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OF
LINGUISTIC SCIENCE
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Volume 3

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ANALYTICAL COMPARISON

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AMSTERDAM STUDIES IN THE THEORY AND
HISTORY OF LINGUISTIC SCIENCE

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Volume 3

Franz Bopp

*Analytical Comparison of the Sanskrit,
Greek, Latin and Teutonic Languages,
showing the original identity of their grammatical structure*

FRANZ BOPP

ANALYTICAL COMPARISON
OF THE SANSKRIT, GREEK, LATIN AND TEUTONIC
LANGUAGES, SHEWING THE ORIGINAL IDENTITY
OF THEIR GRAMMATICAL STRUCTURE

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Newly edited, together with

a bio-bibliographical account of Bopp SBD-FFELCH-USP
by Joseph Daniel Guignaut,

an introduction to *Analytical Comparison*
by Friedrich Techmer,

and a letter to Bopp by Wilhelm von Humboldt,

by

Konrad Koerner
University of Ottawa

with a new foreword, a select
bibliography, and an index of authors

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1989

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Analytical comparison :



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Portrait of Franz Bopp

Franz Bopp

PREFACE TO THE 1974 EDITION

1816 is generally accepted as the year marking the beginning of a systematic comparison of Indo-European languages, though a number of forerunners of Bopp's *Conjugations-system*¹ have been cited, among them Marinus Fogelius (1634-1675), Sahnovics, and Gyarmathi (cf. *Index of Authors* for details), all of whom had been working in the more closely-knit area of Finno-Ugric languages. Indeed, Gyarmathi's work of 1799 was still praised two generations later by Schleier in the second volume of his *Linguistic Investigations*² and even later Benfey, in his voluminous *History of Linguistics* (1869), referred to Samuel Gyarmathi's *Affinitas linguae Hungaricae cum linguis Fennicae originis grammaticae demonstrata* (Göttingen: J. C. Dieterich, 1799) as the first truly scientific comparison of languages.³

The almost universal acceptance of Bopp's *Conjugationssystem* of 1816 as having led to the development of the study of language as a science, distinct from philology -- a discipline in which linguistic considerations play a subordinate role -- seems to be evident from the fact that the editors of Saussure's *Cours de linguistique générale* (Lausanne & Paris, 1916) chose to publish the book precisely one hundred years later, clearly with a view to suggesting that historical-comparative linguistics, the great achievement of the 19th century, would from then on constitute merely one province within the science of language. Subsequent developments in this century have shown that Saussure's concept of a synchronic linguistics -- an approach to language which ignores previous stages of its development and focuses its attention on the analysis of the interrelationship between linguistic elements within a given code, has become the prevailing mode of linguistic investigation. Yet in 1966, exactly fifty years after the first appearance of the *Cours*, structuralists no less eminent than Noam Chomsky and Morris Halle stated in the editorial preface to the first volume of their *Studies in Language* series that they hope to include "an inquiry into the mechanism and causes of

¹ Franz Bopp, *Über das Conjugationssystem der Sanskritsprache in Vergleichung mit jenem der griechischen, lateinischen, persischen und germanischen Sprache, nebst Epistolen des Ranajan und Mahabhar in genauen metrischen Uebersetzungen aus dem Originaltexte und einigen Abschnitten aus den Vedas*. Herausgegeben und mit Voreinmungen begleitet von Karl Joseph Windischmann (Frankfurt am Main: Andreäische Buchhandlung, 1816 [repr., Hildesheim: Georg Olms, 1975]), xxxvii, 312 pp. in-16^o. - Probably in an attempt to repeat the success of F. Schlegel's book eight years earlier (cf. note 5) only half of the volume (pp. 3-157) was devoted to linguistics, with the remainder being taken up by translations from Sanskrit of literary and philosophical-theological texts.

² See August Schleier (1821-1868), *Die Sprachen Europas in systematischer Übersicht: Linguistische Untersuchungen* (Bonn: H. B. König, 1850 [new ed., with an introduction by E.F.K. Koerner, Amsterdam: John Benjamins, 1983]), p. 61 note, where he called it "ein für seine Zeit ganz vorzuziehliches und noch jetzt brauchbares Buch".

³ See Theodor Benfey, *Geschichte der Sprachwissenschaft und der orientalischen Philologie in Deutschland ...* (München: J. G. Cotta, 1869; repr., New York: Johnson, 1965), p. 278.

the still puzzling phenomenon of language change.¹⁴ In effect, it seems that one has witnessed a revival of interest in historical linguistics in recent years and, I may add, a renewed interest in the works of our predecessors.

Quite contrary to the aspirations of his mentor and friend Windischmann (1775-1839), who believed that Bopp had set out to penetrate into the mystery of the human soul by way of linguistic investigation, the *Conjugationssystem* essentially represents the first serious attempt to put into practice Schlegel's proposals concerning the creation of a science that is devoted to the inner structure of languages or comparative grammar.⁵ It is true that Bopp, like Schlegel, appended a considerable number of Sanskrit texts and translations of a poetic and philosophical nature to this first major publication of his (cf. note 1), but as the revised version of the linguistic part of the *Conjugationssystem* clearly indicates, he was abandoning the Romantic stance adopted by Schlegel, whose erroneous view that Greek, Latin, Persian, and the Germanic languages had derived from Sanskrit Bopp never accepted.

Bopp's *Conjugationssystem* was well received both in Germany and abroad. In fact, during his sojourn in London (1817-1820), while he concentrated most of his efforts on translating and translating Sanskrit manuscripts which Henry Thomas Colebrooke (1765-1837) had kindly placed at his disposal, the *London Magazine* printed a favourable review of his book.⁶ As a result, Bopp felt encouraged to prepare an English version of the linguistic portion of his *Conjugationssystem*. It appeared in June 1820 as the first article in the inaugural issue of the newly-founded *Annals of Oriental Literature* under the title "Analytical Comparison of the Sanskrit, Greek, Latin, and Teutonic Languages, shewing [sic] the original identity of their grammatical structure" (pp. 1-64).⁷ It mapped out a well-defined program of linguistic research: the analysis of the grammatical structures of several related languages, the comparison of their morphology (including the meaning and function of these elements), and the subsequent proof that they all would have to be considered as having "sprung from some common source, which, perhaps, no longer exists", as William Jones put it in his famous lecture of 2 February 1786. In fact, Bopp stated in his *Conjugationssystem*: "I do not believe that Greek, Latin and other European languages are to be considered as

derived from Sanskrit [...] I feel rather inclined to consider them as languages as subsequent variations of one original tongue."⁸

Bopp's *Analytical Comparison* represents not merely a translation of the Sanskrit part of his *Conjugationssystem*, as has often been claimed in the literature, but a significant advance in theoretical clarity and methodological soundness of a new, self-contained comparative procedure.⁹ Curiously enough, this work is not mentioned in Ferdinand Bopp's *Geschichte der Sprachwissenschaft* (cf. note 3). Salomon Leimann's 800-page biography of Bopp, makes only brief mention of *Analytical Comparison*, though he refers to a detailed account that Bopp himself wrote in 1821 -- *Conjugationssystem* -- in a brief stay at the University of Göttingen, where he was awarded a doctorate in *causa*. In this paper Bopp pointed to the differences between the ideas put forward in *Conjugationssystem* and the 1820 version.¹⁰ Instead of going into the details, Leimann draws attention to the fact that Persian had been left out in Bopp's *Analytical Comparison*, not realizing that this language appeared in the title of *Conjugationssystem* without being subjected to a linguistic analysis in the study itself to any significant degree.¹¹

Other scholars, among them Bréal in his introduction to the French translation of the second edition of Bopp's *Comparative Grammar* (1866)¹² Guignault in his bibliographical account of Bopp (1877[1869]) -- compare p. xxiv in the present volume --, and, above all, Delbrück in his influential *Einführung in das Sprachstudium* (1881, 6th ed., 1919), have commented upon Bopp's *Analytical Comparison*.¹³ In fact, the English version of Delbrück's book contains such a fine analysis of the salient features of Bopp's advance over his *Conjugationssystem* that I find it simply not possible to restate the relevant passages instead of restating the salient points here.¹⁴ It suffices to cite

⁸ Quoted from William Burley Lockwood, *Indo-European Philology: Historical and Comparative* (London: Hutchinson, 1969), pp. 23-24. (Correction: This quote which Lockwood attributes to Bopp's first book was in fact taken from the 1820 work, beginning on page 3 (see this volume, p. 16).)

⁹ Interestingly, seven years after its first appearance, a German translation of *Analytical Comparison* was prepared by a certain Dr. Pacht of Hildesheim and printed under the title "Analytische Vergleichung des Sanskrit, des Griechischen, Lateinischen und der germanischen Dialecte, welche die ursprüngliche Uebereinstimmung ihres grammatischen Baues beweiset" in *Göttinger Anzeiger für Philologie und Pädagogik* 2:3, 51-80, 4, 1-30 (Hannover: Hahn, 1827).

¹⁰ Bopp's 'Selbstanzeige' appeared in *Göttingische Gelehrte Anzeigen* 1821, 529-43.

¹¹ Cf. Salomon Leimann, *Franz Bopp: Sein Leben und seine Wissenschaft*, Part 1: *Biographie* (Reimer, 1891), p. 68. The similarity between German and Persian having been noted for centuries -- compare Wilhelm Streitberg's (1864-1925) paper, "Zur Geschichte der Sprachwissenschaft: Indogermanische Forschungen 35, 182-96 (1915) -- it may have been a device to attract the attention of a wider audience in Germany. (Note that Streitberg, p. 182, makes an explicit reference to both works of Bopp discussed here.)

¹² Cf. Michel Bréal's (1832-1915) introduction to Bopp's *Grammaire comparée des langues indo-européennes*, vol. I (Paris: Impr. Nationale, 1866), p. xxxi f.

¹³ It is also mentioned in Adalbert Kuhn's (1812-1881) commemorative article, *Franz Bopp, der Begründer der vergleichenden Sprachwissenschaft*, *Unsere Zeit: Deutsche Revue der Geisteswissenschaften* 4:10, 780-789 (Leipzig: F. A. Brockhaus, 1868), p. 782, as well as in August Leskien's (1830-1916) account of Bopp in *Allgemeine Deutsche Biographie* 3, 140-49 (Berlin: Duncker & Humblot, 1875); repr. in *Portraits of Linguists* ed. by Thomas A. Sebeok, vol. I (Bloomington & London: Indiana Univ. Press, 1966), 207-221, p. 212.

¹⁴ Cf. Bernhard Delbrück, *Introduction to the Study of Language: A critical survey of its history and methods of comparative philology of Indo-European languages*, authorized translation by E. W. Cunningham (Leipzig: Breitkopf & Härtel, 1882; new ed., with a preface by E. F. K. Koerner, Amsterdam: Van Nostrand, 1974 [new printing, 1988]), pp. 8-12, with lengthy quotations from *Analytical Comparison*, pp. 10, 11, 14 and 16.

⁴ Cf. Preface to N. Chomsky's *Correlation Linguistics* (New York & London: Harper & Row, 1966), p. x.

⁵ Friedrich Schlegel, *Über die Sprache und Weisheit der Indier* (Heidelberg: Mohr & Zimmer, 1808; new ed., with an introduction by Sebastiano Timpanaro, Amsterdam: Benjamin, 1977), p. 8.

⁶ It must remain a matter of speculation whether Alexander Hamilton's review of Bopp's *Conjugationssystem*, together with his Latin rendering of a Sanskrit epos, *Naluk: Carmen sanscritum* (London, 1819), had an impact in this connection; Hamilton's account of these two books appeared in the *Edinburgh Review* 33, 431-442 (May 1820). Cf. Rosane Roemer, *Alexander Hamilton (1767-1824): A chapter in the early history of Sanskrit philology* (New Haven, Conn.: American Oriental Society, 1968), 114-15. There can be no doubt, however, that Hamilton was one of Bopp's benefactors.

⁷ Only three issues of the *Annals* ever appeared (London: Longman, Hurst, Rees, Orne & Brown, 1820-1821) of 576 pages altogether, the third containing minor contributions by A. J. Silvestre de Sacy (557-58), Ohmar Frank (558-61), with the Orientalist Antoine-Léonard de Chézy (1773-1832), professor of Sanskrit in Paris since 1814, concluding the volume (570-76). This early demise of the journal may be taken as an indication of the little interest the scholarly public in England took in this area of human curiosity at the time when Germany began to establish chairs for Sanskrit (e.g., the one at Bonn University in 1818 for A. W. Schlegel, and another in Berlin for Bopp in 1821).

that at least from 1820 onwards Bopp began to pursue exactly what Humboldt in his letter to Bopp of 4 January 1821 -- printed in this volume (pp. 61-66) -- stated for his own scholarly attitude: 'Hitherto my study of Sanskrit has exclusively been concerned with the language, not the literature, and I am convinced that it will be an indispensable requirement for anyone conducting linguistic studies to understand it as profoundly as circumstances permit.' (66)

Possibly as a result of Delbrück's appraisal of Bopp's *Analytical Comparison*, but also because of Friedrich Teichner's own sense of history and his appreciation for the founder of comparative Indo-European linguistics, almost seventy years after its first appearance, this significant early statement of Bopp's became available again to the general linguistic public due to Teichner's re-editing and printing it in the fourth volume of his *Internationale Zeitschrift für Allgemeine Sprachwissenschaft* (1889), on which the present edition is based.¹⁵ In his foreword (reproduced here, pp. 3-13) Teichner placed Bopp's study within the context of its time; moreover, he decided to print the letter which Humboldt had written in response to Bopp's letter of 20 June 1820, which accompanied the shipment of a complimentary copy of *Analytical Comparison*. Teichner's decision was a particularly judicious one, since Humboldt's detailed reply not only reveals his cordial relationship with Bopp -- a relationship which ended only with Humboldt's death in 1835 -- and the scientific exchanges between the two scholars, but, what is more, it bears witness to the strong linguistic leanings of Humboldt, a fact which has been obscured in most histories of linguistics, and which Delbrück recognized in the fourth edition of his *Einführung* (1904) for the first time.¹⁶ As a matter of fact, Humboldt's letter shows the great humanist without portfolio (Marianne Cowan) as a keen analyst with profound analytical talent and thorough linguistic knowledge.

May the reader enjoy the present edition as much as I enjoyed preparing it.

Bloomington, Indiana

14 June 1973

E. F. K. K.

¹⁵ See *Internationale Zeitschrift für Allgemeine Sprachwissenschaft* 4.3-13 (= Teichner's "Vorwort"), 14-60 (= Bopp's "Analytical Comparison"), and 61-66 (= Humboldt's letter of 4 January 1821, commenting upon Bopp's study). -- Note that the complete set of Teichner's *Zeitschrift*, consisting of five regular volumes plus one supplement of altogether 2,700 pages in small quarto-size format, has recently been reprinted (Amsterdam: John Benjamins, 1973); it constitutes a mine for anyone interested in general linguistics and its history.

¹⁶ Cf. B. Delbrück, *Einführung in das Studium der indogermanischen Sprachen*, 4th rev. and enl. ed. (Leipzig: Breitkopf & Härtel, 1904), pp. 41-55, where he gives a detailed account of Humboldt's linguistic ideas. In the earlier editions Humboldt is depicted as having exerted an influence on linguistics through his broad mental culture and his noble humanity' (cf. his 1882 *Introduction* [see note 14 for details], p. 28) rather than in any other tangible way.

FOREWORD TO THE NEW PRINTING

Fifteen years ago, the present volume of the "Amsterdam Classics in Linguistics" series was first prepared for publication. If we ignore the traditional, at times fairly detailed, accounts that we find in the histories written by Bentley (1869) and Delbrück (1880), already discussed in the 1973 Preface (above), the biographical account by A. Leskien (1876) and the voluminous documentation of Bopp's life and work provided by S. Lefmann (1891-97), on which subsequent authors (e.g., Neumann 1967, Rocher 1968:112-115) have built and whose treasures still await full exploitation, little scholarship on Franz Bopp, the father of comparative Indo-European linguistics, had been published. Since about 1972, however, with the publication of such works as Kurt R. Jankowsky's *The Neogrammarists* (The Hague: Mouton) for instance, which devotes almost half of the space to the predecessors of the *Junggrammatiker*, and the research presented by several contributors to the 2-tome *Historiography of Linguistics*, which appeared three years later (The Hague: Mouton, 1975) -- though most contributions had been submitted by the end of the summer of 1972 -- there has been an increase of interest in 19th-century linguistics and in Bopp's contribution to linguistic science. We could mention a number of other recent papers to illustrate this resurgence, such as Paustian's (1978) account of Bopp's critical attitude toward the traditional Indian grammatical analyses and Schlerath's (1986) analysis of Bopp's treatment of ablaut phenomena or, for that matter, Sternemann's (1984a,b) general appraisals of Bopp's place in comparative Indo-European linguistics. However, none of these scholars manages to explain the importance of Bopp's work. -- The most thorough analysis to date of his intellectual background, theoretical stance as well as linguistic practice is Anna Morpurgo Davies' (1987) paper, and it is hoped that studies like this will lead to a new appraisal of Bopp's significance comparable to that which other important pioneers in the history of the language sciences (like Friedrich Schlegel, Jacob Grimm, or August Schleicher) have received in recent years. In fact, it is curious to note that during the international conference on "Lebnitz, Humboldt e le origini del comparatismo", held in September 1986 in this City, the name of Bopp was hardly ever mentioned, although it was undoubtedly he who laid more decisively than anyone else the foundations of comparative grammar. Far too often in the history of the study of language, the appearance of Bopp's *Conjugationssystem* in 1816 is referred to as 'the beginning of linguistics as a science', and then passed over. Perhaps the 1991 bicentenary of Franz Bopp's birth will provide the occasion to reinstate him in his rightful place in the annals of linguistic science.

Rome, 3 May 1988

Konrad Koerner

* See the list of "Secondary Sources" provided at the end of this brief note for further references.

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* As far as I know there is no full bibliography of Bopp's work available to the present day. Guignaut's "Liste des ouvrages" of 1877 (reprinted above, pp. xxxvi-xxxviii) appears to be the fullest account to date. However, Guignaut translated all titles into French, thus making it difficult to trace the original references. It is therefore hoped that the present list (far from being complete) gives at least some indication of the extent of Bopp's œuvre.

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NOTICE HISTORIQUE

SUR LA VIE

ET LES TRAVAUX DE M. FRANÇOIS BOPP,

ASSOCIÉ ÉTRANGER DE L'ACADÉMIE DES INSCRIPTIONS ET BELLES-LETTRES.

PAR M. GUIGNAUT,

SECRETAIRE PÉPÉTUEL.

Messieurs, deux sciences nouvelles ont été créées de nos jours, dans l'ordre de la philologie et de l'histoire, par le progrès de l'analyse appliquée aux œuvres primordiales de l'esprit humain : ce sont, d'une part, la science des langues, organes si divers en apparence de la pensée des peuples; d'autre part, la science des mythes ou la mythologie, expression non moins variée de leurs croyances. Analogues à la géologie, à l'anatomie, à la physiologie comparée, l'honneur de notre siècle est ou sera de les avoir constituées sur la double base de l'observation et de l'induction, et par là d'avoir sondé, à des profondeurs auparavant inconnues, l'histoire du génie de l'homme aussi bien que celle de la nature.

Le savant dont j'essayerai de vous peindre aujourd'hui la vie modeste et les glorieux travaux, quoiqu'il ait eu d'illustres précurseurs et d'éminents émules en Allemagne et chez nous, a mieux qu'un autre mérité le titre de fondateur de cette science qu'il faut appeler, dans sa plus haute généralité, la

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Lue
dans la séance
publique
annuelle
du
19 novembre
1869.

VORWORT DES HERAUSGEBERS.

Eine ausführliche Darstellung des Lebens und eingehende Besprechung der Werke des Begründers der indogermanischen Sprachwissenschaft für diese Zeitschrift zu schreiben hat Herr Prof. LERNMANN übernommen, welchem von der Familie Bopp's dessen litterarischer Nachlaß zur Verfügung gestellt worden ist. Da der Umfang dieses Lebensbildes über den Rahmen eines Heftes der 1. z. hinausgewachsen ist, so wird dasselbe in einem Supplement zu diesem Bande erscheinen, sobald es vollendet ist. Mittlerweile verweise ich auf BENFEY: GESCHICHTE DER SPRACHW. 1869, S. 370—379, 470—515; BRÉAL: INTRODUCTION À LA GRAMMAIRE COMPARÉE. . . DE M. FRANG. BOPP, I. 1866 — IV. 1872; GUIGNIAUT: NOTICE HISTORIQUE SUR LA VIE ET LES TRAVAUX DE M. FRANG. BOPP, LUE DANS LA SÉANCE PUBLIQUE ANNUELLE DU 19 NOV. 1869; DELBRÜCK: EINLEITUNG IN DAS SPRACHSTUDIUM; EIN BEITRAG ZUR GESCHICHTE DER METHODIK DER VGL. SPRACHFORSCHUNG, 1880; 2. A. 1884, S. 1 ff. Auf die Bedeutung von Bopp's Abh.: ANALYTICAL COMPARISON hat BENFEY leider nicht, wohl aber BRÉAL I. S. XXXI f.; GUIGNIAUT S. 11 und DELBRÜCK S. 9 ff. aufmerksam gemacht. Wenn nun diese für die Geschichte der Sprachw. und ihrer Methodik so wichtige Bopp'sche Schrift sonst seitens der Sprachforscher nicht die verdiente Berücksichtigung und Verwertung gefunden hat, so liegt das wohl daran, daß sie so schwer zugänglich gewesen; ich habe mich wenigstens bisher vergeblich bemüht ein Exemplar zu erwerben. Ich darf deshalb wohl erwarten, daß es den Lesern der 1. z. willkommen sein wird, wenn ich mit Erlaubnis der Familie Bopp's in diesem Bande ANALYTICAL COMPARISON nebst einem noch unveröffentlichten Briefe W. v. HUMBOLDT'S an den Vf. über diese Abh. zum Abdruck bringe. Nachdem ich mich auf die oben gen. Werke über Bopp bezogen, darf ich mich hier wohl auf einige wenige einleitende Bemerkungen beschränken, um die Stelle zu kennzeichnen, welche ANALYTICAL COMPARISON in der Sprachw. wie unter Bopp's Schriften einnimmt.

Die Verwandtschaft der griech., lat., german. u. ar. Spr. unter sich wie mit dem Skr. war ja bereits vor Bopp erkannt worden; unter andern von LEWIS und W. JONES, von welchen ich darauf bezügliche Stellen 1. z. III. 341, bzw. 295, angeführt habe. Der wissenschaftliche Beweis der Verwandtschaft war aber noch keineswegs erbracht. Wir lesen bei FRIEDR. SCHLEGEL: UBER

DIE SPR. UND WEISHEIT DER INDER, 1808, S. 28: 'Jener unterscheidende Punkt aber, der hier alles aufhellen wird, ist die innere Struktur der Spr. oder die vergleichende Grammatik, welche uns ganz neue Aufschlüsse über die Genealogie der Spr. auf ähnliche Weise geben wird, wie die vgl. Anatomie über die höhere Naturgeschichte Licht verbreitet hat.' Friedr. Schlegel unterschied einen 'Stufengang der Spr.': auf der untersten Stufe die einsillbige chinesische Spr., welche die Nebenbestimmung der Bedeutung durch mechanische ändernde Hinzufügung von für sich bestehenden Wörtern bezeichne; auf der obersten Stufe die indische und verwandte Spr., welche die Verhältnisbegriffe durch innere Veränderung und Umbiegen der Wurzel (Flexion) andeuten und organisch entstanden seien. Die Wurzel sei auf dieser höchsten Stufe ein Keim, der sich lebendig entfaltete. Auf Zwischenstufen ständen der chines. näher die amerikanischen, der ind. näher die semitischen Spr. (S. 45 ff.). W. v. Humboldt schrieb in ADELUNGS MITRIADATES S. A. 34 (1816): 'Nicht die einzelnen ohne weitere Analyse aufgegriffenen Wörter zweier Spr., sondern die Analogie der Wortbildung, zusammengenommen mit dem ganzen Umfang ihrer Wurzelteile, muß man vgl., um über ihre Abkunft und ihre Verwandtschaft ein gegründetes Urteil zu fällen... Möglichst genaue Feststellung der Ausspr. und strenges Studium der innern Analogie sind die Grundfesten alles etymologischen Studiums.' Übrigens hatte J. S. Vater, welcher nach ADELUNGS TODE (1806) den MITRIADATES fortsetzte und vollendete (1817), der grammatischen Analyse schon mehr Aufmerksamkeit zugewendet; sowohl im MITRIADATES wie in seinen späteren Schriften.¹ Und vordem hatte OTRIMAR FRANK: FRAKMENTE EINES VERSUCHS ÜBER DYKAMISCHE SPRACHZERLEGUNG NACH VOLL. DER PERS., IND. UND DEUTSCHEN SPR. UND MYTHEN, 1813, mit Bezug auf die Sprachzergliederung der alten ind. Grammatiker und die 'weniger glücklich durchgeführten Versuche' von Fulda für das germ. Gebiet, geäußert: 'Es ist möglich, daß sich solche künstlichen Analysen, wenn sie von richtigen Ideen aus begonnen würden, auch wirklich in der deutschen, pers. u. aa. Spr. durchführen ließen, wobei sich die innere Verwandtschaft jener beiden unter sich und mit d. Skr. am besten bestätigen müßte, ja die schon vorhandene Analyse dieser wohl sogar als Muster gebraucht werden könnte.' Leider ist der Versuch FRANKS, welcher namentlich vom Pers. ausging, weniger gelungen, als diese Bemerkung erwarten ließ. Die streng wissenschaftliche Verwirklichung der von seinen Vorgängern nur angedeuteten vgl. Zergliederung und Grammatik blieb Bopp vorbehalten, wenigstens für die indogerm. Spr.²

¹ Vgl. auch seine spätere Abh. AN ESSAY ON THE BEST MEANS OF ASCERTAINING THE AFFINITIES OF ORIENTAL LANGUAGES, TRANSACTIONS OF THE ASIATIC SOCIETY, 1828, im Auszuge I. Z. II. 43.
² ANNALETTEN DER SPRACHLEHRE, 1820. DIE SPR. DER ALTEN PERSIEN, 1821. VERGLEICHENDE GRAMMATIK DER EUROP. SPRACHEN, UND SÜD-, WESTASIATISCHER, 1822.
³ Über die Ergebnisse der vgl. Zergliederung der semitischen Spr. im Mittelalter siehe MUNK, JOURN. AS. 1850, XVI und NEUBAUER, NOTICE SUR LA LEXICOLOGIE HEBRAÏQUE, JOURN. AS. 1861. Für die ugrischen Spr. s. P. HUNFALVY: DIE UNGARISCHE SPRACHW., LITTEK. BERICHTER I. 75 ff. Die Ähnlichkeit der ungar. mit den finnischen Spr. halten bereits AXOS COMENIUS, OLAV RÜDEBECK, LEIVISZ (vgl. I. Z. III. 341) bemerkt. Den Beweis der Verwandtschaft mit dem Lappischen versuchte JOH. SAJONICS (DEMONSTRATIO IDIOGA UNGARICORUM ET LAPPONICORUM IDIOMATIS, 1770) zu führen, nicht bloß durch Vgl. von Ausspr., von Wörtern und Hilfswörtern, sondern

Nachdem Bopp sich auf der Schule zu ASCHENFELSKO eine tüchtige Kenntnis der klassischen und neueren Spr. erworben, ging er 1812 nach PARIS, um dort orientalische Spr., namentlich Skr., Pers., Hebr. und Arab. zu studieren; die semitischen unter Leitung von SILVESTRE DE SACY.¹ Im letzten Jahre seines Aufenthalts in PARIS 1816 erschien sein Erstlingswerk: ÜBER DAS KONJUGATIONSSYSTEM DER SANSKR. IN VGL. MIT JENEN DER GRIECH., LAT., PERS. UND GERM. SPR., herausgeg. von seinem früheren Lehrer WISSENSMANN. In dieser Arbeit ist die Anregung unverkennbar, welche Bopp Friedr. Schlegel und den Philologen der ältern holländischen wie der deutschen Schule, namentlich G. HERMANN, sowie auch teilweise S. DE SACY verdankt. Doch läßt die weitere Ausföhrung den selbständigen Forscher erkennen, welcher auf induktivem Wege, seines Zieles wohl bewußt, vorgeht und die Irrwege seiner Vorgänger geschickt meidet. Sein Streben ist nach S. 137 dahin gerichtet: 'den Grund und Ursprung der grammatischen Formen [zunächst der Konjugation] derjenigen Spr. zu erklären, die mit dem Skr. in engster Verwandtschaft stehen.' Sein Mittel zu diesem Zweck ist die vgl. Zergliederung, welche, wie wir gesehen, zwar bereits empfohlen und angestrebt, aber vor ihm noch nie in so wissenschaftlicher Weise geübt worden war. Insofern hat er Grund zu sagen S. 12: 'Da ich mich aber in meinen Behauptungen nie auf fremde Autorität stützen kann, indem bisher noch nichts über den Ursprung der grammatischen Formen geschrieben worden, so muß ich sie mit triftigen Beweisen belegen.' Gleichzeitig damit hat B. auch zuerst den Beweis für die Verwandtschaft der ind. mit der griech., lat., pers. und germ. Spr. wirklich erbracht. Die folgerichtige Durchführung der vgl. Zergliederung und der strenge induktive Beweis der Verwandtschaft der gen. Spr. ist also die eigenste That Bopps in dieser seiner ersten Arbeit. An Friedr. Schlegel erinnert S. 7: 'Unter allen bekannten Spr. zeigt sich die geheiligte Spr. der Indier als eine der fähigsten, die verschiedensten Verhältnisse und Beziehungen auf wahrhaft organische Weise durch innere Umbiegung und Beziehungen auf wahrhaft organische auszudrücken.' Von F. Schu. weicht er jedoch ab und nähert sich der Auffassung der gen. Philologen, wenn er fortfährt: 'Aber ungeschickt dieser bewundernswürdigen Biegsamkeit gefällt es ihr zuweilen, der Wurzel das Verbum abstracrum einzuverleiben.' An HERMANN und SACY schließt B. sich darin an, was er S. 3 von dem Zeitwort im allgemeinen bemerkt. HERM. folgt der damals herrschenden logischen Auffassung des Satzes, wenn er DE EMENDANDA RATIONE GRAMM. 1801, S. 127 tres partes orationis unterscheidet, quot sunt partes cogitationum. Atque unaquaeque cogitatio . . . tribus omnino constat jusque necessariis partibus: prima quam subiectum philosophi vocant . . . secunda,

nach von Suffixen, Bildungs-silben und Konjugation. Grammatisch erwies die Übereinstimmung des Indier mit dem Finnischen und Estnischen SAM. GRAMMATIK: AFFINITAS LINGUARUM FINNICARUM LINGUIS FINNICAE ORIGINIS GRAMMATICAE DEMONSTRATA, 1799, womit N. RÉVIZ Grammatik 1803—6 und A. M. RIEDL MAGYARISZIE GRAMM., 1858, zu vgl. Buxper hebt die für ihre Zeit ganz ausgezeichnete, erste wirklich wissenschaftliche Sprachvgl. von SAM. GRAMMATIK in seiner Gesch. DER SPRACHLIV. besonders hervor. Sie sollte bald von Bopp in den Schatten gestellt werden.
¹ Vgl. I. Z. III. S. XXVIII.

quam praedictatum appellat . . . tertia denique, quae copulae nomen habet. Vgl. S. 173: Est enim haec verbi vis, ut praedictatum subiecto tribuat atque adiungat. Hinc facile colligitur proprie unum tantummodo esse verbum: idque est verbum esse. Dem entsprechend Bopp, *kosyue*. S. 3: 'Das Verbum . . . ist bloß das grammatische Band zwischen Subj. und Prädikat . . . Es gibt unter diesem Begriffe nur ein einziges Verbum, nämlich das sog. Verbum abstractum; sein, esse.' So findet B. als äußeres Kennzeichen des Futurs as S. 66j, des lat. Imperf. bhū (S. 96j), anderseits als Kennzeichen des schwachen germ. Präteritums die Wurzel von thun (S. 151j); vgl. 156: 'Wein im Engl. der Gebrauch des Zeitworts do als Hilfsverbum so herrschend ist, und wenn auch im ältern Deutschen dieser Gebrauch bestand, so dürfte dieses vielleicht darin seinen Grund haben, daß dieses Zeitwort schon im ältesten Germ. mit umgebungen Wurzeln verbunden ward, um deren Nebenbestimmungen auszu-drücken.' Was die Personenendungen betrifft, so hatte bereits Scaevola, *PROLEGOMENA AD ETYMOLOGICUM LINGVAE GRAECAE*, 1790, S. XLIV ff. die Vermutung ausgesprochen: syllabas esse a pronominibus . . . resectas . . . Sunt enim litterae hae, syllabaeve, o, w, hi, hev, hev, mus, proprie particulae pronominum antiquissimum, vel ipsa pronomina adhuc usitata, determinandis veli personis unice inservientia, ut apud Gallos pronomina separata je, tu . . . Adformantes syllabicas et asyllabas grammatici hebraei pronomina ejusmodi vocant, qua de re diximus ad *avaioc*, p. 279, 280. B. bemerkt nun *kosyue*. S. 147: 'Es scheint mir keinem Zweifel mehr unterworfen zu sein, daß die Buchstaben, die ich in diesem Versuche Kennzeichen der Personen zu nennen pflege, wirkliche Pronomina seien. Schon aus der griech. und lat. Spr. ließ sich dies mutmaßen; die Kenntnis des Altind. bringt es meiner Meinung nach zur Gewißheit. — Wenn der Genus der Spr. mit bedachtsamer Vorsicht die einfachen Begriffe der Personen mit einfachen Zeichen dargestellt hat; wenn wir ob dessen weiser Sparsamkeit dieselben Begriffe an Zeit- und Fürwörtern auf gleiche Weise ausgedrückt finden, so erhellt daraus, daß der Buchstabe ursprünglich Bedeutung hatte, und daß er seiner Urbedeutung getreu blieb. Wenn ehedem ein Grund vorhanden gewesen ist, warum mām mich, und tam ihn heißt, und nicht letzteres mich, und bhavami ich bin, und bhavati er ist heißt aus demselben Grund, daß nun bhavami ich bin, und bhavati er ist heißt und nicht umgekehrt. — Wenn das Zeitwort wegen mannigfacher Nebenbegriffe, die durch bedeutsame Flexion auszudrücken ihm zukommt, nicht auch die allzu wichtigen Begriffe der Personen durch eigene Mittel — durch innere Biegung — auszudrücken vermochte, wenn es sich desfalls Zeichen beigesellen mußte, deren Bedeutung keinem Zweifel Raum ließ; so konnte es mit Recht keine andern Buchstaben wählen als die, welche seit dem Ursprung der Spr. die ihm auszudrückenden Begriffe mit vollständiger Klarheit darstellten.' Die weitere Vgl. zeigt, wie sehr auch nach dieser Seite B. seine Vorgänger überholt hat; wie behutsam er deren Fehler zu vermeiden verstand, ohne freilich selbst unfehlbar zu sein; mit wie scharfem Blick er bei seiner Vgl. Zerlegedienung in der Mannigfaltigkeit das Übereinstimmende herauszufinden wußte. Es war das zunächst eine besondere Anlage für diese Bethätigung, welche durch Übung im Laufe der Jahre gepflegt und vervollkommenet wurde.

Mit Unterstützung der bayerischen Regierung ging B. nun nach London, wo er zu einigen von den englischen Orientalisten in Beziehung trat, welche wie Wilkins und Colebrooke die Kenntnis der ind. Spr. und Literatur, die sie an der Quelle geschöpft, den europäischen Gelehrten übermittelten. Hier trieb er namentlich Skr., unter andern auch mit W. v. Humboldt, wie er es in Paris mit A. W. v. Schlegel gethan. Wie fruchtbar der Aufenthalt in London für B. war, zeigt die neue engl. Bearbeitung des Gegenstandes seines ersten Werks, welche er als I. Artikel in den neubegründeten *ANNAALS OF ORIENTAL LITERATURE* im Juni 1820 Teil I. 1—65 unter dem Titel: ANALYTICAL COMPARISON OF THE SANSKRIT, GREEK, LATIN, AND TELUGUE LANGUAGES, SHEWING THE ORIGINAL IDENTITY OF THEIR GRAMMATICAL STRUCTURE veröffentlichte. Eine in Aussicht gestellte Fortsetzung ist nicht herausgegeben; die *ANNAALS* hörten mit dem II. Hefte auf zu erscheinen. Auch hat sich im literarischen Nachlaß, wie ich erfuhr, kein weiteres engl. Ms. vorgefunden. Der Fortschritt im Vgl. zum *KOSYUCARIVISSAYAM* von 1816 ist bedeutend. War sich B. schon in der ersten Arbeit seines hohen Zieles bewußt, so ist er jetzt auch seiner Methode, in deren Handhabung seine Hauptstärke liegt, sowie der Ergebnisse im ganzen sicher. Das zeigt schon der neue Titel, in dem die Zerlegung neben der Vgl. zum Ausdruck kommt, als Mittel die ursprüngliche Übereinstimmung des grammatischen Baues der gen. Spr. zu erweisen. Es sollte also wohl nicht bloß das Konjugationssystem, sondern der grammatische 'Organismus' überhaupt in Betracht kommen; in der That ist aber in dem vorliegenden Teil nur das Zeitwort zu einem gewissen Abschluß gebracht.

Nach einigen einleitenden Bemerkungen über die Wichtigkeit der grammatischen Zergliederung und Vergleichung zeigt B., daß die griech., lat. und germ. Sprr. das Slaw., Pers., Armen., Georgische zieht er vorderhand noch nicht in den Kreis seiner Untersuchung; nicht etwa vom Skr. abgeleitet seien, wie das noch F. Schlegel, *SPR. V. WEISB. D. IND.* S. 3 behauptet hatte, sondern daß sie alle mit dem Skr. Abarren einer Sprache seien, der das Skr. in den meisten, aber keineswegs in allen Formen verhältnismäßig am nächsten stehe. In seiner Transskription oder vielmehr Translitteration des skr. Alphabets schließt er sich in Rücksicht auf seine engl. Leser an W. Jones und Dr. Wilkins an, z. T. mehr als gut ist. Der Phonetik und Graphik der altind. Grammatiker zollt er gebührende Anerkennung, rigt jedoch, daß sie mit dem Buchstaben für ä auch zugleich è und ö bezeichnet hätten, welche letztern kurzen Vokale sie in der gesprochenen Spr. nach seiner Ansicht unterschieden haben müßten.

Neu ist in der engl. Bearbeitung der Abschnitt über Wurzeln. B. geht hier von den skr. Wurzeln aus, dem Ergebnis der Zergliederung der altind.

¹ Von dieser Ansicht ist B. später leider unter dem Einfluß von GRAYNS *GRAMM.* I. 594 zurückgekommen. Er sagt von. *GRAMM.* 3 I. § 3: 'Unter den einfachen Vokalen fehlt es dem altindischen Alphabet an einer Bezeichnung des griech. è und ö, deren Laute, im Fall sie im Skr. zur Zeit seiner Lebensperiode vorkamen, doch erst nach der Festsetzung der Schrift sich aus dem kuren *a* entwickelt haben könnten, weil ein die feinsten Abstufungen des Lauts darstellendes Alphabet jenes gilt weniger für die Vokale als für die Konsonanten' gewiß auch die Unterschiede zwischen ä, è und ö nicht vernachlässigt haben würde, wenn sie vorhanden gewesen wären.'

Grammatiker. Er behauptet, ihr Wesen bestehe in der Einsilbigkeit, welche auch für das Lat., Griech. und Germ. gelte¹; die Wurzeln der arab. und verwandten Spr. dagegen seien nicht auf eine Silbe beschränkt, sondern im allgemeinen an drei Konsonanten gebunden. Die semitische Wurzeln gestalten eine mannigfachere innere Beugung, während letztere bei den einsilbigen Wurzeln natürlich nur eine beschränkte sein könne²; das Skr. und die verwandten Spr. seien deshalb in ihrer Wortbildung mehr auf äußere Anfügung angewiesen. Er tritt damit in Gegensatz zu Fr. Schlegel, welcher den Ursprung der grammatischen Formen nicht untersucht und den Begriff 'Flexion' zu einseitig gefaßt habe. Andererseits nimmt er hier auch zu Schweinius in Betreff der Personenendungen Stellung; er stimmt dessen Auffassung im Grunde bei, kritisiert aber seine unwissenschaftliche Methode.

An die vgl. Zergliederung des Zeitworts tritt er hier mit derselben logischen Auffassung des Satzes, seiner Teile und besonders des Zeitworts heran, wie in seinem KONJUGATIONSSYSTEM. Mit HERMANN³ kennt er nur 3 wesentliche Redeteile: Subjekt, Prädikat, Kopula, welche im Zeitwort verbunden auftreten: Potest unites in itself the three essential parts of speech, t being the subject, es the copula, and pot the attribute. After these observations the reader will not be surprised if in the languages, which we are now comparing, he should meet with other verbs, constructed in the same way as potest, or if he should discover that some tenses contain the substantive verb, whilst others have rejected it, or perhaps never used it. He will rather feel inclined to ask, why do not all verbs in all tenses exhibit this compound structure? and the absence of the substantive verb he perhaps will consider as a kind of ellipsis. Die Leser von heute, welche durch jene ältere logische Voraussetzung nicht mehr beeinflusst sind, brauchen bei dieser sehr verführerischen Stelle nicht erst zur Vorsicht gemahnt werden; es wird sich ihnen von selbst die Beobachtung aufdrängen, daß B. das Verbum abstractum in seiner Zerlegung wohl zu häufig gefunden, weil er es eben überall gesucht hat. Nach dem Verbum abstractum behandelt Vf. das Zeitwort überhaupt mit allen seinen Teilen, welche die Zeit, den Modus, die Personen u. s. w. bezeichnen. Das Augment vgl. B. mit dem a privativum. Auch wer nicht mit dieser Auffassung einverstanden ist, wird mit Interesse die allgemeinen Bemerkungen über die sprachliche Bezeichnungswiese lesen, welche daran geknüpft werden: It is gratifying to observe, how with apparently few means, by a wise employment of them, languages succeed to convey in an unequivocal manner, an immense number of ideas 32 [26]. Besonders hervorzuheben ist, daß B. gern

¹ Vgl. A. F. BERNHARDT: *ASPAKASCHENDE DER SPRAKIKW.*, 1863, S. 106: 'Alle Wurzelwörter sind . . . einsilbig und obgleich ihre Gesamtheit eine Fiktion ist, so liegen sie doch als aus dem absolut einfaßen der Spr. gebildet, ihr als ein wirkliches zu Grunde. Die Fiktion besteht nämlich nur darin, daß schließendlich vorausgesetzt wird: sie hätten als solche einmal existiert.'
² B. läßt bei diesen als innere Beugung nur noch gewisse Vokalveränderungen und die Verdoppelung gelten.

³ Vgl. auch S. DE SACY: *PRINCIPES DE GRAMMAIRE GÉNÉRALE*, 1799; 8e éd. 1852, S. 24: Le verbe être exprime seulement l'existence du sujet et sa liaison avec l'attribut . . . Dans le verbe autres que le verbe être, le verbe et l'attribut sont compris dans le même mot.

jede Gelegenheit benutzt, die neuern und lebenden Spr. zur Vgl. heranzuziehen, wenn auch sein Hauptziel, die Erklärung des Ursprungs der grammatischen Formen, ihn nötigt, im ganzen möglichst die ältesten Denkmäler der Spr. in den Vordergrund zu stellen; letzteres hat er für die ind. Spr. leider nicht in gebührender Maße gethan. Von Analogiebildung spricht er S. 46, vgl. I. 2. III. 103.

Kein Forscher hatte dazwischen Bopp's *AVAL. COMP.* besser würdigen können als W. V. HUYWOOD. Es dürfte deshalb den Lesern willkommen sein, daß ich S. 61 ff. aus B. litterarischem Nachlaß einen Brief veröffentlichte, welchen W. V. H. über *AVAL. COMP.* an den Vf. gerichtet und den Herr LERMAN mit gef. überlassen hat. Bopp kehrte nun nach Deutschland zurück und verlebte einen Winter in GÖTTINGEN, wo er eine Selbstanzeige für die *GÖTTINGER GELEHRTEN ANZ.*, 1821, schrieb. In der Anzeige sagt B. S. 550 ff.: 'Diese Abh. ist 2. T. eine Umarbeitung der deutschen Schrift über das KONJUGATIONSSYSTEM DER SKRSKR. IN VERB. MIT JEDEM DES GRIECH., LAT. etc., von welcher sie sich in der Darstellung hauptsächlich dadurch unterscheidet, daß sie die Grammatik der vgl. Spr. gleichzeitig entwickelt, wodurch eine leichtere Übersicht der Uebereinstimmungen gewonnen wird. Die pers. Spr. ist ausgelassen, teils um die Aufmerksamkeit nicht zu sehr zu zerstreuen und um in den Schranken der einer periodischen Schrift angemessenen, Kürze zu bleiben, teils weil der Vf. ein ausführliches Werk herauszugeben beabsichtigt, worin alle mit dem Skr. verwandte Spr. behandelt werden sollen, also neben dem Pers. auch das Armen. und die in der Sprachgeschichte so merkwürdigen slav. Mundarten. Indem die erwähnte Abh. dem Vf. dieser Anzeige angehöret, so darf der Leser hier keine Beurteilung derselben erwarten, sondern bloß eine nähere Auseinandersetzung des Inhalts und des eigentlichen Zwecks, der den angestellten Untersuchungen zum Grunde liegt. Es war nämlich nicht einzig die Absicht des Vf., die Verwandtschaft der angegebenen Spr. zu beweisen, sondern noch vorzüglich, durch ihre Zusammenstellung und wechselseitige Vgl. über Ursprung und primitive Bedeutung der ihnen gemeinsamen grammatischen Formen Aufschlüsse zu erlangen, die sich aus spezieller Erforschung der einzelnen Spr. an und für sich nicht leicht ergeben können. Ein solcher Zweck war aber zu erreichen nicht wohl möglich, ohne zugleich diejenigen, welche den angestellten Untersuchungen zu folgen geneigt sind, von dem innigen Zusammenhang des Skr. mit verschiedenen europäischen Spr., wie es uns scheint, eine volle Überzeugung zu gewähren. In wiefern diese Behauptung gegründet sei, wird ein Blick auf die S. 17, 18, 20, 22 [in dem Abdruck hier bzhw. S. 25, 26, 28, 30] etc. gegebenen Paradigmata zeigen. . . Einige kleine Abweichungen der griech. Konjugation von der skr. werden S. 15 und 22 [S. 24 und 30] daher erklärt, daß die griech. Spr. μ am Ende eines Wortes stets in ν verwandelt, daß μ niemals ein Wort schließt, es sei denn daß ein Vokal apostrophirt sei. Daher kommt es denn auch, daß während im Skr. und Lat. der Acc. sing. durch m bezeichnet wird, im Griech. statt dessen

¹ Man vgl. aber auch KOSGARAVENS Beschreibung der *ANNALS OF ORIENT. LIT.*, JEN. LITZT. 1821, Sept.; A. W. SCHLEGEL: *REFLEXIONS SUR L'ÉTUDE DES LANGUES ASIAT.*, 1832, S. 31 ff.; CUR. LASSEY, *IND. BRIT.* III. 77 ff.; R. GARRETT, *PHILOL. SOC.*, LONDON I. 265, II. 165, III. 9, 19.

ein v steht, z. B. tam (ihn oder diesen), istum, tov . . . Ein 2. im Griech. ebenso standhaft befolgtes Gesetz ist die Abwertung des τ am Ende eines Wortes (auch das verwandte θ kann sich an dieser Stelle nicht behaupten) . . . so ist πατήρ, ἕκαστος — πάτερ, ἀπὸ. Die lat. Spr. ist in dieser Hinsicht duldsamer als das Griech., indem sie dem τ am Ende eines Wortes sehr gemessen Platz vergönnt, wie in amat, erant, etc.; ja sie trägt selbst in dieser Hinsicht den Sieg davon über das Skr., weil sie τ selbst im Falle eines vorhergehenden n am Ende eines Wortes beibehält. Formen wie amat, erant; Wortes etc. kommen im Skr. nicht vor, weil diese Spr. das t am Ende eines Wortes abwirft, wenn ein n vorhergeht . . . In den übrigen Teilen der Konjug. ist die Skt-spr. nicht minder übereinstimmend mit der griech.; sie hat z. B. in Gemeinschaft mit ihr und dem Lat. und Got., ein durch Reduplikation gebildetes Präteritum . . . Was den Ursprung der grammatischen Formen anbelangt, so werden die Personalendungen der Zeitwörter für wesentliche Bestandteile wirklicher Pronomina angesehen, der Beweis wird aber bis dahin verschoben, wo in dem 2. Teil der Abh. die Fürwörter im besonderen abzuhandeln sind . . . Dem Verbum substantivum wird ein sehr bedeutender Einfluß auf die Konjug. der Verba attributiva zugeschrieben.

1832 folgte B. einem Ruf an die Universität Berlin, welchen er der Empfehlung W. v. Humboldts verdankte. Dort las er in der Akad. der Wiss. eine Reihe von Abh., welche in gewissen Sinne als die Ergänzung und Fortsetzung seiner engl. Schrift angesehen werden können. Ihr gemeinsamer Titel ist: VGL. ZERLEGERUNG DES SKR. UND DER MIT IHM VERWANDTEN SPR. I. VON DEN WURZELN UND PRONOMINA 1. UND 2. PERSON, 1833; II. ÜBER DAS REFLEXIV, 1834; III. ÜBER DAS DEMONSTRATIVUM UND DEN URSPRUNG DER KASUSZEICHEN, 1835—36; IV. ÜBER EINIGE DEMONSTRATIVUM UND IHREN ZUSAMMENHANG MIT VERSCHIEDENEN PRÄPOSITIONEN UND KONJUNKTIONEN, 1830; V. ÜBER DEN EINFLUSS DER PRONOMINA AUF DIE WORTBILDUNG, 1830—31. Da Bensev und Breál auf den Inhalt dieser akad. Abh. nicht näher eingehen, so seien mir hier einige Bemerkungen darüber gestattet. In Abh. I spricht Bopp zuerst von 'Wohl-lautgesetzen' der gen. Spr., deren Übereinstimmung 'sich auch in Spr. zeigen, die sonst in keiner Berührung miteinander stehen, sie finden ihren Grund in den Sprachorganen selbst'. Er nimmt dann die Wurzelfrage wieder auf S. 126: 'Die Wurzel wird gefunden, wenn man von einem Worte alles ablöst, was irgend einen grammatischen Nebenbegriff andeutet, wie die Kasusendungen des Nomens und das Ableitungssuffix, wodurch es zu einer bestimmten Klasse von Nominen gestempelt wird, die Personalendungen der Zeitwörter, und das, was die Tempus- und Modusverhältnisse bezeichnet, und wenn man überhaupt nur das übrig läßt, was alle von einer Quelle ausgehende Wörter miteinander gemein haben.' Indem er zu den Pronomina übergeht, rügt er den Fehler der ind. wie europ. Etymologen, daß sie die Pronomina 'von denselben Wurzeln ableiten, woraus Verba und andre Redeteile entspringen', womit Abh. V. 13 zu vgl.: 'Vor den Wurzeln der übrigen Rede-

teile, die wir Verbalwurzeln nennen mögen, zeichnen sich . . . die der Pronomina aus und verschwiebten Präpositionen und Konjunktionen durch die gedrängte Kürze aus.' Letztere werden in der vgl. GRAMM. § 105 den Verbalwurzeln als 'Pronominalwurzeln' gegenüber gestellt. In der III. Abh. S. 71 ff. gibt er in der Frage nach dem Ursprung der Kasuszeichen der symbolischen Erklärung Spielraum, wie auch noch später in der vgl. GRAMM. § 113, 206, 226 und sonst, was doch wohl auf W. v. Humboldts Einfluß zurückzuführen sein dürfte.

Neue Anregung brachte das Studium von J. GRIMMIS D. GRAMM. B. besprach sie in einem längern Aufsatz, JAHRB. F. WISS. KRIT., Febr. und Mai 1827, wieder abgedruckt mit neuen Anmerk. unter dem Titel VOKALISMUS, 1836, wonach ich berichte. Beachtenswert sind hier und in der Folge z. B. auch in der Vorrede zur 1. A. der vgl. GRAMM., die aus dem Gebiet der Naturwissenschaft entnommenen Vgl. und die wohl mehr bildlich als in ihrem eigentlichen Sinne zu verstehenden Bezeichnungen. So vok. 1: 'Die Spr. sind . . . als organische Naturkörper anzusehen, die nach bestimmten Gesetzen sich bilden, ein inneres Lebensprinzip in sich tragend sich entwickeln, und nach und nach absterben. . . . Eine Grammatik in höherem, wissenschaftlichem Sinne soll eine Geschichte und Naturbeschreibung der Spr. sein; sie soll, so weit es möglich ist, geschichtlich den Weg ausmitteln, wodurch sie zu ihrer Höhe emporgestiegen oder zu ihrer Dürftigkeit herabgesunken ist; besonders aber naturhistorisch die Gesetze verfolgen, nach welchen ihre Entwicklung oder Zerrüttung oder die Wiedergeburt aus früherer Zerstörung vor sich gegangen.' Seine Anschauung von dem sprachl. Gesetze spricht er vok. S. 15 in folgenden Worten aus: 'Auch suche man in Spr. keine Gesetze, die festen Widerstand leisten als die Ufer der Flüsse und Meere.' Beachtenswert ist die Bopp eigentümliche Auffassung von Guna und Wridhhi im Skr. vok. S. 6: 'Guna und Wridhhi sind im Skr. 2 Arten von Diphthongierungen, die sich beide durch den Vortritt eines a vor einfache Vokale, kurze oder lange, besonders vor i und u erklären. In der ersten Art verschmilzt das a mit dem folgenden Vokal. . . Im Wridhhi sind beide verbundenen Vokale hörbar, aber nur eine Silbe bildend, wie in den deutschen Diphthongen ai und au. . . . İt ist Guna und İr Wridhhi des R-Vokals. Es wird hierdurch . . . klar, daß Guna in der Vortretung eines kurzen und Wridhhi in der eines langen a besteht.' Wie GRIMM gezeigt hatte, daß der 'Umlaut' durch die Natur des Vokals der Endung bedingt sei, sucht B. nun zu beweisen, vok. S. 10 ff., 'daß auch der Ablaut von der Beschaffenheit der Endungen herbeigezogen werde.' Er stellt gegenüber:

Skr.	Got.	Griech.
veda vidima	vait vitum	oída · θύειν
vēta vīda	vait vitum	oída · θύειν
vēta vīda	vait vitum	oída · θύειν
vēda vidūs	vait vitum	oída · θύειν

und fährt dann fort: 'Wir bezweifeln daher nicht, daß es die Endungen sind, welche einen Einfluß auf den Wurzelvokal äußern, ihn erweitern, wo sie schwach

1 S. die spätere Abh. vgl. ZERLEGERUNG I, Berl. akad. 1833.

2 Bei letztem hat er besonders die holländische Philologenschule im Auge.

1 Zur Kritik dieser Auffassung des Wridhhi vgl. schon LASSER, IND. MITT., III, 45 ff.

sind: und ihn in seine ursprüngliche Einfachheit zurückzuführen, wo sie selber sich mehr ausdehnen.¹ B. nimmt hier an, daß der Ablaut 'mechanisch' durch das Gewicht der Endungen bedingt sei, während Grimm ihn auf psychologische 'dynamische' Ursachen zurückführt.² B. geht ferner auf die Deklination und ihre 'starke' und 'schwache' Form ein; leider aber nicht auf GRIMM'S Lautverschiebungsgesetz. Diese Seite, welche bald von POTT mit besonderem Erfolg gepflegt werden sollte, wie ich im Supplement zum v. dem Andenken an POTT zu widmenden Band der 1. z. näher ausführen werde; berührt B. nur oberhin am Schluß v. S. 130: 'Treffliche Belehrung über das germ. Lautsystem in sinniger Vgl. mit dem der verwandten Spr. erhalten wir vom V. S. 1—595. Mangel an Raum verhinderte uns aber. Einzelheiten hervorzuheben und Betrachtungen daran zu knüpfen.'³

Die reichen Ergebnisse all seiner früheren Arbeiten hat B. dann in seiner vgl. GRAMM. DES SKT., SEVD., ARMEN., GRIECH., LAT., LIT., ARLISLAW., GÖT. UND DEUTSCHEN ZUSAMMENGEFÄHRT, deren 1. Aufl. in 6 Lieferungen 1833—49 erschien. Die Vorrede beginnt: 'Ich beabsichtige in diesem Buche eine vgl., alles Verwandte zusammenfassende Beschreibung des Organismus der auf dem Titel genannten Spr.', eine Erforschung ihrer physischen und mechanischen Gesetze und des Ursprungs der die grammatischen Verhältnisse bezeichnenden Formen. Nur das Geheimnis der Wurzeln oder des Benennungsgrundes der Urbegriffe lassen wir unangetastet.' Unter dem 'Organismus' versteht B. hier wohl das aus einheitlichem Ursprung entwickelte grammatische System. Nach BRÉAL hat BOPP mit 'physischen' Gesetzen Lautgesetze (vgl. oben 'Wohlhautgesetze'), mit 'mechanischen' Gesetzen Gewichtsgesetze (lois de gravité), also wohl eine Art Kompensationsgesetze⁴ der Vokale und Silben gemeint. Eine engl. Übersetzung der vgl. GRAMM. ist von EASTWICK unter den Auspizien von WILSON 1845—53 veröffentlicht worden.⁵ BRÉAL'S franz. Übersetzung habe ich bereits erwähnt. Eine 2. deutsche Ausgabe ist 1857, eine 3. 1868 erschienen.

¹ Die Eintheilung der Flexionen in 'leichte' und 'schwere' hat B. dann auch in seine Skt.-Grammatik eingeführt.

² Weitere Untersuchungen haben dann die Abhängigkeit des Ablauts vom Accente erwiesen, welcher leider in den bis dahin in Europa veröffentlichten Skt.-Grammatiken vernachlässigt worden war, wie W. v. HUMBOLDT mit Recht in seinem Briefe S. 65 rügt. Vgl. zunächst namentlich A. HOUTZMANN: *Über den Ablaut*, 1844 und C. W. M. GRENZ, *Ablaut*, 1862.

³ Die hier in Frage kommenden Lautverschiebungsgesetze, die des Hochdeutschen ausgeschlossen, hatte schon RASK in seiner Preisschrift: *Ungewöhnliche Om des gamle nordiske eller islandske sprogs oprindelse*, 1818 und VATER in seinen *Vgltraktat. des kuhn. Stammes. und sūd., westasiat. Sprachen*, 1822 dargestellt.

⁴ BOPP fällt sie in der Vorrede zur 2. A. seiner vgl. GRAMM. unter der Bezeichnung des indoeuropäischen Sprachstammes zusammen.

⁵ Vgl. oben das im Vokalismus über Ablaut angeführte.

⁶ Vgl. die Besprechung dieser engl. Übersetzung vom Okt. 1851 unter *COMPARATIVE PHILOLOGY I*. Wir lesen daselbst S. 30: *his CONJUGATION-SYSTEM was translated into English as early as 1820, in the ANNALS OF ORIENTAL LITERATURE (ANALYTICAL COMPARISON . . .)*. Schon eine oberflächliche Vgl. zeigt, daß es sich nicht um eine Übersetzung, sondern um eine neue Bearbeitung des Gegenstandes handelt, wie ja auch B. in seiner Selbstanzeige und in der Vorrede zur 1. A. seiner vgl. GRAMM. angibt. *ANAL. COMP.* ist von PACHT¹ ins Deutsche übersetzt worden in SEEBOD'S NEUES ARCH. F. PHILOL. U. PÄD. II.

Auf den Inhalt dieses klassischen Werkes brauche ich wohl nicht weiter einzugehen. Mir kam es hier ja namentlich darauf an, die Bedeutung anzudeuten, welche die Abh. *ANALYTICAL COMPARISON* unter den Arbeiten von BOPP und für die Geschichte der Sprachw. hat. Der folgende Abdruck ist, selbst mit Beibehaltung einiger nicht ganz folgerechter Äußerlichkeiten im Satz, genau nach der Originalausgabe, deren Seiten am Rande angegeben sind. Nur habe ich, um die liegenden Buchstaben ganz der Transkription der 1. z. vorzubehalten; statt ihrer gesperrt setzen lassen. Viele Druckfehler sind ohne weitere Bemerkung berichtigt worden; sie stammen zum großen Teil von der ungewöhnlichen Verwertung des v als Zeichens der Länge her. Mit Recht schreibt W. v. HUMBOLDT an BOPP, in diesem Bande S. 65: 'Es kann den Leser mißleiten und ihm eine falsche Vorstellung geben.' Es ist deshalb für v das gebräuchliche Längenzeichen v gesetzt worden.

LEIPZIG.

F. T.

ANALYTICAL COMPARISON

OF THE SANSKRIT, GREEK, LATIN, AND TEUTONIC LANGUAGES, SHOWING THE ORIGINAL
IDENTITY OF THEIR GRAMMATICAL STRUCTURE. BY

F. BOPP.

[1] It is now very generally admitted, that there exists a similarity between the Sanskrit and several of the languages, which by conquest or other causes, have obtained the most extensive adoption over both ancient and modern Europe. No person, however, not practically acquainted with the language of the Brahmans, could be aware that there exists a coincidence so exact and so universal throughout all portions of grammar as is really the case. Many resemblances are evident at first sight; others are discovered by more careful investigation, and the more closely we analyse the reconditæ structure of the kindred tongues, the more we are surprised to find them constantly developed by the same principle.

A careful inquiry into the analogy of the Sanskrit with the above mentioned European languages must, on many accounts, be considered as truly valuable. It shews the higher or lower degree of affinity by which nations, who in the remotest antiquity wandered from the land of their ancestors into Europe, are connected with the present inhabitants of India. It shews, secondly, that those refinements of grammatical construction by which the Sanskrit is so advantageously distinguished from all the spoken dialects of the Indian world, already existed in that remote antiquity; when colonies, leaving their Asiatic seats, transplanted into Europe their native tongue; because by the same refined grammar which distinguishes the Sanskrit from the Bengali, Tamil, Hindustani, and the Mahratta languages, &c. it is connected with the Greek, Latin, and the ancient Teutonic dialects; among the latter, particularly with the Gothic. Hence we may conclude that the beauties of the Sanskrit language [2] are not the work of the learned or the priesthood, as some might be inclined to suppose; but that they really were in daily use in the mouth of the people, and were so strongly impressed upon their minds, that they did not forget them in their transmigrations beyond distant mountains and seas. We might farther conclude, that a nation, possessing a language so polished in so early a period, where we are altogether abandoned by the light of history, must be able to boast of a very ancient literature, and it is credible that those who remained in their native country, or more in its vicinity; for it is probable

that what we call Sanskrit was spoken also in its primeval form by the ancient Persians and Medes; would thine upon means to preserve in their purity the tenets of their religious and civil institutions; that they might deliver to their successors the venerated traditions of their ancestors, they would probably invent means of writing them down before their brethren who wandered abroad, could recover sufficient leisure for that purpose. Therefore, what the Brahmans tell us, concerning the antiquity of their Védas, and other religious writings, stands upon a more solid ground than they perhaps themselves are aware, and before the contrary has been more effectually proved than has yet been done, we may with due precaution and necessary restrictions, listen to the reports of the Hindus, who are certainly not merely guided by vanity when they so unanimously speak of the high antiquity of part of their literature.

Another and not less important reason, which makes a critical comparison of the Sanskrit with its European sisters, worthy to be undertaken, is the light thrown thereby upon each of the languages compared, and the clearer view we thence obtain of the most ancient forms of each respectively, and probably some conception of the original and primitive signification of a great part of the grammatical inflections common to all. It is chiefly by comparison that we determine as far as our sensible and intellectual faculties reach, the nature of things. FREDERIC SCHLEGER, justly expects, that comparative grammar will give us quite new explanations of the genealogy of languages, in a similar way as comparative anatomy has thrown light on natural philosophy.

I do not believe that the Greek, Latin, and other European languages are to be considered as derived from the Sanskrit in the state in which we find it in Indian books; I feel rather inclined to consider them altogether as subsequent variations of one original tongue, which, however, the Sanskrit has preserved more perfect than its kindred dialects. But whilst therefore the language of the Brahmans more frequently enables us to conjecture the primitive form of the Greek and Latin languages than what we discover in the oldest authors and monuments, the latter on their side also may not unfrequently elucidate the Sanskrit grammar. That is to say, whilst the Sanskrit has preserved many grammatical forms, which can be supposed to have formerly existed in Greek, Latin, Gothic &c. there are instances where the reverse is the case, where grammatical forms, lost in the Sanskrit, have been preserved in Greek or Latin. To explain this fact it will be necessary to offer a few remarks, which shall be more fully investigated in their proper place. The first person of the Sanskrit verb is generally indicated by an *m*, this *m* in the present tense is followed by *an i*, thus *b'avāmi* signifies I am, the second and third persons are *b'avasi*, thou art, *b'avati*, he is, plur. *b'avanti*, they are. From these persons the middle form *i* is derived by the slight change of the terminating vowel *i* into *e*; *b'avati*, *b'avanti*, *b'avasi*, become *b'avatē*, *b'avantē*, *b'avasē*; corresponding with the Greek *ἔσται*, *ἔσονται*, *ἔσονται*. We should expect that analogous to this, *b'avāmi* would

* Called by Dr. WILKINS, in his GRAMMAR, the proper form.

make in the middle form b'avāmē, but here the m, which is the characteristic of the first person, is lost, together with its preceding vowel, and only the terminating ē remains, so that we find b'avē instead of b'avāmē. If the analogy of the Sanskrit language alone was insufficient to produce a conviction that this must have originally been the middle form of b'avāmi, the Greek forms δόουα, τυρούα, &c. would inform us that μέ, jaí, characterized the first person of the present tense, middle form, in that ancient Asiatic tongue before it was transplanted into Europe. The Latin also has preserved the original shape of some inflections, at present lost in Greek and Sanskrit and, 4) whilst there is a pronoun extant in the two latter of which the former has no vestige, a few adverbs and derivatives, as tam, tum, tot, totus, tantus excepted; there is one pronoun in Latin, complete in declension, which has, with the exception of a few cases, some adverbs and derivative pronouns, become obsolete in Sanskrit, and has left scarcely any traces in Greek. This subject, I hope, will be found of sufficient importance to require some further explanation, which shall be given in its proper place.

But before we enter upon our comparison, it will be necessary to explain the manner in which the Sanskrit words occurring in this essay will be written in the Roman character. The Sanskrit alphabet contains 50 single letters, and the Roman only 25, if we comprise the y and z. But as it is inconvenient in matters of grammar to represent one single letter by two or three, as is too frequently the case, I shall endeavour to propose a method by which this can be almost entirely avoided. With respect to the vowels, it will be sufficient to state, that after the example of Sir WILLIAM JONES and Dr. WILLIAMS, I here make use of the Italian orthography as the basis, distinguishing the long from the short vowel, in Sanskrit represented by particular letters, by means of a grave accent.¹ In a few instances, however, where grammatical differences are expressed only by the length or shortness of a vowel, I have made use of the prosodial signs, in order to attract more effectually the attention of the reader. Those who are unacquainted with the Italian, will do well to follow the French pronunciation, with the exception of the vowel u, which is to be pronounced as in the English word bull, where it has no accent, and like the word rule, where it is marked with a grave accent.¹ Besides the vowels known in European languages, the Sanskrit has an r, considered as a vowel, with a sound much the same as that of the syllable ri in the English word merrily where the i is scarcely heard. In fact the r is the only consonant which can be pronounced without the help of any vowel, and it is therefore not at all to be wondered at that the Hindus consider it as a vowel, where it is neither preceded nor followed by another vowel, and that they have invented a particular letter for it, which it will be thought well to represent by our common r, with a point under it: (ṛ). Sanskrit grammars speak also of an l vowel, but this letter scarcely ever occurs, and it is therefore not necessary to embarrass ourselves with the invention of a mode of representing it.

¹ Instead of the grave accent the common sign of length ... has been put in this reprint for reasons given on p. 13.

It is proper to be acknowledged, that the Italian language has preserved most faithfully the Latin pronunciation, and we may be assured, that the single vowels, at least, were pronounced in Latin as they still are pronounced in Italian. It will be desirable therefore that, in order the better to comprehend the following comparisons, the English reader would follow the Italian pronunciation in Latin words also, laying aside for a little while his peculiar manner of pronouncing them, by which he distinguishes himself, not much in favour of truth, from all the continental nations. With respect to the Greek pronunciation, I believe, that for the single vowels at least, that of Erasmus is to be preferred, conformably to which η corresponds to the Sanskrit ē, and is to be pronounced like a French e with a circumflex accent, as in the word tete: its corresponding short vowel ε is rather to be pronounced like the French e in the word bonté. ι has always the sound of i in French, either short or long, and υ that of a French, if not rather of an Italian u. Following this pronunciation, the similarity of the Greek with the Sanskrit will appear more striking than by that generally adopted in England.

With regard to the consonants we have to observe, that in Sanskrit each has its corresponding aspirate, to express which the Indian alphabet is furnished with particular letters. It will be convenient to indicate these by the Greek sign of aspiration, in order to avoid representing one letter by two; conformably to this I write b'avati; he is, and not bhavati. There is a letter in the Sanskrit alphabet having exactly the sound of an English ch, which we may use, as the only instance of two letters expressing a single sound. Its corresponding aspirate will regularly be accompanied by the Greek sign of aspiration (ch'). Another Sanskrit letter has the sound of an English j, or of an Italian g before e or i; I represent it by j. Where words, in which this [g] letter occurs, are used in Latin or Greek, we generally find a g or γ in its place; as for instance, jana, (nom. janasi) race, family, people (les gens), genus, yévoç; janitri, mother, genitrix; revétepa; rājā, king, rex, reg-is; il reges, rājati, he reigns, regit; jānu, knee (a neuter noun), genu, γόνυ; rajatam, silver, argentum; jarā, decrepitude, old age, γήρως, &c.

There are three kinds of sibilants in the Sanskrit alphabet. One corresponds to the common English s, as in the word sama, similar (similis), óuoç, the same; another has a slight aspiration, and might be accompanied by the Greek spiritus lenis (s'). This s very frequently is changed into k, but only after established rules of euphony, and we find that where words are in Sanskrit written with this s, in Greek and in Latin a x or c are its usual substitutes; for instance, daśa, ten, daśamas the tenth, correspond to the Greek and Latin, déka and decimus; and the root drś-, to see, which forms draks'yāmi, I shall see, answers to the Greek verb drōkw, &c. The third sibilant has a strong aspiration, and is therefore to be marked with the spiritus asper (s'). It seldom occurs at the commencement of a word, unless

¹ It might be given also by a Z, to which we could conventionally adjoin the sound of the English ch. I generally use a Z when I write Sanskrit with Roman characters for my own use, to gain time.

it be confounded with one of the two preceding sibilants, most frequently it is a change of the first s, reproduced by the rules of euphony. The Sanskrit alphabet contains four different n's, which are respectively used as the following letter may chance to be a guttural, palatal, cerebral, or dental consonant, but as the three first scarcely ever occur at the commencement of a word, and as we have no occasion to use them in this essay, we have no need to fix upon any sign for distinguishing them from the common n. It will be more necessary to mark with a point, after the example given by Dr. WILKINS, a peculiar kind of t and d, called cerebral, together with their aspirates, that they may not be confounded with the common dental t or d, as d, t, d', t'. The letter y' wherever it occurs in this essay, in Sanskrit or Gothic words, is always to be considered as a semi-consonant, and to be pronounced as in the English word year; it answers to an Italian and German j.

Before we quit this tedious but unavoidable subject, we may be allowed [7] to pay a tribute of deserved praise to the admirable system by which the alphabet is arranged by the Sanskrit grammarians: in the original grammars the letters are classified with the most scientific skill, in an order founded upon the nature of the organs of speech by which they are respectively articulated. Many sounds, which other languages are obliged to express by several letters, can be represented by single ones in the Sanskrit alphabet, which also has particular characters for short and long vowels, and even for the diphthongs ai and au: but those connected with one another in sound bear also a similarity in the shape by which they are expressed. There is only one defect of which we may accuse the Sanskrit alphabet, namely, that the short a, the short Italian e and o are not distinguished from one another. For I cannot believe, that in the language of the Brahmans, when it was a vernacular tongue, the akāra had always the power of a short a, and that the sounds of e and o never occurred in it; I rather think that the sign used for the short a, was put also to express a short e and o. If this was the case, it can be accounted for why in words common to the Sanskrit and Greek, the Indian akāra so often answers to e and o, as for instance: asti, he is; loti; patis, husband, rōtic: ambaras, sky, ōpoo, rain, &c.

The languages, which we shall now endeavour to shew, as being intimately connected with the Sanskrit, are the Greek, Latin, and the ancient Teutonic dialects. Among the latter we prefer the Gothic, as the oldest, and, therefore probably, bearing the greatest similitude to its Asiatic sister. UPRUDA'S Gothic translation of the Gospels, which has happily escaped the destruction of time, was made in the fourth century. We dare boldly affirm, that the language of UPRUDA has a closer resemblance to the Sanskrit than to the English, although in the latter, as belonging to the Teutonic stock, there is not extant any grammatical inflection, which might not with facility be deduced from the Gothic. The reader himself can apply our remarks on the Gothic to its kindred dialects, ancient and modern, and he will find that among the modern, the German chiefly abounds in grammatical coincidences with the Sanskrit. Similar [8] coincidences preserved in the Slavonian dialects are too striking to be entirely overlooked, and among Oriental languages, the Persian, Armenian, and,

may add, the Georgian, can be proved to have had one origin with the Sanskrit: the sacred language of the Hindus. We shall perhaps have an opportunity of speaking of these in one of the following numbers, confining ourselves at present to those of a more general interest.

OF THE ROOTS.

Were we inclined to follow the example of the best grammarians, and to form a grammar by an analysis of speech, we should at the end of our labour only be led to discover those simplest elements which we call roots, and from which the Indian grammarians derive all words, from which also the larger portion, with the exception of pronouns, numerals, and particles, really do proceed. It will be well to avail ourselves of the labours of the first grammarians, and beginning with the simplest elements, contemplate the roots developing themselves under our own sight, as we may say, into various ramifications. The character of Sanskrit roots is not to be determined by the number of letters, but by that of syllables, of which they contain only one; they are all monosyllables, a few excepted, which may justly be suspected of not being primitives. A Sanskrit root may contain as few letters as are requisite to constitute a monosyllable, that is to say, a single vowel is sufficient, and it may also accumulate as many letters as can possibly be united into one syllable. I shall give examples of the two extremes: i is a root, common to three languages, signifying to go. In Sanskrit we may form from it imas, we go, in Latin imus; Greek ἴμεν, or after the Doric dialect, ἴμεν. Svask is a root, which likewise signifies going in Sanskrit; in this we find collected four radical consonants with one vowel. The reader will observe, that in its first elements the Sanskrit shews a strong contrast to the Arabic and its sister languages. The nature of an Arabic root is not to be determined by the number of syllables, but by that of radical letters. Three of these [quadrilateral verbs being not to be considered as primitives], neither less, [9] nor more, characterize an Arabic root, among which letters, the short vowels, which are necessarily used to articulate the radical consonants, are not to be counted. An Arabic root may be a monosyllable, if the second radical is an elif, waw, or ya, as sāl, kāl, being pronounced in grammar sāla, kāla, the last short vowel does not really exist in the spoken language, which agrees more with the Hebrew. But the greatest proportion of Arabic roots contains two syllables, as Katab, barā, ātar &c. Roots like the above mentioned i cannot possibly occur in Arabic.

Wherever we are enabled to reduce, with any certainty, Latin, Greek, and Teutonic verbs or nouns to their roots, we find them always to be monosyllables, as for instance, da, sta, mon, min, (mon+o, meminij), frag, (frango, fregij), vid, voc, &c. corresponding to the Sanskrit roots, da, to give, st'ā, to stand, man, to mind, b'anj, to break, vid, to know, vach, to speak. Examples of Greek roots are πο (pō), Sēsik, b'ā, to shine, ἔβ

¹ The vowels a and i, terminating verbs of the fifth and sixth conjugations, remain only in certain tenses, and therefore cannot be considered as belonging to the root.

ἔδω), Sansk. ad, to eat; δεικ (δεικνυμι, δείκω). Sansk. dīś, to shew; future tense, dēk-s'yāmi, I shall shew. There are, however, roots in Greek, which bear evidently the character of having two syllables, as for instance, ὀφείω forms the verb ὀφείω. But if we consider, that frequently words, which the Greek has in common with other languages, are distinguished in the former by a prefixed ο, as ὄνομα, name, nomen; Sansk. nāman (nom. nāma); ὄνομα, ὄνομα-ος, dens, dent-is, Sansk. danta; ὄφρυς, eye-brow, Sansk. b'ru; likewise a feminine, whose nom. is b'rus, &c.; if we pay due regard to these and many similar cases, we shall be inclined to take οεr as the primitive root of ὀφείω, which would agree with the German root reck (recken), of the same signification.

As examples of Gothic roots may be cited, sleep (slepan) to sleep, Sansk. svap; var (varjan) to prevent, Sansk. vr, which forms vārayati, he prevents, Goth. vareith; vas (vasjan) to clothe, Sansk. likewise vas; [to] vai (vatjan) Sansk. vā, expressing in both languages the motion of the air, vaivoun vindos, which occurs in *Matth.* VII. 25, signifies, 'the winds blew'; in Sanskrit I often met with vavau vāvuh, the wind blew, vavau being formed by the reduplication, like the Gothic vaivoun, whose singular is vaivo.

If we can draw any conclusion from the fact that roots are monosyllables in Sanskrit and its kindred languages, it is this, that such languages cannot display any great facility of expressing grammatical modifications by the change of their original materials without the help of foreign additions. We must expect that in this family of languages the principle of compounding words will extend to the first rudiments of speech, as to the persons, tenses of verbs, and cases of nouns, &c. That this really is the case, I hope I shall be enabled to prove in this essay, in opposition to the opinion of a celebrated German author, who believes that the grammatical forms of the Sanskrit, and its kindred languages, consist merely of inflections, or intermodifications of words. Mr. FREDERIC SCHLEGER, in his excellent work on the language and philosophy of the Hindus, very judiciously observes, that language is constructed by the operation of two methods: by inflection, or the internal modification of words, in order to indicate a variation of sense, and secondly, by the addition of suffixes, having themselves a proper meaning. But I cannot agree with his opinion, when he divides languages, according as he supposes them to use exclusively the first or second method, into two classes, reckoning the Sanskrit language, and those of the same family, in the first, under the supposition that the second method never is used by them. I rather think that both methods are adopted in the formation of all languages, the Chinese perhaps alone excepted, and that the second, by the use of significant suffixes, is the method which predominates in all. Reduplication, for instance, is found in languages, which scarcely use any other mode of modifying words. The Arabic, and its sister languages, are considered by Mr. F.

¹ The Greek αδερβ ὀδέε will be better derived from the verbal root ΔΑΚ, to bite, connected with the Sanskrit root das', (forming the future dak-s'yāmi), of the same signification.

SCHLEGER as having a remarkable tendency to use the second method; and he very ingeniously observes: 'Where the first and most essential forms, as those of persons in verbs, are marked by incorporated particles, having an independent meaning themselves, in their separate state, and where a propensity to adopt similar suffixes shews itself in the ground work of the language, there we may safely believe that the same circumstance has taken place in other instances; where the addition of foreign particles cannot now be so certainly recognized; we may be convinced that the language generally belongs to this class (which uses suffixes) notwithstanding it has already assumed a higher character by means of mixture and artificial refinement.' The indication of the persons of verbs in the Sanskrit language, and those of the same origin, Mr. F. SCHLEGER considers as being produced by inflection; but SCHLEGER shews very satisfactorily, with respect to the plural at least, that even the Greek verbs make use of pronouns, in compound structure with the root, to indicate the various persons. With respect to the singular, he would have succeeded much better if he had not limited himself to the corrupt form in *w*, terminating the third person of the present tense, in *en*, where I cannot perceive any pronoun incorporated; — but had extended his view to the form in *mi*, terminating the third person in the Doric dialect with *τι*. SCHLEGER commits another fault, namely, that in speaking of the pronouns he stops at the nominative, whilst the crude form of nouns may be better extracted from the oblique cases. In this way it is easy to discover that *το* is the radical form of the Greek article, which is originally nothing more than a pronoun of the third person, and is used as such in *Hom.*: 'This *το*, benefit of the final vowel, becomes an essential element of verbs in their third person, singular, dual and plural, as, διδοτι, διδοτω, διδοτωι. I have no doubt but it can be proved, with as much certainty at least as in the case of the Arabic, that Sanskrit verbs also, form their persons, by compounding the root with the pronouns, upon which subject I shall offer a few remarks in its proper place. Mr. F. SCHLEGER does not enter into any inquiry of the origin of what is generally called grammatical inflection, this subject belonging not to the plan of his highly instructive work; if he had been induced to undertake it, it would certainly not have escaped his usual sagacity and profoundness of thought, that the greatest part of those inflections are merely additional particles, whose proper signification, where it can be discovered, is more or less connected with the modification of sense induced by them upon the verb or noun. The only real inflections which I consider possible in a language, whose elements are monosyllables, are the change of their vowels and the repetition of their radical consonants, otherwise called reduplication. These two modes of inflection are used in the Sanskrit and its kindred dialects to their full extent, and often even, particularly in the former, to a needless redundancy; I mean without indicating a modification of the sense. The Arabic, together with its sister languages, having mostly roots of two syllables, is naturally capable

¹ Used in the Doric dialect, in which the original form of words is the most faithfully preserved.

of a greater number of internal inflections, this faculty it particularly displays in its formation of nouns, deriving from the roots a great number of them, without the help of foreign additions, whilst the Sanskrit forms almost all its nouns by means of a great number of suffixes, of which many are easily reduced to their own roots. In other parts of grammar the Arabic almost entirely neglects its capability for inflection; the verbs, for instance, have properly two tenses only (besides an imperative mood): a present, which also is used as a future tense, and a preterit; and these two tenses are chiefly distinguished by their mode of joining the pronouns, the former affixing them before, the latter suffixing them after the verb, as for instance, *Yaktub, Yaktub, thou writest, we write; Katabra, katabra, thou wrotest, we wrote.* The Sanskrit grammar contains a great variety of tenses and moods, partly formed by composition, partly by means of inflection, as we shall endeavour to shew in the following chapter.

[13]

OF THE VERBS.

A verb, in the most restricted meaning of the term, is that part of speech, by which a subject is connected with its attribute. According to this definition it would appear, that there can exist only one verb, namely, the substantive verb, in Latin *esse*; in English, *to be*. But even these are sometimes used as attributive verbs, as in the phrase, *Deus est*, There is a God; here the attribute ascribed to the subject *Deus*, is expressed by the verb *est*, he is. This verb is more generally used as a mere grammatical copula, without conveying the idea of existence. In the phrase, *homo est mortalis*, the verb *est* merely ascribes the attribute *mortalis* to the subject *homo*; we do not think at all of its expressing existence. In fact, existence is sufficiently expressed by the word *homo*, which conveys a complex idea, comprising that of existence. The only quality, supposed as unknown or not expressed by the word *homo*, is mortality, which the verb *est* attributes to the subject. One who does not exist, cannot die, and it would be superfluous to say: first, that man exists, and then state that he is subject to death. Again, if we do not renounce the idea of existence, which *est*, used as an attributive verb, expresses, then the phrase, *homo est mortalis*, instead of a simple logical proposition, offers a complex one. If after having said 'This man is . . .', one stops suddenly, the hearer remains in expectation of what this man is, the word is appearing to him only a connecting particle, which does not inform him of any thing, but is only the mean of informing. The Spanish language makes use of *estar*, derived from the Latin *stare*, as a substantive verb, but here certainly we abstract from the original meaning of standing, as it may be applied to subjects sitting or lying.

¹ I have here in view the spoken Arabic, which agrees more than the literary with the Hebrew. The latter has a few tenses more, formed by terminations following the final radical. So the aorist *Yaktub*, which alone occurs in the spoken dialect, gives origin to *Yaktubu*, *Yaktuba*, and *Yakrubanna*. It would lead us too far beyond our immediate object to enter into any discussion, whether these tenses existed originally in the language, or whether they are an invention of grammarians after the time of Mahomed.

² The French imperfect *j'étois*, originally written *j'estois*, comes from the same verb.

It appears to me, that it is from the want of a mere grammatical copula, that languages make use for this purpose of a verb already attributive; but among attributive verbs, to be is certainly the most convenient, because every subject, to which an attribute is ascribed, exists, or is at least supposed to exist. An attribute which may be expressed by an adjective can be included in the verb itself, and such attributive verbs incline more towards the nature of adjectives than that of verbs in their grammatical functions. Languages of a structure similar to that of the Greek. Latin &c. can express by one verb of this kind a whole logical proposition, in which, however, that part of speech which expresses the connexion of the subject with its attribute, which is the characteristic function of the verb, is generally entirely omitted or understood. The Latin verb, *dat*, expresses the proposition, he gives, or he is giving the letter *t*, indicating the third person, is the subject, *da* expresses the attribute of giving, and the grammatical copula is understood. In the verb *potest*, the latter is expressed, and *potest* unites in itself the three essential parts of speech, *t* being the subject, *es* the copula, and *pot* the attribute.

After these observations the reader will not be surprised, if in the languages, which we are now comparing, he should meet with other verbs, constructed in the same way as *potest*, or if he should discover that some tenses contain the substantive verb, whilst others have rejected it, or perhaps never used it. He will rather feel inclined to ask, why do not all verbs in all tenses exhibit this compound structure? and the absence of the substantive verb he perhaps will consider as a kind of ellipsis. That he may be better enabled to form his opinion, it will be well to begin our comparison with the substantive verb: explaining its entire conjugation, from which it will be easy to make due application to that of other verbs. There are two roots in Sanskrit expressing 'to be, As and B'ū, answering to the Latin roots *Es* and *Fu*; the former is almost solely employed to express the grammatical junction between subject and attribute, it is defective in its conjugation, and, in some measure, irregular; the latter has a complete conjugation, it supplies deficiencies of the former, like the Latin *Fu*; and almost all words connected with the idea of existence are derived from it. In several Teutonic dialects, ancient and modern, the verb substantive is formed from two different roots, corresponding with those in Sanskrit. The English root *Be* has a striking similarity with the Indian B'ū; and *As* assumes in English the form of *Ar* (forming then *art*, we are, &c.), the change of *S* into *R* being extremely frequent in Sanskrit as well as in several of its kindred languages. In German the first and second person, singular, of the present tense, *ich bin, du bist*, correspond with the Sanskrit root B'ū, and all the remaining persons, with *As*. The present tense, which expresses the real conjunction of a subject with its attribute, without any restriction, is formed in Sanskrit by the mere addition to the root of the characteristics of the person. These are throughout all the tenses; with a few exceptions, *M* for the first person, singular and plural, *V* for that of the dual; *T* for the third person of the three numbers, and, the present tense excepted, for the second, plural; *S* for the second of the

singular, and T' for that of the dual, and the plural of the present tense, and indeed of many tenses, particularly of the middle form, also of the singular number.

In exact conformity with the Sanskrit, M is also the characteristic of the first person, singular and plural, in the Greek, Latin, and Teutonic languages, but in the Gothic only of the plural. In Greek μ is always changed into ν at the end of a word, a situation in which μ never appears, and therefore in Greek ν is the characteristic of the accusative case, which is denoted by an m in Sanskrit and Latin. This rule extends to the first person of verbs, where ν takes the place of μ , if it is not followed by any termination. In the language of the Franks also, n distinguishes the first person, singular, of the present tense, and in the plural, where this characteristic is followed by the termination es , it assumes its original form m , as $machon$, I make, $machomes$ we make. In Latin the m of the first person singular has been more carefully preserved in the conjunctive than in the indicative mood; where it remains in the imperfect and pluperfect only, and in the future tense of the third and fourth conjugations; the present tense of the verbs sum and $inquam$ excepted.

The characteristics of the other persons in Greek, Latin, and the Teutonic languages will likewise be found to agree, more or less, with those of the [16] Sanskrit. That these characteristics are real pronouns, or the radical consonants of them, will appear perfectly evident when we come to treat of the declension of pronouns.

In the present tense the pronominal consonants M, S, T of the singular number and of the third person plural, are articulated with a short i . M i joined to the root As , forms $asmi$, I am. 'EI, which is to be considered as the root of the substantive Σ in Greek, connected with the syllable μ , should form $\epsilon\gamma\mu$ i, but the radical Σ , followed by the characteristic M, was changed in the Doric dialect into M, ($\epsilon\gamma\mu$ i) for sake of euphony, in the same way as the Sanskrit dative $tasmai$, to him, has assumed in Gothic the form of $thamma$. More generally $\epsilon\gamma\mu$ i was contracted into $\epsilon\mu$ i, whilst in the plural, $\epsilon\gamma\mu\epsilon\upsilon$ is more common than its contract form $\epsilon\mu\epsilon\upsilon$. The Latin derived from the root Es the obsolete form $esum$, which was changed into sum ; in Gothic the radical S is rejected in the first person of the present tense, but im , I am, is perhaps the only instance of the Gothic preserving the characteristic m in the singular. By the addition of the pronominal syllable si , to the root As , should be formed $assi$ in Sanskrit, but one s has been rejected, and asi , thou art, agrees with the Latin es and the Gothic ist . The ancient $\epsilon\sigma\tau\acute{o}$ in Greek, derived from the root 'EI by the addition of the pronominal syllable st , has certainly preserved the original form in its greatest purity. 'E $\sigma\tau\acute{o}$ was in later times contracted into $\epsilon\tau\acute{o}$, like $\epsilon\gamma\mu$ i, into $\epsilon\mu$ i. The Sanskrit third person $asti$, he is, is almost entirely identified with the Greek $\epsilon\sigma\tau\acute{o}$, from which also the Latin est , and the Gothic ist are little different. In the plural, as well as in the dual, the Indian root As loses, in an irregular way, its radical vowel, but the characteristic M in the first person plural of the present tense, receiving the termination as , we find

$smas$, we are, instead of $asmas$; in which we recognize the Doric $\epsilon\sigma\mu\acute{\epsilon}$ c, which again agrees with greater appearance of right, to be considered as the original form. In Latin we have $sumus$ and the ancient $esumus$, in Gothic $siyam$. The second person in Sanskrit is $st'a$, you are, instead of $ast'a$, [17] which we find preserved in the Greek $\epsilon\sigma\tau\acute{\epsilon}$; the Latin $estis$ corresponds more with the Indian dual $st'as$, which is used instead of $ast'as$. In the Gothic $siyuth$, we find the second person indicated by an aspirated t , as in the Sanskrit. The third person in the ancient language of India is $santi$, they are, which will be found exactly to resemble the Latin $sunt$ and the Gothic $sint$. The Doric $\epsilon\sigma\tau\acute{\iota}$, which was changed into $\epsilon\tau\acute{o}$ by the influence of the same principle that transformed $\tau\acute{\upsilon}\tau\tau\omega\upsilon\tau\iota$ into $\tau\acute{\upsilon}\tau\tau\omega\upsilon\tau$, is certainly mutilated, and as in all the persons hitherto considered, we found the radical Σ inherent; we might fairly conclude that the original shape of $\epsilon\sigma\tau\acute{\iota}$ was $\sigma\epsilon\upsilon\tau\acute{\iota}$, or $\epsilon\sigma\epsilon\upsilon\tau\acute{\iota}$, which would be analogous to $\epsilon\gamma\mu\acute{\epsilon}$ v and $\epsilon\sigma\tau\acute{\epsilon}$.

The following table offers a coherent view of the present tense of the Sanskrit verb substantive:

Sing.	Dual.	Plur.
1 $As\ mi$	S vas	S mas
2 $As\ si$	S $t'as$	S $t'a$
3 $As\ ti$	S tas	S $anti$.

In order to shew the conjugation of the present tense in a more regular verb, we choose the root $P\acute{a}$, to reign, which may be compared with the Doric-Greek, Latin, and Gothic roots; $\Phi\acute{A}$, Da , and Hab :

	Sansk.	Greek.	Latin.	Goth.
	1 $P\acute{a}\ mi$	$\phi\alpha\ \mu\acute{\iota}$	Do	Haba
	2 $P\acute{a}\ si$	$\phi\alpha\ \sigma$	Da s	Habai s
	3 $P\acute{a}\ ti$	$\phi\alpha\ \tau\acute{\iota}$	Da t	Habai th
		Plur.		
	1 $P\acute{a}\ mas$	$\phi\alpha\ \mu\acute{\epsilon}\varsigma$	Da mus	Haba m
	2 $P\acute{a}\ tas$	$\phi\alpha\ \tau\acute{\epsilon}$	Da tis	Habai th
	3 $P\acute{a}\ nti$	$\phi\alpha\ \nu\acute{\iota}$	Da nt	Haba nd
		Dual.		
	1 $P\acute{a}\ vas$	—	Hab os	
	2 $P\acute{a}\ tas$	$\phi\alpha\ \tau\acute{o}\nu$	Hab ats	
	3 $P\acute{a}\ tas$	$\phi\alpha\ \tau\acute{o}\nu$	—	
		Sansk.	Greek.	Goth.

Note. The Dual was extensively used in the language of the Goths; it occurs very frequently in the gospels translated by Ulfila. The first person always terminates in os , perhaps but little differing from the Sanskrit termination vas . The second person has ts for its characteristic, which is joined

¹ S at the end of a word is subjected in Sanskrit to several changes, depending upon the rules of euphony, &c.: it will be well in this comparison to preserve it always in its original form.

to the verb by one of the vowels, a, i, u, ai or ei. In the gospel of JOHN, C. XIV. 23, CHRIST, speaking of himself and his divine Father, says: Καὶ τὸς αὐτὸν ἔλεουσέμεθα, καὶ μὴ οὖν παρ' αὐτῷ ποιήσομεν; this Ἐλεουσέμεθα has translated word for word, employing the present tense with a future signification, in the following manner: yah du imma galeithos, ya salithvos¹ at imma gatauyos. MARK XIV. 13, CHRIST says to two of his disciples: ὄψεσθε, this is translated by gaggats; in Sanskrit it would be gach'atam. In the first person plural the Frankish dialect offers a more striking similarity than the Gothic to the Sanskrit, Greek, and Latin, having the termination mes. answering to the Sanskrit mas, the Doric mes, and the Latin mus. The whole of the present tense of the Frankish language will perhaps be found to coincide more than the Gothic with the above languages. The root Mach is thus conjugated:

Sing.	Plur.
1 Macho n	Macho mes
2 Macho s	Macho t
3 Macho t	Macho nt

The first person sing. agrees with the Greek termination ov in the imperfect and second aorist; for the Frankish dialect seems in conformity with the Greek, to change a final m into n.

The middle voice expresses the reflection of the action upon the actor himself, but is often used in Sanskrit with an active signification. In order to effect its derivation from the active voice, those persons terminating with an i, change this vowel into ē; so b'avari, he is, b'avanti, they are, and b'avasi, thou art, are changed into b'avatē, b'avantē, b'avasē. If the Greek ai had the sound of a French ai, which is that of an Indian ē; then the Greek derivation of θόρατα, θόρατα from the Doric and original forms of the active voice, θόρατ, θόρατ, would agree exactly with the method employed in Sanskrit; the second person θόρατα supposes the active to have been θόρατ, but σι, which characterizes in Sanskrit the second person of the present tense, active voice, has in Greek only been preserved in ἐσ-σι; thou art. From the first person θόραμι is derived the middle form θόραται. after the same principle. In Sanskrit the characteristic of the first person is lost in the singular, throughout all tenses of the middle voice; b'avāmi, I am, does not form b'avāmē, as might have been expected, but b'avē, which certainly cannot claim such high antiquity as the Greek θόραται. As túrttaṃ, túrttaṃ (which has been changed into túrttaṃ and túrttaṃ) and túrttaṃ are in complete analogy with θόραται, &c. we may thence conclude that the present tense of all active verbs terminated originally in μι, σι, τι. The change of túrttaṃ, túrttaṃ into túrttaṃ, túrttaṃ has not affected their derivatives of the middle voice, which, having preserved the original form, point out the primitive state of their corresponding persons of the active.

All the persons of the Sanskrit middle voice are not in such intimate connexion with their corresponding persons of the active voice, but one

¹ This is the accusative, plural, of salithva.

principle chiefly predominates in the formation of the middle voice, in Sanskrit as well as in Greek, namely, the increase or lengthening of the termination. I consider therefore the origin of the middle form as the mere result of inflection, in its restricted use, without the help of foreign addition. The following table exhibits the conjugation of the present tense, middle voice, in comparison with that tense of the active.

	Sing.		Dual.
1	B'avā mi	B'av ē	B'avā vas
2	B'ava si	B'ava sē	B'ava t'as
3	B'ava ti	B'ava tē	B'ava tas
			B'avē t'ē
			B'avē tē
		Plur.	
1	B'avā mas	B'avā mahē	
2	B'ava t'a	B'ava d'vē	
3	B'ava nti	B'ava nti.	

Potential mood. — After the present tense the potential mood is treated of in the Sanskrit grammars. Its characteristic is a long i inserted between the root and the pronominal characteristics, to which is prefixed in most of the conjugations a long a in this tense, so that the above i is to be changed into the semi-consonant y, according to the rules of euphony.

Whatever may have been the original pronunciation of túrttaṃ, túrttaṃ, 20 and θόρατ, θόρατ, &c. it is certain that the vowel i, inserted just in the same way as ī is in Sanskrit, between the root and the personal termination, characterizes the Greek optative. Also in Gothic, this way of forming the potential mood prevails, from Sokyam, we seek, is derived, Sokyaima, we seek. Although it becomes pretty evident, by the proper names occurring in Ulrich's translation of the Gospels, that ai was pronounced in Gothic as in French, namely, like a long ē, this contracting of two vowels into one sound does not prevent each of them from retaining its proper signification. In Sanskrit i is always contracted into ē with a preceding a, without affecting its meaning, thus jayait becomes jayēt, he may be victorious, the two words nana idam are contracted one, namēdam, according to the rules of euphony. Even in Greek túrttaṃ was probably pronounced túpsūmi; in this word i still remains the only characteristic of the optative, as well, as in θόρατ, θόρατ, &c.

The Indian root Ḍs, to be, rejects, in an irregular way, its radical vowel throughout the whole potential mood, making Syām, I may be, instead of Ḍyām. The conjugation of Syām may be compared with that of Stein, occurring in PLACIUS, and with the Gothic Sīyan:

¹ That I am authorized to consider i as the essential characteristic of the potential mood appears from the middle voice, where ā is not placed before the pronominal terminations, and therefore the y resumes its primitive form, as adyāt, adīta. It appears also from the first and fourth conjugations, where ā is not placed before the personal characteristics, but because of the a preceding in these conjugations, the i is contracted with it into ē, as b'avēt, instead of b'avait.

	Sansk.	Lat.	Goth.
Sing.			
1	Syā m	Sie m	Siyai ma
2	Syā s	Sie s	Siyai s
3	Syā t	Sie t	Siyai t

	Plur.		
1	Syā ma	Sie mus	Siyai ma
2	Syā ta	Sie tis	Siyai th
3	Syus	Sie nt	Siyai na.

Note. Syām, syās, &c. is properly instead of sīām, sīās, &c. which agrees perfectly with the Latin *siem, sies*. In Latin and the Doric dialect, we might add also the language of the ancient Franks: the *N* of the first person is in the plural always followed by the termination *us, es, es*, but in Sanskrit *m* appears in the present and future tense only; in the others *s* is rejected, and *syāma* therefore agrees more with the Gothic *siyaima* than with the Latin *siemus*. It may be proper to observe, that it seems not improbable that in Sanskrit also; *m* was originally stood in all the tenses, and that in *adīnas*, we eat (*édoieci*); *pāmas*: we reign; &c. the termination *s* properly denotes plurality, whilst *m* which belongs also to the singular, indicates the first person. It may perhaps not be out of place here to observe, that Sanskrit nouns also indicate plurality, in the nominative and accusative, by the termination *as*: corresponding with the Greek terminations *es* and *ec*. and with the Latin *es* of the third declension.

The Gothic language loses the characteristic of the third person, in the singular and plural of the potential mood. With respect to the Indian *syūs*: they may be, I have to observe, that here also the third person seems to me to be unexpressed, and the termination *us* only to indicate plurality. In the second preterite also, which is formed by reduplication, the third person terminates with *us* in the plural and dual, the only difference; I perceive, between the two numbers is this, that the dual expresses the third person by its usual *t*: which the plural leaves out. Thus in *b'ab'āvarus*, both are, I find plurality expressed together with the third person; in *b'ab'ūvus*; they are, I consider the idea of plurality alone is indicated; the usage of the language supplying the want of the pronominal characteristic. From the conjugation of the present tense of the substantive verb, in Greek, we could easily draw the conclusion that *ΕΙ* is the root of it. If this be the case, we cannot but consider the optative *είνυ* as a corrupt form, the radical *Σ* being rejected. *Είνυ* stands probably instead of *είνυ* or *έείνυ*. It is very well known how addicted the Greek language is to reject *σ*, particularly where it stands between two vowels — *έτύρτεσθ* is changed into *έτύρτεσθ*, which by contraction becomes *έτύρτεσθ*; according to the same principle of rejecting *σ* *τύρτεσθ* is formed from *τύρτεσθ*.

[22] The striking analogy between the Greek optative, particularly of that of verbs in *μ*, and the Sanskrit potential mood will appear in the clearest light

by comparing *pāyām* (instead of *pīām*) I may reign, with *qaíny*, I may speak:

	Sing.	Dual.
1	Pāyā m	qaín v
2	Pāyā s	qaín c
3	Pāyā t	qaín t
	Plur.	
1	Pāyā ma	qaín mev'
2	Pāyā ta	qaín té
3	Pāyus	qaín tav

Observations. — The *μ* of the first person is in Greek changed into *v*, conformably to the prevailing principle of the language, which does not permit the use of a final *μ*. The characteristic of the third person is wanting, and so it always is, where it would stand at the end of a word. Neither *t* nor *ò* ever close a word in Greek, unless the final vowel be omitted, because of a vowel beginning the following word; and thus it is accounted for, why we have *ò, ò, TO'*, and not *TO'Δ* or *TO'T* like the Sanskrit pronoun *sas, sāt*, *tad*, or *tat*; of which the accusative case is *tam, tām, tad* or *tat*, corresponding with *tóv, tήv, τό*. The Latin language has, in many instances, preserved the grammatical forms in a purer state than the Greek, the neuter of several pronouns is in it denoted by a *d*; neither does the Latin acknowledge the propriety of rejecting the final *t*, but the Italian, following the example of the Greek and yielding too much to the love of euphony, rejects the final *t* of its parent tongue; *amabat* becoming *amava*. In the middle voice the Sanskrit suffixes a short vowel to the characteristic of the third person singular, this method being followed in Greek also, the final *o* prevented the characteristic *t* from being rejected in the middle voice. The long *a* which precedes in Sanskrit the pronominal letters throughout the active, is omitted in the middle voice, and its corresponding *η* in Greek, which is really an astonishing coincidence, follows the example, — *dadyāt*, he may give, forms *dadit-a*, and *dadyāma*, we may give, *dadimahi*; and so in Greek *òboin*, which originally must have been written *òboinr*, forms *òtrou-o*, and *òboinjev* makes *òboinēda*. The similarity, which *qaínrov, qaíntrv*, evince with *pāyātām, pāyātām*, where the second and third persons dual in both languages, are distinguished merely by the measure of the personal termination, is too striking to be overlooked.

The first conjugation, as we have already observed, does not in the potential mood prefix a long *a* to the personal characteristics, but as this conjugation in the first four tenses suffixes an *a* to the root, this vowel is contracted with the *i*, indicating the potential mood, into *ē*: so the root *pach* forms *pachēt, pachās, pachāma*, &c. which agrees with the Latin *laudat, laudes, laudemus*, &c. Now, if this striking analogy is not merely accidental, which can hardly be believed of a language so constantly following

¹ I preserve intentionally the primitive form, instead of the contracted *qaínrov, qaínjev*, &c.

the grammatical principles of the Sanskrit, then we must admit, that *laudem*, *es*; *et*, &c. are contractions of *laudaim* (agreeing with *edim* of *PLAUTUS*, where a *w* would be the character of the first conjugation (*laud* being the root), and *i* that of the conjunctive. It is worthy of remark, that even in Italian the conjunctive is constantly characterized by an *i*; *amio* becomes *ami*; *amate*, *amate*, *amano*, *amino*, *ho*, I have, is changed in the conjunctive into *abbi*, &c. It is very improbable that we should succeed in explaining with certainty the original meaning of every syllable or word, which in grammar produces a slight modification of the sense of verbs or nouns, but this ought not to prevent us from seriously inquiring into it. The reason why the vowel *i* expresses the potential mood cannot be discovered in Greek, in Latin, nor perhaps in any other European language, but in Sanskrit the radical element *i* expresses wishing, desiring; and what syllable could be more properly employed to indicate an optative than the one to which the Hindu grammarians had given the primary signification of *Kānti*, having desire? I will not affirm that this is the primitive meaning of the root *i*, and that the grammarians had a sufficient reason for putting *Kānti* at the head of their explanation, but certain it is, that *imas* has, among other significations, that of *we desire or wish*. Now it is remarkable that the sense expressed in Sanskrit, and the languages here compared with it, by a syllable, signifying desire, incorporated into the verb, is in English, and often in German also, expressed by detached auxiliary verbs, having the primary signification of wishing.¹ The German *mögen* has frequently this signification, and the English *may* is of the same origin, derived from the Saxon *magan*, in Gothic likewise *magan*. It is the genius of modern languages to express, by separate words, what in ancient languages was united into one body. In Sanskrit, Greek, and Latin, &c. the pronouns, for instance, are suffixed to the verb, but in English, German, French, &c. they are placed separately before, and where the pronouns, formerly united with the verb, have left some remaining traces, they have now lost their signification, and therefore a repetition of the signs of the persons is become necessary. In the French, '*nous aimâmes*' the first person is expressed twice, and so is the third person in the German *er liebt*, he loves. The third person singular is generally indicated by a *t* in German verbs, in conformity with the Sanskrit, Latin, and Gothic, but notwithstanding this *t*, originally a pronoun of the third person, the pronoun *er* is always placed before the verb.

Imperative Mood. — That we may preserve the order in which the conjugation is exhibited in Sanskrit grammars, I shall now proceed to treat of the Imperative. This mood has no particular characteristic to express command, like as we discovered in the preceding tense, an incorporated *i*, indicating wish, or desire. It is, however, sufficiently distinguished from the present tense by its personal terminations, which in the dual and plural it has in common with the potential mood, and generally also with that preterit, which is formed by a prefixed *a*. The first person singular is expressed by

¹ In NORSE we read, '*1 mahta baldur weinon*', *vellum velkenmenter plonac*.

an *n* instead of an *m*, and the second by an *h* instead of *s*. In this person the root *As*, to be, is entirely irregular, also in the second and third persons, dual and plural, its radical vowel is rejected, which rejection could certainly not have taken place but subsequently to the age, when emigrating colonies introduced into Greece and Italy, languages so intimately connected with that of India. If we restore the rejected *a*, then *asta*, *astām*, *astām* will be exactly identified with *étre*, *étoiv*, *étoiv*, and the Latin *este*. Other coincidences will be discovered in the following table:

	Sing.		Dual.
1	<i>Asā ni</i>		<i>Asā va</i>
2	<i>Éd'i</i>		<i>S tām; éstov</i>
3	<i>As tu, éstuv, esto</i>		<i>S tām; éstuv</i>

Plur.

1	<i>Asā ma</i>
2	<i>S ta, ést re, este</i>
3	<i>Sa ntu, su nto.</i>

The similarity between the imperative of the Sanskrit, Greek, and Latin languages will be better understood by comparing that of the roots *Pā*, *ΦA*, and *Da*.

	Sing.	
1	<i>Pā ni</i> ———	<i>Pā va</i> ———
2	<i>Pā hi</i> <i>φα θί</i>	<i>Pā tām</i> <i>φα τώv</i>
3	<i>Pā tu</i> <i>φα τώ</i> <i>Da to</i>	<i>Pā tām</i> <i>φα τώv</i>

Plur.

1	<i>Pā ma</i> ———	<i>Da te</i>
2	<i>Pā ta</i> <i>φα τέ</i>	
3	<i>Pā ntu</i> <i>φα ντov</i>	<i>Da nto.</i>

Note. Sanskrit roots of the first, fourth, sixth, eighth, and tenth conjugations do not join any pronominal letter to the second person singular, of the imperative mood; so, for instance, *b'ava-si*, thou art, makes *b'ava*. Herewith agree the Greek verbs in *w* and all Latin verbs, as *turre*, *ama*, *more*, *audi*, &c. Also in the Teutonic dialects, the second person singular of the imperative is generally the mere root, without any addition but a vowel. Only the Gothic dialect uses the potential mood as imperative. The Attic form of the third person plural, *φάvτωv*, is more than *φάvτωv*, used in its place, analogous to *pāntu* and *danto*, and more conformable also to the practice prevailing in the Doric dialect, of indicating plurality by an *v* prefixed to the characteristic of the third person.

First preterit Tense. — This tense is formed by means of a short *a*, prefixed to the verb in the same way as the Greek augment. This *a* I cannot consider as a mere inflection, in the restricted meaning of the word, but it rather appears to have nothing to do with the root of the verb, and to be a foreign addition endured with a proper signification. I do not believe that

at first it specifically expressed past time, and that therefore it possessed original adaptation to form a preterit tense: but languages are very seldom capable of expressing fully what they pretend to express; of every thing in nature, of every animal, of every plant, speech can seize only one quality, in order to express the whole by it. The elephant is called in Sanskrit danti (nom. danti) from its teeth, or divirada (lended with two teeth), or from his trunk serving him for a hand, he is called hastin or karin (nom. hasti, kari); from his habit of taking water in his trunk, and then drinking when he pleases, he is called divipa (twice drinking). Were the Sanskrit to express all the qualities of the elephant by one word, it would be obliged to join all those mentioned together, and to add a great number of others. The serpent is called, from its motion sarpa, or pannaga, going not with feet, from pad, foot, na, not, and ga, going; or uraga, going upon the breast. This will remind us of that passage of Scripture, in which God cursing the serpent, says, 'Because thou hast done this, thou art cursed above all cattle, and above every beast of the field; upon thy belly shalt thou go, and dust shalt thou eat all the days of thy life.' Besides many other names the serpent has also, in Sanskrit, that of pavana's'ana, wind-eating. Although in this language, admirable for its beautiful structure, the reason of appellation is much easier ascertained than in Greek and Latin, it is however sometimes impossible to discover from what quality a thing has received its name: the less striking qualities not seldom give rise to the appellation of objects. It is gratifying to observe, how with apparently few means, by a wise employment of them, languages succeed to convey in an unequivocal manner, an immense number of ideas. But, as language is incapable of expressing all qualities, even of material things, by one word; being obliged to indicate one quality only; how could it be constantly possible fully to convey the finer shades of modal [27] and temporal meaning? And if languages here likewise bend to the necessity of sometimes expressing a part, how can the philologist always determine with certainty, what part is expressed, and what supplied by the usage of language? Precisely such is the case with the a, prefixed to verbs in order to form a preterit. What it originally signified, I do not know, but this I know; that it is prefixed in the same manner to nouns with the sense of a negative or privative particle; for instance, adina, happy (not miserable), anindita, dea (not despised), abala, weak (without strength), &c. It would not by any means be contrary to the general practice of languages, if by the words adina, anandita, exceeding the primary sense of the negative particle a, the Sanskrit had also signified one who has been miserable, who has been despised — but who is not now miserable, not now despised; in that case there might have been a closer connexion between a negative and a preterit, than would be evident at first sight; or in other words, the particle a, expressing in a primitive sense negation, can very properly in a secondary meaning indicate past time, that is to say, deny the existence of the action or quality with respect to the present time. One might ask, why in this way a is not a well employed to form the future tense, for neither in this tense does the action or quality expressed by the verb, actually exist: but the usage o

language is despotic, arbitrarily employing its means, without control. Another objection could be taken against the original identity of the negative a Greek under the form of a, the second under that of an e, so that different forms answer to different meanings. But it is very often the case, that one original word produces, in languages originating from others, two, three, or more words, with slight variations in form and meaning; and this practice has particularly contributed to the copiousness of the English language. For instance, to stray and to stand have the same origin, both are variations of the Sanskrit root St'ā, to stand. I stray agrees with the German verb, ich stehe, signifying I stand, of which the preterit is, ich stand (I stood), which is considered as a new root in English.

The personal terminations of the first preterit, in Sanskrit, are, in some measure, different from those of the present tense, but this difference, in my opinion, does not contribute any thing to the change of the sense, which is sufficiently and solely expressed by the prefixed a. It ought to be noticed also, that these terminations, whilst they differ from those of the present tense, agree generally with those of the potential mood, the signification of which is much more widely remote than the present tense from that of the preterit. In Greek it is likewise the augment only, which evinces the true characteristic of the imperfect, the terminations of the dual and plural, the third person excepted, agree with those of the present tense. The perfect agreement of the Sanskrit first preterit with the Greek imperfect will be fully explained by a comparison of the conjugation of Apām with that of the Doric ἐῶν.

	Sing.	Dual.	Plur.
1	Apā m	ἔρα v	Apā ma
2	Apā s	ἔρα c	Apā ta
3	Apā t	ἔρα	ἔρα τε
		Apā tām	ἔρα τῶν
		ἔρα τῶν	Apā n
			ἔρα v

Note. It has been already observed, that the Greek is abhorrent to the use of a τ at the end of a word. With respect to the language of the Hindus we have now to remark, that in the state in which we find it preserved in that portion of their literature remaining extant, as far as I have been able to ascertain by a careful examination, a final t never occurs with an n preceding. This letter, preceding a final i, always causes it to be rejected. So, for instance, to the accusative of the present participle adant-am, (edent-em, ἔθωv-σ), to the plural adant-as (edent-es, ἔθωv-σς) to the feminine adan-ti, answers the nominative masc. adan, ἔθωv, instead of adant, ἔθωv. One might say that t is afraid in Sanskrit to appear at the end of a word, preceded by an n, and that the Greek τ is still more timid; wherever they can avail themselves, if I dare so say, of the shelter of a following vowel, then they resume their deserted station. Thus, as from the singular ab'avat, he was, the middle voice is derived by suffixing an a,

¹ It is the practice of the Greek to lengthen the vowel, when in the nominative of the third declension the final consonant is rejected.

[29] making *ab'avat-a:* in a similar way: from *ab'avani*, they were, or rather from *ab'avant* (as it originally must have been written) is produced the middle voice *ab'avant-a*. It is scarcely necessary to add, that, in the Greek middle voice likewise, *éturtrero* and *éturtrero* prove the anterior existence of the active voice forms *éturtrero* and *éturtrero*. From these observations it would follow that in *apān* and *éqav'* there is only plurality expressed; for, in the present tense, *pānti* and *qavri* are distinguished from their corresponding singular *pāti* and *qavri* by means of an *n* prefixed to the characteristic of the third person. This way of indicating plurality I consider as a mere inflection, because a nasal is sometimes even inserted in the midst of a root, where it may be regarded as modifying only the pronunciation of the vowel; and in the Sanskrit alphabet the *anusvāra*, a sign which may represent any of the five nasals, is ranged among the vowels.

It will not be out of its place here to observe, that the Gothic language has a passive, which is formed in exact analogy with the above mentioned *ab'avata*, *éturtrero*, *ab'avanta*, *éturtrero*, namely, by addition of an *a* to the personal characteristics. 'Ni *liugand*, *ni liuganda*' is Ulpilus's translation of the Greek text: *ἦτε ὑμᾶνδύον, ἡδὲ ὑμᾶνδύωνται*: they neither *fravaurhteis* themselves' is the Gothic translation of *ἀφ' ἑωρατοῦ δὲ ἀπαρτίαν οὐ*. Thy sins are forgiven thee. S. Luke v. 20. — *Alletanda* is derived from the active *alletand*. — Conformably to a rule of euphony a final *S* in Gothic is always changed into *Z*, when a vowel is joined to it, therefore the second person singular, terminating with *S* in the active, cannot become *Sr* in the passive, but *Za*. However, as *haitis*, vocas, *haitith*, vocat, do not form the passives *haitiza* and *haitida*?, but *haitaza*, *haitada*, changing into the vowel *i*, which in the active connects the personal characteristics with the root: — it puzzled the grammarians Hicks, and whilst he explains very properly the origin of the above *liugand-a*, *alletand-a*, and other similar [30] forms, in order to explain *haitaza*, *haitada*, *afinmada*?, &c. he has recourse to the passive participle, formed by a suffixed *d*. But unfortunately the roots, *hait*, *nim*, &c. do not form their passive participle by a suffixed *d*, but an *n*, conformably to the English participles, taken, given, &c. Besides, there exists no participle formed by *z* or *s*; the nominative, sing. masc. only has for its characteristic, which disappears in the oblique cases. Hicks ought to have considered, that in Greek also; *ἴστανς*, thou standest, does not form in the middle voice *ἴσταναι*, but *ἴσταναι*, resuming its radical *α*; for which in the active, an *η* has been substituted. From the first and third person, plural, *haitam*, *haitand*, and from the first, singular, *haita*, one would expect the second and third to be *haitas*, *haitath*, but, although the usage of language

¹ I shall perhaps succeed in proving *éqavay*, which is more commonly used for *éqav*, to be of a compound form, when I shall have occasion to speak of the incorporation of the substantive verb with the attributive verbs.

² Th is always changed into *d*, when followed by a vowel.

³ *Praviteles haushistins haitaza*; *προσφίτης ὑμῶντος κηθήσθη*. Luke I. 76. — *Afrimada afim sa bruthatans*; *ἴσταν ἀποθήσθη ἀφ' αὐτῶν δ' ὑμῶντος*. Matt. ix. 15.

here chose an *i*, to connect the personal characteristics with the root; this has not affected the passive, where the *a* resumes its place.

Where the active already terminates with an *a*, in the passive, this vowel is changed into *au*, much after the same principle that changes the final *i* of the present tense, Sanskrit and Greek, in the middle voice, into *ē* (being the contraction of *ai* and *ai*, as *b'avantē*, *turtrorai*, from the active *b'avanti* and the Doric *turtrora*). The third person, plural, of the potential mood terminates with *na* (instead of *nda*), having lost its pronominal letter *d*, in the passive this *d* has preserved its place, and the following *a* is changed into *au*: thus *andhausyaina* (originally *andhausyainanda*), *audiant*, makes *andhausyainandau*?, *audiantur*: *gaumyaina*, *videant* (*gaumyainanda*); produces *gaumyainandau*?, *videantur*.

To return now to the Indian substantive verb *As*, we have to observe, [31] that this root, belonging to a conjugation which does not add any servile vowel or syllable, requires necessarily a vowel to connect the pronominal consonants *m*, *s*, *t* with the root, in the singular of the first preterit, which *Pā*, as well as the Greek *φA*, could receive without the interference of a foreign vowel. It is generally a short *a* which performs this office to those roots of the second conjugation terminating with a consonant. Thus *ād*, to eat, which out of *ād*, produced by the augment, makes *ād*, contracting by a rule of euphony two short vowels into their corresponding long one (as *hō* in Greek originates from *étō*), forms in the singular of the first preterit; *ādām*, *ādas*; *ādāt*. The Greek language is here, as in many other instances, less regular than the Sanskrit, because it interposes between the root and personal characteristics, sometimes an *o*, sometimes an *ε*, making *hōov* 'hōec, hōe (*hōer-o*), and not *hōov*, *hōoc*, or *hōev*, *hōec*, &c. which would, at the same time, be more regular and more conformable to the example given in the Sanskrit grammar. In the plural and dual, where the pronominal consonants are followed by vowels, the interfering *a*, being unnecessary; disappears, as *ādma* (*hōo-mey*), and not *ād-a-ma*. The root *As* makes by the augment *ās*, contracted from *āās*, and so in Greek the root *EX* produces *hē* instead of *éc*. The first person singular is *āsam* in Sanskrit, in the second and third person *i* is chosen as intermediate vowel, therefore *āsīs*, *āsīt* stand for *āsas*, *āsai*. The Greek verb substantive is mutilated in the singular of the preterit, and this mutilation, I believe, is due to the hatred the Greek idiom constantly shews against *Σ*.⁵ As *éturtrōv* stands for the first person, singular, and for

¹ In Greek the passive is in almost all tenses the same with the middle voice; but the Sanskrit has a proper characteristic of the passive, namely, the insertion of the syllable *ya* between the root and the personal terminations, which are the same as those of the middle voice. Thus *pāte* is the middle voice of *Pāri*, and *Pāyate* the passive. It might be said that the change of *i* into *e* indicates the reflection of the action upon the subject, which the passive has in common with the middle voice, and that the syllable *ya* indicates that the subject does not himself perform the action.

² *Ort*, . . . *εἰσακουσθήσονται*, ei . . . *andhausyainandau*. Matt. vi. 7.

³ *Ormus* *dr qavawōr*, τοῖς διδούσι, *ei gaumyainandau manam*. Matt. vi. 5.

⁴ *hōov* would be formed by analogy, but is not in actual use.

⁵ Even in Sanskrit *S* is liable to much change, or to total suppression, but only when it

[32] the third, plural, originating in the first case from ἐπιτρού (plur. ἐπιτρού-εϋ; middle form ἐπιτρού-ηϋ), in the latter from ἐπιτρού (ἐπιτρού-ο); thus we may conclude from ἦσαν, they were, which sometimes we find changed into ἦν, in Herodotus, Hesiod, &c. that the first person singular was originally likewise ἦσαν (ἦσάν-ηϋ, agreeing with the Sanskrit āsam). The rejection of the syllable σα, which happens occasionally in the third person, plural, became general with respect to the first of the singular. If this was primitively ἦσαν, the second and third must have been ἦσαν and ἦσε. But leaving the decision of this question to those who make the Greek language the object of particular investigation, and who cannot but be aware of the love of abbreviation, predominant in this language, particularly when Σ is concerned, we shall only compare the dual and plural with the first preterit of the Indian substantive verb.

	Dual.	
Sing.	A's va	A's ma
1 A'sa m	—	ἦ mev
2 A'si s	A's tā m ἦσ rov	A's ta ἦσ re
3 A'si t	A's tā m ἦσ ηϋ	A'sa n ἦσα v.

The persons here compared with the Sanskrit make it highly credible that ἦνν originated from ἦσ-mev, which would be distinguished from the correspondent person of the present tense, ἔσμεν by the mere augment, which distinguishes also ἔσ-τε from ἦσ-τε.

The S of the Latin root Es is changed into R in the imperfect, a change which very frequently occurs in Latin, and even in Sanskrit S is often changed into R, but only at the end of words, and according to invariable rules. In consequence of one of these, for instance, patis mama, conjux meus: for rather mei, of mei is changed into patir mama, because a final s, preceded by an i, is always changed into r, when the following word begins with m. Also in all the Teutonic dialects, the Gothic excepted, the change of s into r frequently occurs; in the Icelandic this permutation is quite characteristic. The Gothic was, I was, for instance, whose plural is westum, is in German, in both numbers, changed into war (ich war, wir waren); the English preserves the original s in the singular, and changes it into r in the plural — I was, we were. To give another instance, where an original s is changed into r in Latin, I shall mention the genitive plural of the first, second, and fifth declensions, terminating with rum; but instead of musarum we find the obsolete form musarum. This I am the more inclined to consider as the original form, because it is connected with the Sanskrit, in which all the pronouns terminate their genitive plural, with sām, or, when this termination is preceded by an ē, with s'ām, because s always is changed into ś; when

appears at the end of a word. In this case it is, conformably to general rules, either changed into visarū, having the power of an h, or into r, or it is changed into ō, together with the preceding a, or it is dropped entirely; only in a few cases it retains its original shape. The Latin language proves itself more indulgent than the Greek and Sanskrit to S. Where it does not substitute an r for it, it is always preserved, as well in the midst as at the end of a word: but to the transmutation of S into R, the Latin is excessively addicted.

following an ē. Etāsam significes istarum, and kāsam quarum; of which the masculines are etēsām; kesām, istorum, quorum. Pronouns more usually preserve the oldest forms of declension; and, in English, it is well known: the pronouns only, have preserved any traces of declension by final terminations, as, he, his, him; who, whose, whom; — whilst all other words have laid aside the use of them. As a consequence of this fact, we may presume; that sām, the characteristic of the genitive plural, was extended originally also to other nouns of the first declension¹, at least the supposition is rendered probable by the Latin using the termination rum, which is not merely confined to pronouns. The tendency for changing S into R is too conspicuous not to be observed, and therefore we cannot doubt that eram stands instead of esam², which would agree with the Sanskrit āsam, and at the same time be analogous with the conjunctive esem; which in the oldest Latin stands for essem, the s having in later times been repeated. Conformably to the principle above explained, esem would be derived from esam; by the insertion of i, the characteristic of the potential mood, and ai would [34] have been contracted into ei; as it generally happens in the Sanskrit language.

Second preterit tense. — Past time can also be indicated in Sanskrit by a mere internal inflection without having recourse to any thing foreign to the root, by the repetition of the first letter of the radical, which letter, when it is a consonant is articulated by the vowel of the root. This vowel always becomes short, if it be a long one, and the initial consonant, if aspirated, is changed into its corresponding tenuis³. Thus Tutup, to kill, makes by the reduplication tutup; Dīus⁴ of similar signification makes did'ūs; Lis⁵ to lessen, makes lilis⁶. However the root B'ū, to be, notwithstanding it has an ū as radical vowel: does not make by the reduplication bu'ū, but bab'ū; besides, all roots with an r vowel, articulate, for sake of euphony, the repeated consonant with an a; thus B'r, to bear, (fer) makes bab'ar. What may be considered as an exception in Sanskrit, becomes regular in Greek, in which, whatever may be the radical vowel, the repeated consonant is always articulated with an ε; and thus ΤΥΤΙ does not make τύτυρ, but τέτυρ.

A more striking resemblance with tutup, in regard to the principle of

¹ The first Sanskrit declension comprises the first and second of the Latin language, the masculines and neuter terminating their nominative, singular, with as and am, agree with the Latin terminations us and um; and the feminines in ō, answer to the first Latin declension.

² I cannot pass over in silence an old Etruscan form of the first person plural of the substantive verb, found in the 5th Etruscan table: 'V'utur; asama; kuvertur; asaku; vinnu; sevakhit', which Lantzi translates: 'Vovimus quatuor assum, vinnum hornum'. He considers asama as making one word with vutu, and observes that devolare, occurring in PLAUTUS, ought to be remembered. — sicutu DE LINDOVA ERVUSCA, t. i. p. 367. — In another part of the same work he observes, that asama is connected with egady, or a similar Greek. According to my opinion, it is more nearly connected with eramus, if restored to eramus, its original shape. But rather than with the Greek and Latin, it agrees with the Sanskrit āsma (we were), from which it merely differs by an a, connecting the personal termination with the root.

³ There are a few other rules: to be observed with respect to the repetition of an initial consonant, for which we must refer to the Sanskrit Grammar of Dr. WILKINS.

reduplication, expressing past time, is seen in the Latin *cucurr*, formed from the root *Curr*, the first person, plural, is *cucurr-i-mus*, very similar to its corresponding *tutup-i-ma*, and so *momord-i-mus* agrees with the Sanskrit *mamard-i-ma*¹, we bruised. In the Gothic language also, the preterit tense is frequently formed by reduplication, but the repeated consonant is always articulated with *ai*, without any regard to the radical vowel. The root *Fah* makes *fai-fah* — 'Ainshun ni fai-fah ina' *hōeic ēriacēv aurov*, JOHN VIII. 20. *Tek* forms *taitok* — 'Taitok mis sum's', *hwarō mu tīc*, LUKE VIII. 46. *Vai* forms *vai-vo* — 'Vai-vo-un vindos', *ēreueoav oi aveion*. MATTH. VII. 25, &c.

[35] The second preterit in Sanskrit has this peculiarity, that neither the first or third person singular, nor the second of the plural number, are indicated by the usual pronominal characteristics; and these three different persons are all alike in their termination, joining only an *a* to the final letter of the root, if it be a consonant. Thus *tutōpa*² signifies both, I, and he killed, and *tutupa* signifies you killed. However old this rejection of the personal characteristics may be; because even in Greek the first person singular of the perfect terminates in *α*, and not in its usual *ν*; and in Gothic the first and third person singular of the preterit are always alike, and where this tense is formed by the reduplication, or by the change of the radical vowel, there the first and third persons, singular, terminate in the final letter of the root: — notwithstanding all this, I consider that the omission of the pronominal signs in three different persons, in Sanskrit, was not a defect of the language in the primitive state, whilst Greek, Latin, Teutonic, Sanskrit, &c. still continued one and the same speech. In that remote age *tutōpam*, *tutōpat*, *tutupara*, or *tutupira*, or something similar, may perhaps have occupied the place of those mutilated forms we have mentioned. At least the Greek can boast of having preserved in the second person plural its usual *τε*: *τετταρε* is therefore certainly older, and more in conformity with the constant analogy of the Greek and Sanskrit languages, than the Indian *tutupa*. In Latin also *momorditis* appears nearer to the original form than in Sanskrit its correspondent *mamardita*, which should be *mamardita*, to agree with the first person *mamardima*. In Gothic the second person plural is marked by *th*, as in all other tenses. The Greek language has also this advantage over the Sanskrit, that it has preserved, in the middle voice, the characteristics *μ* and *τ*, which are followed by the termination *αι*: *λέλυται*, *λέλυται*, *λέλυται*, *λέλυται*, suppose an active *λέλυμι*, *λέλυται*, &c. from which they would be derived, like *διδοται*, *διδοται*, from the Doric *διδοται*, *διδοται*. [36] In Sanskrit the second person of the middle voice is indicated by *से*, corresponding with the Greek *σαι*, in *λέλυσαι*. This suffix *से* is either directly joined to the root, or by means of the vowel *i*; from the root *D'u*, to shake,

¹ The vowel *i* is very frequently used in Sanskrit as well as in Latin, to connect all kind of suffixes with the root.

² In the singular of this tense, the radical vowel receives that increase, which in Sanskrit grammars is called *gūṇa*, it is the change of *a*, *i*, *u*, *r* respectively into *ā*, *ī*, *ū*, *ṛ*.

comes *duḍ'ūs'ē*¹ which leads to the conjecture, that originally, besides the active form *duḍ'ōt'a*, where the second person is expressed by the syllable *t'a*, there might have existed also *duḍ'ōs'i*, from which *duḍ'ūs'ē* would proceed, in the same way as in the present tense, *dāvassē*, from its corresponding active *d'avasi*.

The following table offers a coherent view of the second preterit, active and middle voice: the application to the Greek and Latin can be made by the reader himself.

		Sing.		Middle voice.	
		Active.			
1	Tutōp a	Tutup ā		Tutup ē	
2	Tutōp i t'a	Tutup i t'ē		Tutup i s'ē	
3	Tutōp a	Tutup ā		Tutup ē	
Dual.					
1	Tutupa i va	Tutup i vah ē			
2	Tutupa t'us	Tutup ā t'ē			
3	Tutupa t'us	Tutup ā rē			
Plur.					
1	Tutupa i ma	Tutup i mah ē			
2	Tutupa a	Tutup i d'vē			
3	Tutupa us	Tutup i rē.			

Note. It has been elsewhere observed², that in the third person plural there is only plurally expressed, by the termination *us*, which in the dual is preceded by a *t*, the proper characteristic of the third person. In the middle voice, this person terminates with *i rē*: how this termination is connected with the active voice, whence it is derived, and what part of it properly expresses the third person (if this person is really expressed), I have not yet been able to discover.

Roots beginning with a consonant and terminating with a single consonant, form this tense, if their radical vowel is a short *a*, by changing it into *ē*, with the exception of the first and third persons, singular, of the active [37] voice. Thus the roots *Tas*, *Svap*, *Tap*, &c. form *trāsīma*, we feared, *svēpīma*, we slept, *tēpīma*, we burnt. It scarcely requires to be noticed, that this inflection is used also in Latin, to indicate past time: *cepimus*, *fregimus*, *egimus*, &c. being formed exactly like the above Sanskrit preterits. But particularly in the Teutonic dialects, ancient and modern, the change of the radical vowel is most frequently used to indicate past time, and every vowel is capable of undergoing a change for this purpose. In Gothic, for instance, the preterits *band*, *twoh*, *straig*, are derived from the roots *Bind*, to bind, *Twah*, to wash, and *Steig*, to go. Frequently reduplication and

¹ *s* in the midst of a word, is always changed into *ś* when preceded by any other vowel than a short or long *a*.

² See p. 21.

a mutation of the radical vowel unite to form the same preterit, as *gaigrotun*, they wept, from the root *Gret*; *laiot*, he let, from *Let*. In Latin the perfect tenses *peperci*, *fecelli*, from *Parc* and *Fall*; unite likewise two inflections, of which each by itself would be sufficient to express past time.

Although reduplication and change of the internal vowel are very frequently employed in Gothic, there exists another method of forming the preterit tense, which, in fact, is extended to the greatest number of verbs. This method consists in suffixing *d* or *t* to the root, either immediately or by means of *i*; the first and third person singular have no characteristics, and terminate with *a*, like the second preterit in Sanskrit. Thus comes from the root *Sok* the preterit *sok-i-da*, signifying I sought, as well as he sought; the second person is *sok-i-das*. From the root *Og* comes *oh-ta*, *oh-tas*, *oh-ta*, I feared, &c. I do not regard this method of forming the preterit as the original invention of the Teutonic language, nor must *d* or *t* be considered as characteristics of past time, but it originates from a participle, common to the Teutonic dialects with the Sanskrit, Latin, and other languages of the same stock. This participle is formed in Sanskrit by the suffix *ta*, joined either immediately to the root, as in *tyak-ta*, abandoned, *jita*, vanquished, or by the insertion of *i*, as in *lik-i-ta*, written; *kül-i-ta*, strewned. Its nominative, singular, is in the three genders: *tas*, *tā*, *tam*, corresponding [38] respectively with the Latin *tus*, *ta*, *turn*, and the Greek *tós*, *ñ*, *töv*. The suffix has commonly a passive sense, indicative of the influence of an action already fulfilled, not now fulfilling, upon the subject, as in the above mentioned *jitas*, one who has already been vanquished. In neuter verbs the suffix *ta* has an active signification, and often stands instead of a preterit tense, thus *gato vanam*, gone to the forest, may express quite the same as *jagāma vanam*, he went to the forest. It is therefore no wonder that in the Teutonic languages, this passive participle serves to form a preterit tense with an active signification. In Gothic the root *Sok* forms the participle *sok-i-ds*, *quasitus*, *sok-i-da*, *quasita*, *sok-i-th*, *quasitum*. The final *s* of *sokids* is the sign of the nominative, it is rejected in the neuter, which has no characteristic of the nominative and accusative cases.¹ It must necessarily be rejected also to form a verb, and the termination *a* then takes its place, thus in produced *sokida*, I sought. From the root *Og* comes the participle, *oh-ts*, *oh-ta*, *oh-th*, and thence the preterit *oh-ta*, I feared; the radical *g* being changed into *h*, for the sake of euphony, because of the following *t*.

An evident proof, that there is a connexion between the passive participle and the preterit tense, is, that only such verbs as form the passive

¹ Roots beginning with a double consonant, in Gothic, repeat only the first, as in Greek *τέτυγον*, *κέκλιον*, &c. and in Sanskrit, *λατσα*, *bab'ija*, &c.

² Greek words, formed by this suffix, more generally have the signification of Latin words, formed by the suffix *bitis*; but frequently they agree in signification with the Sanskrit suffix *tas*, and the Latin *tus*, as *πομπός*, *εμπροσ*, &c.

³ The Gothic language prefers *th* at the end of a word, but when by any grammatical inflection it is to be followed by a vowel, it is changed into *h*.

participle by the suffix *d*, derive their preterit tense in the manner just described; others, which use the suffix *a*n, to form the passive participle, employ the reduplication or the change of the radical vowel, in order to express past time. For instance, *Nim* forms the participle *numan*s, *numana*, *numan*, prehensus; *a*, *um*, its preterit is *nam*, I took, or he took; *Hait*, to call, forms the participle *haitans*, and the preterit tense *haihait*.

The method of deriving tenses from participles has obtained extensive use in Bengali: *Karite*, *Kariṭe*, *Kariṭe*, *Kariṭe*, form *Karitam*, *Karilām*, *Kariyam*. In Persian the preterit tense is always derived from the passive participle: *ber-deh*, *borne*, agreeing with the Sanskrit *b'f-tas* or *b'f-tah*, of the same signification, forms *berdem*, I bore. Also the Greek verb contains a tense which seems to me to be derived from a participle; I mean the aorist passive *ἐτύθη-ην*, *ἐβόθ-ην*, together with its derivatives, which I conceive may proceed from the passive participle *τυθη-έτις*, *βοθ-έτις*, substituting for the termination *etic*, the personal terminations *ην*, *ης*, *η*, &c. If I am right in this conjecture, there is no wonder why *ἐτύθη-ην*, *ἐβόθ-ην*, with an active termination, have a passive sense, and even never occur in the middle voice, like other tenses of the Greek passive. The passive sense of *ἐτύθη-ην*, *ἐβόθ-ην* is expressed by the letter *θ* coming from the participle, and therefore the termination may be, without prejudice, that of the active voice. Participles in Greek are generally deduced by grammarians from their corresponding tenses of the indicative, and so *τυθη-έτις* and *βοθη-έτις* must be so good as to descend from *ἐτύθη-ην* and *ἐβόθ-ην*; but I cannot conceive why they might not have been previously formed, or why the usual practice of placing the participles at the end of the conjugation, should exert such a great influence upon the origin of grammatical forms. Languages sometimes have unfortunately taken just the reverse course of what the grammarians have thought proper to assign them.

To return to the Indian verb substantive, we have to observe, that roots beginning with a vowel are likewise reduplicated in the second preterit, but the vowel repeated, and the initial of the root, are both subjected to the general rules of euphony, and so it may happen that the augment and reduplication produce the same effects. Thus, for instance, the root *As* makes *ās* by the augment, contracting the prefixed *ā* with the radical *ā* into *ā*, agreeably to a rule of euphony. By the operation of the same rule, *As*, making by reduplication *ās-as*, forms also in the second preterit *ās*; but we are not therefore authorized to say, that the preterit of which we are now speaking, is formed by the temporal augment, if the root begin with a vowel. Besides, it is not in all roots, whose initial is a vowel, that the same effects are produced by the augment and the reduplication. For instance, the root *Urv* [40] makes with the augment *ōrv*, instead of *a-urv*, *a* and *u* being contracted into *ō*, conformably to a rule of euphony; by the reduplication, *ūrv* is changed into *ūr* (instead of *ūr*), because by another rule of euphony, two short vowels of the same power are changed into their corresponding long one. The Sanskrit language is in general much more regular than the Greek, and particularly the change of vowels is entirely founded in nature, there is no

arbitrary usage of language. Thus, for instance, it is quite natural that \bar{a} twice repeated should produce \bar{a} , two \bar{u} 's \bar{u} , because, two short vowels being pronounced successively without stopping, the voice naturally produces a long one. It is not so apparently natural why a and i , and likewise a and u , when they meet together, are contracted, the former into \bar{e} , the latter into \bar{o} : but we find that in French ai and au are pronounced just as are in Sanskrit \bar{e} and \bar{o} , originating from the union of $a-i$ and $a-u$. Therefore this pronunciation of two vowels with one sound must have a natural cause.¹ The Greek language is much more arbitrary in its contractions; there can scarcely be given any reason, why o or o produce ou and not rather u , why e or \bar{e} are changed into ei and not into η . With respect to the augment and reduplication of verbs, beginning with a vowel, the Greek follows more the method of the Sanskrit grammar, which we may call the natural method of contraction. Agreeably to the same principle, which in Sanskrit produces \bar{a} s from \bar{a} s and \bar{u} r from \bar{u} r \bar{v} , there is formed in Greek η τερον from ϵ τερον, produced by the augment; also, η τερον from ϵ τερον, by the reduplication. As η very often stands instead of a long α , and not seldom answers to the Sanskrit \bar{a} , therefore it is natural that $\delta\bar{u}$ r \bar{u} make by the reduplication η νκα, contracted from $\delta\bar{a}$ νκα. In the imperfect the initial of $\delta\bar{u}$ r \bar{u} may pass into \bar{e} , \bar{a} and \bar{e} being frequently confounded with one another) in order to accommodate itself to the prefixed augment; and thus may the η of η ντορ be [41] resolved. The verb $\delta\bar{u}$ ρ \bar{a} τ \bar{u} will form by the reduplication $\delta\bar{u}$ ρ \bar{a} τ \bar{u} , but the two short vowels are changed into their corresponding long one as in Sanskrit \bar{u} r \bar{v} is contracted into \bar{u} r \bar{v} . The Greek alphabet has no particular letters for i and u , short or long, but υ ρ \bar{i} τ \bar{u} , which is short, becomes long by the reduplication — υ ρ \bar{i} τ \bar{u} instead of υ ρ \bar{i} τ \bar{u} . Now, if $\delta\bar{u}$ ρ \bar{a} τ \bar{u} , υ ρ \bar{i} τ \bar{u} , ι κ \bar{e} τ \bar{u} , &c. form also in the imperfect, $\delta\bar{u}$ ρ \bar{a} τ \bar{u} υ ρ \bar{i} τ \bar{u} , ι κ \bar{e} τ \bar{u} , I should rather be inclined to say, that verbs, beginning with certain vowels, have the reduplication already in the imperfect, than to explain their perfect as originating by the temporal augment.

A few perfect tenses, which really are formed by the augment, namely, ϵ τα, ϵ ωγατ, ϵ ύνηται, together with ϵ οικα, ϵ οκτα, ϵ ορα, do not appear to afford sufficient proof, that no verb beginning with a vowel has the reduplication in the perfect tense, whilst the perfect $\delta\bar{u}$ ρ \bar{a} τ \bar{u} has certainly as much claim as the Sanskrit preterit \bar{u} r \bar{v} a (I injured): to be considered as produced by reduplication.

Mr. BURYMAN derives the augment in general, syllabic and temporal, from the reduplication, and, according to his opinion, the ϵ of ϵ τ \bar{u} ρ \bar{o} ν is the reaffirming vowel of the syllable $\tau\bar{e}$, which begins the perfect tense $\tau\bar{e}$ τ \bar{u} ρ \bar{a} ; after the rejection of the repeated τ . He observes, at p. 159 of the 6th edition of his excellent Grammar, 'Also, in the perfect tense, the temporal augment originates from the vowel ϵ . For, as the usual reduplication consists in the

¹ It is clear also why \bar{e} and \bar{o} , when followed by another vowel, are in Sanskrit, changed into \bar{a} and \bar{u} , namely \bar{e} and \bar{o} , containing the elements of \bar{a} and \bar{u} , their final vowels i and u pass naturally into their corresponding semi-consonants, when another vowel is rapidly pronounced after them; the first element a can remain unaltered, without producing any hiatus.

repetition of the initial consonant accompanied by an ϵ , therefore, if the verb begin with a vowel, there can only an ϵ be prefixed to it, which ϵ , together with the following vowel, constitutes the temporal augment.' In my humble opinion, the ϵ of the augment has nothing to do with the vowel which articulates the repeated consonant of the perfect; if it had, then the coincidence of the Greek imperfect and aorist with that Sanskrit preterit which is characterized by a prefixed a , would be more apparent than real. The Sanskrit augment a has no connexion at all with the reduplication, because the redoubled consonant is generally articulated by the vowel of the root: Tup utōpat ι lēs'at, instead of atōpat; alēs'at, then it might be said that there exists some connexion between the reduplication and the augment, which as an affix which had its proper signification.

The following table offers the conjugation of the second preterit of the Sanskrit verb substantive; active and middle voice.

Sing.	
Active.	Middle voice.
1 \bar{A} 's \bar{a}	\bar{A} 's \bar{e}
2 \bar{A} 's \bar{i} \bar{t} a	\bar{A} 's \bar{i} \bar{s} ' \bar{e}
3 \bar{A} 's \bar{a}	\bar{A} 's \bar{e}
Dual.	
1. \bar{A} 's \bar{i} \bar{v} a	\bar{A} 's \bar{i} \bar{v} ahē
2 \bar{A} 's \bar{a} \bar{t} us	\bar{A} 's \bar{a} \bar{t} ' \bar{e}
3 \bar{A} 's \bar{a} \bar{t} us	\bar{A} 's \bar{a} \bar{r} ' \bar{e}
Plural.	
1 \bar{A} 's \bar{i} \bar{m} a	\bar{A} 's \bar{i} \bar{m} ahē
2 \bar{A} 's \bar{a}	\bar{A} 's \bar{i} \bar{d} ' \bar{v} e
3 \bar{A} 's \bar{u} s	\bar{A} 's \bar{i} \bar{r} ' \bar{e}

Note. The second person singular, active, if it were formed analogous to $\delta\bar{u}$ t'ō- \bar{t} a, χ akar- \bar{t} 'a, \bar{s} is'it- \bar{t} 'a, &c. by joining the pronominal characteristic immediately to the root, then \bar{a} s- \bar{t} 'a would offer a striking coincidence with η θ \bar{e} a. It remains, however, questionable, whether the σ of η θ \bar{e} a is radical, or whether it is to be considered as belonging to the personal termination. The latter is rather more probable, because θ \bar{e} a frequently expresses the second person in Greek, as in $\tau\bar{i}$ θ \bar{e} θ \bar{e} a, ϵ τ \bar{i} θ \bar{e} θ \bar{e} a, &c. From this reason the coincidence of η θ \bar{e} a with the Sanskrit \bar{a} s'it'a is not really so great as it may appear. I am, however, of opinion, that $\tau\bar{i}$ θ \bar{e} θ \bar{e} a, &c. do not proceed from $\tau\bar{i}$ θ \bar{e} s, ϵ τ \bar{i} θ \bar{e} s, by adding to the σ , characteristic of the second person, the syllable θ \bar{e} , but I believe that the whole termination θ \bar{e} a is intimately connected with \bar{t} 'a, which frequently indicates the second person singular in Sanskrit, particularly in the middle form, being in the active confined solely to the second preterit. The Greek language is

very fond of prefixing σ to θ , as in manifestly evinced by the passive participle formed by the suffix $\theta\epsilon\iota\kappa$; but prefixing σ to the θ , there is formed [43] $\delta\iota\sigma\theta\epsilon\iota\kappa$, $\mu\eta\sigma\theta\epsilon\iota\kappa$, $\chi\eta\sigma\theta\epsilon\iota\kappa$, &c. Therefore it is no wonder if the Greek has formed $\sigma\theta\alpha$ out of the Sanskrit termination $t'a$.

The Latin root Es is not separately in use in the perfect tense, where the root Fu assumes its place. But one might suspect, from the general analogy, that si , $sisti$, sit , would be the perfect of Sum , or esi , $esisti$, $esit$, that of the obsolete Esu m.

Besides the tenses already explained to the reader, and their corresponding ones of the middle voice, the Sanskrit root As has not preserved any other forms in a disconnected state, but, if we turn our attention to the attributive verbs, we might expect, agreeably to the principles before developed, that we should discover it here and there to be incorporated in them. The Greek root $'EI$ has still a future tense used disconnectedly, which however, in my opinion, is only a present tense of the middle voice, employed by the usage of language with a future sense. Were we to derive a verb in w from the root $'EI$, it would be $\xi\omega\upsilon$, $\xi\sigma\epsilon\iota\kappa$, $\xi\sigma\epsilon\iota$; as the root AER produces $\lambda\acute{\epsilon}\gamma\omega$, $\lambda\acute{\epsilon}\gamma\epsilon\iota$, $\lambda\acute{\epsilon}\gamma\epsilon\iota$; the active $\xi\omega\upsilon$ does not occur, and has perhaps never been in use, but its corresponding middle form, $\xi\sigma\theta\upsilon\alpha\iota$, $\xi\sigma\theta\upsilon$, $\xi\sigma\theta\epsilon\iota\alpha$ is used with a future sense. Instead of $\xi\sigma\theta\epsilon\iota\alpha$, we find more generally $\xi\sigma\theta\upsilon$, which certainly is nothing else than the middle voice of $\xi\sigma\theta\iota$ (he is); produced by the change of i into α , as $\delta\iota\theta\omega$ - $\tau\alpha$ is derived from the Doric, and original active $\delta\iota\theta\omega$ - $\tau\iota$. The Greek verb substantive is the only verb in μ , which has preserved $\tau\iota$ in the third person singular, through all dialects; whilst in other verbs this genuine Sanskrit termination distinguishes the Doric dialect, the faithful preserver of the original forms. In the second person also; the Sanskrit termination $s\iota$ is merely confined to the verb substantive ($\xi\sigma$ - $\sigma\iota$): even the Doric dialect has rejected the i in other verbs. There is another coincidence with the Sanskrit; almost exclusively confined to the root $'EI$; I mean the direct junction of the pronominal characteristics to a root terminating with a consonant. The connection of the pronominal terminations with the verbal root, without the intervention of any servile vowel or syllable, is the characteristic of the second conjugation in Sanskrit; a conjugation indeed not containing any great number of verbs. The root $P\acute{a}$ which we have chosen as paradigm, belongs to it; and likewise the root of the verb substantive, As . If like the first, this conjugation inserted an a , this root would form the present $as\acute{a}mi$, $asasi$, $asati$; the Greek follows this method in the middle voice, or, not to be misunderstood, in the future tense; there we have $\xi\sigma$ - σ - $\mu\alpha$, $\xi\sigma$ - σ - $\mu\epsilon\theta\alpha$, &c. instead of $\xi\sigma$ $\mu\alpha$, $\xi\sigma$ $\mu\epsilon\theta\alpha$.

We must not forget the Homeric form $\xi\theta\upsilon\epsilon\upsilon$, which stands quite isolated in the Greek, and requires the elucidation of the Sanskrit grammar. In proof of this we observe, that the Indian root Vid , signifying, to wit, to know, belongs to the second conjugation, and in conformity with its rules, forms in the first person plural, of the present tense, $vid\acute{m}as$, we know; analogous to this, Homer formed $\xi\theta\upsilon\epsilon\upsilon$, which he perhaps pronounced with the digamma $F\theta\upsilon\epsilon\upsilon$, or, agreeably to the Doric dialect $F\theta\upsilon\epsilon\upsilon\epsilon$. For, the Homeric root $'IA$

answers to the Sanskrit and Latin root Vid ; FIA was in later times changed into EIA . The second person of $vid\acute{m}as$ is $vid't'a$ (instead of $vid't'a$), d before t' being always changed into t' , by a rule of euphony. Also $\theta\upsilon\epsilon$ or $F\theta\upsilon\epsilon$ would have been intolerable to the ear of a Greek, therefore the final radical was changed into σ ($\xi\sigma\theta\epsilon$). The change of θ into σ is very common in Greek, and always happens in the perfect, passive, with respect to roots terminating with θ , because σ is preferred to θ before μ , although the junction of $\theta\upsilon$ is not at all inconsistent with euphony, and we find in Hesiod the participle $\pi\upsilon\sigma\tau\epsilon\phi\alpha\delta\upsilon\theta\epsilon\upsilon\sigma$, in Pindar $\kappa\epsilon\alpha\theta\upsilon\mu\epsilon\upsilon\sigma$, which were afterwards changed into $\pi\upsilon\sigma\tau\epsilon\phi\alpha\theta\upsilon\mu\epsilon\upsilon\sigma$, $\kappa\epsilon\alpha\theta\upsilon\mu\epsilon\upsilon\sigma$. It is strange that the Sanskrit forms, from the root Vid , another present tense, assuming the terminations of that preterit, which is formed by reduplication; but it is still more strange that the Greek root $\theta\upsilon$, or $F\theta\upsilon$, follows, even in this irregularity, the example of the Sanskrit. Changing the radical vowel i into ϵ ; a change which is frequent in the Sanskrit conjugation, but does never indicate any modification of the sense; the Sanskrit root Vid derives $v\acute{e}d\alpha$, $v\acute{e}t't'a$, $v\acute{e}d\alpha$. I know, thou knowest, he knows; herewith agrees the Greek $\sigma\theta\upsilon$, $\sigma\theta\epsilon\iota\alpha$, $\sigma\theta\epsilon$. It is to be observed, that the Sanskrit d is changed into t before $t'a$, indicating the second person; the Greek θ has disappeared entirely before $\sigma\theta\upsilon$, unless it be supposed that $\theta\alpha$ alone expresses the second person, and that the preceding σ is the substitute of the radical θ . This, however, is not probable, because there is no other instance of $\theta\alpha$, instead of $\sigma\theta\upsilon$, indicating the second person, and the same θ is rejected also in the future tense $\epsilon\theta\upsilon\sigma\omega$. The German verb ich weid, coming from the Gothic root vit ($v\acute{i}t\acute{a}n$) to know, has likewise in the present this coincidence with the preterit, that the first and third person are alike; ich weid, du weidst, er weid.

To return to the verb substantive we must observe, that the Latin ero stands instead of eso , the radical s of the root Es being changed into r , as in the imperfect $eram$. $Es\omega$ would agree with the Greek $\xi\omega\upsilon$, which does not occur, but is the active of the middle form $\xi\sigma\theta\upsilon\alpha\iota$. Instead of ero we find in the oldest writers also $esco$, where the radical s is connected with c , which, like the Greek κ , is frequently found placed after s . In Greek we have from the root $'EI$ the imperfect $\xi\sigma\theta\upsilon$, which often occurs as well separately as in connection with attributive verbs, losing in the latter case its initial ϵ ; — $\pi\acute{\epsilon}\mu\pi\tau\epsilon\sigma\theta\omega$, $\rho\acute{\alpha}\nu\epsilon\sigma\theta\omega$, $\delta\acute{\alpha}\mu\upsilon\alpha\sigma\theta\acute{\epsilon}$, &c.

Of the future Tense of attributive Verbs. — The future of attributive verbs, in Greek, I consider as being nothing more than the conjunction of an attributive root with the present tense of the substantive verb $'EI$, given a future signification. Mr. MARTINE observes, with reason, that $\xi\sigma\omega$ (in the middle voice $\xi\sigma\theta\upsilon\alpha\iota$) is properly the characteristic of a future tense. $'E\omega$ or $\xi\sigma\theta\upsilon\alpha\iota$, in connection with the roots OV , AP , MAX , AIA , produces $\delta\acute{\alpha}$ $\xi\omega\upsilon$, $\delta\acute{\alpha}$ $\xi\omega\upsilon$, $\mu\alpha\chi$ $\xi\sigma\theta\upsilon\alpha\iota$, $\alpha\lambda\beta$ $\xi\sigma\theta\upsilon\alpha\iota$. Whilst $\mu\acute{\alpha}\chi\omega$ produces the future $\mu\alpha\chi$ $\xi\sigma\theta\upsilon\alpha\iota$, $\mu\acute{\alpha}\chi\omega$ makes $\mu\alpha\chi\acute{\iota}\sigma\theta\upsilon\alpha\iota$ because the ϵ joined to the root $\mu\alpha\chi$, and the initial of the substantive verb, $\xi\sigma\theta\upsilon\alpha\iota$, are confounded together into

η, and thus μαρτυρομαι stands instead of μαρε εδομαι. Future tenses, which like ἔσω, ἔσσω, &c. seem to have preserved the original shape, are not [46] very frequent; usually, as Mr. Matthiae observes, either the ε or σ of ἔσω and εδομαι are rejected, and this rejection respectively characterizes the first or second form of the future tense. Whether the first or second rejection is to take place, particularly depends upon the final radical letter of a verb; some verbs have both forms. 'Οὐ ἔσω, which is used by Homer, is found in the same author abbreviated into ἔσω, in the middle voice ἔσσομαι, and the third person ἔσσει was by him contracted into ἔσσειτο. 'Απ ἔσω was abbreviated into ἔσω, and ἔσω, and the latter is contracted into ἔσω. The roots ΚΥΡ, ΛΥ, produce κύρω, λύω; and ΒΑΛ, ΣΤΕΛ, form βαλέω, στελέω, contracted into βάλω, στέλω. Now, if Mr. Matthiae is right in stating that ἔσω is the proper characteristic of the future tense, then we may believe that ἔσω is the proper characteristic of the future tense, makes part of every future tense. Agreeably to this principle, even ἔρω οὐμαι contracted from ἔρω ἔσομαι, would be considered as the abbreviation of ἔρω-ἔσομαι. It may appear strange, that the verb substantive should enter into conjunction with itself, and ἔσομαι, at first sight, might appear a strong argument against my explanation of the future tense; but let us observe that, when it had become general, in the languages derived from the Latin, to form the future tense by joining the present tense of the auxiliary verb avoir, to the infinitive of any attributive verb, then even the verb avoir, following the current of analogy, formed the future tense by compounding its own present with the infinitive. The present of avoir, when it is suffixed in this manner to infinitives, undergoes such abbreviations, in the plural particularly, that it would scarcely be possible to recognize it, if in the Langue Romane, or the language of the Troubadours, it had not sometimes been placed separately from the infinitive. A French author remarks upon this subject, 'Souvent ils ont [les Provençaux], entre les deux verbes qui forment leur futur, inséré un article, un pronom ou autre particule, et quelquefois plusieurs, comme s'ils eussent prévu qu'on pourroit un jour confondre le verbe principal avec le verbe auxiliaire qui compose ces temps. J'en rapporterai ici plusieurs exemples que [47] j'ai recueillis en lisant les ouvrages de nos anciens Provençaux. Comparat vos ai, je vous compteraï; dar vos n'ai, je vous en donnerai: dir vos ai, je vous dirai; dir vos em, nous vous dirons, gitar m'etz, vous me jeterez.'

The Provençal infinitive aver is contracted into aur, when it enters into conjunction with the present tense ai², to form the future: aur ai would properly signify, I have to have; and so it might be said that ἔσομαι

¹ See MÈN. DE L'ACAD. DES INSCRIPTIONS ET BELLES-LETTRES, TOM. XXIV. REMARQUES SUR LA LANGUE FRANÇOISE DES DOUZIÈME ET TREIZIÈME SIÈCLES, COMPARÉE AVEC LES LANGUES PROVENÇALE, ITALIENNE ET ESPAGNOLE, DES MÊMES SIÈCLES, PAR M. DE LA CUNNE DE SAINTE-PALAIS, P. 684. Upon this subject may also be consulted Mr. RAYNOUARD'S GRAMMAIRE DE LA LANGUE DES TROUBADOURS and Mr. A. W. SCHLEGEL'S OBSERVATIONS SUR LA LANGUE ET LA LITTÉRATURE PROVENÇALES.

² The plural averem, we have, loses its radical element av, and preserves only the termination em, when it enters into composition with an infinitive. Thus amar em (instead of amar averem) will appear more mutilated than ἔσω for ἔσω.

originally means, I am to be. The difference, however, between the Greek and Provençal future is, that 'EZ, being a root can never be employed in speech without entering into connection with some particle or other.

In Sanskrit the future tense is formed by connecting with the unaltered root the word Syāmi, Syasi, &c. the conjugation of which will be seen in the following table.

	Sing.	Dual.	Plural.
1	Syā mi	Syā vas	Syā mas
2	Sya si	Sya tas	Sya ta
3	Sya ti	Sya tas	Sya nti

If the reader will compare this with Syām, Syās, Syāt, &c. the potential mood of the root As¹, he will, I believe, be led to the opinion that Syāmi likewise is derived from As. The only difference indeed is, that Syāmi has the termination of the present tense², placing, for instance, in the singular and third person plural, an i after the pronominal consonants. But Syāmi has, in common with Syām, the essential characteristic of the potential mood, namely, the i inserted between the root and the personal terminations, which i, as it has been observed, signifies 'in Sanskrit, to wish. Syāmi stands for Siāmi, i before ā being changed into y, in conformity to a rule of euphony. It may be supposed, that the root As would have had [48] a future tense originally, and it seems to me credible that Syāmi is this future tense, being lost by lapse of time in disconnected use, and being found at present extant only compounded with attributive roots. It is not unfrequently the case in other languages, that words become obsolete in a disconnected state, and are preserved only as elements of compounds. To give an example, the Latin word ficus, doing, making, from the root Fac³, is never used separate; but in composition with male, bene, and other words, it forms maleficus, beneficus, honorificus⁴, &c. One would think that, before these compounds could have originated, their single members must have been in existence. But suppose that ficus was never in separate use, still it must be considered in maleficus as being itself a word. Had the verb facio, and all nouns of the same root become obsolete, then the word ficus, and fictium (the latter forming beneficium, sacrificium, officium) would probably have been called by grammarians inflections or terminations; but what are called inflections are mostly distinct words, whose origin and primitive meaning is obscure, or not sought for.

There is the more reason to consider Syāmi as the future of the verb substantive, because the future and potential mood express synonymous modi-

¹ See p. 20.

² See p. 17.

³ The vowel a is very frequently changed into i in Latin.

⁴ The i between honor and ficus, I believe, is here, as it is very commonly, only the mean of connection between the two members of the compound, and not the dative termination. Honor, although it may be the nominative, is here the crude form, from which all cases, honor-is, honor-em, &c. proceed.

factions of sense. Neither in the one nor in the other does the action or quality really exist, but having its being only in the mind of the speaker, is thought possible, is concluded from reasons, is desired or conditionally predicted. It is therefore not to be wondered at, that in grammar both tenses bear the same characteristic, in Sanskrit an *i*, expressing desire. The English auxiliary verb to will, which like *θέλω* in modern Greek, is employed to indicate future time, does not much differ in signification from the German [49] auxiliary verb *mögen*, signifying to wish, which is employed as may (from the Anglo-Saxon *magan*) in English, to express the potential mood. But something more conclusive than these theoretic reasonings can be practically shown by a language having the future and potential mood in reality the same; this language is the Gothic. The tense, which Hickeys mentions as future, is exactly the same with the potential mood; later grammarians deny the Gothic language to have a future tense, and it will therefore be proper to give a few instances, where *Ulpinia* translates the Greek future by the potential mood:

MARK IX. 19. Ὁ ρεβὴ δῆστος, ἔκ ποτε πρὸς ὑμᾶς ἔσθαι: ἔκ ποτε ἀπέθνηται ὑμῶν; — O kuni ung: aubdyando, und hva at izvis SIVAUN? und hva THULAU izvis?

MARK IX. 35. Ἐσται πάντων ἔσχατος, καὶ πάντων ἀκόρον. — SIVAI allaze afumnist yah allaim andbahts.

MARK X. 7. Ἐσκεν τῆρα καταλείπει ἀνθρώπον τὸν πατέρα αὐτῆ καὶ τὴν μητέρα. — Inuh this vILVAID: manna attim seinamma yah aitheim. v. 8. Καὶ ἔσονται οὗο εἰς ἀόρα μίαν. — SIVAINA tho tva du leika samin.

In Sanskrit *Syāmi* is either joined immediately to the verbal root, or by means of an inserted *i*, as for instance, *Dā-syāmi*, I shall give, (*dū aw*): *Tan-i-syāmi*, I shall extend. In Gothic the preterit of the potential mood exhibits a similar connexion of an attributive root with an auxiliary verb, joined either immediately, or by the mean of an inserted *i*. From the root *Og* is derived *oh-tedi*, that I might fear; from *Sok* comes *sok-i-dedi*, that I might seek. In the corresponding tense of the indicative this combination takes place only in the plural number — *Sok-i-dedum*, we sought, or rather, we did seek. The Gothic *dedi* is so nearly connected with the English *did* that it scarcely needs any further proof to shew that *sokidedi* is a compound term; besides, we find in *Ulpinia* the word *missadeds*, a criminal deed, a compound word, the second member of which seems originally to have been a passive participle, like the Latin *factum*; the final *s* characterizes the nominative, and ought to be rejected to form *dedum*, we did, *dedemā*, we might have done. The verb *tauya*, I do, seems to be a slight variation from the radical element of the substantive *deds*; but this

¹ A. W. SCHLIGER observes very properly: — 'Ce que nous devons ou voulons faire est toujours dans l'avenir; c'est pourquoy, dans plusieurs langues, les verbes devoir et vouloir, comme auxiliaires, indiquent le futur.' See OBSERVATIONS SUR LA LANGUE ET LA LITTÉRATURE PROVENÇALES.

tauya, in the plural of the preterit indicative, and in both numbers of the [50] potential mood, enters into conjunction with itself, forming *tav-i-dedi*¹, I might have done. Here I must again remind the reader of the Provençal future tense *aur ai*, I shall have, or properly, I have to have.

There is another future tense in Sanskrit which is worthy of notice, because the verb substantive is a constituent part of it likewise, if I am not deceived by its analysis. The third person of the three numbers appears to be nothing else than the nominative masculine, of a participle having a future sense, and formed by the suffix *tr*, as, for instance, *dātr* from the root *Dā*. In the nominative case the *r* of the suffix irregularly disappears, and an *ā* is placed after the *t*, thus *dāā* signifies *daturus*, the accusative is *dātār am*, *daturum*, the nominative of the dual and plural number is *dātār au* and *dātār as* (*datur i*, *datur es*). This nominative, without any alteration or addition, stands for the third person of the future tense above mentioned, according to the respective numbers; *dātā* (*daturus*) may express *daturus est*, and *dātāras*, (*daturi*) may signify also *daturi sunt*. In the other persons the nominative singular of the participle enters into conjunction with the present of the verb substantive, — *dātāsi*², *daturus es*, — as will be seen in the following table.

Sing.	Dual.	Plural.
1 <i>Dātāsmi</i>	<i>Dātāsvas</i>	<i>Dātāsmas</i>
2 <i>Dātāsi</i>	<i>Dātāst'as</i>	<i>Dātāst'ā</i>
3 <i>Dātā</i>	<i>Dātārau</i>	<i>Dātāras</i> .

The French author³, above quoted, observes, with respect to the future tense of the Provençal language, that the Troubadours often placed an article, a pronoun, or other particle, and sometimes several, between the two verbs forming the future tense, as if they had foreseen that at some future period the principal and the auxiliary verb, which compose this tense, might be confounded together. In order to shew that the ancient Hindu and *महान्याकरा* a few examples of the separation of the participle from the verb substantive by words interposed.

Ka' am ātmasutān hitvā trātā parasutān asi

Quid, propius-filius deserendo servaturus alius filios es?

Kim karōmi vasō brūhi rājini karttā tad asmi tē

Quid faciam? voluntatem dic, regina; facturus istud sum tibi.

In a similar way as we found the third person of this future tense expressed by the nominative of a future participle, so, I believe, the second person, plural, of all tenses of the Latin passive voice, is expressed by the

¹ The root *Tau* is changed into *Tav* before a vowel, in conformity with a Sanskrit rule of euphony, requiring the change of a *ta* into *v* before any vowel.

² See the present tense of the root *A s*, p. 17.

³ M. DE SAINTE-PALAYE.
TECKNER, ZITSCHE, IV.

nominative, plural, masculine: if a participle, formed in Sanskrit by the suffix *mānas*, *mānā*, *mānam*, to which corresponds the Greek suffix *μενος*, *μενη*, *μενός*, and we have reason to believe also that it existed in ancient Latin under the form of *minus*, *minna*, *minum*. A *mini* would be the nominative case; plural, masculine of such a participle, which was in use in the Etruscan language, where we find *dikamine*, saying, and *pelmener*, the dative plural, answering, according to Lazzari, to the Greek *ρελοῦένοιο*, from the verb *ρέλομαι*. In the Etruscan dialect *o* is equivalent to the Latin termination *us*, and *or* to the nominative plural *ni*; thus *scerhto*, *scerhtior*, *subato*, *subator*, are found in place of the Latin, *scriptus*, *scripti*, *subactus*, *subacti*. The second person, plural, of the imperative mood, *amanior*, is an ancient plural termination, like *scerhtior*, *subator*; in *Caro* we find *præfaminio*, and in *Festus faminio*, as the second person singular of the imperative, and these obsolete forms agree with *scerhto*, *subato*. The internal vowel of the suffix *minus* having been rejected, we find, *alumnus*, *vertumnus*, properly participles, used as substantives. As the Greek participle, formed by *μενος*, may have an active or passive signification, according as it is used in the middle or the passive voice; so *alumnus*, formed by the same suffix, expresses with an active sense, *εἰμι αλιτ*, and with a passive sense, *quæ alitur*. *Vertumnus* agrees with the Sanskrit participle *vartamānas*, signifying turning, from the root, *वृत्*, to turn.

[52] After rejecting the termination *us*, the suffix *min-us* forms substantives of the third declension, changing in the nominative singular the internal vowel *i* into *e*, as similar nouns in Greek, formed by *μεν*, are changed in the nominative case into *μην*, by lengthening the vowel, where the *v* terminates the word.² Those substantives, of course, may have an active or passive sense, conformably as the usage of language determines, but the latter is more common. *Discrimen*, *discrimin-is*, quod *discrimin*; *stramen*, quod *strutur*; *legumen*, quod *legitur*; *prelimen*, preface, what is said at the commencement, &c. I cannot help mentioning the word *carmen*, a poem, properly signifying, quod *factum vel creatum est*, and so far answering to the Greek *ποίημα* from *ποιέω*. In Sanskrit *karma* signifies deed (from the root *kr*, to make) a neuter, rejecting in the nominative case its final *n*, forming *karma*, the genitive is *karma-n-as*, answering to *carm-in-is*.

Of the third Preterit. — Besides the two preterits whose conjugation has already been explained, there is another in the Sanskrit language very little differing, where it is simple, from the first, formed by the augment. The only difference indeed, is, that the peculiarities of the different conjugations, which are preserved in the first, disappear in the third preterit. The third

¹ The Sanskrit suffix *mānas* forms participles of the middle voice, but when preceded by the syllable *y a*, they receive a passive signification; *वृत्त्यामānas* expresses *qui vertitur*.

² It may here be observed, that the above suffix *tr* forms also substantives, corresponding in sense to Latin nouns in *tor*; thus *dātrām* may signify *datorem*, as well as *datorem*; the former sense being more common. It is evident that the Latin suffixes *tor* and *turus*, are of one origin, differing only in declension.

conjugation, for instance, distinguishes itself from the rest by repeating the initial consonant of the root in the first four tenses; thus *Dā* produces *dadāmi*, I give, to which answers the Greek *δίδωμι*. The first preterit is *adadāmi*, I gave, identified, by the Greek *ἐδίδωμι*; the third preterit, losing the repeated syllable, is *adām*. It is nothing wonderful that the Greek, which has hitherto been found so constantly to reflect, if I may so say, the Sanskrit, follows this example, opposing *ἐδωκεν* to *adām*. The first conjugation, in Sanskrit, joins an *a* to the root; thus *B'ū* makes in the first preterit *ab'avat*, he was, *ab'avas*, thou wast, &c. changing the radical *ū* into *av*, because of the following *a*, the third preterit, rejecting this *a*, joins the personal characteristics immediately to the root; thus is produced *ab'it*, *ab'it's*, &c. One would think that if the Greek root *AY* could produce the second form of the aorist, it should be *ἐλυ*, *ἐλυς*, &c. because the imperfect interposes an *o*, or some other short vowel, between the root and the personal characteristics, making *ἐλυ ον*, *ἐλυ ες*, &c. agreeing with the Sanskrit *ab'avam*, *ab'avas*. The root *TYT* would, in the second aorist, reject the *τ*, which in several tenses is added to the root, and thus *ἐτυρον* would be distinguished from *ἐτυροτο*. But many verbs never use the second, or simple, aorist, and *AY* and *TYT* produce *ἐλυ σα*, *ἐτυρ σα*, by the operation of composition, which it will be well to explain first, by examples from the Sanskrit language.

I shall therefore observe, that those roots which do not form the third preterit in the manner just described, enter into combination with *āsam*, the first preterit of the verb substantive, placing, however, the augment before the attributive verb, and, not to express past time twice in the same word, *āsam*, contracted from *āśsam*, would become *āsam*, by losing its augment. Now, as it has been observed throughout the whole conjugation of the verb substantive, that its radical *a* is often in an irregular way rejected, therefore it will appear less surprising that *sam*, *sis*, *sit*, in a compound structure stands for *āsam*, *āsīs*, *āsīt*, &c. Let us observe also, that *aste*, *ase*, &c. the middle voice of *asti*, *asi*, when it enters into composition with the prepositions *viati* (*vi-ati*), loses its initial *a*, so that the root *As* seems to have a propensity to reject its initial letter, when entering into composition with foreign elements.

The root *S'ru*, to hear, by connexion with the substantive verb, forms *as'raus'am*, I heard; for the radical vowel in this tense is increased, *i* and *u* being respectively changed either into *ē* and *ō*, or into *ai* and *au*; a radical *a* always becomes *ā*. Because of the preceding *au*, the *s* of the substantive verb receives an aspiration, by a rule of euphony already several times mentioned. The conjugation of *sam*, *sīs*, *sīt*, in conjunction with *as'rau*, may [54] be compared with the first preterit of the root *As*, as it is exhibited in page 32; whereby it will become evident that it differs from this only by the loss of the initial vowel.

¹ This root, beginning with *s*, which is frequently changed into *h*, (see p. 6), may be compared with the Greek *ΚΑΥ* (*kaúw*) of the same signification.

	Sing.	Dual.	Plur.
1	As'rau ś'am	As'rau ś'va	As'raṅ ś'ma
2	As'rau ś'is	As'rau ś'tām	As'rau ś'ta
3	As'rau ś'it	As'rau ś'īam	As'rau ś'us.

Note. The third person plural, terminating with *is*, agrees more with the second preterit *āsus*, they were, than with the first *āsān*. But the root *Lih*, to resemble, and those of the same class with it in the conjugation of this tense, have *san*, not *sus*, in the third person plural; *alek ś'an*¹, they resembled. The first person singular, *as'rau ś'am*, heard, is analogous with *śuv śa*, of which the middle voice is *śuv śāu ŋv*, preserving the characteristic of the first person, which in the active has been lost. The root *Tap*, to shine, forms *atāp sam*², analogous to the Greek *ἐ-π-σθ*, *ἐκπυρ σθ* (*ἐτρυν σθ* *ŋv*, *ἐκπυρ σθ* *ŋv*). The second and third person: *atāp śis*, *atāp śit*, are more in conformity with the Latin *sep sisti*, *sep sit*: *scrip sisti*, *scrip sit*, from the roots *Sep* and *Scrib*, in union, I believe, with the verb substantive; the augment not being used in Latin. The Sanskrit root *Vah* of the same signification as the Latin *Veh* (*vehō*), forms *ivaks'it*, he carried; if you retrench the augment, you will recognize a preterit certainly very similar to the Latin *vec-sit* (*vecixit*). Roots terminating with a consonant either reject the verb substantive in those personal terminations beginning with *t*, or they insert a vowel between the *s* and *t*, because *atāp sta* and *alek ś'ta*, as second persons plural, would sound too harsh to ears accustomed to a refined euphony. Thus instead of *atāp sta*, you shone, as would be expected from the first and third persons, *atāp sm*: *atāp sus*, we find *atāpta*; for *alek ś'ta*, we find *alek ś'ta*, agreeing with *ētrun otre*. We have elsewhere observed, that the first person *āsam*, I was, leads us to expect in the second and third persons, *āsas*, *āsāt*, which would also be conformable with the first preterit of attributive verbs, in which as and at correspond by exact analogy with the first person *am*. In compound structure the verb substantive often forms *sas* and *sat* in the second and third persons, as, for instance, in the preterit of the root *Lih*, and others following the same analogy. The second and third persons of *alek ś'am* are *alek ś'as*, *alek ś'at*, in conformity with *ētrun oac*, *ētrun oar-o*. In order to give a coherent view of the Sanskrit third preterit, simple or compound, according as it answers either to the Greek second or first aorist, I choose *adām* and *alek ś'am* for comparison with the Greek *έθου* and *έτ-τ-α*.

	Sans.	Sing.
1	Adā m	έθου v
2	Adā s	έθου c
3	Adā t	έθου

Middle voice Adāt-a. έθoτ-o.

¹ If *h* and *s* meet together, the first letter is changed into *k*, the latter into *ś*, conformably to a rule of euphony. *Lāk* (for *lik*) produced in this way from *lih*, may be compared with the English word *like*.

² Here the *s* of the auxiliary verb preserves its original shape, because the conjunction of *p* and *s* is perfectly according to euphony.

	Dual.
1	Adā va
2	Adā tām
3	Adā tām

Plur.

1	Adā ma	έθo uev
2	Adā ta	έθo te
3	Adus	έθo oav.

Sing.

1	Alēk ś'am	έτρυν σθ (έτρυν σθ
2	Alēk ś'as	έτρυν σθ c
3	Alēk ś'at	έτρυν σθ e

Middle voice Alēk ś'at a έτρυν σθ a r o.

Dual.

1	Alēk ś'ā va	---
2	Alēk ś'a tām	έτρυν σθ rov
3	Alēk ś'atām	έτρυν σθ rrv.

Plur.

1	Alēk ś'ā ma	έτρυν σθ uev
2	Alēk ś'a ta	έτρυν σθ te
3	Alēk ś'at a	έτρυν σθ v

Middle voice Alēk ś'at a nt a έτρυν σθ a vr o.

[56]

The preterit of *As* is sometimes joined to an attributive root, not immediately, but by the mean of an inserted *i*, as *atōp i ś'am*, *atōp i ś'ma*, I killed, we killed, &c. Sometimes the suffixed *S* has the reduplication throughout all persons the third and second excepted; for instance, *ayāsiti*, he went; *ayāsīs*, thou wentest, *ayāsīs'am*. I went, *ayāsīs'ma*, we went, &c.; this is the most evident proof that *sis'am* and *sis'va*, as well as *sis* and *sit*, are to be considered as particular words. Now, if this cannot be denied, it naturally follows, that also the Greek and Latin forms, *έτρυν σθ*, *vec sit* (*vecit*), are compounds, because their similarity with *atāp sam* and *avāk ś'it* is too striking to be considered as merely accidental.² But we do not even need to have recourse to the Sanskrit to prove the compound structure of the Greek and Latin preterits. ² *EI* is in Greek, and *Es* in Latin, the root of the verb substantive. The former produces, by means of the augment, *ησθv*, which in the first person has been abbreviated into *ŋv*, by the rejection

¹ Here I consider the verb substantive to be joined to the root, as I shall elsewhere endeavour to prove.

² Here it may be observed, that the roots *Dr* and *Sru* form this tense by means of the reduplication, before which they place the augment, without joining the verb substantive. Thus we recognize in *adūdrvam*, *asusrvam*, both signifying I ran, the form of the Greek pluperfect.

be considered as merely accidental, because the Anglo-Saxon, belonging to the Teutonic stock, has a close affinity with the Sanskrit, and therefore also with the Latin. In the Latin tables of GUBRIO, we find instead of erunt, eriront and erafont. In the first case Es (changed into Er) is connected with itself, so far resembling the Provençal future aur ai, I have to have, and the Greek ἐσθῶμαι, I am to be, if the latter is really an abbreviation of ἐσθῶμαι; in the second case (era font) Es is connected with a word synonymous with itself. Those ancient forms make it probable that da bam and da bo might originally have been written da fam, da fo, in which state fam and fo are more nearly connected with fu-i, fu-o, or fi-o.

The Sanskrit root B'ū, as already has been observed, has two preteritis formed by the augment; the first is ab'avat, as, am; the second ab'ūt, ab'ūs, ab'ūvam, the first person being not in complete analogy with the second and third. From ab'avam, I was, may be deduced bam, omitting the augment, by an abbreviation similar to that producing malo, nolo, from ma-volo and ne-volo. Ab'ūvam agrees more with the Latin fui, which is used separately, particularly if we pay regard to the ancient form fuvi.¹ [60] It would be more difficult to prove amavi to be a compound, than amabam; it is not, however, the habit of the Latin language to introduce v in the midst of a word without some reason, and the change of b or f into v is not so great as to remain unattempted in languages; we recognize amabam in Italian under the form of amava; we see also, by the Provençal future tense dir ai, dir em, (je dirai, nous dirons), the latter for dir avem, that words entering into conjunction with others, are liable to great alterations or contractions, in order that the compound might have more the appearance of a simple word; languages manifest a constant effort to connect heterogeneous materials in such a manner as to offer to the ear or eye one perfect whole, like a statue executed by a skilful artist, that wears the appearance of a figure hewn out of one piece of marble. What still more makes me consider ama vi as a compound, is, that it appears improbable that possum (pot sum) which contains the substantive verb in all other tenses, should be simple in the perfect potui, the same as potvi. My humble opinion, not, indeed, produced that I may force it upon the reader, is, that where Es begins to be supplied by Fu, there possum begins to connect itself with fu, abandoning sum; but where Fu itself enters into conjunction with Es, as in fueram, there the root Pot contains two auxiliary verbs.

The Greek language has, in common with the Latin, the peculiarity of suffixing, in some tenses, the verb substantive in the third person plural,

¹ See LANZI, SACRO DI LINGUA ETIUSCA.

² The v in fuvi ought not to be confounded with that in laudavi, but it was usual in ancient Latin to change u before a vowel into uv, thus is produced pecuva, which is found for pecua, and fuvi for fui. In Sanskrit ū before a vowel is either changed into v alone, or into ūv, as in ab'ūvam, I was.

³ The Sanskrit words नावस, new, नावा, nine, &c. prove the antiquity of the v in the Latin words novus, novem, which I would not with the celebrated Vossius, derive from the Greek νέος, and ἐνέα by the introduction of a v.

whilst all the other persons are void of it. For instance, ἐστὲν ὁ αὐτὸς ὄν, ἐστὶν ὁ αὐτὸς ὄν, ἐστὶν ὁ αὐτὸς ὄν; of which the middle form would be ἐστὶν ὄν, ἐστὶν ὄν, &c. Sic after rejecting the verb substantive, we have ἐστὶν ὄν, ἐστὶν ὄν. The optative likewise enters into conjunction with the verb substantive, which, however, does not extend to the middle voice — τίθειν ὄν, τίθειν ὄν, not τίθειν ὄν. The verb substantive εἶναι, a corrupt form, instead of εἶναι or εἶναι, exhibits a combination with itself, producing εἶναι ὄν, instead of εἶναι ὄν, εἶναι ὄν. The simple form εἶναι is more commonly used. In Sanskrit dāyā sus, they may give, is the third person, plural, of the precativ mood, which has no other distinction from the potential than the rejection of the additional letters and syllables peculiar to the different conjugations. After this rejection the precativ mood enters, the second and third persons singular excepted, into combination with the verb substantive, which uses the terminations of the first preterit; all but the third person plural, it having the termination of the third preterit; and therefore we have dāyā sus for dāyā san, which would offer a more striking similarity to bhōhi ὄν. Sus, however, is distinguished from the third preterit āsus, they were, in the same way as ὄν from ἦσθαι, that is by the rejection of the initial vowel. The following table offers the complete conjugation of the Sanskrit precativ mood, so that the reader will be able to compare the suffixed substantive verb with the first preterit of the root As.

	S-ḡ.	Dual.	Plur.
1	DĀYĀ sam	Dāyā sva	Dāyā sma
2	DĀYĀ s	Dāyā stām	Dāyā sta
3	DĀYĀ t	Dāyā stām	Dāyā sus.

It has been observed that in the conjugation of the Greek verb substantive, the radical Σ very often is rejected; this rejection might sometimes have taken place where Ξ entered into combination with attributive verbs. But in this case it remains impossible to ascertain the compound structure. It may be said that ἐδόθη contains the verb substantive in its whole conjugation ην, η, &c. being joined to δοθ, the remainder of the participle δοθεῖς after the termination etc is rejected. But it may be answered, in opposition to this solution, that η in ἐδόθη, ἐδόθη, &c. is nothing more than the medium of connecting the principal characteristics with δοθ, such connexion being impossible without the intervention of a vowel. Therefore we dare only affirm, that the third person plural, ἐδόθη ὄν, contains the verb substantive, because it is recognized in ἦ radical consonant, Σ. The third person, plural, of the imperative mood, ἔστω ὄν, διόστω ὄν — merits a particular notice, because the verb substantive is joined after the characteristic of the third person, ὄν being joined to the singular τούτω, διότω.

The Latin passives forms amat ur, amant ur, would, in some measure, agree with this mode of joining the verb substantive, if this r also result by a permutation of an original s; and this appears not quite incredible, if we compare the second person ama ris with the third amat ur. Either in one

¹ See p. 32.

or the other there must be a transposition of letters, to which the Latin language is particularly addicted. If *ama ris*, which might have been produced from *ama sis*, has preserved the original order of letters, then *ama tur* must be the transposition of *ama rut* or *ama sut*, and *ama ritur* that of *ama runt* or *ama sunt*. If this be the case, the origin of the Latin passive can be accounted for, and although differing from that of the Sanskrit, Greek, and Gothic languages, it is not produced by the invention of a new grammatical form. It becomes clear also, why many verbs, with a passive form, have an active signification; because there is no reason why the addition of the verb substantive should necessarily produce a passive sense. There is another way of explaining *ama ris*, if it really stand for *ama sis*; the *s* may be the radical consonant of the reflex pronoun *se*. The introduction of this pronoun would be particularly adapted to form the middle voice, which expresses the reflection of the action upon the actor; but the Greek language exemplifies the facility with which the peculiar signification of the middle voice passes into that of the passive, for in most of the tenses the two voices are not at all distinguished from one another.

Before we draw to a conclusion our comparison of the verbs, I shall offer a few remarks upon the characteristics of the different conjugations in Sanskrit, and point out such Greek or Latin verbs as could be classed with one or other of them. The Sanskrit verbs are divided into ten conjugations; the characteristics of the three first we have already had occasion to mention, in which it has been observed that the first introduces a short *a* between the root and the personal terminations. For instance, the root *Srp'* forms [63] *sarp a ri*, he creeps, *sarp a si*, thou creepest, *sarp a t'a*, you creep. With this may be compared all Greek verbs in *w* that constantly interpose a vowel, generally a short one, between the root and the personal termination, and thus *ἔστρεα* agrees with *sarp a t'a*; in the first person the interposed vowel becomes long in Sanskrit; and thus, *sarp ā mas* does not so completely agree with *ἔστρεα* (Doric *ἔστρεα*), where a short vowel is interposed. In Latin it is particularly the first conjugation that adds an *a* to the root, which we shall compare with the first of the Sanskrit language. All Latin verbs, in fact, add some vowel or other to the root, unless it terminate with a vowel, like *Da*, *Sta*, &c. The second conjugation joins the personal terminations immediately to the root, like *Pā ti* from *Pā*, and thus in Greek the Doric *πατί* from *PA*; the root *As* forms, after the same principle, *As ti*, he is, and *Vid* forms *Vid mas*, we know, which we have already compared with the Greek *ἔδρα*, and *ῥέμα*, or, with the digamma *ῥέμα*. The third conjugation is distinguished by the repetition of the first radical letter, thus *Jan* forms *jajamti*, I produce, which agrees with the Greek *ἵκω* and the Latin *gigno*, it having been observed that the Indian *j* always become *γ* in Greek and *g* in Latin. The Sanskrit root *Dā* forms *dadāmi*, I give, which is identified with the Greek *δίδωμι*. The fifth conjugation interposes the syllable *nu* between the root and the personal terminations, thus

¹ *Sarp* might as well be taken for the root.

A'p forms *āpnūmas*, we obtain, *Trp* produces *trpnūmas*, we are pleased; in Greek the addition of the syllable *vu* to a verbal root occurs very frequently, *δέκω* (Doric form), *ζεύω*, *πύω*, &c. are formed after the principle of the above Sanskrit verbs, from the roots *DEK*, *ZET*, *PH*. The roots *A'p* and *Trp* may be recognized under *ἄρω*, *ἄτρομα*, *τέρω*, which do not insert the syllable *vu*, and thus in Sanskrit the roots *Dis*¹ to shew, forming the future *dak s'yāmi*, *Yug*, to join [*jungo*], *Banj* or *Baj*, to break [*frango*, *frēgij*] which could be proved to be connected with the above Greek roots of similar signification, never use the syllable *nu*. The sixth conjugation is only a slight variation of the first, prefixing an *a* to the personal terminations. The seventh inserts a nasal in the midst of the root, thus *Rud'* forms *rud'mas*¹, we confine, with which we may compare the Latin *tango*, *frango*, and the Greek *κράω*, *κράωω* from the roots *Tas*, *Frag*, *AAQ*, *AAB*; the latter corresponds with the Sanskrit root *Lab*¹; to obtain. The eighth conjugation adds to the root the vowel *u*, thus *Tan* forms *tanōmi*. I extend, *tanūmas*, we extend, to which we may compare the Greek verbs *ταύω* (*τάωμι*), *ἄλλω*. The ninth conjugation adds *nā* to the root, for instance, *στράτι*, he spreads, answering to the Latin *sternit*, where *n* does not belong to the root, forming the perfect *stravi*, and the supine *stratum*. Greek verbs likewise very frequently suffix a servile *v* to the root; by which method are produced, *κλίνω*, *κλίω*, *τένω*, from the roots *KAI*, *KPI*, *TEM*. The tenth conjugation, in Sanskrit, is distinguished by an *i* joined to the root, and the Latin fourth conjugation has the same characteristic. The fourth is the only conjugation of the Sanskrit grammar, wherein no analogy with the Greek or Latin is discoverable, it placing the syllable *ya* before the personal terminations as *nahyati*, he fastens, from the root *Nah*, shewing, however, by the future *nak s'yāmi*, that it is identical with the Latin root *Nec*, producing *nec to*, *nec sui*, *necui*. For, it ought to be observed, that the characteristics of the different conjugations extend only to the first four tenses; disappearing in the future tense, in the second and third preterites, answering to the Greek perfect and aorists, &c.; conformably to the same principle the Greek verb *δέκω* does not form in the future *δέκωω* but *δέξω*, in the perfect and aorist *έδεξα*, *έδειξα*, not *δέκωωκα*, *έδεικωκα*, &c. Of the Sanskrit derivative verbs I shall only mention the repetitives and desideratives. The former are very properly indicated by means of the reduplication, without joining any foreign particle to the root; the radical vowel is increased in the repeated syllable, and thus *Hu*, to sacrifice, produces *hōhu*, to sacrifice often, *D'u*, to shake, makes *dōd'u*. The desiderative verbs have likewise the reduplication, but, besides this, they suffix the syllable *sa* to the root, which becomes *s'a*, conformably to a rule of euphony; when the vowel *i* is introduced to form the connection between the root and the suffix. A radical *a* and *r*, short or long, are changed in the repeated syllable into *i*, thus *Bā* to shine, *Mān* to think, *Trp*, to be pleased, *Dru*, to run, produce, ⁶⁵

¹ In the singular the inserted nasal receives an *a*, as *rud'mi*, I confine.

² *r* is changed into *ō* in the singular number.

biḥāsa, mimansa, titarp i ś'a and dudrūś'a. Biḥāsa, to wish to shine, may be compared with πρῶσικυ, I bring to light, which, although no desiderative, is formed after the same principle from φΑ. Dudrūś'a, to wish to run, answers not quite so perfectly to βιβῶσικυ, formed from the root ΔΠΑ. It may be added, that, what has been observed in this essay with respect to the practice of joining the verb substantive to attributive verbs, in order to indicate the connexion between the subject and its attribute, which else would remain unexpressed, leads to the conjecture that the syllables sa and oku, in the above derivatives, proceed from the roots as and 'ES. We need not here repeat that EI forms the imperfect ἔσκειν, I was, and that in ancient Latin we find esco, I shall be.

WILHELM V. HUMBOLDT AN F. BOPP

ÜBER

ANALYTICAL COMPARISON.

BERLIN, den 1ten Januar 1821.

Ich bin wahrhaft beschämt, Ew. Wohlgebornen so gütigen und ausführlichen Brief vom 20. Juni v. J. erst heute zu beantworten. Ich erhielt ihn aber erst spät, und als ich auf dem Lande war. Das Lesen Ihrer interessanten Schrift zog mich dergestalt an, daß ich den Vorsatz faßte, nunmehr einen ernstlichen Versuch mit der Erlernung des Sanskrit zu machen. Dennoch konnte ich hierzu erst in der Mitte Novembers, wo ich zu meinen Büchern in die Stadt zurückkehrte, kommen. Nachdem ich nun einige, wenn auch noch sehr geringe Kenntnisse erlangt habe, bin ich zu einer neuen Lesung Ihrer Abhandlung geschritten, und kann Ew. Wohlgebornen nicht sagen, wieviel Nutzen und Vergnügen ich daraus geschöpft habe.

Sie ist gewiß der erste so ausgezeichnet gelungene Versuch einer vergleichenden Analyse mehrerer Sprachen, und über die Richtigkeit der aufgestellten Hauptsätze kann, meines Erachtens, kein Zweifel obwalten. Sie haben vollkommen bewiesen, daß auch das Sanskrit nur durch Agglutination seine grammatischen Formen bildet, und daß der von Fr. Schlegel gemachte Unterschied zwischen Sprachen, welche diese, und andern, welche die Inflexion anwendeten, so wie ich immer geglaubt, ein aus mangelhafter Sprachkenntnis entstandener Irrtum ist. Es ist ungemein zu wünschen, daß Ew. Wohlgebornen diese Arbeit fortsetzen, und auch die Deklinationen, und dann die Wortbildung selbst abhandeln mögen.

Gegen einiges einzelne aber hätte ich allerdings Bedenken, ob ich gleich selbst noch sehr zweifelhaft bin, ob Ew. Wohlgebornen Meinung nicht die richtige sein möchte. Ich gestehe aber, daß ich mich noch nicht recht davon überzeugen kann, daß das Futurum der griechischen Konjugation, samt der davon abgeleiteten Zeiten, aus einer Verbindung der Stammsilbe mit dem Auxiliare entstanden sein soll. Schlagende Beweisgründe, daß dies geradezu unmöglich sei, wüßte ich allerdings nicht anzugeben. Allein die Behauptung selbst scheint mir auch nicht solche zu haben, welche die Überzeugung ab-

durch die Pronomina entstehen solle. Von einer Seite erscheint mir die Sache auf den ersten Anblick sehr einleuchtend. Es ist ein scharfsinniger Gedanke, daß die Pronomina an die Substantiva gehängt werden, um ihren Leben zu geben, und in der That ist es in allen Reden des gemeinen Volks aufällend, wie dasselbe sehr oft das Subjekt nicht eher auf das Verbun bezieht, als bis es ein Pronomen dazwischen geschoben hat, wie wenn man sagt der Mann, der geht dort. So würde ich also ohne Bedenken die Endungen der z. Decl. im Griech. für das den Endungen nachgesetzte Pronomen halten. Die andere mag man auf ähnliche Weise erklären können. Allein woher stimmt nun die Deklination der Pronomina selbst? Diese Frage scheint mir eine eigene Beantwortung zu erfordern.

Ich möchte überhaupt glauben, daß sich das Entstehen der Deklination nicht auf eine Art allein erklären lasse.

Oft entstehen gewiß die Kasus aus wirklichen Präpositionen. An einigen amerikanischen, den vaskischen und andern ist dies unverkennbar. Ich habe mir auf diese Weise auch immer unserm Genitiv s des Mannes erklärt, und diesen Endkonsonanten als den Ueberrest von a us angesehen. Im Griechischen und Lateinischen aber möchte ich nicht behaupten, daß sich nur ein einziger Kasus so abweisen ließe.

Eine andre Entstehungsweise scheint mir in dem Zusammenhangeln mehrerer Dialekte in eine allgemeine Sprache zu liegen. Es ist auch sonst bekannt, daß mehrere grammatische sogenannte Flexionen nur dazwischen kommen, daß man in einer Periode der Bildung vielen an sich gleichbedeutenden Formen einen bestimmten Unterschied anwies. So müßte ich nicht sehr irren, wenn nicht Je-r und de-n bloßer Dialektunterschied wäre, und in einem deutschen Dialekt ich denke im schweizerischen; den auch als Nominativus zählte.

Eine dritte Art fügen nun Ew. Wohlgeboren sehr scharfsinnig durch die Verbindung gleichbedeutender, aber verschiedener Pronomina mit den Stammeswörtern hinzu. Allgemein, glaube ich, läßt sich hierüber nichts entscheiden, sondern man muß in jeder einzelnen Sprache ihre Eigentümlichkeit aufassen.

Ew. Wohlgeboren haben gewünscht, daß ich Ihnen über Ihre Schrift und die Grundideen derselben meine Meinung umständlich sagte, und dies wird mir für die Weltläufigkeit dieses Briefes zur Entschuldigung dienen. Ich muß Sie dessenungeachtet um Erlaubnis bitten, noch über mein eigenes Sanskritstudium einiges hinzusetzen zu dürfen, und Sie um die Erteilung Ihres einseitigen Rates zu ersuchen.

Ihre Abschrift einiger Seiten des HUROPADESA hat es mir allein möglich gemacht, nur das Lesen anfangen zu können. Ich kann jetzt alles lesen, ohne weiter nachzusehen, wengleich die eigentliche Gefäßigkeit nur mit der Zeit kommen kann.

Damit Ew. Wohlgeboren den Standpunkt meiner Kenntnis eher vielmehr Unkenntnis beurteilen können, so schicke ich Ihnen eine Abschrift dessen, was ich mir über die ersten Verse Ihres NALUS für mich angenehm habe. Ich lerne ohne alle mündliche Hilfe. WILKEN, der Sanskrit getrieben hat, ist lange wieder davon abgekommen; LINK macht nicht eigentlich fort davon;

BERNSTEIN sehe ich nicht, und außer diesen dreien wird mir mag niemand hier nur lesen können. Ich habe zuerst WILKINS' Grammatik teilweise genau gelesen, teilweise eben nur durchgesehen. Dann habe ich die mir von Ew. Wohlgeboren geschickten einzelnen Bogen über den HUROPADESA stellenweise gelesen, endlich mich, auch mit Hilfe des WILSON, jen leider noch nicht ich selbst besitze, den aber die Bibliothek hat, an IHNEN NALUS gemacht. Dies zieht mich am meisten an, allein ich halte es für gut, mit diesen drei Arten des Studiums abzuwechseln.

Das Alphabet habe ich so gründlich, wie möglich, studiert. Es ist von einer wunderbaren Regelmäßigkeit und Vollständigkeit. Allein was mich daran immer hindert und stört, ist, daß es für mich wenigstens völlig tot ist. Ich kann mir durchaus keinen Begriff machen über sehr viele Punkte: über die cerebralen Konsonanten, die Verschiedenheiten der Nasenlaute, wenigstens in den ersten vier Klassen, den Unterschied der Aussprache des Anusvāra und entweder des m, oder eines der verschiedenen n, über die des Visarga, das ja nicht bloß ein h, sondern immer ein ah zu sein scheint, auch wenn ein i vorausgeht. Ich wage daher nicht laut zu reden, und möchte wissen wie Ew. Wohlgeboren es machen um im Laut z. B. ṛ und ṝ zu unterscheiden.

Überhaupt möchte ich das Sanskrit die toteste aller toten Sprachen nennen. Denn ich habe in der dicken Grammatik von WILKINS auch nicht eine Zeile über den Accent gefunden, auf dem doch in der Sprache alles Leben, ja selbst alle Unterscheidung der Wörter, der Individuen der Sprachen, beruht. Was davon vorkommt, ist nur immer Quantität. Darin gestelle ich, kann ich Ew. Wohlgeboren nicht ganz darin beitreten, daß Sie die langen Vokale mit einem Accent, und nicht mit einem Längereichen Zeichen. Es kann den Leser mißleiten und ihm eine falsche Vorstellung geben.

Noch unbegreiflicher wird mir die Materie des Accents im Sanskrit, wenn ich an das häufige Koaleszieren zweier Wörter in eins denke, was die Schwierigkeiten des Verstehens so sehr vermehrt. Manchmal ist allerdings dies Koaleszieren nur Sache der Rechtschreibung und der Sitte, sowie auch Ew. Wohlgeboren in der Vorrede des NALUS Sich so darüber auslassen, daß man sieht, daß eine gewisse Willkür darin liegt. Wenn z. B. ein Wort mit einem schweigenden Konsonanten schließt, und das andre mit einem Vokal anfängt, so wäre es zwar eine große Erleichterung, wenn man, wie man nicht thut, die reell getrennten Wörter auch im Schreiben trennte, allein man begreift doch, daß dies im Accent nichts ändern kann, sondern daß jedes Wort den seinigen behält. Allein wie mag es da gewesen sein, wo End- und Anfangsbuchstaben zusammen in einen dritten übergehen, oder sich auch sonst nur verändern? Sind da beide Worte unter einen Accent gekommen, wie ein Wort eigentlich immer nur einen hat, oder nicht? Eine accentlose Sprachgestaltung, oder existiert sie in Unterweisungen, und wird nun, da sie zum Verständnis nicht hilft, übergangen? Hierüber wünsche ich sehr durch Ew. Wohlgeboren Aufklärung zu erhalten.

Eine sonderbare Sitte ist es auch, das kurze i und allein dieses unter allen Vokalen, vor den Konsonanten zu schreiben, nach dem man es ausspricht.

Das ganze Kapitel des Sandhi habe ich mit so vieler Genauigkeit als möglich studiert. In Wikus sind aber die Regeln wenig geordnet, ich möchte sie beinahe verwirrt nennen. Ich habe mir zu meinem Gebrauch sie ganz umgearbeitet. Auch ist das Kapitel, wie man sieht, nicht recht vollständig. Überhaupt wäre eine andre Grammatik ein großes Bedürfnis. Wikus scheint mir unschätzbar, als ein großes Repertorium von Wörtern und Paradigmen, allein die Leichtigkeit der Übersicht, die Aufstellung vieler Fälle umfassender Regeln u. s. f. fehlt ganz. Die Deklinationen sind unendlich leichter, als sie bei ihm scheinen. Die vor ihm verschmähte Tafel der Endungen (§ 66) dient doch zu einer viel faulichen Grundlage, als seine zahlreichen Paradigmen. Ich komme durch die Deklinationen viel besser durch, wenn ich erstlich immer genau trenne, was wirklich veränderte Endung, und was nur innerhalb des Wortes selbst vorgehende Umlautung ist, und zweitens immer mir anmerke, wo die Endung von jenem Grundschema abweicht. Die Kasusendung, welche mit Konsonanten beginnt *ti* und *ti*, ist mir, auch wegen ihrer Regelmäßigkeit sehr aufgefallen. Sollte sie nicht aus Präpositionen entstanden sein? Sehr wunderbar und abweichend von andern Sprachen ist auch der sogenannte crude state der Wörter, von welchem der Nominativus hernach wieder abweicht. In der 8. Dekl. ist dies wenigstens häufig. Sind diese Formen, als selbständig, bloß abstrahiert von den Fällen, wo sie, wie in einigen Gattungen der Komposita, in undeclinirtem Zustand vorkommen, oder haben sie einmal zur wirklichen Sprache gehört, so daß sie in ihrem rohem Zustande mit in die Rede eintreten? Sehr angezogen haben mich die Kapitel über die Bildung der Derivativa. Aber ich dünke, daß auch diese müßten befriedigender und systematischer gefaßt werden können.

Ich studiere, bis jetzt wenigstens, das Sanskrit bloß der Sprache, nicht der Literatur wegen; aber ich bin vollkommen überzeugt, daß es für jeden, der Sprachstudium treibt, ein unerlässliches Bedürfnis ist, es so tief, als nur immer die Umstände erlauben, zu kennen. Können mir daher Ew. Wohlgebornen aus Ihrer eignen Erfahrung Ratschläge geben, wie ich vielleicht mein Lernen noch zweckmäßiger einrichten kann, so werden Sie mich ungemein verbinden. Den Brief an Herrn Vater habe ich besorgt. Den gegenwärtigen addressiere ich an Ihren Herrn Vater nach Aschaffenburg.

Ich wünsche von Herzen, daß es Ihnen recht bald gelingen, oder vielmehr schon gelungen sein möge, eine vorteilhafte Anstellung zu erhalten. Ich kann mir nicht denken, daß nach demjenigen, was Sie bereits geleistet haben, man Ihnen nicht damit entgegenkommen, und die Art selbst Ihrer Wahl überlassen sollte. Es wird mich sehr freuen, wenn Sie mir erlauben wollen, Ihnen manchmal zu schreiben, und wenn ich, wie bisher, auf Ihre gütigen und ausführlichen Antworten rechnen darf.

Verzeihen Ew. Wohlgebornen, daß ich nicht eigenhändig geschrieben habe. Ich schreibe aber so schnell, und dünke mir auch, daß es Ihnen lästig sein müßte, einen so langen Brief von einer so undeutlichen Hand, als die meine ist, zu lesen. Mit der herzlichsten Hochachtung Ihr

HUMBOLDT.

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* It is conceivable that Techmer meant to refer to Olof Ruczeck, Jr. (1660-1740).
 E. F. K. K.

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- SCHLEGEL, Friedrich (1772-1829): *Über die Sprache und Weisheit der Indier: Ein Beitrag zur Begründung der Altertumskunde*. (Heidelberg, 1808). Amsterdam, 1977.
- RASK, Rasmus Kristian (1787-1832): *A Grammar of the Icelandic or Old Norse Tongue*. Transl. by Sir George Webbe Dasent (London, 1843). Amsterdam, 1976, 2nd ed. 1989.
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science des langues ou du langage, mais qui, par la diversité flottante des noms plus ou moins compréhensifs, plus ou moins heureusement formés sous lesquels on la désigne, témoigne à la fois de sa jeunesse et de l'étendue mal définie encore de son objet.

Franz ou François Bopp naquit, le 14 septembre 1791, à Mayence, qui peu d'années après devenait une ville française. Devant nos armées victorieuses, il fut emmené par son père, attaché à la maison de l'Électeur fugitif, à Aschaffembourg en Bavière, et c'est là qu'il fit ses premières études. Il y fut bientôt remarqué par ses maîtres, surtout par le docteur Windischmann, homme d'esprit et de science, auteur d'une Philosophie de l'histoire, et qui, après Herder, et avec les Schlegel, Görres, Creuzer lui-même, demandait à l'Orient, à l'Inde surtout, des lumières qu'ils ne pouvaient guère donner alors sur les origines de l'humanité. C'était le romantisme dans l'érudition, contre-coup de celui qui, par un mouvement semblable, ramenait les esprits, des traditions classiques et des théories du XVIII^e siècle, vers le moyen âge, sa poésie, sa littérature et son mysticisme. Ce mouvement, quels qu'en aient été les excès, les erreurs, n'en eut pas moins son côté fécond et utile, par l'élan qu'il imprima et par les horizons nouveaux qu'il ouvrit; le jeune Bopp le côtoya, du reste, plus qu'il ne s'y livra. Au lieu de chercher, comme tant d'autres à ce moment, la lumière dans les ténèbres, esprit net, positif et d'une pénétrante sagacité, ce fut à l'étude approfondie des langues qu'il s'adressa pour en obtenir des révélations sur l'histoire de l'esprit humain, dont elles sont la manifestation la plus spontanée et la plus intime.

En possession des langues classiques et des principaux idiomes de l'Europe, Bopp se sentit invinciblement entraîné

par le désir de connaître ceux de l'antique Orient, et surtout cette langue, mystérieuse encore, le sanscrit, que dans un petit livre d'une grande profondeur, *Sur la langue et la sagesse des Indiens*, publié en 1809, Frédéric Schlegel annonçait dignement à l'Allemagne. Il signalait sa parenté non-seulement de lexique, mais de structure grammaticale, avec le grec, le latin, le persan, les idiomes germaniques, d'autres encore, préliminant ainsi à la *grammaire comparée*, comme il la nommait déjà.

Paris était, au commencement de ce siècle, le foyer des études orientales, surtout par l'école de philologie sémitique dont Silvestre de Sacy fut longtemps le chef respecté. Il s'y formait en outre, dans l'ombre de la Bibliothèque impériale, sous les auspices du zèle conservateur des manuscrits orientaux, Langlès, une pépinière de jeunes indianistes : c'étaient Chézy, Fauriel, Schlegel lui-même, initiés à la connaissance de la langue sanscrite par un Anglais, Alexandre Hamilton, qui avait résidé dans l'Inde, et que la politique du Premier Consul, depuis la rupture du traité d'Amiens, retenait en France, contre le droit des gens, avec tous ceux de ses compatriotes qui s'y trouvaient. Langlès, pour occuper ses loisirs forcés, l'avait chargé de rédiger le catalogue des manuscrits sanscrits recueillis jadis dans l'Inde par un de nos plus savants missionnaires, le P. Pons. Ce fut dans ces circonstances et dans ce milieu, plus favorable que tout autre à ses desseins, qu'il arriva en 1812 à Paris, grâce à une subvention du roi de Bavière, l'étudiant allemand parvenu à l'âge de vingt et un ans.

On a dit, mais avec plus d'affectation rétrospective que de vérité, que Bopp apprit le sanscrit à l'école de Chézy, pour qui le gouvernement de la Restauration, en 1815, créa, au Collège de France, la première chaire de cette langue qu'avait vue l'Europe. Bopp, la sincérité même, déclare, dans la pré-

face d'un de ses premiers ouvrages, à la date de 1819, qu'il avait appris le sanscrit sans maître, et des lettres authentiques d'Auguste-Guillaume de Schlegel, imprimées depuis sa mort, montrent cet illustre critique lisant à Paris, en 1815, avec le secours de Bopp, l'Homère de l'Inde, comme il se exprime, c'est-à-dire la grande épopée de Valmiki (le Rāmāyāna), qu'il devait expliquer plus tard et traduire avec tant d'éclat dans la chaire fondée pour lui à l'université prussienne de Bonn.

Bopp, dans ses livres études de près de cinq années parmi nous, ne se borna point à la langue sacrée de l'Inde, à la comparaison des grammairres sanscrites déjà existantes, à la lecture du petit nombre de textes publiés qu'il trouvait sous sa main; il suivait, à l'École des langues orientales et au Collège de France, les cours de persan, d'arabe et d'hébreu, en même temps qu'il dépouillait, dans l'intérêt de ses travaux futurs, les manuscrits de notre grande bibliothèque. Ni la guerre européenne, ni les terribles catastrophes d'alors, n'enrent le pouvoir de le distraire de ses persévérantes recherches, de ses fécondes méditations. C'était, comme on l'a dit, un vrai sage de l'Inde transplanté en France, un ascète de la science, les yeux fixés constamment sur les faits nouveaux qu'il apercevait chaque jour plus clairement. Les seules diversions qu'il se permit l'y ramenaient encore, ces extraits des chefs-d'œuvre de la poésie brahmanique, toute pénétrée de religion et de philosophie, qui devaient être l'un des deux objets de son enseignement comme de ses publications futures, et non pas le plus neuf ni le plus important.

Ce fut encore un petit livre, celle fois gros d'avoir, évidemment inspiré de celui de Frédéric Schlegel pour le plan, pour l'idée même à bien des égards, mais conçu dans un es-

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prit sévèrement scientifique, qui marqua du même coup le début de François Bopp devant le public et l'avènement de la vraie méthode en fait de philologie comparée. Windischmann se chargea de faire imprimer à Francfort, en 1816, et de présenter, dans une préface, à l'Allemagne, qui l'ignorait, l'essai de celui qu'il regardait naïvement comme son disciple. C'était, pour donner le titre en français, le *Système de conjugaison de la langue sanscrite, comparé à celui des langues grecque, latine, persane et germanique, avec des épisodes tirés du Ramajān et du Mahābhārat, traduits fidèlement en vers d'après le texte original, et quelques paragraphes des Védas*. Ces traductions, soavamment calquées sur le mètre sanscrit, comme celles de Frédéric Schlegel et à son exemple, leur sont bien inférieures; la nature n'avait pas fait Bopp poète en même temps que philologue, et il eut le bon esprit d'y renoncer plus tard. Mais, en revanche, la première partie du volume reste capitale, malgré ses lacunes. Bopp y posa nettement et il y résolut, en un point qu'on a justement appelé le point central de la science des langues, c'est-à-dire la théorie du verbe, le grand problème qu'il ne cessa de poursuivre et d'approfondir jusqu'à la fin de sa vie : c'était l'explication des formes grammaticales et de leur origine, par l'analyse et la comparaison des idiomes de l'Orient et de l'Occident qui constituent avec le sanscrit une même famille, celle que l'on désigne encore sous le nom trop étroit d'indo-germanique, que Bopp, comme Eugène Burnouf, nommait de préférence indo-européenne, et pour laquelle a prévalu ou prévaudra soit l'appellation plus précise de famille *aryenne*, qui est son nom de race, soit celle d'*indo-celtique*, que nous avons proposée autrefois, et qui manquerait les termes extrêmes de son développement géographique.

Dès longtemps, l'affinité générale du sanscrit avec les prin-

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cipales langues de l'Occident, soit ancien, soit moderne, avait été reconnue et constatée. Vingt ans avant la fondation de la Société anglaise de Calcutta, en 1784, et les discours de son illustre président, William Jones, qui mêlaient en lumière cette affinité, le P. Cœurdour, un de nos missionnaires dans l'Inde, comme le P. Pons, avait adressé à l'Académie des inscriptions, par l'intermédiaire de l'abbé Barthélémy, des lettres, un mémoire même sur ce sujet. Mais, ainsi que l'a rappelé l'éminent disciple de Bopp, ancien élève de notre École normale, qui professe aujourd'hui au Collège de France la grammaire comparée, Fréret n'était plus, avec sa curiosité universelle; les rares philologues de l'Académie aimaient ailleurs, et il ne fut pas donné suite à cette importante communication, tardivement insérée dans notre Recueil en 1810.

Cependant la parenté, de plus en plus probable, des langues dont il s'agit n'était pas démontrée : elle le fut quand la diversité apparente de leurs formes, dans l'unité originelle de leur vocabulaire, eut été ramenée à des lois certaines; quand l'explication des flexions et des désinences des mots eut été trouvée. Dès lors l'histoire des peuples, leur filiation, furent éclairées d'une lumière nouvelle, la plus sûre de toutes, celle de leurs idiomes, et l'histoire même de la formation des langues fut révélée, dans la famille aryenne directement, indirectement dans les autres. Il ne fut plus vrai, comme l'avait avancé Fr. Schlegel, que pour la langue sanscrite, considérée comme la mère des idiomes congénères, le vocabulaire et la grammaire eussent été en quelque sorte coulés d'un seul jet, résultat d'une intuition supérieure, aux temps primitifs du monde. L'analyse savante que fit Bopp de la conjugaison, dans cet ordre de langues dont le sanscrit n'est que la plus parfaite, qui toutes ont découlé d'une source commune,

comme déjà l'avait soupçonné William Jones, montra que les terminaisons des verbes furent d'abord des mots distincts, soit pronoms personnels, soit même verbes auxiliaires, ajoutés à la racine principale, puis combinés et fondus avec elle pour exprimer les rapports divers de la pensée dans le discours. Un pas de plus, et il allait être établi que les langues à flexions ne différaient pas essentiellement, dans l'origine, de celles où les rapports grammaticaux sont déterminés par des mots fixes et qu'on nomme aujourd'hui langues *agglutinantes*. Ce pas, définitivement franchi par l'étude et le rapprochement d'autres types de langues plus élémentaires ou plus compliqués, soulevait la question générale de la classification de ces langues diverses, de leurs relations entre elles, de leur formation première, et ramenait bon gré mal gré le redoutable problème de l'origine du langage.

Bopp n'en était pas là; il se contenta d'avoir prouvé, dans son premier essai, la sûreté de sa nouvelle méthode grammaticale, d'en avoir fait entrevoir la puissance par l'évidence des résultats de ses combinaisons et par une foule d'observations aussi justes qu'ingénieuses. Il sentait d'ailleurs le besoin, avant d'aller plus loin, d'affermir la base de ses recherches en se perfectionnant dans la connaissance de la langue sanscrite, en liant des relations directes avec les hommes qui l'avaient le mieux possédée jusque-là et puisée à la source même; enfin, en s'entourant de tous les matériaux, de tous les secours nécessaires à la continuation de ses travaux. Pour cela, il fallait, de Paris, se transporter à Londres, se mettre à portée des riches collections de la compagnie des Indes, entrer en commerce avec Wilkins, le père des études sanscrites en Europe, avec Colebrooke, le plus grand philologue indianiste depuis la mort de William Jones. La lecture qui fut faite à l'excellent roi de

Bavière, Maximilien, par le secourable Windischmann, d'un des fragments épiques traduits en vers par Bopp détermina sa mission à Londres, avec un traitement honorable, en 1817.

Ce fut là qu'il trouva, chargé d'affaires de Prusse, un des esprits les plus éminents de l'Allemagne, l'ami de Schiller, de Göthe, l'homme profond, sans être populaire, politique et dévoué à son pays, mais ne relevant que de sa conscience, qui joua pour nous, un trop grand rôle, mais un rôle patriotique dans des temps désastreux, et qu'un goût dominant avait entraîné de bonne heure vers l'étude des langues, considérées surtout dans leurs rapports avec les races et le génie divers des peuples. Guillaume de Humboldt, frère aîné d'Alexandre, qui s'inclinait sans fausse modestie devant sa haute intelligence, devait être le protecteur naturel de Bopp, et il le fut avec un zèle fondé sur une estime égale pour son caractère et pour son talent philologique. Ce talent, il le mit à l'épreuve en lui demandant des leçons de sanscrit, qui fructifèrent comme on peut le voir dans plusieurs de ses mémoires lus devant l'Académie de Berlin. Ainsi fut-il donné à Bopp d'initier à cette étude encore si nouvelle, dans un intervalle de quelques années, deux grands esprits d'une trempe fort différente, qui contribuèrent puissamment l'un et l'autre, chacun dans sa voie, à la répandre en Allemagne, Guillaume de Schlegel et Guillaume de Humboldt.

Le premier, dans un de ces articles de critique où il recommandait, comme dans ses leçons, l'application des méthodes éprouvées de la philologie classique à l'enseignement du sanscrit, appelait de ses vœux trois œuvres, selon lui également nécessaires au succès de cet enseignement : une chrestomathie ou un choix de textes fait avec goût, une grammaire simplifiée, enfin un glossaire alphabétique d'une étendue raisonnable.

Bopp eut l'honneur de satisfaire successivement à ces trois besoins, sans perdre un instant de vue l'objet principal de ses travaux la science à laquelle il avait dévoué sa vie.

C'est ce qui perce déjà dans les notes et dans la préface de la chrestomathie, dont il donna le premier morceau en publiant à Londres, dès 1819, en français et en latin, le *Naluk*, le plus beau peut-être des innombrables épisodes semés à travers cette forêt vierge de la poésie indienne, selon le mot spirituel de M. Benfey, c'est-à-dire le *Māhābhārata*, que Bopp avait explorée à Paris. Ce fut encore près de vingt ans plus tard, par la traduction en vers allemands, dans la mesure de l'original, de cette touchante histoire de *Nala et Damayanti*, tant de fois reproduite, qu'il termina, en 1838, la série de ses essais plus ou moins heureux en ce genre. Dans l'intervalle, après l'édition maîtresse du texte de la *Bhagavat-gīta*, cet autre épisode, d'un caractère si différent, si poétiquement sublime, du même poème, publié par G. de Schlegel avec une traduction en prose latine qui en est presque digne, et que suivit de près un examen littéraire et philosophique par G. de Humboldt, qui ne l'est pas moins, Bopp avait donné coup sur coup plusieurs autres morceaux de l'immense épopée religieuse, légendaire et métaphysique, mais cette fois pour son propre enseignement.

En effet, de retour en Allemagne, où il était déjà bien connu, dans le cours de l'année 1820, il passa l'hiver suivant à Göttingue, où il vit O. Müller, ce grand helléniste, qui commençait lui-même à se produire. De là il se rendit à Berlin, où il retrouva G. de Humboldt, devenu ministre de l'instruction publique. Ce fidèle protecteur n'eut qu'une pensée : ce fut de conquérir pour la Prusse et pour l'université déjà florissante de sa capitale celui qu'il regardait comme le premier indianiste

de l'Allemagne. Mais Bopp se crut lié avec la Bavière par la pension qu'il recevait de l'université de Munich. Il offrit, pour se dégager, quoiqu'il fût loin d'être riche, de restituer cette pension. L'Académie, en déclinant cette offre, lui fit une réponse aussi honorable pour elle que pour lui : « Un savant tel que vous, lui fut-il écrit en son nom, appartient à tous les pays. »

Il devint donc professeur à l'université de Berlin, en 1822, avec la mission d'y enseigner le sanscrit comme il l'entendait, c'est-à-dire en y joignant la grammaire comparée. Déjà en 1820, lorsqu'il résidait encore à Londres, il avait fait paraître en anglais, dans les *Annales de littérature orientale*, un travail où il dépassait, en l'élargissant, le sujet de son premier traité, et où il préjudait manifestement à son grand ouvrage. Un bienôt membre de l'Académie de Berlin, il lut successivement devant elle, de 1823 à 1831, cinq mémoires qui en furent des préparations. Il faut en dire autant d'un sixième et d'un septième, réunis plus tard avec les autres, et qu'il avait communiqués à l'Académie en 1833, l'année même où commençait la publication de la *Grammaire comparée*.

Tandis qu'il méditait ce livre, fondement de la science et de sa renommée, il n'oubliait ni l'intérêt des étudiants, avides de ses leçons, ni deux des trois vœux formés pour l'enseignement du sanscrit par G. de Schlegel, auxquels il n'avait point encore satisfait. De 1821 à 1827, il publia par livraisons, en allemand, sa *Grammaire développée de la langue sanscrite*, d'après celles de Wilkins, de Forster, en partie de Colebrooke, elles-mêmes fondées, mais trop servilement, sur les ouvrages des anciens grammairiens de l'Inde. Dans ce premier essai d'exposition élémentaire d'une langue si difficile, il se montra, dès l'abord, supérieur aux Anglais pour la méthode, pour la clarté

et la simplicité. Sa franchise avec hardiesse de toute autorité consacrée, et dominant son sujet du haut des principes qu'il avait tant contribué à établir, il expliqua l'idiome sanscrit d'après les lois propres de son développement, et, quoiqu'on lui ait reproché d'avoir trop négligé les grammairiens indiens et l'histoire de la langue dans ses transformations à travers les âges, depuis les Védas, on peut répondre avec le savant auteur de la *Grammaire sanscrite complète*, d'après celles mêmes des brahmanes, que là n'était pas et ne devait pas être l'objet de Bopp s'adressant à des Européens, pour lesquels il sera toujours, comme s'exprime M. Benfey, le grammairien généralisateur par excellence, en même temps que le plus grand comparateur. Tel fut, du reste, le succès de son ouvrage, qui répondait à un besoin senti dans toute l'Europe, qu'à peine terminé il dut être reproduit en latin par l'auteur, de 1828 à 1832. En 1834, il publia en allemand sa *Grammaire critique abrégée*, vrai chef-d'œuvre en son genre, dont les éditions se succédèrent rapidement.

Comme complément indispensable de ses grammaires, il fit paraître, en 1830, un court *Glossaire sanscrit-latin*, destiné aux commençants, qu'il développa dans une seconde édition, de 1840 à 1847, et qu'il marqua en quelque sorte de son cachet en y faisant une large place à la comparaison des langues, depuis le grec jusqu'au celtique. Une troisième édition, accompagnée d'un index alphabétique et comparatif, fut publiée de 1866 à 1867, l'année même de sa mort.

On voit à quel point la sphère des comparaisons de Bopp s'était élargie, combien les résultats en étaient acceptés, puisqu'ils passaient ainsi dans des livres élémentaires tant de fois reproduits. C'est que l'auteur de ces livres, dont le nom devenait de plus en plus célèbre en Allemagne et dans toute

L'Europe, avait, depuis son premier ouvrage, étendu ses rapprochements à des langues que le vrai précurseur de ces grandes études, Fr. Schlegel, soupçonnait déjà d'une parenté au moins éloignée avec les idiomes indo-germaniques.

Bopp fit d'abord entrer dans son cadre, en la substituant au persan moderne, d'après des travaux que les siens avaient provoqués en partie, la langue de l'Avesta, c'est-à-dire des livres sacrés attribués à Zoroastre, langue qu'au lieu de zend on est fondé à nommer aujourd'hui l'*ancien bactrien*. Rask, Olshausen et surtout notre illustre Eugène Burnouf l'avaient ressuscitée par la connaissance du sanscrit et l'application des principes de la grammaire comparée. Bopp en rapprocha l'ancien perse, le perse des inscriptions cunéiformes des rois achéménides, que Burnouf encore et le savant indianiste Lassen étaient parvenus à déchiffrer, chacun de son côté. Il fit aussi une place, et une place importante, aux langues slaves, avant tout au lithuanien, au letton, à l'ancien prussien, qui ont conservé, mieux que d'autres membres de la famille, des formes d'une époque singulièrement reculée. Le gothique prit son rang à la tête des dialectes teutoniques, dont Jacob Grimm avait fondé à la fois la grammaire et l'histoire avec une grandeur de vues et une finesse d'analyse qui n'ont de comparable que les travaux mêmes de Bopp. D'un autre côté, l'arménien vint s'intercaler entre le zend et le grec, comme tenant de près au premier; le grec lui-même et ses dialectes, le vieux latin et les idiomes italiens, furent sévèrement comparés entre eux et avec les autres langues. Bopp, dans le premier des nouveaux mémoires lus par lui à l'Académie de Berlin de 1838 à 1854, ayant réussi à résoudre, par sa merveilleuse sagacité, nombre de difficultés grammaticales des idiomes celtiques qui l'avaient d'abord arrêté, n'hésita plus à

les admettre dans la famille indo-européenne. Zeuss, et d'après lui Schleicher, tous deux ravis trop tôt à la science, ont, depuis, pleinement confirmé son opinion à cet égard. D'autres tentatives du même genre lui furent moins heureuses peut-être pour quelques-uns des dialectes caucasiens, sinon pour l'albanais. Il osa même, sur les pas de Guillaume de Humboldt, dont les belles recherches sur la langue sacrée de l'île de Java l'avaient frappé, s'aventurer dans le domaine des idiomes de l'archipel malayo-polynésien, et y risquer des conjectures qui ne sont pas toutes demeurées stériles.

Depuis longtemps déjà et dans une voie plus sûre, celle de l'étude méthodique et complète du développement intérieur des langues vraiment aryennes, Bopp avait donné à ses travaux une direction nouvelle et féconde. Par l'analyse des formes grammaticales successivement appliquée, depuis son écrit sur la conjugaison, à la déclinaison des noms, des pronoms, et à toutes les parties du discours; par l'explication des flexions des mots, dont il avait, en quelque sorte, fait son propre domaine, il fut conduit à examiner de plus près les modifications des sons, voyelles et consonnes, étude qui grâce à lui, et surtout à Grimm, constitue aujourd'hui cette partie importante de la science qu'on nomme la *phonétique*. Il assigna le rôle capital de ces modifications dans la formation même des mots et dans la métamorphose des idiomes, par la permutation des consonnes d'ordre différent et par les variations bien plus délicates des voyelles; mais il ne voulut point ici reconnaître, avec Grimm, un nouveau mystère du langage, comme celui qu'avait cru trouver Fr. Schlegel dans les *Lexions*. Ainsi que pour celles-ci, il chercha l'origine des phénomènes vocaux qu'exprime le nom d'*apophonie*, par lequel M. Bréal traduit avec bonheur l'*ablaut* allemand, dans la com-

paraison attentive des langues analogues, et il en détermina les lois par le seul rapprochement des faits, celles entre autres qu'il a ingénieusement appelées « les lois de gravité des voyelles ». Ce fut le sujet d'articles critiques d'un grand retentissement, réunis en 1836 dans un volume intitulé : *le Vocalisme*, et dont les résultats passèrent dans la *Grammaire comparée*. Il en fut de même plus tard, non pas toutefois avec le même succès, d'un dernier traité qui se rattachait également à la phonétique, le *Système comparatif d'accentuation*, publié en 1854, à propos d'un Mémoire de M. Böhlingk sur l'accent en sanscrit. Bopp fit ressortir avec son talent ordinaire certains rapports frappants de l'intonation dans la déclinaison et la conjugaison sanscrites et grecques; mais ses vues générales sur le principe de l'accentuation indienne et les conséquences qu'il en tire n'ont pas obtenu l'approbation des connaisseurs.

Tout, du reste, était préparé ou se préparait pour cette œuvre immortelle dont la rédaction, la publication répétée, le perfectionnement sans relâche, remplirent la meilleure part de la vie mortelle de notre confrère. En 1833 commença à paraître la première édition de la *Grammaire comparée*, dont les six livraisons se succédèrent jusqu'en 1852. Tous les juges compétents y applaudirent en Europe et dans l'Inde, Eugène Burnouf avant tout autre, au *Journal des Savants*. Une traduction anglaise de M. Eastwick, trois fois reproduite, commença à paraître, sous les auspices du savant Wilson, bien avant que l'ouvrage eût atteint son terme. Nous avons attendu la nôtre cinq années encore après la seconde édition de l'original, publiée de 1856 à 1861, en 3 volumes in-8°, avec des additions considérables où l'auteur avait mis à profit tous les résultats nouveaux acquis à la science dans l'intervalle des deux éditions. Mais cette longue attente est bien compensée par la

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haute valeur de la traduction française. Non-seulement elle est la plus complète, mais le traducteur est entré plus profondément que personne n'eût pu faire à sa place dans la pensée de son ancien maître; il a reçu jusqu'au dernier jour ses précieuses communications, et il continue de développer sa doctrine au-devant de chaque volume, dans des introductions où l'admiration respectueuse du disciple n'ôte rien à la liberté de son jugement.

Nous ne saurions donner ici de ce grand ouvrage, apprécié par M. Bréal avec une compétence spéciale qui nous manque, qu'un simple aperçu. Nous sommes sûrs toutefois de ne point nous égarer en demandant avant tout à l'auteur lui-même d'éclairer notre marche dans cette rapide esquisse de son livre, comme l'a fait M. Benfey, l'un de ses plus illustres émules, dans l'analyse étendue qu'il vient d'en publier. C'est une des parties les plus considérables de sa récente *Histoire de la science du langage et de la philologie orientale en Allemagne, depuis le commencement de ce siècle*. Nous en avons profité ici et ailleurs.

La simplicité des principes, la rigueur des déductions, l'indépendance absolue de toute autorité, si ce n'est celle de la raison appliquée à l'observation des faits la plus complète, tels sont les caractères généraux de la *Grammaire comparée* et de la méthode dont Bopp est le véritable créateur; dans cette belle et neuve étude devenue, par lui surtout, la science du langage. Lui-même en pleine conscience de la vertu de sa méthode, il a ramené à trois points fondamentaux les développements de son ouvrage, et l'infinie variété, le chaos apparent des faits et des détails où elle doit porter l'ordre et la lumière.

Il veut d'abord décrire, comme il le dit expressément, l'organisme, la structure intime des langues qu'il entreprend de rapprocher, pour en découvrir, s'il se peut, la commune

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origine, indépendamment de tout rapport extérieur et accidentel des sons et des mots. De cette description, de cette comparaison générale, qui plus d'une fois déjà laissent entrevoir les traits de famille de ces langues, il résulte, en les examinant de plus près, que nombre de formes grammaticales, c'est-à-dire organiques, diverses en apparence, quant aux sons, portent en elles-mêmes des caractères tellement analogues qu'ils font soupçonner leur identité première. Pour la constater scientifiquement, il faut alors rechercher les lois dites par Bopp physiques et mécaniques, sous l'empire desquelles ces formes analogues, supposées originellement identiques et pourtant si différentes d'aspect, se sont tellement métamorphosées, dans les langues diverses, qu'il semble d'abord impossible d'admettre cette identité. Mais sitôt que ces lois qui régissent les sons, et qu'on nomme pour cette raison *phoniques*, ont été découvertes, les organismes, si différents au premier coup d'œil, des langues sœurs se résolvent en un seul et même organisme, qui se réfléchit, pour ainsi dire, sous des angles divers dans chacune d'elles au gré des lois phoniques qui y ont prévalu.

Qui ne voit que les deux premières données du problème posé par Bopp rentrent l'une dans l'autre, et que les lois qui ramènent à l'unité de l'organisme primitif la variété des organismes secondaires une fois reconnues, l'origine commune des langues comparées entre elles est par cela même constatée? Mais Bopp va plus loin : il veut saisir, pour ainsi dire, sur le vif la naissance des formes destinées à exprimer les rapports grammaticaux, formes devenues si diverses, à première vue du moins, dans les langues congénères. Pour trouver le secret de leur origine, il entreprend de déterminer leur signification première.

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Il arrive, le plus souvent, que cette signification première des formes grammaticales, qui en explique l'origine, se révèle par leur simple confrontation, dans les langues sœurs, séparées les unes des autres depuis des milliers d'années, mais gardant entre elles, comme nous le disions tout à l'heure, des traits de famille reconnaissables. Que si la confrontation, en dégageant la forme la plus ancienne, par l'application des lois phoniques, ne découvre pas toujours le sens primordial et par lui l'origine de cette forme, elle met du moins sur la voie. Dans tous les cas, c'est là le point le plus élevé que Bopp, dans la circonspection de sa méthode, égale à sa hardiesse, se soit proposé d'atteindre. Et quoi de plus grand, en effet, que la connaissance des moyens par lesquels la mieux douée des races humaines est parvenue à créer son œuvre la plus parfaite, c'est-à-dire sa langue, par la puissance inconsciente et spontanée de la raison? Là est le triomphe de la science de Bopp, où concourent en réalité tous les éléments, tous les procédés de recherche, toutes les méthodes, naturelle, historique, comparative et philosophique : d'où il suit que la science des langues ne peut être classée dans la sphère exclusive d'aucune de ces méthodes; que, toute fondée qu'elle est sur l'observation et sur l'expérience, elle ne saurait, comme le veut un ingénieux professeur, l'un des premiers linguistes de ce temps, M. Max Müller, être rangée parmi les sciences physiques.

Pour revenir au livre de Bopp, ce livre si fortement conçu, développé avec tant de simplicité et de largeur, repose donc, au fond, sur la notion de l'origine des formes grammaticales, dans la famille des langues qui en sont le sujet, et c'est pour cela qu'il y attachait tant d'importance. La comparaison des formes diverses de ces langues, qu'il a soumise pendant près

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de cinquante ans à une si patiente et si profonde analyse, n'était à ses yeux que le moyen d'atteindre jusqu'aux formes primordiales, par la connaissance des lois phoniques, l'âme de cette comparaison. Le dernier résultat de ses longues méditations, pressenti par lui dès 1820, devait être la reconstruction de la langue mère, dont toutes les autres, à commencer par le sanscrit, ne furent que les filles, de même que nos langues néo-latines sont celles du latin, non du provençal, l'une d'entre elles, ainsi que le soutint jadis notre confrère Raynouard. Là en est aujourd'hui la science que Bopp a fondée sur ses vraies bases, et qui a ouvert à l'activité de ses successeurs une si vaste carrière dans le domaine entier du langage humain.

Quoique Bopp ait donné pour but à son ouvrage la comparaison et l'explication des formes grammaticales dans les langues indo-européennes, il ne faudrait pas croire qu'il ait négligé, comme la plupart des grammairiens spéciaux, de traiter des racines, l'élément fondamental du langage. Elles étaient à ses yeux, comme elles sont dans le fait, la condition première de la formation des mots. Seulement, lui qui, pour les flexions, pour certaines variations des voyelles, entendait tout expliquer par des lois naturelles et repoussait, comme nous l'avons vu, toute idée de mystère, il s'arrête, dit-il expressément, devant celui des racines. Il renonce à pénétrer la cause pour laquelle telle conception est marquée par tel son plutôt que par tel autre. C'est que cette question, impliquant celle de l'origine même du langage, dépassait l'horizon de ses recherches, et qu'il n'avait point de solution à en proposer. Il se borne donc à distinguer dans les langues, objet de son étude, deux classes de racines, les racines verbales, nommées encore attributives, d'où proviennent les verbes et

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les noms, soit substantifs, soit adjectifs, et qui expriment une action ou une manière d'être; puis les racines pronominales ou indicatives, désignant les personnes, avec l'idée accessoire de situation dans l'espace, et desquelles dérivent, outre les pronoms, toutes les prépositions primitives, les conjonctions, les particules. C'est, dit très-bien M. Bréal, par la combinaison de six ou sept cents racines verbales avec un petit nombre de racines pronominales que s'est formé ce mécanisme merveilleux qui frappe d'admiration celui qui l'examine pour la première fois, comme il confond d'étonnement celui qui en mesure la portée indéfinie après en avoir scruté les modestes commencements.

Une fois sur cette voie, le grand comparateur ne put se défendre de rapprocher, en ce point capital, les racines verbales aryennes des racines sémitiques. Celles-ci, formées de trois consonnes, et dissyllabiques d'ordinaire, des qu'on les prononce avec une voyelle, deviennent des mots avec des sens divers, selon la diversité des voyelles introduites. Au contraire, dans les idiomes aryens les plus anciens et les mieux conservés, où toutes les racines sont monosyllabiques, et d'un nombre très-variable de lettres, elles constituent comme un noyau fermé, presque immuable, s'entourant de syllabes étrangères, dont le rôle est d'exprimer les idées accessoires que la racine ne saurait rendre par elle-même. Du reste, Bopp se borne à prendre acte de ce contraste entre les deux familles de langues, à leur âge le plus reculé, sans essayer de le résoudre, comme on l'a fait depuis, par des hypothèses plus ou moins probables, qui tendraient à les ramener à une commune origine. Dans cette voie encore, à propos des racines et de la formation des mots, il se vit amené, en réfutant les idées de Fr. Schlegel et en modifiant celles de son frère, à émettre ses

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propres vues sur la classification générale des langues, quoiqu'il évitât d'ordinaire cet ordre de questions, laissant à d'autres, d'un savoir plus étendu, sinon plus solide que le sien, des problèmes trop ambitieux pour lui.

Bopp, par la rigueur autant que par la fécondité de sa méthode, par ses livres non moins que par ses leçons, a fait école en Allemagne et dans toute l'Europe. Parmi ses nombreux disciples, les uns ont embrassé à sa suite, pour l'agrandir encore, le vaste domaine qu'il avait cultivé le premier; les autres en ont fouillé dans leurs dernières profondeurs les différentes provinces. Les applications nouvelles et hardies de la comparaison des langues, d'après les principes établis par lui, ont été faites à l'étymologie, devenue une science positive au lieu de cette divination fantastique qu'elle avait été si longtemps; à la mythologie, qui y a retrouvé le sens original de ses fables, développées depuis par la poésie au gré du génie divers des peuples; enfin, à l'histoire primitive des ancêtres de notre race, alors qu'ils ne formaient encore qu'une même famille parlant une même langue, dispersés plus tard en nations nombreuses, dont la parenté est attestée avec certitude par les traits communs de leurs idiomes.

Ce sont là les fruits durables de cette vie constamment studieuse, qui commença à pencher vers son déclin peu de temps après la seconde publication de la grammaire comparée en 1861. Vous n'attendites pas, Messieurs, cette époque pour appeler dans votre sein une gloire si pure et si modeste; dès 1857, vous aviez, à la mort du baron de Hammer-Purgstall, élu M. Bopp l'un de vos associés étrangers. Il ne fut pas moins flatté de cette distinction que de celles du même genre qui lui avaient été conférées dans d'autres pays, et de la faveur extraordinaire qu'il reçut du roi de Prusse Frédéric-Guil-

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laume IV; ce roi, ami de la science et des savants, en lui décernant l'ordre peu prodigué du *Mérite*, l'inscrivit de sa main sur le livre de l'ordre en caractères dévanâgaris. Une autre joie de sa vieillesse fut de voir son grand ouvrage si dignement traduit dans notre langue par son ancien disciple M. Béal.

Mais l'honneur qu'il apprécia surtout, et qui eut le pouvoir de ranimer un moment ses forces de plus en plus défaillantes, ce fut quand, le 16 mai 1866, le ministre de l'instruction publique à Berlin, les collègues et confrères de Bopp à l'Université, à l'Académie, ses élèves et ses admirateurs de toute contrée se réunirent pour célébrer, dans une de ces cérémonies touchantes que l'Allemagne a su conserver mieux que nous, le cinquantième anniversaire de la publication de son premier écrit, germe fécond de tous les autres. La guerre qui allait éclater ne permit pas de donner à cette solennité tout l'éclat qu'elle aurait dû avoir. Mais une députation se rendit chez Bopp, et il répondit en quelques mots aussi émus que bien inspirés aux félicitations qui lui furent adressées. De tous les points du monde où son nom avait pénétré, survinrent, suivant l'usage, des télégrammes, des brochures, des ouvrages dédiés au héros de la fête, à l'objet du *Jubilé*, et la France y eut sa part. On fit plus et mieux encore: une fondation fut instituée sous le nom de Fondation Bopp et en son honneur. Telle était la popularité de ce nom qu'en peu de temps les souscriptions s'élevèrent à une somme considérable. L'Inde y contribua pour beaucoup, et les Parses de Bombay se montrèrent surtout empressés. En Europe, la France prit rang immédiatement après l'Allemagne.

Un peu plus d'une année après, notre illustre confrère, mortellement frappé d'une seconde attaque d'apoplexie le 23 octobre 1867, fut enlevé à la science pour laquelle il avait

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tant fait, à son pays qu'il avait tant honoré. Telle était toutefois la médiocrité de sa situation, tel avait été son dédain des soins vulgaires de la vie, que la veuve qu'il a laissée fût restée presque sans ressources si la précieuse bibliothèque formée pendant longues années par Bopp n'était devenue un trésor pour les siens. Elle a été achetée, nous assure-t-on, pour une somme considérable, et transportée à Chicago, dans l'État d'Illinois, où elle est un témoignage de plus du lien qui n'a pas cessé d'unir les peuples frères de l'ancien et du nouveau monde.

M. Bopp a été remplacé par M. de Rossi le 13 décembre 1867.

LISTE DES OUVRAGES PUBLIÉS PAR M. FR. BOPP.

A. — GRAMMAIRE COMPARÉE.

I. — OUVRAGES DE GRAMMAIRE COMPARÉE.

1. *Du système de conjugaison de la langue sanscrite, comparé avec celui des langues grecque, latine, persane et germanique* (Francfort-sur-le-Mein, 1816), in-12. Avec une préface de Windischmann, datée du 16 mai 1816, et une traduction en vers de quelques fragments des épopées indiennes (du Ramâyana et du Mahâbhârata) ainsi que quelques fragments des Védas. — Le même sujet a été repris par Bopp avec plus d'ampleur et de développement dans les *Annales de littérature orientale* (en anglais), 1820. Ce nouveau travail a été traduit en allemand par le docteur Pacht, dans le recueil intitulé : « *Nouvelles archives de philologie et de pédagogie* », 1827.

2. *Grammaire comparée du sanscrit, du zend, du grec, du latin, du lithuanien, du gothique et de l'allemand*.

1^{re} édition (6 livraisons, de 1833-1852), en 3 vol. in-8°. — *Grammaire comparée du sanscrit, du zend, de l'arménien, du grec, du latin, du lithuanien, de l'ancien saxon, du gothique et de l'allemand*.

2^e édition (entièrement remaniée de 1857-1861), accompagnée d'une table alphabétique et méthodique, par Carl Arendt; en tout 4 vol. in-8°. Cette 2^e édition a été traduite en français par M. Michel Bréal. Paris, Hachette, 1866-1872. 4 vol. grand in-8°. (La traduction de M. Bréal en est à sa seconde édition.)

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Une 3^e édition de la *Grammaire comparée* de Bopp a été publiée, en partie depuis son mort, par les soins du docteur Kuhn. 1869-71, 3 vol. in-8°.

3. *Système comparatif d'accentuation, suivi d'une exposition sommaire des concordances grammaticales du sanscrit et du grec*. 1854, grand in-8°. Ce dernier traité avait déjà paru en abrégé dans le journal de Kuhn, tome III, 1854, p. 1-26, sous le nom de : *Comparaison de l'accentuation grecque et de l'accentuation sanscrite*.

II. — RÉimpression d'articles.

Vocalismus ou critique de linguistique comparée sur la grammaire allemande de Grimm et le trésor de l'ancien haut-allemand de Gruff, avec les bases d'une nouvelle théorie de la phonétique. Berlin, 1836, in-8°. (Reproduction d'articles publiés dans les *Annalen für wissenschaftliche Kritik*.)

B. — SANSCRIT.

I. — GRAMMAIRES.

1. *Exposition détaillée du système de la langue sanscrite*. 1824-1827, grand in-4°.
2. *Grammatica critica lingue sanscritæ*. 1829-32, in-4°.
3. *Grammaire critique de la langue sanscrite sous une forme abrégée*, 1834, 2^e édition, 1845; 3^e édition, 1861; 1863; 4^e édition, 1868.

II. — TEXTES ET TRADUCTIONS.

1. *Voyage d'Aryana dans le Ciel d'Indra*, avec quelques épisodes du Mahâbhârata (texte et traduction allemande), 1824, 2^e édition, 1868.
2. *Sandyluthi* : *Le Déluge et trois autres épisodes de Mahâbhârata* (texte et traduction allemande), 1829.
- Il en a également paru une traduction latine intitulée : *Divanium*.
3. *Nalâs, curram sanscritum* (texte et traduction latine). Londres, 1819; 2^e édition, Berlin, 1832, in-4°; 3^e édition, 1868.
4. *Nalâs et Damayanti* (traduction allemande), 1838.

III. — GLOSSAIRES.

Glossarium sanscritum. 1828-1830, in-4°.
Une deuxième édition en trois fascicules, 1840-1847, in-4°.
Glossarium comparativum lingue sanscritæ in quo omnes sanscritæ radices et vocabula usitatissima explicantur et cum vocabulis græcis, latinis, germanicis, Lituanicis, slavicis, celticis, comparantur. Editio tertia in qua vocabula sanscrita accentu notata sunt latinisq; literis transcripita. 1867, in-4°.

Cet ouvrage forme la 3^e édition du *Glossaire sanscrit* de 1830.
Tous les ouvrages de Bopp ont paru à Berlin, sauf ceux dont nous avons indiqué la provenance.

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IV. — MÉMOIRES DE L'ACADÉMIE DE BERLIN.

FRANZ BOPP

1. Analyse comparée du sanscrit et des langues de la même famille :

Premier article: *Des racines et des pronoms de la première et de la deuxième personne* (avec deux planches). 1824, p. 117-148.Deuxième article: *Du pronom réfléchi*. 1825, p. 191-200.Troisième article: *Du pronom démonstratif et de l'origine des signes caract.* 1826, p. 65-103.Quatrième article: *De quelques thèmes démonstratifs et de leurs rapports avec les diverses prépositions et conjonctions*. 1829, p. 27-47.Cinquième article: *De l'influence des pronoms sur la formation des mots*. 1831, p. 1-28.2. *Des noms de nombre en sanscrit, en grec, en latin, en lithuanien, en gothique et en ancien slavon*. 1833, p. 163-169.3. *Des noms de nombre dans la langue zend*. 1833, p. 171-180.4. *De la parenté des langues malayo-polynésiennes avec les langues indo-européennes*. 1840, p. 171-246.

Concordance des pronoms des langues malayo-polynésiennes avec ceux des langues indo-européennes. 1840, p. 247-332.

5. *Du géorgien considéré dans ses rapports de parenté avec les autres langues*. 1846, p. 259-339.6. *De la langue des anciens Prussiens et de ses affinités*. 1853, p. 77-131.7. *De l'abonais et de ses affinités*. 1854, p. 459-549.

La plupart de ces articles ont paru en brochures à part, quelquefois avec des titres légèrement différents.

Il faut y joindre les lectures mentionnées dans les comptes rendus de l'Académie de Berlin, qui n'ont pas été publiées ou ont trouvé place dans quelque un des grands travaux de Bopp :

De la conjugaison en vieux slavon dans ses rapports avec le sanscrit. 1836, p. 29.*Les corrélatifs en sanscrit et dans les langues sœurs*. 1837, p. 49.*De la formation et de l'origine des terminaisons métatales en sanscrit, en zend, en grec et en gothique*. 1837, p. 79.*Du rapport de l'impratif et du conjonctif lithuanien avec le précatif sanscrit et l'optatif corse deux en grec*. 1839, p. 110.*Des manières d'exprimer le futur en sanscrit, en zend et dans leurs langues sœurs d'Inde*. 1842, p. 215.*Compte rendu des travaux de Rosen sur la langue latine*. 1843, p. 311.*De l'écriture et de la phonétique du persan ancien*. 1848, p. 132.*De la formation du participe dans les langues indo-européennes*. 1848, p. 319.*De la dérivation et de ses rapports avec le sanscrit, etc.* 1851, p. 679.*Des conjonctions dans les langues de la famille indo-européenne*. 1852, p. 485.*Des noms de nombre dans la langue Huron*. 1855, p. 600.

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ANALYTICAL COMPARISON
OF THE SANSKRIT, GREEK, LATIN AND TEUTONIC
LANGUAGES, SHEWING THE ORIGINAL IDENTITY
OF THEIR GRAMMATICAL STRUCTURE
(1820).Preceded by an Introduction
by Friedrich Teichner (1889)