form indhe (I burn) would be due to a blending of *ine and *idhé (: ai $\theta \omega$ ); subj. inadh to analogy.
40. vii. trnedhi. See §30.
41. viii. Av. banadāmi (I bind; Bartholomae's reading). Indo-Iranian ${ }^{*} b h a n d \bar{a} m i+{ }^{*} n a d h a \overline{m i}$, cf. the participles baddhá naddhá. The root nedh (rhyming with wedh ${ }^{24}$ in Sk. vivadhá, shoulder-strap ; cf. the blend of the two in OBulg. nevod $\breve{\text {, }}{ }^{25}$ net) has $d h$ certified by vótos (bastard; cf. Sk. bandhula, CR 13.400 ; AJP 25.380), ${ }^{26}$ Lat. infula (fillet), treated as in-fula. From (s) nēi, the original root, we have Sk.ni-dh-ád (net, snare). Cf. also Av. $n a-\delta a$ (article of clothing), with $d$ or $d h$, the latter wrongly denied by Persson, Beitr. 814. With Grassmann (col. 707) I admit nádh (but=descendant, not band; on Av. naf-šu see §43 fn.) ; cf. Lat. nōdus<noddhos (o-grade as in фópтos).
42. ix. ru-náddhi (obstructs).-(a) ru: é $\rho \dot{v}-\kappa \epsilon$, épvóoua (see
 urvare (to plough a symbolic furrow-fence about a town), Umbr. víu uruvú (way, boundary). (b) *naddhi (binds, impedit). $r u-d h$ is the usual $d h$ extension of the short root $r u$. From rudh denasalization of rundh forms would start. See further on denasalization §30.
43. x. unap (bound, confined). (a) *unáti: uta (woven) + $n a b h^{27}$ (§29).
44. xi. The posterius nak (§§44-48). prnáliti (fills, mixes).
 vá $\sigma \sigma \epsilon \iota$ (presses, packs, stuffs, fills). For the root pel (to strike> fill) see $A J P$ 26.190. The gloss to Virgil G. 3.328, rumpent $\cdot$ implebunt, is a hit or miss momentaneous version, but rumpere (to fill to repletion) is certain, cf. Lewis \& Short's version of G. 1.49.
45. xii. vinákti (sifts, opposite in sense to prnákti).

[^68]-nakti is further to be compared with $\tau \iota$-vá $\sigma \sigma \epsilon t$ (shakes), in which $\tau \iota$ belongs to the root $t(w) i$-s of $\sigma \epsilon_{l}^{\prime} \omega$ (see $C R 18.208^{1}$ ). (a) $v i$ : $w^{\bar{o}}(i)$ (strike, bore, split; separate, sift; semantic of OBulg. cěditi), see Boisacq, ä $\tau \eta$. Cognates in Sk. vā-ra (sieve), vā-s- $a-$ yati (cuts off), vấ-sī (axe), ve-ssít (needle); Lith. vinìs (nail); Av. vaē-p (throw down), vaē-nā (nose, holes in), vaē-ma (cleft), $v a \bar{e}-\delta i$ (corpus), vaē- $\delta a$ (iaculum), vaē-g (throw). Add vī-naoiti (slays; on -naoiti to root nāu see §26), v $\overline{-}-n \bar{a} \theta a y e n^{28}$ (they shall flay). So far as the sense of vináliti goes, it may belong to wei (twists, brandishes, shakes, throws; cf. $\dot{\rho} i \pi \tau \epsilon$, Ger. werfen, Lat. torquet ap. Boisacq, $\left.\dot{\rho} \not{ }^{\prime} \mu \nu o s\right)$.
46. xiii. pinásṭi (crushes), 2 d sg. impf. pinák. (a) $p i: p e \bar{i}$ (press, rub, crush; strike, cut) in Lith. peîlis: Lat. pīlum, see §59. In its briefer form pēi survives chiefly in metaphorical senses, as in Sk. píyati (scolds; cf. Fr. piquer, and Lith. bariù: Lat. ferio); cf. with $k$-determinant Lith. peĩ-k-ti, but $\pi \iota \kappa$-рós (bitter) : токкídos (tattooed) has $c$. (b) nak-s-ti: vá ${ }^{\prime} \sigma \epsilon \iota^{29}$ (see §44); here Sk. pínāka (club; see $A J P$ 26.188). From the variation pen (:p $\bar{e} i$, §8) we have the root pen-t, in Eng. finds, etc. (semantic as in §62). The type of pinsánti: Lat. pinsunt is the sum of ${ }^{*}$ pinéti and ${ }^{*}$ piseti (root pēis/pais/pis in Lith. paisýti to thresh) ; in $\pi \tau \alpha i \epsilon \epsilon$ (crushes) we have a blend of ${ }^{*} p y e ́ t i$ (: pēi $:: d y a ́ t i: d \bar{e} i$, see §35) + ${ }^{*} p ə i s e ́ t i .-T h e ~ r o o t ~ p \bar{e} i$ as $p \bar{e}(i) l$, $p \check{(i) l}$ (strike-and-touch, beat, drive against) is thoroughly alive in the sept of Lat. pello: $\pi \epsilon^{\prime} \lambda a s$ (touching). The iota of $\pi i \lambda v a \tau a \iota ~ i s$ precious evidence and not to be disqualified. After any adequate evaluation of its Homeric usage (see JEGP 6.249-251), $\pi_{i} i \lambda v a a=$ means to strike (bump), not merely to touch. The right general semantic is to be found in Lobeck and his followers, ap. Boisacq, $\pi$ té $\lambda a s$; see also my independent explanation already cited. The mystifying $n$ of pinak comes normally from $l n$, and we might operate with IE piln-akti (§66). For the suppletion of $p i$ by pil cf. $\mu a \pi \epsilon \epsilon \epsilon \nu$, aorist to $\mu$ áp $\pi \tau \epsilon \iota$.
47. xiv. $t(v)$ anákti (coagulates). (a) $t(v) a(=t w a ̀$ or $t w n)$ : $t(w) \bar{e} i$ in OEng. pwītan (to cut; cf. Lat. taeda, kindling, $C Q$ $11.93^{1}$; see Falk-Torp, tvede). (b) -nakti. For cuts>coagulates cf. Boisacq, $\tau \alpha ́ \mu \mu \sigma o s . ~ E n g . ~ c u t s, ~ l i k e ~ \sigma \chi i ́ \zeta \epsilon, ~ m e a n s ~ ' c u r d l e s ' ~$
$28 n \bar{a} \theta:$ snat : Goth. sneiban, §57. A source of the preverb $v \bar{n}, v i$ (apart) is glimpsed here and in vin-naoiti. On tautological Lat. vi-n [e]x-it (bound) see $A J P 32.413$.
${ }^{29}$ The root of $\nu \dot{\alpha} \sigma \sigma \epsilon \iota$ is nak-s ( $\mathcal{q} \nu \dot{\alpha} \sigma \sigma \omega<n a k s y \bar{o}$; cf. in Avestan 1 and 2 uxšya vaxšya in Bartholomae's lexicon, 1909); vaктб́s is from nak[s]tos, $v a \sigma \tau 6$ s is from metathetic nas[k]tos.
(separates curds from whey). For presses $>$ coagulates cf. Lat. premere of cheese-making and Fr. présure (rennet).
48. xv. Gāthic Av. marañ̃ăaite (necant, caedunt). (a) mara: Sk. mrṇáti (crushes). (b) nakti.
49. xvi. rinákti (linquit), Av. irinaxti (lets go, drives). (a) $r i: \lambda_{i ́ \text {-váal }} \cdot \tau \rho \in ́ \pi о \mu a l$, cf. Sk. $n i+l \bar{\imath}$ in agnír devébhyo (ablv.) ${ }^{30}$ ni layata $=$ Agni slipped-away from the gods (example from Delbrück's Ai. Syntax, p. 110). (b) nalti: nek (to turn), in Lith. pra-nókti (praevertere, outstrip), nókti (turn, restricted to the ripening of grain or fruit-kernobst); and in $\pi \rho o-v \omega \pi \eta^{\prime} s$ (bending, i.e. turning forward), Sk. nāka (vortex caeli). (s) nek ${ }^{w}$ is one of the numerous extensions of (s) n $\bar{e} i$ (bind, wind, twist, spin, reel, etc.). A variant nec ( $c$ from the sept of the synonym root in Sk. paś, band, cf. Wackernagel, Ai. Gr. i §148) in Lat. necto: necesse (TAPA 41.31; 43). On év $\tau \epsilon \sigma$ - (in harness) see $A J P 34.19^{1}$; or derive from $e-n k^{w}-e s: n e k^{w}$.
50. xvii. tuñjáte (they thrust, urge). (a) $t u$ as in §58. (b) $\tilde{n} j$ : (e) $n e j(h)$, as in ' $\epsilon \gamma \chi^{\circ}$ (spear), OBulg. nož̃ (knife); or - $\tilde{n} j-$ :
 IF 4.92.
51. xviii. bhunálati (enjoys). (a) bhu:bhēu ${ }^{31}$ (strike off, break off from and eat, break bread; break forth, sprout, grow; cf. $A J P 25.375$; 26.196) ; note the $t$ extension in Lat. con-futo. (b) nakti: Eng. snatch snack (see Falk-Torp, snak), vต́ $\quad$ a $1 a$ (tidbits). For a Germanic root snag (<snak by Verner's law) see Falk-Torp, snage. ${ }^{32}$ In bhunáliti the sense of eats has yielded enjoys. In fungitur the sense breaks off from has yielded com-pletes-and-leaves-off (functus officio). The fugit sept is cognate (breaks $>$ flees).
52. xix. Posterius (s)neg (bind), §§52-53. yunákti (yokes). (a) See §29. (b) (s)neg (to bind, wind, twist, weave) ${ }^{33}$ in

30 This was the original construction; the accusative-cf. rinákti pánthām in RV 7.71.1-came by assimilation of opposites (take it $x$ leave it); to leave only means not take, turn from. In Latin de-serit we have a like turn, root ser (fluere, ire).
${ }_{31} \mathrm{Cf}$. , with persistent or recurrent sense, OHG bouwen (press, squeeze, rub; see Kögel in PBB 9.515, 532); also Goth. b-nauan, blended of bouwen and nauan ( $\$ 26$ ).
${ }^{32}$ Dialectic Norse snage (tongue of land) recurs in the name of Sicily, Tri-nac-ria.
${ }^{33}$ The line arrangement here and elsewhere is not an attempt to place a chain of definitions. After long interassociation roots starting with any one of these senses precisely would develop all. This is why, from generalization, so many synonym roots are to be reckoned with.

Serb. negve (to fetter), OSwed. nek (sheaf), Eng. snake (binder, see TAPA 41.38) : Sk. nāga (also<trunk of >elephant), pannaga (foot-binder $>$ snake), Lat. nătrix: nēre. For rope x snake cf. AV 4.3.2, datvátī rajjús=toothed-rope, for snake; note in pw varatra x ahí.
53. xx. vrnákti (twists). (a) vr: Lat. vermis (§17). (b) as in §52. In $\dot{A} J P 26.400$ I connected Lat. vergit (twists) with $f^{\text {ै }}$ ¢ $\gamma$ ov, again (see §26) nearly coinciding with Meringer ( $I F$ 17.152). Senses like work, make (<knead) are abstractions, generalizations from the particular, and worthy of closer attention than they receive in our lexica, which play for safety.

54. xxi. Posterius net (spin), §§54-55. krnátti (spins; or cuts, cf. Ludwig 5.306, on RV 10.130.2). (a) kr: Ker (bind, bend) in кор $\omega v \eta$, Lat. curvus. ${ }^{3 *}$ (b) natti:net, parallel with ned, $\S 62$; cf. $n t$ in | ä $\sigma \sigma o \mu a \iota ~(a n d ~ p e r h a p s ~ i n ~ D o r . ~$ |
| :---: |
| ä $\tau-\rho \iota o v, ~$ | 41 fn .), Sk. átka (if not=robe of nettles: ádík $)$, OTr. étim. Alban. ent is from e-net ( $e$ of $e^{e}-\theta^{\prime} \dot{\varepsilon} \lambda \omega$ ). On the alternation of the determinants $t / d / d h$ see Persson, Beitr. pp. 166, 199 ; cf. on $k / g / g h$ Prellwitz, ¢ $\eta \quad \gamma v \nu \mu$.
55. xxii. gṛnátti in AV 10.7.43 replaces krnátti as in §54. (a) $g r$ - belongs with jatā, §18.
56. xxiii. Av. činäānaidē (let us instruct, pervert). (a) ci: Sk. cinóti (struit). (b) na- $\theta: \nu$ véci ( $\mathrm{struit}=$ heaps, piles up, loads). But na- $\theta$ may be an extension of $n \bar{e} i$ in its earlier sense of ducere (§31), cf. ducit, misleads.
57. xxiv. Posterius ned (thrust, cut), §§57-62. chinátti (cuts off). (a) *chi-náti (cf. 1st sg. impf. achinam, but see Whitney, §555a). (b) natti: Celtic snado (I cut, see Fick-Stokes, p. 315), cf. snax ${ }^{x}$ th in Av. snat (caedere). Because of Goth. sneipan I see here a long diphthong root $(s) n \bar{e}(i) t(h)$ (§45). Lat. scindit (see $A J P$ 37.171) may be like chrna-tti, §§68, 71. On ned (thrust) in a transferred sense see $\$ 62$.
58. xxv. tundate (they thrust). (a) $t u$ is the root in Lat. stuprum. (b) nad as above. The senses strike (cut), thrust, pierce, are all found in Lat. ferio/foro, and to rub in frio (rub x bore as in Lat. tero), cf. Persson, Beitr. 782 fn. 2; Walde is hopelessly wrong, for Lat. $f r$ - never comes from $m r$-, see $C Q$ 13.37. There is no semantic incompatibility between tu-nd-ate and Celtic snado. Passing over my previous remarks on the

[^69]semantic groups ${ }^{35}$ under consideration, I cite the following from Lord Avebury's Prehistoric Times, ${ }^{7}$ p. 356.

> 59. 'It is useless to speculate upon the use made of these rude yet venerable palaeolithic weapons. Almost as well might we ask, to what use could they not be applied? Numerous and specialized as are our modern instruments, who could describe the exact use of a knife? [Considered as an act it is simply pressing or pushing.] . . With these implements . . he cut down trees, scraped them out into canoes [cf. §26], grubbed up roots, attacked his enemies, killed and cut up his food, made holes through the ice in winter, prepared firewood, etc.' Ib. p. 581: <As man developed into a hunter>' the knife and the hammer would develop into the spear [Lith. peilis: Lat. pilum again] and the club.'
60. xxvi. tr-nátti (bores, splits). (a) *trnáti (cf. atrnam, as in §57) : Lat. terit (rubs, bores). (b) nad as above. Add as evidence for (s) ned (? or nedh net nes) ONorse nista (to bore through; see Falk-Torp, neste). Be it recalled that sewing is stitching (sticking, pricking) and that needles and awls are borers and piercers.
61. xxvii. bhinátti (splits). (a) *bhinéti: OIr. benim (<bhinami), ${ }^{36}$ Lat. per-fines (perfringas; cf: AJP 26.180). (b) For nad I would here note OWelsh nedim (axe).
62. xxviii. Gāthic Av. vī-(vi-) nasti(finds). (a) vi: wŏi(§45), strikes>hits (cf. Ger. treffen; and see on $\tau v \gamma \chi_{\text {áve }}$ etc. $A J P$ 26.193). (b) nasti:ned (thrust) in Sk. ni-nd-ati (blames) : Av. nadəntō. Or (a) vi:wēi ${ }^{37}$ (bind) + (b) ned (bind, in Goth. nati, net). For the semantic cf. Shakespeare's 'Safe bind safe find.' Cf. Sk. vināta (belly; $t$ dialectic for $d$ ) with $v \eta \delta v^{\prime}$, , §18.
63. xxix. Av. činasti (proclaims, ${ }^{38}$ declares), Gāthic činas
${ }^{35} A J P 25.383$ (1904), TAPA 37.9 (stone-working as the source of the metaphors of cutting), MLN 22.383 (polemic against Walde), $C Q$ 1.17-18; $5.120, A J P 32.405^{2} ; 407^{2} ; 409$. Walde's semantic is not methodical. Occasionally he accepts right teaching as in his remarks under capus (taken over by Boisacq, $\kappa \delta \pi \tau \omega$ ), but he denies s.vv. caedo scindo the very semantic he takes over for ferio. The correlation of caedo with chinatti is certified by the accord of Plautine caedite ligna with Sk. chettar (wood-cutter).
${ }^{36}$ I would now analyze Sk. su-bhnāti (concidit, l.e. p. 193) as preverb ( $k$ ) su (: $\xi u \dot{u}-\nu$, sėe $\wp 66$, and Boisacq, s.v.) $+b h[ə]-n e \bar{t} t i$. When OBulg. s $u$ takes the accusative (Brugmann, Gr. 2.2. §665), it is because some native word, in general like $\beta a \lambda \omega \nu$ or $\stackrel{\varkappa}{\epsilon} \chi \omega \nu$ or $\lambda a \beta \omega \nu$ (all=with), has influenced it. Or did ksu<slou (following) originally take the accusative?
${ }^{37}$ In Lat. vīginti $v \bar{\imath}$ is a (neuter) dual, meaning plies-two (cf. AJP 37.164 on $u b h a \vec{u} u$, wefts-two).

38 Bartholomae's definition of lehren is quite misleading, though docet has sometimes the general import of proclaims.
(promisit). (a) ci: Lat. ciet (calls, proclaims). (b) nasti:nes, doublet of $n \bar{a} u / n e \check{u}$ in Sk. nāuti (cries out). ${ }^{39}$ The variation $e s / u$ in roots is not uncommon; cf. Eng. throw's: $\tau \rho \bar{\epsilon}[\sigma] \in \iota$ (shakes, trembles), aor. $\xi_{\epsilon}^{\prime} \sigma-\sigma \epsilon: \xi \hat{\xi} \dot{-\epsilon}$. The root (e) nēu in övvua : Armen. anun, gen. anu-an (pace Meillet, Esq. §26), Lat. nō [u]men. To the same root with $\bar{a}$ (cf. Lat. nāre: vev́roual) belongs Lat. narrat, either syncopated from $n \bar{a}[u]$ serat, or from $n \bar{a}[u]-s-a t$.
64. xxx. Posterius nes/ns (throw, etc.), §§64-65. śinasti (leaves over; passive, remains over). (a) *sinati: $(s) c(h) \bar{e} i$
 (falls off). ${ }^{40}$ (b) asti:ásyati (§65), vi-asyati (breaks in pieces); cf. Eng. throws away=casts off.
65. xxxi. hinásti (hurts). (a) hi as in hinóti (throws, hurtles) hetí (iaculum) ; Celto-Latin gae-s-um (spear). (b) nasti as above. Add Av. as-ta (hate; as if objectatio, cf. Eng. fling, Ger. vor-w urf). The root nes $/ n s$ also in Lat. $e-n[e] s$-is (knife thrown, sword, §59), in which $\bar{e}, \check{e}$ is the preverb (Brugmann, Gr. 2.2. §634) ; cf. $\S 60$, ONorse nista. But the primate of ensis may be $n s-i s$.
66. xxxii. Posterius ag (break). bhan-ákti (breaks). (a) $b h a n=\mathrm{IE}$ bhen, ${ }^{41}$ by form of $b h \bar{e} i$ (in $b h i n a ́ t t i$ ), as ten of $t \bar{e} i(\$ 8)$. (b) -akti, from $a g$, in ăклй ( 1 beach, 2 meal); compounded with ( $k$ ) $s u$ in Sk. $s v$-akta (thoroughly rubbed; $s u$ with the force of $\sigma v v-$ in $\left.\sigma v v-\tau \epsilon^{\prime} \mu \nu \epsilon \epsilon\right), s[w]-a k t u ́(g r i t s):[\sigma] f-a ̈ \gamma v v \mu c$. Simple root also in $\mathfrak{a} \xi \mathfrak{\xi} i v \eta$ (axe) ; Goth. aquizi (primate ag-wes-ī). Possibly we have ag also in -aksnoti, §26. On $s u / s w / s / w /$ zero see further $\S 61$; and

39 Was the nose a crier (snorer)\& Cf. Plautus, Miles 822, naso . . . magnum clamat. Then the primate was $n \bar{a}[u] s$ (cf. $\bar{o}[u] s$, mouth). So we account for $\ddot{u}$ in Ger. nüster; see also $\$ 10$.

40 When the native grammarians united Sk. sat sad and $s \bar{\imath}$ into a system, their semantic was entirely sound. Quite in the sense of Persson, śat and śad are 'determinative' variants of (s)c(h) $\bar{e} i$. For the sense of falls cf. the passives of $\delta \stackrel{r}{r}$ (crush) and Lith. krintù (cado): Sk. krntati (cuts). More in AJP 26.396; 39.292.
${ }^{41}$ Root of Sk. bhánati (loquitur), cf. Scotch crack=talk. Further, Eng. tells: Sk. dalati (bursts) ; speaks: $\sigma \phi a \zeta \zeta \iota$ (slays; root sphēi, cf. Falk-Torp, spaan, Boisacq, $\sigma \phi \eta \dot{\eta}$; in $s p(h) e \bar{e} i$, 'bursts' is a sequel to 'swells'); OEng. sprecan : $\sigma \phi \dot{p} \rho a \gamma o s(s p a r k$, splinter), Sk. sphūrjati. I note colloquial 'He bus' out an' said.' Eurther observe OFr. deviser (<divisare), colloquium habere (cf. JEGP 6.248) ; ф $\omega \nu \grave{\eta} \nu \dot{\rho} \eta \xi \xi \alpha s$ (Herodotus, 5.93), rumpit voces (Aeneid). Kiessling's note on ferire verba in Horace, S. 2.3.274 shows that the Stoics had thoroughly realized the semantic equation voice (speech) $=$ strike (air) ; cf. Quintilian 1.6.34, 'verba' ab aere verberato. Voices still strike the air; cf. Fr. frappent, Ger. schlaaen (to warble). From bhen comes $\phi \omega \nu$ - $\eta$; see $\$ 22$.
cf. Lat. saltus: Sk. aṭav̄̄, ä入 ${ }^{\text {cos }}$ (JEGP 17.423; KZ 40.422; TAPA 44.108; CQ 11.213, with literature).
67. xxxiii. abhisnak (medebatur). Of the two solutions for bhis-aj (medicine-man) offered in AJP 26.399 and 32.415 the former is correct. The original sense was either demon or feardispelling, cf. OBulg. běsŭ ( $\delta a i \mu \omega \nu)$ : Lith. baisà (fright), adv. baĩs. Consider Av. baeš-aza (curative, used of stars and moon) in' the light of h. mag. in Lunam (Wessely), סódov $\tau \epsilon \mu$ ova [cutting>obstructing, preventing] $\phi$ ó $\beta$ ov $\sigma \omega \tau \eta \rho i \eta$. Av. baeš and Sk. *bhiṣan (in abhis [a]n-ak, cf. Lith. baisunas [monstrum], $S k$. bhĭsana) have to be added to bht bhís (instrum. bhīs ás) etc.; making a rich store of stems. For -k in abhiṣnak see §4, fn.
E. Compounds (type of partakes) with dati (gives, makes) dhati (puts, makes)
68. xxxiv. chr-na-tti (spues, ejects). (a) chr-n-a acc. from sc(h)r-n- (cf. Norse skarn; for gender nouns, cognate Lat. muscerda and ко́троs): $\sigma \kappa \omega ́ \rho$, gen. бка-тós, Sk. ava-skara (*excrement, place of same). In chrna, sch is due to contamination of sker with schid (Norse skide), though Sk. ch<skh is perhaps found in iccháti: OBulg. iskati (Wackernagel, i. §132). (b) For the sense of -doti cf. Eng. gives for makes or does (gives a cry, dat gemitum). An accusative prius from skor, again governed by $d \check{u}$ (giving, making), in the OBulg. gerundial skare-d $\check{u}$ (nasty ; cf. §27; AJP 37.169, operandus).
69. xxxv. uná-tti (wets), impf. āunat (streamed). (a) un-a is acc. of wen (water, §§15-16, 20). (b) -dati. But nod (wet) in Goth. natjan justifies us in ascribing $u$ - to blending of nod and $u d / a u d$ in ódatā (flowing) : útsa (spring), udán (water). The impulse to blending was probably first felt in nouns, as though, gender apart, Lat. unda were a blend of the primates of vios and Sk. nad $\downarrow$ (river) ; cf. OBulg. nevodu in §41.
70. xxxvi. Subj. ṛ̣á-dhat, ptc. rendhát. (a) Forms of redh mean thrive, but the sense here is vaguely promote. In RV 1.84.16 yá esām bhrtyấm (loc.) rnádhat=siquis eorum in servitio (? ad servitium) currat (or the like), so that rn-a may be accusative of a rootnoun ren $/ r n$ (a running, see $\S 38$ ) $+d h$-et (faciat). Then ptc. rudhát (trans.)=Eng. running (a race, horse, boat; affair, business).

## V. The Determinants $d$ and $t$

71. In conclusion I observe that blending (synchysis) and tautological grouping (in look-see compounds) do not differ in
principle. By these lines of explanation wide and varying morphological vistas are opened. Let me illustrate by the alternatives presented for 'suffixal' $d$. If we accept after §69 wen (water) then $u n-d a$ (exempli gratia) may=water-swirl ( $d-a: d \bar{e} i$ in $\delta i v \eta, \S 20$ ). The root of tendit may be enlarged from ten (stretches, weaves; cf. Sk. tanik $\bar{a}$, cord, rope), not by the $d$ of $d \bar{o}$ (give), but by the $d$ of $d \bar{e} i$ (bind), and Lat. ten-di-cula lends itself to analysis as stretch-band (slip-knot) $>$ snare, noose; while Lat. impv. inde (coronam, compedes) is as likely to mean bind on as put on, or may even be from ndhe, root nedh (§41). In Lat. fin-dit scin-dit ( $\S 57$ ) the priora may be accusatives of lost stems $b h i$ and $s c i$, governed by a form of $d \bar{a} i$ (sever), and meaning quasi strike-severs and slice-severs. The loss of these monosyllables out of composition need not surprise us, cf. Wackernagel, IF Anz. 24.114, Meillet, Mém. 14.477. The posteriora of Ger. diebstahl and Eng. kidney are no longer alive as simplices: -Nor do I see why the wide irradiation of $t$ as a determinant forbids us profitably to guess that krt (to cut; cf. Lat. plec-t-it, beats) is some sort of compound of $k r+$ an element from $t(w) \bar{e} i$ (§47) ; and $k r t$ (spin) a compound of $k r$ ( $\S 54$ ) +tēi/ten (Sk. tāy/tan, §8). This contrasting pair constitutes an excellent source for determinant $t$, and we are brought to one of Professor Bloomfield's starting points, the rhyme of necto flecto plecto; cf. also wer-t (turn, twist, spin) in Lat. vertit. So far as the reduction of $t \bar{e} i$ to a bare $t$ goes, we have a perfect parallel, of much later creation (?), in Lat. cré-d-it, where $d$ is all that is left of $d h \bar{e}(i)$. -In a given case, as of crē- $d-i t$, we may make sure that a compound is of the type of animadvertit, par $(t)$ takes. For plec-t-it (plaits) we must hesitate between the look-see and partake types. In the name of safety, but really upon our peril, we may decline to analyze plectit, satisfying ourselves with setting in a row the roots pel (Lat. du-plus) ppt-eu ( $\dot{\alpha}-\pi \lambda$ óos) pl-ec ( $\pi \lambda \epsilon$ 'к $\omega$ ) pl-ec-t (plectit), cf. polt in Goth. falpan. Let us thank the researches of Persson for this wide vista in morphology, without thinking that we have explained anything by calling eu ec ect $t$ determinants and without going on to say that, because $e u$ is a determinant, plec may not profitably be considered a blend of pel and pec (in Av. pas, to bind), or that it is futile even to try to investigate the $t$ of plectit and falpan. The 'roots' and 'stems' of the grammarian are no more ultimates than the crystals of the mineralogist. Let the mineralogists expound their crystallography ever so minutely : still the chemists must take a hand and determine, whether after one or twenty efforts, the constituent elements, the material of the crystal.

Austin, Texas.

# RĀUHINEYA'S ADVENTURES: THE RĀUHINEYACARITRA 

Helen Moore Johnson
Fellow by Courtest, Johns Hopkins University

For this translation of the Rāuhineyacaritra I have had access only to a native edition, without commentary, published at Jamanagara in 1908. Although the edition as a whole is a good one, there are some obvious emendations to be made and others that are highly probable. Weber, Die HandschriftenVerzeichnisse der koenigl. Bibliothek zu Berlin, Vol. 2, Part 3, p. 1098, describes a manuscript, dated 1445 A. D., of a kathā collection, 'which includes the Räuhiṇeyacaritra. It contains 469 ślokas, which is the correct number for our edition, though the number appears as 471, through two errors in the numbering of the slokas. A collation of this manuscript would have been of great assistance, but was, of course, impossible at the present time. Later I hope to prepare a critical edition of the text on the basis of all available material. The present translation is therefore more or less provisional.

The text is rich in new material for the lexicons and, as a result of this, presents many difficulties, some of which I have had to leave unsolved for the present. Attention is called to these problems as they occur, in so far as they affect the translation. The author's style is extremely anacoluthic and I have not in all cases preserved the integrity of each śloka. Otherwise I have adhered as closely to the text as is consistent with tolerable English style.

I am under obligation to Professor Maurice Bloomfield for the most generous criticism and assistance throughout, to Professor Franklin Edgerton for a thorough revision of my work, and to Professor G. M. Bolling for a number of valuable suggestions.

The Pārśvanātha references are to Bloomfield, Life and Stories of the Jaina Savior Pärģanätha (now in press, Baltimore, 1919).

The words in parentheses are not in the text, but are inserted to clarify the sense.

## Introduction

The Rāuhineyacaritra has for its raison d'être the glorification of Jainism by the account of the conversion of an unbeliever. The moral of the story-as stated in the Proemiumis that one may always profit by listening to the words of the Jina. As an illustration of this truth, an account is given of two incarnations of Rāuhineya, the hero of the story. In the earlier existence he failed to understand the discourse of a Jain sage and, consequently, was reborn in a thief's family. His thief-father warned him against the Jaina teaching, and it was only by accident that he overheard a fragment of a sermon by Vira, which was instrumental in converting him, ultimately. At the end of this existence he became a god-thus demonstrating the advantages of listening to the Jina.

The conversion of Rāuhineya was an especially creditable one; for he was a thief, an arch-sinner in the eyes of the Jains, whose five vows are: non-injury (ahins $\bar{a}$ ), non-lying (asatyatyāga), non-stealing (asteya), chastity (brahmacarya), and poverty (aparigraha). Rāuhineya was not only a thief himself, but was the scion of a distinguished thief-family, proud of its reputation and position among fellow thieves. The profession of stealing ${ }^{1}$ seems undoubtedly to have been well organized; the thief is a favorite subject in Sanskrit fiction, and the main interest of the Rāuhineyacaritra lies in the light it sheds on the thief-motif.

The story opens with a brief account of Rāuhineya's grandfather, Rūpyakhura, and of his father, Lohakhura, who lived in the city Rājagṛa in Magadha under King Prasenajit. Rūpyakhura was a very distinguished thief and also an accomplished magician, possessing among other accomplishments the power to make himself invisible. Because of this art he could enter houses at will and the people were helpless. Finally the king summoned him and they made an agreement, not all of whose terms are clear, under which he ceased stealing on the payment of a tribute. Rūpyakhura observed this agreement, as did also his son Lohakhura, who succeeded to his position and received the tribute.

After this preliminary, the story concerns the last earthly existence of Rāuhineya. At his birth an astrologer predicts

[^70]that he will be a great saint; and even in his childhood he shows no inclination to follow the traditions of his family-much to the disgust of his father, who reproaches him for not killing anything, for not drinking wine (which is also forbidden to Jains), and for not eating meat. Rāuhineya reflects on the immorality of the course his father advised; but respect for his father compels him to submit. His father rejoices in his submission and charges him to avoid the Jina, whose teaching is deceitful.

Soon after this Lohakhura dies, and Abhaya, the minister of Srenika (who had succeeded Prasenajit as king), refuses to pay tribute any longer. Rāuhineya at first does nothing to avenge this injury, but finally yields to his mother's taunts. He goes to the city Räjagrha, and issues a challenge to Abhaya and commits his first theft. On his way home from this expedition, he overhears, accidentally and notwithstanding his precautions, a verse spoken by the Jina, which describes the characteristics of the gods. At the time, Rāuhineya scorns this bit of information, but later it proves to be the means of his salvation.

In the course of his career as a thief he employs many magic arts. He can assume the form of any person or animal, can make himself invisible, and is immune to injury from all weapons. The technical side of thieves' methods receives little attention, though there are several allusions to the breach in the wall made for entrance, the locus classicus for which is the third act of the Mrechakatika, 'The Hole in the Wall.' There the thief discusses at length the different methods of making the breach and the recognized forms that it might take; and when the hole is discovered, some one suggests that it may have been made for practice. In our text this hole in the wall is even called a navadvāra, 'a new door,' evidently a term borrowed from the vocabulary of the profession.

After committing a theft to please his mother, Räuhineya is leading a peaceful existence as an honest merchant, when he is aroused to action by the reported boasting of the chief of police, who calls himself a 'robber-grindstone.' Rāuhineya makes a tunnel into the chief's house and steals everything he can lay his hands on; then he steals the king's choicest horse and leaves it at the house of the chief, who is accused of this and other thefts that Rāuhineya commits. Abhaya defends the chief of police and is accused of 'grafting.' For a thief to shift the blame upon an innocent person and for officials to be accused of conniving with a thief are not unusual events.

Having obeyed his parents and demonstratted his powers, Rāuhineya next boldly reveals himself to the minister Abhaya, and openly dares him to a test of skill. He declares that he will abstain from food each day until he has visited Abhaya; and if Abhaya succeeds in recognizing him, he will give up thieving. Abhaya thinks this will be an easy task; but Rāuhiṇeya proves clever enough to escape detection for some time. One day, however, he follows Abhaya into a Jain temple disguised as a Jain layman, and Abhaya recognizes him through his failure to act as a devotee should. He brings him before the king, who, delivers himself of a eulogy on the Jain religion, thus for the first time introducing in the story religious edification. Rāuhineya offers to prove his innocence by submitting to ordeals, but Abhaya refuses his offer, because he knows that he is immune to all injury, and wishes him to submit to a test at the hands of an image called 'Thief-catcher,' a mechanical doll so wonderfully constructed that she could be manipulated to seem alive. In his character of a Jain layman, Rāuhiṇeya at first refuses to pay homage to any but the Jina, but through a trick Abhaya makes him unconscious and takes him to a palace where he is surrounded by temptations, particularly in the shape of four lovely women who pretend to be goddesses, and who call themselves his wives. By recalling the Jina's description of the characteristics of the gods, Rāuhineya detects the trick, perceiving that the women cannot be goddesses. This impresses him so that he is converted and becomes a Jain in earnest, publicly professing his faith before the king, the minister, and the people.

Rāuhineya then relates to Abhaya a dream about their former lives. This is very interesting from its many fairytale features. Abhaya was a minister and Rāuhineya was his bodyguard. A rogue in the guise of a Yogi enticed Abhaya into a forest full of wonderful and dangerous creatures. By the use of an ointment the Yogi changed Abhaya into a tiger and they proceeded to the forest. On the way thither they met two ogres (rāksasas) who demanded the tiger for food. One of them was killed by the Yogi; the other gained possession of the tiger and made him a human again by giving him a blossom of a banyan tree to smell. Then Abhaya saw a civet-cat which proved to be the Yogi, and they continued their journey together. Intent upon seizing a certain creeper they pursued a ghoul to the city Pātăla, where a witch (Yogin $\bar{\imath}$ ) advised Abhaya to get rid of the Yogi by performing a religious ceremony to him in the presence of the 'Human Tree,' a tree that had the secret of wealth. While
they looked for the Human Tree, they saw a troop of gods who were changed into monkeys by entering a tank of hot water and changed back into gods by entering a tank of cold water. This happened for several days, and then Abhaya changed himself into a monkey and joined the troop to discover the location of the Human Tree. He got the information, performed the ceremony, and the tree-spirits devoured the Yogi. At this point he found his bodyguard (who was Rāuhineya), took his bow and shot an arrow into the Human Tree, which had a man and a woman in its trunk. From the breast of the woman flowed a stream of milk from which Abhaya drank; then he saw all the treasure of the earth, after which he and his bodyguard left the forest. They came to a city where they heard a Jain sage deliver an illuminating discourse, which the minister understood, but the attendant did not. As a consequence of this, the minister was reborn as the great minister Abhaya, while the attendant became the thief Rāuhiṇeya.

After Rāuhineya relates this account of their former lives, they ask Mahāvirra if it is true and receive an affirmative answer. Rāuhineya distributes his wealth among the people, takes initiation, and ultimately reaches paradise.

That Rūpyakhura and Lohakhura had well established places in folk-lore as accomplished thieves is evident from the Samyaktvakāumudī. ${ }^{2}$ This work appears in two recensions. In the longer recension, King Srenika of Magadha asks Gāutama. Svāmin to tell him the story of kāumudisamyaktva.

## The story told by Gāutama Svāmin

Gāutama's story begins with the enumeration of several groups of persons: King Padmodaya and his son Uditodaya, now king; the minister Sambhinnamati, and his son Subuddhi, now minister; the thief Rūpyakhura, his wife Rūpyakhurā, and son Suvarnakhura, now thief; the merchant Jinadatta and his son Arhaddāsa, now merchant. Every twelve years, it was customary to hold in Magadha a great festival for women, from which all men were excluded. Arhaddāsa, who had eight wives, had secured permission to keep them at home, because of a vow that he had taken. King Uditodaya, however, proposed to go to the forest where the women were. His minister opposed

[^71]the plan and finally dissuaded him from his purpose. Then the king suggested that he and the minister go incognito through the city at night and look for adventures. As they wandered about, they saw a man's shadow, but not the man himself. The minister explained to the king that this was the thief Suvarnakhura, a skilled magician, who robbed all the houses at night, invisible by means of a magic salve, so that there was no way to catch him. The king and minister followed the thief, who took his seat in a tree near the house of Arhaddäsa; they remained at the foot of the tree and all three listened to the story told by Arhaddāsa to Kundalatikā, one of his wives, who had enquired why he devoted himself to asceticism.

## The story of Rupyalhura as told by Arhaddāsa

The thief Rūpyakhura had the habit of eating with King Padmodaya. He was invisible because of his magic salve and the king was helpless. Finally his minister by using smoke made the thief shed tears, which washed away the salve. He became visible, was captured, and condemned to be impaled. On the day of his impalement Jinadatta and Arhaddāsa passed, and Rūpyakhura, who was suffering from thirst, asked Jinadatta to bring him a drink. Jinadatta replied that he had for the first time, after twelve years' attendance on his teacher, received a revelation, and that he would forget it if he stopped to get the water. Rūpyakhura offered to recite the saying, so it would not be forgotten, and Jinadatta consented. When Rūpyakhura recited the holy verse, his spirit left his body and was received into heaven. When the king learned that Jinadatta had spoken with the impaled thief, he sent his servants to confiscate his property, according to the law. In the form of an ogre, Rūpyakhura protected Jinadatta against the king's agents and the king, who finally came himself and received pardon on condition that he put himself under the protection of Jinadatta.

Arhaddāsa's other wives believed this story, but Kundalatikā did not, which greatly enraged the three secret listeners, all of whom knew the story to be true. The king decided to punish her the next day. Then Arhaddāsa's other wives all told the stories of their conversions, but she was still unimpressed. The next day the king and minister went to Arhaddāsa's house and questioned Kundalatikā, whereupon she faced about and declared her intention of taking initiation. The king, the min-
ister, Suvarnakhura, and Arhaddāsa all retired in favor of their sons and took initiation. The name of Suvarnakhura's son is not mentioned.

In the shorter recension of the Samyaktvakāumudi Srenika is the king who goes incognito with his minister, who is named Abhayakumāra. Rūpyakhura's experiences take place in the time of Prasenajit and his son is named Lohakhura. Weber thinks this recension is the older of the two, and considers the fact that Prasenajit is introduced and that Srenika plays a more important rôle arguments in favor of the earlier date of this recension, as they figure prominently in early Jain fiction. The date of the Samyaktvakāumudī is unknown, but it can not be earlier than the eleventh century, as there is a reference to the poet Bilhana, nor later than 1433 A. D., the date of one of the manuscripts.

The date of the Rāuhineyacaritra is also unknown. If Weber's theory is correct, it probably belongs to the early Jain fiction. We have a terminus ad quem for it, as Hemacandra quotes extensively from it in his commentary to his Yogaśāstra. ${ }^{3}$ So it must have been well known in the twelfth century.

## Translation of the Rāuhineyacaritra

## Proemium

By paying attention, even in a hostile spirit, to words of enlightenment, a man may win exalted attainments, as Rāuhineya did. A (medicinal) decoction, even though it is unpleasant, gives comfort to the sick, even as the sum, though it burns hotly (causes pain), makes for the good of the creatures of the world.

The scene of the story (1-7)
The story is as follows. In this country of Magadha, on the bank of the Ganges, there was situated a beautiful town, named Rajjagrha, adorned with wealthy inhabitants. Nearby was the mountain Vāibhāra, delightful with its plateaux, which was ever a place of repose for both thieves and ascetics. The moun-tain-where thousands of lions and tigers roared by day, while (by night) it was terrifying with the howls of jackals and the hootings of owls-was resplendent with vanaspatī${ }^{4}$ measured

[^72]by eighteen bhāras (a large weight; or, a load), and with cascades like marvelous ropes of pearls. By virtue of magic charms, amulets, and simples the young of the thieves habitually played there with the young of the lions. Many ascetics, who lived on bulbs, roots, and fruit, dwelt in the woods around the mountain and performed manifold penance; and hundreds of families of thieves dwelt in the caves, which, shut in by bamboo network, were in the recesses of the mountain.

The story of Rāuhineya's grandfather (8-23)
Preeminent among all the thieves ${ }^{5}$ in thieves' science was an exceedingly bold and rich thief, named Rūpyakhura ('Silverhoof'), who was wont to put silver slippers on his feet and roam ${ }^{6}$ the mountain at his own free will. In Rājagṛa ruled King Prasenajit, who, though a fearless slayer of enemies, was nevertheless very much afraid of thieves. The thief Rūpyakhura made a practice of wandering at night in various houses, and whatever pleased his fancy, that he did without fail. This thief took note of all the policemen, and constantly made 'new doors' (navadvära, thieves' slang for 'holes') by night in house after house. Flying up like a bird, he would enter (ascetics') huts, ramparts, and palaces (alike), and even steal the swords of the Rājputs, as they looked on. He would announce (his plans openly) and dig a hole (in a house-wall); even after he had administered a sleeping-potion (avasvāpinī, cf. Pārśvanātha, p. 233), he would awaken (the people, in bravado) and escape, unperceivable and irresistible. He knew how to stop the point and blade of a sword; a blow at him had no effect, (so) what did the king do? The king summoned the thief, and, having given him many sworn assurances (of safeconduct?), said ${ }^{7}$ in gentle words: 'Friend, pray do not cause
$p \bar{a} d a$-division after vanaspaty $\bar{a}$ (this metrical fault is frequent in my text). The word $\bar{a} b \bar{a} a r a$ does not occur elsewhere, but it might be equal to äbharana, 'ornament': 'the mountain was resplendent with as many as eighteen tree-ornaments.'
${ }^{5}$ Read ${ }^{\circ} c a ̄ u r a ̄ n a ̄ \dot{m}$ madhyataś.
${ }^{6}$ parvate parvati. According to Dhātup. 15. 68, the root parv means 'fill'; here it seems that it must mean something like 'wander,' perhaps by confusion with marv (Vop. 'move,' Dhätup. 'fill'). Evidently there is a verbal play on parvate.
'avivadac; it ought to be causative in sense, 'made him speak'; but this is hard to interpret here (unless it means 'brought him to terms' [by saying . . .] ${ }^{\text {i }}$ ).
destruction in this city, but rather accept permanently the choice (tribute-) food which we shall give you.' . . . ${ }^{8}$ On these terms an agreement was made between the king and the thief; and the people slept with open doors in perfect security. Then Rūpyakhura's son said to his father privately: 'Am I then not allowed by you to wear the silver slippers, father?' (His father replied:) 'We ourselves cannot commit theft in the territory of the king; the silver would wear off and be wasted to no purpose. Get iron slippers.' When they heard these words, all the thief's retinue laughed and said: 'This son of yours is covetous, 0 robber-lord!' And they gave him a name: 'for to be sure he will be Iron-hoof (Lohakhura)!' (said they.) And he too, like his father, became a pleasure-house of thieves' science.

## The birth of Rāuhineya (24-30)

One day Rūpyakhura died somewhere in Rājagrtha, and the happy people never knew the name of a single thief. Then all the tribute-food ( $g r a \bar{s} a$ ) continued to arrive at Lohakhura's house, while by this means (guna, seemingly = upāya, cf. BR. s.v., $1, k$ ) all the people in the entire region were freed from fear.

But in the house of Lohakhura a son was born to Rohinī; and in the horoscope of his future he appeared highly endowed with noble qualities and like the sun in majesty. The astrologer said to Lohakhura: 'According to the horoscope, in the end he will not be a thief, but very virtuous. He will receive homage from the lords of earth and heaven and from the demons as well, and under the name of Rāuhineya ('son of Rohinī') will be renowned throughout the three worlds. He will be a benefactor to others, virtuous, compassionate, fearing rebirth, skilled in magic arts (or, in learning), and powerful, 0 lord.' When he heard the astrologer's speech, Lohakhura's heart was completely filled with both delight and dismay. ${ }^{9}$

[^73]
## The childhood of Rāuhineya (31-43)

At the time when Rohinī's son was born, Srenika came in haste from Venātaṭa-city to Rājag̣̣ha; Prasenajit took initiation (as monk), and the illustrious Srenika became king. Little Rāuhineya, ${ }^{10}$ the robber-child, grew up in the cave. He came to the age of eight years, studied various arts, and by his intelligence was able to cause bewilderment even in a learned man. He controlled that (art) by which one's voice is exchanged for any (other creature's voice), and likewise that by which a different form is assumed. He knew magic arts fascinating to all living beings, and was skillful enough to distinguish the (rhetorical) beauties of speech also. The thief (Rāuhineya) would fly up like a bird and go through the air in a moment; instantaneously he would abandon his own form and assume the form of a wild beast. Giving a loud cry, he would mount all the trees along with the sun's rays (at daylight?) ${ }^{11}$ and devour the fruits, all of them. (Making himself) deer-faced, he would go and sport among the deer; he would change himself into a peacock and dance with abandon at the arrival of the cloud. ${ }^{12}$ He learned too the crossing that leads across the river Ganges; and afterwards he was destined to cross the ocean of worldly existences. His parents knew that wheresoever the boy went, he was amusing himself thus at will by means of accomplishments such as these. He knew magic herbs of all sorts, and magic formulas and amulets by the crore, but, on the other hand, was entirely ignorant of injurious actions. Rāuhineya not only did not kill any living thing himself, but he would restrain others who committed injuries; he even would cut without hesitation the snares of the hunters. Or again he would halt (in his play) and disappear and go swiftly to the hermitages of the monks and listen to the religious instruction which they gave him.

[^74]Rāuhineya's father reproaches him for his conduct (44-64)
One day Rāuhineya's father heard about his son's conduct from his retinue, and he himself summoned the boy. When Rāuhineya was in his presence, Lohakhura said to him: 'Son, you are unquestionably breaking the rules (literally, thread) of the house.' Rāuhineya laughed and replied to his father, in a playful sort of way: 'From my very birth, father, a thread has never been broken ${ }^{13}$ by little me.' 'You do not follow at all the path observed by your ancestors. This (thread of which I speak) is the thread of family custom, not a thread that comes from spinning, my son. Although born in our house, you do not kill any living thing; you do not indulge in wine-drinking; you are not willing to eat meat. What opinion can you expect these (people) of mine to have of you? Whereas you were born among us, you certainly do not follow our instructions at all. In the course of time you will surely beg people for alms (that is, turn monk). Does the prediction of an astrologer often prove false? Why waste words with you? So hear in brief what I have to say. Conduct yourself according to my wishes or prepare for death at my hands.'
'Gambling is a depository of miseries; gambling is the home of strife; gambling destroys the morality of the family; how, then, can I gamble? Weakness comes from strong drink, and impurity, too; grain does not stay in the stomach (of a drunkard) ; how then can I drink, father? How can I kill the wild beasts with which I play in the forest daily, father, and eat their flesh? (But) if I do not engage in thieving, that has come to me (as profession) by inheritance, then you may be angry ${ }^{14}$ with me.' When Lohakhura heard these words of Räuhineya, he rejoiced very much; and he took his son in his arms and embraced him again and again. Delighted in his heart, the robber-chief spoke again to his son: 'Son, may you always follow (this) one doctrine (art), which brings advantage to my house. The renowned (Jina) Vìra, a hypocritical rogue, famous among all on the surface of the earth, may always be making a threefold heap of gold, silver, and jewels (with ironic

[^75]reference to the 'three jewels' of the Jain faith). To the unsuspecting people of all castes, who come where he is, he may tell some fairy-tale or other, and so deceive them, that they, deceived, may desert even their wives and children, and become indifferent to all occupations in the sphere of the senses. Do not have any eagerness to win his sort of wealth. It can be grasped by no one, even when clearly revealed. Do you therefore ever be blind, my son, for seeing his face, and deaf for hearing his voice, if you are devoted to your father. Make an agreement (promise) with me about this matter.' 'My father's command is law to me,' said Rāuhineya for his part. After some time Lohakhura died ; (but) the various kinds of tributefood continued to come in just the same way to his cavehouse.

Abhaya refuses further tribute after Lohakhura's death (65-74)
Other thieves who were hostile to Rāuhineya let (the king's minister) Abhaya know by a letter the news of the thief's (Lohakhura's) death. And within the letter it was written: 'We know your mind about giving your own food (as tribute) to his young son.' When Abhaya learned what the letter had to say, he said to the followers of Lohakhura (who had come for the tribute): 'Your master is afflicted with disease, and is being treated by physicians. He has summoned you; go there quickly; and return again in case he is restored to health; but if he dies, the king will establish new tribute (regulations) for you.' With these words they were sent out from the tributemart. They all went in great dejection to the door of the cave; and when Rohinī saw them arrived, she wailed aloud. The mother of Rāuhineya stood wailing and said to them: 'Why have you come hither to the cave without the tribute-food?' 'Abhaya spoke tricky words to us and sent us away. Listen to our words, mother; there is just one thing that is advantageous in this case. If your son will join issue with (i. e. attack) the king, then the king will maintain the supply of tribute-food, not otherwise.' When she heard the words of the people, Rohini wept again and recounted the qualities of her dead husband in a loud voice.

Rohini's lamentation for her dead husband (75-81)
'Without you, your wife, unsupported, weeps, alas! Therefore show yourself once more, 0 beloved! Now in the land of "the lion antelopes wander, alas! The rays of the sun are gone
and darkness has spread over the land. Now pigeons have set foot in the home of the king of beasts, since other robbers have been permitted to speak. Without you, O husband, who will (dare) show himself on the top of the mountain, having thorough knowledge in his mind of the deep caves at the foot of the mountain? Without you, O beloved, who will know now in the night-time from the cries of the animals the path to caves, whose paths are undiscoverable (by ordinary means) even by day? Without you, O robber-lord, say, who by his own strength of arm will make a hole underneath hut and fortress alike? With ease you made your horses leap down from the top-copings of the ramparts, made them cross over the Ganges-water, and brought them out from the Ganges-water.

Rohiṇī grieves over Rāuhineya's failure to steal (82-87)
Although coming from the best stock (literally, 'a piece of the best metal'), what hope have I in him, who from this very day is characterized by unprecedented cowardice? The income of the fortunate (i. e. your father and grandfather) has cer-' tainly followed them (to the next world-disappeared with them) ; so, 0 worthless Rāubineya, you must fetch the roots of (your own?) fagots. ${ }^{15}$ She spoke again to her son, as they all listened: 'Hear attentively, O son, the traditions of your house. Even if a crore of gold should be in the house of robbers, still new wealth does not result ${ }^{16}$ without theft. What hope have I that you will obtain wealth when even your grandfather's tribute-food has disappeared while you are living? Why was not a daughter with the auspicious marks born in your place? Why was I not barren? What virtue (use) is there in a son like you?'

Rāuhiṇeya, spurred on by his mother, engages in theft (88-113)
At these words of his mother, Rāuhineya, distinguished in thieves' science and devoted to pleasure, thought to himself: 'What virtue is there in a son, born but (as good as) unborn, if men can seize his father's property ( $b h \bar{u}$ ) while he is living? I am the son and during my lifetime all my father's tribute-

[^76]food has disappeared. My mother speaks rightly; certainly she is not to blame.'

After these reflections, he left the cave-house in sportive mood, and, very potent, by the power of a charm easily assumed the form of a camel. He went up the main street of the city, and remaining for some time in the form of a camel sat on a raised terrace and sang a loud song, in which were contained these words: 'Sirrah watchman, awake! Observe the thief, the snatcher of wealth, who has come into the city. The thief Lohakhura, who was the son of Rūpyakhura-his son am I, in the form of a camel, and I am right powerful in thieves' science.The people who stole my father's tribute-food (i. e. Abhaya and the king, who failed to give tribute)-it is they who are causing the lamentations ${ }^{17}$ (of the people, over the property about to be stolen) ; the devotion to nothing but crime that is in my person is the result of my natural (inherited) disposition. In the city the poor people will give forth sighs (suffer, from the robberies), to be sure; (but) all the blame belongs to the king and to Abhaya the minister. Do not think me a camel; I am a robber-chief, who dwells on Mount Vāibhāra, and I can cause a great deal of distress. What (deceased ancestor) in the earth could drink water (of śrāddhas) after beholding the face of such (a descendant), whose inherited food ${ }^{18}$ is withheld while he still lives? Presently therefore all the wisdom of the minister Abhaya shall be known, and also the ability and power of the king's retinue.'

All the people heard his declaration to this effect, and the favorites of the king in the palace, brilliant with lamps. And many people gradually collected around him. Then he flew up from the place and went to the paddocks of the buffalo-cows. And when the cows suddenly saw his figure in the crowded part of the city, they were all at once terrified and filled with fright by his loud bellows. He went to all the paddocks of the cows, wherever they were, and, bellowing, followed the cows as they

[^77]fled peli̇mell out of the city. A loud, prolonged din arose from the people in the crowded part of the city who were knocked down by the cows, and from the onslaught of their attack. At this time the illustrious King Srenika was standing on his balcony; and at this time, too, the camel, following the herds of cows, arrived there. And the owners of the cows, full of complaints, went there too; and in their midst was the chief of police, his hands busied with his sword. Rāuhineya suddenly abandoned the form of a camel, stole the sword from the hand of the chief of police, and instantly made himself invisible. While he was thus amusing himself at that place, the sunrise came; and although he was standing right in the midst of the people, he was perceived by no one. Abhaya, the prince of ministers, was marked by Rāuhineya as he was amusing himself, but Rāuhineya, the prince of robbers, was not observed by Abhaya. The streets were blocked by the buffalo-cows and filled with crores of people, so that no one could take a single step in any direction. As the thief departed he saluted the minister Abhaya, and said: 'Truly the (common) people do not need to be afraid of me in the least; (but) I shall come night after night and constantly play tricks ${ }^{19}$ with ease on the king, the prince, the minister, and the policemen.' After this speech the robber-chief departed before their very eyes; and, as each one valued his life, no one followed.

He overhears, against his will, a fragment of a sermon by the Jina (114-119)
Covering both ears with his hands, keeping in mind his father's instructions (to be blind and deaf to the Jina) as his guide, when he beheld (the Jina) Vira's place of descent (from heaven), he hastened on uneasily. As he walked along a sharp thorn broke off in one of his feet; and because of it he was unable to take a single step. Keeping one ear covered with one hand, with the other he hurriedly extracted the thorn from his foot. At that time he heard a solemn utterance spoken in a deep voice by the holy Virra, the Sage (guru) of the world, who was delivering a sermon. 'The gods do not touch the earth with their feet; their eyes are unwinking; their wreaths do not

[^78]wither ; they do not perspire; and their bodies are free from disease.' 'This is a great piece of learning! Out upon it!' With this reflection, having hastily extracted the thorn from his foot, and having (again) covered both his ears with his hands, he departed in that attitude.

## Rohiṇī rejoices over him (120-130)

Eyeing (constantly) the precious sword (in his hand), he arrived at home, made obeisance to his mother, and said: 'Set your mind at rest; mother, I stole this sword from the hand of the chief of police, because of my father's command (prayojana $=$ niyojana?), and to satisfy your mind.' His mother quickly arranged nyunchanas, ${ }^{20}$ and the lamp with seven wicks, made the tilaka (mark, upon his forehead?), and gave her blessing to her son with these words: 'Light of the house, support of the house, glory of two families, may you ever sport thus in the seven ways of this city. ${ }^{21}$ You are a mere infant, my son; but be not afraid of death. Conduct yourself so that you may quickly write your name in gold. I should not grieve at your death; but what I dread is your holding back (reluctance, to steal). If you should hold back (show such reluctance), then all your father's and your grandfather's glory would be lost. If you should fly at the sight of a fight, my son, you would expose to shame both your father's family and mine. If, in a lion's family, a jackal should be born in the womb of a lioness-shame, shame upon such a miserable coward! It would be better if he had never been born. If a kin̄śuka tree were produced in the basin of water at the foot of a mango tree, tell me, what hope for fruit would there be from this black, crooked

[^79]source ? ${ }^{22}$ If you bring into trouble the king, the prince, the minister, or the chief of police, then you should hasten to Vāibhāra (as refuge).' After he had carried out his father's command (prayojana, cf. 121 above), and bowed at his mother's feet and received her instructions, the robber-chief departed again.

Personal description of Rāuhineya (131-139)
His body shone with an intense light, as if he were made of gold (read ${ }^{\text {onaravad) ; it was difficult to look at him because of }}$ his splendor, like the sun when it has risen on the earth. He astonished the multitude by his face that resembled the autumnal full moon; his nose was like a sesame blossom, and his eyes were like those of a wagtail (khañjarìta). He was resplendent with a serpent-like braid of hair that hung down near his mouth, which was like a jar of speech-nectar. Now a chief of robbers, but later to be chief among the virtuous, he shone resplendent with his sectarian mark (pundra), ${ }^{23}$ and with beauteous locks of hair. The rows of his teeth were like seeds of the pomegranate fruit; his voice was pleasant; his neck was shell-like, his shoulders broad;-he was full-chested and courageous. His arms were like a yoke; both hands were marked with the conch and the dise; his waist was shaped like an axe; his disposition was gracious; his ankles were delicate (?gūdha, ordinarily 'concealed') ; his legs were like a deer's; his feet were lotusshaped; his nails glistened with the great brilliance of a mass of the coral-bead plant. Handsomely costumed, erect, calm, very gracious, well-formed, proud, bold, brave, powerful, fearless in battle, familiar with love, handsome, a house of love for charming young women-Rāuhineya abode in the city of Rājagṛha, victorious over his enemies.

His life as a merchant in Rājagṛa (140-150)
With his money he bought a beautiful, richly decorated, stuccoed, seven-storied palace, where a young woman of mature

[^80]age (vṛddhā yuvatī), lean-waisted from hunger because she had become a mother (?), ${ }^{24}$ was made house-mistress. He secretly brought a certain amount of the gold, silver, and other riches, which had been acquired by his ancestors on Mount Vāibhāra. With this wealth he publicly became an ornament of the merchant's profession in the city; and he provided for (literally, ornamented) the destitute by giving them his own money. His vessels (vähana), numbered by the hundred, were heavily laden upon the ocean; and (on land) his wagons, full of treasures, set out in all directions. He gave at his own sweet will wealth numbered in lacs to the people, as if he were a genuine (read 'vyājena) Kubera (god of wealth). Easily he dispelled the misfortunes of the weak and helpless; for he gave protection even to his enemies and to the dependents (suppliants) of the king. He presented fine cloths (?pattakuila, cf. below, 176,313 ) and horses to throngs of beggars, and relieved the distress of the poor by his distribution of money. So the name of the merchant Rāuhineya became renowned in that city; and thus he obtained enormous wealth by all sorts of means. He dismissed theft from his mind and concentrated his thoughts on commerce. Wealth can be obtained by commerce such as can not be obtained by all other means together. So Rāuhineya, while constantly engaging in commerce with desire for profit, fulfilled the wishes of many people.

He again plunders and tricks the chief of police (151-191)
When six months had passed, some people who recalled theft to his mind met him and told him about the conduct of the chief of police. 'Since you, dear sir (tvayakā), have abandoned theft, this chief of police, undisturbed, causes the bards to describe him as a "robber-grindstone.", When Rāuhineya heard this, he thought to himself: 'Up to this time I have endured it; but after today I shall not endure it. Tonight I must make a "new entrance" in the house of the chief of police.' With these reflections he dismissed the men. At midnight he made a tunnel ${ }^{25}$ into the house of the chief of police, and went and quickly took everything that was loose (muktam) to his
${ }^{24}$ pratipannāmbikātvena. It seems that her moral fall had resulted in extreme poverty; R. shows his kind disposition by giving her work. At least this seems the best guess; it cannot be considered certain.
${ }^{25} k$ ṣātra (also 156, 178), a hyper-Sanskritism for khātra, as pointed out by Dr. Bloomfield.
own house. And after this prize-thief had very deftly stolen Srenika's prize horse, then at the tunnel-entrance he felt an intense disgust, and, as he went, awakened the Pāndavas, ${ }^{26}$ who were the watchmen. 'Get up, sirs! Demand the horse from the chief of police!' The watchmen jumped up immediately and, when they did not see the horse, lighted bright lights and started to look for the horse's track. The track made by the horse led to the house of the chief of police, and the horse's guards gathered there, making a great commotion. 'Even by all this sustenance (his regular salary) his (the chief's) greed isn't satisfied ; and so he steals the king's prize horse!' So saying, in great anger, they set the chief of police, whom they found asleep in the court, on the horse then and there, and quickly made a horseman out of him! And at dawn the Pāndavas led him before the king, just as the people in the $\dot{r a} j o t s a v a$ (some sort of festival) lead the king of the rajjotsava. The minister Abhaya said: 'This man cannot possibly be a thief. There is some important matter (concerned here), sirs, that needs investigation. Until I find out all about this matter, just how it is, you are not to stir up any quarrels among the palace retinue.' As a result of this speech by the minister Abhaya, the chief of police was allowed to go home; and he was greeted by his wife: 'Sir, why have you come home? Have not these Pāndavas under pretext of the horse robbed your whole house? Therefore they must be punished.' 'This very day I shall capture all the Pāndavas and kill them with a sharp sword;' with these words the chief of police went to the horsestables. Drawing their swords, the Pāndavas rose up and said: 'You scoundrel of a thieving policeman, stand stock-still before us! Wretch, you are a slave, and we are those Pāṇdavas by whom the Bhārata (probably land, rather than epic) was made famous in all the three worlds.' The swords of both sides would have clanged, but the minister Abhaya stopped them again. When they fell to quarreling again, the minister took bonds from (both parties, to keep the peace) ; and he insulted the chief of police by saying: 'He never lays eyes on the thief.' The chief of police was sitting in the assembly and expressed his strong dissent (from this opinion) by twice fainting; ${ }^{27}$ the

[^81]people too were there, and the thief was actually standing in front of him (though he didn't know it). (Then the chief of police said:) 'If this robber by any means falls (cat, cf. Pārśvanātha, $p$. 221) into my hands, I shall wreak the anger of my heart upon him in a suitable way! The scoundrel did not stop with the robbing of my house, but has created hostility between the Pāndavas and poor me.' When Rāuhineya perceived him talking abusively thus before the people, he laughed aloud and flew up like a bird; and, as he went, he snatched from the head of the chief of police the fine cloth turban that the king had given him. Mounting the top of the palace, he spoke without the least fear: 'Wretch, why are you talking abusively? I know what your power amounts to. It was I that in the first place stole your sword from your hand; I too dug the tunnel into your house, O coward; I likewise caused trouble between you and the Pāndavas by stealing the horse; and now I have also taken the covering from your head. Do not delay, wretch of a policeman; quickly summon the warriors who come to fight, so that next I can amuse myself with them a little, with due regard ( $\bar{a} d a r a \bar{a} t$, ironical) ; and next summon the minister Abhaya so that I may make him a present of some enlightenment. You cannot catch me, a solitary youth. Now, sir, what has become of all that "robber-grindstone" business of yours?' A large crowd collected, and Abhaya also came thither; and then the retinue said to Abhaya the Fearless: 'If you will grant us the favor of some betel (a common sign of royal favor, especially to dependents starting on a journey), great minister, then we will banish even the very name of this robber.' The robber heard this and said: 'In that case, proceed openly, and all of you win for a bit freedom from debt for the food you eat (that is, do something for the king to earn your salt, by catching me). For the whole kingdom of King Srenika is eaten up by you tigers in garb (alone, not in actions), because you make way with the grain. If anyone among you all will make a vigorous attack on me, such a valorous hero will surely show that he was not born merely to destroy the youth of his mother. You warriors have come here to the place of heroism (the battlefield) with your horns and tails drooping, ${ }^{28}$ like eunuchs madly bent on violence. Betel certainly is appropriate to a wretched,

[^82]deserted hag; how is it that you ask for betel at the hour of battle? Or rather I know the important reason why you ask for betel; you doubtless ask for it (read $y \bar{a} c a t h a)$ with the intention of leaving the country. Or is it that you have come into such distress that you want to make a funeral-pyre here with three-leafed betel? ${ }^{29}$

Battle between Rāuhineya and the courtiers (192-207)
a noise of drums arose, a mighty sound of wardrums, and an overpowering lion's roar of valorous heroes; the whole universe was deafened by the twanging of the bows, and at that time the sun was concealed by the multitude of arrows. The warriors, filled with self-conceit, gave forth furious shouts, and the arrows flew through the air and resounded. The swords and other weapons, composed of flashing light like lightning, crashed with a great glitter. The mighty men surrounded Rāuhineya closely on all sides and all together attacked him with a general onslaught; some threw clods of earth, others sticks of wood, huge stones, powerful arrows, and weapons of various kinds; but by virtue of his simples, charms, and amulets, the onslaught of the people did not take effect at all on his body. Furthermore a quarrel, produced by the power of the thief's magic charms, straightway arose among the people themselves. Standing on top of the palace, the thief, like (Nārada) the instigator of strife, was delighted at seeing them engaged in strife and laughed aloud. As they continued to fight the thief spoke to them as follows: 'Why do you keep on fighting among yourselves, sirs? I am not in your power, so why do you get into trouble' uselessly? Moreover, I could discharge fire and burn the whole city. However, I have given my right hand to the people; and (if I did as suggested) the whole populace would be distressed, and no (benefit) at all would result to me. What does the retinue amount to? What power have they? Of what importance is Abhaya? But (since) my ancestors ate tributefood (from the city), therefore I will not destroy (it). I could easily throw a big rock and kill all the people; but their dear ones would mourn, and no (benefit) at all would result to me. Therefore I shall depart and see what happens hereafter. Let

[^83]that chief of police keep this in mind, when he has a panegyric sung by the bards!' After this speech the thief became invisible, and the people went to their own homes, surprised and pleased by the conduct of the thief.

## Rāuhineya kidnaps a bridegroom (208-224)

A wedding was taking place (bhavann asti) in the house of the chief of the retinue (parigraha-pati), and the robber, assuming the figure of the chief of police, appeared there. Nothing happened until the bride and groom were married. At the time for the appearance of the horses, he became a horse, and in a twinkling disappeared with the bridegroom. He took away all his clothes and everything else he had on, and left the bridegroom stripped, and set him free, thoroughly terrified, in a window of the house of the chief of police. As soon as the chief of the retinue heard the news from a certain trustworthy man of his, he surrounded the house of the chief of police. 'I am in the window; let no one throw any fire(-brands, to burn the house)!' At this speech of the bridegroom a great uproar arose. The chief of the retinue himself set up a ladder, helped the bridegroom down, and asked' if he was unhurt. 'That chief of police takes plunder_right in the heart of the city. We shall pay him a very pleasing honor!' At this time the chief of police was with the minister, and, when he heard the uproar, went with Abhaya to the house. Abhaya spoke to them as follows: 'Why have you come here? Are you, bent on violence, going to rob the house like robbers? What have you to do with this man? He was with me just now, and here he is himself. Why did you, Pāṇ̣avas though you are, seize him thus? ? The attendants answered: 'If you are a protector, then protect! Can't you see that yonder fellow is a thief? The bridegroom was found in his house.' Then the chief of the retinue spoke up: 'Hear what I have to say, Abhaya. Never on the face of the earth are there witnesses to a pair of eyes (i. e. no witness can tell you anything about what your own eyes have seen). This chief of police is the one and only house-breaker, the prince of thieves, a criminal deceiver of the people. : No one in the city is worse. This same wily rascal has robbed the whole town; you take his side out of greed for bribes. If a rain of hot coals comes from the (proverbially, cool) moon, or a flood of darkness from the sun, or if fire springs out of water, then, Abhaya, anything may happen. If your conduct is criminal, who on earth
will do right? If a lizard ${ }^{30}$ eats cucumbers, then, Abhaya, anything may happen. If you insist on protecting this criminal now, 0 minister, I shall certainly commit murder later and go to another kingdom.'

Rāuhineya makes himself known, and dares Abhaya to a trial of skill (225-241)
Even while a quarrel was thus arising, that best of thieves appeared and said to the most distinguished minister Abhaya: 'It was I, in the form of the chief of police, that seized that worthy bridegroom; and 'twas I, too, that stole his ornaments; here they are, look at them. Fight, all of you, with lone me, and capture me, or otherwise go with covered heads each to his own house. A man at whom I direct a blow cannot move from the spot.' With these words the robber-chief transfixed the retinue (by magic) and joyfully took their swords and a collection of ornaments from the persons of them all. After he had thus carried out the teaching of his mother, the robber-chief presented a pearl necklace to Abhaya, saluted him, and spoke thus: ' $O$ great minister, you are like the wish-tree (of paradise); I am like a bamboo shoot. What rivalry is possible between you and me? Furthermore, by reason of the powers of your intellect, you and you alone are foremost among ministers; your intelligence is exclusively lauded in all three worlds. Each day I shall partake of food only after I have paid homage to you; until I have bowed at your feet I shall refrain from eating. And when, 0 great minister, you recognize me as the thief, by my marks, then I shall positively give up stealing which ends in death.' ${ }^{31}$ The minister laughed and said: 'I have made careful note of you, 0 prince of thieves, by your body-marks. It would take no great wit to detect you! Yudhisṭhira was true to his promise and true to his word, 0 robber-lord. You must observe the declaration you uttered with your own lips.' The thief replied: ' $O$ minister, my word is like Mount Meru upon earth, and like a loharekh $\bar{a} .^{32}$ I am neither the son of Satānīka

[^84]nor Candapradyota, by deceiving whom you might acquire on earth a reputation for wisdom.' Now it was dense night and, as he had conquered the retinue, the robber went to his own house, well satisfied. He abandoned all theft and fixed his mind on compassion; and in various ways he amused himself in the city of Rajagrha. The excellent thief kept his word and day after day did not eat at all until he had seen the minister Abhaya.

Rāuhineya is detected by Abhaya (242-260)
One day the chief minister Abhaya went to the temple of the holy Jina and performed a pūjā to the gods, and lingered there a long time. And the robber, who was very hungry, soon followed Abhaya, disguised as a Jain disciple, and bringing with him a pūjā-oblation. When he entered the Jina's temple he did not make a nisedhik $\bar{a}^{33}$ nor did he perform the deasil around the assembly. Then the minister Abhaya felt sure, 'This person in the guise of a disciple is the robber, or else some rogue upon the earth.' 'I salute you, fellow-believer!' said the minister Abhaya; the other made him an obeisance accompanied by some worldly language (not in Jain cant; lokabhāsānugā ). By these signs the wise Abhaya was certain in his own mind that he was some low fellow, ${ }^{34}$ not a virtuous lay-disciple. So the minister took the right arm of the thief and went to his own house, talking to him on the way: 'I have recognized you today, my fine fellow (?deva, literally 'your majesty'), beyond a doubt. Keep your promise, if you are truthful.' In reply to this speech of the minister, the daringly clever thief said: 'What do you mean by "keeping my promise" and by "recognizing me," 0 minister? You with your powers of intellect have attained distinction in the king's council ; I am a merchant, 0 minister, a simple-minded lay disciple. I know nothing of any meeting with you; if you have any question to ask me,

[^85]then tell me plainly. The wise men who sit at your side in the council, and no others on earth, can understand what you say.' Immediately both the thief and the minister, surrounded by crores of men, entered into the royal assembly, into the presence of the king. The noble minister Abhaya made obeisance to the king and said: 'Here is that robber who has robbed the whole city. O prince, he daily assumes a new form; this thief's conduct is beyond words, 0 king. First of all this thief easily tricked the chief of police; and after playing a prank by kidnapping the bridegroom, he escaped by (returning to) his own form. When I was performing a pūjā he came into the Jina's temple; he entered the interior of the temple without making a nişdhika (see note 33); he did not make the deasil around the assembly; and yet he is (apparently) able to give the fee (daksināa). ${ }^{35}$ Then I understood clearly (who he was).'

The king eulogizes the Jain religion (261-268)
Then Srenika spoke: 'All hail to the Jain teaching, adorned with the virtues of discernment, discipline, good conduct, and prudence. Just as all planets, constellations (naksatra), and stars are brilliant, but not one is described by the wise as equal to the sun; so on earth all religions are appealing, but no religion in the three worlds is equal to the Jain religion. Although they call the partridge "Ganeśa" ${ }^{36}$ with their own tongues, fools, devoted to false religions, kill and eat it, alas! Or in the Nāga-festival ${ }^{37}$ they honor the Nāga as "Gomaya," and yet openly kill the quivering, moving serpent. Men deprived of the Jain religion, saying "(they are?) simply paratās," eat in their lack of discernment many babbūlaphalikās. ${ }^{38}$ Any men

[^86]there may be on earth who are deprived of the Jain religion do not know the proper method of worship of gods and gurus. So may my mind, enlightened, be devoted in existence after existence to the Jain religion, which is blest with the discernment and culture of the holy Mahāvīra.'

Rāuhineya offers to prove his innocence by ordeals (269-285)
He (Rāuhineya) heard this conversation of the king and the minister; and all the people of the city assembled to look at him. And when they saw him all the people said with one voice: 'Why have you arrested this man, great minister? Tell us quickly. Rāuhineya by name, the playhouse of fortune, he is well-known to the inhabitants of the city, a divine tree (tree of wishes) for cultivated folk. This noble man pays out or takes in (in business) a crore of gold, and there is no doubt that he pays a lac of money in the custom-house. All the merchants do business with him, O king; send out your messengers and summon them quickly. This man, merciful, pious, devoid of sins and faults, is the very refuge of the weak and helpless in your city. Is every man in the city, 0 minister, a possible thief, who in his honest simplicity does not (according to you) know how to honor the gods, or who does not know how to perform a sevā according to your (idea of the) duties of a lay-disciple, or who does not by his qualities of wit come up to you in wisdom? Free yonder Rāuhiṇeya, a lay-disciple and a merchant; if you do not, we shall leave your city.' When Abhaya heard this speech of the people, he spoke despondently: 'I am beaten. Take him and depart quickly, O people.' Then Rāuhineya said: 'What good will it do (simply) to go home? Free me today from that charge (by testing) whether it be true or false, sir. I am willing to drag out of a jar a snake, showing his fury by the expansion of his hood: I am willing to take a hot lump of iron in my right hand; or I am willing to leap into a furnace filled with chadira (a very hard wood) coals; or I am willing, because my heart is pure, to eat a powerful poison; I am willing solemnly to drink the water in which every idol has been bathed. By such means I shall free myself from the charge,
should expect babbūlaphalikā to have a similar meaning (phalikīa from phatā?). Yet a good Jain would eat nothing that had life, and the context implies that he might eat paratās. Moreover three separate acts of heretics seem to be referred to; and suakes have been disposed of. It is probably something quite different.
sir.' Then Abhaya laughed and said: 'I know all about your practices. You are not burned by fire; you are not bitten by snakes; you are not bound by thongs; poison would have no effect on you. Even the gods (whose bathing-water you propose to drink) are not a match for you, on account of your ruthlessness ${ }^{38}$ and firmness. By the power of your charms you would turn fire into water. Submit, sir, to this ordeal which I shall have 'prepared.'

## Abhaya tries to force Rāuhineya to pay homage to an idol (286-303)

To this Rāuhineya said : 'So be it.' Now at this time a lampholding statue (for animated statues etc. cf. Pārśvanātha, p. 192) had been made with great care by a skillful artisan. She had astonished many people by her movements produced by numerous cords; she was endowed with a beautiful form and adorned with ornaments. By the moving of one cord she would grind her teeth ; by another she would give a blow with a sword; by one mechanism she would dance, by others smile, cry, and open wide her eyes; and by yet another she would cause bewilderment in people's minds. She had been brought to the minister as a gift, and now she occurred to his mind. So the minister caused to be brought into the assembly this lamp-holding statue, named Thief-catcher, armed with sword and shield. When she had been led in, the minister said to the thief: 'Do you make obeisance to this goddess with ardent devotion, sir. If you really are not a thief, and are a virtuous man (sādhu), then she will pronounce your name without any doubt.' Rāuhineya then replied to the minister: 'Hear, 0 minister. I am fixed in my determination to do homage to no one except the Jina. Do not consider everyone like yourself, Abhaya. You, as the chief minister of a king, are the dwelling-place of hypocrisy. (I say this) for above all you are causing countless men to worship an evil spirit; (that is,) above all you-unworthy you-are causing the faithful to practise wrong conduct. Yet with these characteristics of yours you constantly have your miserable self described as one possessing pure perfection, and even as a devotee of the holy Jina. I am a (Jain) disciple, and
${ }^{30}$ nihśükatvāt:? More suited to the context would be 'insensibility (to pain)'; perhaps this is what it.means; the word nihśüka is rare and seems not quite certain as to meaning. Or, possibly, nihśokatvät should be read.
most certainly am not going to submit to an ordeal at the hands of this (statue).' So the robber spoke; but upon reflection he said again: 'Whether I shall now undergo ordeals, because of your persistency-(to determine that question) I shall engage in spiritual meditation in the presence of the Good Teacher (the Jina).' (After a moment of silence and pretended meditation he announces his conclusion:) 'I will endure for a long time your fatal anger, but I will not fall at the feet of the goddess, O great minister. Even if it costs me my life, I will not commit an act by which perfection, hard to obtain even in a hundred thousand existences, would escape me, 0 minister.' When King Srenika heard this speech of the thief, he was delighted (and said) : 'This man is my fellow-believer, O minister. It is not possible that he is a thief.' In the presence of the assembly the thief spoke again fearlessly: 'While the people look on, determine whether I am speaking the truth or lying, $O$ minister.'

Abhaya makes Rāuhineya unconscious and takes him to a palace where he is surrounded by temptations (304-349)
After this speech, the minister quickly performed a $p \bar{u} j \bar{a}$ to the puppet with flowers, and himself had her bathed with a very delightful mixture of water and strong liquor, from the fragrance of which (liquor) alone a man would become unconscious. Then the prince of thieves was given the liquor and water used in the bath to drink, and, while he was drinking this bathfluid, the puppet, directed by a cord, struck him a blow on the head with the sword. And as a result of this, his eyes rolling from the drink of liquor, he fell unconscious to the ground, and the people thought he was dead. All the people, earnestly devoted to him and distressed by their grief for him, uttered lamentations and shed a flood of tears. 'Men learned in the śästras describe princes as devoted to folly; that saying will never on earth prove false, even at the end of a world-age.' Talking to this effect, the people went to their own houses.

Abhaya prepared a beautiful, stuccoed, seven-storied palace, adorned with an open hall, and perfumed within with musk, aloe, and camphor perfumes. Inside the palace he placed a soft couch covered with fine cloth (pattakūla, see above, 147) and strewn with a heap of flowers. 'By what good deeds were you born our lord here in the highest heaven? Tell us the virtuous act you performed in a previous incarnation.' He (Abhaya) instructed four beautiful women, whose hands were adorned with
garlands, (to speak) to this effect, and placed them at the four feet of the couch; and a whole school (?sampradāya) of singers and other artists, who were familiar with the measures of musical time and skilled in dancing, was provided. Then poor Rāuhineya, intoxicated from the drink of liquor, was put to sleep on that couch opened out by the minister Abhaya. As soon as the intoxication had passed away, he became conscious, and saw the wonderful palace that was equal to a palace of the gods. And he beheld the goddess-like women with beautiful forms, and godlike men of surpassing beauty. At this time the factitious goddesses, bearing wreaths of flowers, came before him and addressed him in a loud voice: 'This fifth (so! pañcamah) heaven, O lord, and this very beautiful heavenly palace-the lordship thereof has fallen to you by virtue of your good deeds. All four of us here are your wives, fair sir, and all these gods likewise will fulfil your commands at all times. Tell us first your good deeds performed in a former incarnation, so that afterwards we may do for you what is customary in heaven. Did you recite some great charm, or practise penance, or give a gift to a worthy person, that you became lord of a celestial palace? Or was royal station that ended in (your) death bestowed by you on some one's house ? ${ }^{40}$ Or did you endure some pain in this body, O lord? Or did you arrange your death at the sacred bathing-place of some stream? Tell us truly by what good deeds you became our lord.'

Now the minister Abhaya also, summoning the merchants Nāga and Rathika, residents of the city, went likewise to the palace. And he said to them: 'Listen for some time to what Rāuhineya does, and then come away quickly.'-Now when Rāuhineya heard the words of the goddesses, he reflected: 'Surely this is some clever trick of the minister Abhaya. If a fickle-minded robber-chief like me, who caused people to suffer, can go to heaven, then who would be in hell? The characteristics of the gods as described by Vira are not apparent at all in these goddesses; their flowers wither; their feet touch the earth; and their quivering eyes open and close (mesa $=$ nimesa). He has provided the factitious goddesses, palace, and everything, and then has taken me and brought me here to test my

[^87]temper. I shall give them a pleasant answer for today.' So thinking, he said to the gods and goddesses: 'My name is Rāuhineya. I always lived in the delightful city Rājagrha and was a distinguished merchant. My mind was always fixed on the Jina, the holy Vira, but I have not succeeded in going to him, because of some obstacle or other. I had faith in addition to self-restraint; I endured penance hard to endure; but there was a minister Abhaya, son (so! ${ }^{\circ} \bar{a} t m a j a$ ) of Srenika, in that city, and he made a false charge of theft against me. I, a good lay disciple, was given poison to drink, under the pretext of drinking water in which the idol was bathed (read kośa $a^{\circ}$. The goddess struck me a blow on the head with a sword, and then my heart's desire for initiation was lost as a result of the misfortune. Daily I honored the Jina with flowers heavy with perfume and with the utmost faith I gave gifts to worthy persons. Yet I was falsely accused and worsted by the prince. By these good deeds I have become a noble god in this palace.' Again those goddesses said: 'Come now, enjoy continually along with us sensuous pleasures that surpass desire.' (Rāuhineya replied:) 'He who was formerly the god in this palace, his wives are you; to me you are mothers and I am your son.' The merchants Näga and Gobladra (so! for Rathika above) were listening at that time; and the god (Räuhineya) again spoke thus, in a decisive manner: 'Since there is no intercourse between mother and son, I have no use for this (place), even though it be heaven; to me it offers only sin.' The son of Rohini was not disturbed in the least by the women before whose beauty and loveliness even monks would fall. Nāga went and told to King Srenika all this most astonishing story of what he did. And Srenika came and said to Rāuhiṇeya: ' $O$ house of virtue, man of discretion, pardon my offense. You are our fel-low-believer ; the minister knows nothing at all.'

Rāuhiṇeya publicly announces his conversion (350-368)
At this time the birthday festival of the holy Jina occurred; and all the people in the city were filled with delight in the knowledge that Vira had descended to earth, bestowing the blessing of salvation. At this time Rāuhineya folded his hands and said to the minister: 'Let me pay my respects to your wisdom, which surpasses (that) of the gods even. That liquor of yours, O minister, saved me from a double misfortune; you did good to me, though I did evil to you. That which you gave me, 0 minister, was a gain, that increases my hopes (of salvation); in
manufacturing a (factitious) celestial palace for me you really did bring me to the attainment of a celestial palace. You did all this to test me, great minister. Your wisdom is preeminent among men, surpassing even the words of the Teacher (guru). The power of your hand is very great, noble minister, since I have gained a celestial palace through the drink of liquor that you gave me. The sin that I have committed is indescribable, 0 minister; yet by means of that I have become a saint in the three worlds by your grace. There is no other benefactor in the three worlds but you. By me the city was tricked; (and yet) by you I have been given nectar to drink. Listen, $O$ minister. Men who die while still (remaining) alive on earth become free from old age and death by the grace of Mabāvīra. The water (read $k o^{\prime} 0^{\circ}$ ) in which the goddess was bathed that you gave me to drink was most excellent, since through it I have become faultless by the power of your hand.' The god continued: 'The sword that was in the hand of the goddess had extraordinary noble qualities; it made all sin pass from my head immediately. The blow on the head that this goddess gave me with a sword has proved my savior from the round of existences, by the nature of the supreme truth. Let all the people hear! I was a thief, sprung from a thief-family, of pure thief-lineage on both father's and mother's side, uncontrollable even by the gods. My father did not allow me to go to Vira's assembly ; therefore he continually led me astray for so long a time. Having discharged my duty to his command, and having been perfected through the minister Abhaya, I shall now take initiation (as a monk) and cross over to the end of existence. Since by one speech of Virra I escaped (chut, cf. Pārśvanātha, p. 232) from a snare of wit, therefore $I^{-}$wish now to hear all of his words.' Abhaya said: 'The words of Vira that you heard, sir, have been fruitful in glory and renown for you. As a result of (former) good deeds I am the repository of all the fourfold forms of intelligence that exist on earth. And yet, alas! even with these powers of wit I did not lead you off (nir-n $\bar{\imath}$ ? $)^{\prime}$; I did not get you intoxicated with the liquor, nor married to the women.'

Rāuhineya's dream about a former existence (369-461)
Then the thief said: ' $O$ minister, I had a dream just now. In it I perceived that you were once minister in Svetāmbī. And I was your bodyguard and the executor of your daily commands, and I always attended you, courageous and honest. One day
a wily rogue, a deceiver of the people, disguised as a great Yogi, came before the minister. On account of his great dignity he was respectfully welcomed by the minister, who showed him honor, rose from his seat to greet him, and gave him presents; for such is the inner nature of the good. One day the excellent minister found opportunity to ask him the reason for his coming, and he said to him: 'There is a forest Kāutukabhanḍāra ('treasure-house of marvels'), fascinating with its manifold wonders, and full of various herbs, creepers, and trees. If you will go to that forest, then I will give you the power to obtain gold, and magic arts that can work many miracles, and spells by the hundred.' The minister was overcome by greed and followed the Yogi without saying farewell to his family. Verily greed is hard to resist. After they had gone a great distance, the Yogi said to the minister: 'This forest is truly a dangerous place; it is like a grove of ghosts. Here are millions of Bhillas ('bheels,' savage men), like Yama in form, and terrible bears, and tigers and lions by the thousand. Consequently it would be better if you were invisible when you go there. That is the only possible way for humans to go into this forest.' With these words the Yogi applied ointment to the minister's eyes, and from its effects the minister became a tiger (on animal transformation see Pārśvanātha, p. 150). The Yogi transfixed the tiger with an arresting-charm, mounted him, and thus easily traversed the road. As he was going along he met two ogres (rāksasas) on the way, and the elder ogre said: 'Where are you going right before my eyes, O Yogi? I know by his smell that this tiger was a human; therefore give him to me, so that I can eat him!' As the great Yogi did not surrender him, a fight between the two ensued, and the demon was hit on the head with a trident and killed. Then the second ogre assumed by his magic power the form of the Yogi, the lord Matsyendra (known in catalogues as a teacher of Yoga). When he saw the Yogi Matsyendra, the Yogi dismounted from the tiger and made obeisance to him ; and meanwhile the tiger disappeared. After he had made obeisance, full of devotion, when he looked about, neither Yogi nor tiger was (to be seen), and he was disturbed at heart. The second ogre had seized the tiger and run away. The Yogi saw them going and ran after them in close pursuit. They both entered some cave or other, he knew not where, while the Yogi, a depository of the art of deceit, remained right there in the forest. The ogre then said to the tiger: 'I am going to turn you back into a human.' As the tiger could not speak, he made
an obeisance to the ogre, who quickly brought a flower from a banyan tree and made the tiger smell its odor, whereupon he became a human again, and went out of the cave. As he was then wandering along in the forest, he saw a civet-cat ${ }^{41}$ making the forest fragrant. Out of curiosity and eagerness to catch it, he followed hard after and did not halt, though some unseen form held him back. The cat came up near him and stopped, and, when the minister suddenly seized it with both hands, immediately upon his touch became the Yogi. The Yogi made the minister leap into the air, and when he came down toward the ground, he could not reach it at all. Then the Yogi, his mind filled with anger, said: 'I made you invisible that you might do me a favor, and you disappeared from my side with the ogre. On condition that you will always do as I tell you without any hesitation, I will let you down (ut-tr, caus.; see Pārśvanātha, p. 221; ava-tr might be expected here) now from the plane of the air.' 'I shall do everything you say.' After this promise, the bold minister sank to the surface of the earth before the Yogi.

Then the two departed from that place and went out of the forest, and saw in a certain place a black-marked creeper. When the Yogi and the minister started to take hold of it, a ghoul (bhūta), one of a throng of ghouls, said: 'This creeper cannot be taken without a blood-offering; or if you try to take it by force, then you are dead men.' $\sim$ At these words the Yogi squeezed a quantity of blood from the minister's body and gave it to the ghoul. When they advanced to take the creeper, the chief ghoul seized it and ran away; and with their eyes on the creeper they ran after him. In the mountain there was a cleft, that resembled the mouth of Yama, where the ghoul entered, after he had opened the door-bolt. They also followed in, and there they came across a tank. The ghoul went into the water, and they stopped near by. When (the Yogi) had put a very beautiful magic ring on his companion, they two entered the water also, and saw a flight of steps. After traversing this they came to the borders of the city of Pātāla, where they saw a very large seven-storied palace. With the creeper in his hand, the ghoul entered the palace, where was seated an enormous crowd of witches. The ogres, the doorkeepers of the palace,

[^88]scented them and swiftly ran up, greedy and eager for a taste of flesh; but they were transfixed by the Yogi, who then entered the palace, and told the witches what the ghoul had done. The crowd of witches said: 'If you kill a mortal endowed with the thirty-two auspicious marks and give him to yonder fearlesshearted (ghoul), then it is possible to obtain this creeper, since its guardian is this ghoul, named Bhäirava ('terrible'), who roams at will for his own amusement.' Then the minister quickly drew his sword and thrust it into his own neck, whereupon the crowd of witches was appeased and proclaimed: 'Go back by the same road by which you came; by our power you will right easily pass over the road. Go back, sir, into the same wood from which you came. There you will surely obtain wealth from the Human Tree.' Then one of the goddesses told the minister confidentially: 'Do you, by some means or other, stop associating with the Yogi. When you see the Human Tree, then perform the kalpana (a magic ceremony performed in a fire-pit) for him (the Yogi) with this much water, ${ }^{42}$ and he himself will die (instead of killing you as he hopes).' After that she told him all the supernatural power of the Human Tree. Then he and the Yogi departed by way of the tank.

They reached that door again, getting past the door-bolt; and then the great Yogi and the minister wandered forth hither and yon, searching for the Human Tree; but they could not find it anywhere. But betweeen a pair ${ }^{43}$ of tanks they saw a temple within which sat a beautiful image of Pārśvanātha, marked with the seven hoods of the serpent king of Pātāla. After they had made obeisance to him, the Lord of the World, they sat in the balcony of an out-of-doors pavilion and looked at the shrine of the Jina. The two tanks which were there were adorned with flights of steps; in one of the tanks there was cold water, and in the other hot. As they looked on, a troop of gods came thither, and with great enthusiasm gave a leap into the tank of hot water. As a result of bathing in that water, the gods became monkeys and the goddesses female monkeys; and they made a great chattering. By order of the monkey-chief all the others brought flowers heavy with perfume, and juicy fruits; and all the monkeys bathed the noble Jina with a supply of water brought by the female monkeys, and performed a $p \bar{u} j \bar{a}$ to him with heaps of flowers. And they performed a play there,

[^89]charming with a variety of modes of song and with musical instruments, like a play of the gods. When all the monkeys had performed a material and spiritual $p \bar{u} j \bar{a},{ }^{4 t}$ they set forth from the grove in all directions to enjoy themselves at will. After they had played a long time, at twilight all the monkeys gave a leap into the wide tank of cold water, and by its efficacy all became gods as before and went away to some place or other, roaming at will.

The minister and the Yogi remained just as they were at that shrine, and they saw the same thing again on the next day. The minister said: 'Yogi, I am going among the monkeys today in the form of a monkey, if you will give me careful directions, so that I in their midst may examine all the trees. Perhaps if I have good luck I shall find the Human Tree.' By the Yogi's directions the minister leaped into the tank, assumed the form of a monkey, and came out among the monkeys. And when they had made a $p \bar{u} j \bar{a}$ and other rites in the sanctuary and were enjoying themselves, the wife of the monkey-chief asked her loquacious husband: 'Sir, is the beautiful Human Tree, by the power of whose milk people know the wealth contained in the earth, among these trees? He replied: 'Come along in my company, that I may show it to you.' So saying the pair of monkeys hastened away. The monkey-minister followed the pair as they jumped along with ease, and the three went and sat still on the Human Tree. The loquacious monkey declared to his wife: 'My dear, this is the Human Tree, which cannot be obtained by men unless they offer up a man having the auspicious marks.' The monkey-minister marked it repeatedly with signs, and, after they had gone to their place, returned to his own form. When he had told this to the Yogi, they both set out. And when that beautiful Human Tree was near by, the minister performed the kalpana with earth-water for the Yogi, who was immediately devoured, howling, by the deities that presided over the tree.

Now when the body-guard (i.' e. the future Rāuhineya, cf. 370 above) did not see the minister, he thought: 'The Yogi has certainly led my master into Kāutukabhaṇ̣āra (wood). The tricky wretch has taken him only to kill him. I too will follow

[^90]after him ; his feet are my refuge (i. ${ }^{3}$ e. I am his dependent).' So reflecting he too went forth, and as he wandered he came to the forest, and, as a result of his previous virtuous deeds, he found his master. Mutually delighted, they straightway threw their arms about each other. The minister took the guard's bow and fixed an arrow. Though his courage was sorely tested by shapes of tigers, scorpions, serpents, ghouls, lions, and elephants, he did not admit fear into his soul. In the trunk of the Human Tree there was a lovely couple, a man and a woman, self-created (i. e. not born in the natural way), well-developed and provided with every limb. Then he discharged the arrow, and there suddenly appeared in the breast of the woman an abundantlyflowing stream of milk. The minister drank of it with great satisfaction for several days; the stream of milk stopped of itself, and then flowed again. By the power of the milk he had drunk the excellent minister saw at once all the wealth contained in the earth, as if it were in plain sight before his eyes. So by good fortune the minister was provided with a magic ointment, and resolutely crossed the whole forest with ease. The bold minister went with the body-guard swiftly to the city Srāvastī, where they saw in the city garden Keśin, the head of an assembly of (Jain) saints ('gana' [of 'rsis']), who was a learned and intelligent teacher of the religion, possessing the three Jewels (of the Jain faith). Then the minister and the body-guard sat down before him. At that time the Sage told them something in clear language (sphutam), but I understood nothing because of my stupidity, fair sir. Then the attendant (the body-guard), standing by the minister, eagerly asked: "What did that. Sage tell you? Tell me." "At a convenient time I will tell you everything, later on (?adhikam);" thus he spoke, but he never told him anything at all.

By virtue of the words of enlightenment spoken by the head of the assembly of saints, you became the minister of the illustrious Srenika; because I did not understand those words of enlightenment, I was born on Mount Vāibhāra.-I do not know whether this dream was true or false, but we will put the question in the presence of the holy Vira, the Jina.'

The dream confirmed by Vīra; Rāuhiṇeya's pious end (462-469)
When he had related all this, all went to do homage to the holy Vīra; and Rāuhineya, endowed with serenity, called the people together. He brought from Mount Vāibhāra the treasure
which his father and grandfather had stolen, and gave it to the people,- while Srenika looked on. The noble minister Abhaya made an obeisance to the Lord, the holy Vira, and asked: 'Was the (story of a previous) existence that Rāuhineya described to me true or false?' And Vira said: 'It was true; it was not false.' Whereupon Rāuhineya took initiation before the holy Vira, and all the people, praising (him), went to their own homes, while Rāuhineya engaged in severest austerities. The robber-saint, devoted to the praise of the whole series of 'forms' (representations, images) of the holy Virra and the gods (with cryptic allusion to Deva-mūrti, author of this work), constantly stole away the minds of "the pious by his own spotless virtues. Having resorted to starvation at the end (i. e. starved himself to death), and meditating on the five forms of adoration, he entered a heavenly palace of the noble Sarvārthas ${ }^{45}$ and became a god, a partaker of bliss. Upon hearing the words of the princely Jina, as Rāuhineya did, day by day, men who are devoted to the Jain religion ought to shun thieving in threefold fashion (in thought, deed, and word).

> Envoi (470-471)

Devacandra, the best of teachers, was like a crest-jewel in the Kāsadra family; Devamūrti, who had his dwelling on a seat under a tree at the feet of the Jina (or, under the tree of the 'Jina's feet,' i. e. of the exalted Jina?), was his pupil. He composed that story, full of many flavors (rhetorical moods), a cause of wondering delight to wise folk. May it give pleasure by its beauties for as long as the moon, Mount Meru, the sun, and the ocean shall last.

[^91][^92]
# AGNI VṚTRAHAN AND THE AVESTAN VERETHRAGHNA 

Herbert William Magoun<br>Associate Editor, Bibliotheca Sacra

Verethraghna is one of the prominent Avestan gods; and yet he has always been something of a puzzle. His name is evidently derived from the adjective verethrajan, which is an exact equivalent for Vedic vrtrahan. The latter never rises above the level of an epithet in the Rik, though its uses are various. It is found most often with Indra, and its adjectival character is made evident by an occasional superlative form. It is employed with both gods and things. No comparative form is cited, although verethrajan has one. Moreover, a difference appears in the content of the two words; for the secondary meaning, 'victorious,' has been so developed in Avestan that it completely overshadows the primary one, and the latter has practically disappeared in that language. The god Verethraghna has accordingly come to be regarded as a deity of victory.

He has been identified with Indra, because Indra happens to be so often referred to as vrtrahan. The Vedic term, however, has not forsaken its root meaning, even if it may sometimes be rendered 'victorious' in harmony with Avestan. 'Vrtra-killer,' 'Slayer-of-Sky-dragon,' is its prevailing sense, and that such it must be is made clear by Vedic usage. Thus, in various hymns, almost always those in praise of Indra, Vrrtra himself is referred to as an ahi, or as Ahi, a, or the, 'cloud-serpent.' If the identification is not clear in some cases, the deficiency is more than made up in others, and there can be no question as to the ultimate fact. ${ }^{1}$

[^93]When the passages in which ahi appears in this sense are compared with the well-known lists, covering five periods, into which the hymns of the Rig and Sāma. Vedas have been tentatively distributed, certain curious things come to light. While probably not final, they are at least interesting and suggestive. On the basis of these lists (Arnold, JAOS, xviri. 212 f., 218 ff.), it appears that about sixteen per cent. of the hymns or sections of hymns, involved and pertinent, belong in the first period, about twenty-seven in the second, about forty-six in-the third, about eight in the fourth, and the remaining three in the last. The identification of the two was therefore well established and persistent. That fact should be remembered.

The destruction of Vrtra by Indra is referred to many times. A single hymn (i. 80) variously exploits the deed. It is put in the second period. Others barely mention the matter. In some of them Vrtra has been ignored by Grassmann, feind ('enemy,' 'spook,' 'goblin') being used instead. As such passages, however, are mostly found in first period hymns, that translation is probably somewhat free, and it might be better to retain the original sense; șince Vrtra was universally recognized as the fiendish enemy of mankind and was probably in the mind of the poet. These passages ${ }^{2}$ are not essentially different from the others, and the two translations are even found together in adjacent stanzas in viii. 89 (78). 3, 4, another first period hymn.

Passages dealing with the destruction of Vrtra, ${ }^{3}$ when subjected to the Arnold test, exhibit about fifty-two per cent. of first-period activity, about eleven of second, about thirty-one of third, about five of fourth, and about one of fifth or last. They do not cover all the ground, however, since others include some different or additional agency. Other gods are involved in $v$.

[^94]42. 5, assigned to the second period, human help is suggested in vii. 48. 2 and viii. 21.12 ; 100 (89). 12 , the first two of which, have been put in the first period, Soma becomes a partner in vi. 72. 3, placed in the second period-x. 124. 6 is not perti-nent,-and so does Agni in vi. 60. 1, another hymn of the first period. These pertain to Indra. Agni acts by himself in i. 36. 8, also of the first period, while Trita figures with Pitu (Soma) in i. 187. 1, a hymn of the second. He is grouped with Indra in viii. 7. 24, of the first period, the Maruts being given the task of crushing Vrtra in the stanza that precedes. Grassmann uses feind in all the above first-period hymns save the last; but it is a questionable rendering to say the least. He retains Vrtra in the others, one of which (vi. 72.3) has ahi with vertra.

Where vrtresu is found, the meaning probably approaches that of Avestan verethra, and such passages are important as showing how early this secondary sense began to manifest itself. They are few in number and are all placed in the first period.i. 7. 5: vi. 26. 2 ; 46.1: vii. 34. 3. Two others should be added (vi. 25.6, first period, and x. 50.2, second), since the meaning is similar though the form is in the singular. The Vrtra battle is still the basic idea, with its implication of victory, though the application must be figurative in the passage itself in most instances.

In dealing with vertrahan, it may be well to take the less important uses of the word at the beginning. Indra's impetuosity (śusma) is so characterized in i. 102.2, as are his impetuous acts (plu.) in vi. 60. 3; his thunderbolt (vajra) is treated likewise in i. 121. 12 and vi. 20.9; and the Soma plant (ańśu) fares in the same way in vi. 17. 11, with which should probably be placed i. 175. 5, where Grassmann wavers between soma and mada. The last passage is put in the first period, the other two from the same book in the third, the an'su passage in the second, and the remaining two, which are also from the sixth book, in the first.

Sarasvatī receives the epithet in a first-period hymn (vi. 61. 7 ), and so does Trasadasyu in a second (iv. 42.9). Manyu gets it in a fourth (x. 83. 3), where he is also called amitrahan and dasyuhan. The sun god, probably viewed as a form of Agni, receives it in a third (x. 170. 2), along with amitrahan, asurahan, and sapatnahan. Incidentally, it may be said that śatruhan occurs in x. 159. 3, placed in the fifth period, and that
raksohan is occasionally met with. ${ }^{4}$ Soma and Agni fare about alike. Soma is called vrtrahan in i. 91.5 : ix. $25.3 ; 28.3 ; 37$. $5 ; 89.7 ; 98.5$. The first is in the third period, and the next to the last is in the second. The others are in the first. The Agni passages show i. 74.3 and vi. 16. 14, 19 in the first period, ii. 1. 11 and iii. 20. 4 in the second, and i. 59. 6 and x. 69. 12 (Vādh.) in the third. Finally, Indrāgnī receive the epithet vrtrahana $\bar{a}$ in i. 108. 3 : iii. 12. 4 : vi. 60. 3 : vii. $93.1,4$ : viii. 38. 2. All are of the first period save the first. That is of the third.

It appears, then, that the Vrtra myth involves, or is applied to in some fashion, not only Indra but also Agni, Indrāgnī, the Aśvins, the Maruts, Soma, Trita, Sarasvatī, Trasadasyu, the sun god, and Manyu. It also appears that Indra was a 'spookkiller' as well as Agni and some of the other gods, even if Agni was more prominent than he or any of the rest in that capacity. Furthermore, it is evident that some of the Agni, Indrāgnī, Aśvin, Soma, Trita, and Sarasvatī items go back to the earliest Vedic period with Indra ones, and that Indra's spook-killing activities are equally ancient. The myth is therefore extremely old, and Indra himself must have been present at, or near, the very beginning of the distinctly Hindu cosmogony.

The hymns, or sections of hymns, in which he is called vrtrahan are thus distributed;-sixty per cent. in the first

[^95]period, fifteen in the second, twenty in the third, and five in the last. ${ }^{5}$ None appear in the fourth so far as ascertained. Evidently the myth was most prominent in the first period, and where vrtrahan is used of other gods the implication is, not that it had a general sense but rather that it was employed either with its regular meaning or else figuratively with complimentary intent. English colloquial expressions like crackerjack illustrate what is meant. Thus, Manyu, 'Wrath,' was a 'vṛtrakiller of a god.'

Where a general translation is employed, the Hindu viewpoint is obscured, and the figure is thus more or less completely lost sight of. This is particularly true of the comparative (Avest.) and superlative (Skt.) forms; for the original signification must have been intensive. The English colloquial expressions kill . dead and kill . dead as a door nail illustrate the actual content of the words as so used. Later, because such a killing indicates a complete victory, the sense 'victorious' gradually became conspicuous and in Avestan was exploited until it drove out the primary meaning altogether. The process must have accordingly begun very early or soon after the Indo-Iranian period. Sanskrit retained the normal sense of the word.

On this basis, Indra should be found most often with the superlative. He is, as a matter of fact.-v. 35. 6; 40. 1-3: viii. 3. 17; 6. 37 ; 24.7; 46. 8; 93 (82). 30, 32; 97 (86). 5. Agni and Soma are again treated alike; for the former has i. 78. 4: vi. 16.48 : viii. 74 (63). 4 , and the latter ix. $1.3 ; 24.6$ : x. 25. 9. Furthermore it is applied to the Aśvins in viii. 8. 9, 22, to Indrāgnī in vii. 94. 11, and even to things: to intoxication ( $m a d a$ ) in viii. 46.8 and 92 (81). 17, to counsel (vacas) in viii. 89 (78). 1, and to a troop (śardha) in viii. 93 (82). 16. One
${ }^{5}$ They include:-i. 16. 8; 81. 1; 84. 3; 106. 6; 186. 6: ii. 20. 7: iii. 30.5 ; 31. 11, 14, 18, 21; 40.8; 41.4; 47.2; 52. 7; 54. 15: iv. 30. 1, 7, 19, 22; 32. 1, 19, 21: v. 38. 4; 40. 4; 86. 3: vi. 45. 5; 47. 6: vii. 31. 6; 32. 6: viii. 1. 14; 2. 26; 4. 11; 6. 40; 13. 15; 17. 9 (with vertrāni) ; 24.2, 8; 27. 8; 32. 11; 33. 1, 14; 37. 1-6; 45. 4, 25; 46. 13 (vrtrahantama in 8); 54 (Grassmann, Vālakhil. 6). 5; 61 (50). 15; 62 (51). 11; 64 (53). 9 ; 66 (55). 3, 9-11; 70 (59). 1; 77 (66). 3; 78 (67). 7; 82 (71). 1; 89 (78). 3 (with vrtra); 90 (79). 1; 92 (81). 24; 93 (82). 2, 4, 15, 18, 20, 33 (vrtrahantama in 30, 32); 96 (85). 19-21 (vrtrāni in 18); 97 (86). 4: ix. 98. 10; 113. 1: x. 23. 2; 49. 6 (with vrtrā ; 74. 6; 103. 10; 111. 6; 133. 1; 138.5; 152. 2, 3 (with vṛtra and amitra) ; 153.. 3.
of these passages has been assigned to the second period (v. 40. 1-3), two to the third (i. 78. 4 and vi. 16. 48), and the rest to the first. They furnish further presumptive evidence of the soundness of the position already taken. For that period an intensive meaning was the natural one, as must be apparent.

Further evidence concerning the Vrtra myth is to be found in words referring to it, such as vrtrakhāda, 'destruction-ofVrrtra,' which is used with Indra in iii. 45.2 (third period) and 51. 9 (second). In x. 65. 10 (third period), it is found with Brhaspati. Vrtratur, commonly rendered 'killing of spooks,' is used of Indra in iv. 42. 8: vi. 20. 1 (rayi): x. 48. 8; 99. 1 (vajra): The second is of the first period, the others are of the seceond.. It is álso used of Indrāvaruṇāu in vi." 68. 2. (first period), the slaying of Vrtra by Indra being mentioned in the next stanza: ${ }^{-}$The spooks may be questioned.
More important is vertaturya, which Grassmann applies to Vṛtra in viii. 7. 24 (Trita and Indra) and x.' 104. 9, first and third period hymns respectively. He applies it to battles with spooks, or to their destruction, in vi. 34.5 ; 38. 5 (loc. plu.) : viii. 37. 1 (do.), although all of these passages have been put in the first period. The last one has vrtrahan in the same stanza and in each of the five stanzas that follow. 'Killings-ofVrrtra' might be more accurate; for their conceptions, not ours, must dominate, and they had no fear concerning inconsistency. Moreover, killing Vṛtra did not dispose of him. Grassmann also places in the same group vi. 18. 6 (second period) and 61. 5 (first) ; but he renders each; nevertheless, in accordance with the Vrtra myth. The rendering is probably correct; for, like the others, 'these passages seem to call for such a treatment. Spooks appear to be a modern rather than an ancient idea in this connection.

He makes several similar Agni passages refer to spooks-vi. 13. 1: viii. $19.20 ; 74(63) .9$, 12, all in the first period-but retains Vrtra in x. 66. 8 (Agni as priest), which is placed in the third. . The first mentioned indicates that 'killing-of-Vrtra' would probably be a better rendering. Bṛhaspati again appears in ii. 26. 2, Feindesschlacht being Grassmann's translation. The passage is "of the second period and should be compared with the one above. In i. 106. 2 (loc. plu.), the Adityas figure, a third-period hymn being involved. 'Spook-slaughterings' are supposed to be meant; but 'slaughterings-of-Vrtra' would be more natural, since the Adityas were gods of heavenly light. Incidentally, it may be mentioned that the mother of Vrtra,
vrtraputra $\bar{a}$, is attended to by Indra in i. 32. 9, that the Maruts figure with vrtrahan in vi. 48. 21 (śavas), and that vrtrahatha is used with Agni in iii. 16. 1. The first is of the third period. The rest are of the first.

Last and most important is vrtrahatya, whose root meaning is unmistakable. Grassmann recognizes it, ostensibly, in just half the Indra passages-i. 52. 4: iv. 19.1: v. 29.7: vi. 18.9; 25. 8; 47. 2: viii. 24. 2 (with vrtrahan) ; 89 (78). 5 (with vrtra) : x. 48. 8; 55. 7-but forgets himself in two places, i. 53. 6 (loc. plu. and vrtrani), third period, and vi. 36. 2, first, and reverts to the battle with Vrrtra. The other citations are,-iv. 24. 2: vi. 23. 2 ; 25.1 : vii. 19. 3 (loc. plu.), $10 ; 32.15$ (do.) : viii. 63 (52). $12:$ x. 22. 10. Of the first group, four go into the third period and three each into the first and second. Of the last group, the first goes into the third, but the others into the first. Grassmann's instinct was therefore better, probably, than his reason; for the chances are that Vrtra*was referred to in all the passages. Two are cited in third-period hymns to Indrāgnī, i. 109. 5 and x. 65. 2 (loc. plu.). «In the second Grassmann again abandons his classification and reverts to 'Vrrtra-killings.' He does so rightly. Two others, both in the first period, go to Agni, vii. 1. 10 (loc. "plu.) and viii. 19. 20. In each Vrtra is appropriate, even if men are involved in the first. No others have been noted save a modification of the word in iii. 37. 1, a first-period hymn to Indra. It is värtrahatya and ${ }^{\circ}$ refers to V-rtra.

When ali the citations containing the various words thus far considered are grouped as now assigned, over half appear.in the earliest Vedic period. It is safe to infer, then, that this period marked the zenith of the myth itself. It must therefore be Indo-Iranic. As the Agni passages show almost the same ratio as all combined, it is furthermore safe to infer that Agni Vrrtrahan was originally exactly what his name would indicate, the Vrtra-killer. His well-known character as the fire which came from heaven can only indicate fire from lightning. That points directly to a lightning god- as the original conception concerning him, and Vretra-killing. would thus be entirely consistent with his other activities. When other gods usurped that function, he would easily pass into a 'vṛtra-killer-of-a-god,' i. e., a 'victorious' one, and Verethraghna can be accounted for on that basis.

A word should be said of vertrāni. Its normal application must be to malignant demons who are less conspicuous than

Vṛtra though like him in character. They are naturally subject to the conquerors of Vrrtra, Indra being the most prominent. ${ }^{6}$ In x. 83. 7 (fourth period), Manyu and a man are united in this connection; and Agni is invoked in vi. 16. 34, a hymn of the first period, and in x. 69.6 (Vādh.) and 80. 2, both of which are in the third. Bṛhaspati figures once more in vi. 73. 2 (first period), and it now appears that such terms when used with him are early, not late as ordinarily believed, and complimentary. Soma appears in ix. 17. 1 (second period) and (first) 88. 4; 109. 14, in the second of which he slays by Indra's name. Of the Indra passages, twenty-six are put in the first period, five in the second, and eight in the third. It is accordingly clear that the Vrrtra-spooks were likewise most prominent in the earliest period. The fact is of some significance.

Passages classifying the spooks as Aryan or Barbarian are,vi. $22.10 ; 33.3 ; 60.6$ : vii. 83.1 : x. 69. 6. They involve Indra (first two), Indrāgni, Indrāvaruṇāu, and Agni Vādhriaśva, and cover three periods, the second (first citation), first, and third (two each in order). That such spooks have some association with Vrrtra in Hindu mental processes is made evident not merely by the term itself but also by the way in which related matters are occasionally spoken of. Thus, in viii. 96 (85). 18 the item is added that the waters have demons as lords (dāsapatn $\overline{\text { }}$ ). The vrtrāni, like other demons, are conceived of as going in droves; for no clear instance of the singular (vrtra-m) appears anywhere in the Rik. Such conceptions seem to have been Indo-Iranic.

Now, it is clear that the terms vertra (Avest. verethra) and $a h i$ (Avest. azhi) were originally mere epithets, 'obstructingone' and 'serpent-one,' applied to the crest of an advancing thunderstorm. This is made evident by the use of ahan vertram vertratarain vyansam in i. 32.5 (third period). When the IndoIranians were longing for rain, a stationary crest would call

[^96]forth the first term. At other times, a black and lowering one that darkened the air would suggest the second. Both evidently developed into proper names; for verethrajan and verethrataurvan ('subduing-the-fiend') imply a forgotten cloud demon Verethra, like the Vedic Vṛtra, and Azhi Dahāka ('Snake Fiend' or 'Fiendish Snake') is unquestionably Vedic Ahi. The Iranians ultimately forgot the first and developed the second, while the Aryans of the Pañjāb did just the opposite. Lack of rain furnished the incentive. Both variations of the myth recognize the lightning in the crest of an approaching storm.

In the Avesta it is a battle for the light, and Apâm Napāt seizes the 'Glory' when Ātar battles with Azhi Dahāka (SBE, iv. lxii. f., and xximi. 297 ff.). The Vedic Apām Napāt has come to be regarded as the lightning form of Agni; but, as I showed long ago (JAOS, xix. 137 ff., AJP, xxi. 274 ff., Bib. Sac., Lv. 104 ff .), that is an error. He was the distant descending bolt, 'the tall and shining lord,' and is practically the same in the 'Avesta and the Rik.

As to $\overline{\text { A tar, this much is clear. In the Avesta he is a god of }}$ lightning and of fire, precisely as Agni is in the Rik. He must have been Indo-Iranian, else there had been no Athar-va-Veda and no fire-priest called an athar-van. Agni also' must have been Indo-Iranian; for, otherwise, Latin ignis cannot be accounted for. The disappearance of Agni in the one case and of Ātar in the other plainly indicates a mixture of the functions of the two gods and a consequent confusion of terms. One was accordingly eliminated in each instance.

Agni, 'Agile-one,' was the lightning that sets fire to things, while Ātar (*Athar) was probably the fire kindled by man's agency. It is the fire tended by men (SBE. xxiri. 360 f.) in the Avesta as well as a lightning god. On this basis Agni's subsequent history becomes clear. The lightning, striking and setting things on fire in the sight of various observers, could not fail to suggest the destruction of all spooks within its range, which may explain the refrain of viii. 39, assigned to the third period and copied in other hymns. But-the use of agni for both fire and lightning would surely lead to the employment of agni vertrahan for the god that killed Vṛtra. That much is plain.

Now. observe another thing. Verethraghna, though a god of victory, retained the mythical features of a storm god and was
worshipped as a sacred fire, which was believed to be an emanation from the fire above; and he was regarded as a most powerful protector against foes and fiends (SBE. iv. lxiv. § 14). Both he and Agni (cf. RV. x. 87) became fiend smiters par excellence in their respective spheres.: Both accordingly had a similar origin-nay, the same origin, since lightning was the fire above. Agni himself came from that source as is well recognized. The two gods are therefore to be identified as different developments of a single original.

This is made more clear and certain by the ramifications of the Vritra myth. In the Avesta, Thraêtaona is often the slayer of Azhi Dahāka, and Trita figures similarly in the Rik, though with some other god. The demon has three heads and six eyes and is identified in the Avesta as Azhi (RV. x. 99. 6, second period; SBE. xxiri. 242. §40). In connection with RV. i. 52, Grassmann says: Trita in Vers 5 erscheint wie öfter als Gehülfe des Indra. He also appears, in first-period hymns, with Agni (v. 9. 5), Indrāgnī (v. 86. 1), and Apām Napāt (v. 41. 10), possibly regarded as the son of Agni. That, at least, may be inferred from v. 41. 10, which appears to contrast the two rather than unite them. Furthermore, in v. 18. 2, a first-period hymn, Agni is referred to as Dvita, and Dvita and Trita are combined in viii. 47. 16, a fifth-period fragment. Trita is connected with thunder in v. 54.2 (third period) and gets into a hole in i. 105. 17) (third period also). He is called $\bar{a} p t y a$, just as "Thraêtaona is called. Athwya, and, finally, he appears as Träitana in i. 158.5 (third period).

It is probable that Trāitana (Avest. Thraêtaona) is merely a development of Trita; for the Avestan Thrita became the first healer and the father of Thraêtaona. Both are associated with Haoma (Soma). The problem, therefore, is to discover an explanation for the diverse elements now present in the myth: A triad of lightning gods will satisfy all the conditions and possibly help explain the three seats of Agni (viii. 39. 8, third period) and the Avestan triad, tall-formed Strength, "Verethraghna, and crushing Ascendant (SBE. xxir. 10. § 20, etc.).

The distant descending bolt, apā̀in napāt, would naturally be named first because most conspicuous. Then second and third forms would be noticed, the form that sets things afire and the forked lightning of the clouds. The first became Agni. The other became Trita, because no better name than 'Third' suggested itself. How, then; did he become a healer? Simply
because a thunderstorm always brings a sense of relief and physical betterment, and the Indo-Iranians were utterly unscientific. We forget that. Cf: RV. x. 54. 3.

The term $\bar{a} p t y a$ is found in connection with Indra-other gods seem to be implied as well-in x. 120. 6 (second period), and its general sense is unmistakable. It has reference to the waters of the firmament, the Vouru-Kasha of the Avesta, the dwelling place of all the storm gods. Trita Aptya was accordingly the lightning first seen, that of the clouds, wihich disappears for a time-gets into a hole-as the storm draws near. That is why he belongs with Indra, ${ }^{7}$ and it must be remembered that vajra probably referred to the cause of thunder as they understood it but not to lightning. Indo-Iranian mentality must be remembered in all such matters. It is not strange that Trita is not found with Agni Vrtrahan; for Indra soon usurped Agni's Vṛ̂tra-killing functions, just as Ātar and Thraêtaona did, with the subsequent loss of Agni from Avestan. Vrtrahan thus developed into a proper name in the Avesta, and Agni's characteristics were divided between Ātar and Verethraghna. The process was a slow growth, and later excrescences now obscure

[^97]the entire situation. This indicates that Indra was a distinct Hindu creation due to a change of environment.

When the Aryans reached the Pañjāb and encountered the destructive hurricanes which occur in those regions, when the monsoons change in October, they could hardly help wondering whether the wind god (Vãyu) and the lightning god (Agni) were the deities whom they worshipped. A hurricane could hardly fail to impress them as a driver, as any one who has had experience will recognize, and it would then be the normal thing for them to call it such. The deities would accordingly become 'Wind-of-the-driver' and 'Fire-of-the-driver.'

If they had no suitable word to express the idea, as was almost certain to be the case, they would be forced to coin one, and the suffix -ra would be available. The weak form of $\sqrt{\bar{i}} v$ would furnish a basis; but *in-ra-agni and ${ }^{*} i n-r a-v a \bar{a} y u$ are not easy to pronounce, and some phonetic change would be inevitable. In such combinations the language has no specimens of an $-n r$ form, apparently, save *vanra and *väinra, although it does have a few cases of anusvāra,-puìrrāsi, pum̈ratna, *kimimāja, *Finirrājan, sam̈raksa, samirañjana, samirambha, etc. That, however, is hardly to be thought of in this connection.

On the other hand, although svarabhakti normally follows an $r$, its development here would be easily possible, and a situation essentially parallel to that of Greek *avéós would result. That becomes ảd $\nu \delta \rho o^{\prime}$ almost automatically, and Sanskrit belongs to the same family group. Certain it is that the language possesses dozens of words with the -ndr- combination, such as candra, gundra, indrapata, indripasevana, kendra, mandra, sāndra, ścandra, syandra, tandra, tandri, etc., and it is quite possible that in one or two such forms the $d$ was analogical and prosthetic if not parasitic, although both influences may have had a share in their production. Consider the -l- of could and the - $t$ - of mrtyu, neither of which is original.

Differentiation into 'Driver-and-Fire,' or 'Wind,' would be both easy and natural. The compounds, however, must have been well established in the language before that took ${ }^{-}$place, since the first member plainly remains in the singular in Indravāyū, precisely as it does in Indranāsatyā in viii. 26. 8, assigned to the first period. Now, näsatyā, 'true-ones,' means the two Aśvins, the overcomers-of darkness, who are called vrtrahantama $\bar{a}$ in viii. 8. 9, 22, also of the first period. But if they killed Vṛtra as 'dead as a door nail,' they did so by restoring the full
light of day after a storm. It is accordingly clear that 'True-ones-of-the-driver' will fit into the conjecture; for the darkness of a hurricane is sometimes oppressive. Cf. RV. i. 54. 10 (third period). That Indra himself was a 'Driver' needs no exploitation.

The occasional use of Indrā-agnī, which happens about once in four times as indicated by Grassmann-he represents it, incidentally, as occurring in close connection with indrāgn $\bar{\imath}$ in three first-period hymns, a second-period stanza, and a thirdperiod hymn,-goes to show that indrāgni was normally felt as indra-agn $\bar{\imath}$ and was made into indra $\bar{a}-a g n \bar{\imath}$ (this happens a little over half the time, in hymns where both occur) in the effort to emphasize the dvandva form as such, which also fits into the conjecture. Two hymns (vii. 93, first period, and x. 65, third) use $i n d r a \bar{a}-a g n \bar{\imath}$ only.

Finally, it is hardly conceivable that a god with such marked features as the Vedic Indra certainly was, could have disappeared entirely in Avestan and left merely that part of his name which began as an epithet. There is no adequate reason on the surface of things in the Avesta to account for it. On the other hand, Ātar supplies a reason for the loss of Agni, and there can be no question about the loss of the latter from the Avestan cosmogony. Verethraghna is his counterpart and representative in too many ways to have the resemblance accidental or a mere coincidence, and the curious developments in Avestan religious affairs have not sufficed to obscure that resemblance to a degree sufficient to destroy the plain implications of the situation. The identification with Indra will accordingly have to be abandoned and that with Agni Vrrtrahan substituted. Otherwise, a satisfactory solution of the problem is hardly to be attained.

It happens that the etymology proposed above coincides orthographically with that found in the unabridged Petersburg Lexicon; but the two differ widely in other respects, and the one proposed was reached independently. The dictionary of MonierWilliams, 2d ed., quotes the etymology in the Petersburg Lexicon but not with approval; other handbooks, including that of Uhlenbeck and that of Leumann, fail to mention it; and, in its present form, although the phonetic considerations behind it are sound,-the meaning is not, since Indra was a storm god in the beginning and only ultimately a 'subduer',-that etymology itself has made so little impression on scholars that it has
been consistently ignored by them. It must have been in mind when Professor Lanman expressed the opinion in his Reader that none of the proposed etymologies of Indra are satisfactory. If this particular etymology is left without support, that decision may still hold and hold justly.

Any etymology that is to be satisfactory must take into con-sideration-this was the method actually employed and employed intentionally without any reference to what others had donethe native Aryan immigrant, facing the new conditions, with the mentality of that day, including its limitations. Having had experience with a tornado (Grinnell, Iowa, June 17, 1882), I was in a position to get some idea of what was_involved. The mental picture of a driving storm led straight to the idea of a 'Driver.' Then came a painstaking effort to determine whether Indra had in it any such idea. It certainly seemed as though it did, and the facts of the language agreed in all details. Whatever else may be said of this new tentative suggestion, it appears to have been reached by a totally different road from that employed by the lexicon, since verbal form seems to have first influenced the lexicographer, while the basic idea behind the word itself was what led to these conclusions.

[^98]
# THE LIFE-INDEX: A HINDU FICTION-MOTIF* 

## Ruth Norton

Fellow in Sanserit, Johns Hopkins University
One of the most clearly recognized of man's instinctive desires is the wish for length of days and the assurance of safety for mortal life in a precarious existence. In spite of his nearly universal belief in a life after death, man has always possessed this longing. It is not surprising, then, that it appears again and again as one of the fiction-motifs of nearly every folk of the world. Rather more surprising is the fact that in the folklore of many nations there is one prime means of securing human life from any injury. This method is to make life dependent upon some external object, and then to guard the object in every way possible. Such an object is known to students of folklore as the Life-Index.

Parallel to this in the minds of both primitive and civilized man is the almost equally great desire to know of the health and well-being of an absent friend. Here folklore again gives an index as the solution of the problem. This is, as it were, the passive form of the motif; it is the harm done to the person that affects the index, while in the active aspect the life of the individual is destroyed if the index is injured. A further corollary is developed in the case of the passive index, namely, that a man travelling in distant lands may know of the state of his harem by a token which he carries.

After this short introduction it may be seen how naturally the great mass of material falls into two main groups. The subject has been so divided by other writers who have treated it from time to time, ${ }^{1}$ and I follow their lead in the matter. I

[^99]cannot hope to add materially to the discussion of the motif, but perhaps by treating the subject from the point of view of Hindu fiction alone, where it is encountered often and in varying forms, it may become possible to clarify a few points left in a hazy or unsatisfactory condition.

## I. The Active Index

It seems fitting that the story chosen to illustrate the active index should be the version which appears in Miss Frere's Old Deccan Days (pp. 1 ff.) under the title 'Punchkin,' since the book is the first of a long series of collections of Hindu-tales, and since the tale itself has become the locus classicus for the motif in certain cases. ${ }^{2}$ In relating the story I shall limit myself to the portion dealing directly with the motif under discussion.

Punchkin is a magician who has enchanted seven royal brothers, and finally stolen the wife of the seventh. The son of this unhappy woman is brought up by his sorrowing aunts until he is fourteen, when he plans to find his lost family, if possible. After a long journey, he comes to a land which seems full of stones, rocks, and trees, in the midst of which stands a palace, and nearby the small house of a Malee. From the Malee's wife the young man hears the story of the enchantment of his father and uncles as well as of the long imprisonment of his mother, who will not submit to marriage with Punchkin. After several attempts he discovers himself to his mother and with her assistance learns the location of ${ }^{\circ}$ Punchkin's index, which is carefully described. 'Far, far away, hundreds of thousands of miles from this, there lies a desolate country covered with thick jungle. In the midst of the jungle grows a circle of palm trees, and in the center of the circle stand six chattees full of water, piled one above another: below the sixth chattee is a small cage which contains a little green parrot;on the life of the parrot depends my life;-and if the parrot is killed I must die. It is, however, . . . impossible that the parrot should sustain any injury, both on account of the inaccessibility of the country, and because, by my appointment, many thousand genii surround the palm trees and kill all who approach the place.'

Nothing daunted, the prince sets out to obtain the parrot, and succeeds with the timely aid of two young eagles that he has

[^100]rescued. Since he holds the parrot, he is able to force Punchkin to lift his spells, upon which he dismembers the parrot. Punchkin suffers a like mutilation, but does not finally die until the bird's neck is wrung.

The active index seldom occurs in the literature of India, but the few appearances show it in its normal state. In Section 135 of the Vana Parva of the Mahābhārata, the life of Medhāvi, the son of Vāladhi, the sage, is made dependent upon the everlasting mountains as a reward for his father's piety. The son, who is not of the same temperament as his father, learns this, grows arrogant, and insults the hermits. In punishment for this irreverence, the leader of the hermits ends the youth's life by causing the mountains which were the 'nimitta' of his life to be destroyed by buffaloes. Another story, purporting to come from a literary source, may also be treated here. In a Telugu version of the conflict of Rāma and Rāvana, supposedly translated from a Sanskrit version of the Jāimini Bhārata, after Hanuman has freed Rāma and Lakshmaṇa from Rāvaṇa (called Mäirāvana), he attempts to kill the demon, but does not succeed until on the advice of Dordandi, the sister of Rāvana, he secures the five bees which contain the five vital airs of Rāvana, and which are situated on a mountain 60,000 kos away. ${ }^{3}$ A further example of the index, from the Kathā Sarit Sāgara, will be treated in a group to which it is closely allied.

In folklore the index appears as any conceivable object, animate or inanimate. It may be a necklace; when it is worn by an enemy the owner becomes to all intents and purposes lifeless; when it is removed by the enemy at night, however, the owner returns to life. ${ }^{4}$ A hero is forced into a 'long sleep', because his jewel is thrown into the sea. ${ }^{5}$ Jülg's Kalmückische Märchen gives two good instances of a talisman belonging to
${ }^{3}$ Wilson, H. H.: Descriptive Catalogue of the Mackenzie Mss., i. 329. The story is cited by Clouston, op. cit., i. 350, who has failed to note the interesting fact that in the same volume of the Catalogue, p. 218, the story appears without any reference to this motif, thus showing how the folk-motif has made its way into single versions of literary works, otherwise identical.
${ }^{4}$ Frere: op. cit., pp. 230, 241 ; Steel, F. A., and Temple, R. C.: WideAwake Stories, p. 83; Day, L. B.: Folk-Tales of Bengal, p. 2. In the first two stories the necklace was stolen from the owner; in the other two it had been secreted in a fish and carefully guarded in a distant river or in the pool before the palace.
${ }^{5}$ Crooke, W.: 'Folktáles of Hindustan', Ind. Ant. xxi. 188.
the khan of a certain country. When the talisman is thrown on the ground, the khan's nose bleeds until he dies. ${ }^{6}$ Again, a pair of earrings with Siva's impression are thrown into the fire, and when the impression is defaced the owner dies. He is revived when his brother repairs the image. ${ }^{\text {a }}$

The sword figures as index for a heroic prince in a cycle of stories best classed under the tale of 'Prince Lionheart and his Three Friends', a story containing many interesting elements, not the least interesting of which is the appearance of both active and passive indices'. The prince's life depends upon his sword, which an old witch obtains by working upon the feelings of the prince's wife. When the sword is heated the prince feels a fever creeping over him, and tries to save himself by recovering the sword. A rivet falls from the hilt, however, and as the hilt drops the head of the prince drops as well. Lionheart and his princess, who has been abducted meanwhile, are in a very unhappy plight, until the three friends discover his death, thanks to the barley plants he has left with them as tokens (passive indices), and come to his rescue. The blacksmith forges a new rivet, the knife-grinder polishes the blade, and the carpenter rescues the fair princess. ${ }^{8}$

The other stories vary the details slightly, but the similarity of the motif is recognizable thruout. In one story the hilt does not fall, and the blade is merely clouded by the fire. Since the end of the sword remains bright, a friendly giant, added in this version, polishes the rest of the sword, and so gradually rescues his friend. ${ }^{9}$ Another, and a very poor, version of the story changes the details of the passive index, but gives the incident of the sword in substantially the same way as the last story, except that the sword is tended and (as it were) nursed back to health (!), without any definite means being described. ${ }^{10}$ A further variant makes the sword the index of a giant. The passive index is the same as above. ${ }^{11}$ The story in a still more mutilated form is also told of a Yakā. ${ }^{12}$ Other variants give different methods of cleaning the sword; in one it is restored by 'authorization of the Deity' (a sort of unnamed deus ex

[^101]machina!), in another it is cleaned at a "river, while in a third it is polished with limes of the tree left as passive index. ${ }^{13}$ The Kathā Sarit Sāgara has the sword as index in one story, but here it is the wife of the owner who destroys it, and Durgà who restores its brightness. ${ }^{14}$

In the case of the 'Lionheart' stories, the sword is burned by an enemy of the prince, usually for the purpose of stealing his beautiful wife; in a story from Salsette the prince forgets the sword, it rusts, and his friends appear just in time to save his life by polishing the blade. ${ }^{15}$

Leaving this group of tales, we find others using the inanimate index. A Pamir story tells of a giant whose head always flies on again, as fast as cut off, until the hero is informed of his life-index. Two stones lying on either side of him are to be broken open, the heads of two magpies that emerge from them are to be cut off from the left; the stick by his side is to be broken across the knee, and the lamp inside it quenched in water; the warning is added that if any of these instructions are disregarded the giant will not die. ${ }^{16}$ In a story from the Shans the breath of life of a group of ogres is in an urn, and their life is so tied up in the string of a bow that if one is killed the string grows taut, and if the string is stretched all will die. ${ }^{17}$ A Kashmir story mentions a verandah pillar that, must be broken, and a second tale gives a long list of indices of a demon family, including a spinning-wheel. Another from the same group uses an earthen vessel; it is interesting as being one of the few cases where the index is pointed out by a relative of the demon. ${ }^{18}$

[^102]Flowers and trees seem to have had small appeal as indices to the tellers of the tales, for we find only scattered references to them. Flowers are mentioned in the first story of Miss Stokes's collection, entitled Indian Fairy Tales; they are destroyed while the queen sleeps, but God later revives her. A tale from the Salsette adds the interesting item that if one of the three index-trees of the ränkhas is cut he will be stricken with a fever, while if all are cut with one blow death will be the outcome. ${ }^{19}$ A third tale, this time from Bengal, employs the lemon as the index of a group of rākshasas; if a lemon is cut in half, they also suffer that fate. ${ }^{20}$

Most popular among the indices are the bee and the bird. An ogre's life is dependent upon the life of a queen bee, who rules a hive of furious bees; when she finally is brought to the ground dead the ogre must follow suit. ${ }^{21}$ Or a jinn has his life bound up with that of a bee in the crop of a starling in a gold cage on the top branch of a solitary tree, guarded by a savage horse and a ferocious dog, which can, moreover, only be killed by a prince named Lionheart. The jinn's secret is finally wheedled from him by his captive, and Lionheart is informed of it , as well as of a means of pacifying the horse and dog. He immediately dismembers the bee, kills the jinn, and frees the maiden. ${ }^{22}$

Bengal furnishes us with three more examples of the bee as index. In one story ${ }^{23}$ the life of a group rākshasas is bound up with a pair of bees. The demons can only be killed on condition that the lame son of Queen Duhā shall cover his eyes with a cloth folded seven times, lift a pillar of crystal out of a tank at one diving, as well as a knife and a bitter gourd, cut thru the pillar at one blow, find the gourd in the center of it, and on opening the gourd discover the two bees. He is then to smear his hands with ashes, catch the bees as they fly away, and squeeze them to death; care is to be taken, moreover, that no drop of blood falls to the ground, or the demons will become twice as numerous. Another story varies this by omitting the gourd, knife, and seven folds of cloth. The pillar, however, is still crystal, and situated in a tank. The number of rākshasas

[^103]to spring up is here one thousand. ${ }^{24}$ The third story varies the matter still more. The bees are explicitly called male and female; the pillar is gone, and the receptacle is now a wooden box; moreover, only one with a moon on his forehead and stars on the palms of his hands can obtain the box, and if he allows one drop of blood to fall to the ground he will be torn in seven hundred pieces by the furious demons. ${ }^{25}$ Needless to say, in each of these cases the hero skilfully and manfully carries out all the requirements, and rescues the captive lady, who has helped him by obtaining the secret from the demons.

- By far the most popular index of all is the bird, the index of Punchkin; but we find little variety in its use. It seems, in fact, that the bird can only be killed by having its neck wrung, and, even when the dismemberment is protracted, that is always the outcome. The true scope of the narrator's imagination is to be found, not in the manner of the bird's death, but in the intricate details of its protection.

In the stories that use the bird as index the hero is uncommonly fortunate, for the bird is often directly pointed out to him or even placed in his hands. This is true of a series of stories, some of them more or less alike in other details. ${ }^{26}$ It is not always so, however, for the wise demon usually guards his index well; only a brave and fortunate man can reach it. Sometimes it is merely in a cage on a tree in a distant forest, ${ }^{27}$ or on a distant island $;^{28}$ but such comparatively slight obstacles seldom occur. It is rather found that the bird is at some distance in a cage, on the head of a fat snake, on top of a tree surrounded by tigers, bears, scorpions, and serpents; ${ }^{29}$ or in a cage hung on a shaft in the middle of 'seven and seven seas', which no man has ever crossed $;{ }^{30}$ or yet again the bird is in a nest in a tree on the other side of the sea, while an added injunction recalls the case of the bees, for no blood may fall to the ground when the bird is killed. ${ }^{31}$ A further instance makes the difficulty of procuring the bird greater by placing it on a red

[^104]stone in an impenetrable rock, only to be opened with the magical formula, 'Great Raven, open the door.'32 Again, there are two birds, one of which is to be freed, while the other is to be killed. ${ }^{33}$ And finally, life rests in an egg inside the bird; the egg is to be broken in two. ${ }^{34}$

The few remaining cases of the active index in Hindu fiction are perhaps of more interest than some of the foregoing, because of the choice of the index or additional details. In a story in Chilli's Folk-Tales of Hindustan (p. 114), the life of a family of demons is dependent upon an aviary containing various kinds of birds. The hero kills all except a peahen, which is the index of the ogress queen who has injured his mother. In other versions of the story the prince takes the index home and disposes of it, usually after dismemberment; here the idea is added that when the peahen is forced to dance the ogress must do the same. A second tale illustrates the same sympathetic relation between the index and its owner. After catching two 'bohmae' birds, which have their nest in a cotton-tree in the midst of the sea, the hero dismembers them while still distant from the magician whose index they are. On reaching the home of the magician, he is joined by the inevitable captive lady, and, since he still holds the heads of the birds, he is followed on his way by the head of his victim. On the road home they pass a burning oven, into which the young man throws the two heads, whereupon the magician's head follows and is destroyed. ${ }^{35}$

An unusual location for the index is found in Ramaswami Raju's Tales of the Sixty Mandarins (p. 182), where the toadindex is hidden in the center of a great rock by the summer palace of the father of the kidnapped princess. The princess, who is imprisoned with nine hundred and ninety-nine other maidens in an invisible castle in the clouds, informs her father by dropping down her slipper with a message within it.

The only example of one mortal as another's index occurs in O'Connor's Folk-Tales of Tibet (pp. 113 f.), where a boy is the index of a giant, who hides him in a subterranean chamber. Here, again, a magic formula, 'Open, blank wall,' must be uttered in order to reach the boy. Still more unusual is the

[^105]story among the Khasis, that the life of a king depends upon his own entrails, which he must wash daily, without allowing anyone else to secure them. ${ }^{36}$, The last of a long and varied series of indices is that of the demon Jallandhara, who in his war with the gods proved invulnerable until Vishnu, having assumed his form, consorted with his wife Vrindā, for her chastity alone was the index of the demon's strength, and hence of his life. ${ }^{37}$
Before turning to a few more general matters which must be discussed in connection with the active life-index, I wish to point out a distinction not often made by writers on this subject. A Siamese story gives a further version of the conflict of Rama and Rāvaṇa; Thossakan (Rāvaṇa) actually removes his life from his body and puts it in a box, which he leaves in the caveof a hermit. Hanuman discovers the location of the soul, disguises himself as Thossakan, secures it, and hurries back to Rama thru the air, waving the box violently. The force of the motion is fatal to the soul, so Thossakan falls lifeless. ${ }^{38}$ This, however, is not a real example of the life-index: there is no index here at all, but a removal of the life from the body temporarily for greater safety. It belongs to the same class as the frame-story of Pañcatantra IV, where the clever monkey outwits the crocodile by telling him that his heart is in a fig on a tree by the river. This latter instance is a case of bluff, but is based on a belief in the possibility of such things. ${ }^{39}$

If the index is so well hidden, it may be asked, how does the hero learn its location? There are two usual methods; the index is either pointed out directly, as noted above in connection with the bird-index, or the hiding-place is discovered by trickery. In the latter case, the informant is either consciously in league with the hero, as in the story of-Punchkin, or she is. tricked by some enemy of her husband or father, as in the tales. of Lionheart. The problem of gaining access to an exception-

[^106]ally well-guarded index is solved by the introduction of the helpful animal motif. Often the hero kills a cobra that is attacking the nest of a pair of birds, absent at the time to obtain food for their young. On their return they reward the benefactor by-giving him the two young birds he has saved; with the timely aid of the latter the hero fulfils his mission.

A final question greeting the student of the life-index relates to the choice of index. What may be considered the criterion? An extended study has not resulted in a definite conclusion. Except in the case of flowers the index possesses indefinite permanence, a requirement governing the choice of mountains, or a jewel, or a sword; it may also be a bird or insect of proportionately long life. The smallness of an object may be taken into consideration, on account of the ease with which it may be hidden. It is difficult, however, to explain the choice of a boy, or of flowers, things transitory in themselves, unless it may be due to the fact that the story-tellers gradually became indifferent to the main idea of security, and began to seek new and varied repositories of the soul. It may be noted also that the boy is very securely guarded. ${ }^{40}$

## II. The Passive Index

The passive index shows the reverse side of the picture, being used to learn the condition of absent friends. While this motif, too, has many illustrations, it is, in the main, simple. A plant, or some object closely associated with the departing person, is usually chosen; the appearance of this token is dependent upon the condition of the traveller.

As example of the passive index I choose the only case known to me from Hindu literature. In Jātaka 506 the Future Buddha, who has been born as a Nāga king, when about to leave for the fulfilment of his vows of fasting, tells his wife: 'If anyone strike me or do me hurt, the water in this pool will become turbid. If a roc bird carry me off, the water will disappear.

[^107]If a snake-charmer seize me, the water will turn to the color of blood.' ${ }^{41}$ The serpent-king is caught, and the pool accordingly turns blood-red.

In folklore there is likewise a less imposing array of instances of the passive index. Chief among them is the tree or plant. Each of several men, who are on the point of separating, plants a tree; on returning to this spot, any of them may learn the condition of the others by examining their trees. ${ }^{42}$ A Bengali tale describes a prince who plants a tree in the palace court, and leaves it as a sign of his health. The fading of the leaves shows his danger at the hands of a rākshasī, so his younger brother goes to his rescue. ${ }^{43}$ Still another Bengali story uses a plant as index. When Queen Duhā's lame son goes out to find the tree with golden branches, which alone can cure his father's blindness, he leaves a plant with his mother, informing her that its fading means misfortune, and its death his death. ${ }^{44}$ Flowers on a tree- are the token of a boy in a tale from Ceylon. ${ }^{45}$ If cut flowers are given as an index, they will not fade unless the donor is in trouble. In a tale from the Central Provinces, the departing hero leaves one wife a flower which will become black if he dies, and bids her follow him if this occurs. ${ }^{46}$ A princess in a Punjabi tale presents her sister with a flower as a token of her health, ${ }^{47}$ and a girl gives her brother a flower for the same purpose. ${ }^{48}$ Unhusked rice is given to their sister by seven brothers, when they go to find the sun and moon for her; but no use is made of the token later in the story. ${ }^{49}$

The Lionheart cycle employs the passive index, with as much diversity in the variants as in the case of the active index. The story, as given by Steel and Temple, ${ }^{50}$ uses a barley plant, which is left by the prince with each of his friends; in Ceylon the preference seems to be for a lotus flower, ${ }^{51}$ or a lime tree, ${ }^{52}$ or

[^108]even both. ${ }^{53}$ The three Yakās, who are the three friends in one version, choose a lime tree, a flower tree, and a lotus pond. When the eldest is killed by the burning of his sword, his second brother cleans the sword with the limes; when the latter is struck down by pestilence, his brothers offer the flowers to the gods as a cure. Unfortunately, we are not informed of the cure in case the lotus pond had become muddy. ${ }^{54}$ In the Salsette version of the tale we have a plant of no particular variety, which will fade if the prince becomes ill, and die if he dies. When the prince neglects the sword, it is because of the timely warning given by the fading plant that the friends arrive in time to save his life. ${ }^{55}$ Many details of the story of Ta-ywa, as told by the Karens, are like the Lionheart cycle, tho the entire story is not parallel. Here, again, plants are the index of Ta-ywa's life and health. ${ }^{56}$

Milk is a frequent index, signifying the danger or death of a person by turning to blood. In a Bengali story*a mother leaves some milk from her own breast with her son, warning him that the milk will turn red if his father is killed, and even redder if she herself is also killed. Later the woman's co-wife, who is an ogress, kills the man and woman, and the sons of the two wives flee, warned by the change in color of the milk. The same incident is related by the Santal Parganas, except that in this story the mothers are cow and tiger. ${ }^{57}$ Added to the change of milk to blood, in Shovona Devi's Orient Pearls, ${ }^{58}$ is an arrow stuck bolt upright in the bowl of milk. If the milk is discolored, the six brothers are in danger; if the arrow in the bowl falls, they are dead. At the first sign of danger, the youngest is urged to come to their rescue. The change of milk to blood is used as a token in Miss Frere's Old Deccan Days (p. 263), where the taste of milk is like blood to the young wife, after her husband has been killed. This, however, was not given as an index by the husband on his departure.

[^109]Very few inanimate, material objects are employed as passive indices. When a girl drops her needle she will know that her sister is in trouble. ${ }^{59}$ A departing husband leaves a lighted lamp with his wife; it is to keep burning as long as he lives. Another leaves her the Mangalasusram, which he had hung around her neck at the wedding ceremony, and which is to turn black at his death. ${ }^{60}$ Another story gives a string of beads and a flower as the indices of two princes, when they go out, one after the other, to find the enchanted bird, music, and stream. ${ }^{61}$

The motivation of the passive index differs from that of the active index, in that the passive index is generally selected by the person indexed, while the active index is simply assigned by fate, or, which perhaps means the same thing, taken for granted without any statement of the instrumentality which made the selection and assignment of it. In this respect the chastity index, which we shall presently discuss, is like the passive lifeindex, of which in fact it is only a variant. It is regularly the wife who chooses the token that is to be an indication of her conduct; only in the Kathā Sarit Sāgara story of Guhasena and Devasmitā (see below), the tokens are assigned by a god; possibly the fact that they are in this case mutual and reciprocal may have something to do with this.

## III. The Chastity Index

If the friends remaining at home are anxious to know the fate of the distant traveller, it is not surprising that the absent husband should desire to be kept informed of the security and fidelity of his beautiful wife at home. This corollary to the passive index may best be called the chastity-index. It appears twice in the Kathā Sarit Sāgara, first in the story of Guhasena and Devasmita, to each of whom Siva gave a red lotus, with the warning that infidelity on the part of either would cause the other's flower to fade. ${ }^{62}$ The second instance is the story of Dhanadatta, whose wife has disappeared but has not proved

[^110]untrue to him, and whose garland has therefore not withered. ${ }^{63}$ In the Tuti Nameh ${ }^{64}$ the token is a rose, and in the Totā Kahāni it is a bouquet of flowers that will wither if the wife proves false. ${ }^{65}$

From the foregoing detailed account of the occurrence of the life-index in Hindu fiction, one fact is conspicuous; the motif belongs to folklore, and not primarily to literature. It is a conception current among the folk, based, as has been observed; upon instinctive desire. It does not stand alone as the keynote of the story, but is one of the many motifs employed to ornament the story, and is often adscititious. It is not limited to combination with any particular motif, and may be inserted in any story; yet it is an integral part of two cycles, 'Lionheart', and 'The Son of Seven Mothers'. It wanders freely, and where it is incorporated into the literature, this is often due to folkinfluence upon a single version, as in the Telugu version of the Jāimini Bhārata, mentioned above. The development of the passive index into the faith-index is, however, apparently a literary product, since it appears there in its best form.

The interrelation of this double motif, and its possible connection with folk-practices, are questions that must interest any student of ethnology. The problem, however, must remain unsolved until further study of the motif, as found among other peoples and nations, shall provide a broader basis for its solution. Its relation to folk-magic and folk-medicine, as suggested by Frazer in volume 11 of The Golden Bough (2nd Ed., pp. 95 ff.), may then be discussed with some hope of success. Such a relation may prove to exist in the final analysis, tho it is not evident from the material at the disposal of the Indologist alone. Be that as it may, it is hoped that the present treatment of the Hindu aspect of this interesting folk-motif will serve to throw some light upon the topic when such $\mathrm{a}^{-}$study is eventually undertaken.

## Baltimore, Martland.

[^111]
# THE VEDIC PRESS-STONES 

## Samuel Grant Oliphant

Professor of Greek, Grove City College

A study of the Vedic press-stones may well begin with an examination of the Avestan implements for braying the haoma, since we may trace there in smaller compass and clearer outline the means employed in that pre-ethnic period from which both Iranian and Indian customs descend and develop.

In the Avesta the two words hāvana and havana are used to designate these implements. These are the etymological equivalents of the Sanskrit sāvana and savana, but the denotation is very different in the two languages.

Hävana is a masculine noun and is not found in the singular or the plural, ${ }^{1}$ but only as an elliptic dual. It is the far more frequent ${ }^{2}$ designation for the Avestan press, the mortar and pestle, used in braying the shoots of haoma. In Ys. 27. 7, and Vsp. 12. 2, this dual hāvana changes into a heterogeneous feminine singular, found only in the genitive form hāvanayäs, ${ }^{3}$ as a collective designation for the mortar and pestle.

In one instance only (Vd. 14. 10, yaēsã̃m zayanãm vastryehe fśuyantō . . . asmana hāvana, 'of which implements of the cattle-raising husbandman [is] the stone hāvana') is the word cited for other than the mortar and pestle of the haoma ritual. Here Bartholomae would give it the wider sense of a press for wine, oil, or fruit, but as we have yāvarєnєm zgєrєSno - vardanєm ('the round-headed pestle') in the immediate context, and as

[^112]the word yāvarena naturally suggests the pestle as used in crushing grain (Av. yavo, Sk. yavas), hāvana would seem here to designate the ordinary household mortar and pestle with which the corn was crushed. The Pahlavi commentary explains žurtāk iārt, the Pahlavi rendering of yāvar $\quad$ na, as $\bar{a} s y \bar{a} k ~ \bar{e} p a$ dast ('a handmill').

The other word, havana, is used in the singular in Ys. 10. $2^{2}$, and Nir. 107, as a collective name for the haoma press. In the former passage we have mention of the fratarem havanem (the lower $h$., or mortar) and of the uparem havancm ${ }^{4}$ (the upper $h$., or pestle). In the Nīr. 107, dāityō ainyö havanō dāītyō ainyō [havanō] ('the one $h$. and the other $h$. is thus lawful'), we may have a reference to the same upper and lower havana, or, more likely, to the havana of metal (ayañhanaēibya) and the havana of earth (z $z$ maēnaēibya) mentioned in the first line of the passage. The elliptic dual is used with the same meaning, 'mortar and pestle,' in Vd. 14. 8, havana dāityō. $k_{\epsilon \in \epsilon} \epsilon$, and also in Nīr. 107, according to the Mss. and editions of Darmesteter and Sanjana, but Bartholomae would here emend to the more frequent hāvanaēibya.

The hāvana may be asmana ${ }^{5}$ (stone) or ayañhaēna (metal, prob. copper or bronze, but Bartholomae renders it by 'eisen' with an interrogation point), according to Ys. 22. 2, 21; 24. 2; 25. 2; Vsp. 10. 2; 11. 2, 4; 12. 5; Gāh 4. 5. The havana, according to Nīr. 107, may be ayañhaēna or zєmaēna (of earth), but not astaëna (bone), or drvaēna (wood), or fravā_śaēna (horn).

The priest that has charge of the mortar and pestle and of the preparation of the haoma is called hävanan (Vsp.3.1; Yt. 10. 90 ; Gāh 3. 5; Vyt. 15 ; Vd. 5. 57, 58 ; Nīr. 68, 72, 79, 81, 82). He ranks next to the Zaotar, or chief priest, and stands first among the seven Ratavo, or subordinate priests.

The act of braying the haoma is expressed by the verb hunaoiti (Ys. 27. 7; Vsp. 12. 2, 3; Yt. 9. 3, 4; Vd. 6. 43 ; 18. 12; Nīr. 68, 72), cognate to the Sanskrit sunoti, which designates the same act. The motion of the pestle is described by the verb fra• śavaiti (Ys. 27. 7; Vsp. 12. 2, 5) cognate to the Sanskrit cyavate (cf. grávacyuto, VS. 7. 26; SB. 4. 2. 5. 2: [grấvānas]

[^113]acucyavus, RV. 8. 42. $4^{\text {b }}$ : and hástacyutebhir ádribhis 9. 11. $5^{\text {a }}$ ). The act of 'throwing the pestle into gear' is expressed by the verb vi.mant (Nīr. 72), ${ }^{6}$ cognate to the Sanskrit manthati. In this same passage (Nir. 72) we have the other name for a pestle, anhavana, not cited as occurring elsewhere, but designating the haoma pestle.

Of the two words hāvana and havana, each designating the mortar and pestle, we have seen that the former alone may designate aught else than the haoma implements and that when so used the pestle had a distinctive name that was suggestive of its use in pounding corn. The latter, on the other hand, is found indicating only the implements for braying the haoma. This may indicate an original distinction as generic and specific. Not a single verb or adjective seems to be common to both of them, but this may be due to the few instances of havana.

For the Avesta this is practically the whole story of the nomenclature. We see that the mortar and pestle were the implements used for braying the haoma. The vocabulary is simple and definite. So great has been the conservatism of succeeding generations that hāvan became the New Persian word for mortar and yāvar, or yār, for pestle; and the mortar and pestle are the implements still used by the Parsis for braying the modern 'haoma.'

Plutarch (de Iside et Osiride, II. 369E) refers to the haomaworship of the Magi as follows: тóav үáp тıva кóлтоvтеs ö $\mu \omega \mu \iota$ кадоv-


 It is questionable, however, whether ö $\lambda \mu$ os may be made to imply the continuance of a stone mortar to Plutarch's time.

Anquetil (ZA. II. 534) says the mortar and pestle 'doivent être de metal (les riches en ont d'argent) pour qu'on puisse les purifier plus facilement.' Haug (Essays on the Parsis ${ }^{4}$, 394) says that the modern implements are generally of brass or copper, but 'more valuable metals can be used.' On p. 396 he tells us that 'The hāvanīm, or Homa mortar, is generally shaped like a wine-glass, with foot and stem, but much larger; and the pestle or dastah, chisel-shaped at one end, is kept till wanted on one side in the large water-vessel.' Illustrations of these implements may be seen in Darmesteter (Le ZA. t. 1, pl.

[^114]VI, and also IV). In the latter plate they have been placed on the urvîs, in front of the Zôt.
Haug (282) gives a good account of the differences between the modern Brahmanic and Parsi methods of preparing the soma (haoma).

On turning to the Vedas we are at once struck by the rich and diversified vocabulary connected with the press-stones in contrast to the jejune and limited one of the Avesta, and with the more developed mechanisms. Yet there is unmistakable evidence for an originally close parallel, even in minor details, to the Avestan type.

RV. 1. 28 is a hymn to be sung during the preparation of the soma for the house-holder's sacrifice to Indra, in which the man and wife (nárī $3^{\text {a }}$ ) and members of the household (vibadhnáte, $4^{\text {a }}$, sotŕbhih, $8^{\text {b }}$ ) prepare the libation, apparently without the aid of an Adhvaryu or other priestly assistant. For convenience of reference the hymn is given here in full.
Yátra grávā pṛthúbudhna ūrdhvó bhávati sótave / ulưkhalasutānã̀m ávéd $v$ indra jalgulah //1// yátra dvấv iva jaghánādhisavaṇyā kṛtá /ulúū //2// yátra náry apacyavám upacyavám ca śiksate /ulũo ${ }^{\circ}$ //3//
 yác cid dhí tvám gṛhé-gřha úlūkhalaka yujyáse /
ihá dyumáttamà̀ vadá jáyatām iva dundubhîh //5 //
utá sma te vanaspate váto ví vāty ágram ít
átho indrāya pátave sunú sómam ulūkhala //6 //
àyajâ vājasátamā tá hy ùccáa vijarbhṛtáh /
hárī ivấndhānisi bápsatā //7//
tâ no adyá vanaspatī rssvắv rẹvébhih sotṛbhih /
indrāya mádhumat sutam //8//
úc chisṭám camvòr bhara sómam pavítra á srja /
ní dhehi gór ádhi tvací //9//
In every re, except the last, of this hymn, we find the mortar and pestle either explicitly mentioned or directly implied. Thus we have ulúukhalasutānām in $1^{c}-4^{\mathrm{c}}$, úlūkhalaka in $5^{\mathrm{b}}$, ulūkhala in $6^{\mathrm{d}}$, $\bar{a} y a j \hat{\imath} v \overline{\tilde{a}}$ ajasátamā in $7^{\text {a }}$ qualifying the elliptic dual understood, and the dual vanaspatī as a metonym for the same in $8^{\mathrm{a}}$. We have also gráva $=u l \hat{i} k h a l a$ in $1^{\mathrm{a}}$, adhisavany $\bar{a}$ agreeing with the elliptic dual understood in $2^{\text {b }}$, apacyavám and upacyavám, the movements of the pestle, in $3^{\mathrm{ab}}$, mánthām, the pestle, in $4^{\text {a }}$, and vanaspate, the same, in $6^{\text {a }}$.

We find also a remarkable series of identities or resemblances to what we found in the Avesta.

Thus gráva $\left(1^{\mathrm{a}}\right)$, úlūkhalaka ( $5^{\mathrm{b}}$ ) and ulūkhala ( $6^{\mathrm{b}}$ ) are collective singulars, like havana, designating the mortar and pestle for braying the soma; prthúbudhna ( $1^{\text {a }}$ ) recalls the traditional broad-based mortar of Haug's description; ūrdhvó ( $1^{\mathrm{b}}$ ) finds a parallel either in the uparem havanem of Yasna 10. 2, or in the nirangs of Yasna 27 that state how at stated times in the performance of the ritual the $Z \hat{o} t$ raises the pestle to the height of his ears or eyes; ulúkhhalasut $\bar{a} n \bar{a} m ~\left(1^{c}-4^{c}\right)$ has a parallel in hāvanayåsca haomãm hunvaiñtyå (Vsp. 12.2); the adjectival adhisavany $\overline{\bar{a}}\left(2^{\mathrm{b}}\right)$ in number recalls the elliptic dual hāvana and in etymology the Avestan adjective hāvanay-; krtáa $\left.{ }^{( } 2^{\mathrm{b}}\right)$ is the Avestan kєreta (Vd. 14. 8); apacyavám upacyavám ca (3ab), as terms for the movements of the pestle, are cognate with the Avestan fraśútayå (Ys. 27. 7), fraśávayamnayå (Vsp. 12. 2) and fraśávayamna (Vsp. 12.5), designating the same movements; mánthạ̄̀ ( $4^{\text {a }}$ ), the pestle in gear, recalls the Avestan vimanät (Nīr. 72), the verb expressing the act of throwing the pestle into gear, and the very word suggests that the Avestan mode had some counterpart to vibadhnáte rasmín of the context; gṛhé-gṛha úlūkhalaka yujyáse ( $5^{\text {b }}$ ) is represented by hāvana . . . fraśāvayamna nmānaya (Vsp. 12. 5); dyumáttamam [vádanam] ( $\left.5^{\mathrm{d}}\right)$, compared with dundubhíh, recalls the clear, ringing sounds made, according to the nïrangs, by the Zôt in striking the pestle once, twice, thrice, or four times, against the sides of the metal mortar. According to Dādistān (48. 31) these summon the powers of Heaven and announce their presence, as here they summon Indra. Again the vanaspate ( $6^{a}$ ) and vanaspatī ( 8 a ) indicate that one or both implements were sometimes, or had at some earlier period been, made of wood. The Nirangistān (107) pronounces the wooden havana to be aratufris for crushing the haoma, a prohibition that assumes such a havana and at least an occasional use of it for this purpose. The hypallactic vājasátam $\bar{a}\left(7^{\mathrm{a}}\right)$ has its equivalent, without the figure, in haomō aēibiś . . zāvarє aojåsca baxśaiti (Ys. 9. 22), and $\bar{a} y a j \bar{\imath}\left(7^{\mathrm{a}}\right)$ has to some extent a parallel in hāvana fraoirisimna (Vsp. 12.5), mádhumat sutam (8) has an etymological counterpart in haomahe ma $\bar{\delta} \bar{o}$ (Ys. 10. 8) and in haomāi måāi havanuh $\bar{a} i\left(\right.$ Ys. 11. 10). The camvòr ( ${ }^{\text {a }}$ ) are represented by the taśta zaotrō • barana (Vsp. 10.2; Nîr. 66) and pavítra á srja (9b) is the Avestan varcsāi haomo $\cdot a \dot{n} h a r \epsilon z \bar{a} n \bar{a} i \quad$ (Vsp. 10. 2), 'the haoma-filtering hairs,' in which srja and harcz are cognates. The hymn shows how much Indian and Iranian may have in common, not only in thought but also in its expression.

The hymn is remarkable in other respects. It contains seventy-six different words occurring in a total of eighty-one forms, of which twenty-one, ${ }^{7}$ more than a quarter of the whole
 than hieratic. This is shown, in part, by the fact that so little of it re-appears in the ancillary Vedic literature. None of the padas of $1-4,8$, or $9^{c}$, is shown by the Concordance to appear elsewhere. Those of 7 appear only in Nirukta 9. 36. Those of 5 and 6 appear in Āps. 16. 26. 1 and 3 respectively, in connection with the Agnicayana, and those of 5 appear also in MS. 6. 1. 7. Pada $9^{\text {b }}$ reappears in RV. 9. 16. 3 and 51. 1. More important, as showing something of the relative age of the hymn, is the fact that $5^{\text {a }}$ and $9^{a}$ appear in AB. 7. 17. 2 and 1 , in connection with the a $\tilde{n} j a h s a v a$ in the Sunahséepa-äkhyāna, a legend that appears to be proto-Vedic at least, from the allusions to it in.RV. 1. 24. 12-13, and in 5. 2. 7.

In this ancient and demotic hymn we have found the grấvan identified with the uluthhale, the mortar and pestle, an identification amply confirmed elsewhere, e. g. AV. 9. 6. 15, yány ulūkhalamusaláni grávāna evá té; HG. 2. 14. 4a , ulūkhalā grāvāno ghosam akrata; MG. 2. 4. 8a, ulūkhalā grāvāno ghoṣam akurvata; ApMB. 2. 20. $34^{\text {a }}$ and ApG. 8. 22. 5, āulūkhalā grāväno ghoṣam akrata; SMB. 2. 2. 13á, āulūkhalāh sampravadanti grāvānah.

The implements of our hymn were made of wood, vanaspate (6²), vanaspatī (8a). So also in AV. 20. 136. 6, and SS. 12. 24. 2. 7, we have
> mahānagny ùlū́khalam atikrámanty abravīt yáthā táva vanaspate nighnánti ${ }^{8}$ táthāivéti //

In AVPar. 23. 2. 2-3 (a passage for which I am indebted to Professor Bolling) the ulùkhala and musalá are made of värana wood (Cratceva Roxburghii), doubtless because of the apotropaic and other magical virtues ascribed to this as shown in AV. 10. 3. Also AV. 3. 10. 5 has wooden grấvānas: vānaspatyấ grấ$v a ̄ n o ~ g h o ́ s a m ~ a k r a t a . ~ T h i s ~ i s ~ r e p e a t e d l y ~ a s s e r t e d ~ i n ~ t h e ~ a n c i l l a r y ~$ literature, as prthugrávāsi vānaspatyáh in MS. 1. 1. 6; 3. 12;

[^115]4. 1.-6; 8. 3; and brhádgrāvāsi vānaspatyáh in VS..1. 15; MS. 1. $1.6 ; 3.13$; 4. 1. 6 ; 8. 6 ; KS. 1. 15 ; 31. 4 ; SB. 1. 1. 4.10 ; and bṛhán grávāsi vānaspatyáh in VSK. 1.5.4.

These passages complete the cycle, grávan $=u l u ̈ \hat{k} h a l a=v a ́ n a s-$ páti, and furnish ample evidence that the grávānas were sometimes the mortar and pestle and were sometimes wooden. This forbids us to think of them always as 'press-stones,' as regularly translated in our dictionaries and handbooks. The cognates of the word grávan, as shown by Uhlenbeck, convey only the idea of 'press' or 'mill' without any necessary connotation of the component material.

From the phenomena adduced our hymn seems to present a primitive mode of pressing the soma, either identical with the ancient Iranian mode, or very similar to it. We have a mortar and pestle, wooden unless the word had already become stereotyped and meaningless, and the pestle is turned by a cord in the fashion of the churning-stick. The Avestan passion for the utmost cleanliness would naturally lead to the prohibition of such porous materials as wood, bone, or horn, as we saw in Nir. 107.

In RV. 9. 102. 2, we find another early press;
> úpa tritásya pāsyòr ábhakta yád gúhā padám. / yajñásya saptá dhámabhir ádha priyám

Trita, that 'mysterious ancient deity,' dwelling in the uttermost reaches of the heavens, is pre-ethnic in time. In name he corresponds to the Avestan @rita; in patronymic Āptya to the Avestan $\bar{A} \theta$ wya, but in legend there has been an unwonted confusion between him and the Avestan ©raētaona, the Vedic Trāitana. This ©raētaona of the $\overline{\mathrm{A}} \theta$ wya family was a famous hero of Iranian saga, the New Persian Farēdūn, whose great exploit was the slaying of the three-headed demon Ažay Dahāka, by far the strongest Druj that Añra Mainyu brought forth to destroy all that belongs to Aśa (Righteousness). The story, told in Yasna 9. 8, has its counterpart in RV. 10.99. 6; 120.6, where Trita slays the demon Vrtra in the form of a triple-headed boar! In the Avesta, ©rita of the Sāma family was the first physician (Vd. 20. 2, paoiryō maśyānãm Өamnañuhatããm . . . yaskєm yaskāi dārayat mahrkєm mahrkāi dārayat). His longing for the art of healing was rewarded with the happy gift from Khshathra Vairya, the Amesha Spenta, of the power to 'withstand' (paitiśtāt $\epsilon_{e}$ ) a list of twelve specified diseases and three causes
of disease, ayasyå (evil fortune, or acc. to Bartholomae, evil eye), püityà (foulness) and āhityå (uncleanness).

There is a curious resemblance to this in AV. 6. 113. 1 and 3 (quoted with the SPP. emendations),

> trité devá amrjatāitád énas
> tritá enan manuşyèsu mamrje /
> táto yádi tvā grẩhir ānaśé
> tá̀m te devấ bráhmanā nāśayantu //1//
> dvādaśadhá níhitȧ̇ tritásya
> ápamrṣtà̇ manuşyāinasáni /
> táto- //3 //

Here the gods have cleansed ('wiped') énas in Trita and Trita has cleansed it in men. Now énas is often, perhaps oftenest, 'sin, guilt,' but it is also 'evil, bane, calamity, misfortune, violence, sickness,' etc. The last two of these are much nearer the etymological meaning of the word than the first two and are far more frequently associated with the Avestan cognates. They seem quite appropriate also for some passages in RV. and AV. Here the verb indicates it as something unclean and c indicates that Grāhi, the demoness of sickness and disease, 'reaches' mortals in consequence of it. The Comm. thinks that énas here is paravitti ('overslaughing,' in the form of the marriage of a younger before an elder brother) as in the preceding hymn. But overslaughing is not called énas in 112 and no cleansing is there mentioned for it. There is instead only freeing ( $m u \tilde{n} c$ ) from fetters ( $p a \tilde{a} s \bar{a} \bar{s}$ ). In 113 we have a cleansing power that is a divine gift as in the Avesta and énas lends itself easily to the idea of the pūityä and the $\bar{a} h i t y a$ of the Avestan passage. Then even the twelvefold [énas] that is 'laid down' (nihitam, $3^{\text {a }}$ ) is curiously reminiscential of the twelve forms of sickness to be 'withstood' in the Avestan passage.

With this passage I should compare another, AV. 19. 56. 4, also referring to Trita the physician, náitain viduh pitáro nótá deváh yésā̀m jálpiś cáraty antará tám / trité svápnam adadhur āptyé náraḥ ādityá́so váruṇnấnuśisṭāh //
As shown by the context ( $1^{\text {a }}$ ),
yamásya lokád ádhy á babhūvitha
the sleep of $4^{c}$ is to be identified with that in AV. 16. 5. $1^{\text {b }}$, grâhyāh putrò 'si yamásya káranah,
and therefore it falls within the physician's prophylaxis or therapeutics to the end that he may grant a long life (TS. 1. 8. 10. 2).

So in RV. 8. 47. 13, the gods are invoked to consign to Trita yád ãvir yád apīcyàm . . . dusskrtám and in the following 14-17 to banish to him the dusvápnyam. This may seem to be due to his dwelling in the uttermost heavens and so a wish that these evils may be sent as far away as possible, but we must remember that every primitive physician is supposedly gifted with the apotropaic powers of the shaman.

I am inclined then not to consider these passages as referring to Trita as the scape-goat of the gods but as the primeval medi-cine-man. It may well be that in them we have the materials from which the later legends of the scape-goat Trita were evolved. The use of mrj and énas (cf. Av. āhityå, 'uncleanness' which became the New Persian $\bar{a} h \bar{o}$, 'sin') in A.V. 6. 113, and the 'wishing' of the evil or unpleasant thing 'on' Trita would go far in giving rise to such legends in later Brahmanic speculation, and to the resultant perversion of the earlier conception.

Again both ©rita and Trita, as the physician, have a special connection with haoma, or soma, the healing plant кал' $\epsilon \xi \circ \times \dot{\eta} \nu$. Yasna 9. 4-10 reports that Vivahvant was the first mortal to press the haoma; $\overline{\mathrm{A}} \theta$ wya, the second; ©rita, the third, whereby he won the guerdon of two sons of the highest fame, Urvā $\begin{gathered}\text { śaya, }\end{gathered}$ judge and lawgiver, and Keresāspa, one of the greatest Iranian heroes. In RV. 1. 187. 1, soma is the drink of Trita, by the strength of which he rent Vṛtra joint from joint. His mighty feats made him the original demiurge of the Indian pantheon. In 2. 11. $20 ; 6.44 .23 ; 8.12 .16 ; 9.32 .2 ; 34.4 ; 37.4 ; 38.2$, he is engaged in pressing, cleansing, or otherwise preparing for Indra the amŕta, the celestial soma, the counterpart of the Avestan gaokerena, the creation of Ahura Mazda (mazda $\cdot \theta \bar{a} t a$, Yt. 1. 30; S. 1. 7; 2.7), the drink by which men will become immortal on the Resurrection Day (Bund. 42. 12; 59. 4).

Returning from this digression, designed to present an adequate setting of our passage in RV. 9. 102. 2, quoted above, we note the new word, pāsyòr, used to designate the press of this pre-ethnic Trita. The word is found elsewhere in the Vedas only in RV. 1. 56. $6^{\text {d }}$, where vrtrásya pāsyy $\overline{\bar{a}}$ are the stone bulwarks of Vrrtra. The word belongs to a group of cognates denoting 'stone,' hence we have here an unmistakable transition from the wooden implements of 1.28 , to stone utensils. This dual pāsyòr at once recalls the asmana hāvana of the Avesta. No other
identification could be so apposite in the light of the statements regarding Trita, his functions, and his age.

The evidence from the dual of grávan supports this. We have found the singular as a collective name for the mortar and pestle, as was the Avestan havana. In RV. this dual is found only in 2.39. $1^{\text {a }}$, in a long series of Aśvin similes, where the dual may be altogether due to the figure, and is entirely indefinite in meaning, whether mortar and pestle, or two press-stones, or two presses. In AV., however, this dual is found in 6. 138. 2 ; 11. 1. 9 and 10. In the latter hymn we have,-
etáu grávān̄āu sayújā yuñdhi cármāṇi nírbhindy ansśún yájamānāya sādhú /
avaghnatî ní jahi yá imá́m prtanyávah ūrdhvám prajấm udbháranty úd ūha //9// gṛhāná grávaạnāu sakṛ̂āu vīra háste / 10a/
As in RV. 1. 28, the wife of the sacrificant is engaged, as shown by the feminine participles and by the nárrī in recas 13,14 , and 23. The imperatives $n i ́ j a h i$ and $u \bar{d} \bar{u} h a$ well describe her operation of the pestle. That the gráv $\bar{a} n \bar{a} u$ are held in the hand is indicated by gṛhāná . . . háste. The context amply demonstrates that the implements are in use here in hulling rice for the brahmāudaná and both Kāuśika and Sāyaṇa expressly state that the grávānāu in both these instances are the ulūkhalamusalé. In AV. 9.6. $15 ; 10.9 .26 ; 11.3 .3$; 12. 3. 13 , we find the $u l \dot{u} k h a l a$ and músala thus employed in hulling rice, and in 9.6. 15, the grávānas, as we have seen, are identified with the ulūkhalamusaláni. In the remaining instance of the dual, AV. 6. 138. 2,
klībám krdhy opaşinan átho kurirínami kr dhi áthāsyéndro grấvabhyām ubhé bhinattv àndyà̀u //, the mortar and pestle would seem more convenient and better adapted than any other rendering of the word for the desired piece of surgery.

So far then as the dual of grávan is concerned, the meaning mortar and pestle may be considered established for three of the Vedic occurrences and there is no reason to assume any other meaning for the fourth. In the light of RV. 1. 28. 1, where we found grávan $=u l u ́ u k h a l a$, it seems quite probable that in all four instances the dual is elliptic in nature, a parallel to the Avestan hāvana and havana. In its wider application to the mortar and pestle for other purposes than braying the soma, we have a parallel to the Avestan hāvana.

In RV. 10. 101. 10 and 11, we have both the stone grávānas and the wooden mortar and pestle:

ubhé dhúrāu váhnir āpíbdamāno antár yóneva carati dvijânih / vánaspátiò vána ásthāpayadhvam ní sư dadhidhvam ákhananta útsam // 11 //
The language is so luxuriantly tropical that a definitive decision in all details is difficult. We may, however, safely adopt Grassmann's suggestion that the vásís aśmanmáyīs are the stone grấvänas, unless we supply some other accusative than hárim as the object of taksata, and may further identify the ten kaksyäs, after numerous parallels, with the ten fingers, the váhnis in both instances with the pestle in gear, and vánaspáti and vána with the pestle and mortar respectively. ${ }^{9}$

All the implements thus far considered for pressing the soma have been identifiable with the mortar and pestle. It is not probable, however, that this is true in all cases in the Vedas. In the ancillary literature we find another form of press and evidence for this is discoverable in RV.

Our best description of this press is found in Āpastamba's. Srāuta-Sūtra 12. 2. 15-16:
tasmiñs (carmani) catura grāvṇăh prādeśamātrān ūrdhvasānūn āhananaprakā̀̄̄̄̄n aśmanah saìnsādayati / uparaìn prathiṣtham madhye pañcamam // 15 // tam abhisammukhā bhavanti // 16 //.
' (The Adhvaryu) sets together on this (skin) four press-stones, a span each in measure, high-backed ones, well adapted for striking. He places a fifth, the broadest one, the upara, in the middle. Upon this last the others are placed, face to face to it.' The Commentator's exegesis of 16 makes it very plain, itare grāvānas tam uparam abhimukhā bhavanti ('The other grā̃ānas become face to face with the upara').

As this twelfth praśna is an account of the preparation of the Prätahsavanam, these stones were indubitably designed to press

[^116]the soma. Also in Kāuṣitaki Brāhmaṇa, 29. 1, we have a reference to the same or a similar press, vimuñcatsu tā vāi caturdaśa bhavanti daśa vā añgulayaśs catvāro grāvānah ('At their loosening, they, indeed, become fourteen, ten the fingers and four the press-stones'). As this is from the recitation of the Hotraka at the Mādhyamdinasavanam, the reference is again to a soma-press. Monier-Williams cites this as evidence for a press of four grávānas, adding that the original number was two, and later, according to a scholiast on SB., five. I find no other reference to a press of four stones and believe the four grávānas of KB. to be the four upper stones of the Āpastamba press when loosed from the fixed úpara. Otherwise we should seem to have a press of three upper stones and one lower.

The Comm. on SB. 3. 5. 4. 24 knows the Āpastamba press. Commenting on the text atha grāvna upāvaharati, he writes adhissavanacarmañi abhiṣavasādhanān pāsānān pañcāharanti ('On the adhisavana-hide they place five stones effective for the abhisava'). As shown by the context this was in the preparation of the pressing-place made on the upavasatha or last upasad day.

If now we add to this scholion the rest of the text in 24, dant $\bar{a}$ häivāsya grāvānas tad yad grāvabhir abhisunvanti yathā dadbhih psāyād evaïn tat tān nidadhāti . . . etad̀ u yajñasya śiraņ samiskrtam, and compare with this the text of the Greya-Sūtra of Áśvalāyana (4.3.5 and 14) where, when the various household implements are laid out with the corpse of their deceased owner, we find datsu grāvnah . . . ulūkhalamusale jañghayoh ('At his teeth the press-stones . . . at his shins the mortar and pestle') and the variants of these in the Sānkhāyana-Srāuta-Sūtra (4. 14. 26 and 32), apsu ${ }^{10}$ grāvāṇah . . . ūrvor aṣthīvatoś colūkhalamusale ('In the water the press-stones . . . at his thighs and knees the mortar and pestle'), we have these results: the symbolic equation dántah = grávãnah, whence we may infer a like symbolism in each Sūtra between the several implements and the parts of the body by which they are respectively placed; also the grávạ̄as in each instance are of the Āpastamba type, hence the natural plural, the proper distinction from the ulukhalamusalé; and so we may add these two Sūtras to our authorities for the Āpastamba press.

[^117]In RV. 10.94. 5, we seem to have a reference to this type of press,
> nyàn ní yanty úparasya nişkrtám purú réto dadhire sūryaśvítah //

As the subject, suparṇá, is metonymic for grávānas, we have here plural stones placed downwards upon one fixed nether stone, hence rather obviously a press like Āpastamba's.' In RV. 10. 92 . 15 we find grávāna ūrdhvấh, and in 3. 54. 12, ūrdhvágrā$v a \bar{n} o$, both of which may refer to presses of this type, though there is the alternative of such a plurality of presses as would seem from the plural nether stones to be indicated in 10. 175. 3, grávāna úparess á mahīyánte sajósasah.

In 8. 26. 24, grávañam nấśvaprṣtham mañhánā is predicated of Vāyu. The adjective áśvaprsṭtham at once recalls thè urdhvasānūn applied to Āpastamba's grá́vānas, and leads us either to identify grávvan here with one of his press-stones, or, more likely, to take it as a collective singular for the entire Āpastamba press. In favor of the latter is mainhánā, which we may compare with the purúu réto of the Āpastamba type in 10.94.5. It is shown below that liberality, profusion, etc., is characteristic of this type of press.

In 8. 34. 3, átrā ví nemír esāam úrām ná d̀hūnute vṛ̂kah, we have the only mention in the Vedas of a nemi for the pressstones. Such would seem necessary for a press of the Āpastamba type. The upper stones must have been fastened together in some way, probably by a frame-work attached to their 'high backs,' with a nemi around the whole, and a spout or nozzle on one side, such as Äpastamba in 12.1.9; 13.9, describes in the case of the grāvānam upānśusavanam with a múkha towards the south. On the other hand the nemi of our passage may be only the rim of the mortar about which the soma sprays are shaken by the rotating, pounding pestle.

Thus far we have found two types of grávan. For convenience we may term one of these the Āpastamba type, the other the ulūkhale type. In the use of the latter term I would not be understood to mean that it is always necessarily a mortar and pestle, but also any sort of press evolved from these. Such a press might easily take the form of two stones, wooden blocks, ete., an upper and a lower, with either a vertical or a rotary motion, worked by hand or mechanical device. The original mortar and pestle, however, continued in use, along with any derivative form or forms. The modern Brahmanic custom of
using a large flat upara upon which the soma is pounded to a mass of pulp by a smaller stone held in the hands, as described by Haug (282), is obviously a derivative from the ulúkhale type. It may well have been that special derivative forms were used for specific purposes of which Āpastamba's grāvopān̄śusavana, apparently a small press from the statement that it was samisprsstam pātrābhyäm, may have been a specimen. By 'the Āpastamba type' I shall designate a press with plural upper stones working on a single lower one.

The singular of grávan may naturally be used of a complete press of either type. The dual in three of the four instances in which it occurs has been found to be the ulükhalamusalé. The plural would naturally be used to designate plural presses of either type. We have found a few definite instances in which it seems to refer to the Āpastamba type. I believe that we can point out at least probable instances of the other also.
 in which we have words, expressions, or details of usages which we have found to characterize the ulúzkhale. Remembering, however, how readily such terms are transferred in language even to very dissimilar objects, especially when they perform the same or a similar function, I grant that any certainty is out of the question in specific cases. Though the tests are purely tentative they will not be valueless in the sequel.

One word that we should naturally apply to the ulúkhale type is $t u d$ and we find grárñā tunnó said of soma in 9.67.19a and $20^{\text {a }}$. We do not find it with any plural, however. We have found vad to be characteristic of the ulukhale and this is associated with grávan in RV. eleven times, of which six are plurals (sg. 1. 83. $6^{\mathrm{c}} ; 135 . \mathrm{T}^{\mathrm{a}} ; 5$ 5. 31. 12 $2^{\mathrm{c}} ;$ 8. 34. $2^{\mathrm{a}} ; 10.36 .4^{\mathrm{a}} ;$ pl. 5. 37. $\left.2^{\mathrm{c}} ; 10.94 .1^{\mathrm{a}}, 1^{\mathrm{b}}, 2^{\mathrm{a}}, 3^{\mathrm{a}}, 4^{\mathrm{a}}\right)$. The same metaphor of the voice was found to be characteristic of the mortar and pestle. In some form of vac this is found with grávan seven times, twice in the plural (sg. 1. 84. $3^{\text {d }} ; 5.25 .8^{\text {b }} ; 36.4^{\text {b }} ; 10.64 .15^{\text {c }} ; 100$. $8^{\mathrm{c}}$; pl. 10. 76. $6^{\mathrm{b}} ; 94.5^{\mathrm{a}}$ ), also $\overline{\mathrm{a}} d$ (sg. 4. 3. $3^{\text {d }}$ ), re (pl. 5. 31. $5^{\text {b }}$ ), krus ( $\mathrm{pl} .10 .94 .4^{\mathrm{b}}$ ). These represent one half of the verbal forms found with grávan. Another characteristic word, as we found several times, was ghosa. We have it thrice with grávan (sg. 8. 34. $2^{\mathrm{b}}$; pl. 10.76. $6^{\mathrm{d}}$; 94. $4^{\mathrm{d}}$ ). We have seen that the ulúzhala was used to drive away demons, disease, etc. This shamanist use of the grávañas is employed to destroy the raksíasas (7. 104. 7), to drive away rálṣāñsi . . . duşáapnyain nírṛtim
viśvam atrínam (10.36.4), to banish duchínām and durmatím (10. 175. 2), to circumvent the māyâ of Svarbhānu (5.40.8).

That these apotropaic grávānas belong to this type is supported also by the fact that this lies within the province of Trita the physician and also by the Avestan use of the hāvana for the same purpose, as $e . \dot{g}$. Ys. 27. 1f., snafäi añrahe mainyéuś sna $a \bar{a} i=$ aēśmahe snatāi māzainyanãm daēvanãm snaAāi vīspanãm daēvanãm varenyanãmca drvatãm fradaAäi ahurahe mazdå ('for the striking of Anra Mainyu, for the striking of Aēśma, for the striking of the demons of Māzana, for the striking of all the demons and fiends of Varena, for the aggrandizement of Ahura Mazda'). The nīrangs state that at the first sna $\theta \vec{a} i$ the $Z o ̂ t$ strikes the pestle against the mortar on the side eastward; at the second, on the side southward; at the third, on the side westward; at the fourth, on the side northward. The symbolism is that the hāvana is the weapon that crushes the demons at every point of the compass. So in Vd. 19. 9, Zarathushtra says that the hāvana, the cups, the haoma, and the words uttered by Mazda, are his best weapons against Añra Mainyu. A parallel to this symbolic ringing of the pestle and mortar is found in the Vedic upabdá and upabdí of the grávānas in RV. 7. 104. 17 d, ghnantu rakṣása upabdáih, and 10. 94. $4^{\text {d }}$, agghosáyantah prthivím upabdíbhih, words that seem onomatopoetically to represent the heavier sounds made by striking wooden or stone implements together in this way.

Then the converse side of this power appears in summoning by these metallic ringings the gods and the powers of good, for which we have already cited the Dādistān with reference to Yasna 27, on the Avestan side. We find illustrations of this in RV. 8. 34. 2, where the grávänas summon Indra; in 8. 42.4, the Aśvins; in 9. 80. 4, víśvān deván; in 9. 82. 3, Parjanya; also in 1. 89. 4, and 10. 175. 2, in bringing bhesajám; in 10. 175.3, in bringing vŕṣyam; in 10.94. 2, in visstvī . . . sukrtyáyā.

Another characteristic term of the ulúkhale is yuj. This is found with grấvan ten times (2.12.6;3.4.9; 30.2; 57. 4 ; 5. 37. 2 ; 40. 8; 10. 35. 9 ; 94. 6, 7; 175. 1). The ulúkhale are yoked to dhúras like a horse, and so the grấvänas in 10. 94. 6 and 7, and 175.1. Both with the Avestan hävana and with the ulukhale, cyu was used as a characteristic term of the movement. It appears also in 8. 42. 4, with the grấvãnas.

In the remaining instances of grấvan in RV. that of 5. 40. 2 would naturally follow that in 8 below, which by two tests would
be assigned to the ulúukhale type. The $\bar{u} r d h v o ́ ~ o f ~ 10.70 .7 ~ i n d i-~$ cates the same type. To this also the context points in 3. 42. 2 ; 8. 13. 32 ; 9.113. 6, all invocations of Indra: 8. 27. 1, invocation of the Viśvedevas; 5. 48. 3, apotropaic against Vrtra. One singular (7.33.14) and three plurals (10.78.6; 85.4; 94. 10) remain undetermined by the tests applied.

The results are everywhere consistent except in the case of 10. 94 , alone. This, as we have seen, contains the strongest evidence in RV. for a press of the Apastamba type, yet a round dozen of the tests would place it in the ukuikhale column. This at first thought may seem to invalidate any presumed value of the tests, but a solution for this anomaly will be presented later. A summation of the results shows that in RV. eighteen of the twenty singulars of grávan may tentatively be assigned to the mortar and pestle type, as may twenty-two of the twenty-eight plurals. One singular and three plurals seem to favor the Āpastamba type of press.

If now we apply the same tentative tests to AV., which has six singulars, three duals, and four plurals (excluding those found also in RV., and hence already counted) of grấvan, we find like results. In 10.9.2, the grávan is the mortar and pestle in use for hulling rice for a śatāudana. The other five singulars are apotropaic; 5.22.1 to drive away fever (takmánam ápabādhatām) ; 6. 3. 2, to protect ( $p \bar{a}$ ) from distress; 12.3.14, to slay (han) the Raksas; 12.3.21, to avert defilement by cleansing the clothes of a corpse (śumbhāti malagá iva vástrā̀); 5. 20. 10 , a simile with the apotropaic dancing (ádhi nrtya) of the war-drums (dundubhi) to avert war and confound the enemy and obtain booty. The three duals have already been found to be identical with ulúkhale. The four plurals are assignable to the same type, as in 3.10.5, they are wooden (vānaspatyá grád$v a \bar{a} o)$ that make a ghósam; in 4.24.3, we have pra-vad; in 9. 6. 15, they are ulūkhalamusaláni, and in 27 following the same are yuktá.

The totals, then, for the two Vedas are; of the twenty-six singulars of grávan twenty-four may be tentatively assigned to the ulükhale type, so also three of the four duals, and twenty-six of the thirty-two plurals. To the Āpastamba type we may assign one singular and three plurals. One singular, one dual, and three plurals remain unassigned by the tests applied. In a number of cases two, three, or even more of the tests have applied to the same example. These may be considered the best
established. The results, regarded as purely tentative, are emphatic enough to establish the great preponderance of the mortar and pestle type.

We have another term for the Vedic press in ádri, more frequent than grávan in the RV. but not existent in this meaning in the AV., save in two very doubtful singulars. RV. has sixtythree plurals, three duals, and seventeen singulars if we include every possible doubtful case.

If we apply the same tentative tests as before to ádri, we are surprised at the very meagre results. Thus tud is found but once with ádri (10. 94. 14, á krīláyo ná mātárain tudántah ) and here the stones are striking their mother rather than the soma, a passage, however, suggestive of the Āpastamba type, with plural upper and singular lower stone. There is no mention of úpara, prthúbudhna, ìd, kruś, with ádri. Then ūrdhvá, ghóṣa, vad and cyu occur but once each, vac but twice, and while yuj occurs five times, the ádrayas are never yoked to the dhuras. Nor is the ádri ever guided by the raśmí, nor is it identified with vánaspáti. It has no series of resemblances to the Avestan implements as the grávan was found to have. It is apotropaic only in two hymns in the tenth mandala. These are vital distinctions that set the ádri apart from the grávan, at least from the predominant type. We shall see that the ádri has its own characteristics, and the difference between them and those of the grávan is pronounced. Quite conclusive is the evidence from the hymns in which both words are found. Excluding for the present 10. 94, we have seven hymns in which both occur. These are 1. 135 (á. in $\left.2^{\mathrm{a}}, 5^{\mathrm{e}} ; g .7^{\mathrm{b}}\right) ; 5.40\left(\right.$ á. $\left.1^{\mathrm{a}} ; ~ g .2^{\mathrm{a}}, 8^{\mathrm{a}}\right) ; 7.35$
 $76\left(a^{2} .2^{\mathrm{b}}, 4^{\mathrm{d}}, 7^{\mathrm{a}}, 8^{\mathrm{b}} ; g .6^{\mathrm{b}}\right) ; 10.78\left(\dot{a} .6^{\mathrm{b}} ; g .6^{\mathrm{a}}\right)$. In all these nineteen instances the only encroachment of either upon the characteristic territory of the other is the apotropaic use of $\begin{gathered}d r i\end{gathered}$ in 10.76.4. This is the strongest evidence that the $\boldsymbol{r} s i s$.in general had different concepts of the two words.

Our task, then, is to differentiate them. First, we note that ádri belongs to a group of cognates connoting the idea of 'hard stone,' 'solid rock.' All the evidence in RV. points to this composition. It is only in post-Rigvedic times that we find the mantra that runs thus, ádrir asi vānaspatyáh (VS, 1. 14; TS. 1.1.5.2; TB. 3. 2. 5. 8 ; ŚS. 1. 1. 4. 7 ; ĀpŚ. 1. 19. 8 ; KS. 1. 5 ; 31.4), probably a mere Brahmanic variation of that other mantra, grá́vāsi vānaspatyáh, made at a time when the original difference was largely forgotten. So we may assume an original
difference of component material; but this was not a constant differentiation, since we have found stone grávãnas, if not wooden ádrayas, in the Vedas. The ádri is babrhānáa (5. 41. 12), párvata (10. 94. 1), aśramaná, áśrthita, ámrtyu, anāturá, ajára, and ámavisnu (10. 94. 11), dihruvá, kṣémakāma, and ajuryá (10.94.12), a series of epithets strikingly appropriate to its etymological origin.

Another distinction is that grávan is generic and demotic, as we have seen, but $\dot{a} d r i$ is specific and hieratic, not found as press-stone outside of RV. and mantras therefrom, with few, if any, exceptions outside of the one already quoted.

As an aid to the further differentiation of the two words synoptic tables for the RV. have been made as follows; (a) the metres of each; (b) the deities of the various rcas containing each; (c) the objects and thoughts associated with each; (d) the epithets of each; (e) the similes and metaphors of each; (f) the sounds associated with each; (g) the favorite verbs of each; (h) all other verbs used with each. In a striking manner these tables tell practically the same story.

Of the tables the first is of little value in this connection. It was suggested by a statement in KB. 29. 1, jāgata vāa grāvannah. Of the 49 rcas in RV. in which the word grávan occurs, 16 $(33 \%)$ are in jagatī; $14(28 \%)$ are in tristubub, catalectic jagati, a total of $30(61 \%)$, which amply proves the correctness of the statement. In the case of ádri, gāyatrī leads with 23 instances, $36.5 \%$ of the total of 83 rcas containing the word in this meaning. Jagatī comes next with 20 ( $24 \%$ ) and tristubh third with 19 ( $23 \%$ ), so these two combined have $39(47 \%)$.

Under grávan in the 'Deities' table, Indra and the Viśvedevas tie with 12 ( $24 \%$ ) each, grávānas is third with 9 ( $18 \%$ ) and Soma next with 5. In ádri, Soma leads with 27 (32.5\%), Indra comes next with 20 ( $24 \%$ ), grávānas third with 9 ( $11 \%$ ), and Viśvedevas fourth with 6. This indicates that the special nidus of grấvan is under the aegis of the greater deities, while that of $a d r i$ is by the flowing soma. The latter is shown also by the 27 rcas containing $a d r i$ in the ninth mandala.

A word may be known also by its companions. The table of 'associates' shows a wide difference in the nature of the companions of the two words. It has been thought best to limit the quest for the associates to the rc in each instance, as otherwise the task would be considerably greater but the comparative results little different. The starred words in each list are not
found on the other. The grávan list contains 115 words with a total of 163 occurrences; the ádri list, 106 words with a total of 254 occurrences. These lists readily divide into twelve groups, in the first seven of which addri predominates; in the other five, grá́van. In an ádri-group the italic numeral, when appended, will indicate the number of times the word is found 'associated' with grávann, and vice versa in a grá́van-group.

Our first group describes the soma brew, both qualitatively and quantitatively: mádhu, 18-3; *indu, 12 ; sutá, 6-3; máda, 5-3; *rása, 4; dhárā, 4-1; *uksán, 2; *matsará, 2; sávana, 2-1; *áñjas, *árnas, *ūrmí, *tavás, *dhá́yas, *samudrá, *vātápya, 1 each; rétas, 1-1, a total of 63-12. The second relates to the mingled milk: gó, 12-1; *dhenú, 3; *tudhas, 2; *páyas, *pи̂yūsa, *vaksánā, each 1 ; a total of 20-1. The third refers to the water: áp, 14-1; sindhu, 1-1; *avatá, *ítsa, *udaprút, 1 each; a total of 18-2. The fourth deals with the soma vessels: *kóśa, 3; *camú, 3; *kaláśa, *camasá, *avatá, 2 each; *ararínda, *dhisánạ, *púskara, *vána, *sádas, *sádman, *srúc, *hotrá, 1 each; a total of $20-0$. The fifth group deals with the soma sieve: ávya vá́ra, 5-1; *gós tvác; 4; pavítra, 4-1, *róman, 2; a total of 15-2. The sixth relates to the soma plant: añsí, 4-1; ándhas, 2-1, while grávan has *sáákhä vṛksásya arunásya, 1; a total of 6-3. The seventh contains those that prepare the soma: $n \underset{r}{2}, 11-3$; $k s i ́ p, 5-2$; *bāhú, 2; sotŕ, 1-1; *gábhasti, *dāśvás, *śamitŕ, *susuvás, 1 each; while grávan has also *ūrdhvágrāvan, 1, *yuktágrāvan, 3, *sutásoma, 3, *grāvagrābhá, *grávahasta, *sunván, each 1; a total of 23-16.

In the eighth group, that of the officiants at the sacrifice, grávan takes the numerical lead with a total of 24-14, as follows: adhvaryú, 3-3; brahmán, 3-1; vípra, 3-5; hótr, 2-3; *yájamāna, 3 ; *puróhita, 2; *avavắj, *kīrí, *kīrín, *coditṛ, * vedhás, *sáñstr, *stotŕ, each 1; manīsin, 1-1, and *váhni, 1. The ninth group deals with the sacrifice: adhvará, 9-6; barhís, 5-3; sámiddha agní, 8-3; yajñá, 5-2; *vedi, 2; *ámis pakvá, *prasú, and *svárünām mití, each 1; a total of 32-14. The tenth group has to do with the devotional exercises: *arká, 2; bráhman,-2-3; ukthá, 1-3; dhî 1-4; mati, 1-3; havís, 1-1; *arámati, *̣́́c, *chándas, *námas, *bárhati, *ỉánman, *śastí, *ślóka, *sáman, *háva, *havirádya, *hótrā (hū), 1 each, and ádri has also havyá, 1 ; a total of $20-15$, but grávan has 18 words to the 6 of ádri. The eleventh group is apotropaic: raksás, 3-1; nírrti, 1-1; *paṇi, 2; *atrịna, *duchúnā, *durmatí, *duṣvápnya, *dvésas,
*māyáa, *ráksas, 1 each, and ádri has also *ámīvā, *ámati and *ávarti, each 1 ; total 13-6. The last group contains the special desiderata mentioned in the rc: *ávas, 2; *ágati (índrasya), 2; *áditit, 2; *bhesajám, 2; *pä́thas sumékam, *mánas (índrasya), *vakṣáṇa (áprktā), *sárma, *sakhitvá (sómasya), *sárvatāti, each 1 ; rāí; $1-1$, and ádri has also *rayí, 2; *ís, *ūtí, *vásu-vasu, *śúṣma, *abhíbhūti páuñsya, *śrávas bṛhád, each 1; total of 16-9.

Thus the 'associates' of ádri are connected mainly with the pressing, cleansing, storing, etc., of the soma, the physical preparation for the sacrifice and its enjoyment. Those of grávan are connected rather with the actual offering and the worship.

Grávan is qualified by 46 different adjectives and ádri by 41. Only six are common to both ( $\bar{u} d h v a ́, g .5-a ́ .1$; somasút, 1-1; somin, 1-1; ajára, 1-1; vṛ̣̂an, 4-2; vrsabhhá, 1-1). Grávan is úpara, madhusút, each thrice; yuktá, 5 times; vádat, 4 times. The ádri is hári thrice, āśú and hástayata, each twice. No other adjective on either list occurs more than once. The grávan is prthúbudhna, an epithet that occurs with it also in VS. 1. 14, and SB. 1. 1.4.7. It is prthú in MS. 1. 1. $6: 3.12 ; 4.1 .6: 8.3$, whence it seems distinctive on the physical side. The term is not applied to ádri. The phrase ádrayas párvatās (10.94. 1) is perhaps reinforced, rather than offset, by grấvṇa párvatās of KS. 35. 15, as the latter is probably the generic use of grávan. Trudilá and átrdila might be really informing if lexicographers and commentators could agree as to the denotation and connotation of these apparently contradictory epithets of ádri (10.94. 11). The áśvaprṣ̣̣ha grá́van is in no way matched by the sómaprṣthāso ádrayas. The grávan alone is ukthabhṛt, sāmabhṛ́t, mayobh $\bar{u}$, sukṛ̂t, visțví sukṛyáyā, and cáru; the ádri alone is vipipāná, gavis, somád, and supīvás. These contrasts are akin to those of the previous table and both tend to show that the grávan is the Mary, and the ádri the Martha, of the sacrifice.

Of comparisons, similes and metaphors, the grấvan has seventeen, the $a^{d} d r i$ thirteen. The favorite of the former is the bull, four times; that of the latter is the horse, twice. The ádri is not compared to a bull, but the grávanas once have the prothátho árvatām. This may distinguish them as strong and swift, respectively, a distinction in some degree confirmed by the epithet vřsan four times applied to grấvan and $\bar{a} s ́ u ́ u ~ t w i c e ~ a p p l i e d ~$ to the ádri; also the grávan is ugrá and the ádri is áśvàpastaras than Vibhvan himself, though he was wind-swift (vätájūtas)
and encompassed the heavens in a day. The Maruts shine (sūráyas) like grấvānas and forever crush (ādardirá́so
viśváhā) like the ádrayas. Agni roars (ucyate) like the grávan, but the ádrayas are better pitukṛ́tas than he. Vāyu is as liberal as a grávan that has a horse's back (áśvapṛṣtham mañhánā), but the ádrayas are more soma-drunken (sómarabhastara) than he. The grávan is compared to a kārúr ukthyàs, a jaritŕ, and to viprās; but the human counterparts of the ádrayas are the añjaspás and the vápanto bíjam dhānyäkrịtaそ̉; Mary and Martha again. Not only the spheres are different, but there is also an increasing manifestation of more speed and greater profusion in the case of $a d r i$, along with an additional detail here and there that all bid fair to be of aid in an ultimate differentiation.

In the table of 'sounds' we have interesting contrasts, some of which have already been used as tests. Thus vad eleven times with grấvan and but once (10.94. 13) with ádri; vac ${ }^{11}$ with grávan seven tímes and but twice (7.68.4; 10.94.14) with ádri; śvas with grá́van twice (5.36.4; 10.94. 6), with ádri once (5.86.6) ; ru with grấvan twice (10.94. 3 and 6), with ádri once (10.94.12) ; ghuṣ with grávan thrice (8.34.2; 10.76. $6 ; 94.4)$, with ádri once (10.94.1) ; rec with grávan (5.31.5), with ádri (5. 45. 7) ; upabdí with grávan (10.94.4), with ádri (10. 94. 13). These seven alone are common to both words. Others with grávan alone are ĩd (4.3.3), krand (10. 94. 2),
 104. 17). Those with ádri alone are $n u$ (5. 45.7), hu (7.22.4), sslóka (1. 118. 3 ; 139.10 ; 3. 53. 10 ; 58. 3; 10. 76. 4; 94. 1). Prosopopeia occurs with grávan twenty-six times to eleven with ádri. Sound in the case of the grávan is expressed by thirteen terms and in the case of ádri by ten.
The verbs of sound, taken together, form the favorite group of grávan, but of all verbs $s u$ is the favorite of ádri, occurring thirty-seven times. ${ }^{12}$ This is found a dozen times with grá́van also. The next favorite with $a_{d r i}$ is $d u h$, found seventeen times. It does not occur with grâvan. The third in favor with ádri is

[^118]$h i$, occurring nine times, but eight are repetitions of the same $r c$, except that yajnám is substituted for hárim in the last.- Fifteen other verbs are shared by the two words; yuj ( $g .10$, already given; á. 3. 1. 1; 41. $2 ; 5.43 .4 ; 7.42 .1 ; 10.94 .12$ ) : bhr (g. 5.31. 12 ; 7.33 .14 ; 10. 94.6 ; á. 1. 165. $4 ; 10.76 .4 ; 94.1$ ): han (g.7.104. 17 ; á.9.98.6; 10.76.4): tud (g.9.67.19, 20; á. 10.94.14) : sidh (g.10.36.4; 175.2; á. 10.76.4; 100.8) : śru (g.10.85.4; 94.6; á.1.118.3; 7.22.4; 10.94.12) : caks ( $g .10 .92 .15$; á. 8. 4. 13) : bhas (g.10.94. 3; á. 9. 79. 4; 10. 94. 13) : суи (g.8.42.4; á.9.11.5) : ${ }^{1}$ as (g.8.27. 1; 10.94.10; 100.9 ; á. 1. 109. 3 ; 5. 11. 12; 8. 72. 11; 10. 94. 11) : i (g. 10.
 $10 ; 10.94 .14$ ) : grabh (g.1.162.5; á. 1. 139.10) : bhū (g.1. 28. 1 ; 7. 35. 7 ; 10. 70. 7; á. 10. 76. 8) : yam (g.8.34. 2 ; 10. 94.6 ; á. 5.45 .7 ; 9. 34. 3; 10.76.2). Twenty others ${ }^{13}$ occur with grávan alone, and twenty-three with ádri alone.

The verbals $s u$ and $d u h$ make $50 \%$ of the total with ádri, but less than $25 \%$ of the total of grávan. The verbals vad, vac, $r c, i d$, and $k r u s$, together make one third of the total for grấvan, but less than $3 \%$ for $a d r i$. These are the numerically striking distinctions. In details, however, more interesting differentia appear. The grá́vānas speak (vad) işirám (5. 37. 2), brhát (10. 94. 4), śatávat, sahásravat (10.94. 2), as a kārúr ukthyàs (1. 83. 6) ; but the-ádrayas only by upabdíbhis at their loosening (10.94. 13). The grávvānas raise their voices (vac) divítā divítmatā (10.76.6), ḅrhád (5.25.8; 36.4; 10.64.15), as eagles in the vault of the sky, where they dance ( $n$ rt, 10.94.5) ; but the ádrayas raise theirs only to call the Aśvins (7.68.4), or to cry for the soma (10.94. 14). The grávānas hum over

[^119]the cooked flesh (pakvá ámiṣi) at the sacrifice (10.94.3) while the ádrayas find pleasure in the beestings of the soma plant ( 10 . 94. 8). To press the soma the grấvãnas bhuranti. (10.76.6), or Savitar suvatu dhármañā (10. 175. i and 4) ; but the ádrayas revolve (vivrt, 10.94.14) or men make them spin (dhanayante 1. 88. 3) for the Maruts. The vádan grávā is pressed (avabhriyate) upon the védi, where the Adhvaryus keep it in rapid motion (jīrám cáranti, 5. 31. 12), while the ádrayas sit on the ox-bide (9.79. $4 ; 101.11 ; 10.94 .9$ ), or in the lap of the dhịánạa (-1. 109. 3).

As one surveys these lists he notes comparatively few identities and of these fourteen are due to the one hymn, 10. 94. The more one scans the lists the more the differences stand out, and the impression grows of a fundamentally differing conception of the two words. There was probably more or less transference from one to the other, possibly mutual to some extent, yet undoubtedly greater from the generic to the specific, but at the most this was slight in extent. The outstanding fact is that the divergences are many and pronounced. The ádri has little in common with the ulúkhale; the grávan much, in many cases being identical with it. We know of but two types of Vedic press. We must assume another or identify the ádri with one of the two known. If either, it must be of the Āpastamba type. We have already seen this indicated in 10. 94. 14, krīláyo ná mãtárȧ̀ tuidántah-plural upper stones dancing upon and beating a singular lower one. This, again, would account for the great disparity of the singulars and plurals of ádri, seventeen to sixty-three, while those of grấvan were so evenly divided, twenty to twenty-eight. It would be quite natural to designate such a press as the 'stones.' Speed and profusion have been found characteristic of the adrayas. A press of the Āpastamba type could easily be geared up to produce the speed of a revolving mill-stone. Such a press would naturally yield soma in such profusion as even, in comparison with the mortar and pestle, to justify the hyperbolic terms in such a hymn as 9. 96. 7-9, ná síndhur . . . sómah, sahásraretā, anisór ūrmím, sahásradhāras, and others no less extravagant. Such a press would naturally be intended for the production of soma on a greater scale than the ulūkhala would yield except in considerable time or considerable numbers. The 'associates,' comparisons, epithets, and verbs, all favor such a press as is engaged primarily for producing soma in large quantities and quickly.

Does any evidence conflict with this identification? I have found but two items that could possibly be so construed. One is the ádrir $\bar{u} r d h v o ́ ~ o f ~ 7 . ~ 68 . ~ 4 . ~ T h i s, ~ h o w e v e r, ~ m a y ~ b e ~ a ~ c o l l e c-~$ tive ${ }^{14}$ designation for the press, or merely a borrowed epithet from the normal $\bar{u} r d h v o ́ ~ g r a ̂ ́ v a ̄, ~ o r ~ \bar{u} r d h v a ́ ~ m a y ~ h e r e ~ m e a n ~ ' e l e-~$ vated,' 'erected,' etc. The other is that Āpastamba distinctly calls his press grávan, but we have already found this to be the generic and popular name for the soma-press in the literature, while ádri is hieratic and confined practically to the RV. Hence, he would naturally use this term.
I am then strongly inclined, in the light of the evidence adduced, to the conclusion that in the Vedas we have two types of press, and only two, one the mortar and pestle, and possibly derivative forms of the same, the other a press of the type described by Āpastamba, with possible variations also; and that in the Vedas grávan regularly refers to the former and ádri to the latter.

There is, however, an occasional tendency of $a d r i$ to encroach upon the demesne of grávan, as is noticeably the case in the three duals of ádri in RV. If we apply the tests suggested by the tables, especially that of 'associates,' we shall find in each instance items suggestive of the entourage of grấvan rather than of ádri. The first of these duals is in 1.109. 3, tá hy ádrì dhisáanāyā upásthe. The more immediate context has sómasya práyatā
 $\left(4^{\mathrm{a}}\right)$, sómam . . . sunoti $\left(4^{\mathrm{b}}\right)$, mádhunā . . . apsún $\left(4^{\mathrm{d}}\right)$, all characteristic 'associates' of ádri, but near by are also mánasā ( $1^{\mathrm{a}}$ ), prámatir $\left(1^{\mathrm{c}}\right)$, dhíyà̀ vājayántīm ( $\left.1^{\mathrm{d}}\right)$, stómàm návyam ( $2^{\mathrm{d}}$ ), barhisi and yajñé ( $5^{\mathrm{c}}$ ), which we naturally associate rather with grấvan. 'In 7. 42. 1, yujyắtām ádrī adhvarásya pésah, only dhenáva udaprúto ( $1^{c}$ ) is characteristic of the sphere of ádri, while brahmáno and ángiraso ( $\left.1^{\mathrm{a}}\right)$, yujyâtām and adhvarásya $\left(1^{\mathrm{d}}\right)$, belong rather to that of grâvan. In the remaining instance, 7. 39. 1, bhejấthe ádrī rathyèva pánthām, adri has brought nothing with it unless it may claim the verb alone, which is found with it also in 10.94. 8. On the other hand, ūrdhvó agnîh ( $1^{\mathrm{a}}$ ), jūrnír and devátātim ( $1^{\mathrm{b}}$ ), ṛtám and hótā ( $1^{\mathrm{d}}$ ), barhír ( $2^{\mathrm{a}}$ ), yajñéẹsu yajñíyāsa ū ūăh (4${ }^{\mathrm{a}}$ ), and sadhástham (4 $4^{\mathrm{b}}$ ), would all be proper associates for grâvan. Thus our first dual is attended by about as many of the asso-

[^120]ciates of grávan as of its own, but the other two are practically cut off from their own and overwhelmingly surrounded by those of grávan.

Reasons for $a ́ d r \bar{\imath}$ rather than grávañāa in these passages are not hard to find. One is the well-worn and overworked, but still valid at times, metri causa. The dual of grávan will not work here, unless one change either the metre or the accompanying vocabulary. Another may be that, as we have found in the existing instances, the dual of grávan was so completely identified with the ulūkhalamusalé that the rssis chose ádri to avoid this connotation and to denote more definitely a press of two stones. Again ádri connotes an idea of sthāulalaksya, munificence, liberality, etc., which might readily lead the rssis, naturally prone to extravaganzas of diction, to use it in preference to grávan, just as even Occidental man has not ceased to believe, or at least to act upon the belief, that he can beguile his God by profuseness of profession. Such would seem to be the case also with the plural ádrayas in some instances, as $e . g$. in 3.41. 2 and 6. 63.3.

In 7. 42. 1, the dual $a d r \bar{\imath}$ are the ornament, not the two ornaments, of the sacrifice, and in 7. 39. 1, they pursue a single párth $\bar{a} m$, acting in unison as the rathy $\bar{a}$, the two usual occupants of a chariot. These are decisive, not for a duality of presses, but for one press of dual stones, but whether the upper is a composite; as in the pure Apastamba type, or single as in the ulūkhale type, does not appear unless we stress the 'associates' to favor the latter in a derivative form. I see no reason to interpret the dual differently in 1.109.3, as the interpretation given is adequate and apposite here as elsewhere. ${ }^{15}$

Two other words remain. In 8. 2. 2, we have áśna in sutó áśnāir, as a name for the press-stone. Its 'associates' dhūtáh ávyo váraīh, páripūtah, and niktó nadî́su, as well as its cognates, all fix it as a synonym of ádri. In 3. 35. 8, imám nárah párvatās túbhyam ápah sám indra góbhir mádhumantam akran, pár$v a t \bar{a} s$ may indicate the mountains as the home of the soma plant or of the press-stones. In the latter case it is only an equivalent for ádrayah párvatās as in 10.94. 1.

[^121]I have reserved 10. 94 for a separate consideration. This bizarre hymn of an equally bizarre author, if tradition be trustworthy, is one of the three dedicated to the grávānas. It is the only hymn assigned by tradition to Arbuda Kādraveya Sarpa, or to any of his family, and one of two assigned to sarparsis. According to the Pañcaviñśa-Brāhmana, 25. 15, this Arbuda was a Grāvastut priest that was an officiant at the snake festival. He is known also from AB. 6. 1, and KB. 29.1. In the fourteen stanzas of the hymn we have at least two dozen Vedic äna cip $\quad$ н́́va. The hymn is late and has many 'reminiscences' from earlier ones. At least that seems the most reasonable explanation of the number of terms transferred in it from the gráaunas to the ádrayas. These two names are almost inextricably confused in the hymn. In this it is in marked contrast to what we found to be true in the other seven hymns containing both names. It has been the one disturbing feature in the application of tests made. It is the one hymn that contains the strongest evidence for the Āpastamba type, both with the name grávan and with ádri. The logical explanation for the discrepancies due to this hymn is that to its author the words are so synonymous that he makes no attempt to distinguish between them. The generic and the specific, the demotic and the hieratic, simply blend and he uses now this, now that, without any attempt to differentiate. If Āpastamba could call his press of five stones by the name once identifiable with the mortar and pestle, so could Arbuda at his pleasure. With this interpretation, we have a remarkable consistency in the Vedas in the use of the terms grávan and ádri and in their respective attributes. ${ }^{16}$

## Grove City, Pennstivania.

[^122][Hillebrandt, Ved. Myth. 1. 152ff., anticipates a very few of the data, but none of the important conclusions, of this article. Except for a momentary qualm (op. cit. 161f.) he treats gráavan as meaning only 'stone' and as synonymous with ádri when=soma-press. So, apparently, have all other scholars. See Zimmer, AlL. 278; Pischel, Ved. St. 1. 109; Oldenberg,* ${ }^{*}$ Noten, 1. 24, n. 2.-Editors.]

LICENSED FEET IN LATIN VERSE: A STUDY OF THE PRINCIPLES OF EXCEPTIONAL SHORTENING, 'OF DIAERESIS, AND OF SHORT VOWELS IN HIATUS

Robert Somerville Radford

Professor of Latin, University of Tennessee

The present paper might equally well be called, so far as regards its chief content, a study of popular prosody in literary Latin. Students of Latin versification owe much to the learned and truly monumental work of Lucian Müller, the Res Metrica, yet after all this most valuable and elaborate treatise is not free from serious faults. It is severely restricted in its scope to the period subsequent to Ennius, and it is in many respects a production of the narrower grammatical school; hence its treatment of exceptional shortenings, of diaeresis, and of short vowels in hiatus leaves much to be desired. The principles which I shall discuss in the present study involve directly only a few hundred verses perhaps in the Latin poets, but indirectly they have an important bearing upon the conception which we should form of Latin verse in general and of the manner in which its development has occurred. I shall seek to show, ${ }^{1}$ with important results, as I hope, both to the language and to the metre, (1) that nearly all the initial licenses of final $o$, such as volŏ, sciŏ, Polliŏ, quomodŏ, findŏ, tegendŏ and the like, remarkable shortenings like the commodă (impv. 1st conj.) of Catullus and the gratuřtus of Statius, the ludicrĕ of Ennius, the cöruptum of Lucilius and Lucretius, the supernĕ of Lucretius and of Horace, the postĕ̆ of Ovid and Germanicus, Juvenal's Calpĕ, Vergil's hı̆c (c), Horace's Pröserpina, $\breve{A} p(p) u l i a$ and Catill $(l) u s$, Martial's $c \breve{o}(t)$ tidianus and mŭtoniatus (law of mămilla and law of conscribullo), do not usually occur at random, as has heretofore been assumed, but are justified and, in a measure, legitimatized (just as in English poetry) through the influence of mass and through the reader's knowledge of established metrical' usage.
${ }^{1}$ Of the headings here named it will be possible, in the present article, * to discuss only the first, viz, that relating to exceptional shortenings, but it is hoped that even in the present introductory discussion the principles. involved will be clearly seen to be applicable to all the cases mentioned alike.

For the poet has first firmly established his metre by many perfect lines; hence the reader knows just what he is to expect in certain necessary parts of the verse, and is therefore amply protected at these points against the possibility of metrical ambiguity. Similar conclusions will be reached. (2) respecting nearly all the notable cases of diaeresis, not only dissolüo, süetae, silüae, but dĕinde, cŭ̆̆, hŭic, Orphĕŭs, Pelĕŭs, Trŏĭa, sub̌̆ecta, quadrĭangulum, fortassĕan, antëit, vĕhĕmens, nǐhŭl, prěhendo, etc.; ${ }^{2}$ and (3) perhaps most strikingly of all, with respect to the cases of short vowels (without $m$ ) in hiatus-only another case of diaeresis or the separation of 'syllables-like Horace's malĕ ominatis, Catullus' herculĕ et and factum malĕ, o miselle passer, Persius' discitĕ, o miseri, Vergil's deă. Ille, Sidonius' tu sinĕ illo, Luxorius' magnum deprenderĕ usum, Ennius' hos egŏ in pugna, etc., ${ }^{3}$ which have been doubted needlessly by so many scholars. Since metrical ambiguity is everywhere avoided, it is evident that these occasional and exceptional, yet legitimate; usages are admitted chiefly in the characteristic feet, i. e., those feet which bear the pure and necessary rhythm and which imperatively demand a certain number of short syllables. The precious shorts, which the original Roman language seemed so greatly to lack, must ordinarily be provided by art and by a thousand refinements of form and syntax (such as archaisms, neologisms, constructions of Greek syntax, diminutive formations, hypallage or poetical inversion of the Vergilian variety, hendiadys, apostrophe, hyperbaton and the like ${ }^{4}$ ), yet may some-
${ }^{2}$ I shall not actually reach in the present paper the cases of dialysis named, which are discussed by Müller, l. l., pp. 317f., 304f., 294f., and by Hoche, Metra des Seneca, p." 54 , but even the casual reader who will turn to the examples in Müller will see that they illustrate the principles set forth.
${ }^{3}$ I shall not actually discuss the examples under this third head, but they may be found in Müller, p. 370f. The principle of the pure or necessary foot and the absence of metrical ambiguity under the dipody law furnish a sufficient explanation also, I hold, of the examples of short vowels (without $m$ ) in hiatus which Maurenbrecher has collected with such care and industry (Hiatus im alt. Lat., p. 200f.), but upon which, in common with most Plautine scholars, he passes a most mistaken and erroneous judgment. A detailed discussion and explanation of the Plautine examples, however, is quite necessary, and this I plan to give in a separate article.
${ }^{4}$ Thus the writer considers most unfair and ungracious, for example, the remark of Postgate that 'the device of postponing que metri gratia in the second half of a pentameter is ridden to death by Tibullus,' e. $g$.
times be supplied also by systole and by that bolder license which the speech of Plautus and of Lucilius could never wholly forego. If then there are (as is quite evident) distinctive feet in Roman classical verse with which the poet is especially preoccupied and which he provides for in advance, it is clear that the subject of the special peculiarities which they exhibit is a

Tib. 1. 1. 40 pocula, de-facili composuítque lutó. The truth is that Tibullus, the unexampled master of elegance and purity, could scarcely have composed his pentameters at all without 'riding to death' both the displaced que and the well-known use of the aorist infinitive (as 1.1.30 nee pudeat . . . increpuisse boves). Catullus and the other 'singers of Euphorion' renounced entirely the elision of final $s$,-a counsel of perfection almost comparable to the restoration of the $e$ mute in French. For many reasons then it is not surprising that they so greatly affect and 'ride to death' the use of diminutives, comparatives, verbal nouns in -io, and the like, as Cat. 3.18 meae puellae | flendo túrgidulf rubent ocell; 3.1 lugete, o Veneres Cupidinesque | et quantum est hominum venústiórum; 7.1 quaeris, quot mihi básiátiónes. To form the difficult fifth foot, Vergil often uses hendiadys and hypallage (rhetorical inversion or artificiality of expression), usually with very happy and poetical effects, e. g. 'Such a soil will produce the choicest liquor such as from sacred bowls we pour forth to the gods and from cups of gold' (Georg. 2.191 hic laticis, qualem pateris liba ${ }^{\text {m }}$ mus et auro) ; 'all are of the same mind, to leave the accursed land and to give the south winds to the eager ships' (Aen. 3.61 et dare classibus Austros, poetical inversion for dare classes Austris); 'she disguises her purpose in her looks and shows calm hope upon her brow' (Aen. 4.477 ac spem fro ${ }^{5}$ nte serenat, inversion for spe frontem serenat, 'she smooths her brow with hope'). Yet the ancient critics, as we learn from the sixth book of Macrobius, noted that some of the numerous cases of hypallage, used metri gratia by Vergil in the fifth foot, are not wholly successful, as 'Like fires launched on a dry forest with branches of crackling bay' (Aen. 12.522 arentem in silvam et virgulta sona ${ }^{5} n t i a$ lauro, 'branches crackling with bay,' instead of 'branches of crackling bay'); 'they crowd to see the bodies and the spot reeking with freshly shed blood' (Aen. 9.455 tepida ${ }^{5}$ que recentem | caede locum, 'the spot still fresh with the warm blood'). In the mythology Telephus could be healed only by the rust from the spear of Achilles which had injured him, and in a somewhat similar way we may say that Greece will heal the wounds which she has inflicted on the original Roman language by freely giving to the Augustan poets all her figures of grammar and all her constructions of syntax. On this whole subject, see especially the learned and brilliant study of Köne, Die Sprache der römischen Epiker, Münster, 1840, which is so highly praised by Christ and Brock, but so strangely neglected by Müller. Köne, writing in 1840, often falls, it is true, into exaggeration and positive error, yet how masterly, for example, is his treatment (p. 15) of Horace's Greek infinitive with adjectives (e. g. C. 1.10.7 callidum quidquid placuit,
fairly complex one, and even a preliminary article cannot be written without some reference to the forms of declension and conjugation, and even more especially to the figures of grammar and the figures of rhetoric. For it is by the help of these latter that the Augustans have created in fact a new language in conformity to the new prosody of Ennius, ${ }^{5}$ and so have finally obtained (as for example, in Ovid) a super-abundant and almost miraculous supply of short syllables. Students of Roman comedy are of course thoroughly familiar at the present time with the distinctive foot of the early iambic verse, that is, the pure iambus of the verse-close, and with the many licenses which it exhibits. It is true that a few excellent scholars such as Lange, Staedler, Scheffler, Zingerle and Brock ${ }^{6}$ have studied the often fixed position of words and phrases in the different feet of the hexameter and even of lyric verse, but it can scarcely be said that the valuable results which they have gained in part have received the attention which they merit or have become widely known. Thus the characteristic or licensed feet in the metres of Plautus and Terence have been carefully observed, while those in the verse of Vergil, Horace and Catullus have usually been much neglected.

The Roman language originally possessed, like English, a great wealth of common or 'half-long' syllables, such as domi $/ \bar{i}$, sed-ā̄/ŭt, vidē/ĕ, volū/uptatem, quid- $\bar{a} / \breve{a} c c e p i s t i, \bar{\imath} / \bar{u} l l e$, and the like, and something of the flexibility, the variety and the freedom that belong to our English verse, appears also in the vigor-
iocoso | cóndere fúrto,-necessary dactyl of the Adonic) and of Vergil's use of the infinitive for the gerund (Aen. 2.10 sed si tantus amor casus cogno ${ }^{5}$ scere nostros | et-supremum audi're laborem). He quotes most aptly also (p. 8) as an example of the natural Latin word-order the fine verse of Ennius Ann. 509 M . tum lateralis dolor certissimus nuntius mortis; afterwards, as he so clearly points out, the 'singers of Euphorion' and the Augustans, rejecting the elision of final $s$, were compelled either to resort to artificial positions or to the poetical variation of the gender which is seen in summa dies, dura silex, aurea funis, acerba cinis, horrida pulvis ( $\mathrm{pp}, 85,93$, etc.). In short, Köne's treatment of the dactylic poets is often both more instructive and more stimulating than that of Lucian Müller.
${ }^{5}$ This is most admirably shown in the work of Köne already quoted.
${ }^{6}$ See Lange on the Infinitive Passive in -ier, Denkschriften d. Wien. akad. X (1860), p. 1-58; Staedler, De serm. Lucret., Jena, 1869; Scheffer, De perfecti in -vi formis apud poetas dactylicos, Marburg, 1890; Zingerle, Zu späteren lat. Dichtern, Innsbruck, 1873 and 1879; Brock; Quaestiones Grammaticae, Dorpat, 1897.
ous iambics, cretics and anapaests of Plautus and other early Roman poets. It is true that in an important sense Rome itself was conquered by Ennius, who won in the sphere of literature a victory almost as complete as that achieved by Scipio at Zama or Alexander at Issus and Arbela, and as a result the course of development of the language was actually changed and reversed for a period of several centuries. ${ }^{7}$ Poetry turned from its early rugged strength and its large variability to an elegance and an artistic perfection, a truly classical precision, which, in view of the original Roman material and the native bent, could only be acquired by learning and unremitting study. The system of Greek prosody which Ennius introduced and which he imposed upon Rome sought above all else to reduce the number of common and variable syllables, and so to attain an almost mathematical exactness: Therefore in a later age Caesius Bássus, the teacher of Persius and the gifted lyric poet so highly praised by Quintilian, could not understand the freedom and the flexibility which the early Roman verse had enjoyed, and hence, without regard for the principle of the well-established metre, he severely censured ${ }^{8}$ the line of Terence, which Horace (Sat. 2. 3. 264) was able to convert, by two slight changes, into a dactylic hexameter, viz. Eun. 49 : exclúsit: revocat: rédeam? non, si me óbsecret.

The criticism is easily intelligible in one to whom the precise and elegant prosody of Greece had become all in all, but with respect to early Roman poetry it is no more correct than the judgment passed by another learned critic, Dr. Samuel Johnson, upon the irregular verses of Milton. According to Dr. Johnson's essay, every 'deviation from the rigor of exactness injures the harmony of the line considered by itself'; how erroneous this view really is, may be readily seen by any one who will turn to Professor Corson's Primer of English Verse and read the fourth chapter in which he reviews Johnson's criticism of Milton, and points out, with many apt examples, the 'special expressiveness' of variety in English verse. I hasten to add that the freedom of the early Roman prosody could never be wholly suppressed even in literary Latin, ${ }^{9}$ although elegance

[^123]and precision everywhere became the rule in a language of exceptional beauty and charm. Not only was Ennius unable wholly to suppress the common syllables, as in $\operatorname{sib} \bar{\imath} / \breve{\imath}, \operatorname{cav} \bar{e} / \breve{e}$, vidē $/ \breve{e}$, pal $\bar{u} / \breve{u} s$, but his actual system, as we shall presently see, is usually somewhat misunderstood and is represented as more rigorous than was really the case. For even in the Ennian prosody the Roman language does not wholly give up the very considerable variety and flexibility which was its original birthright, and the Roman poets always possess some power of moulding their material according to pressing needs and of escaping, by means of numerous licenses and variations, from too narrow an interpretation of metrical form. In illustration of this fact I shall discuss the following four topics: (1) the freedom similar to that of early Latin poetry, but greater, which English verse often exhibits; (2) the licenses which belong to the pure iambic verse-close in Plautus and Terence; (3) the greater freedom which Lucian Müller also recognizes in certain feet of the hexameter, although he fails to draw the necessary conclusions from the facts noted; (4) Ennius' own usage as seen in his hexameters.

## I. Examples of Freedom in English Verse

If we are composing a single line as an example of the metrician's art, we can evidently take no liberties in English versification, and we cannot depart in the least from the standard or strict norm. But if a poet is composing a great body of verse, then he may take many liberties after he has once clearly established his metre and gained the ear and the confidence of his reader. Hence English poets often seek to vary the cadence of their verse and, after many smooth and perfect lines, introduce irregular ones, frequently with greater clearness of imagery and with some striking effect, e. g.:

Headlong themselves they threw
Down from the verge of Heaven: eternal wrath Burnt after them to the bottomless pit. Milton, P. L. vi. 864f.
Down the long tower-stairs, hesitating.
Tennyson, Lancelot and Elaine.
I saw the flaring atom-streams
And torrents of her myriad universe, Ruining along the illimitable inane.

Tennyson, Lucretius.

In such lines as these the poet really uses an irregular or exceptional foot after he has first created what we may call a psychological atmosphere or mental attitude, and has established his metre by many faultless lines. Under such circumstances the freer foot presents no difficulty and is by no means displeasing to the reader. The early poets of Rome availed themselves of a somewhat similar freedom, and composed their verse largely according to the ear. The later classical poets observe the formal rules of the Ennian prosody taught in the schools, but since it is difficult entirely to supersede nature, they not only seek variety by means of the many different schemata of the hexameter, but they also compose at times according to the ear and according to their recollection of particular words as they stand at prominent places in the line. This may best be illustrated from a few peculiar and difficult, but notable words which the classical poets, for the sake of metrical convenience, place before the fixed caesura, such as mālüūsti, fōrtǖ̆tus, ${ }^{10}$ grātūūtus, pītū̄̆ta, $\bar{a} r c u ̆ a ̄ t u s, ~ c o ̄ n u \bar{u} b ̆ u m, ~ v i e ̄ t u s, ~ H a ̄ a d r i ̄ a n u s, ~ e t c . ~ T h e ~ c o n-~$ sent and the approval of the grammarians and the precisianists is gained originally of course only by the theory and the artifice of synizesis and by the necessity of providing for the masculine caesura. Typical examples are Lucil. 59.5 B. id quod máluisti ${ }^{3}$, te; Cat. 62.57 cum par cónubiu ${ }^{3} \mathrm{~m}$ maturo; Verg. Aen. 7.253 quantum in cónubio ${ }^{3}$; Juv. 13.225 non quasi fórtuitu ${ }^{3}$ s nec; Manil. 1.182 nam neque fórtuito ${ }^{3}$ s. But after these words have once gained their fixed position in the line, the original theory is largely lost sight of and it makes absolutely no difference in some cases whether we call the license employed synizesis or correption (systole) or even the irregular foot (—u -) admitted in a difficult word under the camouflage of synizesis. For nothing can be clearer than that the license in question does not offend the eye or do violence to the literary script. Hence in the end, as is well known, conūbium (conūbjum), like diūturnus, ${ }^{11}$ is often correpted (conŭbium), ${ }^{12}$ and-not unlike Commodian in a later age-Statius has composed, according to the ear and his recollection of the caesura, a remarkable hendecasyllable, which yet observes most scrupulously all the traditional rules, viz. Silv. 1.6.16 lárgis grátuĭtúm cadít rapínis. For the license which he admits is here abundantly justified both by the choriambus (as we shall see later) and by the regular caesura.

[^124]
## II. Licenses of the Iambic Verse-Close

It is well known that, for the sake of metrical convenience, Plautus and Terence admit many less familiar forms at the end of the line or hemistich which are not acceptable elsewhere. ${ }^{13}$ Lindsay's terse statement is here a most excellent one (Captivi, p. 42) : 'It is in this part of the line that all forms and scansions that are little used, whether on account of antiquity or of novelty, are to be looked for.' It is therefore in the verse-close that we find such archaisms and neologisms as face, siet, creduas, duint, laudarier, ${ }^{14}$ fūerit, f̄̄eri, sumpsë̀runt (vulgar scansion of Perf. Ind.), purigo, mavolo, amaveram, amavero, cognoverim, periculum, dextera, nĭhil, dĕos, etc. Brock has shown that essentially the same principles are followed by the later iambic poets, such as Catullus, Horace and Seneca, and Schmidt ${ }^{15}$ long ago pointed out that it is only in the verse-close that Seneca shortens the first syllables of the Greek words Hebrus, Cyclas, $h y d r a$, and admits, through metrical exigency, Hëbrús, etc.

As I have myself noted also at some length in my study of Plautine Synizesis, ${ }^{10}$ many of these words which the dramatic poet places at the end of the line do not have in ordinary speech the full value of three morae in their last two syllables, but contain a greatly weakened or diminished syllable, viz. $a m a^{v e} r a m$, periculum, $n^{i h} i l, d^{e} o s$, etc., yet these faintly uttered syllables in the verse-close do not disturb the reader or cause serious metrical ambiguity, for the reason that the poet has firmly established his metre by many perfect closes and the reader expects, in the last foot, to give even a weak syllable the value of a full mora. Furthermore it is legitimate for the iambic poets to resort to diaeresis and to resolve the eu diphthong for the purpose of forming the verse-close, as Accius frgm. 668. R. iam hanc úrbem

[^125]ferro vástam, faciet Péleüs; Phaedr. 5.1.1 Demétrius qui díctus est Phălěreüs. ${ }^{17}$ Again the language of the dramatic poets is simpler and more natural than that of the Augustans, but it is well known that, in order to form the two difficult feet of the close, they often break up the usual word-orders and resort to tmesis-forms and a more artificial arrangement of words and phrases (hyperbaton). ${ }^{18}$ We shall see later that the same licenses which belong to the pure iambus in dramatic poetry, belong, in dactylic verse, to the pure dactyl, and, in logaoedic verse, to the necessary choriambus.

I may illustrate the principles just set forth from the much discussed scansion of frustra, which has a short final in Plautus, but a long final in classical poetry. The view of most critics to-day is that an exceptional shortening, a new scansion, should appear last in the pure feet. Nothing could be more contrary to the actual facts. Owing to the pressing need of short syllables, such a scansion makes its appearance first in the necessary feet. In other words, as soon as a syllable becomes doubtful, the new scansion appears in the pure feet. Thus frustrā/a, with the doubtful final, was the real quantity of the adverb in Plautus' time, yet the poet never uses it with the last syllable long, but places the phrase ne frustră sis six times in verse closes. ${ }^{19}$ Similarly the final syllable of the interjection eia, according to the grammarians, was doubtful (Müller, p. 420), yet Ennius and the classical poets place it always in the first and fifth feet with correption.

## III. Müller's Discussion of Licensed Feet

The fact that certain feet of the hexameter as well as of lyric and iambic verse admit occasionally very marked licenses by no means wholly escaped the observation of Müller. Thus he rec-

[^126]ognizes unreservedly both in his Res Metrica ${ }^{20}$ and in his Satires ${ }^{21}$ of Horace that length by position before $s c, s p, s t$ and $z$ is neglected by many authors in the first foot, 'which enjoys a greater freedom,' in the fifth foot 'because of its pure dactylic nature, ${ }^{22}$ and finally in other metres 'which require a short thesis,' i. e. require a pure iambus, a pure trochee or a pure dactyl. This statement, which shows in minute detail a genuine understanding of the somewhat complex principles involved, is fully elaborated and wonderfully complete-as a result, no doubt, of the long controversies over the rule of $s$ impure, in which many eminent classical scholars have taken part. We could wish that he might have shown similar completeness and similar insight when he discussed, for example, the shortening of final $o$ and the question of short syllables in hiatus.-Müller recognizes also in his citations the occasional neglect of position in the fourth foot, which in this license, as in many others, sometimes assimilates itself to the fifth foot, ${ }^{23}$ as Prop. 4.18.21 venu ${ }^{4} n d a t a ̆$ Scylla figura. The usual license and usual neglect of position is seen of course in Verg. Aen. 11.309 spem . . . in armis | po ${ }^{1}$ nitĕ: spes sibi quisque; 3.270 nemoro ${ }^{5}$ sa Zacynthos (proper name also involved). Müller correctly recognizes also as fully legitimate the shortening in the pure fourth foot of the trimeter, as Prud. Steph. 10.688 magístră spe $_{4}$ ctet impia. Better examples are offered, however, by Seneca ${ }^{24}$ (whom he does not quote), as Oed. 541; Agam. 433; Herc. F. 916 trucis ántră $Z e_{2}$ thi; Thyest. 845 tramǐtě zonás (lyric anap., two shorts difficult to provide and here without metrical ambiguity) ; Oed. 421 retinéntĕ zóna (Sapphic, pure trochee). Shortening is also allowed rarely in the pure dactylic penthemimer (second half dact. pentam.) as Mart. 14.151. Finally, if we add that a single case occurs in which a Roman poet has shortened such a syllable within the hexameter in the second trochee (Prop. 4.5.17

[^127]consului ${ }^{2}$ tquĕ strigés), we shall have a complete statement of these licenses.

If we turn next to Müller's treatment of hiatus in the thesis, ${ }^{25}$ we find that he again clearly recognizes the existence of licensed feet, viz. the first and fifth feet of the hexameter (sometimes also the fourth foot), and the necessary cyclic or irrational dactyl of the hendecasyllable. Thus he admits hiatus in the thesis in the case of dactylic or pyrrhic words ending in $m$, as Enn. Ann. 322 M. du ${ }^{1} \mathrm{~m}$ quidĕm únus; ib. 354 mirlitŭm ócto. $^{\text {on }}$ He recognizes hiatus also in cretic and iambic words, with shortening of the long vowel (semi-hiatus), as Verg. Aen. 3.211 $i^{1} n s u l a e ̆$ Ionio in magno; Georg. 1.281 imponere $P e^{5} l i o ̆ ~ O s s a m . ~$ From the hendecasyllable he quotes only Cat. 57.7 uno in léctulŏ, érudituli ambo, but, besides 55.4 (circó tĕ in), Catullus has 10.27 deferrí. Manĕ ínquii puellae. After a dactylic fourth foot Homer sometimes allows hiatus, even when a bucolic caesura is not recommended by the sense, ${ }^{26}$ and Vergil uses the same license, as Ecl. 3.79 et longum, 'Formose, vale, ${ }^{4}$ valĕ,' inquit, 'Iolla.' Still more legitimate is hiatus in bucolic punctuation; for in this case, as is well known, the fourth foot must be a pure dactyl, e. $g$. Ecl. 8.11 a te principium, tibi $d e^{4} \operatorname{sinăm:~accipe~}$ iussis | carmina tuis. Finally, I may add that hiatus is allowed in the pure dactylic penthemimer, as Cat. 114.6 dúm domŏ ipse egeat. I need not here refer to Müller's views on short vowels in hiatus; he had here no clear or settled principles that could throw light upon this vexed question.

Again Müller has a valuable study ${ }^{27}$ of the use of neque, which becomes a pronounced archaism in the Empire and is therefore admitted only in licensed feet. In Martial and Lucan, for example, neque occurs (except for the locution neque enim) only in the cyclic dactyl of the hendecasyllable and in the first, rarely the fourth, foot of the hexameter. How little Müller understood the doctrine of licensed feet taken as a whole, is here fully evident; he remarks casually in explanation that 'the first foot and sometimes the fourth possess a larger freedom,' and does not even stop to note the striking fact that the fifth foot, so highly privileged heretofore, no longer appears in the reckoning. In the mythology a search was always made for the lost Osiris and for the beautiful youth, Hylas, who went down in

[^128]quest of his pitcher and was carried off by the nymphs, but Müller makes no search for the lost dactylic foot. The reason for the exclusion of the fifth foot is, however, perfectly obvious. Lucan ${ }^{28}$ very rarely forms the fifth foot from a monosyllable followed by a pyrrhic word, such as at mihi, na $a^{5} m$ neque Pindi (Verg. Ecl. 10.11), and he never allows conflicts in-accent, such as humú ${ }^{5} m$ neque tánto (Georg. 2.153). In the later dẹvelopment neque is therefore excluded both from the fifth foot and from the penthemimer by considerations relating to complete agreement of accent.

Fortunately we are not dependent upon the study of a single archaic usage. Thus Lange ${ }^{29}$ has collected all the examples of the use of the obsolete infinitive passive in -ier, and pointed out that its proper place in the dactylic poets is in the fifth foot; it is admitted also rarely in the first and fourth feet. ${ }^{30}$ A typical example is Verg. Aen. 4.493 dulce caput, magicas invitam acci5ngier artes. In a precisely similar way it is freely admitted by Catullus in the cyclic dactyls of his Glyconics and Pherecratics, as 61.42 se citarier ad suum ; ib. 68 stirpe nitier: at potest; ib. 65 compararier ausit; and it is used by Horace once in the Adonic, C. 4.11 .8 spargier agno.

Scheffler, in his study of the forms of the perfect ending in $-v i$ in the dactylic poets, has also shown that the full or obsolete forms in̉ -averam, -averim, -avero and in -iveram, -iverim, -ivero are retained chiefly in the fifth foot. ${ }^{31}$ Thus Vergil uses the full forms in -averam and -averim eighteen times in the fifth foot and four times in the fourth. Archaic verbal forms are also freely admitted in the cyclic dactyl of logaoedic verse; cf. Cat. 34.8 deposivit olivam (Pherecrat.). Zingerle ${ }^{32}$ has also noted that certain words and phrases are regularly placed in the clausula of the hexameter from Ennius to Paulinus of Nola, while Asmus ${ }^{33}$ has pointed out that of one hundred and sixty-five
${ }^{28}$ See Trampe, De Lucani Arte Metrica, p. 31.
${ }^{20}$ Denkschriften d. Wien. Akad. X, p. 1-58.
${ }^{30}$ Of the eighty-four examples which occur in the hexameter, sixty-eight are in the fifth foot. It is probably not found in the first foot after Lucretius and Cicero's Aratea. Vergil used this form five times in the fifth foot and once in the fourth (Aen. 8.493); Horace used it six times in the fifth and twice in the fourth foot with bucolic punctuation (Sat. 1.2.78; Ep. 2.2.151).

[^129]proper names in the first book of Propertius, one hundred and thirty-two occupy prominent positions in the verse ( 23 standing in the beginning of the verse, 35 in the end and 74 in the caesura). I may add that the archaic and vulgar fulgĕre, fervĕre, coniverre ${ }^{34}$ used as verbs of the third conjugation stand in the first and the fifth, more rarely in the fourth foot, and it was no doubt in such a position that Catullus used the cavëre cited by Servius (on Aen. 3.409). Similarly Vergil, for example, with only one exception, allows consonantization in abiete (i. e., $\bar{a} b j e t e)$, ariete, arietat, parietibus, genua and tenuia only in the first and the fifth foot (seventeen times in all). ${ }^{35}$ The same license is also allowed in the hendecasyllable, as Priap. 2.10 templi párietibús tui notavi. The single Vergilian exception occurs when the hardening is admitted also immediately before the caesura, as Aen. 2.442 haerent pa²rietibús scalae; for Brock, Stange and others ${ }^{36}$ are wholly right in holding that before the fixed caesurae we have other, but rarer, positions which admit greater freedom. I shall reserve, however, the treatment of licenses before the caesurae for a separate study. Müller cannot conceal his amazement also (l. l., p. 295) that the scansion věhĕmens, instead of the usual vēmens (veemens), is found only twice in all Latin poetry, and each time in the necessary dactyl of the hendecasyllable, but there is nothing really surprising inthis fact to any one who will observe carefully the exceptional forms which are sometimes employed to form the pure or necessary feet. Therefore we should neither blame Ausonius, as Müller does (p. 294), for writing Idyll. 11.16 Gangeticus a ${ }^{5}$ ntĕĭt ales, nor need we be surprised to find nîhŭl and nĭhĭlo occurring first in the verse-closes of Terence and in the cyclic dactyls of Catullus, as 61.193 caelités. nh̆hĭló minus (Müller, p. 296).

## IV. Ennius’ Own Usage

The beginning of many metres often exhibits a greater freedom, ${ }^{37}$ and it is well known that Ennius in a few cases allowed

[^130]even the proceleusmatic and the anapaest as a substitute for the dactyl in the first foot, ${ }^{38}$ e. g.:

> capitibu' nutantis pinos rectosque cupressos.-Ann. 267 M.
> mělănūrum, turdum, merulamque umbramque marinam.-Sat. 59 M .

Somewhat similarly Lucretius begins a hexameter (4.1026) with pueri, but was persuaded perhaps by the learned grammarians of his age to adapt his verse more carefully to the eye of the reader and to write with a species of camouflage: $p u^{1} r i$ saepe lacum; compare also the unusual syncope in Juv. 3.263 stri ${ }^{1}$ glibus et pleno, where the reader is perhaps permitted to recite, if he wishes, stril gilibuis. Exon (Hermath. 13.158) maintains, with good ancient authority, that even Vergil allowed the use of the anapaest in the first foot in Georg. 1.482 flü ${ }^{1}$ vīōrum rex Eridanus. Undoubtedly the reader, whose license is always greater than that of the poet, is permitted to recite the first foot here as an anapaest if he wishes, but it is probable that even in the first foot the Augustan poets and grammarians, who were so familiar with all the usages of Homer, would have greatly preferred the nomenclature, at least, of synizesis (flūvjōrum). Ennius also occasionally admitted shortening in the first foot, sometimes even in violation of the orthography and the law of position, as $A n n .102$ M. vi ${ }^{1}$ rginés ${ }^{39}$ nam sibi quisque; ib. 287 $n 0^{1} n$ enim rumores ponebat; ib. $481 \mathrm{si}^{1}$ cuti fortis equus. These examplès are familiar to all students of Ennian verse, although the logical conclusion respecting the greater freedom of the first foot is by no means always drawn. It is much more important to point out that the fifth or pure dactylic foot also enjoys exceptional freedom in Ennius, e. g.:

quis pater aut cognatu' volet nos cos $n t r a ̆$ tueriq-Ap. Varr. L. L. 7.12.40 Surrenti tu elopem fac emas, glaucu5m apŭd Cumas.-Sat. 26 M.

In the last verse Ennius, who has fĩerī (A.501) and fĩeret

[^131](A. 371) within the hexameter, claims the same liberty as Plautus in his verse-closes ( $f \bar{z}-$ ). He may very possibly have actually written here the archaic Inf. fīere, which he uses elsewhere for the first or the fifth foot ( $A n n .10 .20$ ) and which editors usually substitute here; compare the Augustan poetical ablatives caelestĕ, perennĕ, bimestrĕ, imparĕ, separĕ, marĕ, etc. Laevius also uses fiërrĕ in the hendecasyllable (Gell. 18.7.10).

We conclude then that in the first foot Ennius allowed shortening even against the script and the testimony of the eye, as in virginĕs nam, non enïm rumores, sicutĭ. In the pure fifth foot also he admitted ludicrĕ, contră, fīeř̆, and fīere, and once even against the eye ap $\check{u} d$ Cumas. After all the 'old man eloquent' of Roman schoolmasters was a genuine and original poet, and was not wholly a servile imitator even of Greece. His system approaches closely, it is true, the precise and elegant Greek prosody, and seeks to suppress almost all common syllables, yet it still retains and openly admits a few Roman licenses. Thus it is, in the well-chosen words of Horace, ${ }^{41}$ that some traces of 'rudeness' and of native strength will always remain in the Roman poets.

Furthermore while Ennius in his hexameters regularly retains the original quantity of the verbal endings - $\bar{a} t$ and - $\bar{e} t$ after a long syllable, ${ }^{42}$ we find that he allows shortening here by exception in the fifth foot, as Ann. 138 M. mande $b$ băt homo-
 so also Tereace, Ad. 453, shortens audírĕt haéc (scanned like auferént) in the pure iambus of the verse-close. Similarly we find the shortening of mīles for ${ }^{*}$ miless and prōdes for ${ }^{*}$ prodess first in the fifth foot, as Enn. Ann. 277 M . mi ${ }^{5}$ lĕs amatur; Lucil. 306 B. mil ${ }^{5}$ ĕs Hibera; ib. 876 pro $^{5} d e ̆ s$ amicis. The simple verb ĕs for ${ }^{*}$ ess first appears in Enn. Ann. 580 M . in the first foot (au ${ }^{1}$ sus ĕs hóe ex ore tuo), and exŏs for *exoss first appears in Lucr. 3.721 ( $e^{1} x o ̆ s$ et exsanguis). A striking example is afforded also by sanguis. In the age of Lucretius, as is well known, sanguīs for *sanguins was still long within the verse (Lucr. $4.1050 ; 6.1203$ ), but it was beginning to shorten, and

[^132]Lucretius therefore allows it to be short in the fifth foot, viz. 1.853 sa ${ }^{5}$ nguis et os $<$ sa $>$. Hence Munro is mistaken in saying that sanguıs is unknown to Lucretius, and the correction to sanguen et ossa is quite unnecessary. Merrill, the latest editor, restores sanguis to the text. Similarly, like Tibullus also (1.6.66), Vergil still considers sangū̄s long within the verse (Aen. 10.487), but ventures to shorten it three times in the first foot, viz. Aen. 2.639 (sa1nguis, ait) ; 5.396; Georg. 3.508. Horace also correpts sanguis in a cyclic dactyl, C. 1.24 .15 num vanae redeat sánguĭs imáginí (Asclep.). So also $t o^{1} r q u e ̆ s ~ a p p e a r s ~$ first in Statius, Theb. 10.518 to ${ }^{1}$ rquĕs in hostiles (so Klotz, though $P$ has to ${ }^{1}$ rquis), while Propertius (4.10.44) prefers an unusual spelling ( $t o^{1} r q u i s$ ab incisa).

I trust that my meaning is sufficiently clear. The first and the fifth feet of the hexameter (more rarely the fourth), the necessary dactyls of the pentameter, the cyclic dactyls (or choriambi) of logaoedic verse, the necessary iambi of the trimeter, possess special licenses, if the poet needs or thinks he needs to avail himself of these. The striking shortenings that the literary language has accepted from the time of Ennius on, viz. the correption of final -at, -et, etc., after long syllables and especially that of final - 0 , have all been carried out and achieved through the licenses of these feet, and the student who overlooks this fact can scarcely trace with accuracy the later development of Latin prosody. Shortened proper names, such as Lăvinia, Fı̆dena, Ăpulia, occur only within these feet. Yet in the broader sense every part of the standardized hexameter possesses some special freedom of its own. Especially do surprising shortenings occur sometimes-though much more rarelyimmediately before the masculine caesura (as has already been mentioned), and also in the second word before the fixed caesurae, i. e. in the second or even the third trochee. Thus Ennius regularly has the ending - $\bar{o} r$ in nouns, but we find $A n n .455 \mathrm{M}$. totum $s u^{2}$ dŏr habét., Lucretius begins by shortening the less stable adverbs superne and inferne repeatedly in the fifth foot ( 4.439 ; 6.187 ; etc.), but he ends by shortening superne twice in the second trochee, e. g.:

$$
\text { tecta supe }{ }^{2} r n e \check{e} \text { timent, metuunt infe } e^{5} r n e ̆ \text { cavernas.-Lucr. } 6.597 .
$$

The Latin language has such a deficiency of short syllables that Horace follows readily the example of the great poet of Nature in order to form the necessary iambus of his Alcaic verse:

[^133]Similarly the poetical forms of the ablative in $\breve{\text { e }}$, as caelestĕ, cognominĕ, imparĕ, marĕ, etċ., ${ }^{44}$ belong regularly to the characteristic feet metri gratia, but Lucan and Ovid have a right, too, to place these forms, if they wish, in the trochaic caesura, as Luc. 7.391 erepto nata ${ }^{3} l$ lĕ feret. tunc omne Latinum; Ov. Fast. 3.654 amne pere ${ }^{2} n n e \breve{c}$ latens Anna Perenna vocor. The systematic shortening of final $o$ can only be carried out by means of the characteristic feet, as is done by Catullus, Horace and Ovid, but we find also very rare early examples of iambic shortening before the fixed caesurae, as Verg. Aen. 3.602 hoc sat eri ${ }^{2}$ t. Sciŏ me; Lucr. 6.652 nec tŏta $\mathrm{pa}^{2}$ rs, homŏ terrai quota totius unus; cf. Pers. 5.134 et quid aga $^{2} \mathrm{~m}$ ? Rogăs? én, saperdas.

## Usage Subsequent to Ennius

As we know from Quintilian ${ }^{45}$ and other authorities, not only the forms but also the quantities of words (mensurae verborum) were thoroughly taught in every literary school and, no doubt, also in every club or college of the poets. ${ }^{46}$ Thus the rules for final syllables especially in the new prosody were early reduced to a rigorous system and were thoroughly mastered. Hence, in spite of the fact that the Latin metres really possess an unmistakable freedom in certain feet, the Alexandrian technique and the strict rules of the grammarians bar the way, and in general only a few isolated examples of popular shortening are here admitted by the writers of literary Latin, that is, of the 'Schrift-' and 'Hochlatein.' ${ }^{\text {T }}$ The great outstanding exception to the conservative and learned tradition in classical Latin is of course the thorough-going shortening of final $o$, which was first freely admitted in the characteristic feet by Catullus, Horace and Ovid. After the poetae novi, however, had renounced entirely the apocope of final $s$, this extensive innovation became strictly necessary by way of compensation, and we may be sure that the great literary teachers of the late Republic, such as the Greek Parthenios of Nikaia and the Roman Valerius Cato, themselves gave the signal and approved the license. As regards the restoration of final $s$, it took place very gradually, as Maurenbrecher has so well shown, but it was in the first place

[^134]an extremely bold and well-nigh unparallelled undertaking, in some respects almost comparable to the recall of the French $e$ mute; the complete success finally gained showed clearly that the academicians and precisianists were absolute masters of the 'Hochlatein.' As a consequence the Augustan poets, Vergil, Horace, and Tibullus, composed their verse in a period when the rules of prosody were most severe and the poetical language was most narrowly contracted. For metrical reasons the best poets placed in the cyclic dactyl or in the verse-close occasional obsolete or vulgar forms, as face (Cat. 36.16), fas rier (Verg. Aen. 11.242), $i^{5} n q u e ~ l i g a t u s ~(A e n . ~ 10.794), ~ h o ~ s i s c e ~ s e c u t u s ~(H o r . ~$ Sat. 1.4.6), parvi ${ }^{5}$ ssima quaeque (Lucr. 1.615), parvíssimús (Varr. Papiap. 6 R., iambic close). They close the verse also with homo ${ }^{6}$ nem (Enn. Ann. 138 M.), e ${ }^{6}$ scit (Lucr. 1.619), obi ${ }^{6} v i t$ (Verg. Aen. 6.801), mori ${ }^{6} r i$ (Ov. Met. 14.215), cupi ${ }^{6}$ ret (Lucr. 1.71), veta ${ }^{6}$ vit (Pers. 5.90), or they force the accent in $i^{5} l l i u s$ (arma), perá ${ }^{6}$ gro, tené ${ }^{6}$ brae and the like. Because of the frequent difficulty of composing the close, they admit also the hypermeter to an extent undreamed of by the Greeks, as Verg. Aen. 1.322 hominúmque locó ${ }^{6} r u m q u(e) \mid \mathrm{e}^{1} \mathrm{rramus}$. It would be passing strange then if they did not admit also an occasional archaic or popular scansion in the necessary feet.

I purpose to discuss shortening itself under the following seven heads: ${ }^{48}$ (1) the shortening of final vowels, such as superne, Calpe, postea, commoda, etc., including the shortening of final $o$, which has received a vast extension; (2) shortening by the extensive use in poetry, metri gratia, of exceptional and vulgar ablative forms spelt with $e$ instead of $i$, as praepete and sospite in Ennius, and later caeleste, cognomine, humile, divite, mare, etc. (see Müller, p. 483; Neue-Wagener, Formenlehre, II ${ }^{3}$ 54ff.; I ${ }^{2} 229$; Köne, l. l., pp. 70, 90, 111) ; (3) shortening by the reduction of the double consonant in writing or in speech to a single one, such as hic (c), hoc (c), cor (r)uptus, tintin ( $n$ ) ant, Catil( $l$ ) us, etc. This head comprises examples of the law of mamilla, such as co $(t)$ tidianus, Brit $(t)$ anus, and we may also include here cases like cŏturnix, mŭtoniatus (compare conscrĭbillo); ${ }^{49}$ (4) shortening in Roman proper names, such as Lăvinia, Grădivus, Prŏserpina, Cy̆rene (not the Greek mythological heroine, but the city of Roman Africa) ; (5) shortening, metri gratia, in any compound of pro, as a species of poetic

[^135]camouflage, as though the preposition were always of doubtful quantity; (6) shortening through absolute metrical necessity, as in diŭturnus, diŭturnior, egerĭmus, Hannibălem, fīcĕdulas, zmarăgdos; (7) certain or probable shortening, through metrical convenience, under the camouflage of synizesis, as gratuittus, conŭbium, Leucŏsiam, Paeŏniīs, Servŭlius, Hadriănus ('the irregular foot').

Under several of these categories the well-attested literary examples are very few; they can be counted almost upon the fingers of the two hands. Examples of short syllables in hiatus and even of diaeresis are also very rare. Yet the remarkable and significant fact is that, in a language which is entirely devoted to Alexandrian precision and refinement of technique and which has changed so completely a large part of its original character, these few examples still continue to occur incontestably in the very best and choicest authors. The historical grammarian, we know, does not esteem the law of mamilla quite negligible because in the literary period only half a dozen words fall under its operation. Furthermore we cannot disregard the few occurrences in the 'Hoch-' and 'Schriftlatein,' when we consider the numerous similar licenses which occur freely in the popular poetry of the Carmina Latina Epigraphica. Still less can we neglect even the rare and occasional occurrences when we reflect that one of the categories, viz. the shortening of final $o$, which at first was only one of these insignificant licenses, has finally obtained the widest possible acceptance, and that a second category, the shortening of Roman proper names, is also numerically large.

## I. Shortening of Final Vowels

It is naturally in indeclinable forms such as adverbs that we find the few examples of unusual shortenings with final $i, e$ and $a$ chiefly admitted, viz. firmiterque, sicuti, ${ }^{50}$ superne, inferne, postea, contra, also sollo, ${ }^{51}$ and later many other adverbs in $o$, such as ergo, vero, immo, intro, etc.; see Müller, p. 416 f . Examples are Lucil. 315 B. fir ${ }^{1}$ rmitěrque hóc peniteque tuo sit pectore fixum; 164 B . si ${ }^{1}$ cutĭ, cúm primus ficos propola

[^136]recentis; Lucr. 2.536 si ${ }^{1}$ cutǐ quadripedum cum primis esse videmus (so Merrill, 'the latest editor; see also Munro's critical note in which he admits the weight of MS. authority) ; 3.816 si ${ }^{1}$ cutĭ summarum summast (but 5.361 si $^{1}$ cut summarum) ; Cic. Arat. 131 si $^{1}$ cutǐ cum coeptant. Supernĕ and infernĕ occur often in Lucretius, as 4.439 supe $^{5} r n e ̆ ~ g u b e r n a ; ~ 6.187 ~ i n f e ~ e ~ r n e ̆ ~$ videmus, see above, p. 266.-German. Phaen. 568 Lanigeri et Tauri, Geminorum, po ${ }^{5}$ steă Cancri (Müller, p. 420: post ea, which is a barbarism and scarcely Latin); Ov. Fast. 1.165 po ${ }^{1}$ steă mirabar cur non sine litibus esset (Merkel: post ea); perhaps Varr. Lex Maen. $11 \mathrm{po}^{4}$ steăquam hómines (troch. sept., cf. Müller, p. 547) ; Manil. 2.253 co ${ }^{1}$ ntră iacet cancer patulam distentus in alvum; Enn. Ann. 550 M. he ${ }^{5}$ jă machaeras; Val. Fl. $8.109 \mathrm{e}^{5} \mathrm{iă}$, per ipsum (see above, p. 259) ; ${ }^{52}$ Lucil. 311 B. non so ${ }^{5} l l$ ŏ, dupundi; Ov. Trist. 1.1.87 e ${ }^{1}$ rgŏ cave; Stat. Theb. 2.187 nos ve ${ }^{5}$ rŏ volentes; Mart. 1.85.4 fenerat immŏ magis (penthemimer), etc.

Cavĕ and pută are found also chiefly in the licensed feet, though they also occur rather freely elsewhere; yet within the hexameter the more usual scansion is cave and putā.-Cat. 10.26 ístos cómmodă; nám volo ad Sarapim | deferri. The shortening here also provides for Catullus' favorite diaeresis after the second foot. We should remember too that it is precisely at this point in the hendecasyllable or the Glyconic that he correpts cave three times (as 50.18 núnc audáx cavě sís) and allows the new shortening of $o$ seven times in iambic words (volŏ, dabŏ, homŏ), as 13.11 nam únguentúm dabŏ, quód meae puellae. Lesbia's poet could not know that he would astound the grammarians of a distant age by this single license, ${ }^{53}$ which is really no bolder than that of c. $85.2 \mathrm{ne}^{1} \mathrm{scio}$, or that of Maecenas' hendecasyllable addressed to Horace: plús iam díligŏ, tú tuum sodalem. For it was not yet clearly determined whether final $a$ or $e$ or $o$ would be shortened to afford the relief which the Roman poets so greatly craved.-Mart. 10.20.1 me Salo Ce ${ }^{5}$ ltibĕr oras (Gk. Kє $\epsilon \tau i \beta \eta \rho$, and Celtibēr, Cat. 39.17) ; similarly, accord-

[^137]ing to Victorinus (Müller, p. 399), Samnīs was later shortened to Samnŭs just as sangǔ̌s and pulvĭs.-Juv. 14.279 aequora transiliet, sed longe $\mathrm{Ca}^{5} \mathrm{lp}$ pe relicta. Bentley, quoting Philostratus, argued here for the ablative of a nominative Calpis, and this is possible, since the fifth foot is a favorite place for neologisms. Far more probable, however, is the ancient view (Priscian VII § 8) that we have here a correption of the usual and current form; cf. Auson. Idyll. 6.24 et de nimboso saltum Leuca ${ }^{5}$ tĕ minatur; compare also salvĕ repeatedly C. L. E. 1504 (age of the Antonines). It is to be remembered also that it is in the fifth foot that Juvenal has such shortening as 3.232 vigila ${ }^{5}$ ndŏ, sed ipsum, not to mention 11.91 postre ${ }^{5}$ mŏ severos; 1.169 se $^{5}$ rŏ duelli, and earlier Hor. Sat. 1.9.43 Maecenas quo ${ }^{5}$ modŏ tecum. The 'singers of Euphorion' admit in Greek words a Dat. Sing. with correpted i metri gratia (Müller, pp. 488,496 ), but only in licensed feet; Statius here usually writes $e$ for the correpted $i$ on the principle of caeleste for caelesti and of sibe, quase, here, for sibi, quasi, heri. ${ }^{54}$ Examples are Stat. Theb. 3.521 saepius in dubiis auditus $\mathrm{Ia}^{5}$ sonĕ Mopsus (Klotz
${ }^{54}$ Quintil. 1.7.24; 1.4.8; nise CIL. V 4113; ube IX 3895, see Maurenbrecher, Hiat., p. 193 and Lindsay, L. L., p. 25. For the Dat. Sing. in $-e$ in old inscriptions, perhaps $-\bar{e}$, see Lindsay, L. L., p. 387; Stolz, Formenlehre, ${ }^{3} \$ 85$; Maurenbrecher, l. l., p. 192, however, argues for -ě. The vulgar Dative in -ĕ is occasionally used by the poets (Müller, l. l., 497), as Enn. Ann. 395 M. malo ${ }^{4}$ cruce, fátur, uti des; probably Ov. Her. 4.64 me tua forma capit. capta pare ${ }^{5} n$ tě soror (' My sister was captivated by your parent,' parenti); 5.75 desertaque cosniugě ploret; 5.126; 12.162; perhaps Verg. Aen. 10.653 coniuncta crepisdine saxi. It would be possible also to hold that Ovid forces the grammatical construction and uses poetically the abl. of the instrument. The question is a complex one, and only a somewhat hasty treatment is given in Neue $I,{ }^{2}$ p. 195. In any case Statius, in writing glaucae certantia Doside, follows wellestablished principles of Latin orthography, which show a great dislike for final -乞 (Müller, p. 497), and usually allow it only in the small nisi, sibi, ibi group. Hence we have mare for older *mari, mīte for older *mïtǔ (Lindsay, L. L., 206), and final - $\imath s$, when the $s$ is dropped, is properly written $e$ in Latin, as in the well-known simile est, quale est, pingue est, etc., of the early dramatists (see examples in Leo, Plaut. Forsch., p. 259); later also CLE. (Büch.) 977 aetate his parva iaceo, lacrima ${ }^{5}$ bile semper, i. e. lacrimabili(s) ; CIL. I 63, 64 tribunos militare; I 818 Dite pater; so always in mage, i. e. magi(s) and fortasse, i. e. fortassi(s), while pote est represents both poti(s) est (masc.) and pote est (neut.). Even in Cat. 64.247 it would be possible to read Minoidě; the best MSS. have Minoida.
needlessly corrects to Iasoni) ; Silv. 4.2. 28 et Chios et glaucae certantia Do ${ }^{5}$ ridĕ saxa (Klotz Doridi) ; Achill. $1.285 \mathrm{~Pa}^{11 l l a d i ̆ ; ~}$ perhaps Juv. 15.5. dimidio magicae resonant ubi $\mathrm{Me}^{5}$ mnonĕ chordae (see Duff's note, $\mathrm{P}^{1}$ has Memnonie) ; Cat. 64.247 Mino ${ }^{5}$ idĭ; 66.70 Tethyı̆ (penthemimer); Ov. Her. 8.71 Castor(i) Amýclaeo.-We find occasional shortening of iambic words in the fourth foot, as Hor. A. P. 65 diu ${ }^{4}$ palŭs aptaque remis; Val. Fl. 5.594 mero: $:^{4}$ vidě lata comantem; Hor. Sat. 2.5.75 eri ${ }^{4} \mathrm{t}$ : cavĕ te roget ultro; possibly also Ov. Trist. 1.8.21 idque quod ignoti faciunt, valĕ dicere saltem, that is, if valĕ is the MS. reading here (Haupt vae; Merkel vel).-Here belongs also apparently the correption of the perfect $i \bar{\imath} t$ and its compounds exī̈t and transīt ; for, notwithstanding the arguments of Munro on Lucr. 2.1042, scholars usually hold that the final syllable in these perfects is normally long (Müller, p. 399). Vergil, however, who shortens hic (c) twice, and, with elision, shortens Polliŏ, nuntiŏ, audeŏ in the first foot (Müller, p. 414), also correpts exiit in this foot, as Georg. $2.81 \mathrm{e}^{1}$ xiît ad caelum ; Aen. $2.497 \mathrm{e}^{1}$ xiĭt oppositas, yet he carefully avoids placing either - -o or -it in the close, though, from the regular verb, ambio, he admits Aen. $10.243 \mathrm{a}^{5} \mathrm{mbiit}$ aúro. The Flavian poets are the first to corrept these perfect forms in the close, as Sil. 13.166 tra $^{5}$ nsiut ictu; Sulpic. Sat. 23 e ${ }^{5}$ xiĭt arces.

To treat adequately the shortening of final $o$ would require a separate article. I select, however, a few early and notable examples, including trochaic words and the abl. of the gerund: Verg. Ecl. $8.43 \mathrm{nu}^{1}$ ne scio quid sit amor; Tib. 2.6.41 de ${ }^{1}$ sinŏ; Hor. C. 2.1.14 et cónsulénti Pólliŏ cúriaé (Alcaic) ; Sat. 1.10.42 Po ${ }^{5}$ lliŏ regum ; Sat. 1.4.104 $\mathrm{di}^{1}$ xerŏ ; Sat. 1.4.93 me ${ }^{1}$ ntiŏ ; Lygd. 6.3 aufer et ipse meum periter medica ${ }^{5}$ ndŏ dolore; Ov. Her. 9.126 fortunam vultu fassa tegendŏ suam (penthemimer; so Merkel with G) ; Prop. 3.8(9).35 mare fi5ndŏ carina. Müller neglects entirely the feet in which the new scansions occur. The following are examples which he therefore wishes to correct ( p . 415f.), pronouncing them too bold and a violation of the usage of their respective authors: Grat. Cyneg. 55 repo ${ }^{5}$ nitŏ fumo; Ov. Met. $15.599 \mathrm{ne}^{1} \mathrm{mŏ}$ mihist; Pers. 6.55 acce ${ }^{5}$ dŏ Bovillas; Sil. 9.193 sat ve ${ }^{5}$ rŏ superque.

Knoxville, Tennessee.

## INDEX OF VEDIC AND AVESTAN PASSAGES

Note.-For occasional references to other works, see the Index of Subjects. $1 l l$ references in this and the following indices are to pages.

| VEDIC |  | 1.63 .4 | .198n |
| :---: | :---: | :---: | :---: |
| Rig Veda |  | 73.6 | .246n. |
| 1.4.8 | . . 204 n . | 74.3 | . 200 |
| 7.5 | . . . 199 | 78.4 | . 202 |
| 8.2 | .204n. | 79.1 | .197n. |
| 16.8 | . .201n. | 80 | 198 |
| 19 | ... 3 | 80.1 | .197n. |
| 23.9 | .198n. | 2-5, 10-13 | .198n. |
| 24.9 | . . . 4 | 13 | 197n. |
| 12, 13 | . 230 | 81.1 | .201n. |
| 28 | .228ff., 233f. | 83.6 | . . . . . . .238, 246 |
| 28.1 | . . .234, 246 | 84.3 | . .201n., 238, 246 |
| 13, 14, 23. | . . 234 | 13 | . 204 n . |
| 31.16 | . . 15 | 16 | . 157 |
| 32.1-5 | .197n. | 85.9 | . .198n. |
| 5 | . .198n., 204 | . 88.3 | . .246n., 247 |
| 7 | . .198n. | 89.2, 3 . | ..... 6 |
| 8 | .197n., 198n. | 4 | .239, 246n. |
| 9 | . . 203 | 91.5 | . . 200 |
| 10 | .198n. | 19 | . . . 6 |
| 11-14 | .197n. | 95. | . .... 3 |
| 11 | . 198 n . | 97 | ..... 8 |
| 33.13 | . 198 n . | 100.12 | .200n. |
| 36.8 | .198n., 199 | 102.2 | . 199 |
| 50.12 | ..... . 9 | 4, 6 |  |
| 51.4 | .197n., 198n. | 7 | . 204 |
| 52 | . . 206 | 9, 10 | . . . 3 |
| 52.2 | . 198 n . | 103.2, 7 | .197n. |
| 4 | ... 203 | 8 | .198n. |
| 6 | . .198n. | 105.17 | . 206 |
| 8 | . . .198n. | 106 | . . 2 |
| 10 | .197n., 198n. | 106.2 | . 202 |
| 15 | . . 198n. | 6 | .201n. |
| 53.6 | . . 203, 204n. | 108.3 | . 200 |
| 54.9 | . . .245n. | 109.1-5 | . . 248 |
| 10 | .... 209 | 3 | 246f., 249 with n. |
| 56.5 | . . 198n. | 5 | ...... 203, 248 |
| 6 | . .198n., 233 | 118.3 | . .245f. |
| 59.6 | .... 200 | 121.8 | . 245 n . |
| 61.6, 10, 12. | . . .198n. | 11 | .198n. |


| 1.121 .12 | 199 | 3.1.1 |  |
| :---: | :---: | :---: | :---: |
| 129.6, 11 | . 200 n . | 4.9 |  |
| 130.2 | . . . . . . . . .245n. | 12.4 |  |
| 135.2 | ...... 241, 246n. | 16.1 |  |
| 5 | . . . . . . 241, 245n. | 20.4 |  |
| 7 | . . . . . 238, 241 | 29.10 |  |
| 137.1, 3 | .245n. | 30.2 |  |
| 139.6 | . 245 n . | 4 |  |
| 10 | . .245f. | 5 |  |
| 158.5 | . . . . . . 206 | 6 |  |
| 162.5 | . . . . . . . . 246 | 8 |  |
| 164 | .120n., 124, 127 f . | 22 |  |
| 164.10 | .... . 128 | 31.11, |  |
| 165.4 | ....... . 246 | 32.4, 6 |  |
| 8 | . . . . . . .198n. | 11 |  |
| 174.2 | . . 198n. | 33.6 |  |
| 175.5 | . . 199 | 7 |  |
| 186.6 | . . . . . . 201 n . | 35.8 |  |
| 187 | ..........3, 5 | 36.8 |  |
| 187.1 | ....199, 233 | 37.1 |  |
| 6 | . . . . . .197n. | 5, 6 |  |
| 191 | ....... 4, 17 | 38.4 |  |
| 191.4 | . . 15 | 40.8 |  |
| 8 | . . 17 | 41.2 | . 244 |
|  |  | 4 |  |
| 2.1.11 | . . 200 | 42.2 |  |
| 11.2, 5 | . .197n. | 44.1 |  |
| 9, 18 | .198n. | 5 | .245n., |
| 20 | . 233 | 45.2 |  |
| 12.2 | . . 7 | 47.2 |  |
| 3 | .197n. | 3 |  |
| 6 | . 239 | 49.1 |  |
| 8 | ... 126 | 51.9 |  |
| 11 | . .197n. | 52.7 |  |
| 14.2 | . .198n. | 53.10 |  |
| 15.1 | .197n. | 54.12 |  |
| 16.5 | . .245n. | 15 |  |
| 19.2 | . .197n. | 57.4 |  |
| 4 | . 198n. | 58.3 |  |
| 20.7 | . .201n. | 8 |  |
| 23.3 | . .200n. |  |  |
| 26.2 | . . . 202 | 4.3.3 | . $23 \varepsilon$ |
| 30.2, 3 . | . .198n. | 16.7 |  |
| 33.1 | . . . . . 6 | 17.1 | 197n., |
| 36.1 | . . . . . 245 n . | 3 |  |
| 39.1 . | . . . . 234, 246n. | 7 |  |
|  |  | 8 |  |

Index275
4.17.19 204n. $\quad 5.40 .8$ ..... 239ff.
18.7 $198 \mathrm{n} . \quad 41.10$ ..... 206
19.1 ..... 203
12 ..... 242
2, 3, 9 197n. 42.5 ..... 198-199
21.10 198n. 43.4 ..... 246
22.5 197n. 45.7 ..... 245 f.
9 204 n . 48.3 ..... 240
24.2 ..... 203
54.2 ..... 206
10 204n. 83.6 ..... 16
28.1 197n. $\quad 86.1$ ..... 206
30.1, 7, 19, 22. .201n. ..... 201n.
32.1, 19, 21 ..... 201n.
41.2 ..... 204n.
42.7 204n.
202 8 ..... 202
13.1 ..... 202
6.11.4 ..... 11
9 ..... 199
16.14, 15, 19 ..... 200
45.5 ..... 245n.
34 ..... 204
50.3 245n. ..... 48 ..... 201
57.7 ..... 10
17.1198n.
58 ..... 5
58.8 ..... 25.2.7 . . . . . . . . . . . . . . . . . . . . . . . 2302309 ................................ 148148
9.5 ..... 206
11.12 ..... 246
18.2 ..... 206
25.8 ..... 238, 246
29.2, 3 197n.
7 ..... 203
8 197n.197n.30.6197n.
9, 10 ..... 197n.
11 ..... 199
18.6 ..... 202
9 ..... 203
19.13 ..... 204n.
20.1 ..... 202
2 197n., 198n.
9 ..... 199
22.4 ..... 200n.
10 ..... 204
23.2 ..... 203
25.1 ..... 203
6 ..... 199
 31.4 .197n. 8 ..... 203
5 ..... 238, 245
26.2 ..... 199
7 ..... 197n. ..... 204n.
12 238, 246f. 29.6 ..... 238, 246f. ..... 204n.
32.2 $197 \mathrm{n} . \quad 30.4$ ..... 197n.
35.6 $201-33.1$ ..... 204n.
36.4 ..... 238, 245f. 3 ..... 204
37.2 238f., 24634.5 ..... 202
4 198n. $\quad 36.2$ ..... 203
38.4 201n. $\quad 37.5$ ..... 198n.
40.1-3 ..... 201
38.5 ..... 202
1 241, 245n. 44.14 ..... 204n.
2 ..... 239f.
15 ..... 198n.
4 201n. ..... 233

| 276 | Index |  |  |
| :---: | :---: | :---: | :---: |
| 6.45.5 | .201n. | 7.25 .5 |  |
| 14, 24 | .200n. | 30.2 |  |
| 46.1 ... | . 199 | 31.6 |  |
| 47.2 | . 203 | 32.6 .. |  |
| 6 | .201n. | 15 |  |
| 8 | . . . 11 | 33.14 |  |
| 11 | . . 8 | 34.3 | 199, |
| 48.5 | .246n. | 16, 17 |  |
| 7 | . . 4 | 35.3 |  |
| 21 | . . 203 | 7 | 24: |
| 51.14 | .246n. | 38.7 |  |
| 52.2 | . 15 | 39.1 | 246n., |
| 15 | . . . 6 | 2, 4 |  |
| 56.2 | .204n. | 41. |  |
| 57.3 . | .204n. | 42.1 | 246; |
| 60.1 | . . 199 | 48.2 |  |
| 3 | . 199f. | 49.3 |  |
| 6 | . . 204 | 54.1 |  |
| 61.5 | . . 202 | 55.5-8 |  |
| 7 | . . 199 | 68.4 . . | n., 24 |
| 63.3 | n., 249 | 73.4 |  |
| 68.2 | .. 202 | 83.1 |  |
| 3 | .198n. | 9 |  |
| 72.3 | n., 199 | 85.3 |  |
| 73.2 | . . 204 | 92.4 |  |
| 74 | ... 4 | 93 |  |
| 75.4 | .. 2,9 | 93.1, 4... |  |
| 12 | . . 11 | 94.11 |  |
| 14 | .197n. | 103.1 |  |
| 16 | . . . . 9 | 104.7 |  |
| 19 | . . 9 | 9 |  |
|  |  | 17 | 239, |
| 7.1.10 | . . 203 |  |  |
| 8.6 | .200n. | 8.1.14 |  |
| 13.1 | .200n. | 17 |  |
| 19.3 | . . 203 | 2.2 |  |
| 4 | .204n. | 26 .. |  |
| 5 | .198n. | 32, 36 |  |
| 10 | . . 203 | 3.17 ... |  |
| 20.2 | .198n. | 19 |  |
| 21.3 | .197n. | 20 |  |
| 6 | .198n. | 4.11 |  |
| 22.1 | . 245 n . | 13 | .245r |
| 2 | . 204n. | 6.6, 13 |  |
| 4 | . .245f. | 37 |  |
| 23.3 | . 204 n . | 40 |  |


| 8.7.24 | ..... 109, 202 | 8.62 .8 | 198n. |
| :---: | :---: | :---: | :---: |
| 8.9, 22 | .... . 201, 208 | 11 | . 201 n . |
| 9.4 | . . 200 | 63.2 | 246n. |
| 12.16 | . . . 233 | 12 | . 203 |
| 22, 26 | .198n. | 64.9 | 201n. |
| 13.15 | . 201n. | 65.8 | 245n. |
| 32 | . 240 | 66.3, 9-11 | 201n. |
| 15.3, 11 | . .204n. | 67.17 | . 14 |
| 17.8 | . . 204n. | 70.1 | 201n. |
| 9 | .201n., 204n. | 72.11 | . 246 |
| 19.20 | ....... . 202 | 74.4 | . 201 |
| 21.12 | . . 199 | 9, 12 | . 202 |
| 22.8 | . . 245n. | 76.2, 3 | 198n. |
| 24.2 | . .201n., 203 | 11 | 200n. |
| 7 | . 201 | 77.3 | 200n., 201n. |
| 8 | . .201n. | 78.7 | . 201 n . |
| 26.8 | . . . . . 208 | 82.1 | . 201 n . |
| 24 | . ... . 237 | 5 | 245n. |
| 27.1 | . .240, 246 | 89.1 | . 201 |
| 8 | . . 201n. | 3 | 198, 201n. |
| 29.4 | . . . . . 204 n . | 4 | . . 198 |
| 32.11 | . . 201n. | 5 | . 203 |
| 26 | .198n. | 90.1 | .201n. |
| 33.1, 14 | . .201n. | 4, 5 | .204n. |
| 34.2 | . .238f., 245f. | 91 | . 2 |
| 3 | . . . 237 | 92.17 | . 201 |
| 37.1-6 | . .201n. | 24 | .201n. |
| 1 | . 202 | 93.2 | 197n., 201n. |
| 38.2 | . . . 200 | 4 | . 201 n . |
| 38.3 | . . 245 n . | 7 | .198n. |
| 39 | . 205 | 15 | 201n. |
| 39.8 | . .200n., 206 | 16 | . . 201 |
| 42.4 | .227, 239, 246 | 18, 20 | . . 201n. |
| 43.11 | . . 11 | 30, 32 | . . 201 |
| 45.3 | . 198 n . | 33 | .201n. |
| 4, 25 | .201n. | 95.9 | .204n. |
| 46.8 | . . 201 | 96.5 | .197n. |
| 13 | .201n. | 7 | .198n. |
| 47.13-17 | . . 233 | 18 | 204 with n. |
| 16 | . 206 | 18-21 | . . .201n. |
| 17 | . . . . 16 | 97.5 | ... . 201 |
| 49.2 | .204n. | 99.6 | .198n. |
| 53.3 | . .246n. | 100.2 | .204n. |
| 54.5 | . 201 n . | 7 | .198n. |
| 61.13 | . . . . 11 | 12 | . . 199 |
| 15 | . . . . . 201 n . |  |  |


| 9.1.2 | . 200 n . | 9.98 .10 |  |
| :---: | :---: | :---: | :---: |
| 3 | . . . . . $200 \mathrm{n} ., 1201$ | 101.11 | . . . . 245 n |
| 10 | .204n. | 102.2 | . 23 |
| 11.5 | . .227, 245n., 246 | 107.1, 10 |  |
| 7 | .200n. | 109.14 |  |
| 16.3 | . ....... 230 | 18 |  |
| 17.1 | ... 204 | 110.1 |  |
| 23.7 | .204n. | 113.1 |  |
| $\begin{array}{r} 24.5 \\ 6 \end{array}$ | $\begin{gathered} \text {. . . . . . } 245 n . \\ \text {. . . . . . . } 201 \end{gathered}$ | 6 | .240, |
| 25.3 | . . 200 | 10.5.6 |  |
| 28.3 | . . . 200 | 14.13 |  |
| 32.2 | . . 233 | 15.2 |  |
| 34.3 | . . $245 \mathrm{n} ., 246$ | 17.10 |  |
| 4 | ....... . 233 | 22.8 |  |
| 37.3 | . . . . . .200n. | 10 |  |
| 4 | . . . . . 233 | 23.2 |  |
| 5 | . . 200 | 25.9 |  |
| 38.2 | . . 233 | 28.3 |  |
| 51.1 | . .230, 245n. | 7 |  |
| 61.22 | .198n. | 35.9 |  |
| 63.13 | .245n. | 36.4 | . 238 |
| 65.15 | .245n. | 42.5 |  |
| 66.29 | . .246n. | 48.2 |  |
| 67.3 | . .241, 245n. | 8 |  |
| 19 | .238, 241, 246 | 49.6 | 201n., |
| 20 | .200n., 238, 246 | 50.2 |  |
| 68.9 | . . .245n. | 51.19 |  |
| 71.3 | . . 245 n . | 54.3 |  |
| 72.4 | . . .245n. ${ }^{-}$ | 55.7 |  |
| 73.4, 6 | . . 16 | 58 |  |
| 75.4 | . . 245 n . | 60.11 |  |
| 79.4 | . . 2464. | 12 |  |
| 80.4 | . . .239, 241 | 64.15 | 238, |
| 5 | . . 241 , 245n. | 65 |  |
| 82.3 | . . 239, 246n. | 65.2 |  |
| 86.23, | . . . . . 245n. | 10 |  |
| 4 | . 197n. | 66.8 |  |
| 88.4 | . 204 | 67.12 |  |
| 89.7 | . 200 | 69.6 |  |
| 96.7-9 | . $247^{\text {b }}$ | 12 |  |
| 10 | . . 245 n . | 70.7 | .240, |
| 12 | . 200 n . | 72.4, 5 |  |
| 97.11 | . .245n. | 74.6 | . 2 |
| 98.5 | . . 200 | 76.2 | 241, 245n., |
| 6 | . . . . . . . . 246 | 4 | ...... 241, $\varepsilon$ |


|  | Index |  | 279 |
| :---: | :---: | :---: | :---: |
| 10.76 .5 | . .246n. | 10.1011.10, 11 | . 235 |
| 6 ... | . . . . .238, 241, 245ff. | 103 |  |
| 7 ... | . . . . . . . . 241, 245n. | 103.4 | 200n. |
| 8 ... | . . . . 241, 245n. 246 | 10 | .9, 201n. |
| 78.6 | . . . . . . . . . . 240 . | 12 | . . 11 |
| 80.2 | . ........ 204 | 13 | . . 9 |
| 82.2 | . . . . . . . . . 6 | 104.2 | 246n. |
| 3 | ..... . . 15 | 9 | 202 |
| 83 | ........ 14 | 10 | 198n. |
| 83.3 | . . 199 | 108.11 | 246n. |
| 7 | . . 204 | 111.6 | .198n., 201n. |
| 84 | . . . . . . . . . . 13 | 9 | .197n. |
| 85.4 | . .240, 246 | 113.2 | .198n. |
| 31 | . . 4 | $3 \ldots$ | .197n., 198n. |
| 87 | . . 206 | 6 | . .198n. |
| 87.1 | .200n. | 8. | .197n., 198n. |
| 89.7 | . 198 n . | 116.1 . | . .198n. |
| 90 | . .119, 124, 126f. | 120 | . 14 |
| 90.2 | . . 10 | 120.6 | . 207, 231 |
| 91.1 | . . . 9 | 121 | . $7,124 \mathrm{ff}$. |
| 92.15 | . .237, 246 | 124.6 | . 199 |
| $94 . .$. | ....240f., 247, 250 | 125 | . 124,126 |
| 94.1 | .238, 242, 244ff., 249 | 126 | . 3 |
| 2 | . . . . . . 238f., 245f. | 128 | . . 8 |
| 3 | . . . . . . .238, 245ff. | 129 | . 122 |
| 4 | . . . . . . 238f., 245f. | , 129.4 | . .9, 122 |
| 5 | . . . . . . .237f., 246 | 133.1 | .201n. |
| 6 | . . . . . . .239, 245f. | 2 | .197n. |
| 7 | ....... 239, 246n. | 134.3 | . . .200n. |
| 8 | . . . . . 246 ff . | 136 | .... ${ }^{2}$ |
| 9 | . .245n., 246n., 247 | 137 | . 14,16 |
| 10 | . . . . . . . . . 240,246 | 138.5 | .201n. |
| 11. | ......242, 244, 246 | 139.6 | .197n. |
| 12 | . ........242, 245f. | 141 | . 13 |
| 13 | . . . . . .245f. | 145.1, 3. | . 12 |
| 14 | . . . . . . . 241, 245ff | 6 | . 15 |
| 96.4 | . . . .197n. | 147.1, 2 | 198n. |
| 97.4 | . . . . . 12 | 152 | . 13 |
| 6 | : . . . . 200 n . | 152.2 | . .201n. |
| 12 | . . . 12 | 3 | .198n., 201n. |
| 14, 20 | . . . . 6 | 153.3 | .201n. |
| 99.1 | . . . . 202 | 155.2, 3 | . 4 |
| 6 | . . 206, 231 | 159 |  |
| 100.8 | . .238, 246 | 159.1 | . 17 |
| 9 .. | . . . . 246 | 3 | . . 199 |
| 101.3, 4, 8 | . . 10 | 161.1-4 | . . . 13 |


| 280 | Index |  | - |
| :---: | :---: | :---: | :---: |
| 10.162.1 | . . 200 n . | 3.3 . |  |
| 3, 4, 6 | . . . . 4 | 4 |  |
| 163 | . . . . 7 | 7 |  |
| 163.5 | . . 143 | 10.5 | . . 230 , |
| 166.2 | ... . 16 | 11. |  |
| 168 | ........ 2,17 | 12 |  |
| 170.2 | ....199, 200n. | 15.4 |  |
| 173.6 | .... 16 | 16 |  |
| 174. | . . . . 12 | 17 |  |
| 175.1 | .239, 246n., 247 | 18.1, 4. |  |
| 2. | ........239, 246 | 6 |  |
| 3. | . .237, 239, 246n. | 19 |  |
| 4 .. | . . . . .246n., 247 | 19.6-8 |  |
| 180.2, 3 | ...... 10 | 20 |  |
| 184.2 | . . . . . . . . 10 | 21. |  |
| 191.3 | . . . . . 9 | 21.10 |  |
|  |  | 25.3 |  |
| Rig Veda Khilāni |  |  |  |
| 7.55 .1 | . . . . . 16 | 4.2 | ..... 7, 12 |
| 103.1 | . . . . 16 | 3.2 |  |
| 10.103.1 | . . 11 | 5 |  |
| 127.1, 2 | . . 12 | 8 ... |  |
| 128.1 | ..... . 8 | 9 |  |
| 8 | ... . 10 | 11 |  |
| 11 | . . 11 | 13. | . . . . .14, |
|  |  | 15. |  |
| Atharva | (Vulgate) | 19.6 |  |
| 1.2.2 | ........ 11 | 24.3 |  |
| 4 | . . 120n. | 30 | .124, |
| 19 | . . . . . . . . . 9 | 31. |  |
| 20 | . . . . 13 | 32. |  |
| 21.1-4 | . . . . 13 | 33 |  |
| 22 | . . . . 9 | 34 |  |
| 29 | . ........ 12 | 35. |  |
| 29.5 | . ........ 17 |  |  |
| 33 | ... 9 | 5.1 | . 16, |
| 35.2 | . . . 10 | 2 |  |
|  |  | 3 |  |
| 2.1.1 | . . . . . . . . . 15 | 6 .. |  |
| 6 | . ...... . 10 | 20.10 |  |
| 12 | . . . . . . . 15 | 22.1 |  |
| 28 | ........ 9 | 23 |  |
| 33 | ........if. |  |  |
|  |  | 6.3.2 |  |
| 3.1 | . . . . . . . . . 16 | 15.2 |  |
| 2 | ..... . 11 | 46.3 |  |

Index ..... 281
6.51 .2 11 11.3.3 ..... 234
52.2 154 ..... 121
54.3 .....  9
5 ..... 119
64 ..... 9
7 ..... 119, 122
80.1 ..... 2 ..... 119
8
83.2 ..... 133
91.215
3 14, 16
112 ..... 232
12.3.13 ..... 234
14, 21 ..... 240
113.1, 3 ..... $232 f$.
13 (Book) ..... 120
138.2 234 13.1.2 ..... 6
3 ..... 121f.
7.1 ..... 120
12.2 ..... 133
42 ..... 4
50.4 .....  3
53.5 ..... 13
79.3 ..... 126
82.1 ..... 5
3 ..... 10
84.1-3 ..... 10
86.1 ..... 8
9416
8.8.11 ..... 148
9 ..... 11910119
14.1.41 ..... 2
2.10 ..... 4
16.3, 4 ..... 120n.
5.1 ..... 232
18.1.46 ..... 6
19 (Book) ..... 9, 18
19.6 ..... 119, 124, 126 f .
6.4 ..... 10
13 ..... 9, 18
15 ..... 11
47 ..... 12
52 ..... 9, 122
53 ..... 119
54 ..... 119
56.1, 4 ..... 232
57.1 ..... 16
58 ..... 10
62 ..... 11
20.96 ..... 4
96.6-9 ..... 13
107.4-12 ..... 14
136.6 ..... 230
8 ..... 119, 120n
8.43, 44 ..... 119
9.2 ..... 240
26 ..... 234
10 ..... 122
.1.1.9, 10, 13, 14, 23 ..... 234.119, 122
.119
Atharva Veda, Pāippalāda
1.7.2 ..... 17
11 ..... 12, 18
12 ..... 9
20 ..... 9
21.3 ..... 12

| 282 | Index |  |  |
| :---: | :---: | :---: | :---: |
| 1.25 |  | 3.33 |  |
| 28 |  | 34 | . 1 |
| 30 |  | 34.7 |  |
| 51.4 |  | 35 |  |
| 53 | . 9 | 36 |  |
| 53.2 |  |  |  |
| 54.1 |  | 4.1 ... | .7, 17, 1 |
| 56 | f. | 1.2, 3, 8 |  |
| 61 | 13 | 4 |  |
| 62 .. |  | - 2 .. |  |
| 62.4 |  | 6. |  |
| 65 |  | 7 |  |
| 77 |  | 7.4, 6, 7. |  |
| 83.2 | 10 | 12 |  |
| 84 |  | 12.6 |  |
| 93.2 |  | $16 .$. |  |
| 95.4 |  | 16.7 |  |
| 99.1 |  | 17.5-7 |  |
| 107 | 2 | 19.1-3 |  |
| 109 |  | 26 |  |
| 110 |  | 28 |  |
| 111.1 | 15 | 29 |  |
|  |  | 29.8 |  |
| 2.5 |  | 31 |  |
| 5.4 |  | 31.1, 5 |  |
| 6.1 |  | 32 | . 14 |
| 9.5 |  | 32.1, 2 |  |
| 22 |  |  |  |
| 30 |  | 5.3.1-3 .. |  |
| 30.1 |  | 4 ... | . . $\varepsilon$ |
| 32.5 |  | 4.1-8 |  |
| 33.2 |  | 3 |  |
| 37.2 |  | 6 |  |
| 41 |  | 7. |  |
| 70.5 |  | 9.4 |  |
| 74 |  | 11.6 |  |
| 88 |  | 13.1, 8 |  |
|  |  | 18 | .14, 16 |
| 3.1 |  | 38 |  |
| 2 |  | 39 |  |
| 2.7 |  |  |  |
| 5 |  | 6.1 | . . 14 |
| 6. |  | 2. |  |
| 9.7 |  | 3.4 |  |
| 12. |  | 5 |  |
| 30.1 |  | 8.6, 7 . |  |

Index283
6.11 $16 \quad 1.15$ ..... 231
16 3, $5 \quad 7.26$ ..... 226
17 312.77 ff. ..... 6
20 1278,86 ..... 12
17.42, 45, 46 ..... 9 .
7.2 ..... 17
44, 47 ..... 11
3.1, 6 89-99 ..... 5
10 $6 \quad 19.87$ ..... 143
4 $9,18 \quad 25.15,16$ ..... 6
5.9 71 ..... 143
6 627.7 ..... 10
6.1, 8 . 41.2 ..... 10
7.3 1232.10 ..... 15
10.1, 6 $12 \quad 33.28$ ..... 11
11 434.32 ..... 12
12.3, 10 ..... 12
51 ..... 10
13.2 39.8 ..... 143
18.4 ..... 4
8.3 ..... 12
10.11 ..... 10
13 ..... 5
13.8 ..... 2
14 ..... 3
20.9 ..... 4
16 (Book) 120n.
Atharva Veda Parisistas23.2.2, 3230
32.22 ..... 120n.
42.2.9ff. ..... 130
11 ..... 122
44.4.2 ..... 130
Sāma Veda ..... 9
1210, 1211 ..... 11
1212, 1213 ..... 9
1222 ..... 109
Tāittirīya Sam்hitā
1.1.5.2 ..... 241
4.45.1 ..... 4
6.12 .4 ..... 10
8.10 .2 ..... 233
22.5 ..... 4
4.1.7.3 ..... 10
2.6 ..... 6
6.4.4. ..... 10
7.14 ..... 8
5.7.4.3 ..... 6
Māitrāyanī Samihitā
1.1.6 ..... 230f., 244
3.39 ..... 4
2.7.12 ..... 10
12.15 ..... 10
4.1.6 ..... 230f., 244
11.2 ..... 4
14.2 ..... 6
Ārseya-Saminitā
Ārseya-Saminitā
Vājasaneyi Saṃhitā Kāṭhaka Saṃhitā
1.14 241, 244 ..... 1.5 ..... 241

| 1.15 ............................. . . 231 | Tāittirīya Āraṇaka |  |
| :---: | :---: | :---: |
| 4.13 ............................... . 4 | 2.3.1 |  |
| 8.16 ............................... . 10 | 6.11 .1 |  |
| 11.12 .............................. . 4 | 10.1.4 |  |
| 13.15 ............................. 6 |  |  |
| 18.16 ........................... . 10 |  | Chāndogya Upanisad |
| 31.4 ........................231, 241 | 1.1.10 | . 13 |
| 35.15 .......................... 244 | 2.14 | . 13 |
| 37.9 ............................. . 11 | 3.12 | . 13 |
| 38.13 ............................ . 10 | 4.5 | . 13 |
|  | 3.12 .9 | . 13 |
|  | 13.1-8 | . 13 |
| Kāthaka Saminitā, Āśvam. | 18.3ff. | . 13 |
| 6.1 .............................. 11 | 4.5.3 | .13 |
|  | 6.4 | .13 |
| Āitareya Brāhmaṇa | 7.4 | .13: |
| 2.7 ............................... 143 | 8.4 |  |
| 6.1 ............................. . 250 | 5.1.1 | 13: |
| 7.17.1, 2 ........................ . 230 | 19.4 |  |


Gopatha Brāhmaṇa
1.2.8 .................................... . 2

16 .................................. 5

Pañcavin̄śa Brāhmana
25.15

250

Satapatha Brāhmaṇa
1.1.4.7 ......................... 241,244

10
5.4.24
8.3.25 ............................... . . . 143
4.2.5.2 ............................... . . . . 226
12.9.1.3 ............................. 143

Tāittirīya Brāhmaṇa
2.4.3.2 .................................. . 8
7.13.3 ............................. 11
3.2.5.8 .............................. . . . 241
7.6.22 ................................ . 9
12.2 .................................. 6

Sāma Mantra Brāhmaṇa
2.2.13

230

Sā̄̄khāyana Srāuta Sūtra
4.14.26, 32 ........................... 2
9.28 .10
12.24.2.7 ........................ 2
13.29.5 ............................ . 23 !

Āpastamba Srāuta Sūtra
1.19.8
.2
4.15 .1
12.1.9 ................................ . 2
2.15,16 ............................ . 2
13.9 .................................. 2
16.14 .5

Lātyāyana Srāuta Sūtra
3.2.7

| Mānava Srāuta sūtra | Vispered |
| :---: | :---: |
| 6.1.7 ......................... 230 | 3.1 ............................ 226 |
|  | 10.2 ............... 225 n., 226, 229 |
| Āsvalāyana Gṛhya Sūtra | 11.2 ................... 225 n., 226 |
|  | 11.4 ..................... 2255 n., 226 |
|  | 12.2 . . . . . . . . . . . . . . . . . $22254 ., 229$ |
| KāuSika Sūtra | 12.3 .......................... 226 |
| 18.25 .....................120n. | 12.5 ................225n., 226, 229 |
| 43.13 ................................. . 6 |  |
|  | 1.30 .......................... 233 |
| HiranyakeSi Gṛhya Sūtra |  |
| 1.10.6 ......................... 11 | 10.90 ......................... 226 |
| 2.14.4 $\ldots$..................... 230 | 91 ........................ 225 . |
|  | 11.2 .......................... 138 |
| Mānava Gṛhya Sūtra | 24.15 (Vyt. 15) ................ 226 |
| 2.4.8 .......................... 230 |  |
| 18.2 | Gāh |
|  | 3.5 ........................... 226 |
| Āpastamba Mantra Brāhmaṇa | 4.5 ..................... $2255 \mathrm{n} ., 226$ |
|  |  |
| $17 . . . . . . . . . . . . . . . . . . . . . . . . .7$ | Sirōzah |
| 2.8.4 .......................... 11 | 1.7 .......................... 233 |
| 20.34 ....................... 230 | 2.7 ........................... 233 |
| Āpastamba Gṛhya Sūtra | Āfrīngan |
| 8.22.5 ........................ 230 | 4.5 ........................... 225 n . |
| Nirukta | Vendidād |
| 9.36 .......................... 230 |  |
|  | 6.43 ........................ 226 |
|  | 14.8 ¢..................226, 229 |
| avestan |  |
| Yasna | 18.12 .......................... 226 |
| 9.4-10 ......................... 233 | 19.9 . . . . . . . . . . . . . . . . .225n., 239 |
| 8 ............................ 231 | 20.2 .......................... 231 |
| 22 .......................... 229 |  |
| 10.2 .................226, 229, 230n. | Nīrangistān |
| 8 ........................... 229 | 66 ........................... 229 |
| 11.10 .......................... 229 | 68 .......................... 226 |
| 22.2 ....................... 225 n., 226 | 72 ...................... 2264. , 229 |
| $21 . . . . . . . . . . . . . . . . . . .225 n ., 226$ | $79 . . . . . . . . . . . . . . . . . . . . . . . .226$ |
| 24.2 . . . . . . . . . . . . . . . . . 2225 n., 226 | 81 ......................225n., 226 |
| 25.2 .....................225n., 226 | 82 .......................... 226 |
| 27.1, 2 ....................... 239 | $107 . . . . . . . . . . . . . . . . .226, ~ 229, ~ 231 ~$ |
| 27.7 ....................225f., 229 | 108 ......................... 225 n . |

## INDEX OF WORDS, STEMS, AND ROOTS

## SEMITIC LANGUAGES

Note.-In the following indexes of Semitic languages, words, roots, formative elements are arranged in the order of the consonants of the Hek Alphabet, vowels being disregarded except when two or more words ] identical consonants, in which case the order of the English vowels is follo Consonants not found in Hebrew are grouped with their etymological eqv lents. The order of consonants here employed is as follows: , $b, g$ (incl
 d), $q, r, s, \check{s}$ (incl. b), $t$. The difference between the various varieties of $\varrho$, viz., $\check{s}_{1}, \check{s}_{2}, \check{s}_{3}$, etc., is disregarded in the indexes. Words with initial vowel placed under '. A complete list of all roots mentioned as such is given us General Semitic; some few are referred to again under the individual langua

| General Semitic | $\checkmark i b s$ |  |
| :---: | :---: | :---: |
| '(prefix) ............... 38 bis | $\checkmark$ id |  |
| V'hr ...................... 46 | $\checkmark i d^{6}$ |  |
|  | $\checkmark$ ihb |  |
| V'mš ...................... 41 | $\checkmark \backslash$ |  |
| V'nh .................. . 44,45 | $\checkmark$ is n |  |
| V'nh ...................... 45 | $\checkmark$ Višs |  |
| V'nq...................... 45 | Vitn |  |
| 'aqțalun (formal type) ..... 37 | $\checkmark k b d$ |  |
| *'arnab .................... . 41 | $\checkmark k b t$ |  |
| $\checkmark b q^{6} \ldots . . . . . . . . . . . . . . . . . .45$ | $\checkmark k l b$ |  |
| Vbš ........................ 42 | *kalb |  |
| V gbs ...................... 46. | $\checkmark \mathrm{Vrbl}$ |  |
| $\checkmark$ gšš ..................... . 45 | $\checkmark k r$ |  |
| *dubb ...................... 41 | $\checkmark \mathrm{ktr}$ |  |
| $\checkmark d l p$..................... 45 | $l$ (formative) |  |
| $\checkmark$ Vdpp ..................... 45 | $m$ (formative) |  |
| $h$ (formative) .......38, 39, 42 | $\checkmark m t$ |  |
| Vhdi ..................... 47 | $\checkmark m l t$ |  |
| $\underline{\sim}$ (formative).... 38 bis, 39 bis | $\checkmark m m r$ |  |
| V uhb ..................... . 43 | $\checkmark m ¢ ̧ ¢$ |  |
| *zi'b ....................... . 41 | $\checkmark m r r$ |  |
| Vzbb ..................... 46 | $\checkmark m s ̌ s ̌$ |  |
| $\vee z^{\text {d }}$ q..................... 45 | $\checkmark m t$ |  |
| Vzr.................. 41,45 | $n$ (formative) | .38, |
| $\bigvee z r^{6} \ldots . . . . . . . . . . . . .45$ bis | $\checkmark n^{\prime} q$ |  |
| $\underline{i}$ (formative) .... 38 bis , 39 bis | $\checkmark n g^{6}$ |  |


$\vee n h m_{1} . . . . . . . . . . . . . . . .45$ bis $V q t m$ ..... 46
$\checkmark n h q$ 45 Vqțn ..... 46
$\vee n t$ $44 \vee q t^{6}$ ..... 46
$\checkmark n t t p$ 45 Vqtp ..... 46
$\checkmark n p s ̌$ $42 \vee q m$ ..... 39, 42
$\checkmark n q b$ $45 \vee q p^{\prime}$ ..... 45
$\checkmark n q z$ $45 \vee q p d$ ..... 45
$\checkmark n q^{6}$ 45 Vqpq ..... 45
$\vee n q p$ 45 Vqc ..... 35, 39
$\checkmark n q r$ 45 Vqçb ..... 35
$\checkmark n t l$ 39 V $q$ çi ..... 35, 39
$\checkmark n t n$ 39, $43 \quad \sqrt{ } q c^{6}$ ..... 35
$\checkmark$ 'bš 45 Vq¢p ..... 35
$\vee \bar{g} d p$ 45 Vqç ..... 35
$\sqrt{ }{ }^{\prime}{ }^{\prime}$ ' 39 Vq̧̧r ..... 35
*‘aqrab 41 Vqrh ..... 47
V'rp 45 V $q t l$ ..... 36, 38, 46
*p̂̂, * $p \hat{\imath},{ }^{*} p \hat{a}$ $41 r$ (formative) ..... 39
$\checkmark p g^{6}$ $4{ }^{4} 5 \quad$ Vrbi ..... 46
$\checkmark p l$ 38 Vrgz ..... 45
$\vee p l$ 46 Vrgl ..... 46
$\checkmark p l t$ 43, 46 Vrgš ..... 45
$\checkmark$ pli $46 \vee r h b$ ..... 45
$\checkmark p q h$ $45 \mathrm{~V} h \mathrm{~h} q$ ..... 45
$\checkmark p s ̌ r$ 40, $44 \quad \vee r^{d} d$ ..... 45
$\checkmark p t h, p t h$ 40, 44, $45 \quad \vee r^{‘} l$ ..... 45
$\checkmark$ pti 40, 44, $45 \quad$ V $r^{r} m$ ..... 45
$\checkmark p t r$ $40 \quad \vee r^{r} p$ ..... 45
$\checkmark$ çhl 45 Vršs ..... 45 bis
$\checkmark$ çut 45 Vrç ..... 42
$\sqrt{ } / l^{6}$ 39 š (prefix) ..... 38
$\sqrt{ } \mathscr{q}^{s} q$ 45 Všbl ..... 40
$\checkmark \varsigma p$ 45 Vštp ..... 45
$\checkmark$ $\varsigma p d$ 45 Vs̆kb ..... 45
$\checkmark$ ¢fr 39 Vškn ..... 45
$\checkmark$ çrh 45 Vs̆ll ..... 47
$\vee q \not t b$ 46 V ${ }^{6} r$ ..... 39
$\vee q t t$ 46 Všqi ..... 45

| $\checkmark$ šr ${ }^{6}$ | 39 | natâlu |
| :---: | :---: | :---: |
| $\checkmark s$ šti | 45 | siriam |
| $t$ (formative) | . 38 ter | sarâqu |
| $\checkmark$ tpp | . 45 | çêlu |
| $\checkmark t r^{6}$ | . 39 | rabû |
|  |  | * rêbu |
| Assyrian |  | rêbitu |
| $a b a ̂ r u$ | . 46 | raggu |
| eĝ̂ | . 43 | ragâmu |
| aggu | 43 | ramâku |
| amšala, anšala | . 41 | ramâmu |
| amšat | .41, 44 | rapâšu |
| anâh̆u | .44, 45 | rašbu |
| itimâli | . 41 | ruššu |
| gabšu | . 46 | šegû |
| gašru | . 46 | šagâmu |
| da'âpu | . 47 | šelabu, šelibu |
| dabru | . 46 | šapâku |
| dапnи | . 46 | šarâqu |
| darru | . 46 | tabâku |
| datnu | 46 | timâli |
| $z i b \hat{u}$ | . 46 | . |
| zizânu | . 46 | Ethiopic |
| zikkitu | . 46 | 'agadà |
| zumbu | . 46 | 'eger |
| zипะипи | . 46 | 'ed |
| zuqaqı̂pu | . 46 | 'ahara |
| zirbâlu | . 46 | 'anf |
| zirzirru | . 46 | ${ }^{\prime} a f,{ }^{\prime} a f \hat{u}$, 'afâ |
| huliam | . 46 | balaça |
| huššâ | . 46 | gazama |
| kabtu | . 39 | dehra |
| karballatu | . 47 | $d a f^{4} a$ |
| $l a b b u$ | . 42 | $\checkmark$ uhb |
| mahuaçu | . 47 | hadafa |
| nagâgu | . 46 | harasa |
| $n a g \hat{a} s{ }^{\text {se }} u$ | . 47 | haraça |
| nadru | . 42 | haraça |
| nimru | . 42 | kabda |
| napâšu | . 42 bis | kehda |
| nêšu | . 42 | laḥasa |
| našru | . 42 | lasd. |

Index ..... 289
d'a 46 dahâ ..... 47
dha 46 danna ..... 47
ver 41, 45 dasa' $a$ ..... 46
$a b a$ 47 dasara ..... 46
lata a 46, 47 dafáa ..... 46 bis
'aia 46 daffa ..... 45
laça 46 \dafara ..... 46
$f^{4} a$ 46 dafaša ..... 46
dafa 46 daqqa ..... 47
țqața 46 dara'a ..... 46
qrh 47 Vhdi ..... 47
raça 46 hanna ..... 47
raba 47 Vuhb ..... 43
ualada ..... 38
Arabic $\underline{d i} \hat{a} \hat{a}^{6} u^{n}$ ..... 45
$b$ (final element) 41 habaṭa ..... 47
zraqu ${ }^{n}$ 37 hadfun ..... 46
la 42 hanna ..... 47
hmarın 37 hasuna ..... 38
ra 42 hafaqa ..... 46
țama 44 tianna ..... 47
a 42 kurấ $u^{n}$ ..... 45
$m s u^{n}$ 44 labața ..... 47 bis
naha 45 labisa ..... 47
nna (verb) 47 lajada ..... 47
nna, 'annahu 43 lajana ..... 47
nna, 'innahu 43 lid ..... 38
fala 38 lahasa ..... 47
farra 39 lahika ..... 47
tatala 38 lahisa ..... 47
39 lahafa ..... 47
39 lataha ..... 46, 47
$b$ 39 lațama ..... 46, 47
bhatun 47 lațasa ..... 46, 47
bînu ${ }^{n}$ 47 lața a $a$ ..... 46,47 bis
dda 48 lativia ..... 47
uzu ${ }^{n}$ 47 laibun ..... 42
$u f u^{n}$ 47 lamasa ..... 41
daba 47 lasiba ..... 47 bis
dama 48 lasada ..... 47
indabu ${ }^{n}$ 41 lassa ..... 47
‘aza 43 lá alla, lá allahu ..... 43
la'anna ..... 43
la‘iqa ..... 47
laqqa ..... 47
lapama ..... 47
lataha ..... 46, 47
mautun ..... 39
mahada ..... 47
massa ..... 41
maça ..... 47
marada ..... 47
marapa ..... 47
mašaja ..... 44
saja'a
sahaba ..... 47
safaka ..... 46
safa'a46 gibbēa $h$
safaqa ..... 46
gamada ..... 44
'ankabun, 'ankabûtu"
fahata ..... 43
fariha ..... 38
dahika ..... 44
dila $u^{n}$ ..... 39 daiuān
çafaqa ..... 46 dālaq
$\checkmark$ ${ }^{6} f r$ ..... $39{ }^{*}$ dalt
¢̧aqa: $a$ ..... 46 delet
qadiba ..... 47 hab
qalbasa ..... 47 hāgà
qaççâbun ..... 37 hāda
qaraça ..... 46 hādap
ramaha 46 hišlı̂k ( $V$ šlk)
ranna ..... 47 zebûb
rağapa ..... 47 zerôá ${ }^{a}$
rafasa 44, 46 zeret41
radi ${ }^{\text {a }}$, rada${ }^{6} a$ 47 häbat
šâbaha ..... 43 hāraš
šaṭana ..... 47 iābēs
šâkaha ..... 43 iālad
sââkala ..... 43 iās̄ān
pa‘ $l a b u^{n}$ 41 īās̄ēš, $i \bar{a} s z^{2} s$
pú ${ }^{6}$ alu ${ }^{n}$ ..... 41 Vitn
šariba 47 kābēd
Index ..... 291
kôbá 47 *‘ațallēb (ỏ $\theta_{o \lambda o \beta a \delta) ~}^{\text {a }}$ ..... 43
kihhèd 47 'ațallēp ..... 36, 43
kihhēš $47{ }^{*}{ }^{\text {a }} \mathrm{m} \mathrm{m}_{\mathrm{c}}$ ..... 44
kelûb 44 `ôp ..... 43
kēn 42 ' $\bar{a} c ̧ a m$ ..... 44
kissê 39 ‘ârê miqlāt ..... 43
kaptôr 42 pê ..... 36
kerā̄ ${ }^{\text {aim }}$ 45 pāgá ..... 47
kerēt $\hat{\imath}$ 43 bis pāgaš ..... 47
kôteret 42 pahat ..... 43
lēd 38 Vpl’ ..... 46
lähaq 47 Vpli ..... 46
lāțaš 46, 47 Vplt ..... 46
laiss 42 pälaț ..... 47
lāqaq 47 palmôn̂̂ ..... 43
lās̄ād 47 pelôn̂̂ ..... 43 bis
liška 47 pelištı̂ ..... 43
mähaç 47 pelēt̂̀ ..... 43 bis
māhaq 47 pēšer ..... 44
mekurbäl (Vkrbl) 47 pātar ..... 44
$\checkmark m l t$ 47 pitrôn ..... 40
memer 38 çăhaq ..... 44
$m \bar{a} s a k$ 44 çēlā́ ..... 39
*miplāt 43 çāmê' ..... 43
$\checkmark m c ̧$ 47 çāmaq ..... 43
miqdāš ( $\sqrt{ } q d s ̌)$ 43 çepet ..... 42
miqlāt $\quad(\sqrt{ } q l t ̦)$ 43 qâba ..... 47

* $m a \bar{s} s a g$ 44 qaiièm ..... 39
nāgá 47 qāça ..... 39
$n \bar{a} g a \check{s}$ 47 qâçaç ..... 39 bis
nādah $46 q \bar{e} r \bar{e} a ̆ h$ ..... 47
$\checkmark n t$ 44 rāțaš ..... 47
nātaš 47 rāmas ..... 44
nimlat ( $\sqrt{ } m l t t)$ 47 rāmaś ..... 44
nāsak 44 rānan ..... 47
näpal $38 r a ̄ a s c$ ..... 43
nišk $k \bar{a}$ $47{ }^{*} r a ̈ p a s$ ..... 44
nātak 46 rûç ..... 42
sanuērim 42 śățam ..... 47
sāpaq 46 śãțan ..... 47
sirîôn 46 še'ôl ..... 43
‘iunier 37, 42 šōbel ..... 44

| $\check{s} \bar{a} g a^{6}$ | . 46 | tartem |  |
| :---: | :---: | :---: | :---: |
| sahuat | . 43 | țurțâsâ. |  |
| sālah | . 47 | țurțârâ |  |
| $\checkmark$ šlk | . 47 | țarțes |  |
| šû' $\bar{a}$ | . 41 | tarmeš |  |
| ša ${ }^{6}$ ar | . 39 | teraš |  |
| šāpak | . . 46 | * iidda ${ }^{6}$ |  |
| šāpal | . 38 | i ${ }^{\text {a }}$ b |  |
| siriôn | . 46 | iehab |  |
| $t \bar{a} n \hat{u} t ̦$ ( $\sqrt{ } n t$ ) | . 44 | iinda ${ }^{6}$ |  |
| $t \bar{a} p a p$ | . . 45 | kulbâasâa |  |
|  |  | karbelâ |  |
| Syriac and | other Aramaic | kurseiâ |  |
| 'el' ${ }^{\text {a }}$ | . 39 | $l$ (preposition) |  |
| * 'amšâ | . 44 | lehak |  |
| 'an | . 47 | lețas | 46 |
| atmül | . 42 | laita |  |
| behet | . 42 | meha |  |
| gad | . . 48 | mehâr |  |
| gedam | . 48 | $\checkmark m e ̧ c$ |  |
| gauuâ | . 47 | $\checkmark n g^{6}$ |  |
| gehek | . 44 | $\checkmark n t l$ |  |
| gam | . . 48 | sețan |  |
| genah | . 444 bis | - emaç |  |
| $g e^{6} \hat{a}$ | . 44 | pega |  |
| $g e^{6} a r$ | . 44 | pahhet |  |
| gesar | . 44 | $\checkmark p l t$ |  |
| dehâ | . 47 | pelat |  |
| dunbâ | . 40,44 | pešar |  |
| $d e r \hat{a}^{6} \hat{a}$ | . 45 | çaprâ |  |
| hegâ | . 48 | *çeparpầrâ |  |
| $\checkmark h d i$ | . 47 | $q{ }^{\text {a'a }} \mathrm{em}$ |  |
| hedas | . 48 | qelubîa |  |
| hemas | . 48 | $q a p s \hat{a}$ |  |
| herag | . 48 | $\checkmark q r h$ |  |
| zaddeq | . 44 | reheb |  |
| zâdeqâ | . 44 | rehet |  |
| zaiiep | . 44 | ramhul |  |
| $z e k \hat{a}$ | . 44 | ramšâ | . 42 |
| $z \hat{z} p$ â | . 44 | ramšul | . 42 |
| zartâ | .41, 45 | repas | 44 |
| hebat | . . 47 | šulb ${ }^{\text {a }}$ | . 40 |

šelah 47 šeparpârâ ..... 44
šem 39 šeriânâ ..... 46
šemâhât 39 tamtem ..... 48
šammah 39 ta‘lâ ..... 41
špar $44 \operatorname{tar}^{‘} \hat{a}$ ..... 39
INDO-EUROPEAN LANGUAGES
Sanskrit avastha,- $\bar{a}$ ..... 142
aksan 139 avasvāpin̄ ..... 166
aksi 139 avīvadat ..... 166n.
-aks-noti 147,. 156 avyāja ..... 176
ang gustha $141{ }^{1} a s ́$ ..... 246n.
aj 246n. ${ }^{2} a s$ ..... 172n., 246n.
ajara 242, 244 aśrthita ..... 242
ajurya 242 `aśna ..... 249
añj 246n. aśramaṇa ..... 242
añjaspā 245 aśvaprsṭha ..... 237, 245
atrdila $244{ }^{\text {ªs }}$ ..... 246
atka 154 asatyatyăga ..... 160
adri 241ifi. asteya ..... 160
adhikam 194 asthan ..... 142
adhisavanyā 228f. as-yati ..... 156
an-ak 139 ahi ..... 197ff., 204
anakti 149f. ahinsā ..... 160
anātura 24: $\bar{a} g a$ ..... 153
anukramāgata 172n. -ătmaja ..... 188
antastya 142 ädarāt ..... 178
ap 236 ādardira ..... 245
apacyava 228í. āptya ..... 231
aparigraha 160 àbharana ..... 166n.
apāst $(h) i-$ $141 \bar{a} b h \bar{a} r a$ ..... 166n.
abhisnak 157 āmis ..... 247
amavisnu 242 āyaji ..... 228f.
amrta 233 āśana ..... 172n.
amrtyu 242 ás $\bar{a}$ ..... 175n.
ambikātva 176n. āśu ..... 244
$a r$ 246n. áśvapastara ..... 244
arjuna 168n. às ..... 246n.
arjunaketu 168n. àsana ..... $172 n$.
avaskara $157 i$ ..... 246
inddhe 150 kiye-dhā ..... 148n.
indra 208 kusṭtha,-ikà ..... 142
isíra 246 kr ..... 246
$\bar{\imath} d$ 238, 241, 245f. kr?natti ..... 154
ukthabhrt 244 krt ..... 156n., 158
ugra 244 krta ..... 228
uccālita 169n. krsnavakramukha ..... 175n.
utsa, udan 157 kośa- ..... 188f.
udara 143 with n. kostha ..... 142
unatti 143, 157 kāumudīsamyaktva ..... 163
unap 148, 151 krand ..... 245
upacyava .228f. krīd ..... 246n., 247
upabda 239, 245 kruś ..... 238, 241, $245 f$.
upabdi 239, 245f. ksane ..... 140
upara 235f., 241, 244 kssātraupastha142 ksemakāma242
ира̄уа 167 ks-nāuti ..... 147
ulūkhalaka 228f. Khañjarīta ..... 175
ulūkhalasuta 228f. khadira ..... 184
ulūkhalamusale, ..... 176n.234, 236, 238, 240, 249 gana
194
ulūkhale, gandhajāhaka ..... 191n.228ff., 234, 238ff., 247, 249
gabhasti ..... 141
$\bar{u} \bar{n} k \hbar$ 245 gavis ..... 244
ūrdhva..229, 237, 240f., 244, 248 gātrasamkkocin ..... 191n.
$\bar{u} r d h v a s a ̄ n u$ ..... 237
guna ..... 167
re 245f. guru ..... 173, 189
rna-dhat 157 gūdha ..... 175
rãjate 150 g?natti ..... 154
rsi ..... 194
$e-t a, e n \bar{\imath}$ ..... 150
enas 232f. grabh ..... 246
169n.
169n.
g?hyasūtra
g?hyasūtra ..... 183n.
odatà 144n., 157 gras ..... 246n.
osṭha 142 grāma ..... 167n.
kaksya ..... 235
kamala 168n. grāvan 228ff., 234ff.
168n. grāsa kamalānana ..... 167 with n .
192f. grāhi kalpana ..... 233
245f. ghus kāru ..... 245
kās $!$ tha 171n., 179n. ghosa ..... 238, 240 f .
kāsthabhaksana 179n. caks ..... 246
kiñśuka 175n. cat ..... 178
camū 229 dusvapnya ..... 233, 238
car 246n. duh ..... $245 f$.
cal 169n. deva ..... 182
cāy 246n. dyımattama ..... 229
cāru 244 dramaka ..... 167n.
cinoti 154 dravyapūjā ..... 193n.
cyu 226, 239, 241, 246 dvitaya ..... 192n.
chinatti 154 dhan ..... 246n., 247
chrnatti 157 dhā ..... 246 n .
chut 189 dhänyākrta ..... 245
jatā 144, 154 dhiṣaña ..... 247f.
jathara 144 dhur ..... 239, 241
janagrha 187n. -dhrk ..... 139n.
${ }^{2}$ jar 246n. dhruva ..... 242
jarit. 245 naks ..... 246n.
jalarekh $\bar{a}$ 182n. naksatra ..... 183
jāgata 242 nat (+ud, vi) ..... 173n.
jāla 144 , nadī ..... 157
jāhaka 191n. navate ..... 147n.
$j \bar{\imath} r a$ 247 navadvära ..... 161, 166
jus 246n. nas ..... $246 n$.
$j \bar{u}$ 246n. nāka ..... 153
$j u ̄ t a$ 144 nāga ..... 154
jhagataka (jhak ${ }^{\circ}$ ) 98n. nārī ..... 228, 234
$t(v)$ anakti 152 nins ..... 246n.
tilaka 174 with n. niksati ..... 148
tuñjate 153 ni jahi ..... 234
tud 238, 241, 246 nidhā ..... 151
tundate 154 nindati ..... 155
tr+ava, ud 191 nimesa ..... 187
trinhanti 148 niyojana ..... 174
trnatti 155 nihśsuka,-tva ..... 185n.
tr-ne-dhi 148, 151 nisedhika ..... 182n.
trdila 244 nihsidh, nihsedhika ..... 182n.
trita 231ff. nī+nis ..... 189
$t(v)$ analkti ..... 152
tvayakā ..... 176
183 nemi ..... 237daksina
dadhrtk, dadhrsa 139n. nāuti (cf. nu) ..... 156
dant 236 nyuñchana,--ka 174 with n .dalati .....................156n. pañcama187
dundubhi 229 pattaakula ..... 176, 186
pati, patnī 140, 150n. babbūlaphalik $\bar{a}$ ..... 184n.
pannaga 154 bādha ..... $148 n$.
par 246n. brhat ..... 231, 246
parat $\bar{a},{ }^{\circ} d \vec{a}$ 183n. brahmacarya ..... 160
parigrahapati 180 brahmodya ..... 120, 129, 132
parv,-ati 166 brahmāudana ..... 234
parvata 166, 242, 244, 249 bhaj ..... 246n.
palāśa 175 bhan-ati ..... 156 with n.
pali-kni 140 bhanakti ..... 156
pavitra 229 bhavann asti ..... 180
${ }^{2} p \bar{a}$ 246n. bhas ..... 246
pātita 187 bhāra ..... 166
pāsy $y \bar{a}$ 233 bhāvapūja ..... 193n.
pinsanti 152 bhinatti ..... 155 f.
pinak 152 bhisaj ..... 156
pinasti $152 b h \bar{\imath}, b h \bar{\imath} s, b h \bar{\imath} s a n a$ ..... 149, 156
pitukrt 245 bhuktahatta ..... 167 n .
pināka 152 bhunakti ..... 153
pīyati 152 bhur ..... 246n., 247
puccha 178 b石 (n.) ..... 167n., 171
pundra 175 bh $\bar{u}$ (v.) ..... 246
pum $\bar{a}(\dot{n}) s$ 151n. bhūta ..... 191
pulásti 142 bhr ..... 246
$p \bar{u}$ 246n. bhesaja ..... 239
$p \bar{u} j \bar{a}$ 182, 186, 192f. bhyas ..... 149
prc 246n. mañhanā ..... 237, 245
prnakti 151 madhumat ..... 229
prthu 244 madhusut ..... 244
prthugrāvan 230 madhyatas ..... 166n.
pr!thubudhna 229, 241, 244 manthati ..... 227
prthustu 142 manth $\bar{a}$ ..... 228f.
prsti 142 mayobhū ..... 244
prstha 142 maranānta ..... 181n., 187n.
prakuryāta 169n. marv ..... 166n.
pratipannāmbikātva 176n. mastaka ..... 142
prayojana 174f. mahiṣ, -pāla ..... $182 n$.
pruth 245 mahīy ..... 246n.
prothatha 244 mārjāra ..... 191n.
phata. 184n. mātṛn (acc. pl.) ..... 3
phalik $\bar{a}$ 184n. miyedha ..... 148n.
badhnāti 148 mih ..... 246n.
babrhāna $242 m \bar{\imath}$ ..... $246 n$.176176vana142, 235
mukha 175n. 237 vanaspati . . . . . .228ff., 235, ..... 241
musti ..... 141
165 with n .
musala230, 234 vanisthu143
mūrchāksepa 177n. vaś ..... 246n.
mūlik $\bar{a}$ 171n., 179n. vasti ..... 142
233, 246n. vah mrj ..... 246n.
149 vahni mr ..... 235
mrnati 150, $153{ }^{1} v \bar{a}$ ..... 246n.
mesa 187 vāgura ..... 142n.
mred 148n. vājasātama ..... 229
yakrt 139 vātajūta ..... 244
yam 246 vānaspatya ..... 230f., $240 f$.
yama, yamala, yamya. 146 vāra ..... 152
yava 227 vāŝā ..... 152, 235
yācatha 179 vāsayati ..... 152
yиј 239ff., 244, 246 vāhana ..... 176
yunakti 148, $153{ }^{1}$ vid ..... 246n.
yogini 162 vinakti ..... 151
yogya 183n. vināta ..... 155
raksohan 200 vipipäna ..... 244
rabh 246n. vipra ..... 245
raśmi 229, 241 vimāna ..... 195n.
rälksesasa 162, 190 vivadha ..... 151
rājotsava 177 vivrt ..... 247
rāsilikā 172n. viśopaka ..... 167n.
rās, rāsaka 172n. ${ }^{2}$ vis ..... 246n.
rinakti 153 visțvī (sukṛtyayā) ..... 239, 244
ris 246n. visth $h \bar{a}$ ..... 141f.
ru 245 vrkkāu ..... 141
runaddhi 151 vrnakti ..... 154
retas 237 vrt ..... 246n.
rāuhineyaka 168n. vertti,-stha ..... 181
'impati 147 vrtra ..... 199, $203 f$.
ī̀ni 153 vrtraturya ..... 202
'upyate, ${ }^{\circ}$ ta 172n. vrtrahan ..... 197ff.
'okabhāsāanuga 182 vrddhā, yuvat̄̄ ..... 176
ioharekhā 181 vrsan ..... 244
, aṅśa 174 vrsabha ..... 244
yac 238, 241, 245f. vrsnýa ..... 239
sad 238, 240f., 244ff. vedi ..... 247
(avīvadat, see this) veś $\bar{\imath}$ ..... 152
vodhum 148n. subhnāti ..... 155n.
śat 156n. ${ }^{1} s \bar{u}$ ..... 246n.
śatàvat 246 sūtra ..... 169n.
śad 156n. sūri ..... 245
śāstra $186 s r$ ..... 246n.
śinasti 156 srja ..... 229
śilārekhā 182n. sevā ..... 184
sīyate 156 somaprst!ha ..... 244
śuka 175n. somarabhastara ..... 245
śupti 141 somasut ..... 244
śrn̄ga (-pucchaparibhrasṭa) somād ..... 244
178 n . somin ..... 244
śrāddha 172 skabhāy ..... 246n.
śru 246 sthīyate ..... 171n.
śruti, śrusṭi 141 sphutam ..... 194
śloka 245 sphūrjati ..... 156n.
śvas 245 svakta ..... 156
sodaśa 148n. han ..... 246
salitu 156 hari ..... 244
sakthan 142 halīksna ..... 140
sad 246n. hasta ..... 141, 234
sadana 172 hastacyuta ..... 227
samipradāya 187 hastayata ..... 244
sarparsi 250 hi ..... 245
sarvārtha,-siddhi 195n. hinasti ..... 156
savana 225 hinoti ..... 156
sahasravat 246 hu ..... 245
sādha 148n. heti ..... 156
sādhu ..... 185
sāmabhrt ..... 244
Prakrit
sävana 225 ghamgala ..... 98n.
sic 246n. sa-vakkīo ..... 140
sidh ..... 246
sinoti ..... 148f.
Avestan ${ }^{1}$
su 245ff. aiwy-āxštar ..... 139
sukrt 244 ayasyå ..... 232
sunoti 226 aihhavana ..... 227
suparna 237 ayañhaēna ..... 226
supīvas 244 aratufris ..... 229

[^138]ıstaēna .. . . . . . . . . . . . . . . . . 226 yākkarə . . . . . . . . . . . . . . . . . . 139
ısmana . . . . . . . . . . . . .225f., 233
uśa ............................ . . 231
xši
138f. vaē $\delta a$, vaḕ $i$
yāvarєna . . . . . . . . . . . . . . . . . 225 f .
xši . 1381 vē̆ …......................... 152
ihityo . .................. 152

${ }_{z s t a}$ (hate ) ................ . 156 vaēnā, vaēma . . . . . . . . . . . . . . 152

229
upara ..................226, 229 verethrajan............. . 197, 205
uši ........................... 138 varəঠka .......................... 141
Łaya- $\delta a$.....................148n. vinasti ......................... . . . 155


xšnu . . . . . . . . . . . . . . . . . 147n. vīnaoiti ........................ . . 152
̌̌inaөāmaidē ................ . 154 vīnā̈ayen .................... . . 152
šinasti ....................... 155 snat ............................ . . 154
faśta (zaobrō•barana) . . . . . 229 zaotar ........................ . . . . 226
lāätya ....................... . . 226 zєmaēna
226
Zrvaëna ...................... 226 haoma ......225ff., 229, 233, 239

эas .......................... 158 harєz ........................... 229
мӣityå ....................... 232 havana . . . . . . . . 225 ff., 229, 234
¡аёs̆aza ...................... . 157 hāvana ...225ff., 229, 233f., 239
janadāmi .................. 151 hāvanan ...................... 226
Praoirisimna ................. 229 hāvanay ...................... . . . 229

${ }^{\text {r }}$ ravāzáaēna ................. . . 226 hunaoiti 226
‘ra•śavaiti .....  226
‘raśāvayamna ..... 229
r raśávayamnayã ..... 229
raśūtayå ..... 229
гаёza ..... 148
ıa $a$ ..... 151
ıadəntō ..... 155
ıaf-šu 151n. zōt ..... 239Pahlavi
apar hāvan ..... $226 n$.
asīmēn ..... $226 n$.
āsyāk ē pa dast ..... 226
urvīs ..... 228
ıāfya 151n. z̈urtalk ï ārt. ..... 226
wïne 230n. hāvanīm
nərəñädite ..... 153
nqnari ..... 148n.
uinaš ..... 149
227
dastahmyāsaite149 dastahNew Persian
$\bar{a} h \bar{o}$ ..... 233
227ava
$226 y \bar{a} r, y \bar{a} v a r$ ..... 227
hāvan $227 \boldsymbol{\epsilon} \boldsymbol{\epsilon} \sigma$ í $\omega$ ..... 149
hāvanīm 227 गुข日ov ..... 140
корш́ш $\eta$ ..... $1!$ ..... $1!$
кข́бӨos ..... $1!$
Armentan .....
141 .....
141
кข́वтıs
кข́वтıs
139
139
akn ..... 156
leard ..... 139
neard139 นaб名
$1{ }^{1}$
入ívapal
дıтаро́s ..... 140，143
$1!$
$\mu a ́ \sigma \sigma \epsilon \iota$ ..... 14
Albanian  ..... 14
154
$\mu \in \lambda \epsilon \epsilon \sigma \tau i$ ..... 14
ent
$141 \mu \dot{\mu} \sigma \tau a \xi$ ..... 14
lengór ..... 32
ขакто́s ..... 1521
vaós
vaós ..... 14 ..... 14
ขá́aбє
ขá́aбє ..... 151 ..... 151
139
139
Gremi
 ..... 156 ..... $1!$
$\nu$ ข́є
ä ${ }^{\text {ºs }}$ ..... 153
1521
vácós
ä $\gamma \mathrm{o}[\rho] \sigma \tau o ́ s$ ..... 141 ..... 14
àठík ..... 15414
11
aivós 150 vóóos
ä้кทๆбт兀s 142 vผ́ ${ }^{2} \lambda \alpha$ ..... $1!$
 а́ктй ..... $1!$
ástiv $147 \mathrm{n} ., 156$ ódoús ..... 137
á $\pi$ дóós 158 оैккои ..... $1:$
＇А $\pi$ ó $\lambda \lambda \omega$ 14ŏf．öктаддоя ..... 1
à $\bar{o}-\mathrm{-va} \boldsymbol{f} \epsilon$ 147 ö $\lambda \mu$ оя ..... 2
＇A $\rho \gamma \epsilon$ єi申óvтทs 145 oैrva ..... $1!$
＂A $\rho \tau \epsilon \mu / s$ $144 \pi a \lambda a(\imath) \sigma \tau \eta$ ..... 14
ä $\sigma \sigma о \mu а и$ 154 $\pi$ édas ..... 1
äт $\boldsymbol{\text { ácov }}$  ..... 1
＇Aфроді́т 144 тькрós ..... 1
$\beta$ ov̂s，$\beta$ जैs 138 тídvaтaı ..... 1i
रа⿱二小⿱㇒冋刂 $144 \pi \mu \mu \pi$ да́vєтац ..... 1
баі́нши $146 \pi \lambda$ е́к $\omega$ ..... $1_{i}$
ठоv̂дos，$\delta \omega \hat{\lambda} \mathbf{o s}$ 138 токілоя ..... 1
${ }_{\epsilon}^{\epsilon} \gamma \chi^{\circ}$ ㅇ $153 \pi o ́ \sigma \theta \eta, \pi o ́ \sigma \theta \iota o v$ ..... 1
 151n．$\pi 0$ ós ：$\pi \omega$ śs ..... 137
еे $\nu \tau \epsilon \sigma \iota-$ $153 \pi \rho o v \omega \pi \eta{ }^{\prime} s$ ..... 1
évтóo $\theta$ ıa $142 \pi \tau a i ́ \epsilon \iota$ ..... 1
（f） ̈ $^{\text {¢ }}$ $154 \pi v \delta a-\rho i ́ \zeta \epsilon \iota$ ..... 1
ёрєто 150 jáíct ..... 138
 151 бєі́ш ..... 1
$\sigma$ кîpos 156 dup̂lus ..... 158
бкки́ $\rho$, бкато́s 142,157 E-geria ..... 147
$\sigma \pi \epsilon \dot{\delta} \delta \iota$ 138 eiă ..... 259, 270
 156n. ensis ..... 156
óqápayos 156n. ĕs ..... 265
$\sigma \phi_{\eta} \nu$ 156n. exũt ..... 272
тıváббєє 152 exŏs ..... 265
$\tau \rho \epsilon(\sigma) \epsilon \iota$ 156 feminae ..... $264 n$.
 143n. fervĕre ..... 263
vioos 157 fīere ..... 265
-фрі́ш ........................149n. flare ..... 144n.
ф $\omega \nu \eta$ 145 fluere ..... 144n.
Хєє́p $\omega \nu$ 146 fortuãtus ..... 257
frustră ..... 259
Latin fugit ..... 153
abiete 263 fulgĕre ..... 263
acies 139 fungitur ..... 153
aes 150 gaesum ..... 156
antëit 252, 263 gemellus ..... 146
$\breve{A} p(p) u l i a$ 251, 266 genius ..... 146
ariete 263 gratuřtus ..... 251, 257, 269
caelestě. 265, 267, 268, 271 Hĕbrus ..... 258
Calpĕ 251, 271 h九̌c (c) ..... 251, 268, 272
capit 137 hŭic ..... 252
Catŭl(l)us 251, 268 ітто̆ ..... 269
cavĕ 270 imparĕ ..... 267
ciet 156 infernĕ ..... 266, 269 f .
commodă 251, 268 infula ..... 151
con-futo 153 intestina ..... 142
contră 264f., 270 Lăvinia ..... 266, 268
conūbium 257, 269 ludicrĕ ..... 251, 264
cŏruptus 251, 268 mage, magi (s) ..... 271n.
costae ..... 142
mare (abl.) ..... 265, 267 f .
cŏt $(t)$ idianus 251, 268 memnonĕ ( ${ }^{\circ} n i$ ) ..... 272
crēdit 158 milĕs ..... 265
crista 142 napurae ..... 151n.
сйй 252 narrat ..... 156
curvus 154 natrix ..... 154
(de-) frutum 145 nāre, nāvis ..... 147
deserit 153n. nebrundines ..... 140
dicat 138n. necesse ..... 153
Doridĕ ( ${ }^{\circ}$ di) 272 necto ..... 153, 158
neque 261 vensica ..... 143
nihhŭl 252, 263 venter ..... 143
nodus 151 Venus ..... 144
$n \bar{o}(u) m e n$ 156 vergit ..... 154
novacula 147 vermis ..... 154
pavit, pavimentum 138 vertit ..... 158
Pelĕus 252, 259 vexillum ..... 142n.
pello ..... 152
vī-ginti ..... 155n.
perennĕ (abl.) 265, 267 vin(e)xit ..... 152n.
per-fines 155 virgines ..... 264
pīlum 152, 155 zmarăgdos ..... 269
pinsunt ..... 152
plectit ..... 158
posteă ..... 251, 270
prodĕs ..... 265
Prŏserpina ..... 251, 268
$p u(e) r i$264
Praenestine
nefrones ..... 140
quomodŏ ..... 251, 271
rapit ..... 137
re-dimio ..... 146
rēnes 140 boss
saltus 157 étim
sanguǔs ..... 265 f.
scapulae ..... 141
scindit 154, 158
Middle Irish ..... 142
loss
sicută ..... 264, 269
siet ..... 258
sinexter ..... 35
stuprum154 byssupernĕ251, 259n., 266, 269clusttaeda152 nedim
tegendŏ ..... 251, 272
tendit, tendicula ..... 158
terit ..... 155 ..... 156
viú uruví ..... 151
155 ..... 141 ..... 141 ..... 154
Old Irish
beni
boss
étim

142

142 ..... 142 ..... 142 ..... 141f. ..... 141f.
Welsh
bon-llost
bon-llost ..... 155 ..... 155
Gothic
tesca 147 augo ..... 138
Trinacria 153n. b-nauan ..... 147, 153n.
unda 143, 157f. brusts ..... 142
urūca 143n. falpan ..... 158
151 fotus urvare ..... 35
věhĕmens 252, 263 kilpei ..... 144
velum 142n. nati ..... 155
Venilia 144 natjan ..... 157
sneipan 152n., 154 waist ..... 141
tunpus 35 wrist ..... 141
(Old) Norse Lithuanian
eista 142 áudra ..... 144n.
hlust 141f. baĩs, baisà, baisunas ..... 157
il-kvistir 142 dabury $s$ ..... 26
nista 155f. dambralüpis ..... 26n.
nỹra 140 dã̈bras ..... 26n.
skarn 157 daubà ..... 26
skide 157 daubas ..... 27
snage 153 daubé ..... 27
vás 144 daubikė ..... 27
daubiszkis ..... 27
Old High German daubotas ..... 27
bouwen 153n. dauburà ..... 27
chrumbe-lingūn 32 dauburelè ..... 27
wasal 144 dauburỹs ..... 27

* $d y k a ̀$ ..... 33
Old Swedish dyka-dínis ..... 33
nek 154 dŷkas ..... 33
dôbai ..... 27n.
Old English duba 'farm' ..... 27
sprecan ..... 156n.
duba 'barn' ..... 27
pwītan ..... 152
dúba 'hollow of a tree' ..... 27
dübai ..... 27n.
dubelis ..... 27
diebel, dobel, döbel, dübel dubëti ..... 28
leiste 142 dubỹn ..... 28
schaufel 141 dübininkas ..... 28
wanst 142f. dùbinti ..... 28
dubirania ..... 28
dúbyti ..... 28
Modern English
137
brustle28
152 dublë finds finds ..... 28
142 dúblès fist ..... 28
139 dubli liver ..... 29
153 dubliai snack, snatch ..... 29
154 dublinëti snake ..... 29
156n. dublínge speaks ..... 29
156n. dublinge tells ..... 29
156 dublingìné throws ..... 29
dúblinti 29 inkstas ..... 142
dublýs 29 iszdubãvyti ..... 31
dübos 27n. iszdůbëti ..... 31
dubrávas 29 krintù ..... 156
dubsóti 29 lekmenė ..... 32
dùbti 24, 30 minkyti ..... 149
dúburas 29 nyksztỹs ..... 141
duburỹs 29 nókti ..... 153
duburiuotas 29 novyti ..... 147
dubùrkis 29 paisýti ..... 158
dubùs 30 pa-žastìs ..... 141n.
dugnas 25, 30 paũksztas ..... 33 f .
dum̃blas 30 peĩkti ..... 152
dúmblija 30 peinlis ..... 152, 155
dum̃blinas 30 pilkas ..... 140
dumblýnas 30 pir̃sztas ..... 141
dumblỹnė 30 szleĩvas ..... 33
dumblingas 30 szlễvis ..... 32 f.
dúmblinti 30 szlivas ..... 32
dúmblus 30 szlivis ..... 32
dumbluitis 30 va $\tilde{m} b r a s$ ..... 26n.
dímbrus 30 vinis ..... 152
dumbù ..... 24, 30
dumburỹs ..... 30
diiba 30 bemberis ..... $22 n$.
Lettish
diubate 30 dîkâ stâwét ..... 33
důbé 30 dîks ..... 33
dubekasys 30 dumbrājs ..... 30
důbelė 30 dumbras ..... 30
důbëtas 30 dumbrs ..... 30
duibinti 30 làpsta ..... 142
diubkasỹs 31. slums
důbpãraszas ..... 31
dúbti ..... 31
dibummas 31 dubelis ..... 28
dưbùtė 31 golimba- ..... $22 n$.
gaudonė 23 instixs ..... 141
globa 31 klupstis ..... 142
glomóti 31. padaubis ..... 30
[golimba-] ..... $22 n$.
grabkasỹs ..... 31
y-nis 150 běsŭ ..... 157
cěditi ..... 152
olnno ..... 139
čel-ustı̆ 142 pestà ..... 141
grŭstı ..... 141
prŭstü ..... 141
na-lestă ..... 32
skaredŭ ..... 157
navă ..... 147
$s \breve{u}$ ..... 155n.
nevodŭ 151, 157 tresa ..... 148
nั̆za ..... 148
noz̃ว ..... 153
očese ..... 139Serbiannegve154
INDEX OF SUBJECTS

Abhaya, minister, 161; accused of grafting, 161, 180f.; relations with Rāuhineya, 162, 170ff.; former incarnation of, 189 ff .
Abhayakumāra, minister, 165
Ablaut, see Phonology
Accent, Lithuanian, 19
Adityas in Vṛtra myth, 202
Agni, and ignis, 205; and soma, 200; and Verethraghna, 205f.; and Vrtra, 199f.; as Dvita, 206; history of, 205; lost in Avestan, 205, 207, 209; with dasyuhantama, 200n.; with vrtrahan, 199f., 205; with vrtraturya, 202
Agni Vṛtrahan, 203, 207; a lightning god, 205; Indo-Iranian, 205 f.
Ahi, see Vṛtra
Allahabad, early place of pilgrimage, 79
Amitrahan, in Rigveda, 199
Analogy in Semitic, 38n.
Anapaest for dactyl, 263 f .
Anguttara Commentary, 105, 108
Animism in India, 80f.; relation to Upanishads and philosophy, 83; teaches all-prevading spirit, 83f.; relation to monism, 84f.; relation to transmigration, $85 f$.

Anquetil du Perron, on haoma-pressing, 227
Añra Mainyu, 231
Anthropomorphism among Aryans, 207n.
Apām Napāt, 205f.
Āptya, of storm gods, 206
Arhaddāsa, merchant, 163 ff .
Aryans, superiority of overestimated, 77 ff .
Assimilation, see Congeneric Assimilation
Asvins, and Vṛtra, 200; with vrtrahantrma, 208f.
$-\bar{a} t$ in Latin verbal endings, shortened, 266
Ātar, 205 ff .
Atharva Veda, philosophy in, 116ff.; tinged with Dravidian ideas, 83
Atharva Veda Parisisṭas, see Parisistas
Atheism of Buddhism changing to theism, 93
Āthwya, 206,'231, $23 \overline{3}$
Auspicious marks, 171, 192 f .
Avebury, Lord, 155
-averam, Latin verb-forms in, 262
Avestan vocabulary of pressing, compared with Vedic, 229

Azhi Dahāka, 205f., 231
Benares, early place of pilgrimage, 79
Betel, 178 f .
Bhagavad Gitia, on ways of salvation, 93
Bhāirava, 192
Bhaktimārga, see Salvation
Bhārata, 177
Bhartṛari, Nītisataka, quoted, 89
Bhillas, 190
Bidhātā, 91n., 98
Bilhaṇa, 165
Black magic and Life Index, 215n.
Blending (word), see Congeneric Assimilation
Blending of races, effect on culture, 77
Blood-offering, 191f.
Bloomfield, M., 18, 89n., 96n., 117, Dādistān, quoted, 229, 239 118n., 121n., 130, 132n., 134, 137f., : Dainos, Lithuanian, 20, 21n. 141, 158ff., $174 \mathrm{n} ., 176 \mathrm{n} ., 183 \mathrm{n} ., ~ D e a t h, ~ t e m p o r a r y, ~ 100 \mathrm{ff} . ;$ marvelous $211 n$.
Bluff, motif of Hindu fiction, 89n., 219
Boas, F., 145
Body, parts of, 137 ff .
Boehtlingk, Indische Sprüche, 49ff.
Brāhmaṇas, spirit of, 131 ff .
Bṛhaspati, and Vṛtra myth, 202; and vṛtrāṇi, 204
Bridegroom, substituted, 100 ; kidnapped by Rāuhiṇeya, 180
Buddha, see Gāutama
Buddhaghosa, 105, 108
Buddhism, relation to Jainism and Upanishads, 82 ff .; less Aryan than Upanishads, 87
Bundahish, quoted, 233
Caesura in Latin verse, license before, 263, 266
Caland, W., 118
Cāṇakya, 49ff.
Caṇdapradyota, 182
Chāndogya Upanishad, animistic quotation from, 83

Chastity Index, 223f.
Childlessness fated but escaped, 99, 102
Citragupta, helps worshipper escape fate, 100
Clausula, licenses in, in Latin verse, 258, 265, 268
Commerce, seaborne, of Ancient India (Dravidian), 77f.
Composition: 'look-see' type, 148, 157f.; 'par(t)-take' type, 157 f .
Congeneric Assimilation, 35 ff ., 137ff.; in Semitic vocalism, 37 f .
Contamination, see Congeneric Assimilation
Courts of ancient Indian kings, 86 f .
Crooke, W., 80
Culture as product of racial blendings, 77, 87 escapes from, 105 ff .
Deussen, P., 116, 122n., 126
Devacandra, 195
Devamūrti, 195
Dhammapada Commentary, 105, 110, 115
Dhātṛ, 91
Diaeresis, 252, 258, 269
Dīgha Nikāya Commentary, 107n.
Diminutive -ka, 168n., 176
Dīnkard, 105, 112
Disease of Language, 145
Donalitius, Lithuanian poet, 20n.
Dravidians, important element in Indian population, 76f., 87 ; influence on Indian culture, 77 f .; on language, 78 f .; on religion, 79 ff .; part in ancient commerce, 77f.; intelligence of, 78
Dual, elliptic, 225f., 229
Durgā, perhaps Dravidian, 79
Drandvas with initial sing. in Rigveda, 208f.
Dvita, 206
$\breve{e}$, vulgar Latin dative in, 271f.
Eating interrupted daily by fate, 98
Elephant with pearls on forehead, 96
Elliptic dual, see Dual
Elmore, W. T., 80
Emancipation, see Salvation
Ennius, influence and usage of, 251, 254f., 263 f.
Epics, ancient India in, 78
Escapes, from death, legendary, 105 ff . ; from fate, 89 ff .
-ēt shortened in Latin verbal endings, 266
External soul (see also Life Index), $211 n$.

Faith Token, see Life Index (Chastity Index)
Farēdūn, 231
Fate, as kismet and karma, 90 ; escaped, by divine aid, $92 f ., 100 f . ;$ by human shrewdness, 91f., 95ff.; by immediate action of karma, 9 , 103; inevitable, 89, 91; transferred from one man to another, 103; written on forehead, 90 f., 96
Feet, licensed, in Latin verse, 251, 253, 258f., 264, 266
Fiction Motifs, Hindu, Encyclopedia of, 89 n ., 211 n .
Folk-songs, Lithuanian, $20 f$.
Folk stories borrowed from literature, 95n.

Galanos, Demetrios, 49 ff .
Gambler becomes Indra, 99
Gaṇesa, 183
Ganges, 81, 165, 168, 171
Gāutama (Buddha), and predecessors, 81f.
Gāutama Svāmin, 163
Gender, Latin poetical, $254 n$.
Ghouls, 162, 191f.
Girl fated to be prostitute, 96 f .
Gobhadra, merchant, 188
Gods, treatment of in Vedas and Upanishads, 75; of Aryans and

Dravidians contrasted, 80f.; statu of in philosophy, 84f.; characteris tics of, 162, 173f., 187; change into monkeys, 163, 192; factitious 186f; outwitted by men, 95 ff.
Gomaya, 183
Gorakhnath grants barren woma: child, 102
Grierson, G. A., 78f.
Haoma pressing, 225f., 229, 233, 239 implements, 225ff., 239; their ma terials, $225 \mathrm{f} ., 229$; symbolism il their use, 229, 239 ; priests, 226 compared with Vedic soma, 229 (Cf. Soma presses.)
Haplology, 137
Haroun al-Raschid, incognito motif 164
Haug, on haoma pressing, 227
Hemacandra, Yogasāstra, 165
Hiatus, short vowels in, 252, 269 long vowels in, 261
History, definite, earlier in North In dia than in South, 78
Hitopadesa, quoted, 90n.
Hospitality to angels of death, safet: thru, 101f.
Human tree, magic tree of wealth 162f., 192ff.
Hunter gets one animal daily, 96 f .
Hypermeter, Roman use of, 268
$-\breve{\imath}$ final, abhorred in Latin and writtel $e, 271 f$.
-ier, Latin infinitive passive in, 262
Impossible conditions fulfilled, 96
Incest of woman with son, 91
Incognito motif, 164
Indeterminism, 89ff.
Indo-Iranian mythic conceptions 204f., 207
Indra, man becomes I. for a day, 99 f . the god, a Hindu creation, 208f. and Verethraghna, 197; and vrtrāṇi 204; origin of, 208f.; Vṛtrahan 197, 200f.; with vertrahantama, 20:

Indra-agni (Indrāgnī), 200f., 208f.
Indravāyū and similar compounds, 208f.
Intelligence of Aryans and Dravidians contrasted, 77
-iveram, Latin verb-forms in, 262

Jackson, A. V. W., 105n.
Jaimini Bhārata, Life İndex in, 213
Jainism, synchronous with Buddhism and Upanishads, 81 ; common source with them, 82; a national religion, 82; less Aryan than Upanishads, 87; five vows of, 160 ; glorification of, 183; wine forbidden by, 161; three jewels of, 170,194 ; ceremonies of, $182 f$.
Jātaka, Life Index in, $220 f$.
Jina (see also Mahāvīra and Vīra), 160ff., 169; 173, 182f., 185f., 188, 192, 194 f.
Jinadatta, merchant, 163f.
Jñānamārga, see Salvation
$-k a$, Sanskrit diminutive suffix, 168n., 176
Kālī, probably Dravidian, 79
Kāma, Atharvan hymns to, 122
Kamma, power of, 105ff. (See also Karma)
Karma, results of, 86 ; relation to Fate (q. v.), 90ff. (Cf. Kamma)
Käsadra, family, 195
Kathā Sarit Sāgara, Life index in, 215; chastity index in, 223
Kāuśika Sūtra, relation to Atharva Veda, 118ff., 129
Kāutukabhaṇ̣āra, forest, 190, 193
Keresāspa, 233
Keśin, 194
Kismet and Karma contrasted, 90
Klatt, 50ff.
Knowledge, as means of salvation (see Salvation), and as power in magic, 131ff.
Kressler, O., 49 ff.
Kshatriyas, and philosophy, 86

Kubera, 176
Kundalatikā, merchant's wife, 164

Lament of wife over dead robber, 170f.
Language, Dravidian, influence on Aryan, 78 f .; science of, see under Linguistics
Leskien, A., 21 ff.
Life Index, 211ff.; Active, 212-220 (literary, 213; folklore, 213ff.); choice of index, 220 and n.; Passive, 220-223 (literary, 220; folklore, 221ff.) ; Chastity Index, $223 f$.
Life lengthened, 95
Lightning instead of killing strikes little finger, 101n.
Linguistics, see Congeneric Assimilation, Disease of Language, Morphology, Phonology, Semantics
Lionheart, Prince, 214ff.; 219, 221, 224
Lithuanian-accent, 19 ; archaism of, 19 ; comparätive value of, 19 ; folksongs, 20, 21 and n.; grammar, 20f.; lexicography, 20f.; literature, 20 and n .; oral tradition, 20 f .; orthography, 20
Lohakhura, father of Rāuhineya, 160 f., $163,165,167,169$ f., 172

Madhyadesa, population largely Dravidian, $76 f$.
Magadha, 160, 163, 165; population largely Dravidian, 76f.; connected with origin of Upanishads, Buddhism, and Jainism, 81
Magic (see also Black M., Sympathetic M.), in Veda, 117ff., 131ff.; used by thieves, $160 f ., 166,168$, 179, 181; ointment, 162, 190, 194; charms, $165,168,179,185,190 \mathrm{ff}$.; ceremony, 174, 191ff.; tree, 192ff.; tanks of water, 191ff.; milk, 194; distinguished from Life Index, 215n.
Mahābhārata, Life Index in, 213

Mahāvīra, 163, 184, 189; predecessors of, 82 (see also Vīra, Jina)
Manyu Vṛtrahan in Rigveda, 199ff.
Maruts and Vṛtra in Rigveda, 199
Matsyendra, Yogi, 190
Mechanical Doll, 162, 185 f.
Men and Vṛtra in Rigveda, 198
Merriments of man shared by beings, 99
Meru, Mount, symbol of permanency, 181, 195
Metempsychosis, see Transmigration
Milton, versification of, $255 f$.
Ministers, Hindu, character of, 186
Moksa, see Salvation
Monism, evolved from Animism, 85
Monseur, 49ff.
Monsoons, effect of, 207 ff .
Morphology-Comparative, 145; infixed nasal class of verbs, 147 ff .; monosyllable impermanent, 158; neuter plural in -i, 145; participles with strong grade, 148 n .
Motifs of Hindu fiction, encyclopedia of, $89 n$., 211 n .
Mrechakațikā, locus classicus for thieves' methods, 161
Müller, L., criticism of, 251, 259 f.
Müller, Max, 145
Mukti, see Salvation
Nāga, merchant, 187 f .
Nāgas (mythological serpentine beings), 183
Nānaks̄à rescues man from death, $101 f$.
Nārada, instigator of strife, 179
Nasal infix, verbs with, 147 ff .
Nyāya philosophy, 84
-o final, shortened in Latin, 266-270
Ogres, 162, 190 f.
Oldenberg, H., 7n., 8n., 12n., 249n., 250n.
Ordeals, 184ff.
Ox, single, to provide living for boy, $96 f$.

Padmodaya, king, 163 f .
Palace, seven-storied, 175, 186.
Pāndavas, as characters in story of Rāuhiņeya, 177f., 180
Parisistas of Atharva Veda, relation to Atharvan tradition, 118ff., 129
Pārśvanātha, Jain savior, 192; 'Life and Stories of P.' (Bloomfield), 159, 166, 174n., 178, 185, 189, 191
Partridge, 183
Pātāla, city of lower world, 162, 191
Peacocks, 168
Persson, 137, 142n., 151, 154, 158
Philosophy, Hindu; postulates of, $83 \mathrm{ff} . ;$ different systems of, 84f.; questions arising from, 84 ff.; Vedic, 83, 116ff., 130 ff .
Phonology: Loss of aspiration in Skt. thy, thv, 141; Skt. interior $a z^{\prime}, a z$, $a d, 148 \mathrm{n} . ;$ Skt. -n(d)r-, 208; Ablaut: ex-x, 147n.; sw-sw—s-u -zero, 156; $\bar{e} i-e-i$ and $\bar{e} u-e-u$ i 138 n .
Plutarch, on haoma pressing, 227
Population of India, prevailingly Dravidian, 76f, 87
Prāṇa, in Ath̆arvan philosophy, 121
Prasenajit, king, 160f., 165f., $168^{-}$
Press, see Haoma, Soma Presses
Proceleusmatic for dactyl, in Latir verse, 264
Proper names, metrical licenses in, ir Latin, 266, $268 f$.
Prosody, Latin popular, 251, 257 267f., 269
Prostitute outwits fate which limits her number of lovers, 96 f .
Pūjā ceremonies, 182, 192 f.
Punchkin, 212f., 217, 219
Puppet or mechanical doll, 162, 185 f
Purusa hymns of Veda, 119, 126f.
Race blending, effect on culture, 77
Rājagṛha, city, 160f., 165ff., 175, 182 188
Räjputs, 166
Rākṣasas, see Ogres

Rathika, merchant, 187 f.
Rāuhineya, thief: two incarnations of, $160,162,189 \mathrm{ff}$. ; family of, 160 ; magic arts of, 161, 168, etc.; challenges king and minister, 172; first theft and its celebration, 173f.; hears Virra's sermon, 173; description, 175; lives as merchant, 175f.; persecutes police, 176 ff.; submits to ordeal, 185f.; converted to Jainism, 188f.; takes initiation, 195
Rāuhineya-caritra, manuscripts of, 159; date, 165; author, 195.
Rawlinson, H., 77
Release of soul, see Salvation
Reunion of separated lovers by verse, $100 f$.
Risley, on ethnology of India, 76 .
Ritual, importance of in Rigveda, 75
Rohinī, mother of Rāuhiṇeya, 167, 170, 188; laments for husband, 170f.; reproaches her son for not stealing, 171; celebrates his first theft, 174f.
Rohita hymns of Atharva Veda, 120
Roth, R., 5n., 9n.
Rūpyakhura, grandfather of Rāuhineya, 160, 163ff., 172
Rūpyakhurā, 163
$-s$ final in Latin, recall of, 253 f ., n., 267
$s$ impure, shortening before, in Latin, 260
Saints give blood to Viṣnu, 102f.
Saints help to escape fate, 101ff.
Salvation, means of, 86; by devotion, 86, 92 ff .; by knowledge, 86, 92f., 131ff.
Sambhinnamati, minister, 163
Samyaktvakāumudi, story of, 163ff.; date, 165
Sānkhya, accepts plurality of spirits, 85 ; theory of salvation, 86
Santals, 88
Sarvārthas, 195
Sarvärtha-siddhi, 195n.

Sat and Asat, story of, 103
Satānīka, 183
Sava hymns of Atharva Veda, 122
Schick, J., 108n., 110n.
Schmidt, Johannes, 138
Seasons, poem by Donalitius, 20n.
Semantics. Belly, intestines, pudenda, 142; bends ( $<$ binds) : twines, 154n.; blow: flow, 144n.; body, sundry parts of, 142; coagulates $<$ cuts, $<$ presses, 152 ; cutting, striking, rubbing, 154f.; enjoys < eats < breaks off, 153; fills < bursts, 151; finds < strikes, 155; hand and finger group, 141; hates: throws, 156; leaves = not takes, goes from, $153 \mathrm{n} . ;$ makes $<$ kneads, 154; makes < weaves, 155; nose < dripper, 141n.; nose: snore, 156 n. ; runs (proceeds): runs (directs), 157; scolds < strikes, 152; sifts < splits, 151f.; snake < rope, 154; speaks < strikes, $155 \mathrm{n} . ;$ throws $<$ twists, turns, 152; weave < draw, 149; wind: water, 144n.
Semitic languages, divisions of, 40 ; abbreviations of names of, 36 ; alphabets, transliteration of, 36. (Cf. next)
Semitic roots, theory of, 36, 37; development of new, 38, 39; classes of congenerically assimilated, 40 f.; reason for meagerness of evidence for their extension by congeneric assimilation, 48
Seng-houei, 105
Separable soul, 211n., 219 and $н$. (Cf. also Life Index)
Siva, perhaps Dravidian, 79
Sneezing saves boy from death, 102 n .
Soma, and Vṛtra, 199f.; and vretrāni, 204
Soma presses and pressing, 228ff.; press of RV. 1. 28, 228-231; päṣa, press of Trita, 231, 233f.; grāvan, 228ff.; grāvan =ulūlhhala, 230f., 234; adri, 241ff.; 'Apastamba
press', 235 ff., 240 , 247 ff . (same as adri, 247f.); contrast of grāvan and $a d r i$ in vocabulary, 241ff.; materials of presses, 229f., 234f., 241f.; connection with Trita, 233. (See also Haoma)
Son denied brahman, 99
Son of Seven Mothers motif, 224
Soul's binding and release, see Salvation
Speculative hymns of Veda, see Philosophy, Vedic
Spirit, cosmic, identified with Deity, 84
Spooks, and Agni in Rigveda, 205; classified, 204
Srāddha, 81, 172
Srāvastī, city, 194
Sreṇika, king, 161, 163, 165, 168, 173, 177f., 183, 186, 188, 194 f.
Substituted bridegroom, 100
Subuddhi, minister, 163
Suffixes, containing -st(h)-, 141ff.; diminutive -ka, 168n.; 176
Sütras, 75
Suvarnakhura, thief, 163 f .
Svetāmbī, city, 189
Swallowing the god, 98
Symbolism of use of haoma implements, 229, 239
Synchysis, 137 (see Congeneric Assimilation)
Syncretisms, cultural, in India, 80ff., 87
Synizesis, Latin, 257, 263f., 269
Systole, Latin, 253; 257, 259, 266
Tantras, 79
Temporary death, 100 ff.
Thief-catching statue, 185 f.
Thieves, technique of, 161, 177 f. ; accomplishments of, 160f., 166, 168, 171ff., 177ff., 181ff.; bought off by tribute, $160,166 f . ;$ family tradition of, 169, 171f.; ceremony in honor of first theft, 174 (Cf. next)
Thieving, as profession, 160, 169;
technical methods of, 161, 177f.; blame shifted to innocent person, 161 ; with aid of magic, 160 ff . (Cf. preceding)
Thraētaona, 206f., 231
Three fish, fable of, 92
Thrita, 206, 231ff.; connection with haoma, 233 (See also Trita)
Tibullus, elegance of, 253n.
Tota Kahani, Chastity index in, 224
Tradition, Vedic, character of, 123ff.
Trä̀itana, 206, 231
Transformation to animals, of humans, 162, 168, 172, 180, 190, 193; of gods, 163, 192
Transmigration, relation of to animism, 80, 85; importance in Indian thought, 85 ; reason for, 85 f.
Tribute paid to thief, 160, 166f., 170 ff.
Trita, 231ff., 239; connection with Soma, 199, 231, 233; and Agni, 206f.; and Indra, 202, 206f.; not a water-deity, 207 n .; one of a triad, 206f.; and Vṛtra, 199, 206
Tuti Nameh, Chastity index in; 224
Ucchista hymn of Atharva Veda, 122
Uditodaya, king, 163
Upanishads, place and time of origin, 81f.; relation to Buddhism and Jainism, 81ff.; accept Vedic gods, 82 ; new thought of time, 82 f .; relation of kshatriyas to, 86f.; debt to Dravidians, 87; practical aims and quasi-magical methods of, 131ff.
UrvākhSaya, 233
Usener, 144f.
Vāibhāra, Mount, resort of thieves and ascetics, 165, 172, 175f., 194
Vāitāna Sūtra, value as interpretér of Atharva Veda, 118
Vajra, in Rigveda, 207
Vārtrahatya in Rigveda, 203
Vāyu, 208
Veda, Rig, typical of early Aryan thought, 83; Atharva, tinged with

Dravidian ideas, 83. (See Philosophy, Vedic; Tradition, Vedic; Magic, in Veda)
Vedà̀nta system of philosophy, 84ff.
Veṇātata, city, 168
*Verethra, 205
Verethraghna, accounted for, 204
206f.; a fiend-smiter, 205f.; and Indra, 197
Verethrajan, 197, 205
Vergil, hypallage in, 253n.; restricted language of, 268
Vernaculars, modern Indian, influenced by Dravidian, $79 f$.
Verse as means of reuniting lovers, 100 f .
Verse-close, Plautine, 258; licenses of, 265, 268
Versification, Latin, 255f.; English, 256 f.
Videha, population mainly Dravidian, 76f.; and origin of Buddhism, Jainism, and Upanishads, 81
Vidhātṛ, 91
Vikrama, killed by son of infant girl, 96; his length of life doubled, 95

Vira, 160, 169, 173, 187ff., 194f. (See also Jina, Mahāvira)
Viṣ̣u ill, asks saints for blood, 102f.
Vivahvant, 233
Vṛtra, 231, 233; and Ahi, 197f.; and Indra, 198; destruction of, 198ff.; myth of, 200ff. (Indo-Iranian, 204f.) ; mother of, destroyed, 202f.; vrrtrāni, $203 f$.
Vṛtrahan, in Rigveda, 197 ff.
Vrtrahantama in Rigveda, 197, 201, 208
Vrrtrahatya in Rigveda, 203
Vṛtra-killer in Rigveda, 197, 204
Walde, 155n.
Whitehead, Bishop, 80
Witches, 162, 191 f .
Works, see Karma (Kamma)
Yama, 190 f.
Yogi, rogue disguised as, 162, 190 ff.
Yudhisṭhira, 181
Zād Sparam, 105, 113
Zartūsht Nāamah, 105, 114

## ERRATA

Page 39, lines 8-10 from bottom: for S. sammah, semâhât, sem, read šammah, šemâhât, and šem.



[^0]:    ${ }^{1}$ These difficulties have been further increased by the death of two of our associates. Professor Kirby F. Smith of the Johns Hopkins University had promised us an article on 'Invisibility in Folklore,' but at the time of his death the work had not progressed so far as to permit the publication of his results. Professor Fay's article was completed and appears below in this volume. Unfortunately, however, he did not live to see it in type, and it lacks the benefit of the final revision he would have given it.

[^1]:    ${ }^{1}$ Mrs. Bloomfield died on June 25, 1920, while this book was in press.

[^2]:    ${ }^{1}$ This is again apt to be a very different matter from the year in which such communications were verbally presented to the American Oriental Society. For example, Bloomfield's Fifth Series of 'Contributions to the Interpretation of the Veda' was presented orally to the Society in 1892. actually published in April, 1894 (JAOS 17. 149), and finally included as part of Volume 16 of the JAOS, which bears the date 1896.

[^3]:    ${ }^{1}$ Books 1-6 have been published in JAOS volumes 26, 30, 32, 35, 37, and 34. Books 7 and 8 are far enough advanced to make their material available.

[^4]:    ${ }^{2}$ Roth, Der AV in Kaschmir, p. 23.

[^5]:    ${ }^{3}$ Oldenberg's Prolegomena, p. 243.

[^6]:    ${ }^{4}$ Prolegomena, p. 326.

[^7]:    ${ }^{5}$ See below on this page.
    ${ }^{8}$ Der AV in Kaschmir, p. 18.

[^8]:    ${ }^{7}$ Oldenberg Prolegomena, p. 243f.

[^9]:    ${ }^{8}$ Cf. Whitney's Translation.

[^10]:    ${ }^{\circ}$ In the edition of Bk 59 d should read tās te ${ }^{\circ} \circ$.

[^11]:    Hartford, Connecticut.

[^12]:    ${ }^{2}$ This is not the place for a discussion of Lithuanian literature as such, but I should like to protest here against the sweeping verdicts that have so often been recorded in regard to it. For the most part they have expressed either extravagant praise or dismissal with the wave of a hand, depending upon the literary standards employed. It seems to me that both verdicts are almost equally false and equally true. In comparison with Greece Lithuania has practically no literature, either in quantity or quality. But Donalitius' 'Seasons' more than deserves comparison with Thomson's 'Seasons'; the folk-songs are frequently genuine lyrics of naïve grace and charm containing mythological coloring of intrinsic as well as comparative interest; and several contemporary names associated with the Lithuanian national revival offer considerable promise for the future.

[^13]:    ${ }^{5}$ Thus, when one finds a Lithuanian golimba- 'blau' in Brugmann, Grundriss ${ }^{2}$ (II. 1. 389), it does not, unfortunately, cover the case simply to state the fact that Brugmann intended to write Old Prussian golimbaand that he overlooked the slip in preparing his corrigenda. If one may guess from experience, some one, sooner or later, will accept Brugmann as authority for a Lithuanian golimba- 'blau'.

    Likewise, Walde, Lateinisches etymologisches Wörterbuch ${ }^{2}$ (s. v. fimbria), had no intention of setting up a new Lithuanian form when he unwittingly turned into Lithuanian the Lettish word bemberis 'Tannzapfen' which Prellwitz (BB XXI. 236) had correctly transmitted to him from Leskien (Nomina, 444).

[^14]:    ${ }^{8}$ Notice also Ablaut, p. 267: 'Der litauische Wortschatz ist weit davon entfernt, vollständig bekannt zu sein. Schon aus diesem Grunde kann auch meine Sammlung nicht vollständig sein. Dazu kommt, dass ich auch die vorhandenen litauischen Drucke nur in beschränktem Masse ausbeuten konnte: viele ältere oder im russischen Litauen gedruckte Bücher sind nicht zu erlangen, manches eignet sich wegen seiner unvollkommenen und unsicheren Orthographie gerade für den vorliegenden Zweck nicht'. Also Nomina, pp. 153-4: 'Die Geduldsprobe, noch eine Anzahl Erbauungs- und Volksbücher, noch mehr Volkslieder zu lesen, hätte ich freilich fortsetzen können, allein es lohnte, sich zuletzt wenig, und endlich muss man solchen Arbeiten irgendwo eine willkürliche Grenze setzen, da sie keinen bestimmten Abschluss in sich tragen. Auch was ich gesammelt hatte, ist nicht alles verarbeitet; sehr viel Worte, die mir nicht recht sicher schienen oder nicht recht verständlich waren, habe ich bei Seite geworfen. Darin hätte ich vielleicht noch weiter gehen sollen; man wird finden, dass ziemlich viel Worte, die ich nicht zergliedern konnte, doch vermuthungsweise unter bestimmte Suffixe eingereiht sind; und ich kann gegen einen Tadel darüber nichts einwenden, als dass ein besserer Etymolog als ich, dem sie sonst vielleicht entgangen wären, ihnen die richtige Stelle schon anweisen wird'.
    ${ }^{7}$ Cf. my article $A J P 39.314$.

[^15]:    ${ }^{8}$ Leskien's le $=$ lettisch; $N=$ Nesselmann's Wörterbuch; KLD $=$ Kurschat's Littauisch-deutsches Wörterbuch (brackets about a word indicate that it was not entirely familiar to Kurschat and that he could not guarantee its correctness).

[^16]:    ${ }^{9}$ Note, from here on, the following abbreviations: Archiv f. slav. Philol. $=$ Archiv für slavische Philologie, herausg. von V. Jagić (Berlin, 1876 ff.) ; Berneker $=$ Slavisches etymologisches Wörterbuch (Heidelberg, 1908 ff.); Bezzenberger BGLS. = Beiträge zur Geschichte der litauischen Sprache auf Grund litauischer Texte des XVI. und des XVII. Jahrhunderts (Göttingen, 1877) ; Bezzenberger LF. = Litauische Forschungen (Göttingen, 1882); Boisacq = Dictionnaire étymologique de la langue grecque (Heidelberg-Paris, 1916) ; Brückner $=$ Die slavischen Fremdwörter im Litauischen (Weimar, 1877); Brugmann =Grundriss der vergleichenden Grammatik der indogermanischen Sprachen ${ }^{2}$ (Strassburg, 1897 ff.); Feist $=$ Etymologisches Wörterbuch der gotischen Sprache (Halle, 1909); Geitler LS. = Litauische Studien. (Prag, 1875) ; Juškevič = Litovskij Slovarı (St. Petersburg, 1897 ff.); Kluge $=$ Etymologisches Wörterbuch der deutschen Sprache (Strassburg: 7. Aufl., 1910; 8. Aufl., 1915) ; Kurschat DLWb. = Deutsch-littauisches Wörterbuch (Halle, 1870); Kurschat Gram. = Grammatik der littauischen Sprache (Halle, 1876); Kurschat LDWb. = Lit-tauisch-deutsches Wörterbuch (Halle, 1883); Lalis = Lietuviškos ir angliškos lealbu žodynas ${ }^{3}$ (Chicago, 1915); Leskien Abl. = Der Ablaut der Wurzelsilben im Litauischen (Leipzig, 1884); Leskien-Brugmann LV. = Litauische Volkslieder und. Märchen (Strassburg, 1882); Leskien Nom. = Die Bildung der Nomina im Litauischen (Leipzig, 1891); Mielcke $=$ Littauisch-deutsches und deutsch-littauisches Wörterbuch (Königsberg, 1800); MLLG. $=$ Mitteilungen der litauischen litterarischen Gesellschaft

[^17]:    ${ }^{13} \mathrm{I}$ am indebted for the accent of the word and the quantity of the first vowel to Mr. V. K. Račkauskas, editor of 'Tērynē', to whom the word is perfectly familiar. It does not appear in the dictionaries, and Leskien expresses some doubt regarding it.

    I should like to express here my sense of obligation to Mr. Račkauskas, Dr. John Szlupas, his son Mr. K. G. Szlupas, Mr. Roman Karuza, Mr. B. K. Balutis, and many other Lithuanians who have so often assisted me in linguistic matters or in the work of the House Inquiry.

[^18]:    ${ }^{15}$ Despite Berneker, s. v. dikŭ, I take dykas 'wild, arrogant, insolent, wanton' to be another stem. To the best of my knowledge, it does not exist in modern Lithuanian, certainly not in Prussian Lithuanian. Cf. the two catch-words and their derivatives in Nesselmann 142.

[^19]:    ${ }^{10}$ Kluge's change to paũksztis in the eighth edition was made on my suggestion and, therefore, adds no authority to my argument. For paũkstas in the seventh edition read paũksztas.

[^20]:    ${ }^{1}$ Cf. Bloomfield's articles 'On Adaptation of Suffixes in Congeneric Classes of Substantives,' $A J P$ 12. 1-29 (1891); 'On Assimilation and Adaptation in Congeneric Classes of Words,' ibid. 16. 409-434 (1895); 'On the so-called Root-determinatives in the Indo-European Languages,' IF 4. 66-78 (1894) ; also H. Güntert, Ueber Reimwortbildungèn im Arischen und Altgriechischen, Heidelberg, 1914.-The last-mentioned example above has been appropriated by Brugmann, Grundriss ${ }^{2}$ 2. 1. 131, 460, 591, without acknowledgment, from Bloomfield, AJP 12.11 ff .
    ${ }^{2}$ Cf. Bloomfield, $A J P$ 16. 410.

[^21]:    ${ }^{0}$ For analogical formations in general in Semitic cf. Huizinga, Analogy in the Semitic Languages, Balto., 1891 (or AJP 11. 471-482 [1890]; 12. 30-48, 133-156 [1891]) ; S. Fraenkel, 'Zum sporadischen Lautwandel i.d. semit. Sprachen,' Beiträge z. Assyriologie, III. pp. 60-62; J. Barth, 'Formangleichung bei begrifflichen Korrespondenzen,' Orientalische Studien Th. Nöldeke . . .gewidmet, vol. II, pp. 787-796; C. Brockelmann, 'Semitische Analogiebildungen,' $Z D M G$ 67. 108 (1913); Br. pp. 287-296.
    ${ }^{7}$ Very little of this evidence, however, is found in the articles referred to in the preceding note. Practically all of the examples there given are included below, credit being given by references.

[^22]:    ${ }^{8}$ According to some the triconsonantal forms in $c$, $d$, e are more original than the biconsonantal forms, cf. note 3.

[^23]:    ${ }^{\circ}$ Occasionally a new root has fewer consonants than the original, cf. below II, 13.

[^24]:    Baltimore, Martland.
    ${ }^{10}$ Cf. for example Barth, Etymologische Studien, Leipzig, 1893, and Br. pp. 151-282, passim.
    ${ }^{11}$ This same idea was voiced by S. Fraenkel in 1898, but does not seem to have attracted much attention; cf. p. 61 of his article cited in note 6.

[^25]:    ${ }^{1}$ Nor is Boehtlingk's language on p . xiii inconsistent with this view, although the words taken separately are susceptible of a different interpretation.
    ${ }^{2}$ The manuscript may have been incomplete. There is no proof that Galanos' translation has reached the end of the collection, although the presence at the end of a number of stanzas in other than the sloka metre is an indication that it is at least drawing to a close.

[^26]:    ${ }^{3}$ I may call attention to a tendency to substitute explanation for mythology. Vocatives are regularly dropped. It must be remembered that the translation of the $\epsilon \kappa \delta<a \phi \circ \rho \hat{\omega} \nu \pi o \iota \eta \tau \hat{\omega} \nu$ never received a final revision, but was edited by men unfamiliar with the original.
    ${ }^{4}$ Monseur adds a few but I have succeeded in identifying something over eighty additional verses.

[^27]:    ${ }^{5}$ It contains two verses not in Kressler's: iv. 2 sādhubhyas te nivartante putrā mitrāni bāndhavāh | ye ca tāih saha gantāras tad dharmāt sulkrtam kulam || v. 10: anyath $\bar{a}$ vedapāndityaim śāstram $\bar{a} c \bar{a} r a m$ anyathā | anyath $\bar{a}$ yat vadan(!) śāntam lokeāh keliśyanti cānyathā.|| with resulting changes in the numbering of the verses which I disregard, following Kressler's numeration. This copy already contains some of the errors noted in the late edition; but in other cases it is free of such, confirming or tending to confirm the corrections suggested; ef., i. 4, xi. 7, xiii. 15, 17, xiv. 7, 14, xv. 2, 3, 7, 10, 16, 19, xvi. 7, xvii. 15, 18.

[^28]:    ${ }^{1}$ This paper may be regarded as a tentative article in. the encyclopedia of Hindu fiction motifs suggested by Professor Bloomfield in his paper, On Recurring Psychic Motifs in Hindu Fiction, and the Laugh and Cry Motif, JAOS 36. 54. For treatment of individual motifs, see also the following papers by Professor Bloomfield: On Talking Birds in Hindu Fiction, Festschrift für Ernst Windisch, p. 349; On the Art`of Entering Another's Body, Proceedings of the American Philosophical Society 61. 1; The Fable of the Crow and the Palm-tree: A Psychic Motif in Hindu, Fiction, American Journal of Philology 40. 1. Other papers discussing Hindu fiction motifs are as follows: Burlingame, The Act of Truth (Saccakiriya): A Hindu Spell and its Employment as a Psychic Motif in Hindu Fiction, JRAS for 1917, p. 429; Norton, The Life-Index: A Hindu Fiction Motif, printed in this volume; and the present author, Vyāghramārū, or the Lady Tiger-killer: a Study of the Motif of Bluff in Hindu Fiction, to appear soon in the $A J P$.
    ${ }^{2}$ Cf. Hitopadeśa (ed. Peterson) IV. 9 :
    yad abhāvi na tad bhāvi bhāvi cen na tad anyathā iti cintāviṣaghno 'yam agadah kim na pīyate.
    'What is not to be, will not.be; if it is to be, it will not be otherwise. Why not drink this remedy that destroys the poison of worry?'

[^29]:    ${ }^{3}$ So we see a pious but poor Brahman whose unhappy lot results from unrighteousness in former existences, and a wicked but rich Kayasth whose happiness is due to merit acquired in previous births. Needless to say, in the next incarnation their positions will probably be reversed (McCulloch, Bengali Household Tales, p. 7).

[^30]:    ${ }^{4}$ In Bengal, for instance, a common word for fate is kŏpāl, Skt. Keapāla (forehead). See McCulloch, Bengali Household Tales. Cf. the Marathi proverb je kapālāñti te bhogāve, bear what is on your forehead (Manwaring, Marathi Proverbs, p. 208).
    ${ }^{5}$ Also variously known as Vidhātā, Dhātā, Bidhātā, Bidhātā Puruṣa, ete. Dhātr and Vidhātr are first applied to Indra and Viśvakarman (Rig Veda. 10. 82. 2, and 10.167. 3).
    ${ }^{6}$ Manwaring, Marathi Proverbs, p. 210; Pantalu, Folklore of the Telugus (3d ed.), p. 38.
    ${ }^{7}$ Parisisṭaparvan II. 224; Tawney, Prabandhacintāmani, p. 71; Southern Pañcatantra amplior I. 34; Hertel, Das Pañcatantra, pp. 152 and 283; D'Penha in Indian Antiquary 21. 45.

[^31]:    ${ }^{7 a}$ Punningly also: 'Laksmi (Fortune) approaches (only) the Man-lion (i. e. Viṣnu, her consort).'
    ${ }^{8}$ Hitopadeśa, ed. Peterson, Introduction, vs. 22. Cf. Drāupadi's remarks in Mahābhārata, Vanaparva 30 and 32.
    ${ }^{\circ}$ Pañcatantra story of 'The Three Fish' (Tantrākhyāyika I. 12, and other versions).

[^32]:    ${ }^{10}$ Adhyāya 12. 1-8.
    ${ }^{11} I . e$. indifferent to good and evil, etc.

[^33]:    ${ }^{12}$ This is rather different from the statement that the creation by Brahma, the avatāras (incarnations) of Visnu, and the asceticism of Siva-here we have the traditional triad of chief gods-are all the result of karma (Bhartṛhari, Nītiśatakam 95).

[^34]:    ${ }^{23}$ At the same time I shall endeavor to indicate, chiefly in the footnotes, which of the folk, or oral, stories discussed are of independent folk existence and which are borrowed from literature. This is in pursuit of the announcement made by me in JAOS 39. 11 of an investigation of Indian folklore along these lines. In my present paper there are treated 17 oral tales, of which 3 are derived from literary antecedents, 3 appear to be derived from literary prototypes which I have not seen, and 11 are of independent oral existence.
    ${ }^{14}$ Vikrama Carita, Metrical Recension 32.

[^35]:    ${ }^{15}$ For a discussion of the motif 'How to evade seemingly impossible (trick) conditions', see Bloomfield, JAOS 36. 65.
    ${ }^{10}$ Dharmakalpadruma II. 4. 109 ff. (Hertel gives text and translation in $Z D M G 65.441 \mathrm{ff}$.)
    ${ }^{17}$ For this notion see Hertel's reference, $Z D M G 65.445$.

[^36]:    ${ }^{18}$ The Sanskrit word translated 'a tough problem to solve', jhagatalia, is not found in any Sanskrit lexicon. In Hemacandra's Prakrit Grammar IV. 422 jhakataka is said to be equivalent to Prakrit ghamgala, which latter word is not otherwise explained. In Shankar Pandurang Pandit's edition of the Kumārapālacarita, p. 269, jhagataka is said to mean moha.
    ${ }^{13}$ A proverb about equivalent to 'Money makes the mare go.'
    ${ }^{20}$ Variants of parts of this story, probably with this story itself all pointing to a common prototype, appear elsewhere in Hindu fiction. The elder son's adventures are elaborated in two folk-tales. In one of them (Mukharji, Indian Folklore, p. 114) the prince, at the age of fifteen, is compelled by Fate to hunt stags for a living. At the minister's suggestion he ceases to go to the forest to hunt, and Bidhātā (Fate) is compelled to drive the stags to him first at the outskirts of the city, later in the neighborhood of his hut, and finally in the hut itself. Bidhātā now cries mercy, and a compromise is effected by which the boy receives his father's kingdom. The other oral story (Wadia in the Indian Antiquary 15. 171) tells how a band of thieves encounter the goddess Vemāi (who in Gujerat takes the place of Vidhātr) and learn from her that she has allotted to a new-born prince the fate of gaining a living by hunting small game. Anticlimactically, he escapes this lot, acting on the advice of the thieves, by refusing to shoot any but large animals. These two fragmentary, and in some respects jejune, folk-tales appear to represent poor oral tradition from a literary source. The adventures of the younger son and the daughter are paralleled and expanded in a South Indian tale (Natesa Sastri, Indian Folk-Tales, p. 255; also published in the Indian Antiquary

[^37]:    ${ }^{25}$ Mukharji, Indian Folklore, p. 104.
    ${ }^{26}$ Tawney, $K$ Kathā Sarit Sāgara II. 581.
    ${ }^{27}$ For an essay on the motif on 'Entering another's body', see Professor Bloomfield m the Proceedings of the American Philosophical Society 61. 1 ff.

[^38]:    ${ }^{28}$ Very similar to this story is another in Tawney, Kathā Sarit Sāgara II. 186. A thief faithfully worshipped Citragupta, Yama's secretary, and received instructions how to prolong his life. Ultimately, however, he was caught in Death's noose and led to Yama's court. There he was asked which he would take first, his punishment or his reward. Advised by Citragupta, he chose the reward. Once in heaven, he commenced bathing in the heavenly Ganges and muttering prayers, and remained indifferent to celestial joys. Thus he obtained the right of dwelling there a year. By protracting his asceticism thru that year he won the right of living in heaven permanently. In this way the record of his sins was blothed out, and he escaped the torments of hell. (This story, like one which will be treated below, shows human shrewdness coupled with divine aid.)
    ${ }^{20}$ Natesa Sastri, Indian Foll-Tales, p. 366 (also published in the Indian Antiquary 20. 315).

[^39]:    ${ }^{30}$ By remaining dead four days Atirupa fulfilled the literal terms of his fate. In this sense our story belongs under the category of 'Fate modified by the karma of this life'; so also do some of the variants of the tale.
    ${ }^{31}$ There are three other versions of this story, all oral and inferior. In one of them (Kincaid, Deccan Nursery Tales, p. 18) the boy was married to a girl who was destined never to be a widow. The restoration to life came thru the aid of Pārvatī, Siva's consort, whom the boy saw in a dream driving away the messenger of Yama, lord of the underworld, who had been sent for him. In the second version (Upreti, Proverbs and Folklore of Kumaon and Garhwal, p. 199) the hero is restored to life by 'the deities' in the Himalayas, who on investigation found that the wife had been allotted 120 years of life. They took sixty years from her span and added them to that of the boy. The last variant (Damant in the Indian Antiquary 1. 170) tells how the boy propitiated a number of rishis, who promised him immortality. He was fated to be killed by lightning, but when the time came they sat on his body so that the lightning could not touch him. At the intercession of the Creator, however, they exposed his little finger. The lightning struck that, and he remained unconscious for a short time. This was construed as death, and the decrees of Fate were therefore regarded as fulfilled. These three incomplete versions all seem to point to a prototype similar to that translated by Natesa. The folk variations in details are the usual accompaniment of oral tradition. It is more than possible that Natesa drew his story from Tamil literature.
    ${ }^{\text {s2 }}$ Stokes, Indian Fairy Tales, p. 116.

[^40]:    ${ }^{33}$ There is a variant of this story in Bompas, Folklore of the Santal Parganas, p. 307. The victim himself shows hospitality to the messengers of death. They take hipn to the presence of Chando (God), but advise him to put a piece of lampwick in his nose when he arrives there, so that he may sneeze. This he does, and Chando is so pleased at the lucky omen that he sends the man back to earth to live sixty years more. On p. 309 of the same book a woman entertains the messengers of death who have come for her son, and, contrary to their request, cooks their food with salt. They take her son, but carry her to heaven also. There she overhears the son telling his heavenly wife how he will be reborn and the means he will use to accomplish his death again. He is reborn to her, but she takes precautions to foil the schemes laid to bring about his death, and he lives to a ripe old age. These stories all seem independent among the folk.
    ${ }^{34}$ Crooke in the Indian Antiquary 24. 49. The son of Rani Bāchal is Guru Gūgā. For other accounts of him, see Temple, Legends of the Pan$j a b$ I. 121 ff., and III. 261. Our story seems to have no literary parallels.
    ${ }^{\text {ss }}$ Upreti, Proverbs and Folklore of Kumaon and Garhwal, p. 198.

[^41]:    ${ }^{36}$ Mukharji, Indian Folklore, p. 122. A close variant appears in McCulloch, Bengali Household Tales, p. 7. The same tale in ill-fitting Mohammedan attire is reported by Wadia in the Indian Antiquary 20. 107. I have seen no parallel to this story in literature.
    ${ }^{37}$ Dracott, Simla Village Tales, p. 220.

[^42]:    ${ }^{1}$ Professor A. V. W. Jackson of Columbia University was the first to call attention to the possibility of a connection between the Buddhist and Zoroastrian legends. See Journal of the American Oriental Society, 38. 328.
    ${ }^{2}$ Chavannes, Cinq cents Contes et Apologues, No. 45, vol. i, pp. 165-173.

[^43]:    ${ }^{3}$ The Buddha, the Doctrine, and the Order.

[^44]:    ${ }^{4}$ Dīgha Commentary, vol. 1, p. 317 f.

[^45]:    ${ }^{5}$ Commentary on A $\bar{n}$ guttara Nikāya (Colombo, 1904), Etadagga Vagga, vii. 3-4: pp. 249-255; translated in full in my forthcoming Buddhist Parables, Yale University Press. Cf. J. Schick, Corpus Hamleticum, I. 1, pp. 45-66; E. Hardy, JRAS 1898, pp. 741-794.

[^46]:    ${ }^{0}$ Dhammapada Commentary, Book 2, Story 1, Part 2; translated in full in my Buddhist Legends from the Dhammapada Commentary, Harvard Oriental Series, vol. 28, pp. 252-266 (cf. pp. 79-81). Cf. J. Schick, Corpus Hamleticum, I. 1, pp. 15-45; E. Hardy, JRAS 1898, pp. 741-794.

[^47]:    ${ }^{7}$ In a modern Cingalese folk-tale (H. Parker, Village Folk-Tales of Ceylon, vol. i, p. 191), we have the adopted son of a childless king and queen. While the queen is rearing the adopted prince, a child is born to her. The king and queen resolve to kill the adopted prince. The king's minister acts as go-between. Order of events: (1) Bamboos; (2) Cattlefold; (3) Caravan-trail; (4) King of another city.
    ${ }^{8}$ Dīnkeard, vii. 3 ; translated by E. W. West, SBE 47, pp. 35-40.
    ${ }^{\circ}$ The Laugh is a common motif in Hindu fiction. See M. Bloomfield, JAOS 36. 68-89.

[^48]:    ${ }^{10}$ Zād-Sparam, xvi; translated by E. W. West, $S B E 47$, p. 145 f.

[^49]:    ${ }^{11}$ Translated by J. Wilson in the Appendix to his Parsi Religion, pp. 483-490.

[^50]:    ${ }^{1}$ Allgemeine Geschichte der Philosophie, i. 1, p. 209.
    ${ }^{2}$ Especially in The Atharvaveda, pp. 86 ff.

[^51]:    ${ }^{3}$ On this whole subject see especially Bloomfield, Hymns-of the Atharva Veda, lviii ff., particularly lxx f.
    ${ }^{4}$ See the introduction to his Altindisches Zauberritual (Amsterdam Verhandelingen, 1900, Deel III, No. 2). Against this view Bloomfield, GGA 1902, pp. 495 ff.

[^52]:    - As immortalized by the hoary jest about the preacher who attacked high head-dresses on the basis of the text 'Top-knot, come down!' (Matthew 24. 17, Let him which is on the house-top not come down.)

[^53]:    ${ }^{7}$ Cf. Bloomfield, Hymns of the Atharva Veda, p. 623.
    ${ }^{8}$ Stanzas 9, 11, 18, 19.

[^54]:    ${ }^{9}$ The only rival interpretation is that of Deussen, Allgemeine Geschichte der Philosophie, i. 1. 305 ff. Ingenious and even brilliant as Deussen's idea is, I cannot feel that it is Vedic.

[^55]:    ${ }^{10}$ AVP. 7c is a mixture of RV. 7c and 8c.

[^56]:    ${ }^{11}$ See Bloomfield, The Atharvaveda, p. 50, and references there quoted in note 12 .

[^57]:    ${ }^{12}$ The Atharvaveda, pp. 86 ff . For a description of the contents of the philosophic hymns it is sufficient to refer to these pages.

[^58]:    ${ }^{15}$ Even in the method of applying this philosophic magic, the Upanishads are similar to the Atharvan ritual texts. Compare once more my footnote 13, above.

[^59]:    * Died February 17, 1920. See the Foreword.

[^60]:    ${ }^{1}$ L. Meyer, H $d b c h .2 .533$, cites the proverb of the ass that imitated his master: $\epsilon \pi \alpha \rho \alpha \nu \tau a \delta \xi \tau \alpha \grave{\alpha} \sigma \kappa \epsilon \lambda \eta \pi v \delta \alpha \rho l \xi \epsilon \iota \nu$. See also Hesychius, cited in Kock's Knights of Aristophanes, 697. The posterius -pljєı (i.e. $\dot{\rho} \iota \sigma-\delta-\epsilon \iota$ ) belongs either with Eng. raises or with palcı (smashes). For the beating of the
     $\Psi 764$, Ž $\chi \nu \downarrow \alpha \tau \dot{\pi} \pi \tau \epsilon \pi \delta \delta \epsilon \sigma \sigma \iota$; Lucretius 5.1402 , duro terram pede pellere matrem; Catullus 61.14, pelle humum pedibus; Horace, C. 1.37.1, nunc pede libero pulsanda tellus.
    ${ }^{2}$ The long diphthong roots and their grades are beginning to come into their own. The evidence for $s \bar{e}(i) k / s e k / s ə k$; for $s \bar{e} i d / s e d$; for $d \bar{e}(i) c /$ dec/dic (in Lat. dicat, consecrates) is indisputable (see Brugmann-Thumb, Gr. Gram. §342). For two almost as certain $\bar{e} u / e / \iota$ roots see Reichelt in KZ 39.16, $\phi \epsilon \beta \circ \mu a \iota: \phi \cup \gamma \epsilon \hat{\nu}$; ONorse lauf (leaf): Lith. lãpas.

[^61]:    3 The current phonetic rules for final cs in Sanskrit are erroneous. Interior cs came through the stage šs ( $\check{s}$ to indicate the precursor sound to Sk. $\xi$ ) and yielded Sk. $-k s s$ - (cf. $-k s-<s+s$ ) ; final cs yielded $\check{s}$, euphonized as $-t$, sometimes $-k$ (after $t d r r ; s, n$ ) ; cf. $k$ from $s$ in dadhrk (fortiter): dadhrsád (fortis); -k from -t in -dhrk. See JAOS 40.81.

[^62]:    ${ }^{4}$ Root srendh/srēi. Such blends may be recognized as systematic without taking them for genetic or original. To take an extreme case: given the synonymous but quite independent roots $e i$ (ire) and endh (Doric $\neq 0 \theta 0 \nu$ ) then srēi/srendh (to flow) may be merely an analogous pair, unless one recognizes them as compound roots. Indeed, I should like to be shown why, since Sk. i is specifically used for fluere, $s(e) r \bar{e} i i s(e) r e ̆ i ~ s h o u l d ~ n o t ~ b e ~ a c c o u n t e d ~ a ~$ blend, rather than a dissyllabic basis. On the pair ghlendh/ghléi cf. Reichelt, KZ 39.76, Falk-Torp, glans. Brugmann's derivation (IF 12.153) of Celto-Germanic bhrenk/bhronk from $\phi \hat{\rho} \rho \epsilon \iota \nu+\tilde{\epsilon}_{\nu}^{\nu} \boldsymbol{\gamma} \kappa \epsilon \hat{\nu} \nu$ seems to me indubitable.

[^63]:    ${ }^{5}$ Was the nose the 'dripper' ( $n \bar{a}[u] s-:$ Sk. snäuti, cf. $u$ in Germ. nüster) \& See also $\$ 63$.
    ${ }^{6}$ So far as deaspiration after $h$ is not operative, we may confidently restore *ha-st(h)i, not so much because of hástya or antarhastīna, as because of Lith. pa-žastìs (armpit, i.e. taker); see JAOS 31.413 and put beside Horace, Ep. 1.13.12 Kurschat's example iñk taĩ põ pãzaasté=take that under the armpit.
    ${ }^{7}$ I am now disposed to regard this as $a p+e x+s t h i=o f f-o u t-s t a n d i n g$.

[^64]:    ${ }^{8}$ For sth (standing) in names of vegetal growths see $A J P$ 34.18.
    ${ }^{9}$ The projecting rib may have been of a man; the back (prstha) of a quadruped. Note Sk. pár-śu (rib, i.e. fore-swelling, root śvā): OBulg. $p r u ̆-s i$ (breast, i.e. fore-lying, root $c \bar{e} i$ ). From IE prsth (fore-standing, or the like) come also Ger. first (comb of roof), OBulg. prǔstŭ (finger), Lith. pirsztas, OPruss. pirsten/-pīrstans; also Ger. fürst (prince) and (from pri-st[h]mā) Paelign. prismu, cf. Lat. prī-stinus.
    ${ }^{10}$ Here stu is ambiguous, either : sthāu (stand up, project, cf. $\sigma \tau$ úcı, penem erigit) or : stu (if really different) in Sk. tūla (tuft of grass).
    ${ }_{11}$ Accent as paroxytone? For $\sigma \theta / \sigma \tau$ see $\S 13$.
    12 Not as has been lately conjectured $\kappa \nu \hat{\eta} \sigma \tau \iota s$ (scratcher), but an extension of the fem. ptc. a $\kappa \nu \eta$ (:Sk. añc, bend) by - $\sigma \tau \iota$ (cf. on viṣth $\bar{a}$ in §11). For the semantics see Persson, Beitr. p. 1001,1.21.
    ${ }^{13}$ After all the 'Morphological Investigations' it remains perfectly apt to derive Lat. vē-lum (sail) from this root (or from wēi in fn. 24); and vexillum (flag) from veho (cf. Noreen, Urg. Lautl. p. 72). This accords with the earliest usage of vēlum, so why attach it to Sk. vāgura (snare, net)?

[^65]:    ${ }^{14}$ In $u d a-r a r a$ meant flowing (ro: rēi in Lat. rivus) ; cf. $\dot{\delta} \delta \alpha-\rho \eta{ }^{\prime} s$ (watery) with accusative, and $\cup \delta \epsilon-\rho o s$ (dropsy), with instrumental, prius (see $A J P$ $37.167^{2}$ ). Also see pw for the posterius $r a$ (=having), originally, I take it, $=$ flowing with, abounding in, though possibly to be connected with the sept of Lat. res. For $\lambda_{l \pi} \pi-\rho b s$ (abounding in fat) the accus. prius is actually of record.

    15 The definition of rectum is absurd: the alternative definition as a part of the body near the diaphragm means-the pancreas.
    ${ }_{18}$ If he can see a man or woman in the moon, or a hairy cat in the caterpillar, the reader may be able to detect the resemblance to the head of a bird on a diagram of the pancreas given in Cunningham's Practical Anatomy, p. 502, no. 192. The section (which a Vedic Hindu, slicing, might have seen), as figured in Morris-Jackson's Human Anatomy, p. 1196, diagr. 958, is quite suggestive of the head of an owl. The reduced size of the Britannica diagram makes the tail of the pancreas look to me like a caterpillar, but this is only because of the reduced size, I think. I only mention it to explain Lat. ur- $\bar{u} c a$ (caterpillar) as from the root wer (twist)

[^66]:     い"
    

[^67]:    ${ }^{22}$ Possibly dissimilated from rnja[n]te (6th class). Note fluctuation of -ante/-ate in Avestan (Jackson, Gr. §452; and see Macdonell's Vedic Gr. §464). The metrical convenience of the Cretic for clausulae may have contributed to spreading the type of $a \tilde{n} j a[n] t e$, thus producing a contact or switch between the 7 th and the nasal verbs of the 6 th class.
    ${ }_{23}$ The distribution of the to and $n \bar{\imath}$ stems for gender is of interest. Is a generally like distribution, with blending (cf. ${ }^{*} p o-t i$, fem. ${ }^{*} p o-n \bar{\imath}$, in $\delta \epsilon \sigma-\pi o \iota \nu a$ ), responsible for $S k$. (i.e. IE) , pá-ti (lord), fem. pá-t-n̄ (lady) ! See $\$ 9$.

[^68]:    24 Dor. atplov does not disprove $w \bar{e} i$ as the simple root, for $\dot{a}$ - may be
     from $n t$, see $\S 54$.
    ${ }^{25}$ I here mention as one of the most compelling instances of blending E. Leumann's brilliant explanation of Sk. pú-māñs- as a tautological compound (KZ 32.304); māñ is a blend of IE mas and man (in Sk. mánu). ${ }^{26}$ See here also for the equation of $\epsilon \pi \epsilon \nu \eta \nu 0 \theta \epsilon$ with Sk. apinahyati, anticipated by Speyer, Mus. anno 1893, 272.
    ${ }_{27}$ The root (s) nēeip/snəp (in Lat. napurae) is also to be considered. This root we have in Av. nāf-ya (familiaris, connexion) and in loc. pl. naf-šu (descendants).

[^69]:    ${ }^{34}$ Eng. bends is from binds (the bow), but in primitive basketry bending precedes or accompanies or constitutes binding, twining, and the result, as with our Indians of the Northwest, is weaving.

[^70]:    ${ }^{1}$ An article by Prof. Maurice Bloomfield discussing the profession of thieving in all its aspects will soon appear.

[^71]:    ${ }^{2}$ Weber, Die Handschriften-Verzeichnisse der koeniglichen Bibliothek zu Berlin, Vol. 2, Part 3, p. 1123 ff., and Sitzungsber. der Berl. Akad. 1889, p. 731 ff .

[^72]:    ${ }^{3}$ Weber, Handschriften-Terzeichnisse, Vol. 2, Part 3, p. 916.

    * Apparently, if the text is right, some sort of wood, or tree-product. It is possible that the text should read vanaspatyābhāra, in spite of the

[^73]:    ${ }^{8}$ tasya grāsah krtah kīdrg bhultahatṭe viśopakah, vasann eko varo grāmo dramakaśs ca grham prati: 'What sort of (tribute-) food was appointed for himg In the food-market. . .' The rest of this stanza is unintelligible. It evidently describes the tribute, which apparently included a village as a royal grant.-The word grāsa is used repeatedly in this story in the sense of 'tribute,' and sometimes, it seems, of other income or property, a usage not previously recorded. In vss. 89-90 bhū seems to be nearly synonymous with grāsa in this sense.

    - Delight, at the prediction of his son's greatness; dismay, at that of his desertion of the family profession.

[^74]:    ${ }^{10}$ Rāuhineyaka, with probably endearing diminutive -ka. The various phases of the diminutive - lca are quite marked in this story.
    ${ }^{11}$ Or possibly sārdham arjunaketubhih = 'along with the peacocks,' cf. next stanza. There is lexical authority for arjuna $=$ ' peacock.'
    ${ }^{12}$ Peacocks are proverbially said to be in love with clouds.-The word rendered 'deer-faced,' kamalānanah, would usually mean 'lotus-faced,' that is beautiful-faced; but there is authority in Hindu lexicons for the meaning 'deer' for kamala. Doubtless a word-play is intended.

[^75]:    ${ }^{18}$ sütram ucoālitam; play on grhyasūtra, 'manual of household rules.' The word uc-cal seems equivalent to cal, with causative meanings 'shake' and 'trouble.'
    ${ }^{14}$ Reading prakuryāta.

[^76]:    ${ }^{15}$ The whole sloka, and especially the phrase rendered last (mūlikāa $\dot{m}$ vaha kāsṭthānā$\dot{m})$, is very obscure.
    ${ }^{18}$ sthingate; this use of the passive is exceptional and seems to be an extension of the impersonal use.

[^77]:    ${ }^{17}$ I assume rāsakān in the hitherto unknown sense of 'lamentations' (root rās). Possibly, however, we should read rāsikān, and render 'who are making (the people) give up their little piles (of money, through theft).
    ${ }^{18}$ lupyate $\bar{a} s a n a \dot{m}$. . . 'nukramāgatam. I emend to lupyata āsanam, taking $\bar{s} s a_{n} a$ as a derivative of root $a \hat{s}$, 'eat.' The only alternative seems to be to take $\bar{a} s a n a=s a d a n a$, 'dwelling,' an unusual use and one which does not fit the context. The 'food' would of course refer to the tribute, cf. gräsa, note 8 .

[^78]:    ${ }^{19}$ natiṣyami. The verb nat seems here to be used in the sense of 'to play a trick on,' 'to make a fool of.' So also vi-nat in 258 and 357. Un-nat is quoted grammatically (see BR. s.v.) in the same sense.

[^79]:    ${ }^{20}$ The word nyuñchanaka occurs Pārśvanātha 6. 1188 (p. 234), and Dr. Bloomfield thinks there it may mean some kind of coiffure. All that seems clear here is that Rohin̄ is celebrating her joy in some festive rites. The lamp with seven wicks is doubtless a ceremonial lamp; the tilaka mark may be the thief-caste mark, to which Rāuhineya would now be entitled.
    ${ }^{21}$ Perhaps (as pointed out by Professor Bolling) we have here a ceremonial formula of sympathetic magic, applicable, by double entente, to both Rāuhineya and the lamp (vañsa, 'family,' also 'bamboo pole' from which the lamp hangs; 'seven ways' $=$ 'seven wicks' above referred to). If the punning continues through the next verse, it may mean, of the lamp, 'To be sure you suck your nurture like a babe, but I will not let you go out; burn so that you may soon rival the moon.'

[^80]:    ${ }^{22}$ The last words render krṣnávakramukhāt (mukha, literally 'mouth'). The kiñśuka tree is the Butea frondosa; it has beautiful blossoms but no fruit. Its product is gum, whereas the mango bears luscious fruit. There seem to be puns intended on kim-suka (śukía, parrot) and phala-ās̄ā (cf. palā́sa, a synonym of kinśuka). The mango tree is one of the favorite habitats of parrots, and the parrot idea is evidently responsible for the use of mukha.
    ${ }^{23}$ So the text, with dental nd.

[^81]:    ${ }^{26}$ How the Pāṇ̣avas come to be a part of this setting I have not been able to divine.
    ${ }^{27}$ Cf. the rhetorical term mürchälcsepa, defined as the expression of violent dissent or disapprobation by swooning.

[^82]:    ${ }^{28}$ śr $\bar{n} g a p u c c h a p a r i b h r a s t a \bar{a} h ; ~ t h e ~ a l l u s i o n ~ s e e m s ~ t o ~ b e ~ t o ~ a n i m a l s ~ w h i c h ~$ fight with elevated horns and tails. S? $\bar{n} g a$, horn, is used as an emblem of courage and vigor. The double entente in the phrase is evident.

[^83]:    ${ }^{20}$ This verse is very dark; kāsthabhalesana may, at least, mean 'funeral pyre' (but cf. 83 above, mūlikā̀m käṣthānā$\dot{m}$ ?). -In the previous verse R . mocks them by suggesting their fight; kings give betel to their followers when they send them abroad on expeditions.

[^84]:    ${ }^{30}$ vrtti, which I conjecture to be equivalent to vrttistha, lexically quoted as meaning lizard. But it may be a mere corruption for something quite different.
    ${ }^{31}$ [maranāntaim . . . stāinyam: rather, '. . . for the rest of my life';-ED.]
    ${ }^{32}$ A line engraved on metal; symbol of permanency. Professor Bolling informs me that Cānakya (Galanos 121, see above, p. 61) compares the

[^85]:    accomplishments of the good and of the base to silārekh $\bar{a}$ and jalarekh $\bar{a}$ respectively. I cannot find the stories alluded to in the following names. Candapradyota is a well-known figure in Jain legend.
    ${ }^{3}$ nisedhikā; also 259; a new word, of uncertain meaning. It seems to refer to some ceremony performed on entering a Jain temple. I have thought, too, of the possibility of reading nihsedhik $\bar{a}$, diminutive of the Vedic nilhsidh, 'gift.'
    ${ }^{34}$ mahiṣipāla, literally 'keeper of buffalo-cows'; mahiṣi also means 'wanton woman.' It seems to me improbable that there is any reference to $R$.'s previous stampede of the buffalo-cows.

[^86]:    ${ }^{35}$ yogyo 'sāu daksināyā̄śs ca; that is, too well-off to be a good Jain? Or meeting an imagined objection that he might be unable to perform the ceremony because of poverty:
    ${ }^{38}$ No special worship of the partridge seems to be recorded. Calling it Ganesa (the god of wisdom) seems to refer to the reputation which the partridge has for wisdom; cf. Jātakas 37 and 438, and Bloomfield, Festschrift Ernst Windisch, p. 350.
    ${ }^{87}$ The Nāgapañcamī, occurring abòut the end of July. The Nāgas are of course much worshipped in India; they are a sort of supernatural race of serpents. It is not clear just what 'gomaya' means as applied to them.
    ${ }^{38}$ There are two words of unknown meaning in this verse. Hem. Desiñāmamālā 6. 5 (Pischel's ed., p. 182) quotes a Prakrit paradā as meaning serpent; at first sight this looks like our paraṭa. In that case we

[^87]:    ${ }^{40}$ maranāntaín vā tvayā lcsātram pātitaím vā janagṛhe: the text seems clearly corrupt, as shown by meter as well as sense. Apparently it suggests the possibility of a martial death, which might have resulted in heavenly rewards. Delete the first $v \bar{a}$.

[^88]:    ${ }^{41}$ Here gandhajāhaka; below gātrasamikocin (394) and mārjāra (395). BR. quote gātrasamloocin and jāhaka from Hem. as hedge-hog, also jāhaka from Trikāndasesa as cat. The evidence seems to converge on the civetcat, which is commonly called gandhamārjära.

[^89]:    ${ }^{42}$ Indicating the amount by a gesture.
    ${ }^{43}$ Read ${ }^{\circ} d v i t a y a^{\circ}$ for ${ }^{\circ} d v i t i \bar{y} a^{\circ}$.

[^90]:    ${ }^{4}$ dravyapūjā$\dot{m}$ bhāvapū $\bar{j} \bar{a} \dot{m}$. Mrs. Stevenson in The Heart of Jainism, p. 228, defines bhāvapūjā as 'a mental exercise . . . during which he meditates on undoing of karma, qualities of a Tīrthañāra, and similar subjects.'

[^91]:    Baltinore, Maryland.

[^92]:    ${ }^{45}$ srī̄arvärthavimāne. Sarvārthasiddhi (masc.!) is recorded as the name of a class of Jain gods. Is Sarvārtha by itself to be understood in a similar sense here? Or is it the sarvārtha palace-i. e., the palace endowed with all 'objects'?

[^93]:    ${ }^{1}$ See i. 51. 4: iv. 17. 1: vi. 20. 2; 72. 3: viii. 93 (Grassmann 82). 2: x. 113. 3, 8 : and also i. 32. 1-5, 8, 11-14; 52.10 ; $80.1,13$; 103. 2, 7; 187. 6: ii. 11. 2,5 ; 12. 3,11 ; 15. 1; 19. 2: iii. $32 .{ }^{\prime} 11$; 33. 7: iv. 17. 7 ; 19. 2, 3,9 ; 22. 5; 28. 1: จ. 29. 2, 3, 8 ; 30. 6; 31. 4, 7; 32. 2: vi. 17. 9,10 ; 30. 4: vii. 21. 3; 104. 9: viii. 3. 20 ; 96 (85). 5: ix. 86. 44: x. 48. 2 ; 67.12 ; 96.4 ; 111. 9 ; 133. 2; 139. 6. Cited by Grassmann but hardly pertinent are,-i. 79. 1: vi. 75. 14: vii. 34. 16, 17; 38. 7: etc.

[^94]:    ${ }^{2}$ Such as iii. 37. 5, 6: iv. 21. 10 : v. 37. 4: vii. 20. 2: viii. 2. 32, 36 ; 45. 3: x. 42. 5, all of the first period except the third and last, which go into the third.
    ${ }^{3}$ While probably not exhaustive, the following list, with the other references given, will be found fairly complete.-i. 23.9 ; $32.5,7,8,10,11$; 33. 13 ; 36.8 ; 51.4 ; $52.2,6,8,10,15$; $56.5,6 ; 61.6,10,12$; 63.4 ; $80.2-5,10-13$; 85.9 ; 103. 8 ; 121. 11 ; 165. 8 ; 174. 2 : ii. 11. 9,18 ; 14. 2; 19. 4 ; 30. 2, 3: iii. 30. 8 ; 32. 4,6 ; 33. 6 ; 36. 8 ; 47. 3: iv. 16. 7 ; 17. $1,3,8 ; 18.7$ : vi. 17.1 ; 20.2 ; 37.5 ; 44. 15 ; 68.3 : vii. 19. 5; 21. 6 : viii. 3. 19 ; $6.6,13$; $12.22,26$; $32.26 ; 62$ (51). ${ }^{8} 8 ; 76$ (65). 2,$3 ; 93$ ( 82 ). 7 ; 96 (85). 7 ; 99 ( 88 ). 6 ; 100 (89). 7 : ix. 61. 22 : х. 28. 7 ; 89.7 ; 104. 10 ; 111. 6 ; 113. $2,3,6,8 ; 116.1$; 147. 1. 2 ; 152. 3. Some of these have ahi and some have vrtrahan.

[^95]:    ${ }^{4}$ It is used of Indra in i. 129. 11, of Brhaspati in ii. 23. 3 (ratha) and x. 103. 4, of the Aśvins in vii. 73. 4-they appear in connection with Vrtra in viii. 9. 4, Soma being their helper,-of the healer (bhisaj) in $x$. 97. 6, of Agni in vii. 8. 6 and x. 87.1 (vājin); 162. 1, and of Soma in i. 129. 6 (Indu) and ix. 1. 2 (vrtrahantama in 3) ; 37. 3; 67. 20. The Soma passages are all placed in the earliest period, and so are the Indra passage, the Asvin passages, and the first Agni one. The rest are put in the latest period, except the first with Bṛhaspati, which is assigned to the third. Amitrahan occurs with Indra in vi. 45.14 and x. 22. 8; 134. 3, and with Soma in ix. 11. 7 ; 96. 12, the last Soma reference being put in the second period, the last Indra one in the third, and the rest in the first. Indra gets asurahan in vi. 22. 4, as Agni does in vii. 13. 1, second and third periods respectively; but dasyuhan is more common, being found with Indra in i. 100. 12 : vi. 45. 24 : viii. 76 (65). 11; 77 (66). 3 (vrtrahan also). Agni is dasyuhantama, however, in vi. 16. 15 (vrtrahan in 14 and 19) and viii. 39. 8, as is the light (jyotis) in $x$. 170. 2. The first and last Indra passages and the last two are of the third period, the other three are of the first. Sapatnahan, 'rival-killer,' is not pertinent.

[^96]:    ${ }^{0}$ References to him of this sort include:-i. 4. 8; 8. 2; 53. 6 (tenthousand of them, with vrtrahatyesu in the preceding half stanza); 84. 13 (ninety-nine of them) ; 102.7: iii. 30.4, 22 (repeated ten times in succeeding hymns and once in x.) ; 49.1: iv. 17.19 (many mighty ones) ; 22. 9 ; 24. 10 ; 41. 2; 42. 7: vi. 19. 13; 26. 8; 29. 6 (many vrtrā and dasyūn) ; 33. 1; 44. 14; 56. 2; 57. 3: vii. 19. 4; 22. 2; 23.3; 25.5; 30. 2 ; 34.3 ; 83. 9 ; 85. 3 ; 92.4 (with Vāyu and men) : viii. 15. 3, 11; 17. 8, 9 (with vrtrahan) ; 29. 4; 49 (Vālakh. 1). 2 ; 90 (79). 4,$5 ; 95$ (84). 9 ; 96 (85). 18; 100 (89). 2: ix. 1. 10 ; 23. 7: x. 49. 6 (with vrtrahan).

[^97]:    ${ }^{7}$ The notion that Trita was a water deity is based on a misconception. He was a water deity in the same sense that Indra was-a phenomenon of the thunderstorm, not anthropomorphized but simply personified and animated as if a sentient being. Anthropomorphism came later in the god of healing of the Avesta and, probably, in Tpicicv (cf. *Athar, atharvan: Ātar, äthravan). Aryans who became a maritime people with the mild climatic conditions of Greece could easily forget the waters of the firmament and substitute those of the sea; but a reversal of the process is hardly thinkable. To the Indo-Iranians, lightning was the illumination only. Its cause as we know it was to them a deity. They saw him in action. He was therefore alive and sentient. The true connection between the two things escaped them, because they were not capable of making a scientific analysis. They based everything upon their own personalities, or their personal experience. What moved had life and intelligence. Therefore a lightning bolt was a god. The habit of allowing modern occidental conceptions to dominate in such investigations is all wrong. The original conception is fundamental. To ignore it is fatal. Thus, the Greek musical scale was a tetrachord. It was basic. Modern investigators make the octave basic. The overlapping tetrachords covered two octaves and two notes. The investigators cut off the two notes to get two octaves. The Greek symbols prove beyond a peradventure that they are wrong. Similarly, modern investigators make meter basic and are unable to find the compound feet of the ancients. Rhythm is basic, and Longinus was
    

[^98]:    ,Cambridge, Massachusetts.

[^99]:    * This highly condensed account of the Life-Index as it appears in Hindu fiction is to be regarded as a contribution to the 'Encyclopedia' of Hindu fiction motifs proposed by Professor Bloomfield some years ago (JAOS 36. 54 ff .), to which several other contributions have already been made by Professor Bloomfield and others (compare Dr. W. N. Brown's article in this volume).
    ${ }^{1}$ Hartland, E. S.: The Legend of Perseus, ii. 1-54 et passim. Cf. also his article in Hastings: Encyclopedia of Religion and Ethics, viii. 44 ff .Clouston, W. A.: Popular Tales and Fictions, i, 168 ff.-Macculloch, J. A.: The Childhood of Fiction, pp. 118 ff.-Frazer, J. G.: The Golden Bough, 2nd Ed., xi. 95 ff . Of these the first two writers employ the term 'life'index', while Macculloch uses 'separable soul', and Frazer 'external soul.'

[^100]:    ${ }^{2}$ Cf. Clodd, E.: 'The Philosophy of Punchkin', Folklore, ii. 289 ff.

[^101]:    © See p. 58; p. 23 mentions a talisman of the same sort, but this may be considered an index only by inference. Jülg, p. $23=$ Busk, R. H.: Sagas of the Far East, p. 58; Jülg, p. $58=$ Busk, p. 133.
    ${ }^{7}$ Wilson: op. cit., ii. 53. ${ }^{8}$ Steel and Temple: op. cit., p. 47.
    ${ }^{\circ}$ Chilli, Shaik: Folk-tales of Hindustan, p. 51.
    ${ }^{10}$ Parker, H.: Village Folk-Tales of Ceylon, i. 165.
    ${ }^{11}$ Ibid., ii. 162 ff. ${ }^{12}$ Ibid., iii. 35 ff .

[^102]:    ${ }^{13}$ Ibid., 257, 268, 379.
    ${ }^{14}$ Tawney's tr., i. 386 f . It has been suggested that the story of Vikrama and the Brahmarākshasa (Tawney, ii. 582) is an example belonging here. Vikrama draws a picture of the rākshasa in the dust and when he cuts off the head of the figure blood flows from the neck of the rākshasa. This, however, is not the life-index, for the head of the räkshasa does not fall off. Moreover, active indices are not established at will by a third person. After a moment's consideration any student of folklore will place this motif in the category of black magic.
    ${ }^{15}$ D'Penha, G. F.: 'Folklore of Salsette', Ind. Ant., xvii. 50 ff.
    ${ }^{18}$ Jour. As. Soc. Bengal, xlvi. pt. 1, No. 2.
    ${ }^{17}$ Milne, L. and Cochrane, W. W.: The Shans at Home, p. 235. This is a very interesting illustration of a combination of the active and passive indices.
    ${ }^{18}$ Knowles, J. H.: Foll-Tales of Kashmir, pp. 134, 49, 73. Cf. Wilson, cited above.

[^103]:    ${ }^{19}$ D'Penha, G. F.: 'Folk-Lore of Salsette', Ind. Ant., xxii. 249.
    ${ }^{20}$ Damant, G. H.: 'Bengali Folklore', Ind. Ant., i. 171.
    ${ }^{21}$ Knowles: op. cit., p. $383 . \quad{ }^{22}$ Steel and Temple: op. cit., p. 59.
    ${ }^{28}$ Damant, G. H.: 'Bengali Folklore', Ind. Ant., i. 117. This story also uses the passive index.

[^104]:    ${ }^{24}$ Day: op. cit., p. $81 . \quad{ }^{25}$ Ibid., p. 243.
    ${ }^{28}$ Stokes: op. cit., p. 59; Day: op. cit., p. 116 ff.; Knowles: op. cit., p. 49 (here a large group); Chilli: op. cit., p. 114 (again a long list); Parker: op. cit., i. 190; Damant: Ind. Ant., 1. 171.
    ${ }^{27}$ Crooke, W.: 'Folklore in Hindustan', Ind. Ant., xxii. 324.
    ${ }^{28}$ Wádia, P. T. H.: 'Folklore in Western India', Ind. Ant., xvi. 191.
    ${ }^{20}$ Stokes: op. cit., p. 58.
    ${ }^{30}$ Venketswami, M. N.: 'Folk-Tales of the Central Provinces', Ind. Ant., xxvi. 108. ${ }^{a_{1}}$ Stokes: op. cit., p. 187.

[^105]:    ${ }^{32}$ O'Connor, W. F. T.: Folk-Tales from Tibet, p. 154.
    ${ }^{33}$ Wadia, P. T. H.: 'Folklore in Western India', Ind. Ant., xxii. 318.
    ${ }^{34}$ Shovona Devi: Orient Pearls, p. 123.
    ${ }^{35}$ Bompas, C. H.: Folklore of the Santal Parganas (Bodding, collector), p. 224.

[^106]:    ${ }^{36}$ Gurdon, P. R. T.: The Khasis, p. 183.
    ${ }^{37}$ Ramabai (R. D. M.) : 'The Legend of Tulasi as Told in Southern India by the Orthodox,' Ind. Ant., xvi. 154 ff . This story is told to ${ }^{-}$ emphasize the power of a wife's chastity, which accounts for the unusual index.
    ${ }^{28}$ Bastian, A.: Die Völker des Oestlichen Asiens, iv. 340 f.
    ${ }^{30}$ Cf. also Jāt. 208, and the versions of the Pañcatantra. I introducethis case here in order to call attention to the sharp distinction between these two themes, and to correct the treatment found, e. g., in Macculloch's Childhood of Fiction, p. 131, where they are, if not quite confused, at least. not clearly enough separated.

[^107]:    ${ }^{40}$ No very clear distinction as to the choice of a life-index appears to be made between mortal men and supernatural beings. Yet there does, perhaps, seem to be a tendency for a mortal's index to be some inanimate object closely connected with him, as a sword, a jewel, or a necklace. However, in one story (Parker, op. cit., i. 190), a parrot is the index of a human being. The mountains of Mbh. 3. 135 -are clearly regarded as extraordinary. With demons and the like, the range of objects used as indices is much greater.

[^108]:    ${ }^{11}$ Cambridge Translation, iv. 283.
    ${ }^{22}$ Jülg: op. cit., p. $5=$ Busk: op. cit., p. 106. ${ }^{43}$ Day: op. cit., p. 182.
    ${ }^{44}$ Damant, G. H.: 'Bengali Folklore,' Ind. Ant., i. 116.
    ${ }^{45}$ Parker: op. cit., iii. 78.
    ${ }^{46}$ Venketswami, M. N.: 'Folklore in the Central Provinces,' Ind. Ant., xxi. 450.
    ${ }^{17}$ Swynnerton, C.: Romantic Tales from the Panjab, with Indian Nights' Entertainments, p. $460 . \quad$ Wilson: op. cit., ii. 52.
    ${ }^{49}$ Shakespear, J.: The Lushei Kuki Clans, p. 182.
    ${ }^{50}$ Op. cit., p. $52 . \quad{ }^{51}$ Parker: op. cit., iii. 254.
    ${ }^{62}$ Ibid., iii. 376. A flowering tree of vague species occurs iii. 268.

[^109]:    ${ }^{63}$ Ibid., i. 162 ; ii. 165 f.
    ${ }^{54}$ Ibid., iii, 35 ff. For the pond c̊f. Jāt. 506, cited above.
    ${ }^{\text {as }}$ D'Penha, G. F.: 'Folklore in Salsette,' Ind. Ant., xvii. 54, 104 ff.
    ${ }^{50}$ Jour. As. Soc. Bengal, 1865, pt. 2, No. 2, p. 184.
    ${ }^{67}$ Day: op. cit., p. 68; Bompas (Bodding) : op. cit., p. 321. The second story is parallel with the first thru this incident, but does not continue beyond it. Here it may be noted that among the Santal Parganas hunters' wives place water under the bed at night; if it turns red, game has been killed (Bompas: op. cit., p. 417).
    ${ }^{58}$ P. 30.

[^110]:    ${ }^{50}$ Swynnerton: op. cit., p. 461. Her own index is a flower; see above.
    ${ }^{60}$ Damant, G. H.: Ind. Ant., i. 218; Venketswami, M. N., ibid., xxxi. 449.
    ${ }^{0}$ Dracott, A. E.: Simla Village Tales, pp. 204 ff . This is a very good version of the story of the speaking bird, the singing tree, and the yellow water, familiar from the Arabian Nights; see Burton, R.: Supplemental Nights, Vol. III, p. 510.
    ${ }^{62}$ Tawney's tro, i. 86.

[^111]:    ${ }^{63}$ Ibid., ii. 600 f. Swynnerton, op. cit., p. 335, has also a flower as the token.
    ${ }^{64}$ Rosen's tr., i. 109.
    ${ }^{\text {as }}$ I am indebted for this last reference to Parker, op. cit., i. 165, where are also to be found other references to the life-index motif (cf. indices to the three volumes). The notes in Steel and Temple, op. cit., also afford a few further parallels. I wish also to acknowledge my indebtedness to Professor Maurice Bloomfield and to Dr. W. Norman Brown for additional material, as well as for helpful suggestions in the treatment of the subject.

[^112]:    ${ }^{1}$ The unique plural form hävanaēibyo in Nīr. 81, in the MSS. and the editions of Darmesteter and Sanjana, has no justification as a plural and Bartholomae (col. 1713) properly emends it to the normal dual hāvanaēibya.
    ${ }^{2}$ The N. A. V. form hāvana is found in Ys. 22. $2^{2}, 21^{2} ; 24.2^{2} ; 25.2^{2}$; Vsp. 11. $2^{2}, 4^{2} ; 12.5^{2}$; Gāh 4. $5^{2}$; Vd. 5. 39, 40 ; 19. 9. The I. D. Ab. form hãvanaēibya is found in Vsp. 10. $2^{2}$; Yt. 10. 91; Afr. 4. 5; Nī. 81; 108 (where it is to be supplied again with asānaēnaēibya). This list is probably not exhaustive.
    ${ }^{3}$ In transliterating, I have followed the scheme of Bartholomae in his Wörterbuch with a few changes for typographical convenience. Thus for the anaptyctic vowels, I have $\epsilon$ and $\epsilon$ respectively; $\tilde{a}$ ( $a$ with tilde) for $a$ with nasal hook; $\dot{n}$ for the first nasal; $\underline{t}$ for the last dental; $c$ and $j$ without breves.

[^113]:    "Dans les kiryâs de Pt." ad Y. XXVIII. 1, le pilon est appelé "apar hâvan."', Darmesteter, Le ZA. p. 98.
    ${ }^{5}$ The Pahlavi version consistently renders asmana by asīmēn, 'silver,' whence Darmesteter regularly has ' d 'argent.'

[^114]:    ${ }^{6}$ The MSS. and edd. have the corrupt and meaningless vaēmanät, happily emended by Bartholomae.

[^115]:    ${ }^{7}$ These are ulú̄̆chalasuta, adhiṣavaṇyà, apacyavám, upacyavám, ulūthhalaka, ulūkhala, sótave, jalgulah, śíkṣate, mánthām, vibadhnâte, yâmitavā, yujyâse, dyumáttamam, sunú, àyajī̀, vijarbhrtâh, bâpsatā, vanaspatī, ṛsvāv, sistám. The first six as words; the rest as forms of their respective words.
    ${ }^{\stackrel{s}{s}}$ So nirne is used, in Yasna 10. 2.

[^116]:    ${ }^{9}$ A possible alternative would make vána the base of the mortar. Cf. sis. 13. 29. 5, ulūkhalabudhno yūpah, explained by the Comm.- ulūkhalabudhnäkāro yūpo. This does not seem nearly so good.

[^117]:    ${ }^{10}$ Such is the reading of the text. The Comm. (p. 202) says, hūtsu grāvāna iti kecit pathanti /sa ca pāthaḥ samyagasamyag iti śrutito nirnayah // In spite of his appeal to śruti as decisive, neither reading can be accepted. The datsu of Āsvalayana is undoubtedly the correct reading.

[^118]:    ${ }^{12}$ As the passages for vad and vac with grävan have already been indicated, they are not repeated here.
    ${ }^{12}$ The radical $s u$ is thus found in 1. 130. 2; 135. 5 ; 137. 1 ; 139. 6; 2. 16. 5 ; 3. 44. 1, 5; 4. 45. 5; 5. 40. 1; 7. 22. 1; 68. 4 ; 8. 1. 17 ; 4. $13^{2}$; 22. 8; 82. 5 ; 9. 11. 5 ; 24. 5 ; 34. 3; 51. 1 ; 63. 13 ; 67. 3 ; 68. 9 ; 71. 3 ; 72.4 ; 75. 4 ; $86.23,34$; 101. 11; 107. 1, 10 ; 109. 18; 10. 28. 3; 76. 2 , $4,7,8$. The radical $d u h, 1.54 .9$; 121. 8 ; 137. $3^{2}$; 2. 36. 1; 4.50. 3 ; 8. 38.3 ; 65. 8 ; 9.34 .3 ; 65.15 ; 80.5 ; 96.10 ; 97.11 ; 10. 76. $7^{2}$; $94.9^{2}$.

[^119]:    ${ }^{13}$ The verbs with grāvan, but not with ádri, are, ar, 5. 36. 4; ${ }^{1} a s{ }^{1}, 10.94$.
     94. 10 ; ${ }^{1} d h \bar{a}, 10.94 .5$; 175. 3; nas, 9. 82. 3; nrt, 10. 94. 4, 5; bhur, 10. 76. 6; mahīy, 9. 113. 6; 10. 175. 3; rabh, 10. 94. 4; ris, 10. 94. 10; vaś, 6. 51. 14; vah, 10. 94. 7; ${ }^{1} v \bar{a}, 1.89 .4$, zeugmatic; ${ }^{1} v i d, 10.94 .3,4 ; 108$. 11; ${ }^{2} v i s, 10.94 .2 ;{ }^{1} s \bar{u}, 10.175 .1,4$.

    Those found with ádri, but not with grāvan, are, aj, 3. 44. 5; añj, 6. 63.3 ; $\bar{a} s, 10.94 .9$; krīd, 9. 66. 29 ; 10. 94.14 ; cāy, 10. 94.14 ; ju $\bar{u}, 3.58$. 8; dhan, 1. 88. 3; naks, 6. 63. 3; niǹs, 10. 94. 9; nu, 5. 45. 7; '$p a r$, 6. 48. 5; p $\bar{a}, 7.22 .4 ; ~ p \bar{u}, 1.135 .2$; 5. 86. 6 ; prc, 10. 94. 13; bhaj, 7. 39. 1; 10. 94. 8; mih, 10. 104. 2 ; $m \bar{\imath}, 10.94$. 13 ; mrj, 10. 76. 5 ; vrt, 10 . 94. 14 ; sad, 8. 63. 2 ; sic, 8. 53. 3; sr, 1. 73. 6; skabhāy, 10. 76. 4.

    All these have been given with the numbering and form of the radicals in Grassmann.

[^120]:    ${ }^{24} \mathrm{Cf}$. hástayato ádrih (10.67.2) as a collective, equivalent to ádrayas in 4,7 , and 8 , following.

[^121]:    ${ }^{15}$ In RV. 1. 109. 3, Oldenberg (as Professor Edgerton has communicated to me) takes the dual as due to the fact that it is used metaphorically for Indra and Agni. So Sāyaṇa (see note in Griffith) explains it in 7. 42. 1, as the Yajamana and his wife. This method of hermeneutics is antipodal to mine.

[^122]:    ${ }^{16}$ In the preparation of this article the writer has had access only to the texts, the lexica of Bartholomae, Monier-Williams and Grassmann, versions of RV. by Grassmann and Griffth, and of AV. by Whitney-Lanman, of ZA. in SBE IV, XXIII, and XXXI, and works mentioned in the article. He has had no access to other handbooks or journals. If it so happen that any part of his work has been anticipated, he trusts that it may still be of value as corroborative, supplementary, or corrective.

[^123]:    ${ }^{7}$ On the effect of the dactylic hexameter upon the development of the Latin language, see, in addition to Köne, Christ, Metr., ${ }^{2}$ pp. 19, 25; Brock, l. l., p. 76 f .
    ${ }^{8}$ Ap. Rufin. Metr. Terent. 556 K.
    ${ }^{\circ}$ Compare also the examples of popular prosody cited by Lindsay, The Captivi, p. 32.

[^124]:    ${ }^{10}$ Müller, l. l., p. 302.
    ${ }^{11}$ Müller, l. l., p. 431.
    ${ }^{12}$ Müller, $l$ l., p. 303; Munro on Lucret. 3.776.

[^125]:    ${ }^{1 s}$ Engelbrecht, Stud. Vindobonens. VI 219ff.; Brock, Quaest. Gramm., p. 79f.; Hauler, Einl. z. Phormio, ${ }^{3}$ p. 63.
    ${ }^{1 s}$ I do not agree, however, with the view of most critics that the full forms such as laudarier, siet, duit, etc., are restricted absolutely and without exception to verse-closes, but I hold that they are sometimes, though very rarely, admitted to form any pure iambic foot such as the second or fourth, as Ter. Hec. $637 \sin$ ést, ut aliter túa sie ${ }_{\text {t }}$ senténtia; also to form the licensed first foot, as $A d .83$ sié t , quid tristis égo sim? ${ }^{\text {g }}$ cf. Plaut. Amph. 189 dǔé ${ }_{1} l l o$ extincto máxumo. Compare, for a somewhat similar view, Hauler, Einl. z. Phorm., ${ }^{3}$ p. 63, n. 2; Stange, De archaismis Terent., p. 33f.
    ${ }^{18}$ De Senecae trag. rationibus metricis, p. 34.
    ${ }^{16}$ Trans. Am. Phil. Assoc., XXXVI (1906), p. 164f.

[^126]:    ${ }^{17}$ Müller, l. l., p. 317.
    ${ }^{18}$ See, for example, Nilsson, Quomodo pronomina apud Plaut. et Ter. collocentur, Lund, 1901, pp. 9, 41, and the forthooming University of Chicago dissertation of Dr. Bertha E. Booth, The Collocation of the Adverb of Degree in Roman Comedy and Cato.
    ${ }^{19}$ It need not be said that I reject the view of Lindsay, L. L., p. 558, and the former view of Stolz, Gr., ${ }^{2} \S 87$, that frustră is an Acc. Plur. Neut., and also the theory (Lindsay, L. L., p. 593) that supernĕ is not the adverb of supernus. Lucretius takes the shortening of superne from the vulgar speech, where it was doubtless used as a preposition (just as in Umbrian) and so further weakened.

[^127]:    ${ }^{20}$ P. 386f.
    ${ }^{21}$ Einl., p. xxix.
    ${ }^{22} \mathrm{~A}$ good statement of usage according to the feet of the hexameter is also given in the Gildersleeve-Lodge Latin Grammar, §784.9.
    ${ }^{23}$ That the fourth foot, when dactylic, should be assimilated sometimes to the fifth and share in both its licenses and its agreement with the prose word-accent, is not surprising; compare the relation between the two complete feet of the dactylic penthemimer.
    ${ }^{24}$ Ramsay, Latin Prosody, p. 277 (London, 1863; an old, but still valuable manual) ; cf. Hoche, l. l., p. 5.

[^128]:    ${ }^{25}$ L. l., p. 370f.
    ${ }^{26}$ Christ. Metr., ${ }^{2}$ p. 179.
    ${ }^{27}$ L. l., p. 503 f .

[^129]:    ${ }^{r}$ L. l., p. 7, p. 41f., p. 50f.; Brock, l. l., p. 140.
    ${ }^{32}$ L. l., I 44f.; II $49 f$.
    ${ }^{33}$ De appositionis ap. Plaut. et Ter. collocatione, p. 27.

[^130]:    ${ }^{34}$ On these and similar forms, see also Köne, p. 167; Ramsay, p. 289.
    ${ }^{35}$ Examples in Johnston, Metrical Licenses of Vergil, p. 7 f .
    ${ }^{36}$ Brock, l. l., pp. 77, 88 ц. 1, 89, 95; Stange, De Archaismis Terent., p. 33.
    ${ }^{87}$ Müller, l. l., p. 139. Compare the well-known freedom in the first foot of the iambic and trochaic metres of Plautus, and compare also the familiar 'trochaic license,' which is employed especially in the first foot of English verse (Gummere, Handbook of Poetics, p. 212).

[^131]:    ${ }^{38}$ Reichardt, Fleckeisen's Jahrbücher, 1889, p. 785; Gleditsch, Metrik, §173.3; Lindsay, Captivi, p. 97; Exon, Hermathena, 13.158; cf. Müller, l. l., 147.
    ${ }^{30}$ We cannot wonder that Ennius allowed himself certain liberties; for, strictly speaking, virgines, feminae and filiae are all excluded from the Latin epic (Köne, l. l., p. 51). Paulinus of Nola (36.142) also correpted this beautiful word rather than forego altogether its use: Vestae quas vi ${ }^{5}$ rginěs aiunt.
    ${ }^{40}$ Mistakenly given by Müller as Fab. 428.

[^132]:    ${ }^{41} E p$. 2.1.160 manserunt hodieque manent vestigia ruris.
    ${ }^{42}$ Lindsay, L. L., p. 214; Skutsch, Pauly-Wissowa V, p. 2621, s. v. 'Ennius.'
    ${ }^{1 s}$ Note here also in homo ${ }^{\text {a }}$ nem the notable archaism which is so common in the fixed clausula, as $A n n .8$ nec dispendi facit hilum; 168 illa due ${ }^{\circ} \mathrm{llis}$; 322 supere ${ }^{8}$ scit; 415 sive mori ${ }^{8}$ mur. The usage of Lucretius and even of the Augustans is similar.

[^133]:    supérně náscuntúr leves.-Hor. C. 2.20.11.

[^134]:    ${ }^{44}$ Müller, pp. 483, 477; more fully Köne, l. l., pp. 70, 90, 111, 128, and Neue-Wagener, Formenlehre $\mathrm{II}^{3} 54 \mathrm{ff}$.; $\mathrm{I}^{2} 229$.
    ${ }^{45}$ Quintil. 10.1.10; cf. 1.8.13.
    ${ }^{46}$ Schola poetarum, Mart. 3.20.8; 4.61.3.
    ${ }^{47}$ Cf. Maurenbrecher, Hiatus, p. 72.

[^135]:    ${ }^{48}$ Only the first of these will be completed in the present paper.
    ${ }^{\bullet}$ Cf. Müller, p. 447 f.

[^136]:    ${ }^{50}$ Müller does not even mention sicutĭ, but cf. Ramsay, Pros., p. 51; Gildersleeve-Lodge § 707.4.4.
    ${ }^{61}$ Müller regards sollo as an ablative and as equivalent in meaning to omnino; another and doubtless better view (Lindsay, L. L., 207, 400) explains sollo as an Oscan Neut. Pl., Lat. tota.

[^137]:    ${ }^{52}$ The MSS. give also sexagintă and trigintă in the second trochee: Mart. 12.26.1 sexagintă teras; Manil. 2.322 ter trigintă quadrum partes, where the usual correction to sexagena, etc., is scarcely necessary.
    ${ }^{63}$ For similar popular shortening in hendecasyllables and Glyconics, see Lampr. Alex. Sev. vit. 38 (Baehr. frgm. poet. Rom., p. 381) púlchrum quód vidĕs ésse nostrum regem, and Severus' reply: púlchrum quód putăs ésse vestrum regem; alṣo the popular song, Baehr., p. 332 múḷsum quód probě témperés.

[^138]:    ${ }^{1}$ In deference to the wishes of the several contributors, their somewhat different systems of Avestan transliteration have not been altered. The alphabetic order of Bartholomae has been followed.

